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## **ASX RELEASE**

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# **REID'S DOME (PL 231) NYANDA-4 SUCCESSFUL DRILLING AND TESTING**

## **HIGHLIGHTS**

- Drilling, coring, logging and testing of the Nyanda-4 coal seam gas and conventional gas well at PL 231 in Central Queensland has been successfully completed.
- Given the favourable results received during drilling and testing to the planned Total Depth (TD), Nyanda-4 was extended by 200m to 1,200m TD and has been suspended for future re-entry and further testing.
- Quick-look petrophysics indicates 38m of net coal and 25m of carbonaceous shales and thinner coal seams (i.e. <0.3m) amounting to 60m+ of coals and carbonaceous shales intersected in Nyanda-4. Well correlations indicate the lateral persistence of the Reid's Dome coal-bearing intervals across the entire PL 231 permit area.
- Gas data obtained during drilling provided good gas shows from approximately 392m, and an overall increase in gas content with depth, with the data indicating that the well was still in gas shows at TD. Drill Stem Tests established permeability and the presence of approximately 100psi over-pressure within the Reid's Dome Beds in Nyanda-4.
- A 150m cored zone sampled 12 seams of good quality bright coal showing good development of cleats and minor fractures in numerous places. Gas was observed bubbling from the coals and 9 samples were taken for desorption testing.
- The cored zone also intersected 7 zones where light oil was observed bleeding from fine-grained sandstones with gas hissing from sandstones.
- PL 231 encompasses Reid's Dome - a classic north-south dome structure extending over 22km with several faults, situated on the crest of the Sericold Anticline in the southwest Bowen Basin.

**State Gas Limited (ASX: GAS)** is very pleased to advise that drilling, coring, logging and testing of the Nyanda-4 coal seam gas and conventional gas well at the Reid's Dome Gas Project in Central Queensland has been successfully completed, with drilling extended for a further 200m to a new Total Depth (TD) of 1,200m within the Reid's Dome Beds.

Although designed to be plugged and abandoned, due to the favourable results and data obtained thus far, the Nyanda-4 well has been suspended for future re-entry and further testing.

## **Results of Nyanda-4**

Gas data obtained while drilling shows good gas shows from approximately 392m and an overall increase in gas content with depth, with the data indicating that the well was still in gas shows at TD. Total gas peaks present in Mud Logs of up to 3% above background of 0.2% directly correlate with the coals and the sandstones present within the section. From 636m heavier components of up-to C4 were recorded in Mud Logs.

Wireline logging obtained a comprehensive suite from TD to the casing shoe 378m. The density log indicates the presence of coal from 392m to 1177m with seams up to 4m thick. The majority of the coal seams lie between 392m and 880m.

Quick-look petrophysics indicates 38m of net coal, and a further 25m of carbonaceous shales and thinner coal seams (i.e. <0.3m), suggesting 60m+ of coals and carbonaceous shales (excluding conventional and tight gas sands).

A zone of 150m of 76mm core was sampled between 392m and 542m, with 99% core recovery. The cored zone intersected 12 seams of good quality bright coal within a predominantly siltstone inter-burden. The coal shows good development of cleats and minor fractures in numerous places. Gas was observed bubbling from the coals and 9 samples were taken for desorption testing. The core also intersected 7 zones where light oil was observed bleeding from fine-grained sandstones and gas hissing from sandstones.

Four drill stem tests (DSTs) were conducted, the deepest being at 940m and the shallowest at 441m. These tests have established permeability and the presence of approximately 100psi over-pressure within the Reid's Dome Beds at Nyanda-4.

Correlation with the AOE-1 well 14 km to the north, and GSQ Eddystone-4, 12 km to the south indicates the lateral persistence of the Reid's Dome coal-bearing intervals across the entire PL 231 permit area.

Laboratory work in progress will provide further information on gas desorption and gas composition relating to the coals, along with the reservoir characteristics of the sandstones. Analysis and interpretation of the DST data has commenced and detailed petrophysical characterisation will be undertaken after the laboratory results are available for incorporation.

State Gas Limited Chairman, Mr Tony Bellas, said that the outcomes of the Nyanda-4 well have far exceeded the Company's expectations and confirm a significant coal seam gas project and a "free gas" presence within the Reid's Dome structure in PL 231.

"While we await further analytical results, the initial findings from Nyanda-4 indicate that this is a great outcome for the shareholders of State Gas, the State of Queensland and the Australian east-coast gas market."

## **Reid's Dome Gas Project Location and Geological Setting**

PL 231 is located south west of Rolleston in the Bowen Basin in Central Queensland, approximately 50 km from the Queensland Gas Pipeline. Gas was first discovered within the

Reid's Dome Gas Project area during drilling in 1955, and PL 231 is now known to host both conventional gas and coal seam gas reservoirs. Prior to the drilling of Nyanda-4, the PL 231 permit area had not previously been explored for coal seam gas.

PL 231 contains approximately 60m+ of coals and carbonaceous shales within Reid's Dome at potentially viable depths covering an area of 80-160sq km within the permit.

Based on the results of Nyanda-4 and historical drilling, and compared with geological analogues in Queensland, the Reid's Dome gas accumulation appears to be characterized by the entrapment of coal seam methane possibly within a structurally-controlled "free gas" zone within Reid's Dome - a classic north-south dome structure extending over 22km with several faults, situated on the crest of the Sericold Anticline plunging gently to the north and south.

The presence of over-pressured gas in the known conventional reservoirs indicates the cap rocks are sealing. Elsewhere in the Bowen Basin, anticlines have enhanced permeability characteristics for coal seam gas. Due to their lower stress and associated fracturing, tensional areas at the axes of anticlines and synclines in the Bowen Basin have been priority targets for enhanced permeability and coal seam gas production.

Pressure data from Nyanda-4 and historical drilling within PL 231 indicates that the entire section is above hydrostatic, indicating that the top-seal has not been breached, which has enhanced the structural setting for significant gas concentrations within the coals.

State Gas Limited is the Operator and 80%-owner of PL 231 and the Reid's Dome Joint Venture.

### **Further Updates on Outstanding Nyanda-4 Results**

Further updates will be provided to the market as laboratory and analytical results become available.

**ENDS**

### **ABOUT STATE GAS**

**STATE GAS LIMITED** (ASX: **GAS**) is a Queensland-based developer of the Reid's Dome gas field, originally discovered during drilling in 1955, located in the Bowen Basin in Central Queensland. State Gas is sole Operator and 80%-owner of the Reid's Dome Joint Venture (PL 231) which is well-located 30 kilometres southwest of Rolleston, approximately 50 kilometres from the Queensland Gas Pipeline. Covering an area of 181 square kilometres, PL 231 is now known to host both coal seam gas and conventional gas reservoirs.

[www.stategas.com](http://www.stategas.com)

## FOR FURTHER INFORMATION

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