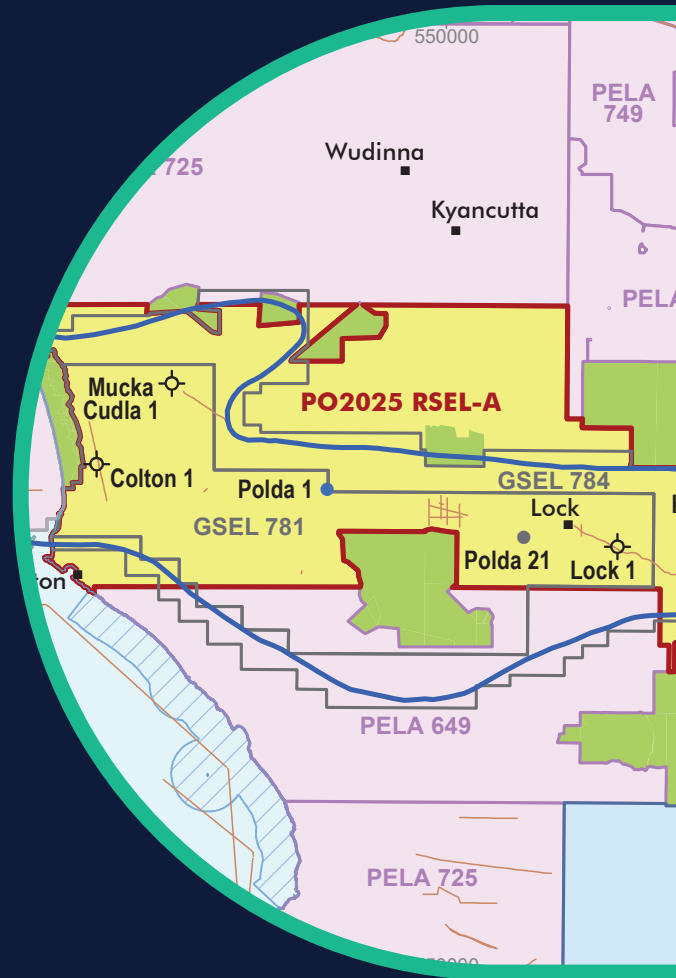


South Australia  
**POLDA BASIN**  
**Acreage Release**  
**PO2025 RSEL-A**

BIDS CLOSE 5.00 pm ACDT  
Friday 31 OCTOBER 2025



## Contents

The offer.....	3
Summary of the onshore Polda Basin .....	4
Introduction .....	5
Previous exploration .....	7
Regional geology.....	7
Setting .....	7
Stratigraphy .....	9
Energy resources geology .....	14
Reservoirs.....	14
Seals.....	15
Petroleum source rock distribution and maturity modelling .....	16
Natural hydrogen source.....	16
Entrapment.....	18
Undiscovered resources.....	19
Exploration potential .....	19
Data and information .....	20
Land use and access .....	20
History of exploration on the Eyre Peninsula of South Australia .....	21
Regulatory framework.....	21
National parks and reserves.....	23
Primary industries.....	23
Aboriginal heritage and native title .....	23
Associated Activities Licences .....	23
Bidding and award process .....	24
Closing date and time .....	25
Applications .....	25
Contact and enquiries .....	25
References .....	26

# Polda Basin Regulated Substances Exploration Acreage Release PO2025 RSEL-A

BIDS OPEN **27 May 2025**

BIDS CLOSE **5:00 pm Australian Central Daylight Time on Friday 31 October 2025**

## THE OFFER

The Polda Basin is a competitive tender region, and vacant acreage must be gazetted and offered for work program bidding. Following a recent acreage relinquishment, one new Regulated Substances Exploration Licence (RSEL) in the Polda Basin is being offered as acreage release block PO2025 RSEL-A by the South Australian Government for competitive work program bidding (Figure 1).

This acreage release is a genuine greenfield opportunity for all regulated substances.

Block	Area (km <sup>2</sup> )	Wells	2D Seismic (line km)	3D Seismic (km <sup>2</sup> )	Primary target
PO2025 RSEL-A	4,968.59	5	111	0.0	Jurassic and Neoproterozoic

Table 1. Summary of block and available data.

Five stratigraphic wells and numerous water and coal wells have been drilled in the PO2025 RSEL-A area (Figure 2) and a total of 111-line kilometres of two dimensional (2D) seismic data have been acquired (Table 1). The release area covers 4,968.59 square kilometres (km<sup>2</sup>).

In the adjacent, offshore portion of the basin, three petroleum wells have been drilled and a total of 3380-line kilometres of 2D seismic have been acquired (Figure 2). Note that all seismic data is only available as hardcopy.

RSELS offer the same rights and tenure as Petroleum Exploration Licences (PELs). Note that RSELS (and PELs) do not include gas storage rights. There are two existing Gas Storage Exploration Licences (GSELs) in the Polda Basin (Figure 1). There are also mineral Exploration Licences (ELs) and one Mineral Lease (ML) in the application area (see [SARIG](#)).

Applicants should also note:

- in the event that additional Parks or Reserves are proclaimed under the *National Parks and Wildlife Act 1972* prior to the grant of an RSEL, and where such Parks or Reserves prohibit the exploration for and production of regulated substances, then the area of any such Parks or Reserves shall be excised from the area to be granted as an RSEL.
- the [Energy Resources Act 2000](#) (ER Act) requires licence holders to prepare:
  - an Environmental Impact Report (EIR) in consultation with all potentially affected people, enterprises and organisations as a precedent to co-regulatory consideration of activity approval. EIRs document potential impacts on the social, natural and economic environments (which includes public health and safety), and consider the significance of impacts, after implementation of relevant controls in accordance with the [environmental impact assessment criteria](#); and
  - a Statement of Environmental Objectives (SEO), informed by an EIR, that must state the environmental objectives to be achieved in carrying out the specified activities, as well as the assessment and leading performance criteria that must be met to ensure the objectives have been achieved by the licensee.

If a proposed activity regulated pursuant to the ER Act cannot demonstrate compliance with the objectives for the protection of social, natural and economic environments, then approval for the activity will not be granted.

The value of contemporaneous, multiple land-use is a key factor in developing all EIRs and SEOs for upstream regulated substances operations anywhere in the State, including the Eyre Peninsula of South Australia.

It is business as usual for conventional energy resources operations in the region and the successful applicants will be able to acquire seismic and drill conventional oil and gas wells, subject to the requisite approval process under the ER Act.

## SUMMARY OF THE ONSHORE POLDA BASIN

<b>Age</b>	Neoproterozoic to Jurassic
<b>Area in South Australia</b>	10,000 km <sup>2</sup> of which around half is onshore
<b>Exploration well density</b>	No dedicated energy resource exploration wells have been drilled in the acreage release area. Drilling to date has targeted coal and minerals.
<b>Depth to target zones</b>	Up to 2,000 m
<b>Sedimentary thickness</b>	Up to 2,000 m
<b>Hydrocarbon shows</b>	Oil staining in Jurassic sandstones in core in Kilroo 1A
<b>First commercial discovery</b>	None
<b>Identified initial reserves</b>	None
<b>Undiscovered resources (50% probability)</b>	Not determined
<b>Production history</b>	None
<b>Basin type</b>	Intracratonic
<b>Depositional setting</b>	Alluvial, glacial, volcanic and evaporitic
<b>Potential reservoir types</b>	Clastic, evaporitic, volcanic
<b>Potential seals</b>	Continental claystones, evaporites
<b>Potential source rocks</b>	Continental claystones, coals, evaporites
<b>Number of wells</b>	5 stratigraphic wells, numerous water wells and mineral drillholes
<b>Seismic line</b>	111 km 2D onshore

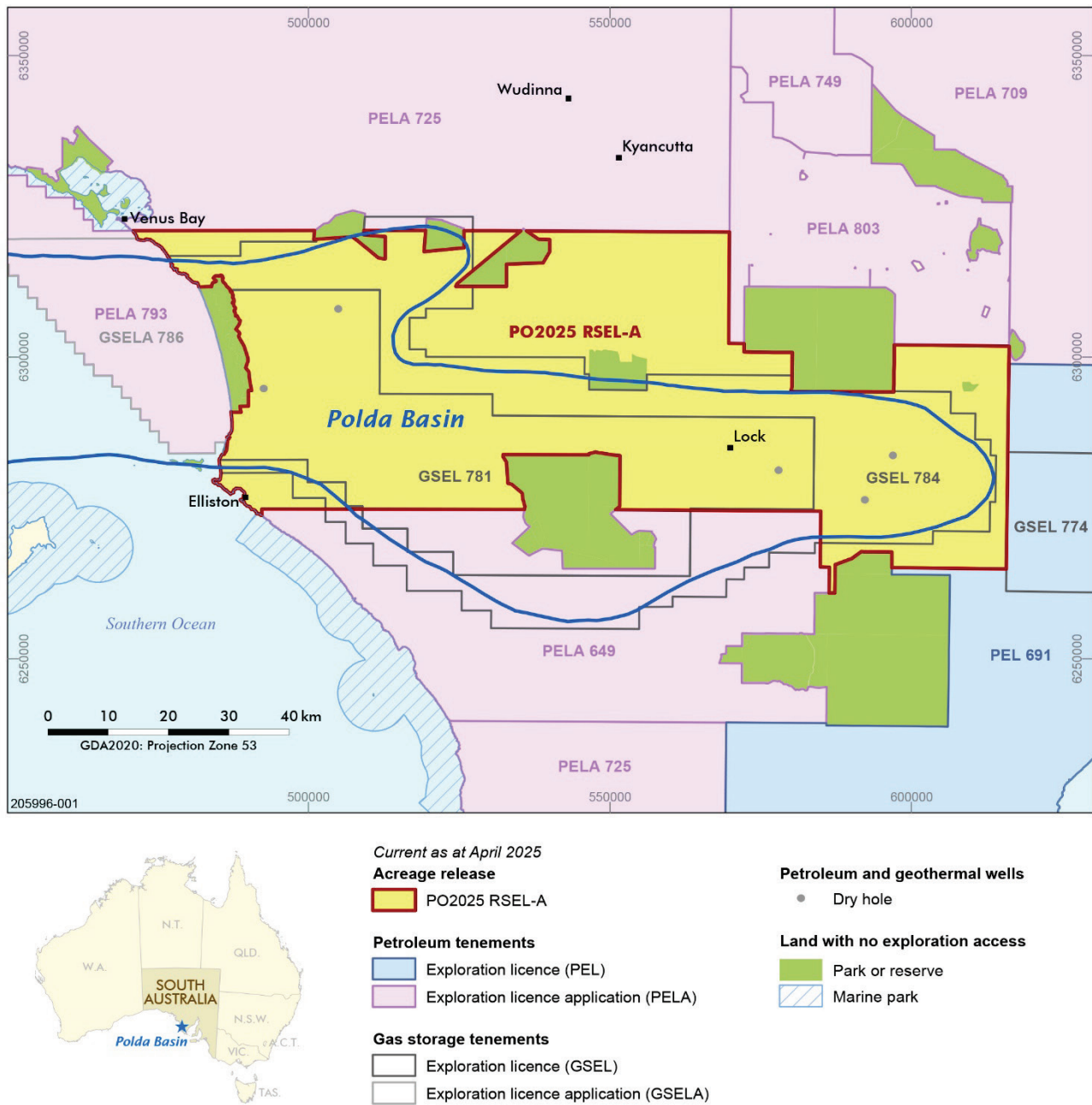


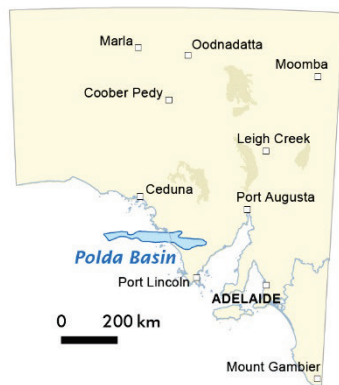
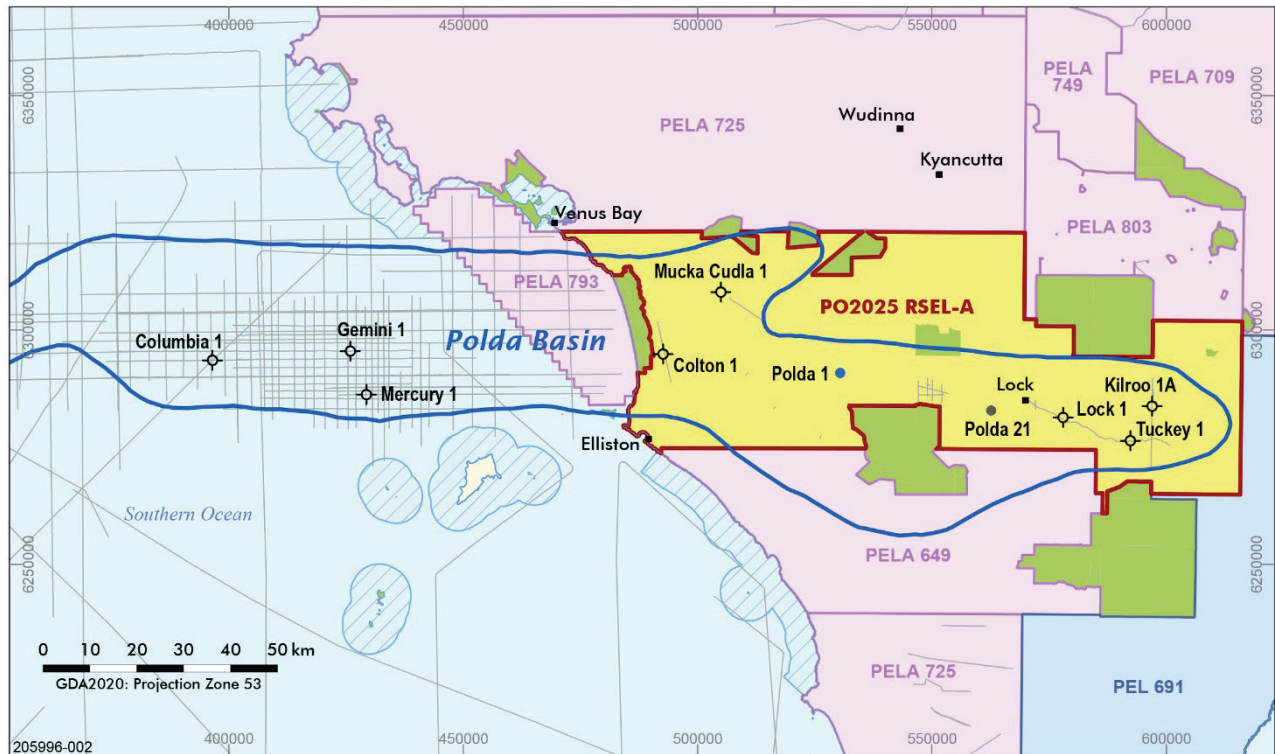
Figure 1. Polda Basin energy resources licences and PO2025 RSEL-A acreage release area.

## INTRODUCTION

The Polda Basin is a 10,000 km<sup>2</sup> Neoproterozoic to Jurassic basin covering the central western portion of the Eyre Peninsula of South Australia and extends westwards into the Great Australian Bight. It contains sediments ranging in age from Neoproterozoic to Jurassic. It is underlain initially by the Mesoproterozoic Itiledoo Basin, and ultimately by the Paleoproterozoic and Archean Hutchinson Group and Sleaford Complex respectively. It is overlain by a relatively thin veneer of Tertiary cover.

The basin is only lightly explored, and the release area contains no dedicated regulated substance exploration wells and minimal seismic data (Figure 2 and Table 2). The last significant hydrocarbon exploration occurred in the offshore Polda Basin, where three exploration wells – Colombia 1 (1982), Gemini 1 (1977) and Mercury 1 (1981/2), all drilled on valid closures – reported no

hydrocarbons except for a relatively minor gas show of 40 ppm methane in Mercury 1. However, source rock studies in the Jurassic section indicate the presence of immature, relatively high total organic content (TOC) and excellent generative potential for both oil and gas from carbonaceous claystone and coal. In addition, a potential source rock from the underlying Neoproterozoic Kilroo Formation (Tiainen 2025) has been visually identified but needs further work to confirm or dismiss.



Current as at April 2025

**Acreage release**

PO2025 RSEL-A

**Petroleum, stratigraphic and mineral wells**

- Dry hole
- Water well
- Coal well

**Seismic surveys**

— Seismic line

**Petroleum tenements**

- Exploration licence (PEL)
- Exploration licence application (PELA)

**Land with no exploration access**

- Park or reserve
- Marine park

Figure 2. Seismic surveys and selected wells in the Polda Basin.

However, 'minor gas' shows and 'petroliferous smell' from sands has been reported in boreholes in the onshore (eastern) portions of the basin, with reported vitrinite reflectance values similar to those encountered in Mercury 1, suggesting that the source of these occurrences may be biogenic in origin.

Further oil staining in the onshore mineral drillhole Kilroo 1A (Tiainen 2025) demonstrates that hydrocarbons have been generated and migrated into permeable reservoir intervals in the Polda Formation.

Natural hydrogen and helium have been recovered from [Gold Hydrogen's Ramsay 1 and Ramsay 2](#) drilled on Yorke Peninsula in 2023, the first dedicated hydrogen exploration wells drilled in Australia. The Yorke and Eyre peninsulas are both part of the Gawler Craton (Figure 3). The discovery of massive halite with minor interbeds of siltstone, claystone, dolomite and limestone extends for approximately 1700 m in Mercury 1 has recently attracted interest as a potential hydrogen storage play as well as a potential seal for natural hydrogen and helium.

## PREVIOUS EXPLORATION

The Polda Basin has been explored for coal, uranium and petroleum. Petroleum exploration focussed on the offshore central Polda Basin following the discovery of the basin by the Shell aeromagnetic survey in 1966. 2D seismic data was acquired by Shell and Bridge Oil, who subsequently identified drilling targets. Gemini 1 was the first petroleum well drilled in 1975 by Outback Oil, while Mercury 1 and Columbia 1 were drilled by Australian Occidental in 1981–82. There has been no exploration carried out since 1982, except for five seismic lines (totalling 125 km within the offshore Polda Basin) obtained as part of a 1986 survey by the Bureau of Mineral Resources (BMR; now Geoscience Australia) and three seismic lines extending into the basin (104 km within the offshore Polda Basin) shot in 1998 by GHD Surveys Pty Ltd. One PEL application is current over the southern portion of the onshore basin and one immediately offshore, and two GSELS cover the whole of the onshore portion of the basin.

The Jurassic Polda Formation contains the Lock Coal Deposit. Coal exploration, centred on the Lock Sub-basin, has delineated 260 Mt of sub-bituminous coal in the measured-indicated category, with a proximate analysis of 26% moisture, 23% ash, 30% volatile matter, and 21% a fixed carbon. The average heat value of 14.6 MJ/kg is typical of [South Australian coals](#).

WELL/DRILLHOLE	DATE	TYPE	ON/OFFSHORE	PEPS	SARIG
Colton 1	1976/77	Stratigraphic	Onshore	<a href="#">Link</a>	<a href="#">Link</a>
Columbia 1	1982	Hydrocarbon	Offshore	<a href="#">Link</a>	<a href="#">Link</a>
Gemini 1	1975	Hydrocarbon	Offshore	<a href="#">Link</a>	<a href="#">Link</a>
Kilroo 1A (CRA 83 KD-1A)	1984	Mineral	Onshore	<a href="#">Link</a>	<a href="#">Link</a>
Lock 1	1980	Stratigraphic	Onshore	<a href="#">Link</a>	<a href="#">Link</a>
Mercury 1	1981/82	Hydrocarbon	Offshore	<a href="#">Link</a>	<a href="#">Link</a>
Mucka Cudla 1	1976	Stratigraphic	Onshore	<a href="#">Link</a>	<a href="#">Link</a>
Polda 1	1965	Water	Onshore	N/A	<a href="#">Link</a>
P 21 (Polda 21)	1977	Coal	Onshore	N/A	<a href="#">Link</a>
Tuckey 1	1976	Mineral	Onshore	<a href="#">Link</a>	<a href="#">Link</a>

Table 2. Selected wells and links to available public data.

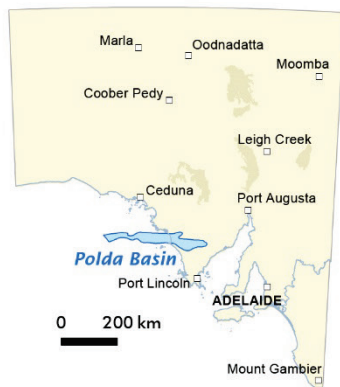
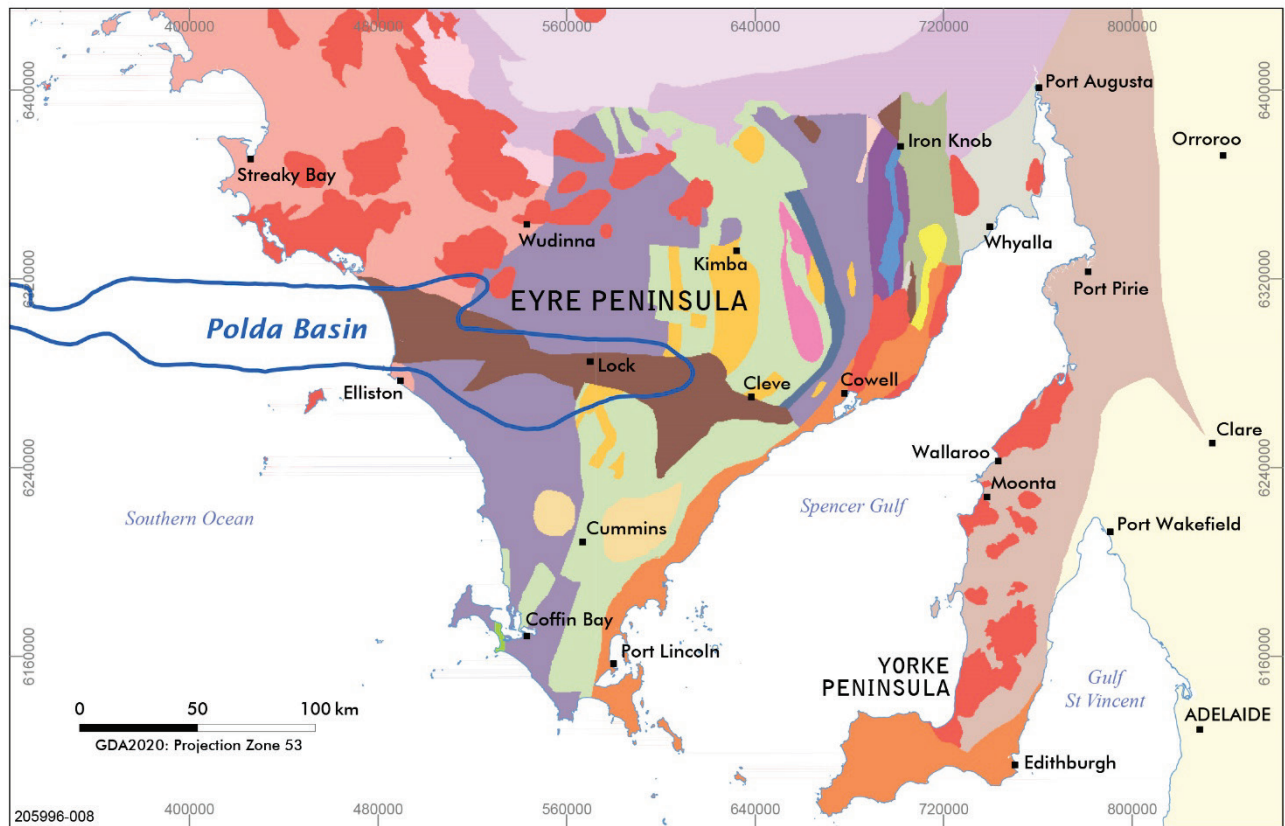
## REGIONAL GEOLOGY

### Setting

The Polda Basin is an elongate west-east trending Neoproterozoic to Jurassic basin covering the central western portion of the Eyre Peninsula of South Australia and extends westwards into the Great Australian Bight. It extends west-east and north-south for approximately 400 km and 10 to 40 km respectively, and covers approximately 10,000 km<sup>2</sup> (Figures 1 to 4). It contains section ranging in age from Neoproterozoic to Jurassic and is overlain by a relatively thin veneer of Cainozoic cover (Jong 1991; Stagg et al. 1992; Holford 2024). It is underlain by the Mesoproterozoic Itiledoo Basin which in turn is underlain by crystalline basement of the Gawler Craton. The basin within the Neoproterozoic section, based on age and lithostratigraphic similarities, particularly the evaporites, may be part of the greater Centralian Superbasin (Jong 1991; Bradshaw et al. 2023). The Permian section is expected to be equivalent to deposition related to continental scale glaciation of Australia during the Carboniferous and Permian periods. The Jurassic section may represent an extensional basin related to the onset of rifting of Australia

from Antarctica. Recent work by Holford et al. (2024) provides greater insight into the burial and exhumation history of the Polda Basin, particularly for the onshore part of the basin.

## Eyre Peninsula, South Australia PROTEROZOIC and ARCHEAN GEOLOGY



Current as at April 2025

**SOLID GEOLOGY (2M)**

**MESOPROTEROZOIC**

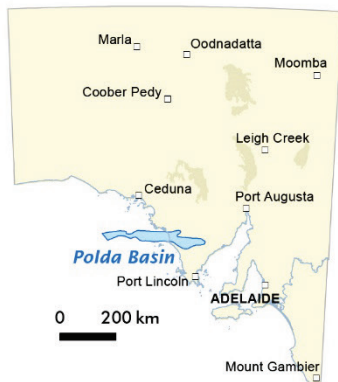
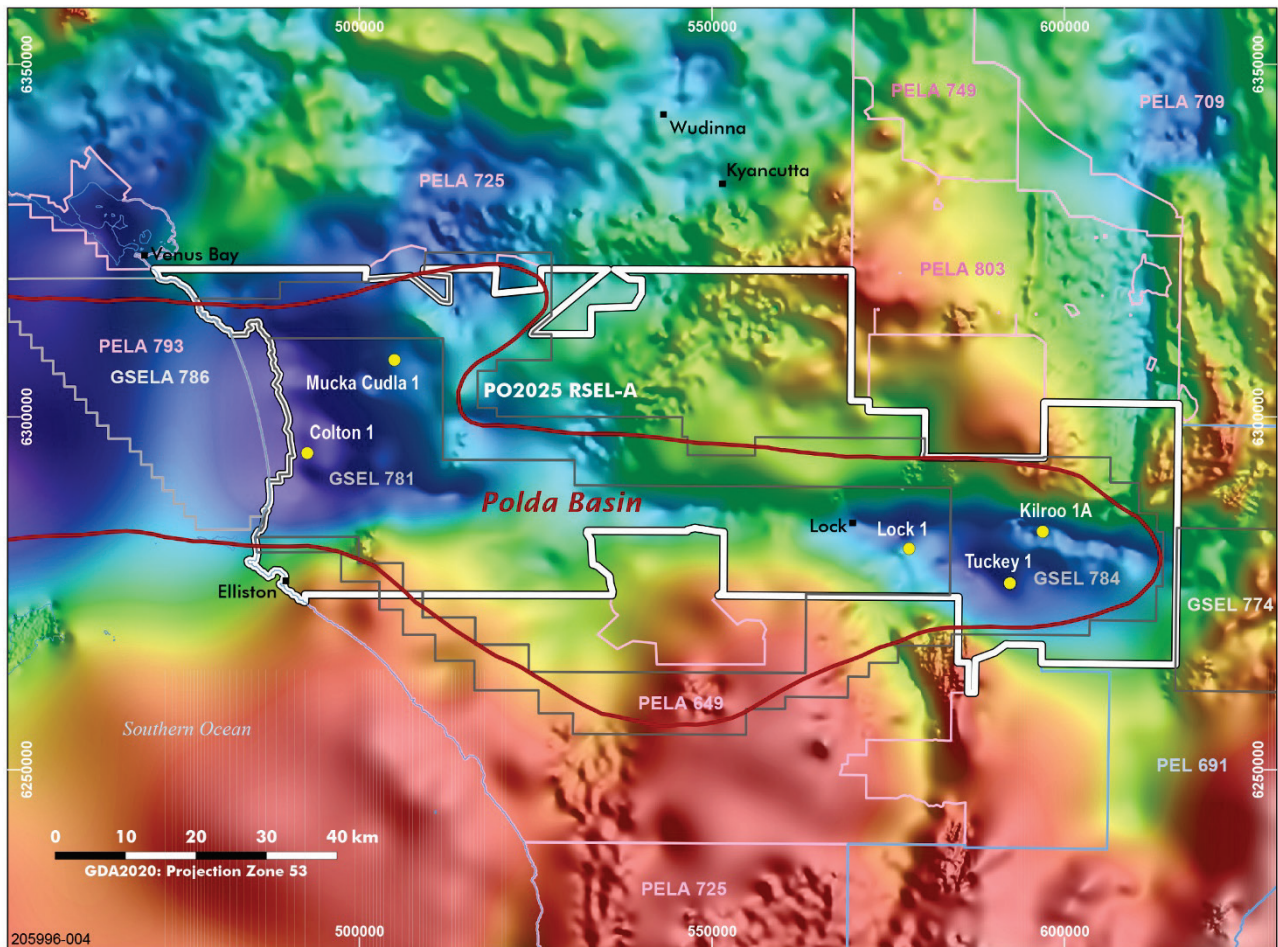
- Hiltaba Suite
- Upper Gawler Range Volcanics
- Lower Gawler Range Volcanics

**PALEOPROTEROZOIC**

- St Peter Suite
- Tunkillia Suite
- Moody Suite
- Corunna Conglomerate and equivalents
- Middlecamp Granite and equivalents
- Burkitt Granite
- Moonabie Formation and McGregor Volcanics

- Wallaroo Group
  - Price Metasediments
  - Wertigo Granite
  - Broadview Schist and Myola Volcanics
  - Donington Suite
  - Hutchison Group
  - Miltalie Gneiss
- ARCHEAN**
- Sediments in Middleback Range
  - Sleaford Complex
  - Coolanie Gneiss
  - Cooyerdoo Granite

Figure 3. Gawler Craton Proterozoic and Archean geology over the Eyre Peninsula (modified from [Solid geology of the Gawler Craton](#)).



Current as at April 2025

**Acreage release**

PO2025 RSEL-A

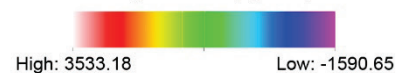
**Petroleum tenements**

Exploration licence (PEL)  
Exploration licence application (PELA)

**Gas storage tenements**

Exploration licence (GSEL)  
Exploration licence application (GSELA)

**Bouguer Gravity ( $\mu\text{ms}^{-2}$ )**



**Petroleum, stratigraphic and mineral wells**  
● Dry hole

Figure 4. Eyre Peninsula Bouguer Gravity Residual map with the Polda Basin highlighted in red.

**Stratigraphy**

The Polda and Itiledoo basins are underlain by a suite of Archean and earliest Proterozoic crystalline basement rocks of the Gawler Craton known as the Sleaford Complex (~2560 – 2470 Ma), which together with the Mulgathing Complex in the northern Gawler Craton was probably part of an adjoining basin now dismembered by Paleoproterozoic tectonism ([Gawler Craton | Energy & Mining](#)). The Sleaford Complex contains a diverse range of metamorphosed and deformed rocks, of which granites and iron-rich mafic rocks may form potential natural hydrogen source rocks on Eyre Peninsula (Figure 3).

The Sleaford Orogeny was followed by approximately 400 Ma of tectonic quiescence in the eastern Poldas Basin area. Late Paleoproterozoic extension led to widespread basin formation across the Gawler Craton, associated with sedimentation and bimodal magmatism. The Hutchison Supergroup (<2000 – 1770 Ma) comprises quartzite, dolomite, iron formation, schist and amphibolite, deposited in a passive margin setting. The Hutchison Supergroup was subsequently intruded by the Middle granites of the Peter Pan Supersuite (1745 – 1700 Ma) as part of the Kimban Orogeny, also likely to be good potential source rocks for hydrogen.

Juvenile felsic to mafic magmas of the St Peter Suite (1650 – 1610 Ma) occur over the northwest of the onshore Poldas area, formed broadly in a continental magmatic arc setting.

Another period of extension occurred in the Poldas area at the end of the Paleoproterozoic, leading to localised sedimentation and magmatism in the Itiledoo Basin (named by Flint and Rankin 1991) with a maximum age of approximately 1605 Ma inferred by radiometric dating of detrital zircons ([Australian Stratigraphic Units Database](#)). Deposition of sandstone, minor grit and pebble beds forming the Blue Range Beds (an equivalent of the Corunna Conglomerate shown in Figure 3) were reworked products of the Proterozoic and Archean basement so are likely to be a good source for natural hydrogen. The Blue Range Beds are exposed within the Poldas Basin at Mount Wedge, approximately 13 km to the southeast of Mucka Cudla 1.

Soon after deposition of the Blue Range Beds the region was intruded by granites of the Hiltaba Suite, thought to be the source of the natural hydrogen encountered on the Yorke Peninsula. No Hiltaba Suite granite has been intersected in the Itiledoo Basin to date, although just to the north of the Poldas Basin the granite encountered in Wudinna 1 was dated as  $1519 \pm 67$  Ma, although Flint and Rankin (1991) expect that the true age is more likely to be 1600 – 1580 Ma. No zircons from the Hiltaba granite have been sampled from the Blue Range Beds, although zircons from the St Peter Suite do occur, indicating that the intrusion was post-deposition in the Itiledoo Basin.

The Poldas Basin contains sediments which range in age from possibly Neoproterozoic to Jurassic, unconformably overlying the Itiledoo Basin with an age gap of at least 600 million years (Figures 5 and 6). The whole section was penetrated at the onshore drillhole Kilroo 1A or CRA83 KD1A (Table 2) and comprises from the base, the Kilroo Formation, a volcanic, evaporitic, red bed sequence, overlain unconformably by the Permian-Carboniferous glacial Coolardie Formation and again unconformably overlain by the Jurassic Poldas Formation. An unconformity separates the Jurassic from unconsolidated siliciclastic Cainozoic above. Figure 5 summarises the basin stratigraphy.

The age of the Kilroo Formation is uncertain, but it is thought to have been deposited during the Neoproterozoic. A recent review of the conventional core from Kilroo 1A (Tiainen, 2025) indicates the formation comprises variably red-brown-grey-white interbedded arkoses, siltstones, claystones and at least two basalt flows and minor anhydrite and rare salt. From prior dating (Flint et al 1988) the lower basalt is dated as Neoproterozoic from three samples and the shallower basalt is dated as Neoproterozoic, Silurian and Triassic from four samples. The sedimentary features observed in the core including mud drapes, bi-directional bedding, syneresis cracks, and possible low diversity bioturbation have been interpreted as indicating deposition on an inter to supra tidal coastal plain gross depositional environment. Massive halite with minor interbeds of siltstone, claystone, dolomite and limestone extends for approximately 1700 m was penetrated offshore in Mercury 1 in 1981/2 (Figure 6 and [Well Completion Report \(WCR\) and Composite Log available in PEPS](#)).

The Coolardie Formation unconformably overlies the Kilroo Formation and primarily consists of diamictite deposited in a terminoglacial environment. The thickness of the formation is variable, ranging offshore from 37 m at Gemini 1 to 87 m at Mercury 1. Based on palynology (Flint and Rankin 1981) the formation is correlative with deposition during the Gondwana Carboniferous-Permian glaciation.

AGE		STRATIGRAPHY	MAXIMUM THICKNESS	LITHOLOGY	DEPOSITIONAL ENVIRONMENT	STRATIGRAPHIC RELATIONS	EXPRESSION	COMMENTS			
CENOZOIC	QUATERNARY	RECENT	Ma	SURFICIAL	1-2 m	Calcareous sand and calccrete	Shallow marine-aeolian	Top soil			
		PLEISTOCENE		BRIDGEWATER FORMATION	30 m (>100 m)	Calcareous cemented dune sand with some clay interbeds	Shallow marine-aeolian	Uppermost unit in sequence	Outcrops west of Lock and in cliffs. Drillholes (near Cape Radstock)	Highly porous clastics with thin clay interbeds — may act as intraformational seals	
		?		UNDIFFERENTIATED	6-7 m	Clay, varicoloured, calcareous		Underlies Bridgewater Formation			
	TERTIARY	PLIOCENE	2.5		UNDIFFERENTIATED	70 m	Green to grey clay and carbonaceous clay, interbedded with coarse sandstone	Fluvial and paludal	Relationships unknown probably equivalent to Uley Formation (Flint, 1990)	Many holes in onshore Poldo Basin	Thin interbedded sequence of clays and sandstone
		MIDDLE EOCENE	5.3		POELPENA FORMATION	>200 m (40 m, Esso RD3)	Grey to black carbonaceous sand, silt and clay with interbeds of dark brown lignite	Restricted marine; fluvial	Unconformably on Jurassic. Overlain by Pliocene and Quaternary	Many holes in onshore Poldo Basin. 81L41C cored hole. Esso RD3	Variable quality reservoir sands; lack major seal for underlying units
		LATE JURASSIC (J6 Onshore)	38		POLDA FORMATION	282 m onshore (Flint and Rankin 1990) > 1000 m offshore	Grey to black carbonaceous fine sands, silts and lignites grading to coarse sands. Brown-black coal seams up to several metres thick	Fluvial and lacustrine	Unconformably on Permian and Proterozoic. Overlain unconformably by Tertiary	Many wells/drillholes in Poldo Basin	Good to excellent gas and oil prone source rocks. Thermally immature for hydrocarbon generation — porous reservoir sands throughout
	PALEOZOIC	PERMO-CARBONIFEROUS (Stage 2 Onshore)	283		COOLARDIE FORMATION	>200 m	Brown to grey-green matrix supported diamictite, silty claystone and shale	Fluvioglacial	Unconformably on Proterozoic. Unconformably overlain by Jurassic	Poldo 1, Tuckey 1 8013OC and 83KD1A	Reservoir sands of variable quality with intraformational seals — poor source rock potential
			293								
	PROTEROZOIC	NEO-PROTEROZOIC	?		KILROO FORMATION	2200 m	Red shale and siltstone, massive halite and basalts	Arid terrestrial fluvial and endothermic playa lakes	Lower contact not observed. Unconformably overlain by Permo-Carboniferous	Mercury 1 Columbia 1 83KD1A	Economic basement fair to good reservoir sands with variable permeability. Low source rock potential, sub-halite traps at the base of halite due to salt mobilisation
			1580		CALYMMIAN	HILTABA SUITE	Calca Granite	Granite	Intrudes Archean to Paleoproterozoic sedimentary and igneous rocks	Outcrops to the north and south of Poldo Basin	Locally U-enriched
MESO-PROTEROZOIC		CALYMMIAN	1600		BLUE RANGE BEDS	>200 m (401 m at Newland 1, Flint, 1990)	Sandstone, conglomerate, shale	Alluvial fan, braided fluvial, subaqueous-lacustrine(?)	Overlies unconformably Neoproterozoic to Late Paleoproterozoic sedimentary and igneous rocks. Unconformably overlain by Neoproterozoic Permian Jurassic Poldo Basin sequence and Cenozoic sediments.	Outcrops around Poldo Basin and drillhole intersections underneath Poldo Basin	Contains detrital zircons with St Peter Suite age but not with Hiltaba/GRV age
			1605		STATHERIAN	ST PETER SUITE	Granite, granodiorite, diorite, gneiss, amphibolite, felsic volcanics		Intrudes Sleaford Complex and Peter Pan Supersuite. Overlain unconformably by Blue Range Beds.	Outcrops and drillhole intersections to north of western Poldo Basin	
		1630		PETER PAN SUPERSUITE	MOODY AND PINBONG SUITES	Granite and minor gabbro		Intrudes Sleaford Complex and Hutchison Supergroup. Overlain unconformably by Blue Range Beds.	Outcrops and drillhole intersections adjacent to eastern Poldo Basin	Locally U-enriched	
PALEO-PROTEROZOIC		HUTCHISON SUPERGROUP	1745		HUTCHISON SUPERGROUP	Cleve and Darke Peak groups	Quartzite, schist, marble, calc-silicate, iron formation, metavolcanics	Subaqueous deposition in epicontinental sea	Overlain unconformably by Blue Range Beds	Outcrops and drillhole intersections to north and south of Poldo Basin	Contains iron-rich metasediments
			1770								
		1800		SIDERIAN	SLEAFORD COMPLEX	Wangary Gneiss, Hall Bay Volcanics, Coula Granite, Kiana Granite	Granite, gneiss, metasediments, metavolcanics	Subaqueous deposition in volcano-sedimentary back-arc basin	Overlain unconformably by Hutchison Supergroup	Outcrops and drillhole intersections to north and south of Poldo Basin	Contains iron-rich metasediments
ARCHEAN		MED-ARCHEAN	2000								
			2410								
		2500									
		2560									

Figure 5. Geological summary of the Poldo and Itiledoo Basins region (modified from Jong 1991, using the [Australian Stratigraphic Units Database | Geoscience Australia](#)).

The overlying Poldo Formation is interpreted to have been deposited in an alluvial plain gross depositional environment (GDE) in response to the extensional tectonism that eventually led to the breakup of Gondwana, via reactivation of the deep basement bounding faults. In its type section in SADME Poldo 1 (Flint and Rankin 1991) the Poldo Formation comprises sandstone and carbonaceous and lignitic claystone around 86 m thick. In the Lock Sub-basin, the unit is divided into three intervals (Gatehouse 1995): a basal dark grey claystone with subangular ‘floating’ sand grains, a middle dark grey to black carbonaceous claystone with lignite, siltstone and fine-grained sandstone interbeds, and an upper dark brown and grey, medium to coarse-grained, angular to subangular and pyritic sandstone. Within the Lock Sub-basin, subbituminous coal seams up to 15 m thick are present. Similar coal seams and other lithotypes were intersected in drilling offshore and in the Kilroo Sub-basin. Coal seams pinch out abruptly towards basin margins to the north and south. In the offshore the formation is subdivided into two intervals, with the lower zone being sand-prone with regular interbeds of coal and siltstone, while the upper zone is dominated by claystone, siltstone and fining upward sandstone. The thickness of the formation ranges from 450–500 m in Columbia 1 and Mercury 1 but is highly variable across the basin.

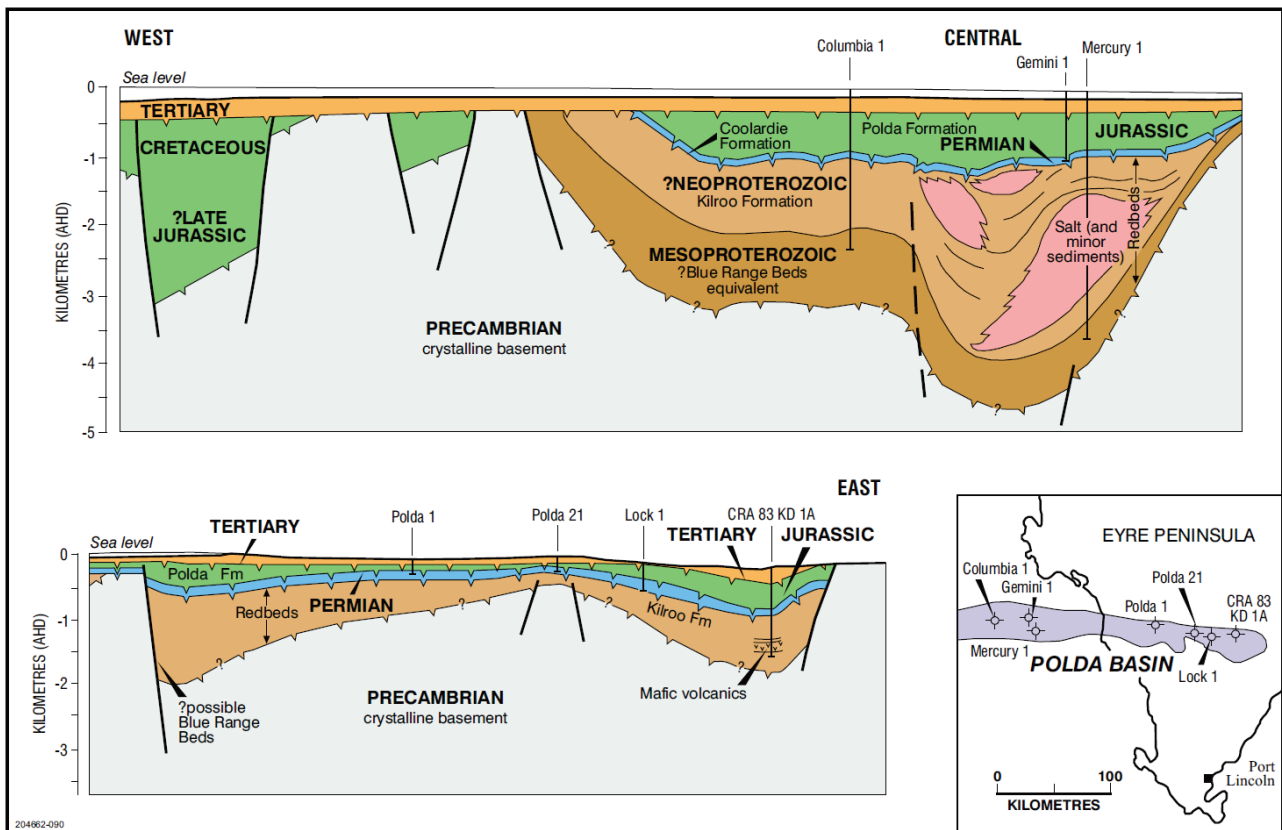


Figure 6. Schematic section of the Polda Basin (modified from Stagg et al. 1990). Note that Polda 1 was drilled as a water well and Polda 21 as a coal well, and that Kilroo 1A is also known as CRA 83 KD-1A, which was drilled as a mineral exploration borehole for coal.

Sedimentary structures in the Polda Formation include crossbedding, upward-fining sequences, and channelling. Poor sorting in coarser grained sandstone and conglomerate, with better sorting in finer grained intervals, and clay units beneath coal seams and within fine-grained sandstone beds, indicate a fluvial environment. The age of the Polda Formation is late Middle to Late Jurassic based on the presence of palynoflora from the *Murospora florida* Zone (Gatehouse 1995).

The depositional environment is interpreted as a broad valley with relatively low relief in which streams provided lateral mudflats, oxbow lakes and swamps in which coal accumulated. Lateral streams from the valley sides may have provided coarser grained sediments. The known distribution of the Polda Formation along the length of the graben (400 km) contrasts with a width of only 20–60 km. The recent review of Kilroo 1A confirms similar lithologies, and additionally micro conglomerates and variably pedogenically altered siltstones. Low angle planar cross beds dominate the micro conglomerate and arenite lithologies and support the fluvial plain interpretation. However, the lack of preserved vertical accretion deposits suggest an anastomosing channel habit rather than meandering, at least at this well. The finer fraction, siltstone and variably carbonaceous-coaly claystone represent vertical accretion and floodplain/mire deposits.

Interestingly no Cretaceous sediments comparable to those in the Bight and Duntroon Basins have been intersected in the Polda Basin, as the Polda Formation is overlain by a thin veneer of Cainozoic sediments, including the sequence of unconsolidated sands and claystones with a lignite base of the Eocene Poelpena Formation. The onshore portion of the Polda Basin is subdivided into the Lock Sub-basin and the Kilroo Sub-basin (Figure 7), containing up to 1500–2000 m of Neoproterozoic to Jurassic sediments in the eastern and western ends but only 500 m in the centre (Figure 8).

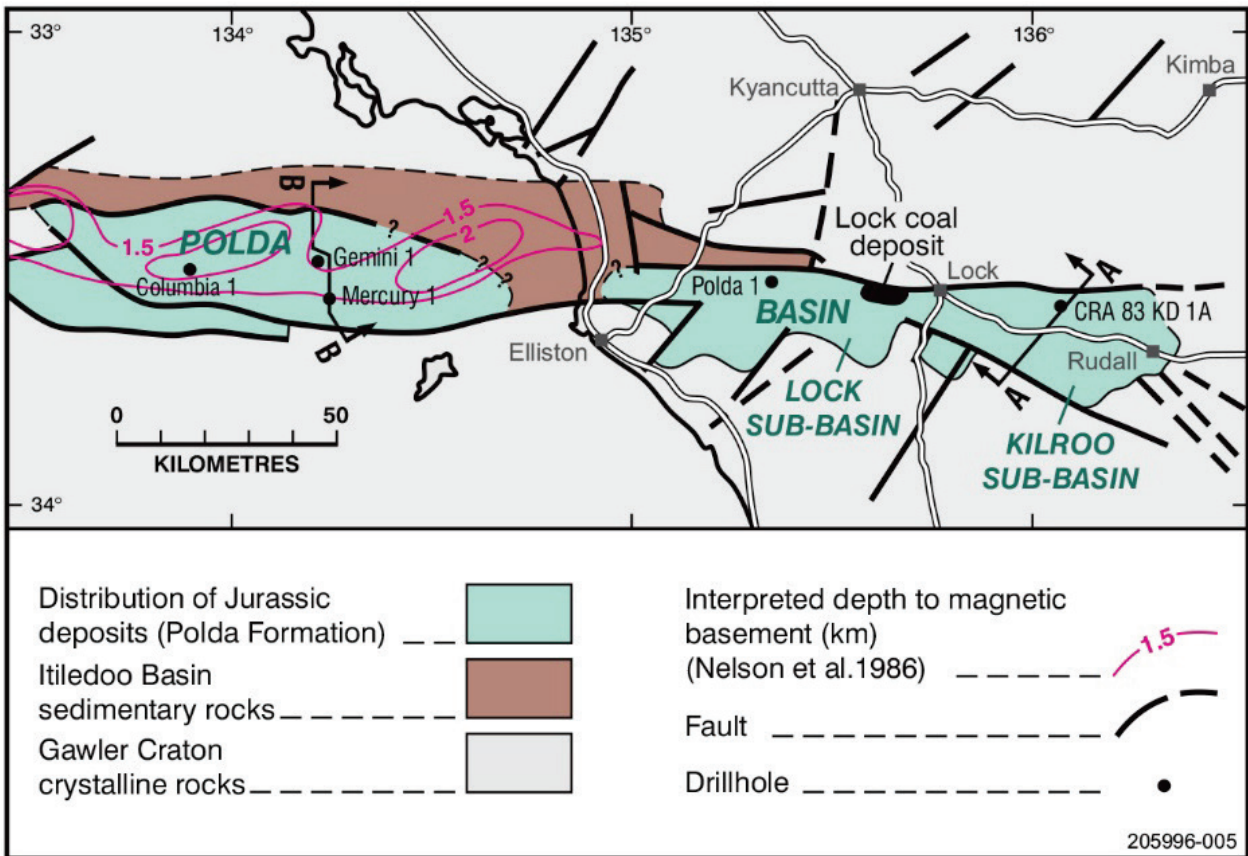


Figure 7. Schematic structure of the Polda Basin (modified from Gatehouse 1995).

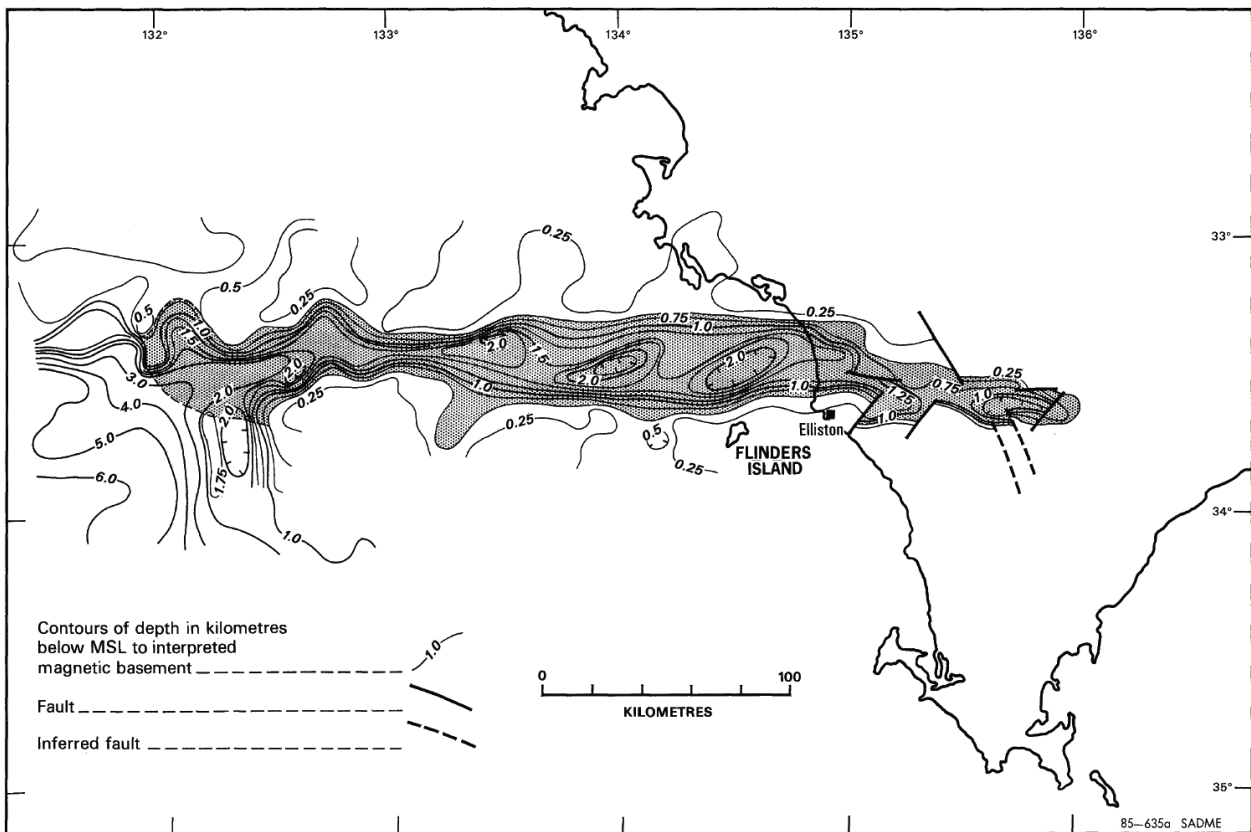


Figure 8. Depth to interpreted magnetic basement for the Polda Basin from aeromagnetic survey data (Nelson et al. 1985).

## ENERGY RESOURCES GEOLOGY

Natural hydrogen exploration became possible in South Australia in February 2021 when changes to the [Petroleum and Geothermal Energy Regulations 2013](#) added hydrogen as a 'regulated substance'. This enabled grant of exploration licenses targeting natural hydrogen and over 40 PEL applications have been made in the State to explore for natural hydrogen.

The exploration philosophy for hydrogen is much the same as for hydrocarbons, in that a suitable reservoir container is required, overlain and/or surrounded by a sufficient sealing interval, a source for the regulated substance and a trap in which it can be contained. Therefore, the *Reservoirs and seals* and *Entrapment* sections below are equally applicable to hydrocarbons and hydrogen.

At least three sedimentary sequences are targets for petroleum and hydrogen exploration in the onshore Polda Basin in South Australia:

1. Reservoir potential is good to excellent in the porous and permeable Jurassic Polda Formation;
2. Reservoir sand of variable quality is present in the Permian Coolardie Formation; and
3. Sandy intervals in the Kilroo Formation in the offshore wells exhibit good porosity and intraformational evaporites may form potential seals.

This acreage release is a genuine greenfield opportunity for all regulated substances and is being offered at a time when interest in exploration for natural hydrogen is on the increase in South Australia and globally.

### Reservoirs

Potential reservoirs include clastic sandstones and conglomerates in the Polda, Coolardie and Kilroo Formations. Reservoir potential has been demonstrated to be fair to excellent in several intervals (refer to WCRs in [PEPS](#)) and are summarised below:

- Reservoir quality is excellent, particularly in the poorly consolidated porous and permeable Jurassic Polda Formation
  - Figure 9 from the onshore Kilroo 1A drillhole shows oil stained, relatively unconsolidated and coarse-grained lithic to sub-lithic arenites in the Polda Formation, which based on sedimentary structures is interpreted as indicating deposition in an alluvial-delta plain gross depositional environment;
  - Sandstone intervals in Mercury 1 have vertical porosity distribution ranging for 0% to 25%, with a mean of 10.9%; and
  - Those in Columbia 1 range from 0.7% to 29.5%, with a mean of 13.2%.
- Reservoirs of variable quality are present in the Permian Coolardie Formation;
- Neoproterozoic Kilroo Formation:
  - Log-derived porosities of up to 19% were recorded from the cleaner sandy intervals in Columbia 1, with thick quartzose sandstones in the basal sequence with porosities in the range 10–15% despite extensive silicification, although SP logs suggest that they might have limited permeability; and
  - In Mercury 1 thin sandstone intervals in the top of the Proterozoic section had maximum log-derived porosities of 18%, whereas thick sandstone beds in the basal sequence showed porosities of around 13%.

# Kilroo 1A / CRA83 KD1A

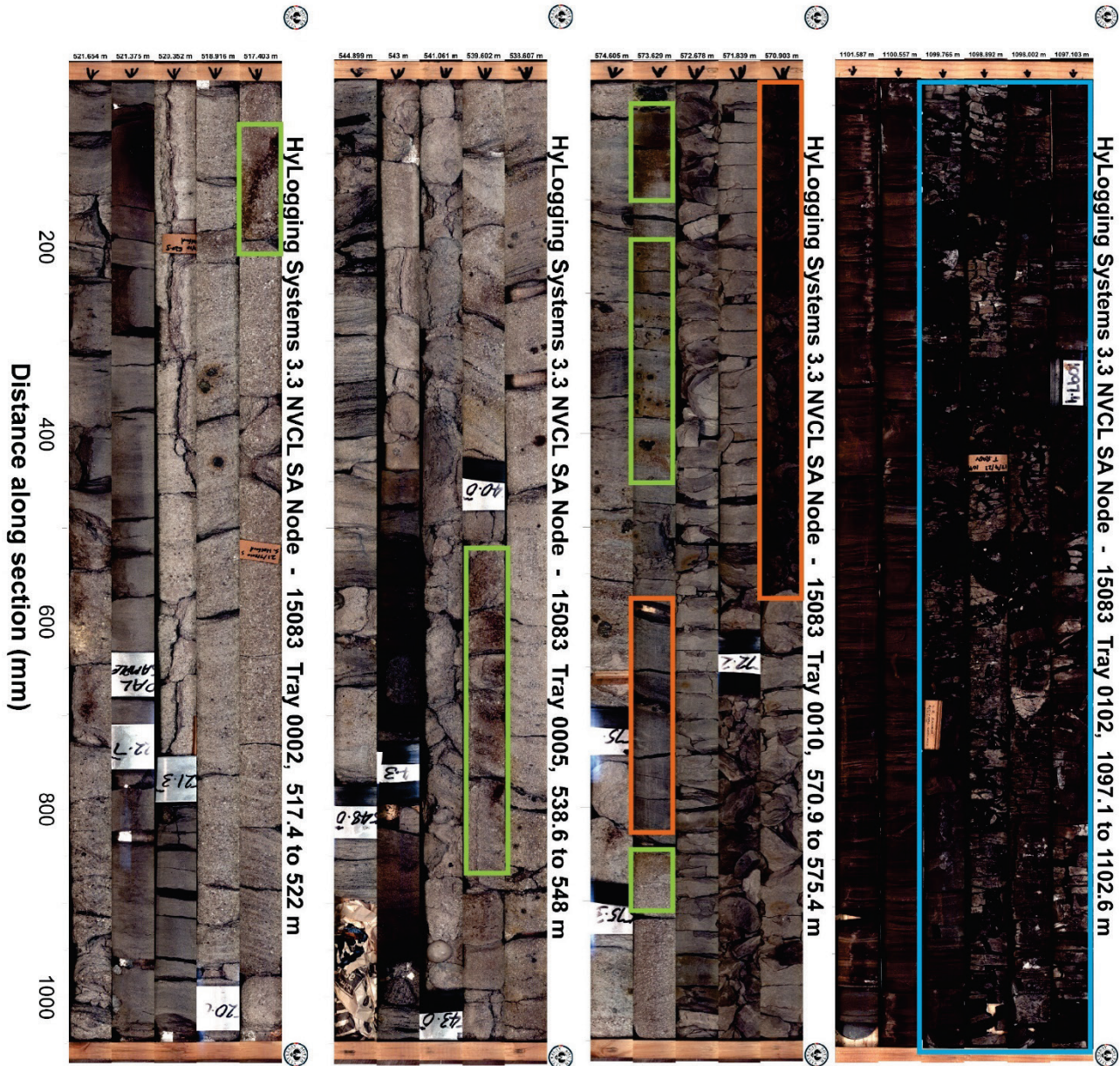


Figure 9. Core photographs from Kilroo 1A showing oil staining (green boxes) in Poldo Formation sandstones, fine-grained potential sealing lithology (orange boxes), fine-grained, carbon-rich lithology? (blue box) in Kilroo Formation (Tiainen pers. Comm.). Photographs available via [SARIG](#).

## Seals

Claystone of the Poldo Formation, claystone and diamictite of the Coolardie Formation and evaporites of the Kilroo Formation are all potential seals. Figure 6 shows that there was a significant thickness of halite intersected within the Kilroo offshore in Mercury 1, which may be a promising site for underground hydrogen storage according to Feitz et al. (2022) and Bradshaw et al. (2023). Thinner sections of halite may be present onshore and provide suitable seals for reservoirs. Figure 6 also shows that mafic volcanics consisting of tuffs and basalt were encountered at two levels in the mineral exploration borehole CRA 83 KD-1A, designated as Kilroo 1A in the [Petroleum Exploration and Production System — South Australia](#); these may act as suitable seals for potential reservoirs below.

## Petroleum source rock distribution and maturity modelling

The Jurassic section contains coal and carbonaceous claystone that have potential to generate hydrocarbons. Jong (1991) reported thermally immature but high total organic carbon (TOC) contents (2.5–55%) and fair to excellent generative potential (2.97 to 126 kg/t) for both oil and gas from twelve wells/drillholes across the basin; Figure 10 shows the results of tests for onshore wells Polda 1 and 44 and Tuckey 1 and offshore wells Columbia 1 and Mercury 1. The results show that Tuckey 1 contains gas-prone source rocks while the rest of the basin is gas and oil-prone. The Polda Basin geothermal gradients at Mercury 1 and Columbia 1 are in the order of 4.3–4.4°C/100 m for the Jurassic and younger section, and 1.7–2.1°C/100 m for the pre-Jurassic section. No geothermal gradient data are available from the onshore portion of the basin.

Given source rock occurrence is documented in equivalent-aged Neoproterozoic red beds elsewhere globally, it could be reasonably expected that source rocks might occur within relatively fine-grained, carbon-rich lithologies in the Kilroo Formation. The onshore mineral drillhole Kilroo 1A drillhole was continuously cored from 456.3 to 1,398.2 m and has been photographed and spectrally scanned. The core photographs show oil staining in coarse grained, relatively unconsolidated sandstones (Figure 9) and based on recent visual assessment potential source rocks in relatively fine-grained, carbon-rich lithologies (Tiainen 2025). In Griffiths 1980, the interval is described as an amygdaloidal tuff. Hence further investigative work is recommended. Three offshore exploration wells Colombia 1, Gemini 1 and Mercury 1 were all drilled on valid closures, yet no hydrocarbon shows were reported except for a relatively minor gas show of 40 ppm methane; the show was within an interpreted raft of black limestone within the salt-red bed section in Mercury 1 (see the [WCR in PEPS](#)) and was considered insignificant.

The hydrocarbon potential of the Polda Formation has been assessed as having good TOC values (2.5–55%) and fair to excellent generative potential (2.97 to 126 kg/t). However, vitrinite reflectance values suggest that the currently drilled portions of the basin are immature for hydrocarbon generation and that maturity will only be reached at considerable depth, either on the flanks of the central Polda Basin or to the west, where potential Mesozoic source and reservoir rocks may be present.

The Polda Formation has good source potential in the upper Jurassic coals, with similar characteristics to the Jurassic Walloon Coal Measure of the Eromanga, Surat and Clarence-Moreton Basins (Jong 1991).

## Natural hydrogen source

Natural hydrogen has been detected in wells in the Cooper and Eromanga Basins, Otway Basin and Stansbury Basin in South Australia.

The natural hydrogen industry is in its infancy worldwide. However, South Australia is at the forefront of exploration for natural hydrogen with granted PELs being actively explored, including PEL 691 on eastern Eyre Peninsula, and over 40 PEL applications.

Proposed subsurface generation mechanisms for natural hydrogen include, but are not limited to:

- degassing of magmas and deep-seated hydrogen from the Earth's core and mantle
- cataclasis
- oxidation of divalent iron (Fe<sup>2+</sup>) rich minerals and lithologies through rock-fluid interaction (e.g. serpentinisation); equivalent redox reactions may also occur using other multivalent elements such as sulphur, nitrogen and manganese
- natural radiolysis of water
- biogenic and abiogenic decomposition of organic matter
- a combination of coincident genetic factors
- numerous observations worldwide suggest that hydrogen derived from magmatic processes and the degassing of the Earth's upper mantle and, hypothetically, the lower mantle and core is prevalent, and routinely migrates through the crust to the Earth's surface.

Further details of these methods can be found in Bendall (2022).

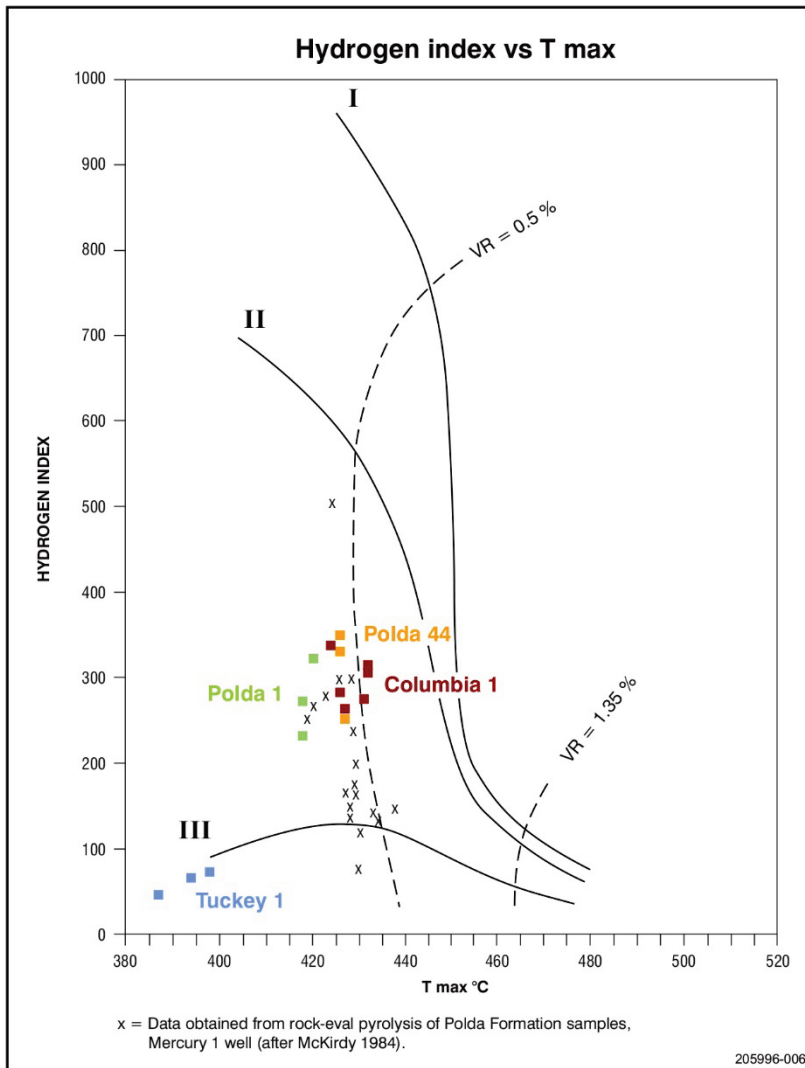


Figure 10. Hydrogen index vs Tmax for onshore wells Poldas 1, Poldas 44 and Tuckey 1, and offshore wells Columbia 1 and Mercury 1 (modified from Jong 1991).

Gold Hydrogen drilled Ramsay 1 and 2 in 2023 encountering both hydrogen and helium (<https://www.goldhydrogen.com.au/>). The source of the hydrogen is interpreted to be water circulation through iron-rich basement (hydrolysis) and/or water splitting during the radioactive decay of radiogenic elements (uranium, thorium and potassium) in the basement (radiolysis). The presence of high helium may be due to the involvement of a radiolytic source of helium or from mantle degassing.

Crystalline basement of the Sleaford Complex contains a diverse range of metamorphosed and deformed rocks, some of which may be potential sources of natural hydrogen on Eyre Peninsula (Figure 3). These include potential radiogenic granite gneiss and granodiorite, iron-rich rocks and radiogenic granites within which natural hydrogen could form via oxidation of ferrous to ferric compounds through interaction with water or by radiolysis of water by ionising radiation from the granites.

The Poldas Basin is bounded by relatively high-displacement faults with the basin shoulders consisting of Archean-Proterozoic crystalline basement. These deep-seated faults may provide conduits for migrating hydrogen and/or helium but may also allow water to penetrate and react with potential hydrogen source rocks. Radiogenic, iron-rich basement rocks may also be juxtaposed with the overlying water-wet sedimentary sequence providing migration and reaction pathways for natural hydrogen.

## Entrapment

There has been no petroleum or hydrogen exploration in the release area hence understanding of trapping mechanisms is limited. However, the deep-seated, east-west striking boundary faults of the Polda Basin have probably been active since the Archean, exerting a primary control on basin development during the Mesoproterozoic (Itiledoo Basin) and Neoproterozoic. Reactivation during Mesozoic rifting of Australia's southern margin from Antarctica have had further impact on trap generation.

Potential plays onshore include unconformity traps at the top of the Kilroo Formation, intra-graben horsts, monoclinical drape features and clastic aprons adjacent to the steep southern boundary fault in particular. Salt-associated traps have been demonstrated in the offshore portion of the Polda Basin and may exist onshore although to a lesser extent due to a likely much thinner salt section.

Offshore, Mercury 1 tested an anticlinal closure above an interpreted halite pillow (Feitz et al. 2022; Figure 6) and may extend inboard to the onshore. Columbia 1 was designed to test a large horst structure in the western sector of the Polda Basin. Gemini 1 was terminated before reaching the target sequence. All three wells were considered to be valid hydrocarbon plays with significant vertical closures.

The deep-seated, east-west striking boundary faults of the Polda Basin have probably been active since the Archean, exerting a primary control on basin development during the Mesoproterozoic (Itiledoo Basin) and Neoproterozoic. They were then reactivated during Mesozoic extension of Australia's southern margin and have had an impact on generating potential traps. They may have acted as long-lived conduits for circulation of fluids and gases and hence as pathways for any generated hydrocarbons and/or hydrogen to migrate towards potential traps.

Figure 11 shows a prospectivity map for natural hydrogen in South Australia, generated from analysis of potential hydrogen source rocks, potential migration pathways (faults, dykes and permeable lithologies) and known trapping mechanisms such as evaporites, clay, dolerite, and basin structure (Rumi Daruso 2023, shown in Margiono et al. 2024). This suggests that there is potential for natural hydrogen accumulation within portions of the onshore Polda Basin.

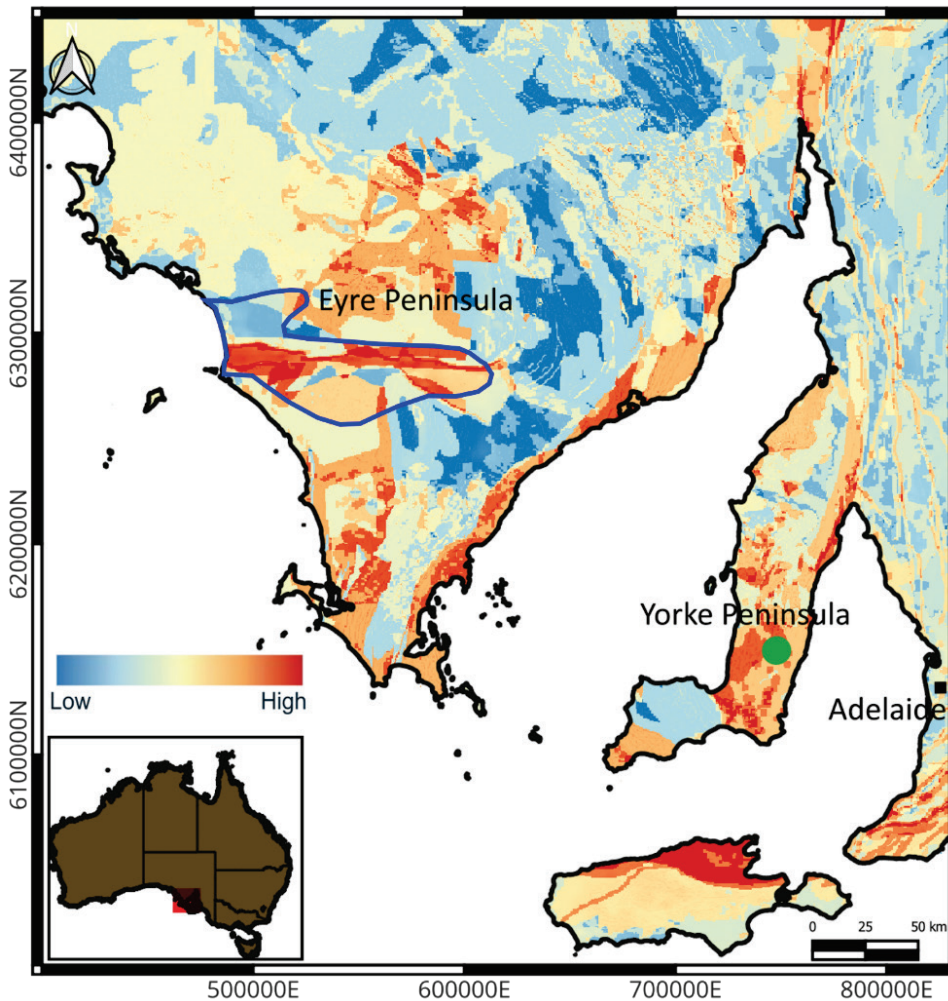


Figure 11. Potential natural hydrogen prospectivity of South Australia, with the Poldo Basin outlined in blue (modified from Margiono et al. 2024).

## Undiscovered resources

The Poldo Basin in South Australia is only modestly explored, with no discoveries of oil or natural gas, therefore no estimates of undiscovered petroleum resources have been made.

The natural hydrogen industry is in its infancy worldwide, and it is early days for exploration in South Australia, hence no estimates of undiscovered natural hydrogen resources have been made in the Poldo Basin.

## EXPLORATION POTENTIAL

The Poldo Basin remains only lightly explored for all regulated substances, especially so in PO2025 RSEL-A. This release is a genuine greenfield opportunity and is being offered at a time when interest in exploration for natural hydrogen is on the increase in South Australia and globally. Natural hydrogen in addition to petroleum, helium and carbon dioxide can be explored for as a 'regulated substance' under the Act.

The release area contains porous and permeable reservoirs, sealing lithologies, potential source rocks for both hydrocarbons and other regulated substances, particularly hydrogen and helium and has a long depositional and structural history conducive to trap generation. The oil and gas-prone source rocks identified in the Jurassic, albeit immature where currently measured, and the potential for deeper and more mature source rocks in the Neoproterozoic, in combination with oil shows in Kilroo 1A point to a working hydrocarbon play. The potential for natural hydrogen and helium, given the basement rock types means the licence area offer multiple plays potentially allowing for simultaneous testing of multiple regulated substances.

## DATA AND INFORMATION

A summary of the Polda Basin is available at <https://www.energymining.sa.gov.au/industry/energy-resources/geology-and-prospectivity/mesozoic-basins/polda-basin> and in Chapter 9 of [The geology of South Australia. Volume 2: The Phanerozoic](#) by Drexel and Preiss (1995).

The following references and datasets can be accessed from the [SARIG catalogue](#):

- Selected well completion reports and data relevant to PO2025 RSEL-A
- Onshore and offshore hardcopy seismic line data – PO2025 RSEL-A
- GIS shapefile dataset and ESRI ArcGIS project – PO2025 RSEL-A
- Acreage release block tenement map – PO2025 RSEL-A
- Selected references relevant to PO2025 RSEL-A

SARIG ([map.sarig.sa.gov.au](http://map.sarig.sa.gov.au)) provides an interactive map window to view, query and download data including spatial data. More information on products and data can be found through the DEM [Energy Resources data centre](#).

Other useful links:

- [Energy Resources Act 2000](#)
- [Energy Resources Regulations 2013](#)
- [Licensing approvals process](#)
- [Environmental Impact Assessment Criteria](#)
- [Information Sheet 001 Holders of energy resources tenements in South Australia](#)
- [Polda Basin prospectivity webpage](#)
- [Petroleum Exploration and Production System \(PEPS-SA\) well data download](#)
- [Gawler Craton webpage](#)
- [Natural hydrogen in South Australia](#)

## LAND USE AND ACCESS

The entire Eyre Peninsula covers a land area of approximately 51,000 km<sup>2</sup> and is home to approximately 58,000 people. The major population centres of Port Lincoln and Whyalla are south and northeast of the release area respectively. The traditional custodians include the [Barnjarla](#), [Nauo](#) and [Wirangu](#) nations. The predominant land use is cropping and grazing (80%) and conservation (13%). The main industries are agriculture, manufacturing and mining, fishing and aquaculture, retail, health and community services and tourism (Landscape SA). Mineral exploration (under ELs) and mining (under mining leases, MLs) are well established industries in the release area. In addition, relatively recent gas storage exploration licences (GSEL) have been awarded in the release area. [SARIG](#) provides information of current land use status.

The climate on the western Eyre Peninsula of South Australia is characterised by warm dry summers and cold wet winters, consequently exploration activities are generally conducted in the summer and autumn months of December through to April. However, with advanced preparation of sites it is possible to conduct activities year-round. For more information on weather in the region: [http://www.bom.gov.au/climate/averages/tables/cw\\_018139.shtml](http://www.bom.gov.au/climate/averages/tables/cw_018139.shtml)

## History of exploration on the Eyre Peninsula of South Australia

The onshore extent of the Polda Basin in South Australia was held most recently under a petroleum licence (PEL 153) by Energy Exploration Pty Ltd from 2014 to 2023, and by gas storage exploration licences GSEL 781 and GSEL 784 held by entX Limited since April 2023 (Figure 1 and Figure 12). However, only 111-line km of 2D data have been acquired and no petroleum exploration wells have been drilled onshore.

Petroleum exploration in the offshore region dates back to the 1970s, with 3,380-line km of 2D acquired and 3 exploration wells drilled.

## Regulatory framework

South Australia's framework under the ER Act is widely recognised for efficiently and effectively deploying leading practice regulation through:

- The grant of an ER Act licence provides a unique entitlement to progress relevant petroleum, natural hydrogen, geothermal and gas storage projects and operations;
- Gaining approval for on-ground activities is a separate (case-by-case) step that follows the grant of an ER Act licence. South Australia's regulatory framework involves robust stakeholder consultation, ensuring that the concerns of potentially affected people, enterprises and organisations are taken into account when decisions are made to approve (or otherwise) on-ground activities regulated under the ER Act;
- The exploration and development of energy resources will not be permitted in agricultural areas of South Australia unless regulated substances licensees address all valid impacts, underpinned by considerable research on the natural, social and economic environment (which must include for example impacts on the tourism, food, wine and fibre industries). Indeed, approval for on-ground operations will only be gained (if gained) after South Australia's regulators are satisfied that:
  - regulated activities that have (actually or potentially) adverse effects on the environment are properly managed to reduce environmental damage as far as reasonably practicable;
  - licensees eliminate as far as reasonably practicable the risk of significant long term environmental damage; and
  - licensees ensure that land adversely affected by regulated activities is properly rehabilitated.
- For a licensee to undertake operations in accordance with the ER Act, an Environmental Impact Report (EIR) must be prepared by the licensee in consultation with all potentially affected people, enterprises, and organisations. This document addresses the potential impacts on the social, natural and economic environments (which includes public health and impacts on brands) and considers the significance of impacts, after implementation of relevant controls in accordance with the [environmental impact assessment criteria](#);
- On the basis of the information provided in the EIR and in accordance with Section 97 of the ER Act, the EIR is reviewed by the Department for Energy and Mining in consultation with other relevant co-regulatory agencies, including but not limited to: the Department for Environment and Water (DEW); Landscapes Boards, the Environment Protection Authority (EPA); SA Health; Department of Infrastructure and Transport (DIT); Safework SA, Attorney-General's Department - Aboriginal Affairs and Reconciliation; and Primary Industries and Regions South Australia (PIRSA);



Current as at April 2025

**Acreage release**

PO2025 RSEL-A

**Petroleum tenements**

Exploration licence (PEL)

Exploration licence application (PELA)

**Gas storage tenements**

Exploration licence (GSEL)

Exploration licence application (GSELA)

**Land with no exploration access**

Park or reserve

Marine park

**Petroleum, stratigraphic and mineral wells**

Dry hole

**Land access**

Cropping

Grazing modified pastures

Intensive animal production

Irrigated perennial horticulture

Lake, reservoir/dam

Managed resource protection

Manufacturing and industrial

Marsh/wetland

Mining

Nature conservation

Other minimal uses

Plantation forestry

Figure 12. Polda Basin land use and access.

- An SEO must then be prepared, which states the environmental objectives to be achieved in carrying out specified activities, as well as the assessment and leading performance criteria used to assess whether the objectives have been achieved by the licensee;
- The EIR/SEO must demonstrate how potential negative impacts are prevented through appropriate design, construction, and modelling and importantly how this will be measured and monitored. Approval decisions for an EIR/SEO will only be made following a minimum 30 business day public consultation process as required under Section 105A of the ER Act. If a licensee cannot demonstrate compliance with these regulatory requirements, then approval

for the project will not be granted. This holds true for all projects regulated under the ER Act; and

- In addition to the requirements of the ER Act, SEOs refer to requirements of co-regulation (for example for the protection of water) of other Acts. In this way, non-compliance with relevant co-regulation becomes a non-compliance under the ER Act. In short, the SEO is a co-regulatory instrument that allows South Australia to be efficient and effective, without duplicative processes to assess and regulate land access for all proposed energy resource, geothermal energy and gas storage exploration, development, and production projects.

The successful bidder will be required to meet South Australia's leading practice environmental requirements before being approved to conduct exploration activity on the block. Further details can be found at [Approvals process | Energy & Mining](#).

An objective-based co-regulatory approach applies in South Australia for the regulation of the upstream energy resources industry to reduce compliance costs and deliver better environmental outcomes.

All existing EIR and SEOs for area-specific and activity-specific upstream energy resource operations in the Poldo Basin can be found on the [Environmental Register | Energy & Mining](#).

### **National parks and reserves**

There are a number of conservation areas designated under the *National Parks and Wildlife Act 1975* and other areas of remnant native vegetation in the release area. These parks, collectively are known as the Mallee Parks of the Central Eyre Peninsula which are operated under a [Management Plan](#). As outlined within the plan, each park has a different proclamation varying from single to joint proclamation, therefore allowing different levels of access to energy exploration.

The Parks are typically small in size, making it possible to work around them (Figure 12).

### **Primary industries**

The Department of Primary Industry and Regions SA (PIRSA) regards Eyre Peninsula as a highly modified landscape where broad-scale land clearance has occurred to develop dryland cropping and sheep farming (Figure 12).

Further information can be found in this brochure: [EP-landscape-plan-2021.pdf](#)

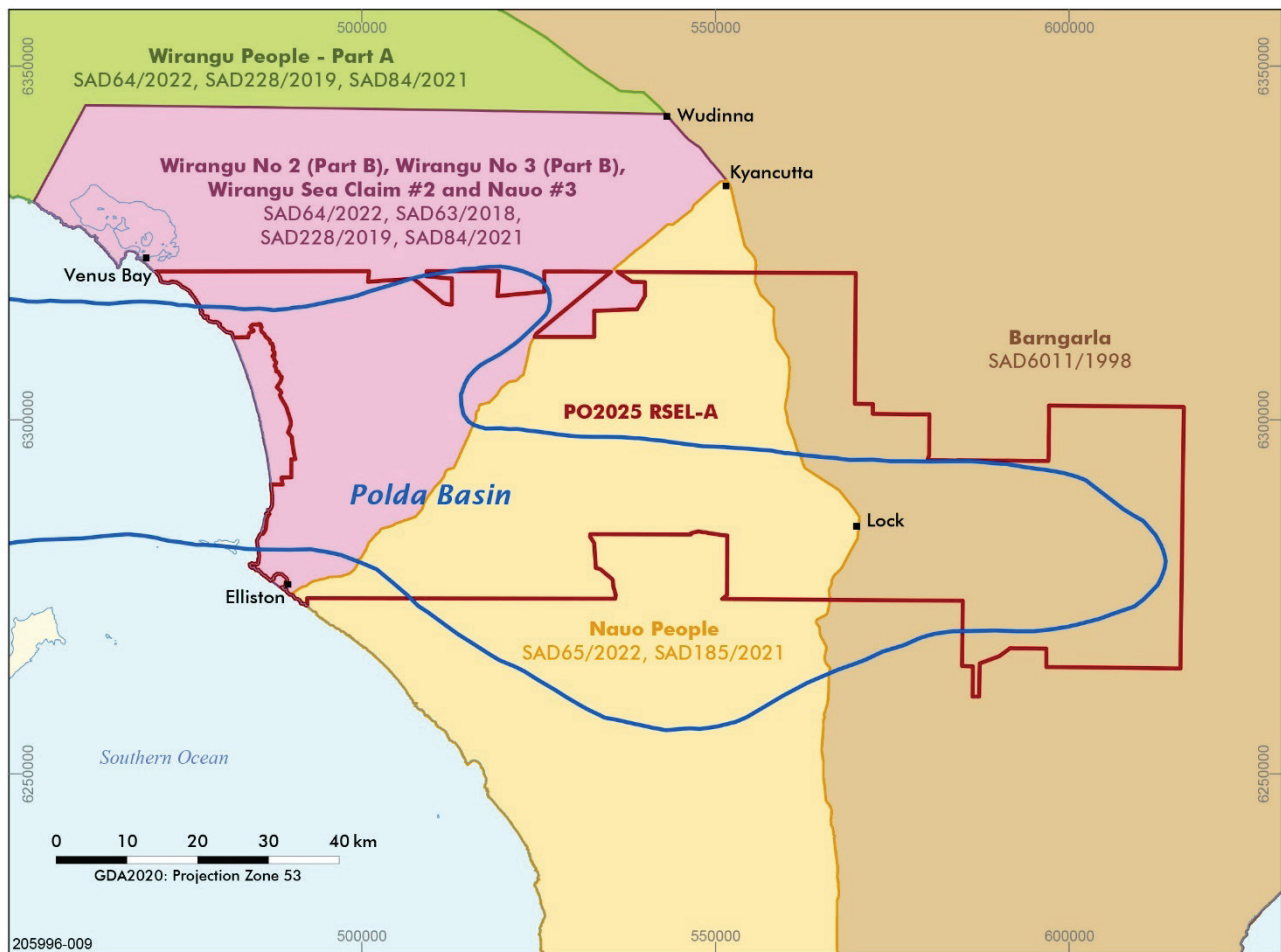
### **Aboriginal heritage and native title**

Native title determinations exist in the release area are shown in Figure 13.

In South Australia it is an offence to disturb or destroy Aboriginal sites, objects or remains. Standard procedures for determining the presence of Aboriginal heritage prior to the commencement of activities have been determined. These procedures involve consulting with the relevant Aboriginal organisation(s) and maintaining a watch for sites, objects or remains during activities. Licence holders are encouraged to develop a dialogue with regard to Aboriginal heritage and related matters with Aboriginal people having associations with the lands coincident with their licence area(s). Native title, as referenced in the *Commonwealth Native Title Act 1993*, may be applicable on non- freehold or non-perpetual leasehold land for example.

### **Associated Activities Licences**

Associated Activities Licences (AALs) are available under the ER Act to allow explorers/producers to undertake activities (e.g. seismic surveys or flowline construction) associated or in proximity to the primary energy resources exploration, retention and production licences.



Current as at April 2025

**Acreage release**

PO2025 RSEL-A

**Native Title determinations**

- Bargarla Native Title Claim
- Nauo People
- Wirangu No 2 (Part B), Wirangu No 3 (Part B), Wirangu Sea Claim #2 and Nauo #3
- Wirangu People - Part A

Figure 13. Native Title determinations in the Polda Basin.

## BIDDING AND AWARD PROCESS

Winning bidders will be selected on the basis of a five-year work program bid. The work program must be completed within the overall area of the RSEL. It must include a statement of exploratory operations the applicant proposes to carry out in the first five-year licence term.

The specific scoring scheme is detailed in [PO2025 RSEL-A Bid Assessment Policy](#).

Relevant PO2025 RSEL-A Application and Award procedures and forms can be accessed at the following links:

- [PO2025 RSEL-A Application Form](#)

- [PO2025 RSEL-A Application and Award Procedures](#)

In general, it is important to note that the timing of well drilling and seismic or other data acquisition will be taken into account. Key assessment criteria include but are not necessarily limited to:

- the number of exploration wells to be drilled in the RSEL, their nature of subsurface targets to be drilled and their timing
- the extent to which proposed wells are supported by existing or new programmed seismic data
- the amount and nature of seismic surveying (i.e. 2D versus 3D) to be carried out and its timing
- other data acquisition (e.g. gravity, aeromagnetic, magneto-telluric surveys, soil gas sampling or other geochemical surveys)
- seismic reprocessing to be carried out
- the adequacy of the applicant's financial resources and technical expertise to satisfactorily undertake the proposed work program and overall regulatory compliance.

Refer to the section above describing South Australia's [regulatory framework](#) to gain an appreciation of the activity approvals process that follows the grant of an energy resources licence pursuant to the ER Act.

## CLOSING DATE AND TIME

The closing date for PO2025 RSEL-A applications is 5.00 pm Australian Central Daylight Time on **Friday 31 October 2025**.

The Minister is expected to announce the winning bidder(s), together with details of work programs, by the end of 2025.

## APPLICATIONS

Applications should be made **via email only** to:

Executive Director, Regulation and Compliance Division, Department for Energy and Mining

Email [DEM.EnergyResourcesAcreageRelease@sa.gov.au](mailto:DEM.EnergyResourcesAcreageRelease@sa.gov.au)

Applications should be marked '**Confidential — contains RSEL application**'.

## CONTACT AND ENQUIRIES

Comments and enquiries for the exploration block should be addressed to:

Director, Geological Survey of South Australia, Department for Energy and Mining

Email [DEM.EnergyResourcesAcreageRelease@sa.gov.au](mailto:DEM.EnergyResourcesAcreageRelease@sa.gov.au)

Website <https://www.energymining.sa.gov.au/industry/energy-resources>

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# ACKNOWLEDGEMENT OF COUNTRY

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As guests here on Kaurna land, the Department for Energy and Mining (DEM) acknowledges everything this department does impacts on Aboriginal country, the sea, the sky, its people, and the spiritual and cultural connections which have existed since the first sunrise. Our responsibility is to share our collective knowledge, recognise a difficult history, respect the relationships made over time, and create a stronger future. We are ready to walk, learn and work together.

## FURTHER INFORMATION

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