



LIQUID  
INTEGRITY SYSTEMS

# capability statement

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## Salar de Atacama, Chile





# **innovative geophysics for large water storage facilities**

Leak detection, 3D seepage modelling, and high-resolution bathymetry with unparalleled capabilities.

Custom hardware, software, and specialised geophysical techniques ensure that each survey is optimised for maximum sensitivity and accuracy.

Our non-intrusive approach allows surveys to be performed at any time with almost no interruption to operations.



# backed by 40 years of geophysical expertise

Liquid Integrity Systems was founded by Zonge Engineering Australia, a geophysical exploration company established in Adelaide in the 1980s.

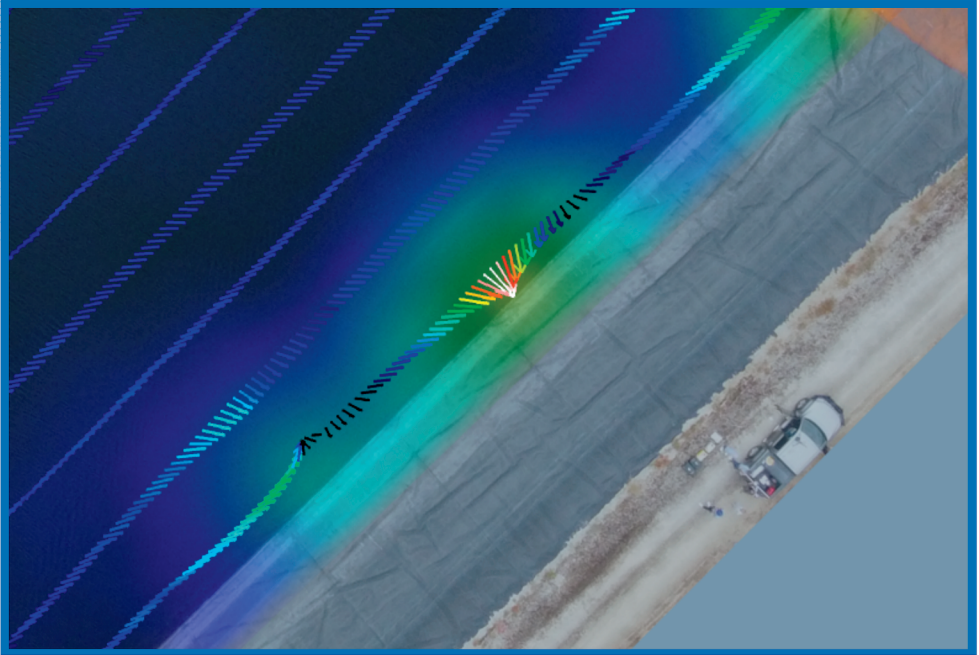
As an independent, Australian owned company, Zonge work all over Australia and the world.



# almost no interruption to site operations

We survey at and below the water line, so there is no need to drain the storage facility to conduct a survey.

Our custom hardware is intentionally designed to cause no damage to geosynthetic liners, can be deployed in any liquid and in almost all weather conditions.



# extreme sensitivity with remarkable accuracy

Each survey is customised to the site, ensuring unmatched sensitivity to leak signatures, which are precisely georeferenced using highly accurate RTK GPS.

Specialised data analysis allows for detailed interpretation of results including leaks sizes and flowrates.

South East Queensland, Australia





# survey where others are ineffective

Earthed infrastructure, poor liner isolation, acid, brine, and sludge present many challenges for conventional leak detection methods.

Through extensive and ongoing R&D projects, we can effectively survey in almost all conditions.





# incredibly fast with a tiny footprint

A typical LIS crew consists of 2 technicians and a van. Setup is usually completed within a few hours of arrival with a survey speed of up to 1ha p/hr.

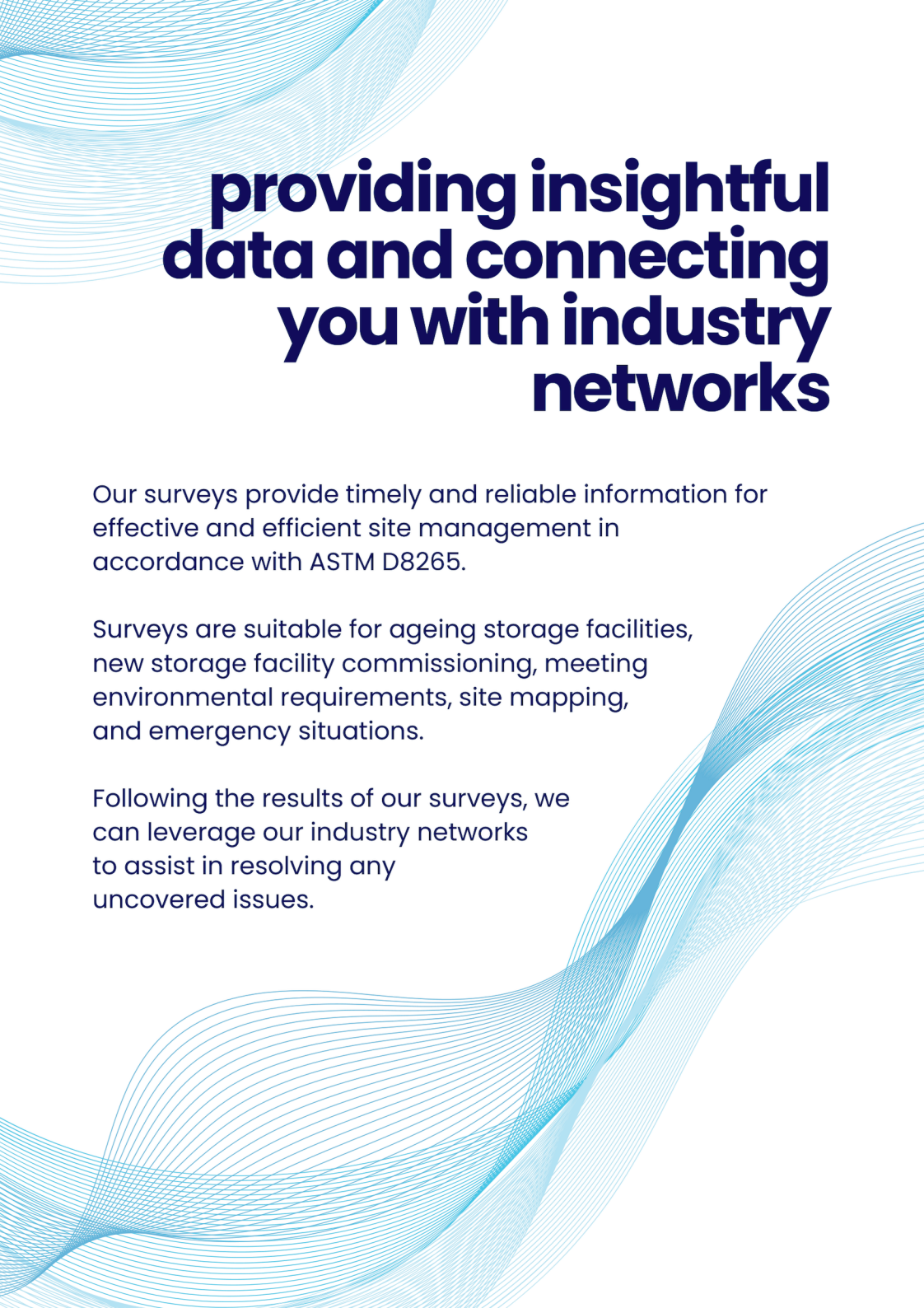
We detect leaks in real time, provide preliminary updates daily, and deliver leak detection and bathymetry results within 7 days.



# protect what matters most with a new level of safety

An LIS survey requires no personnel to enter the water or step on the liner. Our equipment is deployed from beyond the crest of the storage facility.

Our techniques allow us to run exceptionally low voltages, which pose no threat to technicians or other personnel.



# **providing insightful data and connecting you with industry networks**

Our surveys provide timely and reliable information for effective and efficient site management in accordance with ASTM D8265.

Surveys are suitable for ageing storage facilities, new storage facility commissioning, meeting environmental requirements, site mapping, and emergency situations.

Following the results of our surveys, we can leverage our industry networks to assist in resolving any uncovered issues.

Adelaide, South Australia



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