

Santos Ltd
A.B.N. 80 007 550 923
Level 22, Santos Place
32 Turbot Street
Brisbane QLD 4000
GPO Box 1010
Brisbane QLD 4001
Telephone: (07) 3838 3000
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Santos

DATA TRANSMITTAL

	Data Transmittal Ref:
	From: Santos Ltd
	To: RPI Act Development Assessment Team, DILGP
	Date: 6 December 2018
	Contact No: 3838 5696
	Despatched by: Janelle Twyman
	Method of Despatch: ☐ Mail ☐ Courier ☒ By hand

Quantity	Description
1	Fee payment for Regional Planning Interests Act 2014 Assessment Application – Inca 1DW1 well and Inca 1 gas flowline; and Bantam 1 well and Bantam gas flowline
1	Regional Planning Interests Act 2014 Assessment Application and Support Information. Santos references: EMT282 and EMT292

Received in good order except as noted below:	RECEIVED BY: (Print Name)	DARREN BREWER
	SIGNED:	
	DATE:	06/12/2018
This copy of Transmittal is for: Retention by receiver ☒ Return to Sender ☐		

Santos Ltd
ABN 80 007 550 923
60 Flinders Street
Adelaide, South Australia 5000
Telephone: 61 8 8116 5000
Facsimile: 61 8 8116 5050
www.santos.com



6 December 2018

Chief Executive
RPI Act Development Assessment Team
Department of Infrastructure, Local Government and Planning
Level 13, 1 William Street
BRISBANE QLD 4001

Dear Sir / Madam,

Please find attached an assessment application for a regional interests development approval (RIDA) under the *Regional Planning Interests Act 2014* (RPI Act). This application is of an administrative nature. It seeks only to authorise the following activities from within the Channel Country SEA:

- Petroleum 'production' on Lot 2528 on Plan PH429 and PLA1056 from the existing Inca 1DW1 petroleum well and associated infrastructure; and
- Operation of the associated Inca 1 gas flowline (PPL2036); and
- Petroleum production on Lot 1 on Plan SP133822 and PLA1055 from the existing Bantam 1 petroleum well and associated infrastructure; and
- Operation of the associated Bantam 1 gas flowline (PPL2035).

The application includes the following information:

- Attachment 1 – Regional Planning Interests Act 2014 Assessment Application Form
- Attachment 2a – Current State Tenure Title Search (Lot 2528 on Plan PH429)
- Attachment 2b – Current State Tenure Title Search (Lot 1 SP133822)
- Attachment 3a – PL 1056 Resource Authority Public Report
- Attachment 3b – PPL2036 Resource Authority Public Report
- Attachment 3c – PL1055 Resource Authority Public Report
- Attachment 3d – PPL2035 Resource Authority Public Report
- Attachment 4a – RIDA Assessment Report – Inca 1DW1
- Attachment 4b – RIDA Assessment Report – Bantam 1
- Attachment 5 – GIS Files

Payment of the application fee of \$6,480.00 has been paid upon lodgement of this application.

Please do not hesitate to contact Janelle Twyman on (07) 3838 5696 or janelle.twyman@santos.com should you have any queries in relation to the attached.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Liz Dunlop', written in a cursive style.

Liz Dunlop

Principal Environmental Advisor



**ATTACHMENT 1 - REGIONAL PLANNING INTERESTS ACT 2014 ASSESSMENT
APPLICATION FORM**

Regional Planning Interests Act 2014

Assessment application form

Approved under section 94 of the *Regional Planning Interests Act 2014*.

Version 3.0 is effective from 3 July 2017.

Before lodging your application

1. Read RPI Act Statutory Guideline 01/14: How to make an assessment application for a regional interests development approval under the [Regional Planning Interests Act 2014](#)
2. Consider contacting the RPI Act Development Assessment team on 1300 967 433 or email RPIAct@dilgp.qld.gov.au for general queries, or to request a pre-application discussion on the proposed application.

Purpose of application form

This form is to be used when making an assessment application for a regional interests development approval (RIDA) under the *Regional Planning Interests Act 2014* (RPI Act).

Definitions

Expressions highlighted in bold italic type have the same meaning as in the RPI Act or in regulations made under the RPI Act.

How to make the Assessment Application

Section 29 of the RPI Act states:

An assessment application must be:

1. made to the chief executive in the approved form; and
2. accompanied by a report:
 - assessing the resource activity or regulated activity's impact on the area of regional interest; and
 - identifying any constraints on the configuration or operation of the activity; and
3. accompanied by the fee prescribed under a regulation.

The applicant must complete all sections of the form either on the form or as an attachment.

Where to lodge

The preferred method of lodgement is to upload the application form on the electronic registration and login system. Access to the RIDA system is available on the [DILGP Planning website](#).

OR

Provide **1 electronic copy** of the completed application form and the supporting information to the chief executive:

- **Email:** [**RPIAct@dilgp.qld.gov.au**](mailto:RPIAct@dilgp.qld.gov.au)
- **Post:** RPI Act Development Assessment Team DILGP
PO Box 15009
City East QLD 4002
- **Hand deliver:** RPI Act Development Assessment Team DILGP
Level 13, 1 William Street, Brisbane
(For hand deliveries, contact the RIDA Development Assessment team on 1300 967 433).



**Queensland
Government**

1. Property description of the land the subject of the application. Identify all lots or parts of lots on which the activity is proposed, and the total area of disturbance. Provide a map.			
Lot on Plan description (e.g. 1RP12345)	Lot 2528 PH429 Lot 1 SP133822		
Street address/suburb/ locality and post code	Orientos Road, Cameron Corner, QLD 'Durham Downs' via Leigh Creek 5731		
Closest town	Thargomindah, QLD 4492		
2. Application details Attach a map that clearly shows all relevant areas of regional interest on the land the subject of the application and the corresponding proposed location of the proposed activity/ies.			
Identify the area/s of regional interest (ARI) in the application area and the area of the ARI to be disturbed			
Area of regional interest (ARI)	Area of disturbance	Area of regional interest (ARI)	Area of disturbance
☐ Priority agricultural area	_____ ha	☐ Priority living area	_____ ha
☐ Strategic cropping area	_____ ha	☒ Strategic environmental area	12.56 ha
Identify the resource or regulated activity			
☐ Resource activity: mining and other resource activities (not petroleum and gas). (Add the type of mining on this form (e.g. coal, bauxite))			
☒ Resource activity: petroleum and gas			
☐ Regulated activity - broadacre cropping (Only relevant where the application relates to a strategic environmental area)			
☐ Regulated activity - water storage (dam) (Only relevant where the application relates to a strategic environmental area)			
Provide a detailed description of the proposed activities Provide a description of the proposed activities for which approval is sought, location and the surface area of the activities.			
Area of regional interest	Activity	Location	Total area of disturbance (ha)
Channel Country Strategic Environment Area	Production from one (1) gas well and operation of a	Lot 2528 PH429	10.06 ha

	petroleum pipeline. Refer to Attachment 4a.		
Channel Country Strategic Environment Area	Production from one (1) gas well and operation of a petroleum pipeline. Refer to Attachment 4b.	Lot 1 SP133822	2.50 ha
Provide a description of current land use Provide a description of what the land is currently being used for (e.g. horticulture, irrigated cropping, dryland grazing, nature conservation, residential, manufacturing and industrial, etc.) and the surrounding land within a 1 kilometre radius. Attach a map that clearly shows the area and location of all existing land uses and activities on the land the subject of the application, and within a 1 kilometre radius of the boundaries of the land that is the subject of the application. Refer to assessment report. The proposed activities would be located solely on Lot 2528 PH429 forming part of Orientos Station, a cattle station operated by the Betts family. The existing land use for this cattle station includes grazing from natural vegetation.			
3. Supporting information to accompany this application			
Report (<i>addressing matters set out in section 29(b) of the RPI Act</i>)			
Maps, GIS data files, site plans (<i>proposed activities</i>)			
Other documents (<i>optional</i>)			
4. Other relevant information to accompany this application Attach map/s to identify the location of this information and lot on plan details.			
Are there any resource authorities or applications for resource authorities over all or part of the land the subject of the application? (e.g. for exploration or resource development)	☒ Yes (Provide the resource authority reference number, a description of the type of authority/approval, the status (i.e. in application stage or approved); date of application or approval; location and dimensions of each resource authority or application)	☐ No	
Is there a SCL protection decision over all or part of the land the subject of the application?	☐ Yes (Provide decision number/s)	☒ No	
Is there an environmental authority (EA) over all or part of the land the subject of the application?	☒ Yes (Provide environmental authority number/s)	☐ No	
Are there any easements over any part of	☐ Yes (Include nature, location and	☒ No	

the land the subject of the application?	dimensions of each easement e.g. for access, infrastructure)	
Attach a current title search for each lot or part of a lot the subject of the application (NOTE: the searches must be obtained within 3 business days before application.)	☒ Tick to confirm title searches are attached.	
Attach GIS data files for the proposed activities identified in section 2 above.	☒ Tick to confirm data files are attached.	
Is an exemption from public notification for the assessment application under section 34(3) of the RPI Act sought?	☒ Yes (Attach written request including justification for the exemption)	☐ No
5. Land owner details		
Name of all land owner/s	Jennifer Ann and Bradley Ross Betts	
Postal address/s	'Orientos Station', Thargomindah QLD 4492	
Telephone/mobile number/email address/s (non-mandatory)		
Is the applicant the owner (as defined in schedule 1 to the RPI Act) of the land the subject of the application?	☐ Yes	☒ No (Identify the land that is not owned by the applicant)
Is it necessary, under section 30 of the RPI Act, to provide a copy of the application to the owner of the land? (NOTE: proof of delivery will be required.)	☒ Yes	☐ No
Name of all land owner/s	S. Kidman and Co Ltd	
Postal address/s	183 Archer St, North Adelaide, SA 5006	
Telephone/mobile number/email address/s (non-mandatory)		
Is the applicant the owner (as defined in schedule 1 to the RPI Act) of the land the subject of the application?	☐ Yes	☒ No (Identify the land that is not owned by the applicant)
Is it necessary, under section 30 of the RPI Act, to provide a copy of the application to the owner of the land? (NOTE: proof of delivery will be required.)	☒ Yes	☐ No
6. Applicant/authorised person details Section 28 of the RPI Act prescribes who may be the applicant for a RIDA for a resource activity or regulated activity to be carried out in an area of regional interest. The decision about the application is issued to the applicant. The applicant need not be the owner of the land. The authorised person for a company (if applicable) is the contact person for the applicant and need not be the applicant (for example, director, company secretary or sole director). However, formal documents, such as any requirement notice and the decision about the application, will be sent to the applicant at the address for service stated below.		

Applicant/s name (individual or company name in full), include ABN or ACN number if applicable	Santos Limited ABN 80 007 550 923
Applicant's postal address and email address for service	Level 19, 32 Turbot Street Brisbane QLD 4000
Authorised contact person for applicant: name, position and company	Janelle Twyman, Environmental Advisor, Santos Limited
Contact phone number and mobile number	(07) 3838 5696
Contact email address	janelle.twyman@santos.com

7. Electronic documentation	
Where an email address is provided in section 6 above, does the applicant consent to receiving written information relating to this assessment application, required or permitted to be provided under the <i>Regional Planning Interests Act 2014</i> or any other State law, in an electronic format pursuant to sections 11 and 12 of the <i>Electronic Transactions Act 2001</i> ?	☒ Yes ☐ No
8. Application fee (Fees are prescribed in the Regional Planning Interests Regulation 2014)	
Amount payable	\$6,480
Reference number (Contact RIDA assessment team for a reference number)	
Payment option (Contact RIDA assessment team for account details)	☐ Direct deposit Date deposited: ☒ Cheque attached
9. Use and Disclosure of Information Statement	
The information is collected in accordance with the RPI Act and will be used by Queensland Government Agencies for the processing and assessment of your assessment application, and may involve the chief executive: 1. and other officers of the DILGP, and any consultants engaged by or on behalf of the chief executive, reviewing the information provided for the purpose of considering and assessing your assessment application 2. providing a copy of the assessment application to relevant Queensland Government Agencies prescribed as assessing agencies for the assessment application (including the local government), the Gasfields Commission or any person asked to provide advice or comment on the assessment application. The assessment application and the accompanying report will also be made publically available on the DILGP website from the time the assessment application is made until the time it lapses or is withdrawn or, if is decided, until the end of the last period during which an appeal may be made against a decision on the application. However, information will not be made publicly available on the DILGP website to the extent that it is provided by an owner of land (as defined in schedule 1 to the RPI Act) (an owner) who is not the applicant, and is commercial-in-confidence or personal information, and that owner has not consented to its disclosure, or to the extent that it is information which is considered to be sensitive security information. Where an application proposes a resource or regulated activity in a priority agricultural area (PAA) and the applicant is required to provide information about the productive capacity or operation of a priority agricultural land use to address the prescribed solutions in the Regional Planning Interests Regulation 2014 (schedule 2, part 2), the information is to be provided in a separate document attached as an appendix to the assessment application report and the application must: • identify the source of the information provided, including whether the information was provided by an owner other than the applicant • state whether an owner other than the applicant agrees to the information being made publicly available on the DILGP website; and if so:	

- provide the express written agreement of that owner to the information being made publicly available on the DILGP website.

If an owner, other than the applicant, does not provide express written agreement, the information will not be made available on the DILGP website with the other application information. You may also be required to publicly notify your application. A notice about the chief executive's decision relating to your application will also be publicly notified.

Your personal details will not be disclosed for a purpose outside this assessment process, except where required by legislation (including the *Right to Information Act 2009*). This information may be stored in a database by DILGP.

The information collected will be retained as required by the *Public Records Act 2002*.

10. Declaration

This declaration needs to be made by the individual applicant or, when the applicant is a company, an authorised person or persons who have the authority to act on behalf of that company in accordance with the *Corporations Act 2001* (Cth).

Where the declaration is made by a person who is authorised in writing to make that declaration on behalf of the company, evidence of that authorisation must accompany the application.

- ☒ By making this application, I declare that all the information in this application is true and correct and that I have read and understood the '*Use and Disclosure of Information statement*' on this form.

Signature of Applicant

Signature of applicant/authorised person:



Name and Position: Nick Fox, Head of Environment and Access, Santos Limited

Date: 5 December 2018

Office use only	Date received	
	RIDA reference number	
	Source number	

ATTACHMENT 2a – CURRENT STATE TENURE TITLE SEARCH (Lot 2528 on Plan PH429)

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 30157260

Search Date: 05/12/2018 08:43

Title Reference: 17666180

Date Created: 21/10/1995

DESCRIPTION OF LAND

Tenure Reference: PH 15/2528

Lease Type: ROLLING TERM LEASE

LOT 2528 CROWN PLAN PH429
Local Government: BULLOO

Area: 135974.400000 Ha. (SURVEYED)

No Land Description

No Forestry Entitlement Area

Purpose for which granted:
NO PURPOSE DEFINED

TERM OF LEASE

Term and day of beginning of lease

Term: 30 years commencing on 01/04/1966

Expiring on 31/03/1996

Extended to 31/03/2049

REGISTERED LESSEE

Interest

Dealing No: 717008480 14/01/2016

JENNIFER ANN BETTS

1/2

BRADLEY ROSS BETTS

1/2

AS TENANTS IN COMMON

CONDITIONS

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 30157260

Search Date: 05/12/2018 08:43

Title Reference: 17666180

Date Created: 21/10/1995

CONDITIONS

A126 SPECIFIED CONDITIONS FOR: Term Lease
PURPOSE: Rolling term lease - pastoral

----- STATUTORY CONDITIONS:

Statutory conditions are the general mandatory conditions of a lease and binds the lessee in accordance with Part 2 Division 1 of the Land Act.

1. Permitted Use: The lessee must use the land only for the purpose for which the tenure was issued under the Land Act 1994.
2. Duty of Care: The lessee has the responsibility for a duty of care, for the land under the Land Act 1994.
3. Rent/Instalment: The lessee must pay the annual rent/instalment in accordance with the Land Act 1994 and the Land Regulation 2009.
For further information on how annual rent is determined, refer to the department's website at www.dnrm.qld.gov.au.
4. Noxious plants: The lessee must keep noxious plants on the land under control. If the lessee does not comply with this condition, the Minister may bring the noxious plants under control, the cost of which will be recovered from the lessee.
5. Information to Minister: The lessee must give the Minister administering the Land Act 1994, information the Minister asks for about the tenure.
6. Monies for Improvements: No money for improvements is payable by the State on the forfeiture, surrender or expiry of this lease but money may be payable if the State receives payment from an incoming lessee or buyer for the improvements on the land. However, the previous lessee may apply to the Minister to remove the improvements that belong to the lessee, within a period of 3 months from the date of the forfeiture, surrender, or expiry of this lease. The lessee may only undertake the removal of the improvements in the presence of an authorised representative of the department, if required by the Minister. The lessee may only remove those improvements if all monies due from the lessee to the department under this lease have been paid.

REGULATORY-CONDITIONS:-----

A regulatory condition relates to a lease, in accordance with the Land Regulation.

1. Indemnity: The lessee indemnifies and agrees to keep indemnified the Minister, and the State of Queensland and its Representatives, (the "Indemnified parties") against all liability, costs, loss and expenses including claims in negligence (including any claims, proceedings or demands brought by any third party, and any legal fees, costs and disbursements on a solicitor and client basis) ("Claim") arising from or incurred in connection with:
 - a. the granting of this lease to the lessee;

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 30157260

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CONDITIONS

- b. the lessee 's use and occupation of the land; or
- c. personal injury (including sickness and death) or property damage or loss in connection with the performance (or attempted purported performance or non-performance) of the lease or a breach of the lease by the lessee .

The lessee hereby releases and discharges to the full extent permitted by law, the Indemnified parties from all actions, claims, proceedings or demands and in respect of any loss, death, injury, illness or damage (whether personal or property and whether special, direct, indirect or consequential financial loss) arising out of the use and occupation of the lease.

To the full extent permitted by law, the Minister, the State of Queensland and their Representatives will not be liable to the lessee for any special, indirect or consequential damages, including consequential financial loss arising out of the use and occupation of the lease.

2. Public Liability: The lessee must effect a public liability insurance policy with an insurer authorised under the Insurance Act 1973 (Commonwealth) or, if not so authorised then only with the Minister's approval, which can be given or withheld in the Minister's sole discretion, naming the lessee as the insured covering legal liability for any loss of, or damage to any property and for the injury (including death) to any person arising out of anything done or omitted on or about the land or any improvements thereon and against all claims, demands, proceedings, costs, charges, and expenses whatsoever (including claims in negligence) Such policy must:
 - a. be for an amount of not less than \$20,000,000.00 and have no per event sublimit or such higher amounts as the Minister may reasonably require.
 - b. be effected on a "claims occurring" basis; and
 - c. be maintained at all times during the currency of the lease, and upon receipt of any notice of cancellation, the lessee must immediately effect another public insurance policy in accordance with the terms of the lease .

The lessee must, as soon as practicable, inform the Minister, in writing, of the occurrence of any event that the lessee considers is likely to give rise to a claim under the policy of insurance effected and must ensure that the Minister is kept fully informed of subsequent actions and developments concerning the claim.

The lessee must renew such policy, at the lessee's expense, each year during the currency of this lease.

The condition will be satisfied if the lessee is the State of Queensland or a statutory authority eligible for cover under the Queensland Government Insurance Fund and is insured and continues to be insured by the Queensland Government Insurance Fund.

This condition will be satisfied if the lessee is the Commonwealth of Australia or a statutory authority eligible for cover under the Comcover Insurance Fund and is insured and

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Date Created: 21/10/1995

CONDITIONS

continues to be insured by Comcover.

3. Access: The provision of access, further access or services to the land will not be the responsibility of the State.
4. Survey Costs: If the land needs to be surveyed or re-surveyed the lessee must do this at their own cost under the Survey and Mapping Infrastructure Act 2003. This survey plan must be lodged in the land registry within the specified time.
5. Extension: The lease is subject to the extensions of rolling term leases provision of the Land Act 1994 and the Minister must grant an extension of the term of a rolling term lease if the lessee makes an application in the approved form. The extension will be for the original term of the lease and may be given subject to condition changes.
6. Jurisdiction: The lessee is subject to the Land Act 1994 and all other relevant Queensland and Commonwealth legislation.
7. Compliance with Laws - the lessee must comply with all lawful requirements of the -
 - a. Local Government; and
 - b. any department within the Queensland or Commonwealth governments (including the department administering the Land Act 1994), local authority or statutory instrumentality having jurisdiction over the land, or the development, use and occupation of the land, in regard to its use, occupation and development of the land.

SPECIAL-CONDITIONS:-----

These conditions relate to this lease.

Improvements or development on or to the land

1. The lessee must during the whole term of the lease, to the satisfaction of the relevant authorities, maintain all improvements and boundary fencing on the land in a good and substantial state of repair.

Quarry material

1. The lessee must allow any person authorised under the Forestry Act 1959 access to the leased land for the purpose of cutting and removing timber or removing other forest products, or quarry material, or other material from the leased land.
Except as hereinafter provided the lessee must not interfere with any forest products or remove any quarry material (including any stone, gravel, sand, earth, soil, rock, guano or clay which is not a mineral within the meaning of the Mineral Resources Act 1989) or other material upon the leased land without the permission of the Minister administering the Land Act 1994 except under the authority of and in compliance in every respect with the requirements or a permit, licence, agreement or contract granted or made under the Forestry Act 1959.

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

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Search Date: 05/12/2018 08:43

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Date Created: 21/10/1995

ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Lease No. 17666180
2. EASEMENT IN GROSS No 708042385 09/09/2004 at 12:19
burdening the land
VAMGAS PTY LTD A.B.N. 76 006 245 110
SANTOS LIMITED A.B.N. 80 007 550 923
DELHI PETROLEUM PTY LTD A.B.N. 65 007 854 686
SANTOS PETROLEUM PTY LTD A.B.N. 95 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.B.N. 66 007 845 338
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.B.N. 83 010 850 487
ORIGIN ENERGY CSG LIMITED A.B.N. 68 001 646 331
over
EASEMENT G ON SP157755
3. TRANSFER No 715191588 09/07/2013 at 11:13
EASEMENT IN GROSS: 708042385
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
4. EASEMENT IN GROSS No 708106877 05/10/2004 at 08:53
burdening the land
SANTOS LIMITED A.B.N. 80 007 550 923
DELHI PETROLEUM PTY LTD A.B.N. 65 007 854 686
SANTOS PETROLEUM PTY LTD A.B.N. 95 000 146 369
VAMGAS PTY LTD A.B.N. 76 006 245 110
over
EASEMENT H ON SP163455
5. AMENDMENT OF LEASE CONDITIONS No 715965240 21/08/2014 at 05:00
THE CONDITIONS OF THE WITHIN TENURE ARE HEREBY AMENDED.

ADMINISTRATIVE ADVICES

Dealing	Type	Lodgement Date	Status
717904160	CON COM AGMT	17/03/2017 10:35	CURRENT
MINERAL AND ENERGY RESOURCES (COMMON PROVISIONS) ACT 2014			

UNREGISTERED DEALINGS - NIL

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 30157260

Search Date: 05/12/2018 08:43

Title Reference: 17666180

Date Created: 21/10/1995

Caution - Charges do not necessarily appear in order of priority

**** End of Current State Tenure Search ****

Information provided under section 34 Land Title Act(1994) or
section 281 Land Act(1994)

COPYRIGHT THE STATE OF QUEENSLAND (NATURAL RESOURCES, MINES AND ENERGY) [2018]
Requested By: D-ENQ PROPERTY & TITLE SEARCH

ATTACHMENT 2b – CURRENT STATE TENURE TITLE SEARCH (Lot 1 SP133822)

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 30157262

Search Date: 05/12/2018 08:43

Title Reference: 17666157

Date Created: 21/10/1995

DESCRIPTION OF LAND

Tenure Reference: PDH 15/422

Lease Type: ROLLING TERM LEASE

LOT 1 SURVEY PLAN 133822
 Local Government: BULLOO

Area: 782000.000000 Ha. (ABOUT)

No Land Description

No Forestry Entitlement Area

Purpose for which granted:
NO PURPOSE DEFINED

TERM OF LEASE

Term and day of beginning of lease

Term: 30 years commencing on 01/04/1980

Expiring on 31/03/2010

Extended to 31/03/2060

REGISTERED LESSEE

Dealing No: 706291965 21/01/2003

S. KIDMAN & CO LTD A.C.N. 007 872 317

CONDITIONS

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 30157262

Search Date: 05/12/2018 08:43

Title Reference: 17666157

Date Created: 21/10/1995

CONDITIONS

A126 SPECIFIED CONDITIONS FOR: Term Lease
PURPOSE: Rolling term lease - Pastoral

----- STATUTORY CONDITIONS:

Statutory conditions are the general mandatory conditions of a lease and binds the lessee in accordance with Part 2 Division 1 of the Land Act.

1. Permitted Use: The lessee must use the land only for the purpose for which the tenure was issued under the Land Act 1994.
2. Duty of Care: The lessee has the responsibility for a duty of care, for the land under the Land Act 1994.
3. Rent/Instalment: The lessee must pay the annual rent/instalment in accordance with the Land Act 1994 and the Land Regulation 2009.
For further information on how annual rent is determined, refer to the department's website at www.dnrm.qld.gov.au.
4. Noxious plants: The lessee must keep noxious plants on the land under control. If the lessee does not comply with this condition, the Minister may bring the noxious plants under control, the cost of which will be recovered from the lessee.
5. Information to Minister: The lessee must give the Minister administering the Land Act 1994, information the Minister asks for about the tenure.
6. Monies for Improvements: No money for improvements is payable by the State on the forfeiture, surrender or expiry of this lease but money may be payable if the State receives payment from an incoming lessee or buyer for the improvements on the land. However, the previous lessee may apply to the Minister to remove the improvements that belong to the lessee, within a period of 3 months from the date of the forfeiture, surrender, or expiry of this lease. The lessee may only undertake the removal of the improvements in the presence of an authorised representative of the department, if required by the Minister. The lessee may only remove those improvements if all monies due from the lessee to the department under this lease have been paid.

REGULATORY-CONDITIONS:-----

A regulatory condition relates to a lease, in accordance with the Land Regulation.

1. Indemnity: The lessee indemnifies and agrees to keep indemnified the Minister, and the State of Queensland and its Representatives, (the "Indemnified parties") against all liability, costs, loss and expenses including claims in negligence (including any claims, proceedings or demands brought by any third party, and any legal fees, costs and disbursements on a solicitor and client basis) ("Claim") arising from or incurred in connection with:
 - a. the granting of this lease to the lessee;

CURRENT STATE TENURE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 30157262

Search Date: 05/12/2018 08:43

Title Reference: 17666157

Date Created: 21/10/1995

CONDITIONS

- b. the lessee 's use and occupation of the land; or
- c. personal injury (including sickness and death) or property damage or loss in connection with the performance (or attempted purported performance or non-performance) of the lease or a breach of the lease by the lessee .

The lessee hereby releases and discharges to the full extent permitted by law, the Indemnified parties from all actions, claims, proceedings or demands and in respect of any loss, death, injury, illness or damage (whether personal or property and whether special, direct, indirect or consequential financial loss) arising out of the use and occupation of the lease.

To the full extent permitted by law, the Minister, the State of Queensland and their Representatives will not be liable to the lessee for any special, indirect or consequential damages, including consequential financial loss arising out of the use and occupation of the lease.

2. Public Liability: The lessee must effect a public liability insurance policy with an insurer authorised under the Insurance Act 1973 (Commonwealth) or, if not so authorised then only with the Minister's approval, which can be given or withheld in the Minister's sole discretion, naming the lessee as the insured covering legal liability for any loss of, or damage to any property and for the injury (including death) to any person arising out of anything done or omitted on or about the land or any improvements thereon and against all claims, demands, proceedings, costs, charges, and expenses whatsoever (including claims in negligence) Such policy must:
 - a. be for an amount of not less than \$20,000,000.00 and have no per event sublimit or such higher amounts as the Minister may reasonably require.
 - b. be effected on a "claims occurring" basis; and
 - c. be maintained at all times during the currency of the lease, and upon receipt of any notice of cancellation, the lessee must immediately effect another public insurance policy in accordance with the terms of the lease .

The lessee must, as soon as practicable, inform the Minister, in writing, of the occurrence of any event that the lessee considers is likely to give rise to a claim under the policy of insurance effected and must ensure that the Minister is kept fully informed of subsequent actions and developments concerning the claim.

The lessee must renew such policy, at the lessee's expense, each year during the currency of this lease.

The condition will be satisfied if the lessee is the State of Queensland or a statutory authority eligible for cover under the Queensland Government Insurance Fund and is insured and continues to be insured by the Queensland Government Insurance Fund.

This condition will be satisfied if the lessee is the Commonwealth of Australia or a statutory authority eligible for cover under the Comcover Insurance Fund and is insured and

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CONDITIONS

continues to be insured by Comcover.

3. Access: The provision of access, further access or services to the land will not be the responsibility of the State.
4. Survey Costs: If the land needs to be surveyed or re-surveyed the lessee must do this at their own cost under the Survey and Mapping Infrastructure Act 2003. This survey plan must be lodged in the land registry within the specified time.
5. Extension: The lease is subject to the extensions of rolling term leases provision of the Land Act 1994 and the Minister must grant an extension of the term of a rolling term lease if the lessee makes an application in the approved form. The extension will be for the original term of the lease and may be given subject to condition changes.
6. Jurisdiction: The lessee is subject to the Land Act 1994 and all other relevant Queensland and Commonwealth legislation.
7. Compliance with Laws - the lessee must comply with all lawful requirements of the -
 - a. Local Government; and
 - b. any department within the Queensland or Commonwealth governments (including the department administering the Land Act 1994), local authority or statutory instrumentality having jurisdiction over the land, or the development, use and occupation of the land, in regard to its use, occupation and development of the land.

SPECIAL-CONDITIONS:-----

These conditions relate to this lease.

Improvements or development on or to the land

1. The lessee must during the whole term of the lease, to the satisfaction of the relevant authorities, maintain all improvements and boundary fencing on the land in a good and substantial state of repair.

Quarry material

1. The lessee must allow any person authorised under the Forestry Act 1959 access to the leased land for the purpose of cutting and removing timber or removing other forest products, or quarry material, or other material from the leased land.
Except as hereinafter provided the lessee must not interfere with any forest products or remove any quarry material (including any stone, gravel, sand, earth, soil, rock, guano or clay which is not a mineral within the meaning of the Mineral Resources Act 1989) or other material upon the leased land without the permission of the Minister administering the Land Act 1994 except under the authority of and in compliance in every respect with the requirements or a permit, licence, agreement or contract granted or made under the Forestry Act 1959.

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ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
Lease No. 17666157
2. RESUMPTION EASEMENT No 702782044 13/07/1998 at 12:35
burdening the land
THE STATE OF QUEENSLAND
over
EASEMENTS AV AND AW ON SP101337
3. EASEMENT IN GROSS No 703038619 01/12/1998 at 14:21
burdening the land
SANTOS LTD A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
BORAL ENERGY RESOURCES A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 646 331
OIL COMPANY OF AUSTRALIA LIMITED A.C.N. 001 646 331
OVER EASEMENT C ON CP864604
4. CHANGE OF NAME No 705651096 27/05/2002 at 12:41
EASEMENT IN GROSS: 703038619
SANTOS LTD TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES TENANT IN COMMON 33/200
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
OIL COMPANY OF AUSTRALIA LIMITED TENANT IN COMMON 19/8000
5. TRANSFER No 715191739 09/07/2013 at 11:24
EASEMENT IN GROSS: 703038619
SANTOS LTD TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
BORAL ENERGY RESOURCES TENANT IN COMMON 33/200
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
ORIGIN ENERGY RESOURCES LIMITED A.B.N. 66 007 845 338
TENANT IN COMMON 19/8000
6. EASEMENT IN GROSS No 706987170 15/09/2003 at 12:15
burdening the land
EPIC ENERGY QUEENSLAND PTY LTD A.B.N. 67 066 656 219
over
EASEMENTS V,W AND X ON SP158291

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NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

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ENCUMBRANCES AND INTERESTS

7. EASEMENT IN GROSS No 707541465 09/03/2004 at 10:04
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 001 646 331
over
EASEMENT Y ON SP154282
8. TRANSFER No 715191685 09/07/2013 at 11:18
EASEMENT IN GROSS: 707541465
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
9. EASEMENT IN GROSS No 707541601 09/03/2004 at 10:19
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 001 646 331
over
EASEMENT M ON SP145125
10. TRANSFER No 715191630 09/07/2013 at 11:16
EASEMENT IN GROSS: 707541601
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250

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ENCUMBRANCES AND INTERESTS

11. EASEMENT IN GROSS No 707541642 09/03/2004 at 10:21
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 001 646 331
over
EASEMENT D ON SP127015
12. TRANSFER No 715191732 09/07/2013 at 11:23
EASEMENT IN GROSS: 707541642
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
13. EASEMENT IN GROSS No 707541654 09/03/2004 at 10:23
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 001 646 331
over
EASEMENTS J TO L ON SP145115
14. TRANSFER No 715191654 09/07/2013 at 11:17
EASEMENT IN GROSS: 707541654
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250

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ENCUMBRANCES AND INTERESTS

15. EASEMENT IN GROSS No 707542448 09/03/2004 at 11:49
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 001 646 331
over
EASEMENT P ON SP148547
16. TRANSFER No 715191707 09/07/2013 at 11:20
EASEMENT IN GROSS: 707542448
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
17. EASEMENT IN GROSS No 707542491 09/03/2004 at 11:52
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 000 051 696
over
EASEMENT G ON SP145095
18. TRANSFER No 715191695 09/07/2013 at 11:19
EASEMENT IN GROSS: 707542491
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250

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ENCUMBRANCES AND INTERESTS

19. EASEMENT IN GROSS No 707542519 09/03/2004 at 11:54
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 000 051 696
over
EASEMENT N ON SP145126
20. TRANSFER No 715191690 09/07/2013 at 11:19
EASEMENT IN GROSS: 707542519
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
21. EASEMENT IN GROSS No 707542593 09/03/2004 at 12:04
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
DELHI PETROLEUM PTY LTD A.C.N. 007 854 686
SANTOS PETROLEUM PTY LTD A.C.N. 000 146 369
ORIGIN ENERGY RESOURCES LIMITED A.C.N. 007 845 338
VAMGAS PTY LTD A.C.N. 006 245 110
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.C.N. 010 850 487
ORIGIN ENERGY CSG LIMITED A.C.N. 000 051 696
over
EASEMENT E ON SP130818
22. TRANSFER No 715191704 09/07/2013 at 11:20
EASEMENT IN GROSS: 707542593
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250

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ENCUMBRANCES AND INTERESTS

23. EASEMENT IN GROSS No 709586801 11/05/2006 at 15:15
burdening the land
SANTOS LIMITED A.B.N. 80 007 550 923
TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD A.B.N. 65 007 854 686
TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD A.B.N. 95 000 146 369
TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED A.B.N. 66 007 845 338
TENANT IN COMMON 33/200
VAMGAS PTY LTD A.B.N. 76 006 245 110
TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.B.N. 83 010 850 487
TENANT IN COMMON 3/250
ORIGIN ENERGY CSG LIMITED A.B.N. 68 001 646 331
TENANT IN COMMON 19/8000
over
EASEMENTS A AND B ON SP171544
24. TRANSFER No 715191718 09/07/2013 at 11:21
EASEMENT IN GROSS: 709586801
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
25. EASEMENT IN GROSS No 709586837 11/05/2006 at 15:17
burdening the land
SANTOS LIMITED A.B.N. 80 007 550 923
TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD A.B.N. 65 007 854 686
TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD A.B.N. 95 000 146 369
TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED A.B.N. 66 007 845 338
TENANT IN COMMON 33/200
VAMGAS PTY LTD A.B.N. 76 006 245 110
TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.B.N. 83 010 850 487
TENANT IN COMMON 3/250
ORIGIN ENERGY CSG LIMITED A.B.N. 68 001 646 331
TENANT IN COMMON 19/8000
over
EASEMENT F ON SP171545

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ENCUMBRANCES AND INTERESTS

26. TRANSFER No 715191742 09/07/2013 at 11:25
EASEMENT IN GROSS: 709586837
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
27. EASEMENT IN GROSS No 709586913 11/05/2006 at 15:22
burdening the land
SANTOS LIMITED A.B.N. 80 007 550 923
TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD A.B.N. 65 007 854 686
TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD A.B.N. 95 000 146 369
TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED A.B.N. 66 007 845 338
TENANT IN COMMON 33/200
VAMGAS PTY LTD A.B.N. 76 006 245 110
TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD A.B.N. 83 010 850 487
TENANT IN COMMON 3/250
ORIGIN ENERGY CSG LIMITED A.B.N. 68 001 646 331
TENANT IN COMMON 19/8000
over
EASEMENTS S,T,U,V,W,X,Y,Z,AA,AB AND AC ON SP166531
28. TRANSFER No 715191749 09/07/2013 at 11:26
EASEMENT IN GROSS: 709586913
SANTOS LIMITED TENANT IN COMMON 3263/10000
DELHI PETROLEUM PTY LTD TENANT IN COMMON 29/125
SANTOS PETROLEUM PTY LTD TENANT IN COMMON 117/625
ORIGIN ENERGY RESOURCES LIMITED TENANT IN COMMON 1339/8000
VAMGAS PTY LTD TENANT IN COMMON 601/8000
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD
TENANT IN COMMON 3/250
29. AMENDMENT OF LEASE CONDITIONS No 716063411 09/10/2014 at 05:00
THE CONDITIONS OF THE WITHIN TENURE ARE HEREBY AMENDED.
30. EASEMENT IN GROSS No 716739564 08/09/2015 at 15:25
burdening the land
SANTOS LIMITED A.C.N. 007 550 923
over
EASEMENT AD ON SP271307

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NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

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ADMINISTRATIVE ADVICES

Dealing	Type	Lodgement Date	Status
717904118	CON COM AGMT	17/03/2017 10:26	CURRENT
	MINERAL AND ENERGY RESOURCES (COMMON PROVISIONS) ACT 2014		
717904175	CON COM AGMT	17/03/2017 10:40	CURRENT
	MINERAL AND ENERGY RESOURCES (COMMON PROVISIONS) ACT 2014		
717904177	CON COM AGMT	17/03/2017 10:41	CURRENT
	MINERAL AND ENERGY RESOURCES (COMMON PROVISIONS) ACT 2014		

UNREGISTERED DEALINGS - NIL

Corrections have occurred - Refer to Historical Search

Caution - Charges do not necessarily appear in order of priority

**** End of Current State Tenure Search ****

Information provided under section 34 Land Title Act(1994) or
section 281 Land Act(1994)

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Requested By: D-ENQ PROPERTY & TITLE SEARCH

ATTACHMENT 3a – PL 1056 RESOURCE AUTHORITY PUBLIC REPORT

PL 1056 Resource authority public report

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▼ P e r m i t d e t a i l s

Permit ID:	PL 1056
Status:	Application
Lodged date:	31/10/2018
Grant date:	
Commencement date:	
Expiry date:	
Term sought:	10 years
Conditions:	
Locality:	South West Queensland
Remarks:	
Act permit granted under:	
Act now administered under:	

▼ Holders

Authorised holder representative (AHR)

Santos Limited

Team Leader Tenures Compliance Level 22, Santos Place 32 Turbot Street BRISBANE QLD 4000

Holders

Holder name	Share %	Status	Held from	Held to	Authorised holder
SANTOS LIMITED * Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	32.630000000000	Current	31/10/2018		Yes
* DELHI PETROLEUM PTY LTD 25 CONYNGHAM STREET GLENSIDE SA 5065	23.200000000000	Current	31/10/2018		No
SANTOS PETROLEUM PTY LTD * Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot street Brisbane QLD 4000	18.720000000000	Current	31/10/2018		No
* LATTICE ENERGY LIMITED 25 Conyngham Street Glenside SA 5065	16.737500000000	Current	31/10/2018		No
VANGAS PTY LTD * Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	7.512500000000	Current	31/10/2018		No
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD * Team Leader Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	1.200000000000	Current	31/10/2018		No

Tenancy type: Tenancy in Common

▼ Area

Location:	View Map
Mining district:	Quilpie
Local authority:	Bulloo Shire Council
Area:	13 Sub-blocks
Exclusions:	
Marked out date:	

Sub-blocks

BIM	Block	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Broken Hill	116								H	J	K			N	O	P			S	T	U					
Broken Hill	117													N			Q	R	S							

Background land

No data available

Survey plans

No data available

Relinquishment details

No data available

Sub-blocks retained

No data available

PPL 2036 Resource authority public report

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Permit ID:	PPL 2036
Status:	Application
Lodged date:	06/08/2018
Grant date:	
Commencement date:	
Expiry date:	
Term sought:	20 years
Conditions:	
Locality:	80km SWS of Ballera Plant, Bulloo Shire Council
Remarks:	EA0001453
Act permit granted under:	
Act now administered under:	
Type of pipeline:	Point to point

▼ H o l d e r s

Authorised holder representative (AHR)

Santos Limited

Team Leader Tenures Compliance Level 22, Santos Place 32 Turbot Street BRISBANE QLD 4000

Holders

Holder name	Share %	Status	Held from	Held to	Authorised holder
* SANTOS LIMITED Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	32.630000000000	Current	06/08/2018		Yes
* DELHI PETROLEUM PTY LTD 25 CONYNGHAM STREET GLENSIDE SA 5065	23.200000000000	Current	06/08/2018		No
* SANTOS PETROLEUM PTY LTD Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot street Brisbane QLD 4000	18.720000000000	Current	06/08/2018		No
* LATTICE ENERGY LIMITED 25 Conyngham Street Glenside SA 5065	16.737500000000	Current	06/08/2018		No
* VANGAS PTY LTD Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	7.512500000000	Current	06/08/2018		No
* SANTOS AUSTRALIAN HYDROCARBONS PTY LTD Team Leader Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	1.200000000000	Current	06/08/2018		No

Tenancy type: Tenancy in Common

▼ A r e a

Location:	View Map
Mining district:	Quilpie
Local authority:	Bulloo Shire Council
Area:	4.6740 kilometres
Exclusions:	
Marked out date:	

Sub-blocks

No data available

Background land

No data available

Survey plans

No data available

Relinquishment details

No data available

Sub-blocks retained

No data available

Term history

Term	Date notice issued	Date lodged	Date approved	Date commenced	Date term ends	Term	Act granted under
		06/08/2018					

Native title

No data available

Purpose and minerals**Entitlements**

Petroleum pipeline

Minerals sought

Petroleum

Related permitsControlling permit: [ATP 1189](#); [PL 75](#)**Financial****Rent details**

Area units: 5

Rate/unit area:

Activities

No data available

Term history

Term	Date notice issued	Date lodged	Date approved	Date commenced	Date term ends	Term	Act granted under
		31/10/2018					

Native title

Outcome	Process
Existing private ILUA	Existing agreement

Purpose and minerals

Purpose
Petroleum production
Minerals
Petroleum

Related permits

Pre-requisite permits:	ATP 1189
------------------------	----------

Financial

Rent details

Area units:	
Rate/unit area:	

Activities

No data available

PL 1055 Resource authority public report

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Permit ID:	PL 1055
Status:	Application
Lodged date:	31/10/2018
Grant date:	
Commencement date:	
Expiry date:	
Term sought:	10 years
Conditions:	
Locality:	South West Queensland
Remarks:	
Act permit granted under:	
Act now administered under:	

▼ Holders

Authorised holder representative (AHR)

Santos Limited

Team Leader Tenures Compliance Level 22, Santos Place 32 Turbot Street BRISBANE QLD 4000

Holders

	Holder name	Share %	Status	Held from	Held to	Authorised holder
*	SANTOS LIMITED Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	52.00000000000000	Current	31/10/2018		Yes
*	DELHI PETROLEUM PTY LTD 25 CONYNGHAM STREET GLENSIDE SA 5065	28.80000000000000	Current	31/10/2018		No
*	LATTICE ENERGY LIMITED 25 Conyngham Street Glenside SA 5065	10.00000000000000	Current	31/10/2018		No
*	VAMGAS PTY LTD Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	7.20000000000000	Current	31/10/2018		No
*	SANTOS AUSTRALIAN HYDROCARBONS PTY LTD Team Leader Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	2.00000000000000	Current	31/10/2018		No

Tenancy type: Tenancy in Common

▼ Area

Location:	View Map
Mining district:	Quilpie
Local authority:	Bulloo Shire Council
Area:	22 Sub-blocks
Exclusions:	
Marked out date:	

Sub-blocks

BIM	Block	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cooper Creek	2785		B	C	D	E		G	H	J	K		M	N	O	P				T	U				Y	Z
Cooper Creek	2786	A	B	C			F	G	H																	

Background land

No data available

Survey plans

No data available

Relinquishment details

No data available

Sub-blocks retained

No data available

Term history

Term	Date notice issued	Date lodged	Date approved	Date commenced	Date term ends	Term	Act granted under
		31/10/2018					

Native title

Outcome	Process
Existing private ILUA	Existing agreement

Purpose and minerals

Purpose
Petroleum production
Minerals
Petroleum

Related permits

Pre-requisite permits:	ATP 1189
------------------------	----------

Financial

Rent details	
Area units:	
Rate/unit area:	

Activities

No data available

PPL 2035 Resource authority public report

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Permit ID:	PPL 2035
Status:	Application
Lodged date:	01/08/2018
Grant date:	
Commencement date:	
Expiry date:	
Term sought:	20 years
Conditions:	
Locality:	Tartulla Field manifold
Remarks:	EA0001452
Act permit granted under:	
Act now administered under:	
Type of pipeline:	Point to point

▼ H o l d e r s

Authorised holder representative (AHR)

Santos Limited

Team Leader Tenures Compliance Level 22, Santos Place 32 Turbot Street BRISBANE QLD 4000

Holders

Holder name	Share %	Status	Held from	Held to	Authorised holder
SANTOS LIMITED * Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	32.630000000000	Current	01/08/2018		Yes
* DELHI PETROLEUM PTY LTD 25 CONYNGHAM STREET GLENSIDE SA 5065	23.200000000000	Current	01/08/2018		No
SANTOS PETROLEUM PTY LTD * Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot street Brisbane QLD 4000	18.720000000000	Current	01/08/2018		No
* LATTICE ENERGY LIMITED 25 Conyngham Street Glenside SA 5065	16.737500000000	Current	01/08/2018		No
VANGAS PTY LTD * Team Leader, Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	7.512500000000	Current	01/08/2018		No
SANTOS AUSTRALIAN HYDROCARBONS PTY LTD * Team Leader Tenures and Compliance Level 22, Santos Place 32 Turbot Street Brisbane QLD 4000	1.200000000000	Current	01/08/2018		No

Tenancy type: Tenancy in Common

▼ A r e a

Location:	View Map
Mining district:	Quilpie
Local authority:	Bulloo Shire Council
Area:	4.8940 kilometres
Exclusions:	
Marked out date:	

Sub-blocks

No data available

Background land

No data available

Survey plans

No data available

Relinquishment details

No data available

Sub-blocks retained

No data available

▼ Term history

Term	Date notice issued	Date lodged	Date approved	Date commenced	Date term ends	Term	Act granted under
		01/08/2018					

▼ Native title

No data available

▼ Purpose and minerals

Entitlements

Petroleum pipeline

Minerals sought

Petroleum

▼ Related permits

Controlling permit: [ATP 1189](#); [PL 113](#)

▼ Financial

Rent details

Area units: 5

Rate/unit area:

▼ Activities

No data available

**Regional Interests
Development Application
Assessment Report**

**Inca 1DW1 Gas Well and Inca 1
gas flowline**

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Abbreviations and Units

Acronym	Description
ATP	Authority to Prospect
DEHP	Department of Environment and Heritage Protection, Queensland
DES	Department of Environment and Science, Queensland
DILGP	Department of Infrastructure, Local Government and Planning
DNRM	Department of Natural Resources and Mines
EA	Environmental Authority
ha	Hectares
km	Kilometre
m	Metres
N/A	Not Applicable
PAA	Priority Agricultural Area
P&G Act 2004	<i>Petroleum and Gas (Production and Safety) Act 2004</i>
PL	Petroleum Lease
PLA	Priority Living Area
QLD	Queensland
RE	Regional Ecosystem
RIDA	Regional Interests Development Approval
RPI Act	<i>Regional Planning Interests Act 2014</i>
RPI Reg	<i>Regional Planning Interests Regulation 2014</i>
SCA	Strategic Cropping Area
SEA	Strategic Environmental Areas
SMS	Santos Management System
SPA	<i>Sustainable Planning Act 2009</i>
SWQ	South-West Queensland
WR Act	<i>Wild Rivers Act 2005 (Repealed)</i>

1.0 Introduction

Santos Limited (Santos) has prepared this assessment report to support an assessment application for a Regional Interests Development Approval (RIDA) as required under s29 of the *Regional Planning Interests Act 2014* (RPI Act) to be submitted to the Department of Infrastructure, Local Government and Planning (DILGP).

The application is of an administrative nature. It seeks only to authorise petroleum 'production' on Lot 2528 on Plan PH429 and PLA1056 from the existing Inca 1DW1 petroleum well and associated infrastructure, and operation of the Inca 1 gas flowline (PPL2036) currently under application)) within the Channel Country SEA. This is a result of:

- a change in tenure from Authority to Prospect (ATP) to a Petroleum Lease (PL), and subsequent requirement for an amendment to the existing Environmental Authority (EA); and
- the submission of a Petroleum Pipeline Licence (PPL) application to operate the Inca 1 gas flowline and the issuing of the new EA EA0001453.

The new tenures and EAs are to allow for the commercialisation of a petroleum product, following well construction and extended production testing conducted under ATP1189 (EPPG03518215) and pipeline construction under PL75 (EPPG03517415) and ATP1189 (EPPG03518215).

The assessment report has been prepared in accordance with the RPI Act *Statutory Guideline 01/14: How to make an assessment application for a regional interests development approval under the Regional Planning Interests Act 2014* and the RPI Act *Statutory Guideline 05/14: Carrying out resource activities and regulated activities within a Strategic Environmental Area*.

This assessment report provides the following:

- Description of the activities;
- Identification of the relevant environmental attributes of the land subject to the application;
- Evaluation of the potential impacts on the identified relevant environmental attributes; and
- An assessment of how the activities meet the required outcome for Strategic Environmental Areas (SEA) as detailed in the *Regional Planning Interests Regulation 2014* (RPI Reg).

1.1 Landholder Copy of the Application

Separate regulatory systems are in place that require Santos to notify the landholder of petroleum activities occurring within their properties. Given the pre-existing nature of the activities (refer to 2.0) notification to the landholder has already ensued. Notwithstanding, a copy of the application will be given to the landowner within 5 business days after the application is made in accordance with Section 30 of the RPI Act and Schedule 5 of the RPI Reg.

1.2 Non-Notifiable Application

In accordance with Section 34(2) of the RPI Act and Section 13 of the RPI Reg, notification of the assessment application is not mandatory, as the activities are not proposed to be carried out in an area of regional interest that is a priority living area.

The activities are located solely on Lot 2528 PH429 forming part of Orientos Pastoral Station, a 1,424 km² cattle station operated by the Betts family. Discretionary notification under s34(4) would not be necessary given the pre-existing nature of the activities (refer section 2.0), the very large size of the cattle station relative to the activities and that the landholder will receive a copy of the application as described below.

1.3 Referable Application

In accordance with Section 12(2) and Schedule 1 of the RPI Reg, the application is referable to the Department of Environment and Science (DES) and the Department of Natural Resources, Mines and Energy (DNRME).

2.0 Proposed Activity

Santos is seeking to undertake 'petroleum production' on PLA1056, and to operate PPL2036, within the Channel Country SEA from the infrastructure and disturbances listed in Table 1 and shown in Figure 1:

Table 1: Existing Surface Disturbance

Pre-Existing Infrastructure	Pre-Existing Disturbance	
	Length	Area
Petroleum Well Pad (Inca 1DW1)	N/A	0.80 ha
Buried Pipeline (Inca 1 gas flowline)	4.60 km	0.46 ha
Access Track	7.01 km	4.20 ha
Borrow Pits	N/A	4.27 ha
Camp (temporary)	N/A	0.33 ha
		10.06 ha

The infrastructure listed in Table 1 is pre-existing infrastructure, constructed and operated as authorised by ATP1189, PL75, EPPG03518215 and EPPG03517415. Santos intends to continue to operate this infrastructure for the purpose of 'petroleum production' as evidenced by the submission of an application for PLA1056 on 31 October 2018. An associated amendment application to the existing environmental authority (EPPG03518215) is to be lodged with the Department of Environment and Sciences (DES) in the near future. The operation of the Inca 1 gas flowline has been sought through application for petroleum pipeline licence (PPL2036) which was lodged with DNRME on 6 August 2018 and the issuing of EA0001453 on 25 September 2018.

The activity of petroleum production will not change the nature of the activities already conducted at these locations. 'Production' primarily refers to the commercialisation of the petroleum product generated from the Inca 1DW1 petroleum well and operation of the constructed petroleum pipeline (Inca 1 gas flowline) to transport the product to processing facilities and to market. No new surface disturbance to land is required as part of the activity at this location. Activities will be limited to 'production' related operational maintenance and restoration at the end-of-life. Descriptions of the activities are provided in Section 2.0.

Inca 1DW1 and associated infrastructure; and Inca 1 Gas Flowline is located on Orientos Pastoral Station (Lot 2528 PH429). Orientos is a pastoral lease that operates as a cattle station with a capacity of 5,000 head of cattle¹. The primary land uses are cattle grazing and petroleum activities.

2.1 Existing Conventional Petroleum Well and Lease

The existing Inca 1DW1 well currently extracts petroleum for exploration and production testing purposes via surface facilities including a well head, which comprises of equipment on the surface that supports the various pipe strings, seals off the well and controls the paths and flow of reservoir fluids.

A flare pit is required for well control and testing operations for production from the Inca 1DW1 well and is in place for the life of the production operations. The flare pit is likely to contain produced formation water.

¹ Royal Flying Doctor Service, South Eastern Section, Annual Report 11/12, https://www.flyingdoctor.org.au/assets/annual_report/file/12228_RFDS_AR__2011_2012.pdf

The flare pit is clay lined on the base and sides to contain any hydrocarbons within the blowdown water. A minimum freeboard of 300mm is maintained within the pit to ensure overtopping does not occur. In addition, a bund around the pit perimeter minimises surface flow entering the pit. At the end of life of the flare pit, a contaminated land assessment will be undertaken to identify any contaminated soils requiring removal. The pit will be backfilled to a contoured finish as required by the relevant EA conditions.

It is feasible that workover operations will be required for the Inca 1DW1 well in the future. Workover operations include activities such as, cleaning out of production conduits and replacing tubing, retrieving or drilling out obstructions in the well, and well bore decommissioning. For some workovers, a workover rig and associated infrastructure (i.e. a drilling fluids sump) would need to be set up within the existing disturbance footprint for a temporary duration. Workover activities would be scheduled to be completed outside of the wet season.

Extracting petroleum for 'production' will not change the nature of the activities already conducted at this location. The authorisation of PLA1056 is to enable the commercialisation of the petroleum product only. No new surface disturbance to land outside of the existing disturbance footprint is required at this location to facilitate ongoing production. The well will be restored at end-of-life in accordance with the P&G Act 2004 and the relevant EA conditions.

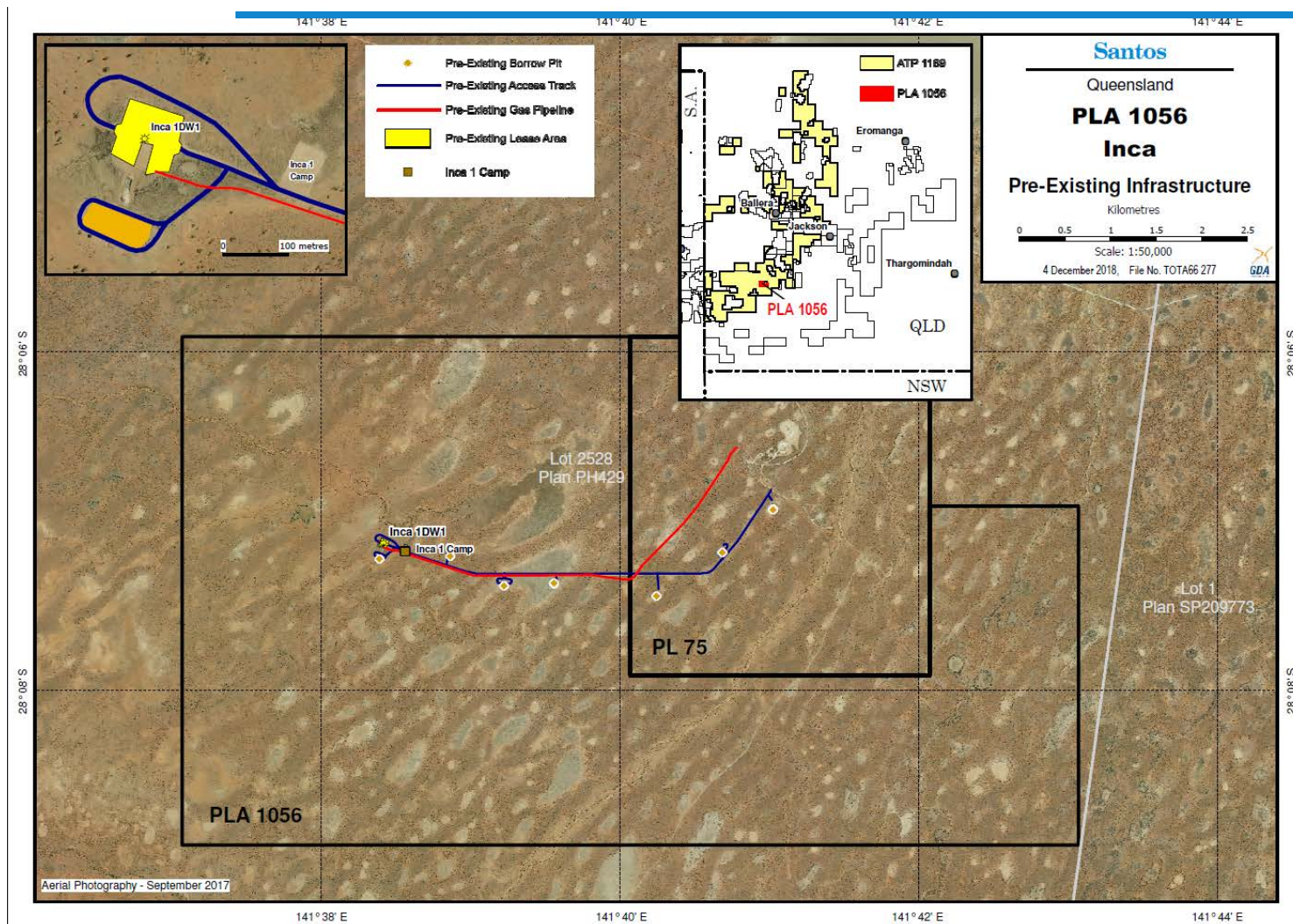


Figure 1: Location of Existing Infrastructure

2.2 Existing Access tracks

Access tracks are proposed to be used for ongoing access to the Inca 1DW1 well and to carry out surveillance and maintenance on the Inca 1 gas flowline. No new access tracks are proposed. Pre-existing access tracks are not designed to be used during wet weather conditions, and therefore have not been constructed to any flood immunity, and will facilitate the passage of water keeping with existing hydrology. Maintenance of the tracks may be required over time (e.g. light grade). The access tracks will be restored at end-of-life in accordance with the *Petroleum and Gas (Production and Safety) Act 2004* (P&G Act 2004) and the relevant EA conditions.

2.3 Existing Borrow Pit

Borrow pits are proposed to be used to provide a source of material required for ongoing well lease, access track and pipeline maintenance. The existing side batters of borrow pits are maintained at a slope of approximately 3:1, and the batters of the entrance / exit are maintained at a slope of approximately 7:1. Borrow pits will be progressively restored by ripping the floor and sides to a minimum depth of 300 mm generally along the contour (Figure 2). Stockpiled topsoil and vegetation is re-spread to a uniform depth over the entire area from which it was removed. The sides and floor of the pits are graded to give a contoured finish, as required by the relevant EA conditions.

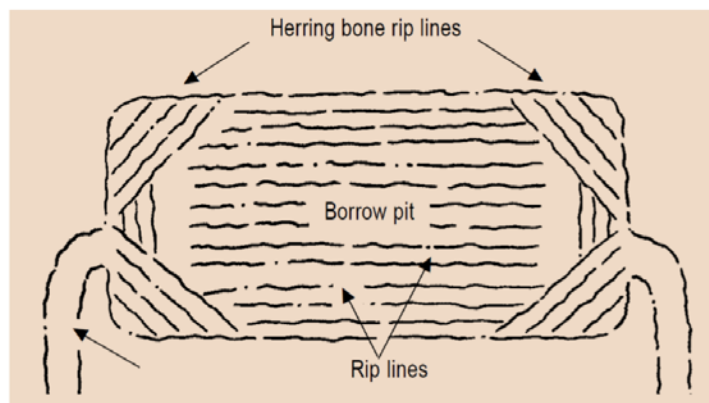


Figure 2: Example Borrow Pit Ripping for Rehabilitation

2.4 Existing camp

The Inca 1 camp is proposed to be used for future workover operations required for the Inca 1DW1 well. No new surface disturbance to land outside of the existing disturbance footprint is required. Stockpiled topsoil and vegetation will be re-spread to a uniform depth over the entire area from which it was removed. The camp area will be graded to re-establish natural drainage, including the installation of diversion berms on long slopes and terraces on cut slopes to give a contoured finish, as required by the relevant EA conditions.

2.5 Existing Buried Pipeline

The existing pipeline is proposed to be utilised to transport extracted petroleum for production. The existing pipeline is buried underground and the surface has been rehabilitated to reinstate existing drainage. It is connected to the existing pipeline gathering network - the Thoar to Ashby Gas Trunkline (PPL80). No new surface disturbance to land is required. The pipeline will be restored at end-of-life in accordance with the relevant EA conditions.

3.0 Environmental Attributes and Potential Impacts

Section 7 of the RPI Reg prescribes the following environmental attributes relevant to the Channel Country SEA:

- (a) *the natural hydrologic processes of the area characterised by—*
 - (i) *natural, unrestricted flows in and along stream channels and the channel network in the area; and*
 - (ii) *overflow from stream channels and the channel network onto the flood plains of the area, or the other way; and*
 - (iii) *natural flow paths of water across flood plains connecting waterholes, lakes and wetlands in the area; and*
 - (iv) *groundwater sources, including the Great Artesian Basin and springs, that support waterhole persistence and ecosystems in the area;*
- (b) *the natural water quality in the stream channels and aquifers and on flood plains in the area;*
- (c) *the beneficial flooding of land that supports flood plain grazing and ecological processes in the area.*

DILGP's RPI Act Statutory Guideline 05/14: *Carrying out resource activities and regulated activities within a Strategic Environmental Area* summarises the above attributes to broadly relate to:

- Riparian process;
- Wildlife corridors;
- Water quality;
- Hydrologic processes;
- Geomorphic processes; and
- Beneficial flooding.

As discussed in section 2.0, the proposed activity of petroleum production will not change the nature of the activities already conducted from existing infrastructure. The proposed activity is limited to production, operational maintenance and restoration of existing infrastructure at end-of-life. Notwithstanding, the relevance of the above environmental attributes to the activity is described below.

3.1 Riparian Process

The activity would be undertaken within Regional Ecosystems (REs) 5.6.4/5.3.16a and 5.3.22a (refer to Figure 3). These REs are listed as No Concern at Present (NCAP), are known to include riparian vegetation and are subject to long-term grazing from the operation of Orientos pastoral lease. They consist of *Atalaya hemiglauca +/- Acacia aneura +/- Acacia spp. +/- Corymbia terminalis low open woodland on reticulate sand dunes* (5.6.4); *Eragrostis australasica sparse tussock grassland on intermittently inundated depressions on flood plains, interdune flats, clay pans and clay plains* (5.3.16a); and *Sparse herbland, open water or bare areas on flood plain lakes and interdune clay pans and lakes* (5.3.22a). The braided channels associated with the Cooper Creek surround the proposed activity; at its closest point, the Cooper Creek is located approximately 12km to the north.

3.1.1 Potential Impacts

The activity is located within the existing infrastructure footprint. No new surface disturbance to land, such as clearing vegetation in or near streams, lakes, floodplains or wetlands, is required as part of the proposed activity. Access to and from the proposed activity will occur along the existing access tracks only.

Following cessation of petroleum production, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent with the surrounding undisturbed land in accordance with the relevant EA conditions. As such, there will be no new disturbance or change to riparian corridors along streams and lakes and within floodplains and wetlands as a part of this activity. Accordingly, the proposed activities would not cause a widespread or irreversible impact on riparian processes within the Channel Country SEA.

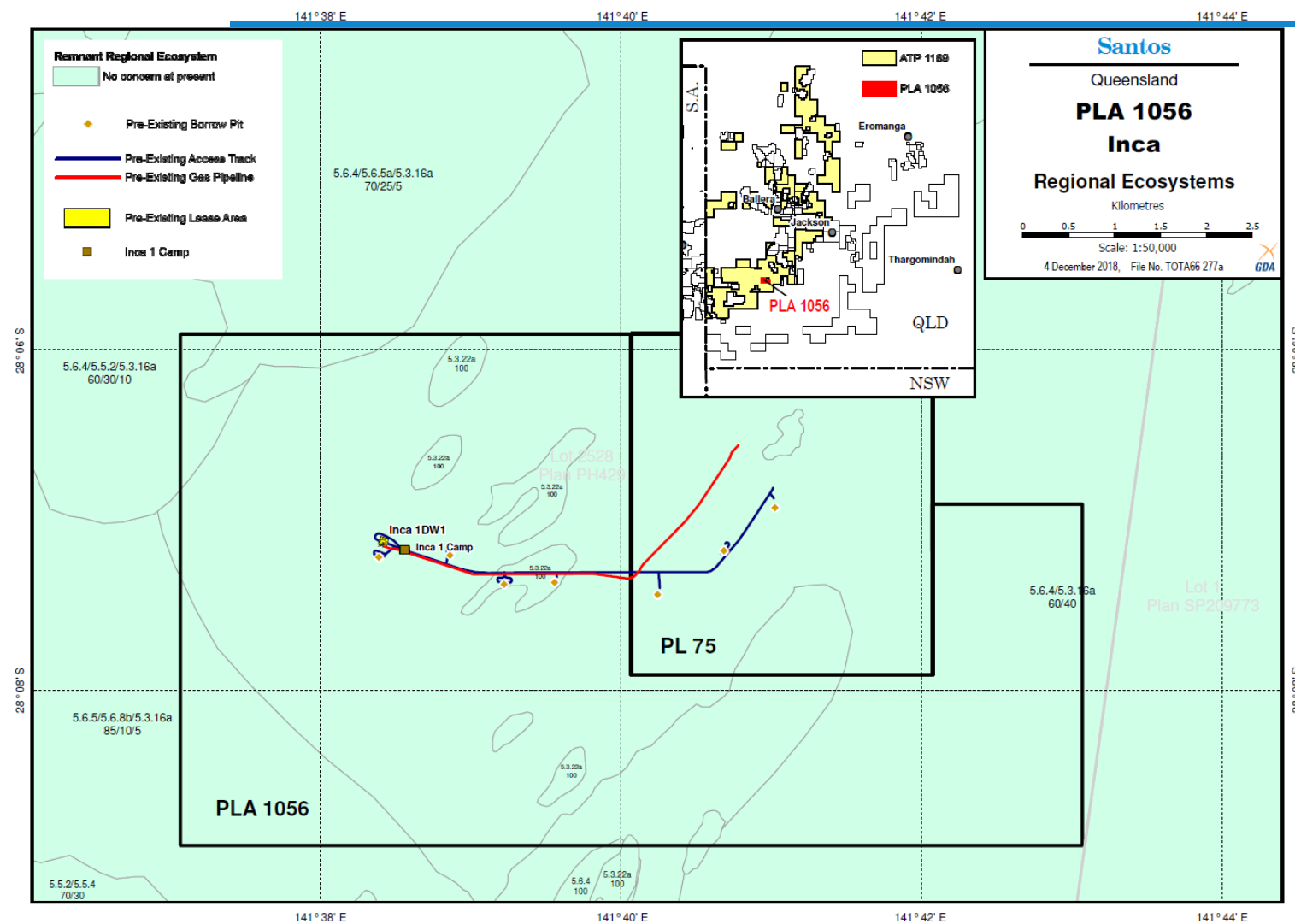


Figure 3: Regional Ecosystems

3.2 Wildlife Corridors

The proposed activity is located within a pre-disturbed area of an existing vegetated corridor. The area where the Inca 1DW1 well and Inca 1 gas flowline is located has been extensively overgrazed from operation of the Orientos pastoral lease. The REs surrounding the location (REs 5.6.4/5.3.16a (60/40) and 5.3.22a) may provide suitable general habitat for a range of wetland water birds, and for the dusky hopping-mouse (*Notomys fuscus*) (Endangered). There are no mapped Environmentally Sensitive Areas (ESA) near the Inca 1DW1 well or Inca 1 gas flowline; the closest ESA, Category C ESA Essential Habitat, is located approximately 18 km to the northeast of the Inca 1DW1 well and 15km to the northeast of the Inca 1 gas flowline at the termination point of the flowline.

3.2.1 Potential Impacts

No new disturbance(s) to aquatic and terrestrial fauna or wildlife corridors is to be undertaken as part of this activity. Measures will be adopted to prevent fauna entrapment within operational areas, and hygiene protocols will be implemented as appropriate to minimise the introduction, spread and persistence of weed species, in accordance with relevant EA conditions. Access to and from the proposed activity will occur along the existing access tracks only. Following cessation of petroleum production, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent with the surrounding undisturbed land, in accordance with relevant EA conditions. As such, there is no disturbance or change to wildlife corridors as a part of this activity and therefore the proposed activities would not cause a widespread or irreversible impact on wildlife corridors within the Channel Country SEA.

3.3 Water Quality

Surface Water

The proposed activities are located within an area of the Cooper Creek basin that is not typically flowing and is subject to intermittent flows associated with Cooper Creek flood events; which have occurred five times since 1989 (using Landsat data). Historical (1965-2016) water quality data from the QLD Government's Cooper Creek gauging station 003103A, located approximately 78km north west, is summarised in Table 2.

Table 2: Cooper Creek Surface Water Quality (1956-2016)

Parameter	Average Value
Conductivity @ 25°C	345 µS/cm
Turbidity	512 NTU
pH	7.4
Total Nitrogen	1.4 mg/L
Total Phosphorus as P	0.4 mg/L
Sodium as Na	44.6 mg/L
Magnesium as Mg	7.4 mg/L
Chloride as Cl	62.6 mg/L
Fluoride as F	0.2 mg/L

Groundwater

Groundwater information in this section has been derived from the Underground Water Impact Report (UWIR) for Santos Cooper Basin Oil and Gas Fields in South-West Queensland (Santos, 2016). The UWIR was prepared in accordance with the *Queensland Water Act 2000* (the Water Act) and the Guideline for Underground Water Impact Reports and Final Reports (the Guideline). The intent of the UWIR is to describe, make predictions about, and manage the impacts of extraction of underground water by petroleum tenure holders in South-Western Queensland where production testing or production is taking place.

The main GAB aquifers (i.e. in the Eromanga Basin stratigraphy) in relation to PL1056 are the Winton Formation, Cadna-owie Formation, Hooray Sandstone, Hutton Sandstone and Poolowanna Formation (Precipice Sandstone equivalent). The aquifers of the Eromanga Basin are considered highly productive aquifers over most of the GAB. Shallow groundwater is generally found within the Quaternary and Tertiary alluvium formations associated with the very flat structures of flood plains and is absent where the Winton Formation occasionally outcrops. Groundwater from Tertiary sediments and the Winton Formation are characterised by a higher proportion of sodium and magnesium ranging in EC values from 3,000 to 13,000 $\mu\text{S}/\text{cm}^2$.

The aquifers of the Cooper Basin, which underlies the GAB sediments of the Eromanga Basin, are not considered sandstone aquifers of the GAB. Groundwater yields from the Cooper Basin may be feasible from the Wimmera Sandstone, Toolachee Formation, Epsilon Formation, Patchawarra Formation and Tirrawarra Formation.

The Inca 1DW1 well primarily targets the Toolachee Formation, but also intersects the Roseneath formation of the Cooper Basin. These formations are the main gas reservoirs within the Cooper Basin and are located at depths of 2000 m or more.

Within the Santos Cooper Basin tenements, only the upper aquifers of the Eromanga Basin sequence are of economic interest to the local community. This is due to the significant depth of the water bearing formations in the Cooper Basin and the general unreliability of the groundwater quality that may be encountered (i.e. it may have a high salinity and contain free and dissolved hydrocarbons).

No registered groundwater bores are located nearby to the proposed activity. There are no known groundwater dependent ecosystems, including Great Artesian Basin springs, which support permanent waterholes or aquatic ecosystems in the area. The closest Great Artesian Basin discharge / recharge springs are located approximately 200km from Inca 1DW1 well.

3.3.1 Potential Impacts

The activity does not involve any new surface disturbance to land, such as clearing vegetation in or near streams, lakes, floodplains or wetlands. No activities proposed involve the discharges of water (point or diffuse sources) or the construction or operation of regulated dams and other major infrastructure (i.e. separation ponds, permanent camps).

² Golder Associates 2013 *Underground Water Impact Report For Santos Cooper Basin Oil & Gas Fields, SW QLD*

Any fuels / chemicals used on site would be stored and handled in accordance with Australian Standards and spill kits will be located onsite where required to contain any spills should they occur. All waste materials and non-essential infrastructure will be removed at the end of the petroleum activities as soon as reasonably practicable, minimising risks associated with contamination, or a reduction in water quality, in accordance with EA conditions.

A flare pit freeboard will be maintained with routine inspections and repairs undertaken to ensure overtopping does not occur. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding and the removal of fluids from the flare pit where floodwater pose a site inundation risk.

Contingency measures for unplanned releases of discharges of contaminants will be implemented in accordance with EA conditions. The rate of infiltration of surface spilt contaminants or leakage from flare pits is likely to be low based on the presence of low permeability clay lenses, the clay lining of the flare pit, low rainfall and high rates of evaporation. Any potential impacts are likely to be confined to a localised area.

Moreover, due to the slow nature of the encroachment of flood waters in the Cooper Creek, sufficient time is generally available to prepare operational areas for potential flood impacts e.g. in these situations all non-essential materials present on site at the time (e.g. hydrocarbons, chemicals, infrastructure) shall be removed from operational areas prior to the arrival of floodwaters. The petroleum well has been completed with steel surface casing, steel production casing, and cement to isolate the well from aquifers, including the Great Artesian Basin, and other geological units.

Given the scope of proposed activities, combined with the above management measures, petroleum production from pre-existing infrastructure is unlikely to disturb or alter the physical, chemical and biological quality of water in the watercourse channels and on floodplains that support and maintain the natural aquatic and terrestrial ecosystems. Accordingly, the proposed activities would not cause a widespread or irreversible impact on water quality within the Channel Country SEA.

3.4 Hydrological Processes

Regional

Topography is limited to low undulating topography between the drainage channel system. The Channel Country is characterised by vast flat-lying, braided, flood and alluvial plains surrounded by gravel or gibber plains, dunefields and low ranges. The low resistant hills and tablelands are remnants of the flat-lying Cretaceous sediments.

The drainage system is dominated by the Cooper Creek Basin draining towards Lake Eyre. During periods of high rainfall, the flat topography and drainage channel system becomes a largely flooded plain with water flow concentrating where Cooper Creek crosses the QLD-SA border. The Cooper Creek system catchment covers an area of approximately 300,000 km². Generally, Cooper Creek streamflow is confined to the main channels, but every 3-4 years, flows are sufficient to inundate parts of the Cooper floodplain via a network of tributary channels. During extended periods of no flow, the Cooper Creek contracts to a series of waterholes. Very large Cooper Creek flood events with the potential to inundate the broader Channel Country region, and flow water into the lower Cooper Creek in South Australia, occur on average once every 10 years, reaching Lake Eyre North in an estimated 1 in every 20 years

Local

The braided channels associated with the Cooper Creek surround the proposed activity; at its closest point, the Cooper Creek is located approximately 12km north outside of PLA1056 (Figure 4). No major watercourses are located within PLA1056 within the vicinity of the activity.

Tibienacka Creek (non-perennial, stream order (SO) 3 crosses the middle of PLA1056 through to PL75 from north to south and is located approximately 1.5km to the east of the activity (Figure 4). A second watercourse (non-perennial, SO 2) crosses PLA1056 from east to west, but does not enter PL75 (DES, 2018). This watercourse is located 250m to the north of the activity (Figure 4).

The Inca 1 gas flowline crosses a non-floodplain, arid/semi-arid wetland swamp mapped as a Referable Wetland of General Ecological Significance (GES) (Figure 4). The wetland is essentially a low-lying clay pan lake surrounded by sand dunes and sand plains. The clay pans receive local inflows from their surrounding catchment areas during local rainfall events. The clay pan wetland is described as a non-floodplain because it is a temporary wetland that does not receive inflows from the Cooper Creek floodplain or watercourses within the ATP1189 and PL75. Semi-arid/arid clay pans are typically dry due to their reliability on local rainfall to cause inflows combined with high evaporation rates and highly variable annual rainfall rates (BOM, 2018).

3.4.1 Potential Impacts

The proposed activity is located within the existing infrastructure footprint. The access tracks have not been constructed to any flood immunity, and will facilitate the passage of water keeping with existing hydrology. The existing pipeline is buried underground and the surface has been rehabilitated to reinstate existing drainage. Any surface infrastructure required as a part of future workover activities (i.e. a drilling sump) and well control and testing operations (i.e. flare pit), may result in diversion or interception of a negligible amount of overland flow, when considering the small footprint of the activity relative to the sub-catchment area. A typical drilling sump has an operating volume of approximately 300kL, whilst a flare pit has an operating volume of approximately 350kL. Both are designed to exclude surface flow. A flare pit freeboard will be maintained with routine inspections and repairs undertaken to ensure overtopping does not occur. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding and the removal of fluids from the flare pit where floodwater pose a site inundation risk.

Workover activities will be temporary in nature and would be scheduled to be completed outside of the wet season (infrastructure removed prior to Cooper Creek flood events) therefore diversion or interception of overland flow is not expected. No new surface disturbance to land, such as clearing vegetation in or near streams, lakes, floodplains or wetlands, is required as part of the proposed activity. Given the nature of the proposed activities, and the implementation of the above design and management measures, there would be no widespread or irreversible impact on hydrological processes within the Channel Country SEA.

3.5 Geomorphic Processes

Regional

Surface geology is dominated by Quaternary alluvium deposits associated with flood plains, with consolidated Tertiary sediments or Winton Formation on the higher ground. Cooper Creek is a large sedimentary sump accreting over a vast floodplain³.

³ Maroulis, J (undated) *Channel Country landforms and the processes that shape them*. University of Southern QLD Faculty of Education/Australian Centre for Sustainable Catchments.

Local

Land systems mapped at the location of the proposed activities are consistent with the regional ecosystem landzone description. The proposed activity location is entirely mapped as dunefields, plains with reticulate sand dunes 3-5m high. The area is associated with the irregularly flooded Cooper Creek main channel area⁴. Land system present within proposed activity location is summarised in Table 3. Soils are entirely mapped as red earthy sands, res siliceous sands and vegetated and bare interdune claypans (Map Code: 1740)⁵.

Table 3: Land System at Proposed Activity Location

Map Code	Land System Description	Agricultural Land Class
D4D3	Dunes (3-5 m high) with rounded crests, which infrequently may be mobile, and sloping duneflanks (1-5%). Dunes are reticulate, approaching longitudinal in places. Vegetated inter-connected interdune areas form drainage lines in places. Claypans which frequently become inundated are common.	C3 - Pasture Land - native pastures, light grazing

3.5.1 Potential Impacts

The proposed activity is located within the existing infrastructure footprint. No new surface disturbance to land, such as excavation, clearing or realigning the beds and banks of watercourse, cultivating soil or excavating on floodplains, are required as part of the proposed activity. No new structures are proposed to be placed in a watercourse, lake or spring or on floodplains as a part of this activity.

The proposed activity is located away from the sources / areas of significant geomorphic processes, the Cooper Creek is located approximately 12km to the north. The Inca 1 gas flowline crosses a non-floodplain, arid/semi-arid wetland. The access tracks have not been constructed to any flood immunity, and will facilitate the passage of water keeping with existing hydrology. The existing pipeline is buried underground and the surface has been rehabilitated to reinstate existing drainage. Any surface infrastructure required as a part of future workover activities (i.e. a drilling sump) and well control and testing operations (i.e. flare pit), may result in diversion or interception of a negligible amount of overland flow, when considering the small footprint of the activity relative to the sub-catchment area. A typical drilling sump has an operating volume of approximately 300kL, whilst a flare pit has an operating volume of approximately 350kL. Both are designed to exclude surface flow. A flare pit freeboard will be maintained with routine inspections and repairs undertaken to ensure overtopping does not occur. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding and the removal of fluids from the flare pit where floodwater pose a site inundation risk.

Workover activities will be temporary in nature and would be scheduled to be completed outside of the wet season (infrastructure removed prior to Cooper Creek flood events) therefore diversion or interception of overland flow is not expected.

⁴ DES (2018). Land systems – western arid region land use study – part 1 – AWA2 (spatial dataset), Accessed 14/05/2018. Available online at: gldspatial.information.gld.gov.au

⁵ ASRIS (2018). Atlas of Australian Soils (spatial dataset), Australian Soil Resource Information System (CSIRO), Accessed 14/05/2018. Available online at: <http://www.asris.csiro.au/downloads/Atlas/soilAtlas2M.zip>

Following cessation of petroleum production, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent with the surrounding undisturbed land. As such, the proposed activity would not alter the delivery of sediment to the river system from adjacent lands and the natural erosion of the bed, banks and floodplains. Accordingly, it is not envisaged that the proposed activity would not cause a widespread or irreversible impact on geomorphic processes within the Channel Country SEA.

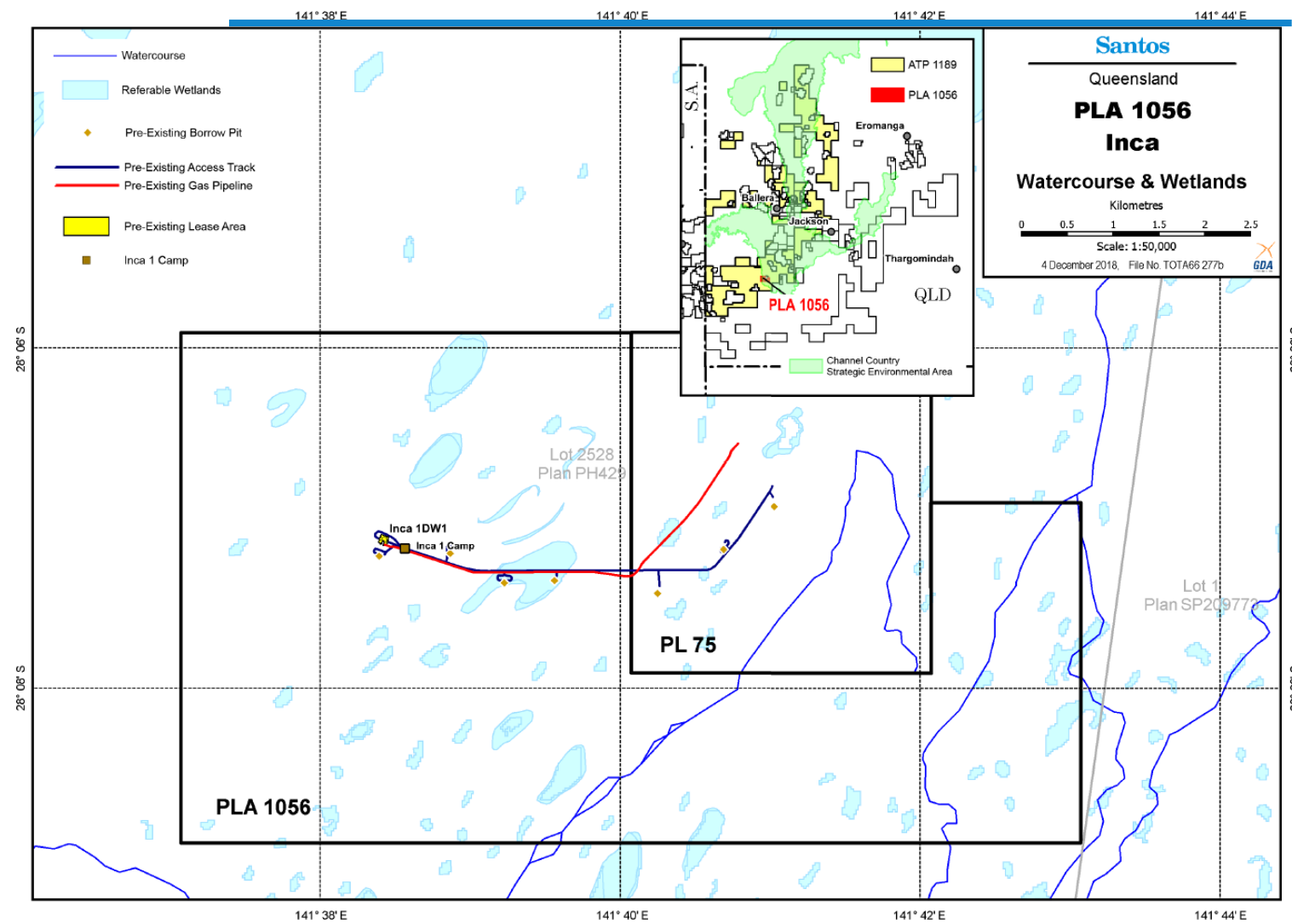


Figure 4: Watercourses, Wetlands and Strategic Environmental Areas

3.6 Beneficial Flooding

The braided channels associated with the Cooper Creek surround the proposed activity; at its closest point, the Cooper Creek is located approximately 12km to the north. The Inca 1 gas flowline crosses a non-floodplain, arid/semi-arid wetland. Notwithstanding, the area of the proposed activity would experience intermittent surface water flows during storm events, causing localised ponding of surface water (occurring on average once every 10 years).

Generally, the surrounding Cooper Creek streamflow is confined to the main channels, but every 3-4 years, flows are sufficient to inundate parts of the Cooper floodplain via a network of tributary channels. During extended periods of no flow, the Cooper Creek contracts to a series of waterholes. Very large Cooper Creek flood events with the potential to inundate the broader Channel Country region, and flow water into the lower Cooper Creek in South Australia, occur on average once every 10 years, reaching Lake Eyre North in an estimated 1 in every 20 years.

3.6.1 Potential Impacts

The proposed activity is located within the existing infrastructure footprint. No new surface disturbance activities, including placing new infrastructure within SEA, are proposed as part of this activity. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding.

Following cessation of petroleum production or pipeline operation, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent to the surrounding undisturbed land. Given no new disturbance or activities other than 'production' or 'operation' from existing authorised infrastructure is proposed (as described in Section 2.0), altered natural flow paths and natural extent of flooding across floodplains will not occur. Accordingly, the proposed activities would not cause a widespread or irreversible impact on beneficial flooding within the Channel Country SEA.

4.0 Required Outcome Assessment

Schedule 2, Part 5 of the RPI Reg provides criteria for assessment by agencies. In accordance with Section 14(3) of the RPI Reg, if the application demonstrates compliance with either of the prescribed solutions stated in Part 5, Schedule 2, the proposed activity will meet the required outcome for the regional interest. Critically, the application demonstrates that the prescribed solution provided in s15(1)(a) will be met as the proposed activity, 'petroleum production' from pre-existing disturbances and infrastructure will not impact on an environmental attribute of the Channel Country SEA. The application also demonstrates the prescribed solution provided in s15(1)(b) will also be met (Table 4).

Table 4: Schedule 2, Part 5 RPI Reg

Schedule 2, Part 5 RPI Reg		Relevance To Application
14 Required outcome <i>The activity will not result in a widespread or irreversible impact on an environmental attribute of a strategic environmental area.</i>	✓	The petroleum activities would not result in a widespread or irreversible impact on each of the environmental attributes as provided in Section 3.0.
15 Prescribed solution <i>(1) The application demonstrates either— (a) the activity will not, and is not likely to, have a direct or indirect impact on an environmental attribute of the strategic environmental area; or</i>	✓	Refer to Section 3.0.
<i>(b) all of the following— (i) if the activity is being carried out in a designated precinct in the strategic environmental area—the activity is not an unacceptable use for the precinct;</i>	✓	The proposed activities do not include any of the unacceptable uses prescribed by Section 15(2) of the RPI Act.
<i>(ii) the construction and operation footprint of the activity on the environmental attribute is minimised to the greatest extent possible;</i>	✓	Existing operational footprint will be utilised entirely. No new disturbance footprint is proposed within this application.
<i>(iii) the activity does not compromise the preservation of the environmental attribute within the strategic environmental area;</i>	✓	Refer to Section 3.0.
<i>(iv) if the activity is to be carried out in a strategic environmental area identified in a regional plan—the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan.</i>	✓	The South West Regional Plan does not identify the Channel Country SEA.

As discussed within Section 2.1, a flare pit is required for well control and testing operations for production from the Inca 1DW1 well and a drilling fluids sump may be required as a part of future temporary workover activities. The application also demonstrates the proposed use of the flare pit and drilling sump does not constitute a regulated activity as defined by the RPI Act.

s11(3) of the Regional Planning Interests Regulation 2014		Relevance To Application
<i>Water storage (dam) is storing water using a dam, other than storing water on land to be used only for any or all of the following purposes—</i> <i>(a) to meet the domestic water needs of the occupants of the land;</i> <i>(b) to water the stock that is usually grazed on the land;</i> <i>(c) to water stock that is travelling on a stock route on or near the land.</i>	✓	N/A – the application does not propose to store water in a dam. The application proposes the storing of produced formation water in a flare pit and drilling fluids in a drill sump. Santos flare pits and drilling sumps are designed to exclude surface flow and avoid the impounding of surface water. In addition, workover activities would be scheduled to be completed outside of the wet season, therefore all surface infrastructure, including a drill sump, would be removed prior to Cooper Creek flood events. Fluids will be removed from the flare pit where floodwater pose a site inundation risk.
Schedule 6 of the Regional Planning Interests Regulation 2014		Relevance to the application
<i>dam—</i> <i>(a) means the following—</i> <i>(i) a barrier, whether permanent or temporary, that does, could or would impound water;</i>	✓	N/A – the flare pit and drilling sump will not impound water. Santos flare pits and drilling sumps are designed to exclude surface water and avoid the impounding of surface water. Workover activities would be scheduled to be completed outside of the wet season, therefore all surface infrastructure, including a drill sump, would be removed prior to Cooper Creek flood events. Fluids will be removed from the flare pit where floodwater pose a site inundation risk.
<i>(ii) the storage area created by the barrier;</i> <i>(iii) an embankment or other structure that is associated with the barrier and controls the flow of water; but</i>	✓	N/A – the flare pit and drilling sump would not constitute a barrier for the storage of water.
<i>(b) does not include a water tank, including a rainwater tank, constructed of steel, concrete, fibreglass, plastic or similar material.</i>	✓	N/A – the flare pit and drilling sump do not constitute a water tank.

ATTACHMENT 4b – RIDA ASSESSMENT REPORT – Bantam 1 and Bantam gas flowline

**Regional Interests
Development Application
Assessment Report**

**Bantam 1 Gas Well and Bantam 1
gas flowline**

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Abbreviations and Units

Acronym	Description
ATP	Authority to Prospect
DEHP	Department of Environment and Heritage Protection, Queensland
DES	Department of Environment and Science, Queensland
DILGP	Department of Infrastructure, Local Government and Planning
DNRM	Department of Natural Resources and Mines
EA	Environmental Authority
ha	Hectares
km	Kilometre
m	Metres
N/A	Not Applicable
PAA	Priority Agricultural Area
P&G Act 2004	<i>Petroleum and Gas (Production and Safety) Act 2004</i>
PL	Petroleum Lease
PLA	Priority Living Area
QLD	Queensland
RE	Regional Ecosystem
RIDA	Regional Interests Development Approval
RPI Act	<i>Regional Planning Interests Act 2014</i>
RPI Reg	<i>Regional Planning Interests Regulation 2014</i>
SCA	Strategic Cropping Area
SEA	Strategic Environmental Areas
SMS	Santos Management System
SPA	<i>Sustainable Planning Act 2009</i>
SWQ	South-West Queensland
WR Act	<i>Wild Rivers Act 2005 (Repealed)</i>

1.0 Introduction

Santos Limited (Santos) has prepared this assessment report to support an assessment application for a Regional Interests Development Approval (RIDA) as required under s29 of the *Regional Planning Interests Act 2014* (RPI Act) to be submitted to the Department of Infrastructure, Local Government and Planning (DILGP).

The application is of an administrative nature. It seeks only to authorise petroleum 'production' on Lot 1 on Plan SP133822 and PLA1055 from the existing Bantam 1 petroleum well and associated infrastructure, and the operation of the Bantam 1 gas flowline (PPL2035) currently under application) within the Channel Country SEA. This is a result of:

- a change in tenure from Authority to Prospect (ATP) to a Petroleum Lease (PL), and subsequent requirement for an amendment to the existing Environmental Authority (EA); and
- the submission of a Petroleum Pipeline Licence (PPL) application to operate the Bantam 1 gas flowline and the issuing of the new EA EA0001452.

The new tenures and EAs are to allow for commercialisation of a petroleum product, following well construction and extended production testing conducted under ATP 1189 (EPPG03518215) and pipeline construction under PL113/PLA1054 (EPPG03517215) and ATP1189 (EPPG03518215).

The assessment report has been prepared in accordance with the RPI Act *Statutory Guideline 01/14: How to make an assessment application for a regional interests development approval under the Regional Planning Interests Act 2014* and the RPI Act *Statutory Guideline 05/14: Carrying out resource activities and regulated activities within a Strategic Environmental Area*.

This assessment report provides the following:

- Description of the proposed activities;
- Identification of the relevant environmental attributes of the land subject to the application;
- Evaluation of the potential impacts on the identified relevant environmental attributes; and
- An assessment of how the proposed activities meet the required outcome for Strategic Environmental Areas (SEA) as detailed in the *Regional Planning Interests Regulation 2014* (RPI Reg).

1.1 Landholder Copy of the Application

Separate regulatory systems are in place that require Santos to notify the landholder of petroleum activities occurring within their properties. Given the pre-existing nature of the activities (refer to 2.0), notification to the landholder has already ensued. Notwithstanding, a copy of the application will be given to the landowner within 5 business days after the application is made in accordance with Section 30 of the RPI Act and Schedule 5 of the RPI Reg.

1.2 Non-Notifiable Application

In accordance with Section 34(2) of the RPI Act and Section 13 of the RPI Reg, notification of the assessment application is not mandatory, as the activities are not proposed to be carried out in an area of regional interest that is a priority living area.

The activities are located solely on Lot 1 SP133822 forming part of Durham Downs Pastoral Station, a 8,910 km² cattle station operated by S Kidman & Co Ltd. Discretionary notification under s34(4) would not be necessary given the pre-existing nature of the activities (refer section 2.0), the very large size of the cattle station relative to the activities and that the landholder will receive a copy of the application as described below.

1.3 Referable Application

In accordance with Section 12(2) and Schedule 1 of the RPI Reg, the application is referable to the Department of Environment and Science (DES) and the Department of Natural Resources, Mines and Energy (DNRME).

2.0 Proposed Activity

Santos is seeking to undertake 'petroleum production' on PLA1055 and to operate PPL2035, within the Channel Country SEA from the infrastructure and disturbances listed in Table 1 and shown in Figure 1:

Table 1: Existing Surface Disturbance

Pre-Existing Infrastructure	Pre-Existing Disturbance	
	Length	Area
Petroleum Well Pad (Bantam 1)	N/A	0.74 ha
Buried Pipeline (Bantam 1 gas flowline)	2.87 km	0.28 ha
Access Track	1.97 km	1.18 ha
Borrow Pit	N/A	0.30 ha
		2.50 ha

The infrastructure listed in Table 1 is pre-existing infrastructure, constructed and operated as authorised by ATP1189, PL113/PLA1054, EPPG03518215 and EPPG03517215. Santos intends to utilise this infrastructure for the purpose of 'petroleum production' as evidenced by the submission of an application for PLA1055 on 31 October 2018. An associated amendment application to the existing environmental authority (EPPG03518215) is to be lodged with DES in the near future to authorise petroleum activities conducted on PLA1055. The operation of the Bantam 1 gas flowline has been sought through the application for PPL2035 which was lodged with DNRME on 1 August 2018 and issuing of EA0001452 on 6 September 2018.

The activity of petroleum production will not change the nature of the activities already conducted at these locations. 'Production' primarily refers to the commercialisation of the petroleum product generated from the Bantam 1 petroleum well and operation of the constructed petroleum pipeline (Bantam 1 gas flowline) to transport the product to processing facilities and to market. No new surface disturbance to land is required as part of the activity at this location. Activities will be limited to 'production' related operational maintenance and restoration at the end-of-life. Descriptions of the activities are provided in Section 2.0.

Bantam 1 and associated infrastructure; and Bantam 1 Gas Flowline is located on Durham Downs Pastoral Station (Lot 1 SP133822). Durham Downs is a pastoral lease that operates as a cattle station with a capacity of up to 21,500 head of cattle¹. The primary land uses are cattle grazing and petroleum activities.

2.1 Existing Conventional Petroleum Well and Lease

The existing Bantam 1 well currently extracts petroleum for exploration and production testing purposes via surface facilities including a well head, which comprises of equipment on the surface that supports the various pipe strings, seals off the well and controls the paths and flow of reservoir fluids.

A flare pit is required for well control and testing operations for production from the Bantam 1 well and is in place for the life of the production operations. The flare pit is likely to contain produced formation water.

¹ S. Kidman & Co Ltd (2018) *Durham Downs*, <https://www.kidman.com.au/properties/5/durham-downs>

The flare pit is clay lined on the base and sides to contain any hydrocarbons within the blowdown water. A minimum freeboard of 300mm is maintained within the pit to ensure overtopping does not occur. In addition, a bund around the pit perimeter minimises surface flow entering the pit. At the end of life of the flare pit, a contaminated land assessment will be undertaken to identify any contaminated soils requiring removal. The pit will be backfilled to a contoured finish as required by the relevant EA conditions.

It is feasible that workover operations will be required for the Bantam 1 well in the future. Workover operations include activities such as, cleaning out of production conduits and replacing tubing, retrieving or drilling out obstructions in the well, and well bore decommissioning. For some workovers, a workover rig and associated infrastructure (i.e. a drilling fluids sump) would need to be set up within the existing disturbance footprint for a temporary duration. Workover activities would be scheduled to be completed outside of the wet season.

Extracting petroleum for 'production' will not change the nature of the activities already conducted at this location. The authorisation of PLA1055 is to enable the commercialisation of the petroleum product only. No new surface disturbance to land outside of the existing disturbance footprint is required at this location to facilitate ongoing production. The well will be restored at end-of-life in accordance with the P&G Act 2004 and the relevant EA conditions.

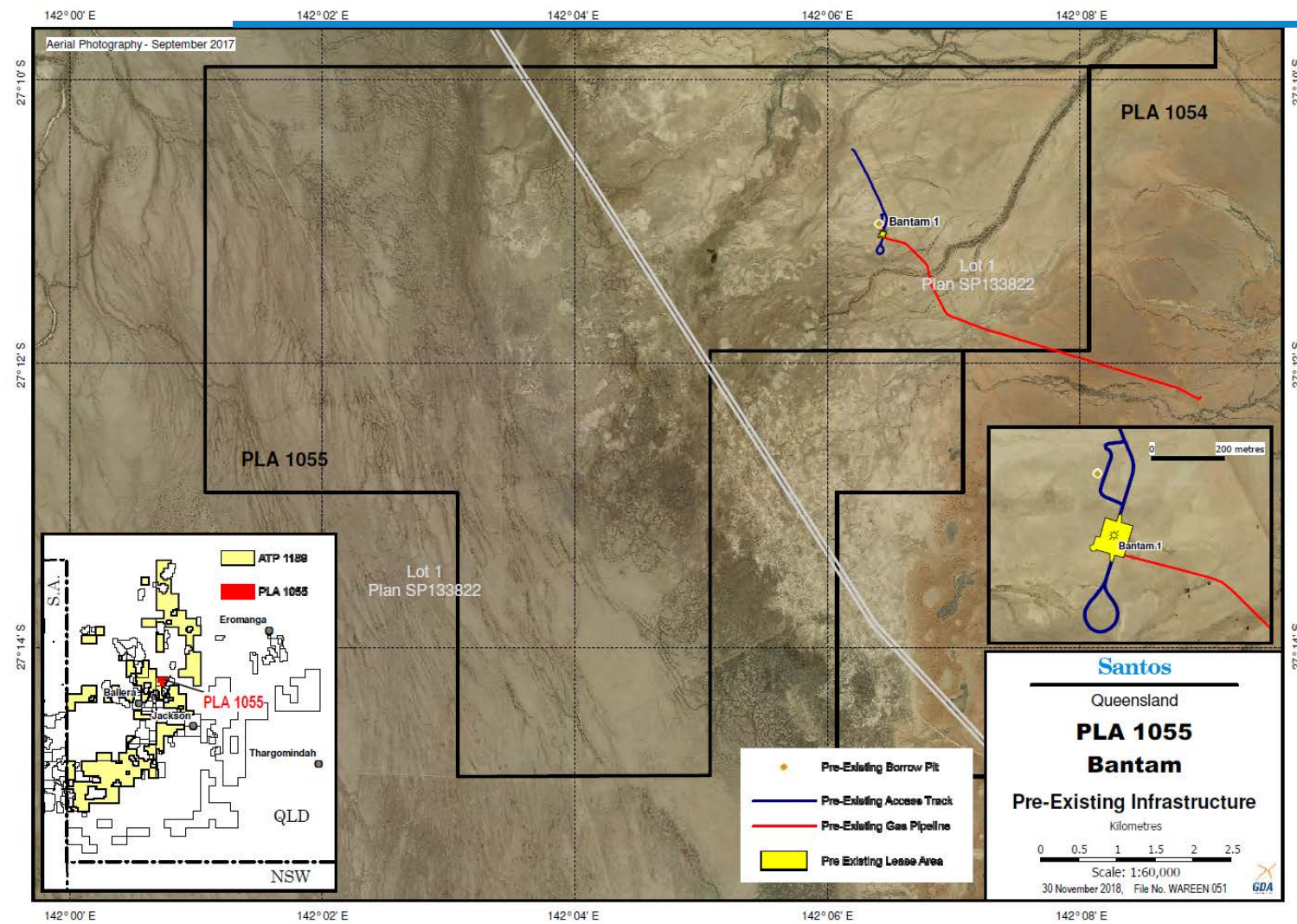


Figure 1: Location of Existing Infrastructure

2.2 Existing Access tracks

Access tracks are proposed to be used for ongoing access to the Bantam 1 well and to carry out surveillance and maintenance on the Bantam 1 flowline. No new access tracks are proposed. Pre-existing access tracks are not designed to be used during wet weather conditions, and therefore have not been constructed to any flood immunity, and will facilitate the passage of water keeping with existing hydrology. Maintenance of the tracks may be required over time (e.g. light grade). The access tracks will be restored at end-of-life in accordance with the *Petroleum and Gas (Production and Safety) Act 2004* (P&G Act 2004) and the relevant EA conditions.

2.3 Existing Borrow Pit

Borrow pits are proposed to be used to provide a source of material required for ongoing well lease, access track and pipeline maintenance. The existing side batters of borrow pits are maintained at a slope of approximately 3:1, and the batters of the entrance / exit are maintained at a slope of approximately 7:1. Borrow pits will be progressively restored by ripping the floor and sides to a minimum depth of 300 mm generally along the contour (Figure 2). Stockpiled topsoil and vegetation is re-spread to a uniform depth over the entire area from which it was removed. The sides and floor of the pits are graded to give a contoured finish, as required by the relevant EA conditions.

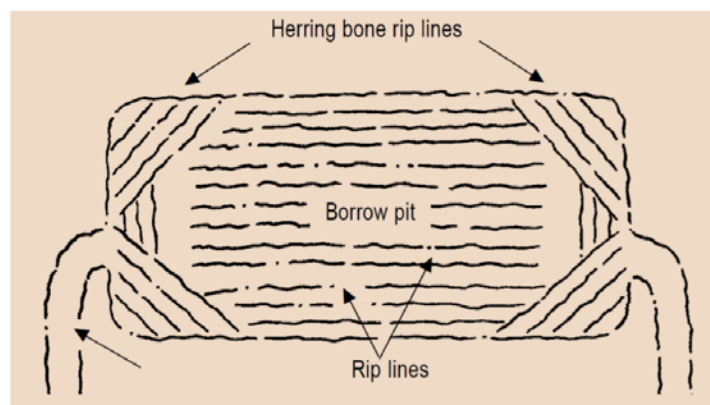


Figure 2: Example Borrow Pit Ripping for Rehabilitation

2.4 Existing Buried Pipeline

The existing pipeline is proposed to be utilised to transport extracted petroleum for production. The existing pipeline is buried underground and the surface has been rehabilitated to reinstate existing drainage. It is connected to the existing pipeline gathering network - the Tartulla Gas Trunkline (PPL47). No new surface disturbance to land is required. The pipeline will be restored at end-of-life in accordance with the relevant EA conditions.

3.0 Environmental Attributes and Potential Impacts

Section 7 of the RPI Reg prescribes the following environmental attributes relevant to the Channel Country SEA:

- (a) the natural hydrologic processes of the area characterised by—
 - (i) natural, unrestricted flows in and along stream channels and the channel network in the area; and
 - (ii) overflow from stream channels and the channel network onto the flood plains of the area, or the other way; and
 - (iii) natural flow paths of water across flood plains connecting waterholes, lakes and wetlands in the area; and
 - (iv) groundwater sources, including the Great Artesian Basin and springs, that support waterhole persistence and ecosystems in the area;
- (b) the natural water quality in the stream channels and aquifers and on flood plains in the area;
- (c) the beneficial flooding of land that supports flood plain grazing and ecological processes in the area.

DILGP's RPI Act Statutory Guideline 05/14: Carrying out resource activities and regulated activities within a Strategic Environmental Area summarises the above attributes to broadly relate to:

- Riparian process;
- Wildlife corridors;
- Water quality;
- Hydrologic processes;
- Geomorphic processes; and
- Beneficial flooding.

As discussed in section 2.0, the proposed activity of petroleum production will not change the nature of the activities already conducted from existing infrastructure. The proposed activity is limited to production, operational maintenance and restoration of existing infrastructure at end-of-life. Notwithstanding, the relevance of the above environmental attributes to the activity is described below.

3.1 Riparian Process

The activity would be undertaken within Regional Ecosystems (REs) 5.3.16b/5.3.18b, 5.3.21a/5.3.7 and 5.9.3 (refer Figure 3). These REs are listed as No Concern at Present (NCAP), are known to include riparian vegetation and are subject to long-term grazing from the operation of Durham Downs pastoral lease. They consist of *Eragrostis australasica* sparse tussock grassland on intermittently inundated depressions on flood plains, interdune flats, clay pans and clay plains (5.3.16b); Braided channel complex of major alluvial plains, includes *Chenopodium auricomum* open shrubland and variable sparse to open-herbland (5.3.18b), Variable sparse to open herbland, *Senna* spp. open shrubland and bare scalded areas on infrequently flooded alluvia of major rivers their distributaries, drainage channels and creeks (5.3.21a), *Eucalyptus coolabah* +/- *Lysiphyllum gilvum* +/- *Acacia stenophylla* +/- *Acacia cambagei* low open woodland on major channels (5.3.7) and *Astrebla* spp. +/- short grasses +/- forbs open herbland on Cretaceous sediments (5.9.3).

The braided channels associated with the Cooper Creek surround the proposed activity; at its closest point, the Cooper Creek is located approximately 5km to the west.

3.1.1 Potential Impacts

The activity is located within the existing infrastructure footprint. No new surface disturbance to land, such as clearing vegetation in or near streams, lakes, floodplains or wetlands, is required as part of the proposed activity. Access to and from the proposed activity will occur along the existing access tracks only.

Following cessation of petroleum production, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent with the surrounding undisturbed land in accordance with the relevant EA conditions. As such, there will be no new disturbance or change to riparian corridors along streams and lakes and within floodplains and wetlands as a part of this activity. Accordingly, the proposed activities would not cause a widespread or irreversible impact on riparian processes within the Channel Country SEA.

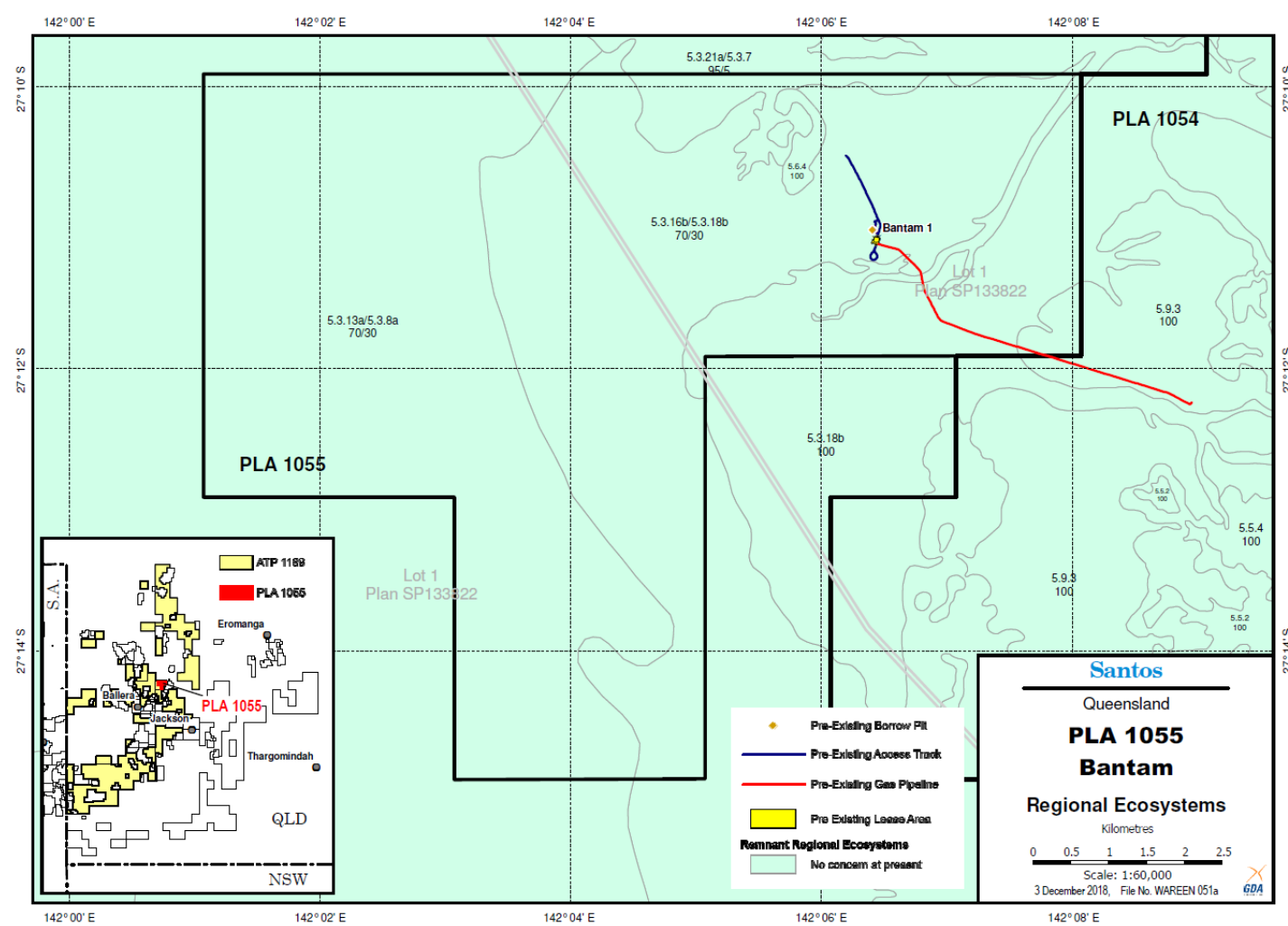


Figure 3: Regional Ecosystems

3.2 Wildlife Corridors

The proposed activity is located within a pre-disturbed area of an existing vegetated corridor. The area where the Bantam 1 well and Bantam 1 gas flowline is located has been extensively overgrazed from operation of the Durham Downs pastoral lease. The REs surrounding the location (REs 5.3.16b/5.3.18b, 5.3.21a/ 5.3.7 and 5.9.3) may provide suitable general habitat for a range of wetland water birds, and for the dusky hopping-mouse (*Notomys fuscus*) (Endangered). There are no mapped Environmentally Sensitive Areas (ESA) near the Bantam 1 well or Bantam 1 gas flowline; the closest ESA, Category C ESA Essential Habitat, is located approximately 15 km to the south west of the Bantam 1 well and of the Bantam 1 gas flowline at the termination point of the flowline.

3.2.1 Potential Impacts

No new disturbance(s) to aquatic and terrestrial fauna or wildlife corridors is to be undertaken as part of this activity. Measures will be adopted to prevent fauna entrapment within operational areas, and hygiene protocols will be implemented as appropriate to minimise the introduction, spread and persistence of weed species, in accordance with relevant EA conditions. Access to and from the proposed activity will occur along the existing access tracks only. Following cessation of petroleum production, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent with the surrounding undisturbed land, in accordance with relevant EA conditions. As such, there is no disturbance or change to wildlife corridors as a part of this activity and therefore the proposed activities would not cause a widespread or irreversible impact on wildlife corridors within the Channel Country SEA.

3.3 Water Quality

Surface Water

The proposed activities are located within an area of the Cooper Creek basin that is not typically flowing and is subject to intermittent flows associated with Cooper Creek flood events; which have occurred five times since 1989 (using Landsat data). Historical (1965-2016) water quality data from the QLD Government's Cooper Creek gauging station 003103A, located approximately 108km south west, is summarised in Table 2.

Table 2: Cooper Creek Surface Water Quality (1956-2016)

Parameter	Average Value
Conductivity @ 25°C	345 µS/cm
Turbidity	512 NTU
pH	7.4
Total Nitrogen	1.4 mg/L
Total Phosphorus as P	0.4 mg/L
Sodium as Na	44.6 mg/L
Magnesium as Mg	7.4 mg/L
Chloride as Cl	62.6 mg/L
Fluoride as F	0.2 mg/L

Groundwater

Groundwater information in this section has been derived from the Underground Water Impact Report (UWIR) for Santos Cooper Basin Oil and Gas Fields in South-West Queensland (Santos, 2016). The UWIR was prepared in accordance with the *Queensland Water Act 2000* (the Water Act) and the Guideline for Underground Water Impact Reports and Final Reports (the Guideline). The intent of the UWIR is to describe, make predictions about, and manage the impacts of extraction of underground water by petroleum tenure holders in South-Western Queensland where production testing or production is taking place.

The main GAB aquifers (i.e. in the Eromanga Basin stratigraphy) in relation to PL1055 are the Winton Formation, Cadna-owie Formation, Hooray Sandstone, Hutton Sandstone and Poolowanna Formation (Precipice Sandstone equivalent). The aquifers of the Eromanga Basin are considered highly productive aquifers over most of the GAB. Shallow groundwater is generally found within the Quaternary and Tertiary alluvium formations associated with the very flat structures of flood plains and is absent where the Winton Formation occasionally outcrops. Groundwater from Tertiary sediments and the Winton Formation are characterised by a higher proportion of sodium and magnesium ranging in EC values from 3,000 to 13,000 $\mu\text{S}/\text{cm}^2$.

The aquifers of the Cooper Basin, which underlies the GAB sediments of the Eromanga Basin, are not considered sandstone aquifers of the GAB. Groundwater yields from the Cooper Basin may be feasible from the Wimmera Sandstone, Toolachee Formation, Epsilon Formation, Patchawarra Formation and Tirrawarra Formation.

The Bantam 1 well primarily targets the Toolachee Formation. These formations are the main gas reservoirs within the Cooper Basin and are located at depths of 2000 m or more.

Within the Santos Cooper Basin tenements, only the upper aquifers of the Eromanga Basin sequence are of economic interest to the local community. This is due to the significant depth of the water bearing formations in the Cooper Basin and the general unreliability of the groundwater quality that may be encountered (i.e. it may have a high salinity and contain free and dissolved hydrocarbons).

No registered groundwater bores are located nearby to the proposed activity. There are no known groundwater dependent ecosystems, including Great Artesian Basin springs, which support permanent waterholes or aquatic ecosystems in the area. The closest Great Artesian Basin discharge / recharge springs are located approximately 200km from Bantam 1 well.

3.3.1 Potential Impacts

The activity does not involve any new surface disturbance to land, such as clearing vegetation in or near streams, lakes, floodplains or wetlands. No activities proposed involve the discharges of water (point or diffuse sources) or the construction or operation of regulated dams and other major infrastructure (i.e. separation ponds, permanent camps).

Any fuels / chemicals used on site would be stored and handled in accordance with Australian Standards and spill kits will be located onsite where required to contain any spills should they occur. All waste materials and non-essential infrastructure will be removed at the end of the petroleum activities as soon as reasonably practicable, minimising risks associated with contamination, or a reduction in water quality, in accordance with EA conditions.

² Golder Associates 2013 *Underground Water Impact Report For Santos Cooper Basin Oil & Gas Fields, SW QLD*

A flare pit freeboard will be maintained with routine inspections and repairs undertaken to ensure overtopping does not occur. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding and the removal of fluids from the flare pit where floodwater pose a site inundation risk.

Contingency measures for unplanned releases of discharges of contaminants will be implemented in accordance with EA conditions. The rate of infiltration of surface spilt contaminants or leakage from flare pits is likely to be low based on the presence of low permeability clay lenses, the clay lining of the flare pit, low rainfall and high rates of evaporation. Any potential impacts are likely to be confined to a localised area.

Moreover, due to the slow nature of the encroachment of flood waters in the Cooper Creek, sufficient time is generally available to prepare operational areas for potential flood impacts e.g. in these situations all non-essential materials present on site at the time (e.g. hydrocarbons, chemicals, infrastructure) shall be removed from operational areas prior to the arrival of floodwaters. The petroleum well has been completed with steel surface casing, steel production casing, and cement to isolate the well from aquifers, including the Great Artesian Basin, and other geological units.

Given the scope of proposed activities, combined with the above management measures, petroleum production from pre-existing infrastructure is unlikely to disturb or alter the physical, chemical and biological quality of water in the watercourse channels and on floodplains that support and maintain the natural aquatic and terrestrial ecosystems. Accordingly, the proposed activities would not cause a widespread or irreversible impact on water quality within the Channel Country SEA.

3.4 Hydrological Processes

Regional

Topography is limited to low undulating topography between the drainage channel system. The Channel Country is characterised by vast flat-lying, braided, flood and alluvial plains surrounded by gravel or gibber plains, dunefields and low ranges. The low resistant hills and tablelands are remnants of the flat-lying Cretaceous sediments.

The drainage system is dominated by the Cooper Creek Basin draining towards Lake Eyre. During periods of high rainfall, the flat topography and drainage channel system becomes a largely flooded plain with water flow concentrating where Cooper Creek crosses the QLD-SA border. The Cooper Creek system catchment covers an area of approximately 300,000 km². Generally, Cooper Creek streamflow is confined to the main channels, but every 3-4 years, flows are sufficient to inundate parts of the Cooper floodplain via a network of tributary channels. During extended periods of no flow, the Cooper Creek contracts to a series of waterholes. Very large Cooper Creek flood events with the potential to inundate the broader Channel Country region, and flow water into the lower Cooper Creek in South Australia, occur on average once every 10 years, reaching Lake Eyre North in an estimated 1 in every 20 years

Local

The braided channels associated with the Cooper Creek surround the proposed activity; at its closest point, the Cooper Creek is located approximately 5km west within PLA1055 (Figure 4). No major watercourses are located within the vicinity of the activity. A watercourse (non-perennial stream order (SO) 4)) crosses PLA1055 from north to west approximately 650m from Bantam 1. A second watercourse (non-perennial stream order (SO) 4)) crosses PLA1055 from north to west approximately 1.6km to the south of Bantam 1. PPL2035 crosses this watercourse (Figure 4). A watercourse (non-perennial stream order (SO) 4)) crosses PL113/PLA1054 from west to east approximately 330m from PPL2035 and 2.14 km from Bantam 1 (Figure 4).

The Bantam 1 gas flowline crosses an arid/semi-arid floodplain grass, sedge, herb swamps wetland mapped as a Referable Wetland of General Ecological Significance (GES) (Figure 4). The wetland is essentially a low-lying clay pan lake surrounded by sand dunes and sand plains. The clay pans receive local inflows from their surrounding catchment areas during local rainfall events. Semi-arid/arid clay pans are typically dry due to their reliability on local rainfall to cause inflows combined with high evaporation rates and highly variable annual rainfall rates (BOM, 2018).

3.4.1 Potential Impacts

The proposed activity is located within the existing infrastructure footprint. The access tracks have not been constructed to any flood immunity, and will facilitate the passage of water keeping with existing hydrology. The existing pipeline is buried underground and the surface has been rehabilitated to reinstate existing drainage. Any surface infrastructure required as a part of future workover activities (i.e. a drilling sump) and well control and testing operations (i.e. flare pit), may result in diversion or interception of a negligible amount of overland flow, when considering the small footprint of the activity relative to the sub-catchment area. A typical drilling sump has an operating volume of approximately 300kL, whilst a flare pit has an operating volume of approximately 350kL. Both are designed to exclude surface flow. A flare pit freeboard will be maintained with routine inspections and repairs undertaken to ensure overtopping does not occur. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding and the removal of fluids from the flare pit where floodwater pose a site inundation risk.

Workover activities will be temporary in nature and would be scheduled to be completed outside of the wet season (infrastructure removed prior to Cooper Creek flood events) therefore diversion or interception of overland flow is not expected. No new surface disturbance to land, such as clearing vegetation in or near streams, lakes, floodplains or wetlands, is required as part of the proposed activity. Given the nature of the proposed activities, and the implementation of the above design and management measures, there would be no widespread or irreversible impact on hydrological processes within the Channel Country SEA.

3.5 Geomorphic Processes

Regional

Surface geology is dominated by Quaternary alluvium deposits associated with flood plains, with consolidated Tertiary sediments or Winton Formation on the higher ground. Cooper Creek is a large sedimentary sump accreting over a vast floodplain³.

Local

Land systems mapped at the location of the proposed activities are consistent with the regional ecosystem landzone description. The proposed activity location is entirely mapped as other alluvia, flooded alluvial plains with eroded low dunes less than 1.5m. The area is associated with the irregularly flooded Cooper Creek main channel area⁴.

³ Maroulis, J (undated) *Channel Country landforms and the processes that shape them*. University of Southern QLD Faculty of Education/Australian Centre for Sustainable Catchments.

⁴ DES (2018). Land systems – western arid region land use study – part 1 – AWA2 (spatial dataset), Accessed 14/05/2018. Available online at: gldspatial.information.qld.gov.au

The land system present within proposed activity location is summarised in Table 3. Soils are entirely mapped as grey clays and claypans on the plains, scalded sandy loam surfaced textured contrast soils and yellow sands on low dunes (Map Code: 491)⁵.

Table 3: Land System at Proposed Activity Location

Map Code	Land System Description	Agricultural Land Class
C1A4	Alluvial plains with gradients of less than 1:5,000; with anastomosing channels (0.1 to 1 m relief), main channels (<10 m relief), shallow flood depressions, waterholes, billabongs and swamps, and slightly elevated more stable alluvial islands. Isolated sand dunes.	C2 - Pasture Land - native pastures

3.5.1 Potential Impacts

The proposed activity is located within the existing infrastructure footprint. No new surface disturbance to land, such as excavation, clearing or realigning the beds and banks of watercourse, cultivating soil or excavating on floodplains, are required as part of the proposed activity. No new structures are proposed to be placed in a watercourse, lake or spring or on floodplains as a part of this activity.

The proposed activity is located away from the sources / areas of significant geomorphic processes, the Cooper Creek is located approximately 5km to the west. The Bantam 1 gas flowline crosses an arid/semi-arid floodplain grass, sedge, herb swamp wetland. The access tracks have not been constructed to any flood immunity, and will facilitate the passage of water keeping with existing hydrology. The existing pipeline is buried underground and the surface has been rehabilitated to reinstate existing drainage. Any surface infrastructure required as a part of future workover activities (i.e. a drilling sump) and well control and testing operations (i.e. flare pit), may result in diversion or interception of a negligible amount of overland flow, when considering the small footprint of the activity relative to the sub-catchment area. A typical drilling sump has an operating volume of approximately 300kL, whilst a flare pit has an operating volume of approximately 350kL. Both are designed to exclude surface flow. A flare pit freeboard will be maintained with routine inspections and repairs undertaken to ensure overtopping does not occur. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding and the removal of fluids from the flare pit where floodwater pose a site inundation risk.

Workover activities will be temporary in nature and would be scheduled to be completed outside of the wet season (infrastructure removed prior to Cooper Creek flood events) therefore diversion or interception of overland flow is not expected.

Following cessation of petroleum production, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent with the surrounding undisturbed land. As such, the proposed activity would not alter the delivery of sediment to the river system from adjacent lands and the natural erosion of the bed, banks and floodplains. Accordingly, it is not envisaged that the proposed activity would not cause a widespread or irreversible impact on geomorphic processes within the Channel Country SEA.

⁵ ASRIS (2018). Atlas of Australian Soils (spatial dataset), Australian Soil Resource Information System (CSIRO), Accessed 14/05/2018. Available online at: <http://www.asris.csiro.au/downloads/Atlas/soilAtlas2M.zip>

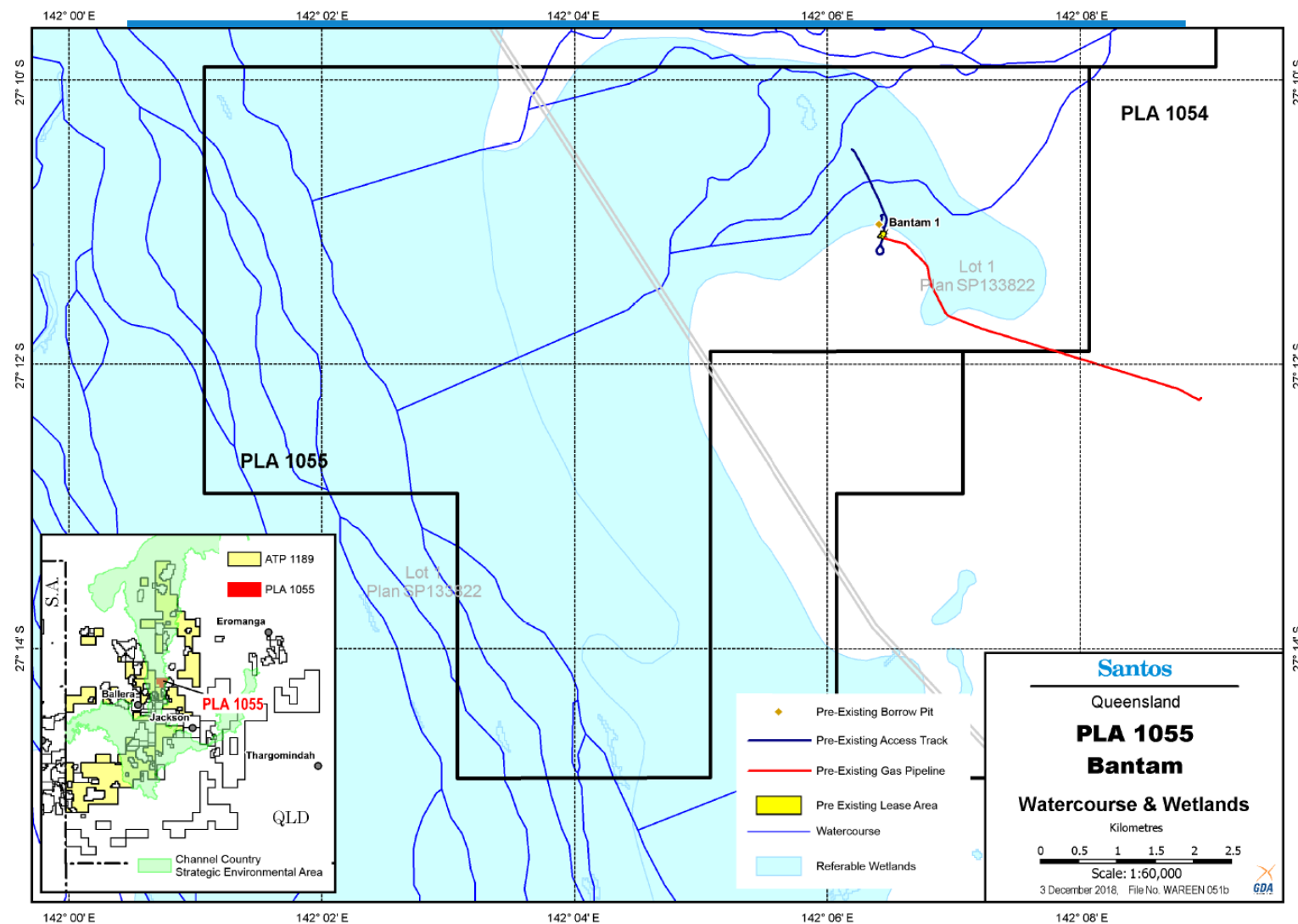


Figure 4: Watercourses, Wetlands and Strategic Environmental Areas

3.6 Beneficial Flooding

The braided channels associated with the Cooper Creek surround the proposed activity; at its closest point, the Cooper Creek is located approximately 5km to the west. The Bantam 1 gas flowline does cross an arid/semi-arid floodplain grass, sedge, herb swamp wetland. Notwithstanding, the area of the proposed activity would experience intermittent surface water flows during storm events, causing localised ponding of surface water (occurring on average once every 10 years).

Generally, the surrounding Cooper Creek streamflow is confined to the main channels, but every 3-4 years, flows are sufficient to inundate parts of the Cooper floodplain via a network of tributary channels. During extended periods of no flow, the Cooper Creek contracts to a series of waterholes. Very large Cooper Creek flood events with the potential to inundate the broader Channel Country region, and flow water into the lower Cooper Creek in South Australia, occur on average once every 10 years, reaching Lake Eyre North in an estimated 1 in every 20 years.

3.6.1 Potential Impacts

The proposed activity is located within the existing infrastructure footprint. No new surface disturbance activities, including placing new infrastructure within SEA, are proposed as part of this activity. Weather conditions are monitored including Cooper Creek gauging stations during periods of high rainfall for preparation of shutdown due to inundation/flooding.

Following cessation of petroleum production or pipeline operation, existing infrastructure would be rehabilitated to promote the natural re-establishment of vegetation consistent to the surrounding undisturbed land. Given no new disturbance or activities other than 'production' or 'operation' from existing authorised infrastructure is proposed (as described in Section 2.0), altered natural flow paths and natural extent of flooding across floodplains will not occur. Accordingly, the proposed activities would not cause a widespread or irreversible impact on beneficial flooding within the Channel Country SEA.

4.0 Required Outcome Assessment

Schedule 2, Part 5 of the RPI Reg provides criteria for assessment by agencies. In accordance with Section 14(3) of the RPI Reg, if the application demonstrates compliance with either of the prescribed solutions stated in Part 5, Schedule 2, the proposed activity will meet the required outcome for the regional interest. Critically, the application demonstrates that the prescribed solution provided in s15(1)(a) will be met as the proposed activity, 'petroleum production' from pre-existing disturbances and infrastructure will not impact on an environmental attribute of the Channel Country SEA. The application also demonstrates the prescribed solution provided in s15(1)(b) will also be met (Table 4).

Table 4: Schedule 2, Part 5 RPI Reg

Schedule 2, Part 5 RPI Reg		Relevance To Application
14 Required outcome <i>The activity will not result in a widespread or irreversible impact on an environmental attribute of a strategic environmental area.</i>	✓	The petroleum activities would not result in a widespread or irreversible impact on each of the environmental attributes as provided in Section 3.0.
15 Prescribed solution <i>(1) The application demonstrates either— (a) the activity will not, and is not likely to, have a direct or indirect impact on an environmental attribute of the strategic environmental area; or</i>	✓	Refer to Section 3.0.
<i>(b) all of the following— (i) if the activity is being carried out in a designated precinct in the strategic environmental area—the activity is not an unacceptable use for the precinct;</i>	✓	The proposed activities do not include any of the unacceptable uses prescribed by Section 15(2) of the RPI Act.
<i>(ii) the construction and operation footprint of the activity on the environmental attribute is minimised to the greatest extent possible;</i>	✓	Existing operational footprint will be utilised entirely. No new disturbance footprint is proposed within this application.
<i>(iii) the activity does not compromise the preservation of the environmental attribute within the strategic environmental area;</i>	✓	Refer to Section 3.0.
<i>(iv) if the activity is to be carried out in a strategic environmental area identified in a regional plan—the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan.</i>	✓	The South West Regional Plan does not identify the Channel Country SEA.

As discussed within Section 2.1, a flare pit is required for well control and testing operations for production from the Bantam 1 well and a drilling fluids sump may be required as a part of future temporary workover activities. The application also demonstrates the proposed use of the flare pit and drilling sump does not constitute a regulated activity as defined by the RPI Act.

s11(3) of the Regional Planning Interests Regulation 2014		Relevance To Application
<i>Water storage (dam) is storing water using a dam, other than storing water on land to be used only for any or all of the following purposes—</i> <i>(a) to meet the domestic water needs of the occupants of the land;</i> <i>(b) to water the stock that is usually grazed on the land;</i> <i>(c) to water stock that is travelling on a stock route on or near the land.</i>	✓	N/A – the application does not propose to store water in a dam. The application proposes the storing of produced formation water in a flare pit and drilling fluids in a drill sump. Santos flare pits and drilling sumps are designed to exclude surface flow and avoid the impounding of surface water. In addition, workover activities would be scheduled to be completed outside of the wet season, therefore all surface infrastructure, including a drill sump, would be removed prior to Cooper Creek flood events. Fluids will be removed from the flare pit where floodwater pose a site inundation risk.
Schedule 6 of the Regional Planning Interests Regulation 2014		Relevance to the application
<i>dam—</i> <i>(a) means the following—</i> <i>(i) a barrier, whether permanent or temporary, that does, could or would impound water;</i>	✓	N/A – the flare pit and drilling sump will not impound water. Santos flare pits and drilling sumps are designed to exclude surface water and avoid the impounding of surface water. Workover activities would be scheduled to be completed outside of the wet season, therefore all surface infrastructure, including a drill sump, would be removed prior to Cooper Creek flood events. Fluids will be removed from the flare pit where floodwater pose a site inundation risk.
<i>(ii) the storage area created by the barrier;</i> <i>(iii) an embankment or other structure that is associated with the barrier and controls the flow of water; but</i>	✓	N/A – the flare pit and drilling sump would not constitute a barrier for the storage of water.
<i>(b) does not include a water tank, including a rainwater tank, constructed of steel, concrete, fibreglass, plastic or similar material.</i>	✓	N/A – the flare pit and drilling sump do not constitute a water tank.

ATTACHMENT 5 – GIS FILES

Santos