

## Lang Loan Gilmerton, Scotland

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*Client*  
*Persimmon Homes*

*Main Contractor*  
*Van Elle Limited*

*Consulting Engineers*  
*DR Murrays*

*Solution*  
*2233 Boreholes into Coal*  
*718 boreholes into Limestone*  
*12,121 Tonnes of Grout*

*Plant Used*  
*5 Rotary Percussive Drill Rigs*  
*Bulk Mixer*

*Duration*  
*24 Weeks*

*Year*  
*2018*

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Van Elle were selected for this project due to our relevant experience and ability to act as a Principal Contractor. We were required to deliver several boreholes and a significant volume of grout to assist with the multi-seam treatment for a large housing project, including large open limestone workings and mineshafts.

### **Ground Conditions**

The ground was a very soft clay that was overlaying interbedded sandstone/mudstone coal measures and the limestone working associated with the Gilmerton Seam.

### **Key Stats**

Boreholes...	2233 into coal workings
	718 into limestone workings
	12,121 tonnes of grout.

5 Rotary Percussive Drill Rigs were used on the job with water flush when working adjacent to housing. A state-of-the-art bulk mixer delivering up to 300 tonnes of grout per day was used to maximise production.

Large down the hole hammers were used to allow gravel and grout to bulk fill the holes.

As a result, the limestone workings were successfully backfilled.

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