

Instrument of Renewal

Section 19 (2B) of the *Petroleum (Onshore) Act 1991*

I, **Paul Toole M.P., Deputy Premier, Minister for Regional New South Wales, and Minister for Police** for the State of New South Wales, pursuant to section 19 (2B) of the *Petroleum (Onshore) Act 1991*, have determined to renew **Petroleum Exploration Licence 238 (Act 1955)** held by: **Santos NSW Pty Ltd (ACN 094 269 780)** and **Santos NSW (Narrabri Gas) Pty Ltd (ACN 147 609 729)**

- (a) for the term of **five (5) years, eight (8) months and five (5) days**; over the exploration area described in Schedule 1;
- (c) subject to the conditions prescribed in the *Petroleum (Onshore) Act 1991* and the *Petroleum (Onshore) Regulation 2016*.
- (d) subject to the conditions set out in Schedule 2; and
- (e) in accordance with the approved work program referred to in Schedule 3.



**Paul Toole M.P.
Deputy Premier
Minister for Regional NSW
Minister for Police**

Dated: 12.4.22

PETROLEUM EXPLORATION LICENCE

Issued under the *Petroleum (Onshore) Act 1991*

Petroleum Exploration Licence Number:	238 (Act 1955)
Renewal date:	12 April 2022
Expiry date:	17 December 2027
Licence holder:	Santos NSW Pty Ltd ACN 094 269 780 Santos NSW (Narrabri Gas) Pty Ltd ACN 147 609 729
Exploration area:	See Schedule 1
Resource:	Petroleum

Information about this licence

This petroleum exploration licence is issued under the *Petroleum (Onshore) Act 1991*. The licence holder may:

- Apply for the renewal of this petroleum exploration licence; or
- Apply for the transfer of this petroleum exploration licence to another person.

Renewal applications are to be lodged not earlier than two months and not later than one month before the expiry date of the licence consistent with the *Petroleum (Onshore) Act 1991*.

The following fees are payable in connection with this licence:

- An annual rental fee; and
- An annual administrative levy and
- Title fee.

Additional rights and responsibilities of licence holders are set out in the *Petroleum (Onshore) Act 1991* and the Petroleum (Onshore) Regulation 2016.

Please note that licence holders may also be required to obtain approvals and comply with requirements of other legislation when carrying out exploration activities, including (but not limited to):

- The *Protection of the Environment Operations Act 1997*;
- The *Environmental Planning and Assessment Act 1979*; and
- The *Water Act 1912* and the *Water Management Act 2000*.

Compliance and enforcement of petroleum titles

From 1 July 2015, under the NSW Gas Plan, the Environment Protection Authority is the lead authority to regulate compliance with and enforcement of all conditions (excluding work health and safety) of petroleum titles.

Rights of the licence holder under this licence

This licence gives the licence holder an exclusive right to prospect for petroleum on the exploration area.

Restrictions on the exercise of rights under this licence

It is the responsibility of the licence holder to apprise themselves of the restrictions on the exercise of rights under this licence that exist under NSW and Commonwealth legislation.

Exploration area (Schedule 1)

The land to which this licence applies is referred to as the exploration area and is set out at Schedule 1 of this licence.

Licence conditions (Schedule 2)

This licence is subject to the conditions:

- set out in Schedule 2 of this licence (standard and special conditions); and
- specified in the *Petroleum (Onshore) Act 1991* and the Petroleum (Onshore) Regulation 2016.

The licence holder must comply with all licence conditions. Contravention of licence conditions is an offence under the *Petroleum (Onshore) Act 1991*.

Further approvals or consents

The licence holder may need to obtain further approvals or consents under the *Petroleum (Onshore) Act 1991* or Petroleum (Onshore) Regulation 2016 or under any other Act or Regulation before carrying out prospecting operations. The licence holder must comply with any such further approvals or consents.

See, for example, condition 1 of Schedule 2 of this licence regarding Native Title. Also see section 31A of the *Petroleum (Onshore) Act 1991* which requires an activity approval to be obtained prior to commencing any assessable prospecting operation on the exploration area. Note that under section 31A (7) of the *Petroleum (Onshore) Act 1991*, it is a statutory condition that the licence holder must comply with any activity approval granted to the licence holder and in force.

Work program (Schedule 3)

In accordance clause 9 of the Petroleum (Onshore) Regulation 2016, it is a condition of this licence that the licence holder will:

- (a) carry out the operations, and any other activities, described in the work program, as for the time being in force, in respect of this licence, and
- (b) comply with any commitments in relation to the conduct of operations specified in the work program, as for the time being in force, in respect of this licence.

Refer to clauses 5 and 6 of the Petroleum (Onshore) Regulation 2016 for further information regarding work program requirements.

The Work Program may be varied on application of the licence holder, with approval of the Minister. Refer to clause 10 of the Petroleum (Onshore) Regulation 2016 for further information regarding variations of work programs.

The approved Work Program is identified by the identification number as set out at Schedule 3 of this licence. A summary of the program, in accordance with section 113G of the *Petroleum (Onshore) Act 1991*, of the Work Program is set out at Schedule 3 of this licence.

Licence History

Identifier (TAS dealing)	Effective date	Reason for Update
180	12 April 2022	Renewal of PEL238 (Act 1955)

Definitions

In this licence:

- (a) A reference to a Code or Guideline includes a reference to that document as amended or replaced from time to time, and
- (b) Words have the meaning given to those terms under the *Petroleum (Onshore) Act 1991* unless otherwise defined below.

Change in effective control of the licence holder means any occurrence which results in any person, not being a related body corporate of the licence holder, newly being in one or more of the following positions:

- (a) having the capacity to appoint or control more than 50% of the number of directors of the licence holder's board;
- (b) being entitled to exercise (directly or indirectly) more than 50% of the votes entitled to be cast at any general meeting of the licence holder; or
- (c) holding more than 50% of the issued share capital (other than shares issued with no rights other than to receive a specified amount in distribution) of the licence holder.

Exploration area means the land the subject of this licence.

Foreign acquisition of substantial control in the licence holder means any occurrence which results in a foreign party, not being a related body corporate of the licence holder, newly being in one or more of the following positions:

- (a) having the capacity to appoint or control 20% or more of the number of directors of the licence holder's board;
- (b) being entitled to exercise (directly or indirectly) 20% or more of the votes entitled to be cast at any general meeting of the licence holder; or
- (c) holding interests in 20% or more of the issued share capital (other than shares issued with no rights other than to receive a specified amount in distribution) of the licence holder.

National park, regional park, historic site, nature reserve, karst conservation reserve and Aboriginal area have the same meaning given to those terms under the *National Parks and Wildlife Act 1974*.

Related Body Corporate has the same meaning given to that term under the *Corporations Act 2001 (Cth)*.

SCHEDULE 1

Exploration area

The exploration area comprises an area of **81 blocks** as specified in the table below, **excluding** any land:

- (a) vested in the Commonwealth of Australia; or
- (b) that was not subject to the licence immediately before this renewal.

Note: Exclusion (b) may include land that, at the date this licence was initially granted, was:

- subject to a petroleum title, or an application for an authority; or
- vested in the Commonwealth of Australia; or
- located within a national park, regional park, historic site, nature reserve, karst conservation area or Aboriginal area established under the *National Parks and Wildlife Act 1974* or other legislation.

Map	Block
BOURKE	1865, 1866, 1867, 1868, 1869, 1870, 1871, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2224, 2225, 2226, 2227, 2229, 2230, 2231, 2232, 2296, 2297, 2298, 2299, 2301, 2302, 2303, 2304, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2518, 2519, 2520, 2588, 2589, 2590, 2591, 2592

The boundaries of the exploration area are indicated on the following diagram.

DISCLAIMER

The boundaries of the exploration area in the diagram are indicative only, based on knowledge and understanding at the time this licence was granted. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date. No warranty about the accuracy, currency or completeness of any information in this diagram is inferred (including, without limitation, any information provided by third parties). While all reasonable care has been taken in the compilation of this diagram, to the extent permitted by law, Regional NSW excludes all liability for the accuracy or completeness of the information, or for any injury, loss, or damage whatsoever (including without limitation liability for negligence and consequential losses) suffered by any person acting, or purporting to act, in reliance upon anything contained herein. Users should rely upon their own advice, skills, interpretation and experience in applying the information in the diagram.

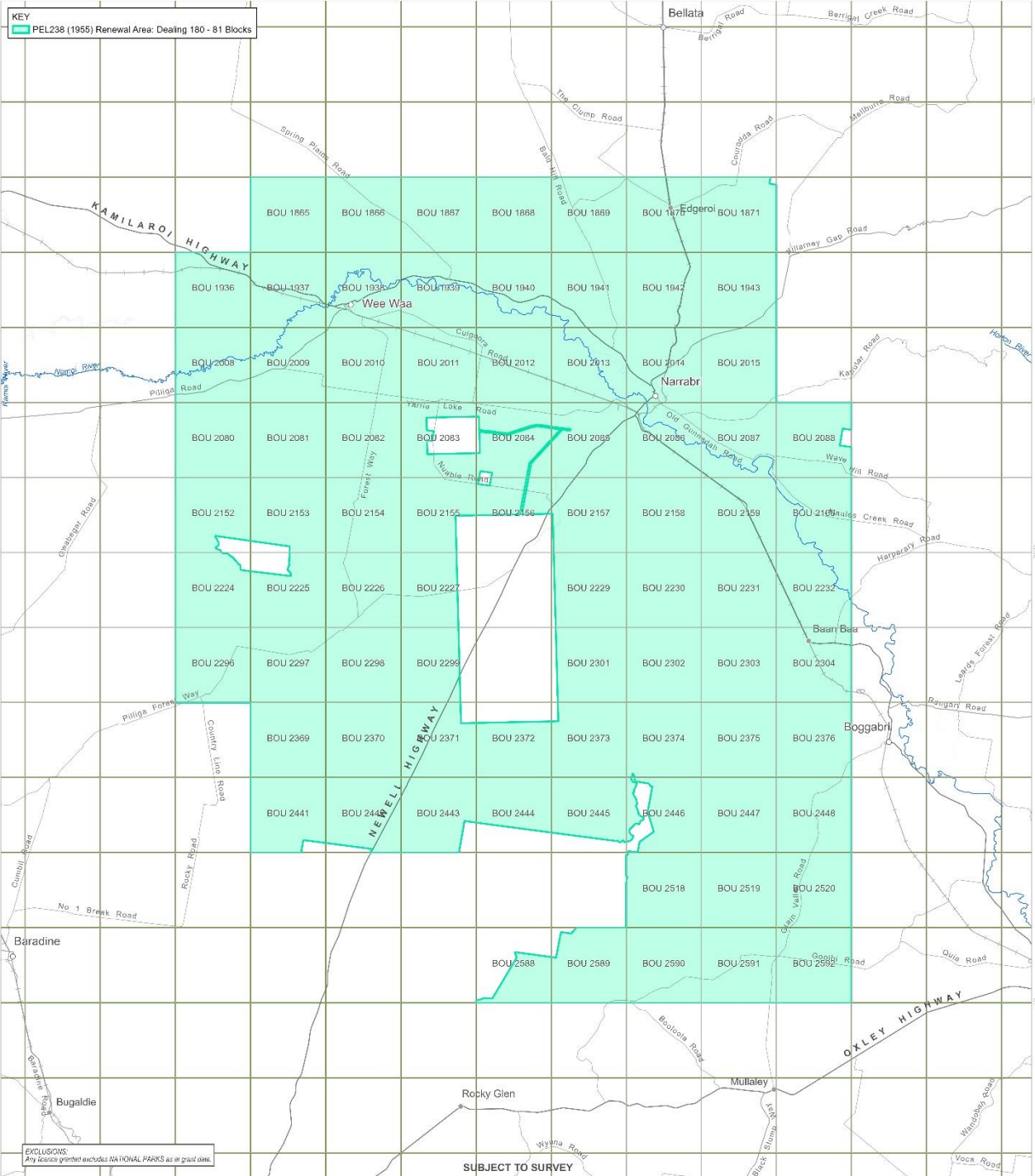
MINING, EXPLORATION & GEOSCIENCE

DIAGRAM P10040-12

TMS: REN590

DIAGRAM of PEL No. 238

WAS PEL APPLICATION: 349 (Act 1955)
 MAIN HOLDER: SANTOS NSW PTY LTD (OTHER HOLDER: ENERGYAUSTRALIA NARRABRI GAS PTY LTD)
 GRANT DATE: 1-SEP-1980
 GROUP(S)/MINERAL(S): PETROLEUM
 MAP SHEET(S): 8737 WEE WAA, 8837 NARRABRI, 8736 BARADINE & BAAN BAA 8836
 COUNTY(IES): BARADINE, JAMISON, NANDEWAR, POTTINGER & WHITE



SPATIAL SERVICES
 ASSESSMENTS AND SYSTEMS

RENEWAL AREA: 81 BLOCKS (DEALING NO. 180)



Prepared by: C. Tiedemann - 17/02/2022

DISCLAIMER:
 The compilation of information shown on this diagram is derived from plans and data, some of which has been produced and provided by third parties. This boundaries have been adjusted to maintain their relationship with the digital cadastral database in some circumstances, thereby creating certain inaccuracies in the data. The Department and the State of New South Wales make no statement, representation or warranty that the titles information shown on this diagram is complete, accurate or free from error. Users rely on the titles information supplied on this diagram at their own risk. The Department and the State of New South Wales accept no responsibility for any person, acting in or relying on, or upon any of the titles information shown on this diagram, and accept in all liability for any loss, damage, cost, expense or injury (including death) incurred or arising by reason of any person, acting or relying on the titles information contained on this diagram by reason of or by any error, omission, defect or misstatement (whether such error, omission or misstatement is caused by or arises from negligence, lack of care or otherwise). Users should always verify historical materials by viewing and relying upon their own separate inquiries prior to making any important decisions or taking any action on the basis of titles information.

SCHEDULE 2

Petroleum Exploration Licence Conditions

Standard conditions

~~Native Title~~

- ~~1. The licence holder must not prospect on any land or waters within the exploration area on which Native Title has not been extinguished under the *Native Title Act 1993 (Cth)* without the prior written consent of the Minister. This condition does not apply to this authority.~~

Community consultation

2. The licence holder must carry out community consultation in relation to the planning and conduct of activities under this licence in accordance with the *Exploration Code of Practice: Community Consultation* (Department of Industry, March 2016), as amended or replaced from time to time.

Protection of the environment

3. The licence holder must prevent, or if that is not reasonably practicable, minimise so far as is reasonably practicable, any harm to the environment arising from activities carried out under this licence. The licence holder must demonstrate why they can only minimise rather than prevent harm to the environment.

Security

4. The licence holder must provide and maintain a security deposit to secure funding for the fulfilment of obligations under this licence (including obligations that may arise in the future) as follows:
 - (a) Amount: [REDACTED]
 - (b) Licence holder's entitlement to interest: none.

Rehabilitation

5. The licence holder must carry out rehabilitation of all disturbance caused by activities carried out under this licence in accordance with the requirements of the *Exploration Code of Practice: Rehabilitation* (Department of Regional NSW, June 2021), as amended or replaced from time to time, to the satisfaction of the Minister.

Annual activity reporting

6. Unless otherwise approved by the Secretary, the licence holder must submit annual activity reports prepared in accordance with the *Exploration Guideline: Annual Activity Reporting* for

Prospecting Titles (Department of Regional NSW, December 2020), as amended or replaced from time to time, at the following times:

- (a) Annually, within one calendar month following the grant anniversary date of this licence;
- (b) On any other date or dates directed by the Secretary in writing; and
- (c) Within one calendar month of cancellation or expiry of this licence.

Change in control

7. If the licence holder is a corporation, the Secretary must be notified within 30 days of any:

- (a) Change in effective control of the licence holder; or
- (b) Foreign acquisition of substantial control in the licence holder.

Notification is not required where a change in effective control of the licence holder, or a foreign acquisition of substantial control of the licence holder, occurs as a result of the acquisition of shares or other securities on a registered stock exchange.

Cooperation agreement

8. The licence holder must make every reasonable attempt and be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations under the *Mining Act 1992* or petroleum titles under the *Petroleum (Onshore) Act 1991*. The cooperation agreement should address, but not be limited to:

- (a) Access arrangements
- (b) Operational interaction arrangements
- (c) Dispute resolution
- (d) Information sharing
- (e) Location and timing of prospecting operations
- (f) Potential resource extraction conflicts
- (g) Integrated rehabilitation activities.

Accuracy of well location and geophysical logging

9. The location and height (Australian Height Datum) of each collar of all wells or bores drilled within the licence must be determined to an accuracy of 1 metre.

10. For any well or bore that intersects a coal seam more than 1 metre in thickness, the downhole survey must achieve a level of accuracy that is within $\pm 0.5^\circ$ for inclination and $\pm 0.2^\circ$ azimuth for a well or bore with an inclination less than 6.0° . For a well or bore with an inclination greater-than-or-equal-to 6.0° the downhole survey must achieve a level of accuracy that is within $\pm 0.5^\circ$ for inclination and $\pm 1.0^\circ$ azimuth.

11. All newly drilled wells must be downhole geophysically logged for the entire length of the well prior to the installation of production casing with a logging suite which can accurately determine the location and properties of all hydrocarbon bearing formations.

12. For all lateral wells or bores the downhole survey must achieve a level of accuracy that is within $\pm 0.5^\circ$ for inclination and $\pm 1.0^\circ$ azimuth, or for each 1000 metres of the drilled well or bore, ± 6 metres vertically and ± 20 metres laterally.
13. The licence holder must provide all geophysical and surveying logs to the Secretary, with the well completion report or within three months of the completion of any well that is decommissioned.

Operations to not affect mineability of coal seams

14. The lease holder must undertake all operations with regard to identifying, managing and minimising the impact of activities on the potential mineability of coal seams.

Removal of steel casing

15. At the completion of production testing and prior to plug and abandonment of the hole, steel casing must be removed from any potentially mineable coal seam. Alternatively, glass reinforced epoxy casing meeting good industry design practice may be used across mineable coal seams, subject to approval of the Chief Inspector of Coal Mines.
16. Downhole geophysical tools and/or cameras must be used to confirm the removal or absence of steel casing throughout the prescribed interval. All logs and information pertinent to the steel casing must be provided to the Secretary.

Special conditions

Local Aboriginal Land Council notification

17. Within 30 days of the renewal of this licence, the licence holder must provide written notification to the relevant Local Aboriginal Land Council(s) to which this licence relates, that the licence has been renewed and include a map of the exploration area.

Activity approvals issued prior to 1 March 2016

18. Any activity or operation the subject of an activity approval under section 36A of the *Petroleum (Onshore) Act 1991* and in force on 1 March 2016 must, in addition to any terms of that activity approval, be carried out in accordance with the following Codes of Practice (as amended or replaced from time to time):
- (a) *Exploration Code of Practice: Environmental Management* (Department of Regional NSW, June 2021),
 - (b) *Exploration Code of Practice: Produced Water Management, Storage and Transfer* (Department of Regional NSW, June 2021),
 - (c) *Code of Practice for Coal Seam Gas Well Integrity* (Department of Trade and Investment, 2012),
 - (d) *Code of Practice for Coal Seam Gas Fracture Stimulation Activities* (Department of Trade and Investment, 2012),
- and these Codes of Practice prevail to the extent of any inconsistency with the terms of such an activity approval, except as provided in condition 20 below.
19. Where the terms of an activity approval granted prior to 1 July 2015 and the requirements of Part B of the *Exploration Code of Practice: Produced Water Managements, Storage and Transfer* (Department of Regional NSW, June 2021) relate to the same activity, the terms of the activity approval will prevail over the requirements of the Code of Practice in respect of that activity.

Note: Reports required under section 97C of the *Petroleum (Onshore) Act 1991* and Part 4 of the Petroleum (Onshore) Regulation 2016 must be prepared in accordance with the *Onshore petroleum reporting and data submission: A guide to geoscientific reporting and data submission of onshore petroleum exploration and production in New South Wales* (Department of Industry, 2016), as amended or replaced from time to time.

SCHEDULE 3

Work Program

In accordance with clause 9 of the Petroleum (Onshore) Regulation 2016 the approved Work Program is the document identified by the following identification number:

WP-PEL238-2022-2027

Work Program Summary

In accordance with section 113G of the *Petroleum (Onshore) Act 1991* a summary of the approved Work Program is set out below.

Work Program Year	Period	Proposed activities
1	2022-2023	<ul style="list-style-type: none"> • Core hole planning and approvals • Ongoing care and maintenance of pilots, and associated infrastructure • Ongoing water management at Leewood Water Treatment facility • Technical studies
2	2023 - 2024	<ul style="list-style-type: none"> • Core hole planning and approvals • Ongoing care and maintenance of pilots, and associated infrastructure • Ongoing water management at Leewood Water Treatment facility • Technical studies

Note: The approved Work Program and Work Program Summary set out above are as at the time this licence instrument was signed. Therefore, any approved variations to the Work Program or progressive agendas (if required in accordance with clause 6 of the Petroleum (Onshore) Regulation 2016), will not be reflected in this licence instrument, rather in separate instruments.