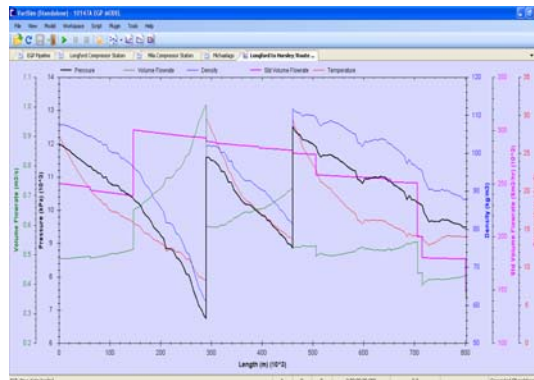




# Eastern Gas Pipeline & Queensland Gas Pipeline Pipeline Gas Management Study

System : Gas Transfer Mains  
 Location : Australia  
 Scope : Pipeline Capacity Study  
 Client : Jemena  
 Study Date : 2010  
 Length : 800+ km  
 Fluid : Natural Gas



Pipe Properties : Cann River to Mila

General Pipe Layout Profile **Temperature**

**Pipe Wall**

Thermal Conductivity : 45 W/m K  
 Specific Heat Capacity : 450 J/kg/K  
 Density : 7850 kg/m<sup>3</sup>

**Lagging**

Thermal Conductivity : 0.2500000000 W/m K  
 Specific Heat Capacity : 1500 J/kg/K  
 Density : 100 kg/m<sup>3</sup>  
 Thickness : 0.2000000000 m

**Exterior**

Thermal Conductivity : 0.1500000000 W/m K  
 Specific Heat Capacity : 1000 J/kg/K  
 Density : 2000 kg/m<sup>3</sup>  
 Temperature : 15 degC  
 Medium : Soil  
 Buried Depth : 1 m

OK Cancel Apply

## Study Scope

To construct mathematical models of two transmission pipelines and calibrate the initial operating conditions against SCADA data, including accounting for thermal effects along the pipelines. The models are used as independent tools to predict and generate results consistent with the actual SCADA data to be used alongside any work being undertaken.

The study determined the pressures, flowrates and temperatures throughout the pipelines and the maximum throughput (flow per day) capacity of the pipelines. The models include all equipment and instrumentation which can effect the dynamics of the pipelines, including the compressors, chillers, CCC system and gas users.



Hydraulic Analysis Ltd  
 Mill House  
 Hawksworth Road  
 Horsforth  
 Leeds  
 LS18 4JP

Tel:  
 +44 (0)113 258 1622

Website:  
[hydraulic-analysis.com](http://hydraulic-analysis.com)

Email:  
[info@haltd.co.uk](mailto:info@haltd.co.uk)

