

Instrumentation & Monitoring and Hydrometry Capability



WJ are I&M and hydrometric experts combining a global reach with local expertise and an impressive track record



Our Team

WJ UK employ over 70 staff so you can rest assured we have the numbers, knowledge and experience required to deliver your project.

Our I&M and hydrometric staff are all competent, CSCS, professionally qualified and experienced engineers and technicians.



WJ UK and its staff are active members of the ADA, CIWEM and British Hydrological Society









Water Statutory Surface Groundwater Dewatering & Management Permitting & Water Recharge Depressurisation Designs Licencing Control Water Pumping & Water Hydrological Passive Design & Treatment Hydraulic Management Modelling Consultancy Relief Design **Balance Tests** & Testing Thermal Permanent In-tunnel Well I&M Well Response & Remediation **Pumping Plant &** Drilling & Drilling Loop Pressure & Treatment Drilling Controls Fit-Out Probing Tests 1&M & Hydrometry Water, Dewatering Instrumentation GSHP Open & Environmental Weather & Pump & Treat Well & Monitoring Closed Loop Services Flow Drilling (I&M) Drilling Monitoring Environmental Data Geotechnical Water Sampling Water Supply Surveys Visualisation Monitoring & In-situ Testing Well Drilling



Hydrometry

We currently operate a network of over 1000 telemetered or standalone continuous flow, level, water quality and weather monitoring sites, and carry out spot flow and quality measurements at many more. Our service capability includes the following:

- Continuous Monitoring Sondes
- Water Level (fully grouted VWP's, VWT's, diver data loggers and baro dataloggers)
- Rainfall Gauges & Weather Stations
- Manual download and telemetry options available (RF nodes and 3G/4G)
- Impeller, Electromagnetic & Acoustic Doppler Flow Monitoring











Water Sampling & Testing

WJ undertake routine baseline, compliance and emergency response groundwater and surface water sampling on numerous sites across the UK.

- Borehole & Surface Water Sampling (bladder pumps, peristaltic pumps, bailers and grab samplers)
- Field Testing using portable multiparameter meters and flow through cells (pH, EC, ORP, DO, Turbidity, Temperature etc)
- Chemical Water Sample Testing for a full range of chemical and microbiological determinants using UKAS accredited Laboratories









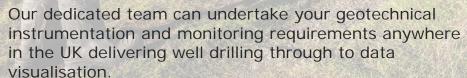


Geotechnical Monitoring













I&M Well Drilling Services

WJ UK operate 8 no. specialist drilling rigs capable of drilling I&M (Water Level & Gas Monitoring, Inclinometer and Datum) Wells from 100mm (4") up to 300mm (12") diameter and ranging up to 200m in depth.

At WJ we continually invest in our drilling crews, rigs and ancillary equipment to ensure we remain at the forefront of our industry.





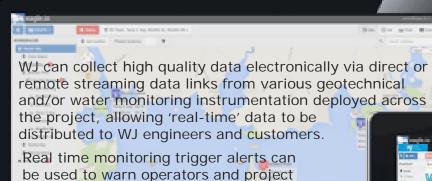




Data Visualisation

teams of problems such as pump failures, power supply issues and preset (project specific) trigger alert thresholds to ensure early action is taken to minimise disruption to the

project and reduce risk



Data can be easily accessed or transferred via API interface into other systems as required. Data can be viewed online using our data visualisation platform with preconfigured SCADA, Web GIS and trending screens.







Case Study: HS2 - C2/C3 Groundwater and Surface Water Monitoring

WJ Groundwater Ltd are undertaking extensive hydrometric monitoring for EKFB, covering the entire 80km stretch of the C2/C3 section of HS2. This hydrometric monitoring requires baseline, construction, and post-construction phase monitoring of a network of groundwater and surface water assets for both temporary and permanent works.

Services completed included, water sampling, multi-parameter field testing, laboratory chemical testing, flow surveys, ecology surveys, Instrumentation and telemetric monitoring, data visualisation and reporting.

Project Client: EKFB Project Value: £5.2M

Project Duration: June 2021

to March 2027

17,322
Water Samples tested





396
Sampling Locations





