



Baseline Assessment of landholder water bores

Coal seam gas (CSG) production relies on the extraction of water in coal seams to depressurise the coal measures allowing natural gas to flow and to be extracted.

Australia Pacific LNG is required by law to monitor the impacts of CSG production on groundwater levels and water quality throughout the Surat Basin and Bowen Basins.

All existing research and experience in producing CSG over the past 10 years plus in-depth knowledge of Great Artesian Basin aquifers and computer modelling show that CSG production is likely to have negligible impacts on the most commonly used water supply aquifers.

Australia Pacific LNG has established an extensive groundwater monitoring program that will operate throughout the entire duration of production operations. The information collected from ongoing monitoring will be compared with computer modelling to ensure any changes measured are in line with predictions.

A key element of the monitoring program is the execution of Baseline Assessments at landholder water bores. It is a requirement of legislation (Water Act 2000) that CSG companies carry out these assessments on all authorised water bores within their production areas.

The information obtained from Baseline Assessments will provide both landholders and Australia Pacific LNG with valuable information about the quality and levels of water in the bore, bore condition and usage prior to CSG production taking place.

This information will provide a baseline that all future monitoring results can be compared to.



Undertaking water monitoring at a landholder bore

What is a Baseline Assessment?

A Baseline Assessment provides information about bore water quality, water level, bore usage and the physical condition of the bore and pumping equipment prior to significant CSG production taking place in the local area.

The Baseline Assessment collects information such as:

- Accurate location information (GPS)
- Groundwater level (if access is available for a groundwater level probe)
- Water quality samples for laboratory analysis (only bores with operational pumps and windmills)
- Gas concentrations at the bore head
- Bore construction and pump details
- Bore use data
- Photos of each bore
- Any historical data that the landholder has recorded, or can recall, including historical water levels, maintenance details etc.
- The water quality analysis includes pH level, temperature, salinity levels, chemicals and additives in the water and gas concentration.



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What to expect during the Assessment

Baseline Assessments can take anywhere between 10 minutes (at an abandoned bore) and 3 hours (at a fully operational bore).

Water quality testing is regulated by strict guidelines. Three well volumes must be pumped from the bore prior to any sampling taking place. In an ideal situation the bore will have an operational pump and the capacity to discharge the necessary amount of water.



Collecting water samples for the laboratory

Prior to the Baseline Assessment

To ensure water level measurements are as accurate as possible, landholders are requested not to pump any bores to be tested for at least 24 hours prior to the assessment. It is understood that this may not be possible. In the case that the bore has been pumped within 24 hours of the assessment, any water level measurements taken may not be representative of actual water levels as the groundwater is likely to be recovering after pumping.

What is the Baseline Assessment process?

1. Australia Pacific LNG/Origin will write to the landholder and request access to the water bore
2. An Origin Energy Landholder Liaison Officer will contact the landholder to arrange a mutually convenient time to undertake the assessment
3. The Baseline Assessment is undertaken on the agreed day
4. Samples are submitted to an independent laboratory for analysis
5. The Baseline Assessment report is completed
6. The report is submitted to the landholder and the Queensland Water Commission

The aim is to provide landholders with the report within 3 months of the on-site assessment completion.

Contact Information

Got a question about Australia Pacific LNG?

Australia Pacific LNG is a joint venture between Origin, ConocoPhillips and Sinopec to supply gas to both the domestic and international markets. The Australia Pacific LNG Project involves developing CSG fields in the Surat and Bowen Basins, construction of a 520 kilometre pipeline and a new LNG processing facility on Curtis Island, off shore from Gladstone.

For enquiries about the gas fields or pipeline call 1800 526 369 or email contact@aplng.com.au

For enquiries about the Gladstone operations and LNG facility call 1300 776 205 or email aplng.gladstone@conocophillips.com

Or visit our website at www.aplng.com.au