

CASE STUDY

Mangahewa E Wellsite

OUR CLIENT:	Todd Energy Limited
INDUSTRY:	Oil and Gas
VALUE:	NZ\$150K
OVERVIEW:	<p>Mangahewa E is a greenfield wellsite comprising four wells and two processing trains, each with High Integrity Pressure Protection Systems (HIPPS).</p> <p>The output of the wellsite is via two multiphase pipelines through the Mangahewa C wellsite back to the Mangahewa Gas Plant.</p>
ENGINEERING:	<p>ECL TÜV certified functional safety engineers utilised two Hima HIMatrix F60 SIL3 rated Safety PLCs to implement, test and commissioning the required functionality. One HIMatrix F60 PLC was used for Process Safety and the other for the processing trains HIPPS.</p> <p>A Delta V DCS node was added for the wellsite from the existing McKee & Mangahewa Safety and Control Systems.</p> <p>Worley Parsons provided documentation for the general requirements of the configuration, system integration, testing and documentation for the Process Control System (PCS) and the Safety Instrumented System (SIS).</p> <p>A fully integrated Factory Acceptance Test (FAT) was completed at the ECL offices before the start of commissioning.</p> <p>The commissioning was staged as each of the four wells became available.</p> <p>ECL supplied the relevant documentation to be compliant with QHSE requirements.</p>

- Commissioning of the wellsite was completed on time, within budget, with no lost time incidents.
- The wellsite is now in full production, with all four wells available to Todd Operations.

