



# AE YATES

# LLANBERIS WwTW

Deepwell dewatering solution for the construction of a shaft and new humus sedimentation tank

Tel: 01953 454540  
enquiries@stuartwells.co.uk  
www.stuartwells.co.uk

**Stuart Wells Limited**

# Deepwell dewatering system design, installation and abstraction with phased pumping to control the impact of flow and water quality

Stuart Wells was awarded the contract to dewater a 12.5m diameter x 5.9m deep shaft at Llanberis WwTW in Gwynedd. Ground conditions consisted of alluvium fan deposits with coarse sand and gravels overlying the Llanberis slate formation.

Dewatering was operational with the initial commissioning of the pumps discharging in incremental increases of a maximum 20 lts/sec per day with a maximum increase of 5 lts/sec at any stage until the discharge water quality was confirmed. Upon acceptance of the water quality pumping was controlled and water quality monitored to mitigate environmental concerns.



## Objective

The client required a dewatering solution to accommodate varying ground conditions and mitigate environmental concerns to Llyn Padarn and Afon Seiont around 220m from the shaft location. The river also acted as the discharge point for abstracted water.



## Solution

9no x 15m dewatering wells were installed with borehole pumps and the shaft was successfully completed within 6 weeks.

<b>Services</b>	Pumping Testing Deep Well Dewatering
<b>Location</b>	Llanberis, Gwynedd
<b>Industry</b>	Utility
<b>Excavation</b>	5.99m deep