Kurri Kurri Lateral Pipeline Project

OIL/GAS | SEWER | STORMWATER | POWER | WATER | TELCO

PROJECT OVERVIEW

The overall project involved the design and construction of seven separate crossings, totaling to 5.9 kilometres of 14-inch steel pipe installed that ultimately assisted in tying in the gas transmission line from the Sydney to Newcastle pipeline (Plumpton to Hexham Northern Trunk) to the Hunter Power Project. Utilising HDD as the installation methodology allowed the pipeline to pass underneath several creeks, roads, sensitive flora and fauna zones and cultural heritage areas whilst ensuring that these sensitive environments remained undisturbed.

LOCATION
Kurri Kurri
New South Wales

CLIENT
Spiecapag Australia

PIPE
350mm steel

GEOLOGY
Sandstone, mudstone, coal & clay

LENGTH
Total length
5.9 kilometres

TECHNIQUE
HDD

SCOPE OF WORKS

UEA was engaged by Spiecapag Australia as the sole HDD contractor to deliver this multi rig project consisting of seven separate crossings. The total length installed via HDD was 5.9 kilometres, with the individual bore lengths ranging from 400 metres to 1,230 metres, and two of the respective bores included a drilled mud return line in addition to the main line. A combination of a Herrenknecht 250C, a Vermeer D330 and a Vermeer D300 were utilised across the two HDD crews to seamlessly execute this technically challenging project.

In collaboration with Future-Proof Solutions, both parties brought APA Group's concept designs to fruition, successfully delivering seven compliant profile and alignments and associated calculation documentation.

Highside Drilling were engaged as the designated steering subcontractor with a combination of Partarack 2 and Gyro deployed across the project as the designated method of tracking, in order to ensure all pilots were accurately steered in accordance with the design.

KEY PROJECT HIGHLIGHTS

- ✓ All seven crossings were compliant with APA's HDD Specification.
- ✓ Utilisation of a dual rig spread to ensure borehole ownership in unfavourable formations.
- ✓ Utilisation of a dual rig spread to manage drilling fluid, eliminating the requirement of a drilling fluid return line.
- ✓ Deployment of Vector Magnetics Paratrack Gyro model ensured the 1,230 metre bore was delivered in accordance with the set tolerances and that the sensitive environmental area remained undisturbed by the construction activity.
- ✓ Successful revised methodology developed and executed due to an unexpected cultural heritage find along the pipeline alignment.