

CASE STUDY Mangahewa D Wellsite

OUR CLIENT:	Todd Energy Limited
INDUSTRY:	Oil and Gas
VALUE:	NZ\$150K
OVERVIEW:	Mangahewa D is a greenfield wellsite comprising four wells and two processing trains, each with High Integrity Pressure Protection Systems (HIPPS). The output of the wellsite is via two multiphase pipelines through the Mangahewa Gas Plant.
ENGINEERING:	 ECL TÜV certified functional safety engineers utilised a Hima HIMax SIL3 rated Safety PLC and two Hima HIMatrix F35 SIL3 rated Safety PLCs to implement, test and commissioning the required functionality. The HIMax PLC was used for Process Safety and the two F35 PLCs were used for the processing train HIPPS. A Delta V DCS node was added for the wellsite from the existing McKee & Mangahewa Safety and Control Systems. Plant and Platform 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). A fully integrated Factory Acceptance Test (FAT) was completed at the ECL offices before the start of commissioning. The commissioning was staged as each of the four wells became available. ECL supplied the relevant documentation to be compliant with QHSE requirements.

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.





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