ATP 768

END OF TENURE REPORT

SEPTEMBER 2020

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1 Tenure information and general area

Authority to Prospect (ATP) 768 was held by QGC Upstream Holdings Pty Ltd (**QGC**) at the end of the tenure, which followed the lodgement of a total relinquishment notice on 2 July 2020 and accepted by the Department of Natural Resources, Mines and Energy (DNRME) on 31 July 2020. ATP 768 formed part of the Bowen Basin TGS Project Area together with ATP 645 and ATP 785, previously also including ATP 1101 for which total relinquishment was accepted on 20 September 2018.

On 8 September 2004, ATP 768 was granted over 54 blocks (1350 sub-blocks) for a four (4) year term commencing from 1 October 2004. ATP 768 was then renewed under the Petroleum and Gas (Production and Safety) Act 2004 (Qld) (**P & G Act**) for a term of twelve (12) years commencing 1 October 2008 over 675 sub-blocks. During the first period of this renewal, PL 398 was granted on 6 January 2012 over 36 sub-blocks of ATP 768 for a 30-year term. The second period commenced on 1 October 2012 over 414 sub-blocks and on 8 July 2014, an endorsement was received to statutorily extend the program and relinquishment period from 30 September 2016 to 30 September 2018 pursuant to section 63B of the P&G Act. During this second period, PL 399 was granted on 24 December 2012 over 25 sub-blocks of ATP 768 for a 30-year term. Additionally, PL 1008 was granted on 25 February 2016 over 14 sub-blocks of ATP 768 for a 30-year term together with 54 sub-blocks from ATP 852.

On 13 December 2017, a special amendment application, pursuant to section 107A of the P & G Act, was made to amend the partial relinquishment requirement in ATP 645 in order to effect the relinquishment from elsewhere in the Bowen Basin TGS Project Area. To meet the 144 sub-block relinquishment, it was proposed to relinquish 50 sub-blocks from ATP 768 and 94 sub-blocks from ATP 1101. This special amendment application was approved on 19 February 2018 with the relinquishment from ATP 768 effective 14 February 2018.

On or before 30 September 2018, ATP 768 had a 225 sub-block partial relinquishment due, being the end of the second period. On 1 August 2018, a special amendment application pursuant to section 107A of the P & G Act was made to amend the partial relinquishment requirement in ATP 768 in order to have part of the relinquishment effected from ATP 1101 in the Bowen Basin TGS Project Area. It was proposed to relinquish 150 sub-blocks from ATP 768 and the remaining 75 sub-blocks from ATP 1101. The special

amendment application was approved on 20 September 2018 with the relinquishment from ATP 768 effective the same day.

Following the above-mentioned special amendment, ATP 768 comprised 150 sub-blocks in three discrete areas with the end of its ATP term approaching on 30 September 2020. On 2 July 2020, a total voluntary relinquishment of ATP 768 was lodged with DNRME, that subsequently acknowledged on 31 July 2020 that ATP 768 was taken to end on 3 July 2020 pursuant to section 65(3)(b) of the P & G Act.

All prior partial relinquishments of ATP 768 have resulted in partial relinquishment reports being provided to DNRME through QDEX in which were described the specific authorised activities and reporting that were related to those areas being relinquished. Additionally, all operational reporting for wells and seismic surveys conducted on ATP 768, along with their specific data, have been lodged with DNRME according to legislative requirements and timeframes and no operational reports are outstanding. This includes operational reporting for activities conducted on the final area of 150 sub-blocks. Therefore, this End of Tenure report specifically addresses the final area of ATP 768, noting that all well and seismic reporting, information and data have already been provided.

Table 1 and Figure 1 show the final area of ATP 768 at the time of relinquishment and Figure 2 shows the final area of ATP 768 in relation to other tenures.

Block Identification Map	Block Number	Sub-blocks
CHAR	1150	All
CHAR	1151	All
CHAR	1222	All
CHAR	1223	All
CHAR	1579	All
CHAR	1584	All
TOTAL		**150 sub-blocks**

Table 1. Sub-blocks comprising ATP 768 at time of total relinquishment.

2 Summary of authorised activities & results - s546(a)(i) & (ii)

Activities conducted under ATP 768 during the life of the tenure, excluding those activities that occurred on subsequent PLs 398, 399 and 1008, consisted of exploration and appraisal drilling together with geological studies and geophysical surveys. Refer to Table 2 and Figure 3 for details.

During the first four-year term after grant, Sunshine Gas Ltd through its wholly owned subsidiary, BNG (Surat) Pty Ltd, drilled 4 wells to evaluate multiple reservoir intervals with conventional gas potential along the 4-way dipping anticlinal Champagne Creek structure. Champagne Creek 2, the first well in the program, spudded on 9th February 2005 and was air-drilled to a depth of 1902m. This exploration well was targeting the Triassic Showgrounds Formation. Strong gas shows and visible gas flares were evident throughout the Triassic Clematis Group. An appraisal well, Champagne Creek 3, was subsequently spudded on 6th March 2005 and was drilled to a depth of 1857m. This well recorded gas shows in both shallow reservoirs within the Triassic Moolayember Formation and deeper reservoirs in the Clematis Group. Champagne Creek 4 spudded on 25th March 2005 and was drilled to a total depth 1700m. Gas shows were again found in shallow Moolayember reservoirs. Champagne Creek 5 was a final appraisal well to test the lateral extent of the shallow gas accumulation. This well was spudded on 15th April 2005 and was drilled to a total depth of 709m. This well also identified a shallow gas accumulation. All appraisal wells were suspended and shut-in pending evaluation of available data.

Earlier drilling at Champagne Creek by Sunshine Gas was limited by rig capacity. Consequently, Sunshine contracted a rig to drill to a depth of 2800m and evaluate the deeper zones. This was accomplished on 22 September 2006, when Champagne Creek 2 was re-entered and deepened to a total depth of 2633 metres. Wireline logs were run and an attempt to run an open hole DST was made over the zone 2064m – 2084m in the Triassic but the DST failed, casing was run and cemented at 2196 metres. The lower portion of the zone of interest was perforated and tested but no gas flow was recorded. It was determined that no further operations should be conducted on this structure.

The Sark 2D Seismic Survey was acquired between 15th October and 3rd December 2013, from start of line preparation activities to end of recording on ATP 768, ATP 685 and DAA 15. The seismic survey consisted of 241.28km across 15 seismic lines. The relevant lines of the seismic survey were acquired over the relinquished blocks as shown in Figure 3.

Moa 1 was drilled to test the Triassic tight gas sandstones of the Bowen Basin as part of the QGC Tight Gas Sands (TGS) project. The primary geological objective of Moa 1 was the early Triassic Rewan Group and the secondary objective was the middle Triassic Showgrounds and Clematis Sandstones. Moa 1 was spudded on 8 August 2011. The Rewan Group was intersected at 1875m, which was 26.8m above prognosis. The Clematis

Group was intersected at 1448m, which was 8.8m above prognosis. Gas readings while drilling through the Rewan reached 20% and the Clematis were up to 2%. Most formations were intersected shallow to prognosis. Two cores were cut from the Clematis Group with a recovery of 13.95m and the second 23.40m. The well reached TD in the Rewan Group at a depth of 3750.00m on the 13 October 2011. The well was left suspended on the 29th October 2011 with the required barriers in place and ready for future stimulation. These operations commenced on 22 December 2011 and ended on 22 January 2012. The method of hydraulic fracturing activities was diagnostic fracture injection test (DFIT), after each test a composite bridge plug with a cement cap was set between stages. 2 DFITs were performed during the operations. The observed DFIT derived fracture pressures conform to the fracturing model produced for the interval, at approximately 1psi/ft. Pressure diagnostics were the only form of diagnostics used on this well.

Moa 2 was a vertical exploration well drilled to test the Triassic tight gas sandstone play potential of the northern Taroom Trough and was drilled 3km south south-east of the Moa 1 well. Moa 2 was located on the Champagne Creek anticline structure and was spudded on 2 October 2014. The Early Triassic Lower Rewan Group target was intersected at 3323.00m, which was 87.29m above prognosis. Gas readings while drilling through the Lower Rewan Group reached a maximum of 9.4%. Two cores were successfully cut within the Lower Rewan Group with recoveries of 26.19m and 27.20m. The well reached TD in the Lower Rewan Group, at a depth of 4400.00m on 21 March 2015. The Rig was released on 9 April 2015 and the well was left suspended for future stimulation, which did not occur and both Moa 1 and 2 were plugged and abandoned in 2017.

Results from the Moa-1 and Moa-2 wells drilled by QGC during the term of ATP 768 were integral in informing the view of prospectivity of ATP 768. Described in following sections, from review of the drilling results, the Moa prospect is not considered by QGC to have economic potential, and considering outputs from regional basin-scale regional play review studies, QGC has not identified any credible model or information to suggest improved tight gas sand prospectivity in the area of the ATP 768, and therefore has not located a drillable prospect or any reason for further evaluation.

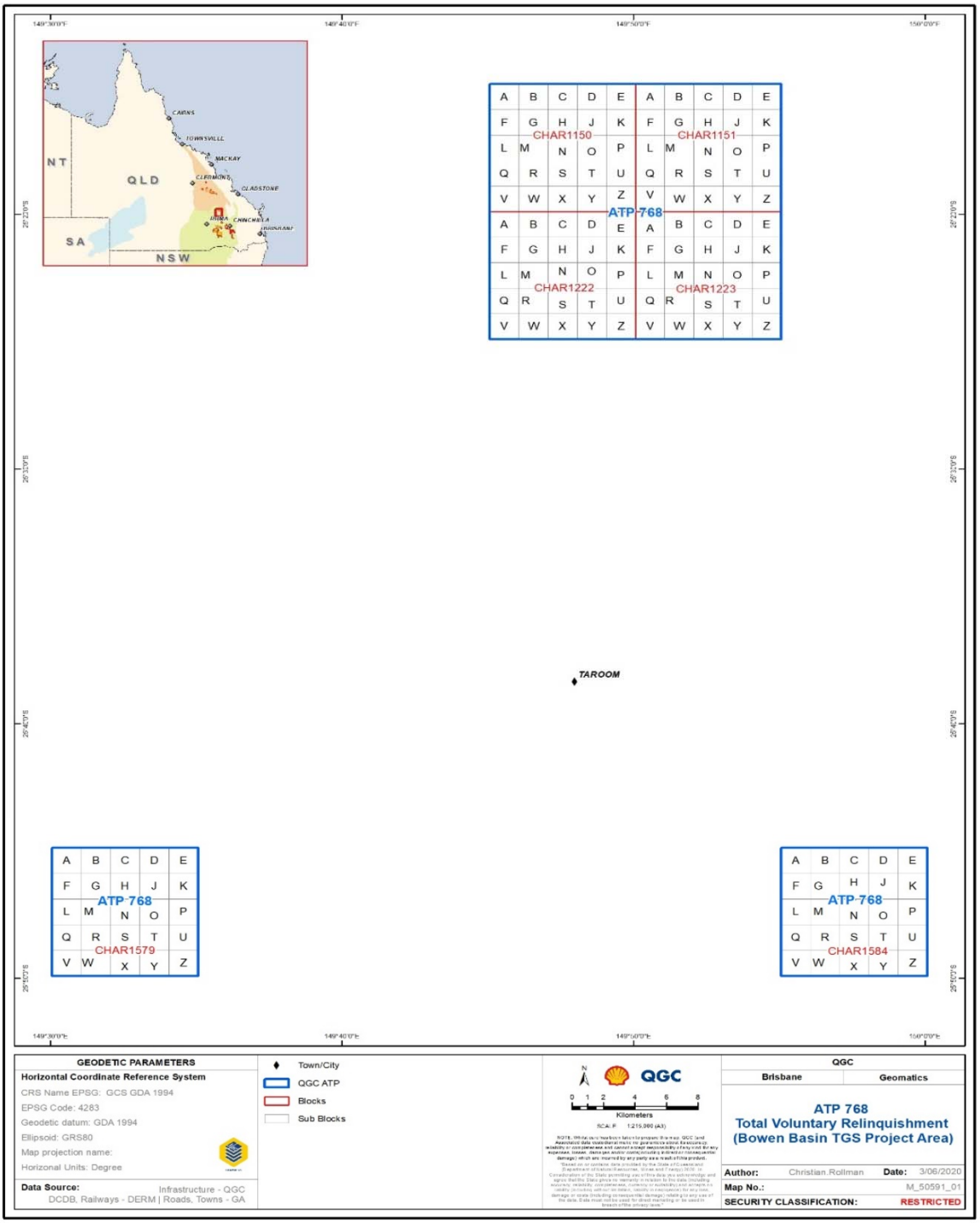

Figure 1. Area of ATP 768 at time of total relinquishment with block and sub-block details.

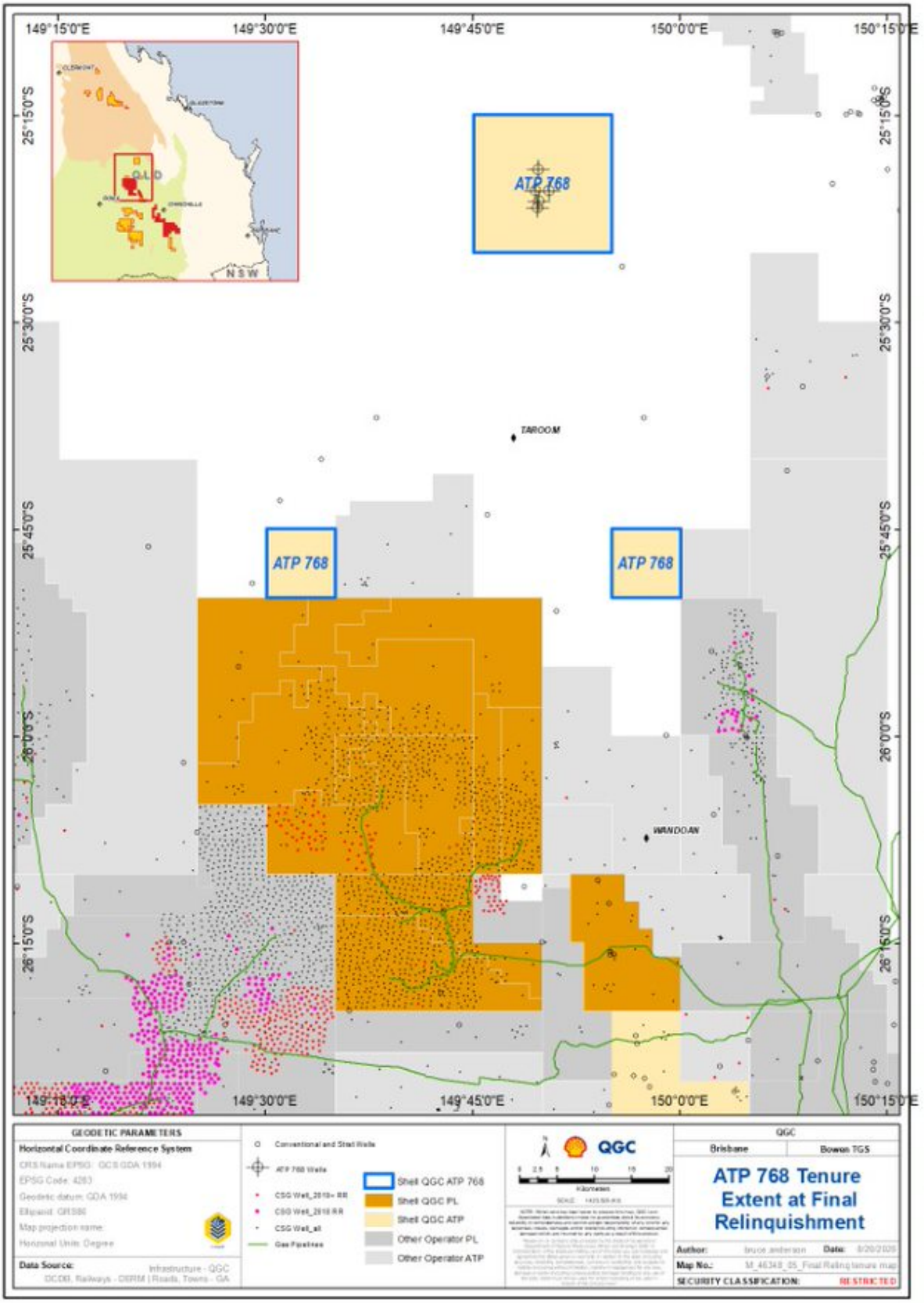

Figure 2. Area of ATP 768 at time of total relinquishment with related tenures.

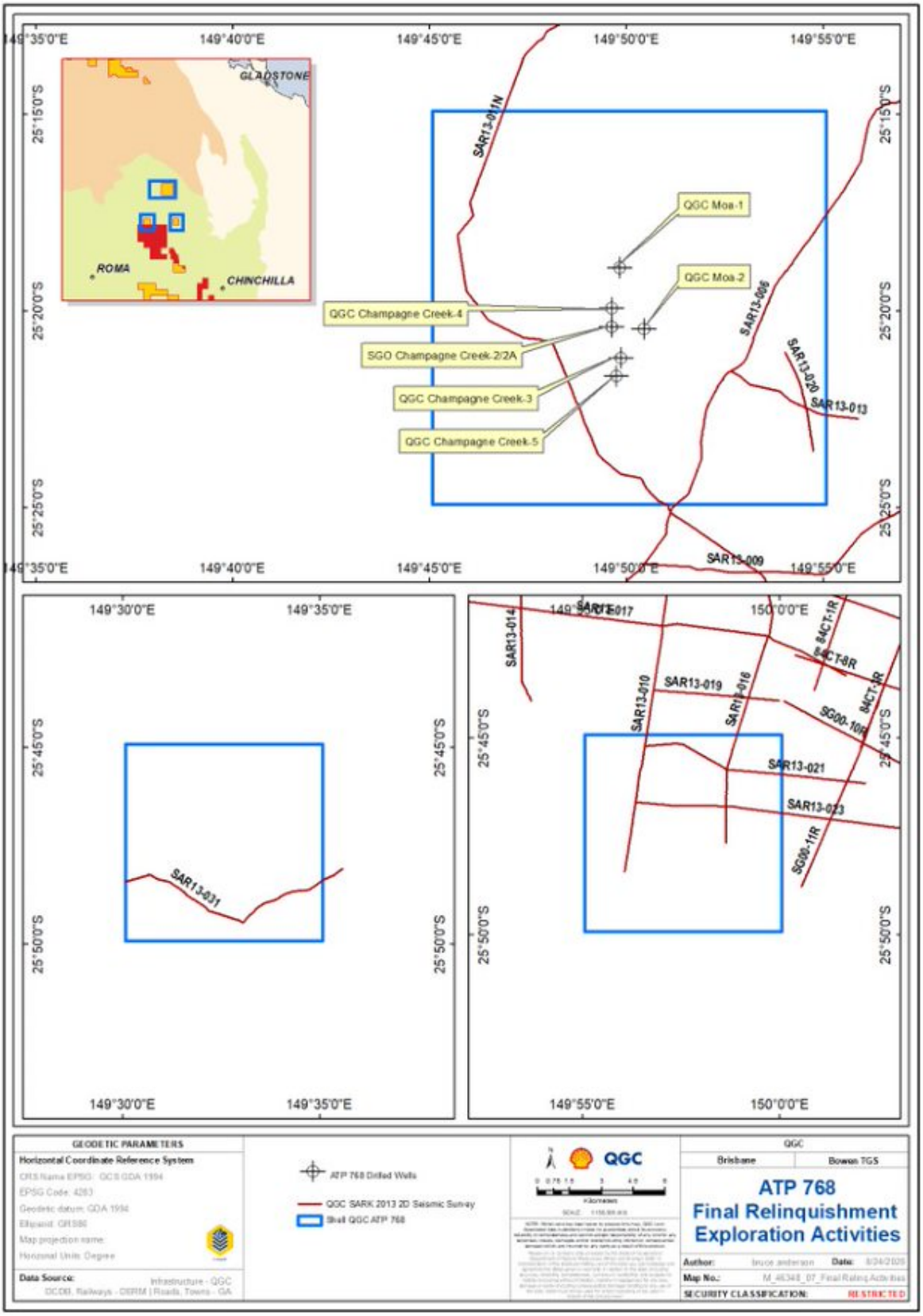

Figure 3. Authorised activities on ATP 768 area at time of total relinquishment.

3 Index of reports lodged - s546(a)(iii)

The statutory reports lodged in relation to ATP 768 are shown in Table 2.

Report	Date Lodged	Company Report No
Champagne Creek 2 Well Proposal	01/02/2005	37935
Champagne Creek 2A Well Proposal	05/10/2006	43790
Champagne Creek 2-2A WCR	07/10/2005	39750
Champagne Creek 2-2A Well Abandonment	24/04/2013	77265
Champagne Creek 3 Well Proposal	03/03/2005	38449
Champagne Creek 3 WCR	10/10/2005	39751
Champagne Creek 3 Well Abandonment	30/06/2014	84892
Champagne Creek 4 WCR	10/10/2005	39752
Champagne Creek 4 Well Abandonment	03/04/2013	76899
Champagne Creek 5 Well Proposal	08/04/2005	38542
Champagne Creek 5 WCR	10/10/2005	39753
Champagne Creek 5 Well Abandonment	29/04/2013	77236
Partial Relinquishment Report	30/09/2013	80005
Geological & Geophysical Studies	30/11/2013	83340
Sark Seismic Survey Final Report	30/03/2015	90981
Moa 1 Hydraulic Fracturing Activities Completion Report	14/03/2012	70156
Moa 1 WCR	22/05/2013	77658

Moa 1 Well Abandonment	28/04/2017	100484
Moa 1 Groundwater Bore WCR	30/06/2015	92509
Moa 2 WCR	17/08/2015	93153
Moa 2 Well Abandonment	28/04/2017	100482
Partial Relinquishment Report	14/02/2018	107956
Partial Relinquishment Report	20/09/2018	109379

Table 2. Statutory reports lodged for ATP 768

4 Summary of significant hazards - s546(a)(iv) & (v)

At the time of total relinquishment, the area of ATP 768 covered 150 sub-blocks. No hazards to future mining or petroleum activity were created during the final tenure period of ATP 768.

5 Petroleum and water produced - s546(a)(vi) & (vii)

During the final tenure period of ATP 768 described in this report, no petroleum or water was produced.

6 Other information and that required under regulation - s546(a)(viii) & (b)

6.1 Geological Setting

The main area of ATP 768 is located north of Taroom, in the north-eastern part of the Taroom Trough, Bowen Basin, onshore Queensland, Australia (Figure 4).

The Bowen Basin covers over 160,000km^2 of southern and central Queensland and has a maximum sediment thickness of about 10,000m concentrated in two main north-south trending depocentres: the Taroom Trough in the east; and the Denison Trough in the west. The basin first opened as a result of an Early Permian extensional tectonic phase. This set

up a series of grabens and half-grabens into which fluvial-lacustrine sediments were deposited. This episode was also accompanied by extensive volcanics throughout the basin, but particularly along its eastern margin in proximity to the orogenic arc.

Following this extensional phase, a more passive thermal subsidence phase occurred. This resulted in a basin wide marine transgression, which saw a temporary cessation of volcanic activity along the eastern margin of the basin. Sediment was dominantly sourced from the west and deposited eastward over the antecedent grabens and half-grabens. Deltaic sediments prograded into the basin from the west, filling in the various depocentres that are associated with coal deposition.

By the Late Permian, a compressional phase led to foreland loading on the eastern margin of the basin. This event cut the basin off from the open sea and resulted in rapid infilling of dominantly coastal plain to alluvial plain facies. Substantial amounts of coal were cyclically deposited, along with varying amounts of volcanic sediments from renewed igneous activity brought about by the tectonic forces.

The interbedded association of coals, volcanics and clastic sediments characterise the Permian Kianga Formation. From the early through late Triassic, the basin was infilled with sediments although continued tectonic compression was experienced resulting in further deformation of the rocks. The Early Triassic Rewan Group is composed of continental fluvial to alluvial clastics and forms the primary objective in ATP 768.

The southern half of the Bowen Basin, is overlain by the Surat Basin, a Jurassic to Cretaceous intracratonic sag basin, which developed as a sag basin during the Jurassic and Cretaceous. The Surat Basin contains the Walloon Coal Measures Surat CSG developments, which including the Shell QGC operated production areas are being developed to supply the QCLNG project. In ATP 768, the Walloon Coal Measures and older Surat Basin stratigraphy outcrops. The Walloon Coal Measures outcrops in the area of ATP 768, and is not considered economic for CSG production due to shallow depth or being absent due to erosion.

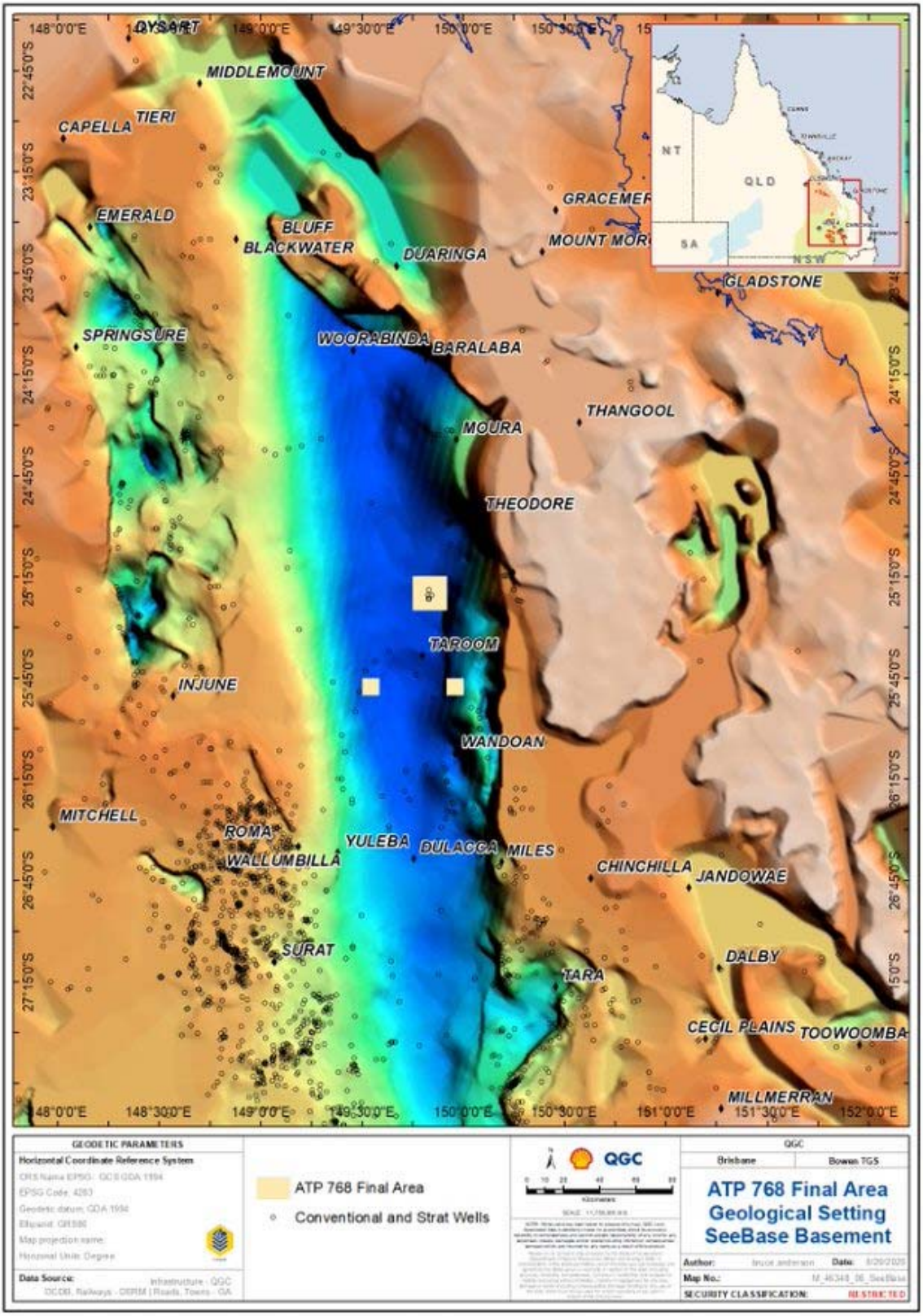

Figure 4. Geological setting of ATP 768 in north-eastern Taroom Trough of the Bowen Basin.

6.2 Work Completed to Date

Since the Bowen Tight Gas Sands (TGS) project commenced in 2010, QGC has spent in excess of $300 million exploring for TGS in the Taroom Trough through:

- Drilling seven wells (with TD ranging from 3180-4694m);
- Fracture stimulating and testing four of those wells;
- Acquiring 826km 2D seismic;
- Reprocessing 4151km 2D and 193km^2 3D legacy seismic; and
- G&G studies (both tenure specific and regional).

A total of $4.3 million has been spent on G&G studies across the Bowen TGS tenures since the start of 2013, with the share of those studies directly and indirectly attributable to ATP 768 being well in excess of the amount committed.

6.3 G&G Evaluation

Since inception of the Bowen TGS project in 2010, QGC has evaluated the petroleum prospectivity of the Taroom Trough, with the immediate purpose of identifying drillable tight-gas sand targets in the Triassic Rewan Group, and in parts of the tenure, the Permian Back Creek Group.

Completed G&G work involved:

- Regional review and synthesis of available legacy exploration data (petroleum wells and seismic);
- Review of tight-gas well results, and integration of results into regional geological model;
- Integration of Rewan Group outcrop mapping with offset well data.

6.4 Regional Review

Available information from legacy petroleum exploration drilling and seismic data was reviewed and integrated with outcrop mapping of the Rewan Group proximal to ATP 768 in developing a regional geological model. This provides a regional framework for assessing the likelihood of encountering favourable areas for potential TGS accumulations within the Taroom Trough.

This work highlighted that demonstration of the tight gas sand potential of ATP 768 depended on successful results from the Triassic section in Moa-1 and -2.

6.5 Review of Relevant TGS Wells

The TGS wells drilled by QGC during the 2011-12 and 2014-15 campaigns in the Taroom Trough added a large amount of valuable data not available from legacy petroleum drilling. These wells included the first penetration of some deep Taroom Trough section, where the pre-drill stratigraphy was largely postulated from up-dip well intersections, seismic character and basin modeling. While the knowledge gained from all seven QGC operated wells has been incorporated into the basin scale evaluation, the wells of most relevance to ATP 768 are Moa-1 and Moa-2. Drilled in the first campaign, key elements of Moa 1 include:

- Located on a regional scale anticline, the primary objective in Moa-1 was the Triassic Lower Rewan Group and the secondary objective was the Triassic Clematis Group, tested to varying degrees of success by the legacy Champagne Creek-1 to -5 wells.
- Clematis Group: Good quality sands were penetrated, and gas shows observed through the interval. Comprehensive wireline logging over the interval, including deployment of a wireline formation pressure tool, concluded that the interval was in fact water bearing.
- Lower Rewan Group: Approximately 400m of Triassic Lower Rewan fluvial sands and silts were penetrated. Gas shows were seen throughout the section however, borehole stability issues (both due to the overlying "Intra-Rewan Claystone" and in the silt beds within the Lower Rewan Group) led to a decision to call an early TD and on completion of cementing, it was determined that the cement job was poor and sufficient isolation of the reservoir was not certain. As a result, the well was not fracture stimulated and tested, however, two Diagnostic Fracture Injection Tests (DFITs) were able to be undertaken and these confirmed that the reservoir was highly overpressured (c. 0.75psi/ft).

While the first campaign was successful in terms of demonstrating the presence of a material in place gas resource in the Triassic Lower Rewan Group, a re-designed approach to drilling of the prospect was required to achieve the future objective of fracture-stimulation and production.

- Moa-2 was drilled in 2015 and achieved a significant operational improvement to Moa-1, reaching the desired maximum TD of 4400m MD within the Triassic Lower Rewan Group, and successfully overcoming wellbore instability challenges to achieve a cased borehole suitable for fracture stimulation and production testing. A gross target interval of >1000m was drilled containing multiple fluvial sand bodies (overall N:G ~25%), each with an observable gas response above background levels. Unfortunately, core taken from a depth of ~3850m MD revealed sands with undesirable high clay content (20-65% from XRD) and high water saturation (60-95% from Dean-Stark analysis). Due to interpreted low prospectivity from the high water saturation in the Rewan sand reservoirs, Moa-1 was not fracture stimulated or tested, and both Moa-1 & Moa-2 were plugged and abandoned in 2017.

6.6 Remaining Potential in ATP 768

Well results in ATP 768 suggests it could contain a true unconventional 'tight gas' accumulation in the sandstone reservoirs of the Triassic lower Rewan Group. These include ubiquitous gas shows throughout the thick section of the Lower Rewan (including below the level of interpreted structural closure of the Champagne Creek anticline), and significant reservoir overpressure. It is likely that the anticline has provided a focus for gas charge by migration, resulting in a complex dynamic system where the influx of gas from the Kianga coals below has exceeded the leakage due to low permeability (creating overpressure).

It remains to be seen if the indications of a continuous accumulation extend beyond the extent of the Champagne Creek Anticline, particularly further west into ATP 768 where the basin monoclinally dips down towards the east (Figure 5). The play elements of thick Triassic reservoir section underlain by Permian coals are certainly present, however if gas accumulation in the Moa prospect relies on trapping mechanism related to the Champagne Creek Anticline then exploration risk increases outside of the anticline in the area of monoclonal dip, particularly as up-dip the Triassic Rewan section ultimately subcrops much higher quality younger reservoirs at the base Jurassic unconformity (e.g. Precipice Sandstone).

Accordingly, prospectivity of ATP 768 has been substantially downgraded following the results of the Moa-1 and, particularly, Moa-2. Based on these results and the relative geological situation of ATP 768 to those wells, the Triassic Lower Rewan Group is not considered prospective for further exploration in the remaining extent of ATP 768. The

underlaying Permian section could have some remaining TGS prospectivity, however apart from a small area in the west of the tenure area, top Permian is deeper than 4000m (below GL), beneath the currently anticipated depth floor to economic development.

6.7 Conclusions

Exploration evaluation of TGS prospectivity in the Taroom Trough has demonstrated the existence of a significant in-place gas resource. Further work is required to delineate sweet-spots and optimise drilling and completion techniques before ultimate economic potential can be demonstrated. Results to date indicate however that commercialisation of the Triassic Rewan Group will be more challenging than the Permian Back Creek targets being investigated elsewhere in the basin.

As the primary objective in ATP 768 is the Triassic Lower Rewan Group interval, with limited potential for encountering Permian sediments at depths prospective for development, the prospectivity of ATP 768 has been downgraded and not considered to warrant further exploration.

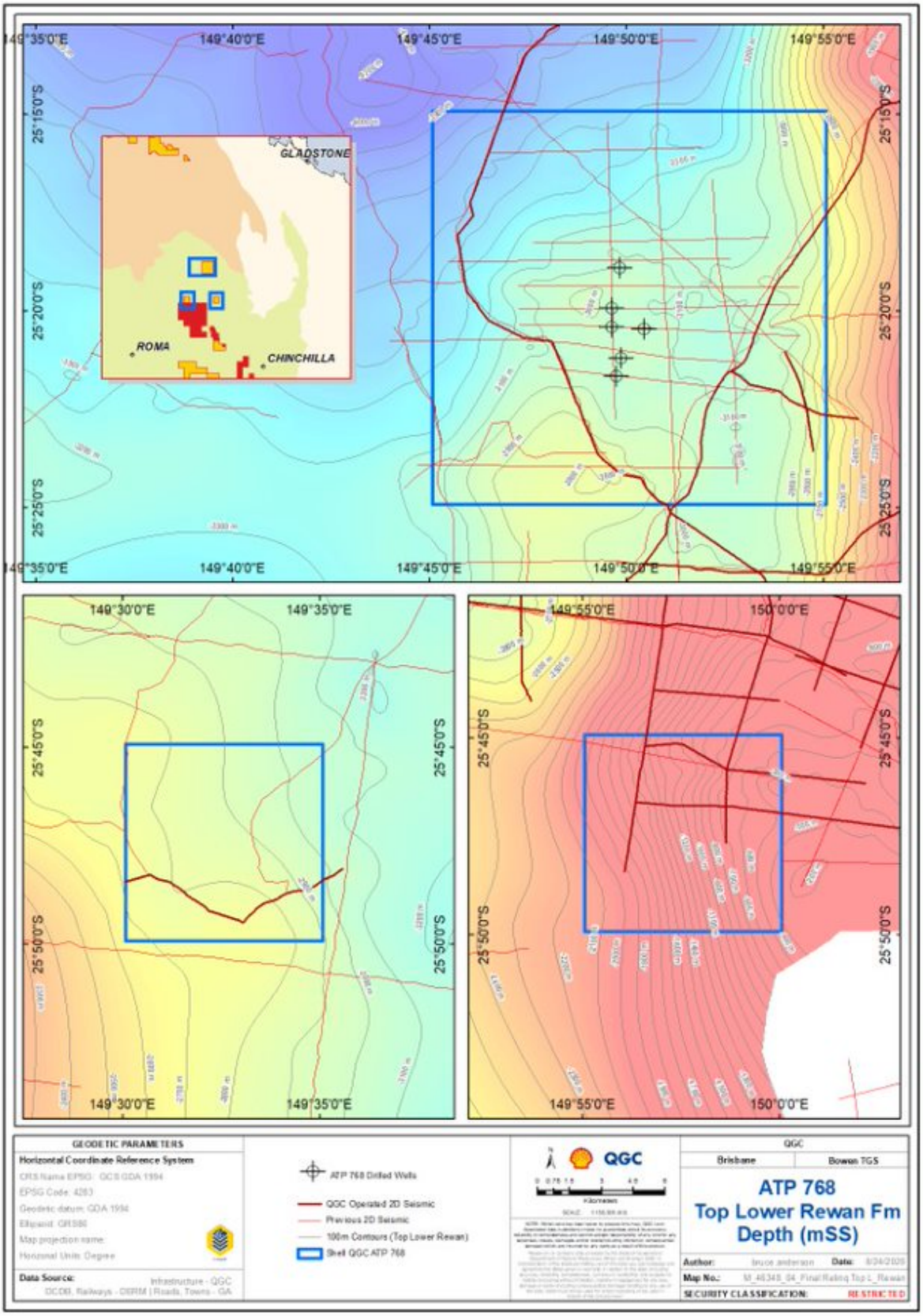

Figure 5. ATP 768 Top Lower Rewan Group depth structure (mSS)