

## INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR PPL 230

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1. 8 September 2009 Grant of Petroleum Production Licence PPL 230 (Muscat Millswood Field)  
  
Interests:

Santos Limited	40.7%
Delhi Petroleum Pty Ltd	20.21%
Origin Energy Resources Limited	13.19%
Vamgas Pty Ltd	8.51%
Santos (NARNL Cooper) Pty Ltd	4.75%
Bridge Oil Developments Pty Ltd	3.99%
Alliance Petroleum Australia Pty Ltd	3.97%
Basin Oil Pty Ltd	2.10%
Reef Oil Pty Ltd	1.97%
Santos (BOL) Pty Ltd	0.21%
Santos Petroleum Pty Ltd	0.40%
  
2. 8 September 2009 Memorandum entering consolidation of PPL 143 (part) and PPL 157 (now PPL 230) on the public register.
  
3. 8 September 2009 Memorandum entering the notation of receipt of security on the public register.
  
4. 10 September 2009 Gazettal of grant of licence.
  
5. 15 February 2011 Memorandum entering notation of the following registrable dealing on the public register.  
  
Delhi Fixed and Floating Charge and Mortgage of JV Assets dated 29 September 2010 between Delhi Petroleum Pty Limited and Westpac Banking Corporation.  
Ref: SA 2011-15
  
6. 28 June 2012 Memorandum entering notation of following registrable dealing on the public register.  
  
Royalty Deed dated 19 January 2012 between Delhi Petroleum Pty Ltd and Esso Australia Resources Pty Ltd.  
Ref: SA 2012-42
  
7. 9 August 2017 Certificate of Registration on Change of Company Name dated 29 June 2017.  
  
From: Origin Energy Resources Limited  
To: Lattice Energy Limited
  
8. 9 August 2017 Memorandum entering notation of change of company name on the public register.

9. 7 June 2018 Memorandum entering notation of the following registrable dealing on the public register:
- Deed of Variation dated 4 December 2015 between Santos Limited, Santos Petroleum Pty Ltd, Vamgas Pty Ltd, Santos (NARNL Cooper) Pty Ltd, Santos (BOL) Pty Ltd, Reef Oil Pty Ltd, Bridge Oil Developments Pty Limited, Basin Oil Pty Ltd, Alliance Petroleum Australia Pty Ltd, Origin Energy Resources Limited and Delhi Petroleum Pty Ltd  
Ref: SA 2018-18
10. 22 January 2020 Certificate of Registration on Change of Name dated 2 December 2019.
- From: Lattice Energy Limited  
To: Beach Energy (Operations) Limited
11. 22 January 2020 Memorandum entering notation of change of company name on the public register.
12. 27 November 2020 Memorandum entering notation of revision to security arrangements on the public register.

**Petroleum and Geothermal Energy Act 2000  
S.115**

**MEMORANDUM**

**PETROLEUM EXPLORTION LICENCE  
PEL 570**

**PETROLEUM RETENTION LICENCES**

**PRLs 14, 17, 18, 28, 29, 30, 31, 111, 112, 113, 114, 115, 131, 132, 133,  
134, 180, 181, 182, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200,  
201, 202, 203, 204, 205 and 206**

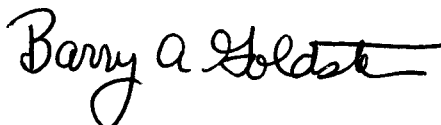
**PETROLEUM PRODUCTION LICENCES**

**PPLs 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25,  
26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46,  
47, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68,  
69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 86, 87, 88, 89, 90,  
91, 92, 94, 95, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109,  
110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124,  
125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138,  
139, 140, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154,  
155, 156, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 172, 174,  
175, 176, 177, 178, 179, 180, 182, 187, 189, 190, 193, 194, 195, 196,  
201, 206, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236,  
237, 238 and 252**

**SPECIAL FACILITIES LICENCE  
SFL 15**

**PIPELINE LICENCES  
PLs 2, 5, 9, 15, 17 and 20**

1. Notation of revision to security arrangements is hereby entered on the public register.
2. Effective 27 November 2020, future revisions to security arrangements for the above-mentioned licences will no longer be noted on the public register.



**BARRY A. GOLDSTEIN  
Executive Director  
Energy Resources Division  
Department for Energy and Mining  
Delegate of the Minister for Energy and Mining**

Date: 27 November 2020

Ref: F2020/000930

**Petroleum and Geothermal Energy Act 2000  
S.115**

**MEMORANDUM**

**PETROLEUM PRODUCTION LICENCES**

**PPLs 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 86, 87, 88, 89, 90, 91, 92, 94, 95, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 172, 174, 175, 176, 177, 178, 179, 180, 182, 187, 189, 190, 193, 194, 195, 196, 201, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237 and 238**

**ASSOCIATED ACTIVITIES LICENCES**

**AALs 258, 259 and 263**

**PIPELINE LICENCES**

**PLs 2, 5, 9, 15 and 20**

1. Notation of change of company name:

From: Lattice Energy Limited  
To: Beach Energy (Operations) Limited

is hereby entered on the public registers.



**BARRY A. GOLDSTEIN  
Executive Director  
Energy Resources Division  
Department for Energy and Mining  
Delegate of the Minister for Energy and Mining**

Date: 22 January 2020



# Certificate of Registration on Change of Name

This is to certify that

**LATTICE ENERGY LIMITED**

**Australian Company Number 007 845 338**

did on the second day of December 2019 change its name to

**BEACH ENERGY (OPERATIONS) LIMITED**

**Australian Company Number 007 845 338**

The company is a public company.

The company is limited by shares.

The company is taken to be registered under the Corporations Act 2001 in South Australia and the date of commencement of registration is the ninth day of September, 1977.

Issued by the  
Australian Securities and Investments Commission  
on this second day of December 2019.

A handwritten signature in black ink that reads 'James Shipton'.

James Shipton  
Chair

CERTIFICATE

**Petroleum and Geothermal Energy Act 2000**  
**S.115**

**MEMORANDUM**

**PETROLEUM PRODUCTION LICENCES**

**PPLs 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 86, 87, 88, 89, 90, 91, 92, 94, 95, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 172, 174, 175, 176, 177, 178, 179, 180, 182, 187, 189, 190, 193, 194, 195, 196, 201, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237 and 238**

**PIPELINE LICENCES**

**PLs 5, 9 and 15**

SA 2018-18      Notation of registrable dealing as evidenced by Deed of Variation dated 4 December 2015 between Santos Limited, Santos Petroleum Pty Ltd, Vamgas Pty Ltd, Santos (NARNL Cooper) Pty Ltd, Santos (BOL) Pty Ltd, Reef Oil Pty Ltd, Bridge Oil Developments Pty Limited, Basin Oil Pty Ltd, Alliance Petroleum Australia Pty Ltd, Origin Energy Resources Limited and Delhi Petroleum Pty Ltd is hereby entered on the public register.



**BARRY A. GOLDSTEIN**  
**Executive Director**  
**Energy Resources Division**  
**Department of the Premier and Cabinet**  
**Delegate of the Minister for Energy and Mining**

Date: 7 June 2018

Ref: 28/01/00045

**Petroleum and Geothermal Energy Act 2000**  
**S.115**

**MEMORANDUM**

**PETROLEUM RETENTION LICENCE**  
**PRL 106**

**PETROLEUM EXPLORATION LICENCES**  
**PELs 637 and 638**

**PETROLEUM PRODUCTION LICENCES**  
**PPLs 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 86, 87, 88, 89, 90, 91, 92, 94, 95, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 172, 174, 175, 176, 177, 178, 179, 180, 182, 187, 189, 190, 193, 194, 195, 196, 201, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237 and 238**

**PIPELINE LICENCES**  
**PLs 2, 5, 9, 15 and 20**

1. Notation of change of company name:

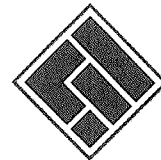
From: Origin Energy Resources Limited  
To: Lattice Energy Limited

is hereby entered on the public registers.



**BARRY A. GOLDSTEIN**  
**Executive Director**  
**Energy Resources Division**  
**Department of the Premier and Cabinet**  
**Delegate of the Minister for Mineral Resources and Energy**

Date: 9 August 2017



# Certificate of Registration on Change of Name

This is to certify that

**ORIGIN ENERGY RESOURCES LIMITED**

**Australian Company Number 007 845 338**

did on the twenty-ninth day of June 2017 change its name to

**LATTICE ENERGY LIMITED**

**Australian Company Number 007 845 338**

The company is a public company.

The company is limited by shares.

The company is taken to be registered under the Corporations Act 2001 in South Australia and the date of commencement of registration is the ninth day of September, 1977.

Issued by the  
Australian Securities and Investments Commission  
on this twenty-ninth day of June 2017.

Greg Medcraft  
Chairman

CERTIFICATE



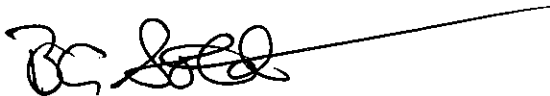
**Petroleum and Geothermal Energy Act 2000**  
**S.115**

**MEMORANDUM**

**PETROLEUM PRODUCTION LICENCES**

**PPLs 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 86, 87, 88, 89, 90, 91, 92, 94, 95, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 172, 174, 175, 176, 177, 178, 179, 180, 182, 187, 189, 190, 193, 194, 195, 196, 201, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237 and 238**

SA 2012-42      Notation of registrable dealing as evidenced by Royalty Deed dated 19 January 2012 between Delhi Petroleum Pty Ltd and Esso Australia Resources Pty Ltd is hereby entered on the public register.



**BARRY A. GOLDSTEIN**  
**Executive Director**  
**Energy Resources Division**  
**Department for Manufacturing, Innovation, Trade, Resources and Energy**  
**Delegate of the Minister for Mineral Resources and Energy**

Date: 28 June 2012

Ref: various files

***Petroleum and Geothermal Energy Act 2000***  
**S.115**

**MEMORANDUM**

**PETROLEUM PRODUCTION LICENCES**

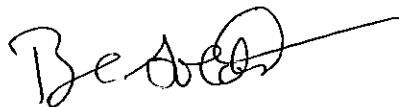
**PPLs 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 86, 87, 88, 89, 90, 91, 92, 94, 95, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 172, 174, 175, 176, 177, 178, 179, 180, 182, 187, 189, 190, 193, 194, 195, 196, 201, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237 and 238**

**and**

**PIPELINE LICENCES**

**PLs 2, 5, 9 and 15**

SA 2011-15      Notation of registrable dealing as evidenced by Delhi Fixed and Floating Charge and Mortgage of JV Assets dated 29 September 2010 between Delhi Petroleum Pty Limited and Westpac Banking Corporation is hereby entered on the public register.



**BARRY A. GOLDSTEIN**  
**Director Petroleum and Geothermal**  
**Minerals and Energy Resources**  
**Primary Industries and Resources SA**  
**Delegate of the Minister for Mineral Resources**  
**Development**

Date: 15 February 2011

## PETROLEUM ACT 2000

*Partial Surrender of Petroleum Production Licences and Grant of Petroleum Production Licences*

NOTICE is hereby given that, pursuant to section 89 of the Petroleum Act 2000, I have accepted partial surrender of the following Petroleum Production Licence areas, pursuant to delegated powers dated 28 March 2002, *Gazetted* 11 April 2002, page 1573:

No. of Licence	Licensees	Locality	Effective Date of Surrender	Approx. Area Surrendered (km <sup>2</sup> )	Reference
PPL 141	Santos Ltd Delhi Petroleum Pty Ltd Origin Energy Resources Limited Vamgas Pty Ltd Santos (NARNL Cooper) Pty Ltd Bridge Oil Developments Pty Ltd Alliance Petroleum Aust Pty Ltd Basin Oil Pty Ltd Reef Oil Pty Ltd Santos Petroleum Pty Ltd Santos (BOL) Pty Ltd	Cooper Basin of South Australia	1 July 2008	34.5	28/1/306
PPL 143				76.4	28/1/259
PPL 173				120.3	28/1/325
PPL 183				3.6	28/1/299
PPL 188				2.9	28/1/290
PPL 172				109.1	28/1/328
PPL 189				252.3	28/1/317
PPL 198				17.6	28/1/321
PPL 142	Vamgas Pty Ltd Santos Ltd	Cooper Basin of South Australia	1 July 2008	21.8	28/1/311
PPL 200	Delhi Petroleum Pty Ltd Origin Energy Resources Ltd Santos (NARNL Cooper) Pty Ltd		8 Sept. 2009	0.9	28/1/336

*Grant of Petroleum Production Licences*

Notice is hereby given that, pursuant to section 92 (1) of the Petroleum Act 2000, the undermentioned Petroleum Production Licences have been granted with effect from 8 September 2009, under the provisions of the Petroleum Act 2000, pursuant to delegated powers dated 28 March 2002, *Gazetted* 11 April 2002, page 1573.

No. of Licence	Licensees	Locality	Area (km <sup>2</sup> )	Reference
PPL 228 ( <i>ex PPLs 141, 96, 97</i> )	Santos Ltd Delhi Petroleum Pty Ltd Origin Energy Resources Limited Vamgas Pty Ltd Santos (NARNL Cooper) Pty Ltd Bridge Oil Developments Pty Ltd Alliance Petroleum Aust Pty Ltd Basin Oil Pty Ltd Reef Oil Pty Ltd Santos Petroleum Pty Ltd Santos (BOL) Pty Ltd	Cooper Basin of South Australia	96.04	28/1/435
PPL 230 ( <i>ex PPLs 143, 157</i> )			7.0	28/1/437
PPL 231 ( <i>ex PPLs 173, 71</i> )			33.42	28/1/438
PPL 232 ( <i>ex PPLs 173, 85</i> )			3.99	28/1/439
PPL 233 ( <i>ex PPLs 183, 28</i> )			27.18	28/1/440
PPL 234 ( <i>ex PPLs 188, 34</i> )			22.64	28/1/441
PPL 235 ( <i>ex PPLs 172, 82</i> )			6.38	28/1/442
PPL 236 ( <i>ex PPLs 172, 189</i> )			1.87	28/1/443
PPL 237 ( <i>ex PPLs 198, 93</i> )			14.4	28/1/444
PPL 238 ( <i>ex PPLs 170, 49, 50</i> )			35.38	28/1/445
PPL 229 ( <i>ex PPLs 142, 200</i> )			Vamgas Pty Ltd Santos Ltd Delhi Petroleum Pty Ltd Origin Energy Resources Ltd Santos (NARNL Cooper) Pty Ltd	

*Description of Areas**PPL 228*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°59'55"S GDA94 and longitude 140°55'25"E GDA94, thence east to longitude 140°56'35"E GDA94, south to latitude 28°01'50"S GDA94, east to longitude 140°57'20"E GDA94, north to latitude 28°01'00"S GDA94, east to longitude 140°57'50"E GDA94, north to latitude 28°00'40"S GDA94, east to longitude 140°58'05"E GDA94, north to latitude 28°00'00"S AGD66, east to longitude 140°59'10"E AGD66, south to latitude 28°02'10"S AGD66, thence east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 28°06'00"S Clarke1858, west to longitude 140°56'00"E Clarke1858, north to latitude 28°05'00"S Clarke1858, west to longitude 140°54'00"E Clarke1858, north to latitude 28°03'00"S Clarke1858, west to longitude 140°51'35"E GDA94, north to latitude 28°02'20"S GDA94, east to longitude 140°52'30"E GDA94, north to latitude 28°02'10"S GDA94, east to longitude 140°53'10"E GDA94, north to latitude 28°01'25"S AGD66, east to longitude 140°53'30"E AGD66, north to latitude 28°00'55"S GDA94, east to longitude 140°54'05"E GDA94, north to latitude 28°00'40"S GDA94, east to longitude 140°55'00"E GDA94, north to latitude 28°00'20"S GDA94, east to longitude 140°55'25"E GDA94 and north to point of commencement.

Area: 96.04 km<sup>2</sup> approximately.

*PPL 229*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°20'50"S GDA94 and longitude 140°14'10"E GDA94, thence east to longitude 140°14'35"E GDA94, south to latitude 27°20'55"S GDA94, east to longitude 140°14'45"E GDA94, south to latitude 27°21'20"S GDA94, east to longitude 140°15'25"E GDA94, south to latitude 27°21'40"S GDA94, west to longitude 140°15'15"E GDA94, south to latitude 27°22'00"S GDA94, west to longitude 140°15'05"E GDA94, south to latitude 27°22'05"S GDA94, west to longitude 140°14'40"E GDA94, north to latitude 27°22'00"S GDA94, west to longitude 140°14'05"E GDA94, south to latitude 27°22'15"S GDA94, west to longitude 140°13'50"E GDA94, south to latitude 27°22'30"S GDA94, west to longitude 140°13'45"E GDA94, south to latitude 27°22'45"S GDA94, west to longitude 140°13'40"E GDA94, south to latitude 27°22'55"S GDA94, west to longitude 140°13'05"E GDA94, north to latitude 27°22'30"S GDA94, east to longitude 140°13'15"E GDA94, north to latitude 27°22'20"S GDA94, east to longitude 140°13'20"E AGD66, north to latitude 27°21'50"S AGD66, east to longitude 140°13'30"E AGD66, north to latitude 27°21'40"S AGD66, east to longitude 140°13'40"E AGD66, north to latitude 27°20'55"S GDA94, east to longitude 140°14'10"E GDA94 and north to point of commencement.

Area: 6.78 km<sup>2</sup> approximately.

*PPL 230*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°09'50"S GDA94 and longitude 139°55'45"E GDA94, thence east to longitude 139°56'00"E GDA94, south to latitude 28°10'00"S GDA94, east to longitude 139°56'10"E GDA94, south to latitude 28°10'50"S GDA94, west to longitude 139°56'00"E GDA94, south to latitude 28°11'25"S GDA94, west to longitude 139°55'50"E GDA94, south to latitude 28°11'50"S AGD66, west to longitude 139°55'30"E AGD66, south to latitude 28°12'00"S AGD66, west to longitude 139°55'20"E AGD66, south to latitude 28°12'10"S AGD66, west to longitude 139°55'10"E AGD66, south to latitude 28°12'20"S AGD66, west to longitude 139°54'30"E AGD66, north to latitude 28°12'00"S AGD66, east to longitude 139°54'40"E AGD66, north to latitude 28°11'50"S AGD66, east to longitude 139°54'50"E AGD66, north to latitude 28°11'00"S AGD66, west to longitude 139°54'40"E GDA94, north to latitude 28°10'35"S GDA94, east to longitude 139°55'00"E GDA94, north to latitude 28°10'25"S GDA94, east to longitude 139°55'15"E GDA94, north to latitude 28°10'15"S GDA94, east to longitude 139°55'20"E GDA94, north to latitude 28°10'00"S GDA94, east to longitude 139°55'45"E GDA94 and north to point of commencement.

Area: 7 km<sup>2</sup> approximately.

*PPL 231*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°12'00"S GDA94 and longitude 140°57'10"E GDA94, thence east to longitude 140°57'35"E GDA94, south to latitude 28°12'10"S GDA94, east to longitude 140°58'10"E GDA94, south to latitude 28°12'20"S GDA94, east to longitude 140°59'00"E GDA94, south to latitude 28°13'10"S AGD66, east to longitude 140°59'10"E AGD66, south to latitude 28°13'30"S AGD66, east to longitude 140°59'30"E AGD66, south to latitude 28°14'20"S GDA94, east to longitude 140°59'45"E GDA94, south to latitude 28°15'30"S GDA94, thence east to eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 28°17'35"S GDA94, west to longitude 140°59'40"E GDA94, south to latitude 28°17'40"S GDA94, west to longitude 140°58'25"E GDA94, north to latitude 28°17'35"S GDA94, west to longitude 140°58'15"E GDA94, north to latitude 28°16'40"S GDA94, west to longitude 140°58'05"E GDA94, north to latitude 28°16'05"S GDA94, west to longitude 140°57'50"E GDA94, north to latitude 28°15'25"S GDA94, west to longitude 140°57'45"E GDA94, north to latitude 28°15'15"S GDA94, west to longitude 140°57'40"E GDA94, north to latitude 28°15'10"S AGD66, west to longitude 140°57'20"E AGD66, north to latitude 28°14'50"S AGD66, west to longitude 140°57'10"E AGD66, north to latitude 28°12'40"S GDA94, west to longitude 140°57'10"E GDA94 and north to point of commencement.

Area: 33.42 km<sup>2</sup> approximately.

*PPL 232*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°14'10"S AGD66 and longitude 140°56'10"E AGD66, thence east to longitude 140°56'50"E AGD66, south to latitude 28°14'20"S AGD66, east to longitude 140°57'10"E AGD66, south to latitude 28°14'50"S AGD66, east to longitude 140°57'20"E AGD66, south to latitude 28°15'10"S AGD66, west to longitude 140°57'10"E AGD66, south to latitude 28°15'20"S AGD66, west to longitude 140°57'00"E AGD66, south to latitude 28°15'30"S AGD66, west to longitude 140°56'20"E AGD66, north to latitude 28°15'20"S AGD66, west to longitude 140°56'10"E AGD66, north to latitude 28°15'00"S AGD66, west to longitude 140°56'10"E GDA94, north to latitude 28°14'25"S AGD66, east to longitude 140°56'10"E AGD66 and north to the point of commencement.

Area: 3.99 km<sup>2</sup> approximately.

*PPL 233*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°46'10"S AGD66 and longitude 139°57'20"E AGD66, thence east to longitude 139°58'20"E AGD66, south to latitude 27°47'00"S AGD66, east to longitude 139°59'00"E AGD66, south to latitude 27°47'10"S AGD66, east to longitude 139°59'20"E AGD66, south to latitude 27°47'20"S AGD66, east to longitude 139°59'40"E AGD66, south to latitude 27°47'30"S AGD66, east to longitude 140°00'00"E Clarke1858, south to latitude 27°49'00"S AGD66, west to longitude 139°58'50"E AGD66, north to latitude 27°48'50"S AGD66, west to longitude 139°58'30"E AGD66, south to latitude 27°49'00"S AGD66, east to longitude 139°58'40"E AGD66, south to latitude 27°49'20"S AGD66, east to longitude 139°59'00"E AGD66, south to latitude 27°49'40"S GDA94, west to longitude 139°56'50"E AGD66, north to latitude 27°48'30"S AGD66, west to longitude 139°56'10"E AGD66, north to latitude 27°47'30"S AGD66, east to longitude 139°56'30"E AGD66, north to latitude 27°47'10"S AGD66, east to longitude 139°56'50"E AGD66, north to latitude 27°46'50"S AGD66, east to longitude 139°57'20"E AGD66 and north to the point of commencement.

Area: 27.18 km<sup>2</sup> approximately.

*PPL 234*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°26'50"S AGD66 and longitude 140°28'50"E AGD66, thence east to longitude 140°29'40"E AGD66, south to latitude 28°27'00"S AGD66, east to longitude 140°30'00"E AGD66, south to latitude 28°27'10"S AGD66, east to longitude 140°30'20"E AGD66, south to latitude 28°28'20"S AGD66, east to longitude 140°30'40"E GDA94, south to latitude 28°28'40"S AGD66, west to longitude 140°29'55"E AGD66, south to latitude 28°29'00"S Clarke1858, east to longitude 140°30'00"E Clarke1858, south to latitude 28°29'15"S AGD66, west to longitude 140°29'10"E AGD66, south to latitude 28°29'30"S AGD66, west to longitude 140°28'15"E AGD66, north to latitude 28°28'55"S AGD66, west to longitude 140°27'40"E AGD66, south to latitude 28°29'10"S AGD66, west to longitude 140°27'10"E AGD66, north to latitude 28°29'05"S AGD66, west to longitude 140°26'35"E AGD66, north to latitude 28°28'10"S GDA94, east to longitude 140°26'45"E GDA94, north to latitude 28°28'05"S GDA94, east to longitude 140°26'50"E AGD66, north to latitude 28°27'30"S AGD66, east to longitude 140°27'20"E AGD66, north to latitude 28°27'00"S AGD66, east to longitude 140°28'20"E AGD66, south to latitude 28°27'20"S AGD66, east to longitude 140°28'40"E AGD66, south to latitude 28°27'25"S AGD66, east to longitude 140°28'50"E AGD66 and north to the point of commencement.

Area: 22.64 km<sup>2</sup> approximately.

*PPL 235*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°21'15"S GDA94 and longitude 140°04'00"E Clarke1858, thence east to longitude 140°04'05"E GDA94, south to latitude 28°21'20"S GDA94, east to longitude 140°04'15"E GDA94, south to latitude 28°21'25"S GDA94, east to longitude 140°04'20"E GDA94, south to latitude 28°21'30"S GDA94, east to longitude 140°04'25"E GDA94, south to latitude 28°21'35"S GDA94, east to longitude 140°04'30"E GDA94, south to latitude 28°21'50"S AGD66, east to longitude 140°04'52"E GDA94, north to latitude 28°21'40"S GDA94, east to longitude 140°04'57"E GDA94, north to latitude 28°21'35"S GDA94, east to longitude 140°05'07"E GDA94, south to latitude 28°21'40"S GDA94, east to longitude 140°05'12"E GDA94, south to latitude 28°21'50"S AGD66, east to longitude 140°05'50"E AGD66, south to latitude 28°22'40"S AGD66, west to longitude 140°04'20"E AGD66, south to latitude 28°23'10"S AGD66, west to longitude 140°04'00"E Clarke1858 and north to the point of commencement.

Area: 6.38 km<sup>2</sup> approximately.

*PPL 236*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°22'50"S AGD66 and longitude 140°16'40"E GDA94, thence east to longitude 140°17'05"E GDA94, south to latitude 28°23'00"S AGD66, east to longitude 140°17'30"E AGD66, south to latitude 28°23'10"S GDA94, west to longitude 140°17'20"E GDA94, south to latitude 28°23'40"S AGD66, west to longitude 140°16'30"E AGD66, north to latitude 28°23'10"S AGD66, east to longitude 140°16'40"E GDA94 and north to the point of commencement.

Area: 1.87 km<sup>2</sup> approximately.

*PPL 237*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°02'40"S AGD66 and longitude 140°46'20"E AGD66, thence east to longitude 140°46'40"E AGD66, south to latitude 28°03'10"S AGD66, west to longitude 140°46'30"E AGD66, south to latitude 28°03'20"S AGD66, west to longitude 140°45'50"E AGD66, south to latitude 28°03'30"S AGD66, west to longitude 140°45'45"E GDA94, south to latitude 28°04'00"S GDA94, west to longitude 140°45'15"E GDA94, south to latitude 28°04'20"S GDA94, west to longitude 140°44'15"E GDA94, north to latitude 28°04'10"S GDA94, west to longitude 140°43'40"E GDA94, south to latitude 28°04'30"S GDA94, west to longitude 140°43'25"E GDA94, south to latitude 28°04'40"S GDA94, west to longitude 140°43'00"E Clarke1858, north to latitude 28°03'00"S AGD66, east to longitude 140°44'00"E AGD66, north to latitude 28°02'50"S AGD66, east to longitude 140°46'20"E AGD66 and north to the point of commencement.

Area: 14.4 km<sup>2</sup> approximately.

*PPL 238*

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°43'20"S AGD66 and longitude 139°56'50"E AGD66, thence east to longitude 139°58'30"E AGD66, south to latitude 27°43'30"S AGD66, east to longitude 139°59'20"E AGD66, south to latitude 27°43'50"S AGD66, east to longitude 139°59'40"E AGD66, south to latitude 27°45'00"S Clarke1858, west to longitude 139°58'40"E AGD66, south to latitude 27°45'20"S AGD66, west to longitude 139°58'30"E AGD66, south to latitude 27°45'30"S AGD66, west to longitude 139°58'20"E AGD66, south to latitude 27°45'40"S AGD66, west to longitude 139°58'00"E AGD66, north to latitude 27°45'30"S AGD66, west to longitude 139°57'40"E AGD66, south to latitude 27°45'50"S AGD66, west to longitude 139°57'10"E AGD66, south to latitude 27°46'00"S AGD66, west to longitude 139°56'30"E AGD66, south to latitude 27°46'30"S AGD66, west to longitude 139°55'30"E AGD66, north to latitude 27°46'10"S AGD66, west to longitude 139°54'50"E AGD66, south to latitude 27°46'20"S AGD66, west to longitude 139°53'50"E AGD66, north to latitude 27°45'10"S AGD66, east to

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longitude 139°54'00"E AGD66, north to latitude 27°45'00"S Clarke1858, east to longitude 139°54'10"E AGD66, north to latitude 27°44'40"S AGD66, east to longitude 139°54'20"E AGD66, north to latitude 27°44'30"S AGD66, east to longitude 139°55'20"E AGD66, north to latitude 27°44'20"S AGD66, east to longitude 139°55'50"E AGD66, south to latitude 27°44'30"S AGD66, east to longitude 139°56'10"E AGD66, north to latitude 27°43'30"S AGD66, east to longitude 139°56'50"E AGD66 and north to the point of commencement.

Area: 35.38 km<sup>2</sup> approximately.

Dated 8 September 2009.

B. A. GOLDSTEIN,  
Director Petroleum and Geothermal  
Minerals and Energy Resources  
Primary Industries and Resources SA  
Delegate of the Minister for Mineral Resources Development

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**Petroleum Act 2000  
S.115**

**MEMORANDUM**

**PETROLEUM PRODUCTION LICENCES  
PPL 228, PPL 229, PPL 230, PPL 231, PPL 232, PPL 233,  
PPL 234, PPL 235, PPL 236, PPL 237, PPL 238**

1. Notation of receipt of Bank Guarantee dated 27 October 2005 is hereby entered on the public register.
2. Security is held to cover any event occurring in any licence operated by Santos Limited on behalf of the respective Cooper Basin Joint Ventures in South Australia.



**BARRY A GOLDSTEIN  
Director Petroleum and Geothermal  
Minerals and Energy Resources  
Primary Industries and Resources SA  
Delegate of the Minister for Mineral Resources  
Development**

Date: 8 September 2009

File: 28/1/435; 28/1/436; 28/1/437;  
28/1/438; 28/1/439; 28/1/440;  
28/1/441; 28/1/442; 28/1/443;  
28/1/444; 28/1/445

**Petroleum Act 2000  
S.115**

**MEMORANDUM**

**PETROLEUM PRODUCTION LICENCES  
PPL 143, PPL 157, PPL 230**

1. Partial surrender of PPL 143, with effect from 1 July 2008;
2. Revocation of Condition 4 of PPL 143;
3. Division of licence area PPL 143;
4. Consolidation of part PPL 143 and PPL 157 (now PPL 230);
5. Grant of Petroleum Production Licence PPL 230; and
6. Revocation of part PPL 143 and PPL 157

is hereby entered on the public registers.

Holder: Santos Ltd  
Delhi Petroleum Pty Ltd  
Origin Energy Resources Limited  
Vamgas Pty Ltd  
Santos (NARNL Cooper) Pty Ltd  
Bridge Oil Developments Pty Ltd  
Alliance Petroleum Australia Pty Ltd  
Basin Oil Pty Ltd  
Reef Oil Pty Ltd  
Santos Petroleum Pty Ltd  
Santos (BOL) Pty Ltd



**BARRY A. GOLDSTEIN  
Director Petroleum and Geothermal  
Minerals and Energy Resources  
Primary Industries and Resources SA  
Delegate of the Minister for Mineral Resources  
Development**

Date: 8 September 2009

Ref: 28/1/259  
28/1/284  
28/1/437



**Petroleum Act 2000  
Cooper Basin (Ratification) Act 1975**

**PETROLEUM PRODUCTION LICENCE  
PPL 230**

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Department of Primary Industries and Resources in the State of South Australia, pursuant to the provisions of the *Petroleum Act 2000*, the *Cooper Basin (Ratification) Act 1975* and all other enabling powers for and on behalf of Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegated powers HEREBY GRANT to:

Santos Ltd	ABN 80 007 550 923
Vamgas Pty Ltd	ABN 76 006 245 110
Alliance Petroleum Australia Pty Ltd	ABN 60 004 559 951
Reef Oil Pty Ltd	ABN 70 000 646 800
Santos Petroleum Pty Ltd	ABN 95 000 146 369
Bridge Oil Developments Pty Ltd	ABN 30 001 152 049
Santos (BOL) Pty Ltd	ABN 35 000 670 575
Basin Oil Pty Ltd	ABN 36 000 628 017
Santos (NARNL Cooper) Pty Ltd	ABN 75 004 761 255
Delhi Petroleum Pty Ltd	ABN 65 007 854 686
Origin Energy Resources Ltd	ABN 66 007 845 338

(hereinafter referred to as the 'Licensee') a Production Licence, in relation to all regulated resources except a source of geothermal energy in respect of the area described below, and subject to the conditions set out below and the provisions of the *Petroleum Act 2000* and the *Cooper Basin (Ratification) Act 1975*, to have effect from 8 September 2009. Grant of this Licence results directly from and as a consequence of the consolidation of PPL 143 (Area B) and PPL 157 pursuant to section 82 of the *Petroleum Act 2000*.

**DESCRIPTION OF AREA**



The land comprised in this Licence is that part of the State of South Australia described in the Schedule attached hereto.

**TERMS AND CONDITIONS**

1. Scope of Rights

For the avoidance of doubt:

- (a) in addition to all operations authorised by a Production Licence granted under the *Petroleum Act 2000* in relation to all regulated resources except a source of geothermal energy, the Licensee is authorised under this Licence to conduct all operations authorised by then Petroleum Production Licences PPL 143 and PPL 157, pursuant to section 33 of the *Petroleum Act 1940* immediately prior to commencement of the *Petroleum Act 2000*; and
- (b) nothing in this Licence affects the rights of the Licensee pursuant to the *Cooper Basin (Ratification) Act 1975*.

## 2. Security

- 2.1 For the purpose of ensuring the due and proper performance of the Licensee's obligations under this Licence and the *Petroleum Act 2000*, the Licensee shall provide security in the amount of \$50,000 in the form of either:
- (a) cash; or
  - (b) an unconditional, irrevocable bank guarantee or letter of credit in a form, and from a financial institution, approved by the Minister, ("the Security").
- 2.2 The Security shall be reviewed periodically, and during the term of the Licence if in the opinion of the Minister it is reasonable to increase the Security amount, provide additional security or substitute another security for the existing Security, the Licensee must comply with the Minister's request within 28 days after being requested in writing by the Minister to do so.
- 2.3 Interest will not be payable by the Minister to the Licensee on any cash Security.
- 2.4 All charges incurred by the Licensee in obtaining and maintaining the Security shall be met by the Licensee
- 2.5 If this Licence is surrendered or cancelled and the Minister is satisfied that there are no further obligations under this Licence or the *Petroleum Act 2000*, the Minister will return the Security to the Licensee.

## 3. Insurance

- 3.1 The Licensee must:
- (a) upon commencement of regulated activities under this Licence, maintain in force during the term of this Licence public liability insurance to cover regulated activities under this Licence (including sudden and accidental pollution) in the name of the Licensee for a sum not less than twenty million dollars (\$20,000,000.00) or such greater sum as specified by the Minister, and make such amendments to the terms and conditions of the insurance as the Minister may from time to time reasonably require;
  - (b) maintain in force during the drilling of any well or operation in any well, control of well insurance in the name of the Licensee for a sum not less than ten million dollars (\$10,000,000.00) or such greater sum as specified by the Minister, and make such amendments to the terms and conditions of the insurance as the Minister may from time to time reasonably require;
  - (c) upon request by the Minister, provide the Minister with a cover note or certificate of currency of each insurance policy referred to in paragraphs (a) and (b).
- 3.2 The Minister in specifying the levels of insurance accepts no liability for the completeness of their listing, the adequacy of the sum insured, the limit of liability, the scoped coverage, the conditions or exclusions of these insurances in respect to how they may or may not respond to any loss, damage or liability.

4. Transfer of Liability

Subject to the *Cooper Basin (Ratification) Act 1975*, a contract or agreement entered into by the Licensee to transfer or accept liability for any well or facility constructed for the purpose of undertaking a regulated activity under the *Petroleum Act 1940* or *2000* cannot transfer, limit or exclude liability under the *Petroleum Act 1940* or *2000* unless written consent of the Minister is obtained.

Date: 8 September 2009



**BARRY A. GOLDSTEIN**  
**Director Petroleum and Geothermal**  
**Minerals and Energy Resources**  
**Primary Industries and Resources SA**  
**Delegate of the Minister for Mineral Resources Development**

Executed for and on behalf of:

**Santos Ltd**  
**Vamgas Pty Ltd,**  
**Santos Petroleum Pty Ltd,**  
**Bridge Oil Developments Pty Ltd**  
**Santos (BOL) Pty Ltd**  
**Reef Oil Pty Ltd**  
**Alliance Petroleum Australia Pty Ltd**  
**Santos (NARNL Cooper) Pty Ltd**  
**Basin Oil Pty Ltd**

by its duly appointed attorney:

**Demitra Ritossa**

.....  
Name (print)

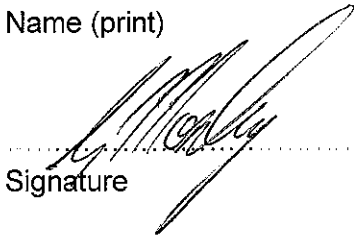


.....  
Signature

Signed for and on behalf of **Delhi Petroleum Pty Ltd** by its authorised representative:

**Gordon Moseby**  
**Production Manager**

.....  
Name (print)



.....  
Signature

Signed for and on behalf of **Origin Energy Resources Ltd** by its ~~authorised~~  
~~representative:~~ *duly appointed attorney:*

**Owen Hobbs**  
**Eastern Australia Onshore Asset Manager**  
**Upstream Oil & Gas Australia**

.....  
Name (print)



.....  
Signature

## SCHEDULE

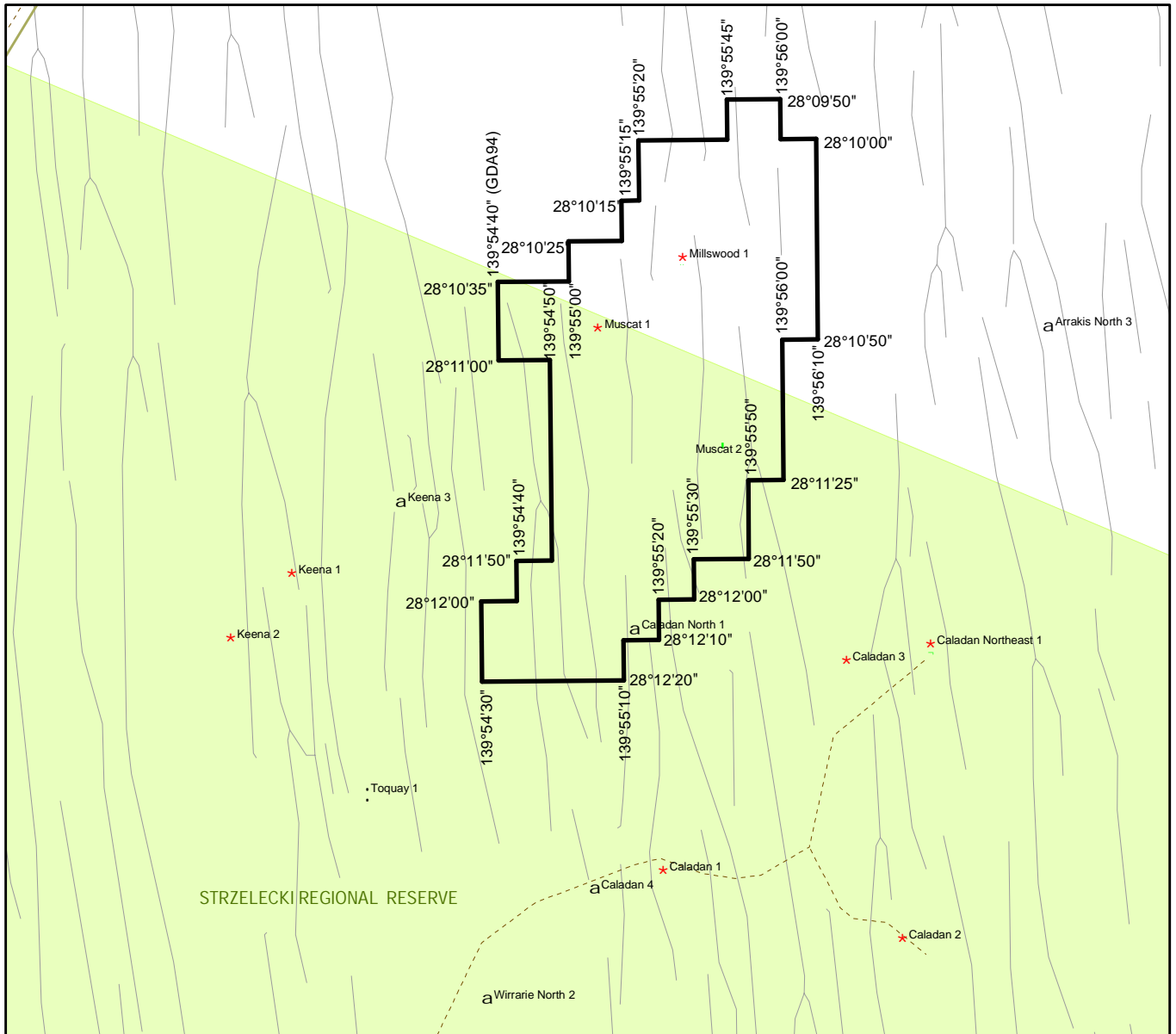
### PETROLEUM PRODUCTION LICENCE PPL 230

#### DESCRIPTION OF AREA

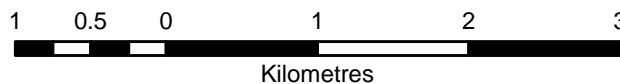
All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of latitude 28°09'50"S GDA94 and longitude 139°55'45"E GDA94, thence east to longitude 139°56'00"E GDA94, south to latitude 28°10'00"S GDA94, east to longitude 139°56'10"E GDA94, south to latitude 28°10'50"S GDA94, west to longitude 139°56'00"E GDA94, south to latitude 28°11'25"S GDA94, west to longitude 139°55'50"E GDA94, south to latitude 28°11'50"S AGD66, west to longitude 139°55'30"E AGD66, south to latitude 28°12'00"S AGD66, west to longitude 139°55'20"E AGD66, south to latitude 28°12'10"S AGD66, west to longitude 139°55'10"E AGD66, south to latitude 28°12'20"S AGD66, west to longitude 139°54'30"E AGD66, north to latitude 28°12'00"S AGD66, east to longitude 139°54'40"E AGD66, north to latitude 28°11'50"S AGD66, east to longitude 139°54'50"E AGD66, north to latitude 28°11'00"S AGD66, west to longitude 139°54'40"E GDA94, north to latitude 28°10'35"S GDA94, east to longitude 139°55'00"E GDA94, north to latitude 28°10'25"S GDA94, east to longitude 139°55'15"E GDA94, north to latitude 28°10'15"S GDA94, east to longitude 139°55'20"E GDA94, north to latitude 28°10'00"S GDA94, east to longitude 139°55'45"E GDA94, and north to point of commencement.

AREA: 7 square kilometres approximately.



SCALE 1:50 000



Note: There is no warranty that the boundary of this licence is correct in relation to other features of the map. The boundary is to be ascertained by reference to the Australian Geodetic Datum (AGD66), Geocentric Datum of Australia (GDA94) and the schedule.

THE PLAN HEREBEFORE REFERRED TO  
**MUSCAT- MILLSWOOD FIELD**

**PETROLEUM PRODUCTION LICENCE NO: 230**

