

CASE STUDY- LEAK SURVEY

Client: Leighton Contractors / WDS/ East Coast Pipelines

Scope: APLNG Gathering Leak Surveys

Value: Various

Scope of Work: iPipe offer a range of specialist leak-detection equipment including acoustic leak monitoring, airborne surveys utilising drone technology and tracer gas surveys. Main Contractors such as Leighton's (now CPB), WDS and East Coast Pipelines engaged iPipe as the principle contractor to conduct a number of leak surveys on gathering systems which had failed the leak test during the green field construction phase.



Client	Location	Type/Size of Pipe	Qty and description of leak	Date
PE100 Gathering Pipeline Specific				
Leighton Contractors	MDH Field - APLNG	20km of PE100 Gas and Water Gathering – TGLT with N2/H	5 leaks found: <ul style="list-style-type: none"> • 1x 3mm pin hole found in pipe near LPD • 3x leaking buried flanges found at WGS risers • 1 leak found at wellsite PE/CS pipe transition 	Q4 2013
Leighton Contractors	Keys Field - APLNG	6km PE100 Gas Gathering – TGLT with N2/H	1 pin hole leak found at bottom of LPD	Q4 2013
Leighton Contractors	Condabri South Field - APLNG	10km PE100 Gas Gathering – TGLT with N2/H	1 pin hole leak found in pipe	Q1 2014
WDS	Reedy Creek - APLNG	14km of PE100 Gas Gathering – TGLT with N2/H	2 leaks found at connection to lease pad	Q3 2014
East Coast Pipelines	Spring Gully - APLNG	2x PE100 Gas Gathering Systems – TGLT with N2/H	Multiple leaks found at buried flange connections	Q2 – Q3 2014

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Innovation: iPipe Process Services have one of the largest fleet of tracer gas membrane systems in Australia. Purpose built medium pressure high flow N₂/ tracer gas systems, trailer based allowing mobility from site to site. Built in tracer gas mixing facilities make these units cost effective solutions to finding leaks as low as 5x10⁻⁷ Cubic centimetres per second making this technique a dependable solution to mitigating leaks on underground green and brownfield (water) gathering systems.

Capabilities:

- Engineering & Project Management;
- Quality Reviews & Risk Management;
- Turnkey Projects;
- Nitrogen services With tracer Gas Mixing Facilities:
 - Membrane systems to 150 Bar;
 - Over pressurisation Protection Skid Units;
 - Multiple Sized LN₂ ISO Units and Tankers;
 - Tracer Gas Monitors/ Mass Spec Monitors.



Other successfully completed tracer gas contracts:

Client	Location	Type/Size of Pipe	Qty and description of leak	Date
PE100 Gathering Pipeline Specific				
CDJV	Dawson River West Branch - GLNG	2km of DN300 GRE pipe – TGLT with N ₂ /H	1 leak found at road crossing	Q1 2014
Santos	Moona House - GLNG	13km PE100 Gas Gathering – TGLT with N ₂ /H	1 leak found at Electrofusion fitting	Q2 2014
Non-Gathering Specific Tests				
Logan City Council	Logan	500m Steel Water Main	Small leak found at meter connections to residences	Q4 2014
Sydney Water	Sydney	Leak Trial containing 5 leaks under different scenarios/conditions	All 5 leaks identified accurately with one leak found to be encased within a cement block	Q3 2014
Sydney Water	Parramatta - Sydney	2x 1.5km steel water mains	Multiple leaks found along street at risers, connections and pipes	Q3 2014
Toowoomba City Council	Toowoomba	2km DN700 steel water main	5 leaks found along pipeline joints	Q2 2015
Sunwater	Moranbah	6km DN700 steel water main	Multiple Leaks found along pipeline	Q2 2015