

ARC ENERGY LTD XYRIS AREA GAS GATHERING SYSTEM (XAGGS)

Concept, multidiscipline engineering design, Dongara, Western Australia

ARC Energy's Xyris Area Gas Gathering System (XAGGS) Development is located near Dongara approximately 380 kilometres north of Perth, Western Australia. The gas produced from the Hovea, Apium and Xyris South fields is gathered and then processed into sales quality gas, via the Xyris gas plant facility, and piped to Perth through the Parmelia pipeline.

ICON Engineering was commissioned in late 2004 by ARC Energy to connect the Hovea, Apium and Xyris South fields to the Parmelia Pipeline

The scope of work included:

- Conceptual analysis, detailed multidiscipline engineering design and preparation of associated documents such as process flow diagrams and P&IDs.
- Project management.
- Preparation of operating procedures and documentation for regulatory authorities.
- Procurement of equipment and instrumentation.
- Construction management.
- Commissioning management.
- Liaising with the independent design validator.

- An additional filter coalescer to facilitate increased production.
- Provision for future expansion has been made to facilitate increasing production.



Construction of the XAGGS facilities.



Construction of the XAGGS flowline, which connects the various wellheads to the Xyris gas

The XAGGS development consists of:

- A 6 kilometre long XAGGS flowline to connect the various wellheads to the Xyris gas plant facility. The XAGGS flowline was designed in accordance with Australian pipeline codes (AS 2885).
- A slug catcher for removal of liquid slugs developed during operation of the XAGGS Flowline.
- A reciprocating gas compressor to increase overall gas field recovery volumes.

ARC Energy's pre-existing Xyris gas plant facility and oil production facilities remained in operation during the construction of the XAGGS development.

ICON's operations experience combined with project and controls know-how led to the delivery of the project on time and within budget.



Completed XAGGS flowline with the Xyris South field in the background.