

## Who is Cornish Lithium?

Cornish Lithium is an innovative mineral exploration and development company with over 60 locally based employees, focused on the environmentally responsible extraction of lithium in Cornwall. This exploration project is to assess the potential production of lithium from the geothermal waters and will be supplementary to other projects across Cornwall.

## What are you drilling for?

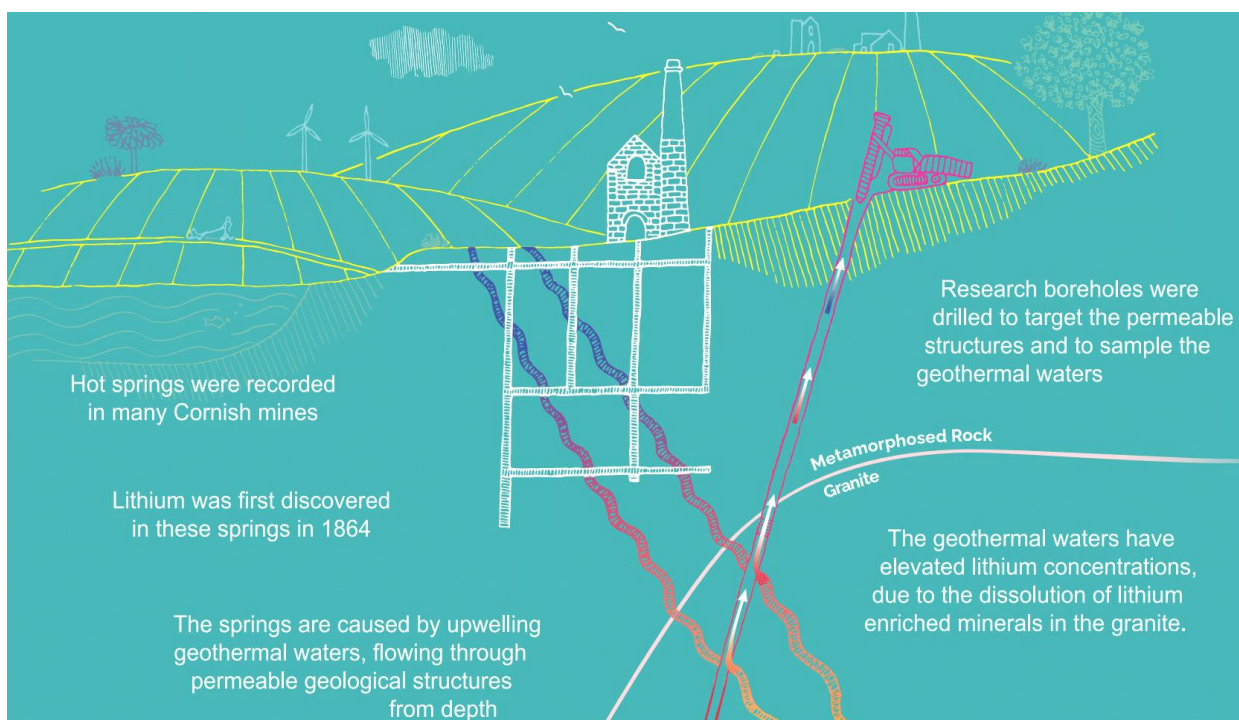
- Cornish Lithium are drilling for lithium contained within geothermal waters
- Lithium is a metal used in batteries for use in electric vehicles and renewable energy storage
- Lithium is dissolved in geothermal waters. These waters circulate naturally in the rock beneath Cornwall
- At present there is no domestic supply of lithium for the UK car industry. This metal is essential as the UK aims for all new vehicles to be electric by 2030, to reduce our carbon emissions and combat climate change

## When are you drilling?

- Cornish Lithium plans to drill an initial research borehole at the Blackwater site commencing in spring 2023
- The programme is expected to last for 6 months, and we are proposing to work 24 hours a day, 7 days per week on 12 hour shifts
- After completing the first borehole, a second one may be drilled if the results are favourable. The second borehole would be slightly larger in width, with a diameter of approximately 8 inches.
- After the drilling programme has finished, further test work will be undertaken to evaluate the lithium potential
- The borehole will be drilled by experienced contractors Priority Drilling Company Ltd., who drilled Cornish Lithium's previous exploration boreholes and several similar boreholes across Cornwall

## Why Blackwater?

- Blackwater has been identified as a highly prospective area to explore for lithium in geothermal waters from Cornish Lithium's extensive digital model of the geology in Cornwall
- In 2022 Cornish Lithium drilled a research borehole at Twelveheads, which is in the process of being deepened to c.2,000m (6,500 ft) which confirmed that the geothermal waters are significantly enriched in lithium
- To build on the knowledge gained at Twelveheads and to gain a better understanding of the area's geology, Cornish Lithium plans to drill a 2,000m (6,500 ft) deep borehole at Blackwater to explore the lithium potential of the geothermal waters
- Rock core will be recovered from the initial borehole, which will be used to identify the location of naturally permeable structures in the rock that geothermal water is flowing through and can be extracted from
- A borehole pump will be used to obtain water samples from these geological structures, which will be analysed for their lithium concentration



*A cross-section through a drilling site, showing how we plan to sample geothermal waters.*

## How will this affect me?

### Noise

- The noise of the drill rig is similar to a moving HGV when stood directly by the rig, which reduces with distance. The location of the rig has been carefully selected to minimise noise impact
- The maximum noise limits are set by Cornwall Council based on background noise surveys taken before drilling, and monitored throughout
- We will take extra measures to minimise noise, especially at night and weekends. Noise barriers will be used to reduce noise levels when needed

### Traffic

- The location is close to the A30, and a traffic management plan will be used for light vehicles throughout the programme and for when the drill rig arrives and leaves the drill site to avoid disruption to local traffic; this will be communicated to the local community well in advance

### Surface Impact

- The borehole will be drilled using a small mineral exploration rig (see photo from Cornish Lithium's 2022 drill site)
- The drillhole/s will be safely capped after use
- After drilling the initial borehole, the results will be reviewed and this may result in a second borehole being drilled within the same programme
- The potential to generate geothermal heat from these boreholes will also be reviewed in the future
- To ensure safe access to the site the gateway may need to be widened, this will be complete under the guidance of ecologists to ensure minimum disruption to the natural habitat
- Groundworks to prepare the site will be carried out after an ecological survey of the area has been completed

### Light

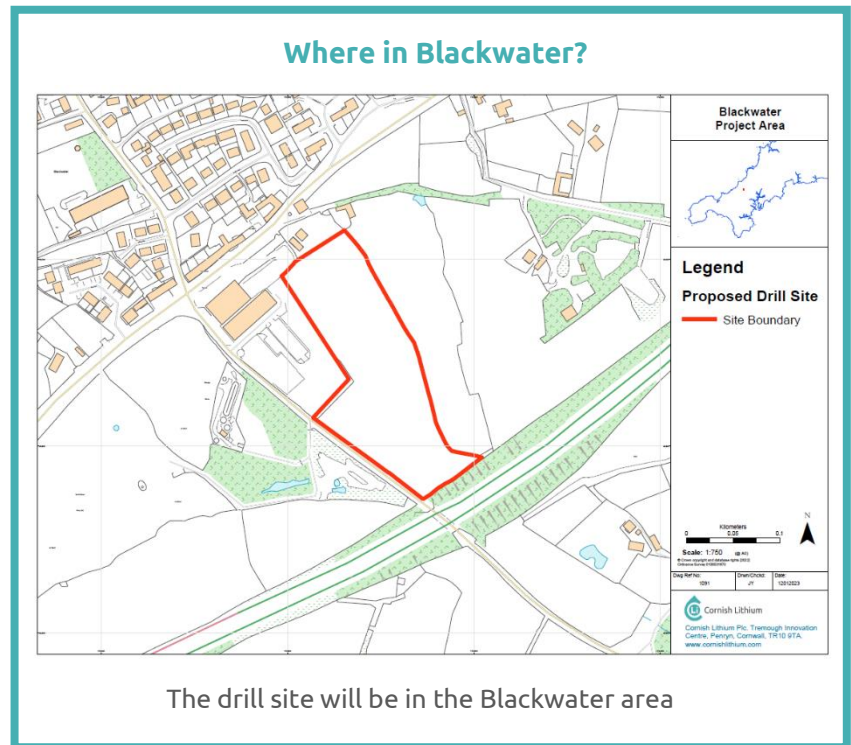
- The drill site has been specifically selected for its location away from residential properties and sensitive habitats
- The programme will follow recommendations from ecologists to minimise light pollution to nearby dwellings and habitats

### Dust and mud

- The drilling method uses water to minimise the production of dust
- Any dust which might be created by vehicles will be suppressed with water as necessary
- The site will use gravel to minimise the amount of mud leaving the area

### Permissions

- Agreements are in place between Cornish Lithium and the landowners, as well as the relevant mineral owners. The drilling will be carried out under a General Permitted Development Order, which will be granted by Cornwall Council



### Contact Us

If you would like more information or have any concerns, please contact the Cornish Lithium drilling team using the contact details below:

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