CASE STUDY

PROJECT WASH BAY WASTEWATER RECYCLING FOR OILFIELD SERVICES EQUIPMENT DEPOT

PRODUCT Dissolved Air Flotation and Multimedia Filtration

INDUSTRY Oil and Gas

LOCATION Jandakot, Western Australia

mak water
water | wastewater | sewage

BACKGROUND

Schlumberger, one of the world's leading providers of technology for reservoir characterisation, drilling, production, and processing to the oil and gas industry, contacted MAK Water to design and manufacture a water recycling system for their new facility. Two separate equipment washbays, with differing waste streams, required two separately designed systems to achieve the strict treated water quality requirements.

A customised Dissolved Air Flotation (DAF) plant was required for the main equipment washbay and a customised Multimedia Filtration (MMF) plant was required for the pressure test bay. A high level of plant customisation, technical capabilities and experience was required to achieve the complex treated water quality requirements.

SOLUTION

- Custom design and manufacture of a 1,500 L/h skid mounted Dissolved Air Flotation (DAF) plant for the equipment washbay and a Multimedia Filtration (MMF) plant for the pressure test bay
- MAK Water undertook bench testing of water samples to confirm the optimal treatment process
- DAF system included pH adjustment, flocculent and polymer dosing, and specific dosing for barium removal, pH neutralisation and multimedia and carbon filtration with chlorine sterilisation for recycling
- MMF included carbon and cartridge filtration with chlorine sterilisation for recycling
- Supply and onsite installation of interconnecting pipework and electrical
- Fast 10-12 week delivery time
- Onsite commissioning and training of local operators, with an ongoing service and maintenance agreement

The dissolved air flotation plant on site

The multimedia filtration plant on site

RESULTS AND BENEFITS

- **Quick response**. Delivered on time and on budget to meet the required client specifications
- **Technical Expertise**. MAK water provided in-house process design and ongoing technical support
- **Compliance.** Maintains compliance with the strict treated water quality requirements