



METHANEX NZ

DISTILLATION PLANT TURNAROUNDS – D3/D4 MOTUNUI, TARANAKI, NEW ZEALAND





The Opportunity

In September 2013 the Motunui Major Projects (MMP) team executed plant turnarounds on the Distillation D4 and D3 plants at the Methanex NZ Ltd Motunui production facility. The plants had been operating since the restart projects in 2011 and 2012. Methanex had planned these turnarounds over the previous 12 months, procuring from Fitzroy a number of replacement heat exchanger tube bundles. Fitzroy Engineering supervisors filled the construction planning roles prior to the turnarounds. Fitzroy were awarded the contract to execute the mechanical work packs, including erection and dismantling of scaffolding.

The Project

The project award was based on agreed reimbursable rates, with Methanex employing a dedicated Turnaround Manager to liaise with the Fitzroy team.

The turnaround schedule was based on the defined scope of work, and included a small weather contingency. Work was sequenced to execute the D4 turnaround, allow Methanex to complete start-up, and operate reliably prior to executing the D3 turnaround.

Emergent work was identified and accommodated during the turnarounds, with scope growths of 16% and 15% respectively.

Repeating the work scopes in close succession provided an opportunity for lessons learned, and resulted in an improved efficiency of the second turnaround.

The project structure required the Fitzroy team to interface with specialist contractors at all levels, including inspection, NDE, scheduling, crane services and bundle pulling. HSE staff were included in the Responsible Care (RC) team, representing Methanex and providing advice to the wider project team.

Key Features

- Successful turnarounds completed in 26 and 24 days respectively
- Fitzroy managed the construction planning
- Flexible approach, with supervision and site services supplied to suit project demands
- Fabrication support from Fitzroy's workshops
- Site Manhours approx 58,000
- Project value approx. NZ\$5M
- Total Recordable Injury Frequency Rate (TRIFR) of 0



Distillation Plant – Heat Exchanger Assembly



Distillation Plant – Cranes positioned for lifting equipment in/out

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