Case Study
One New Change

Play in the City

Landsec

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Technical & Operations Director
GI Energy/ESB

Rig setup

Hand dug pilot hole

Lifting casing into place

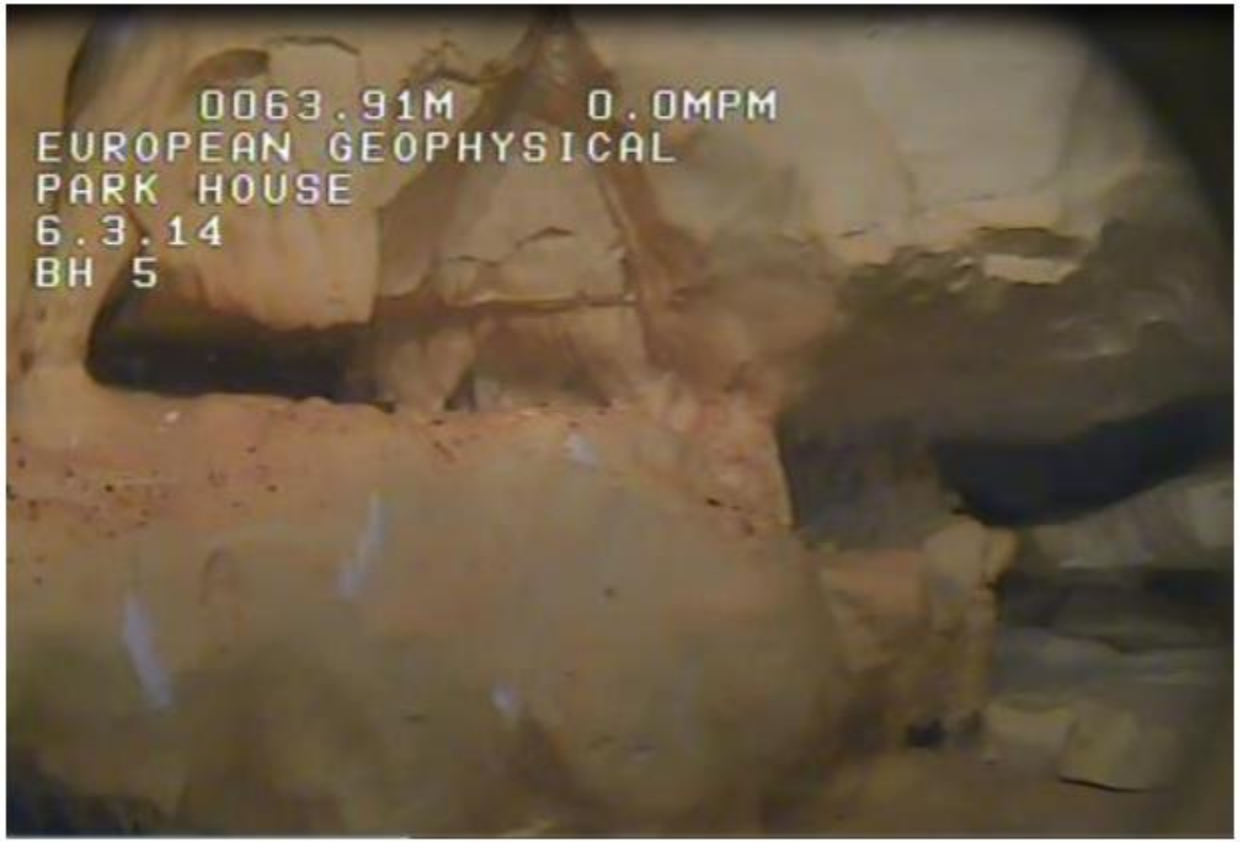
Depth 20m
General view of casing above water table

Depth 54.24m
Water level in well
Bottom of casing 54m

Depth 56.6m
Well wall consists of chalk with flint nodules and ledges

Depth 57m
Open fissures. Brown sand lying on ledges and fissure planes.

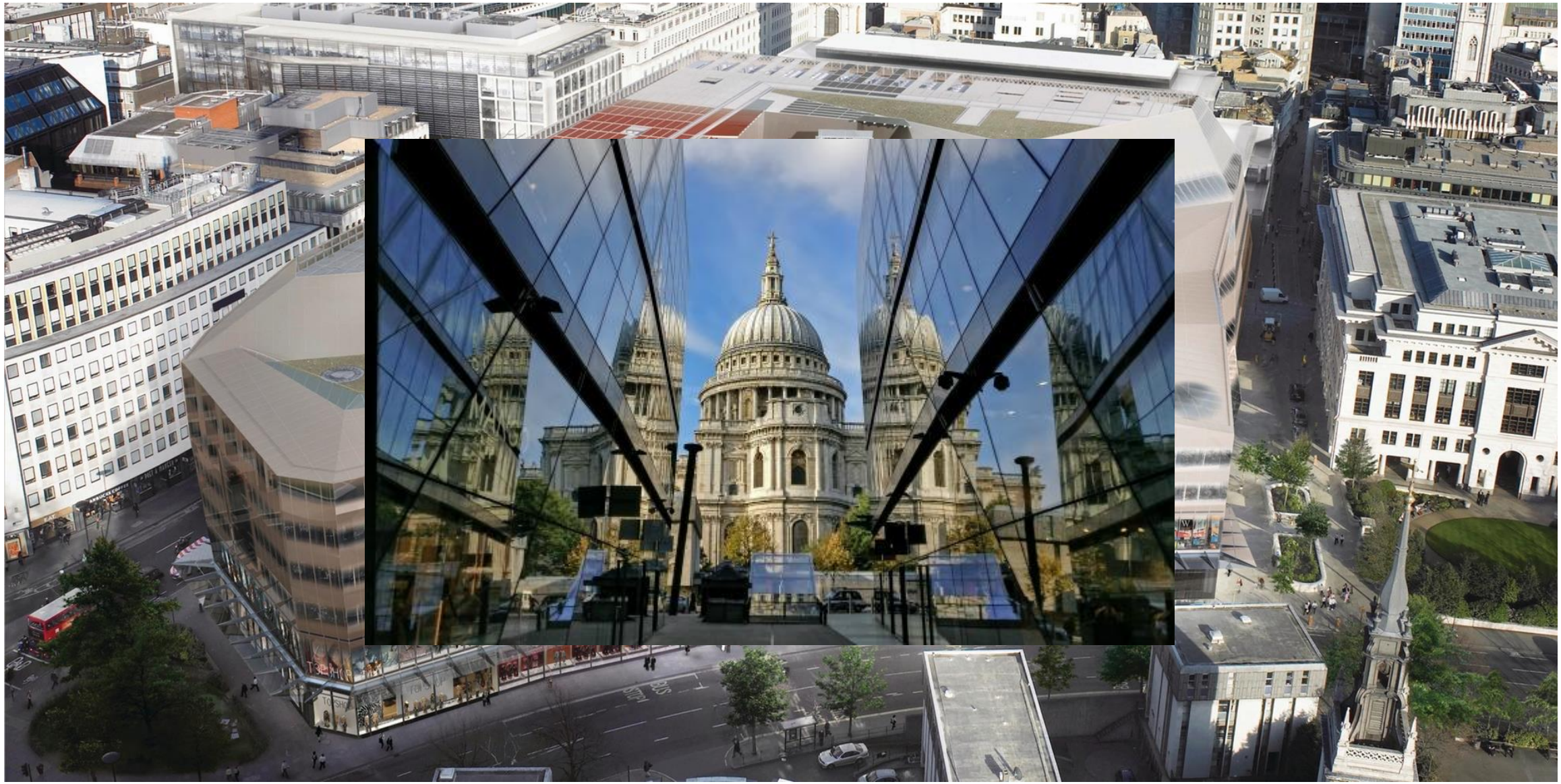
Depth 64m
Light orange discolouration in and around fissures in the chalk



Depth 57.7m
Iron staining from nodule associated with fissure. Sand sized grains, possible iron precipitate, on horizontal ledges.

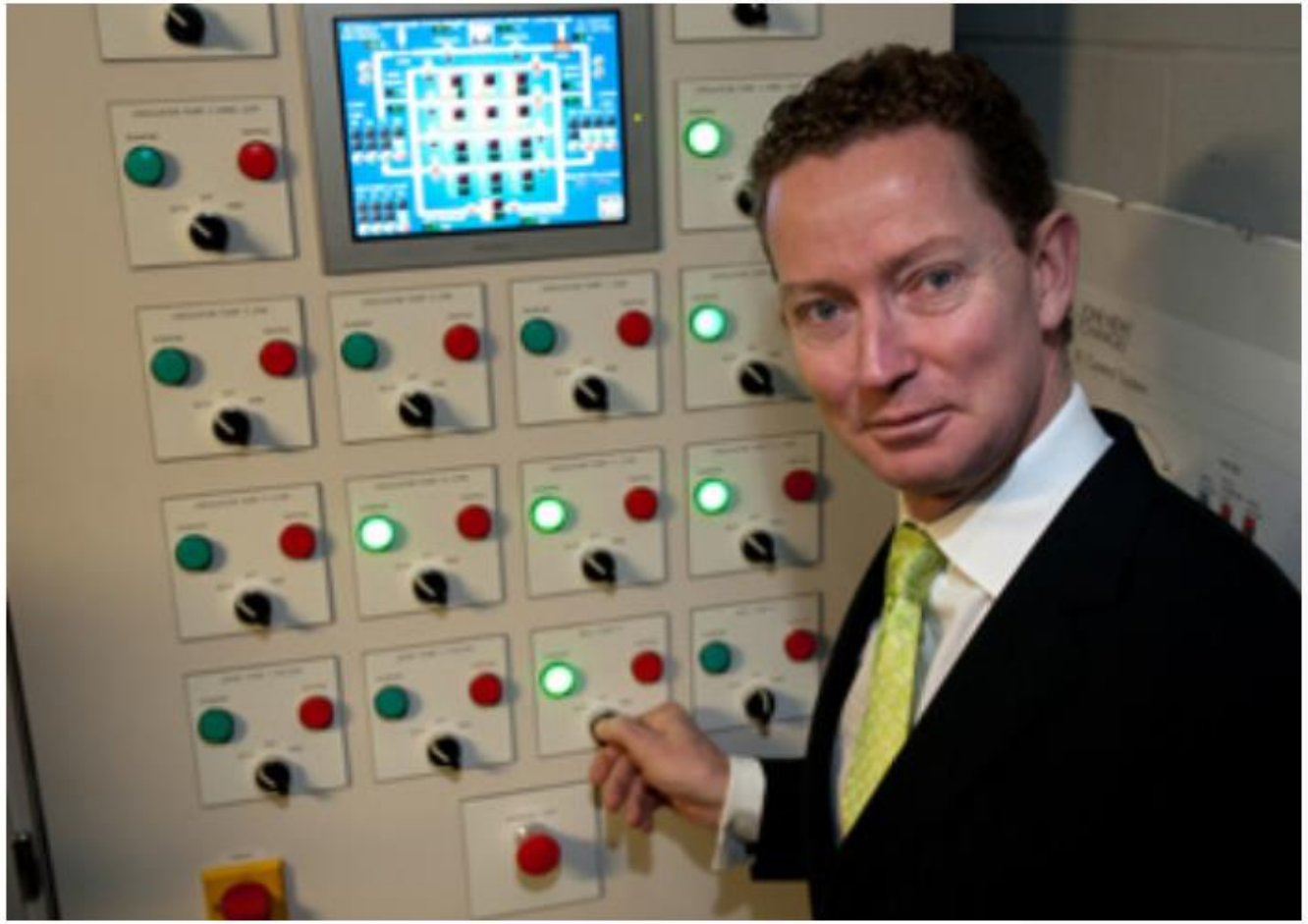
Depth 58m
Flint ledge in chalk face.

Depth 125m
Good visibility to the bottom of the well at 127m.

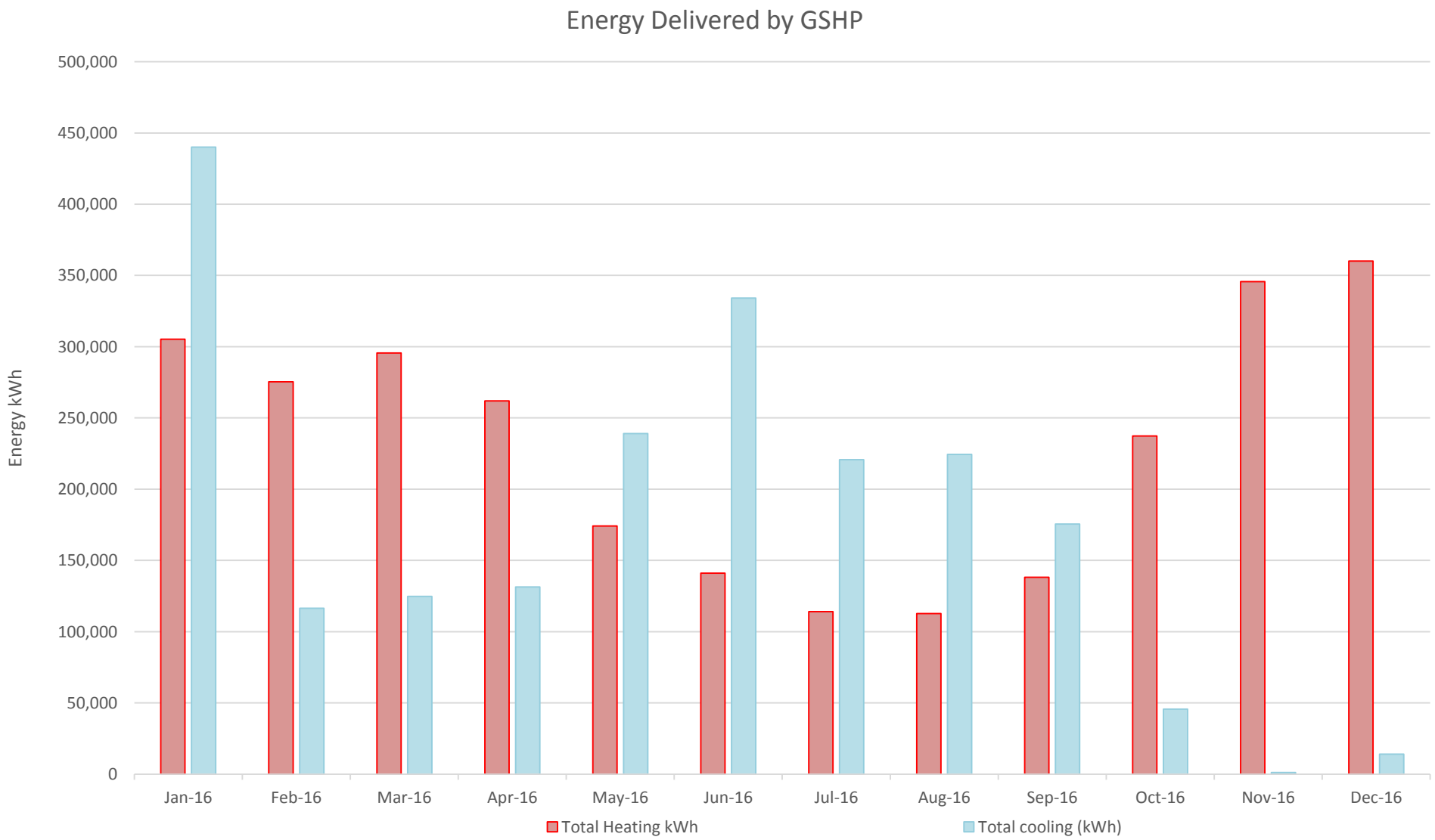


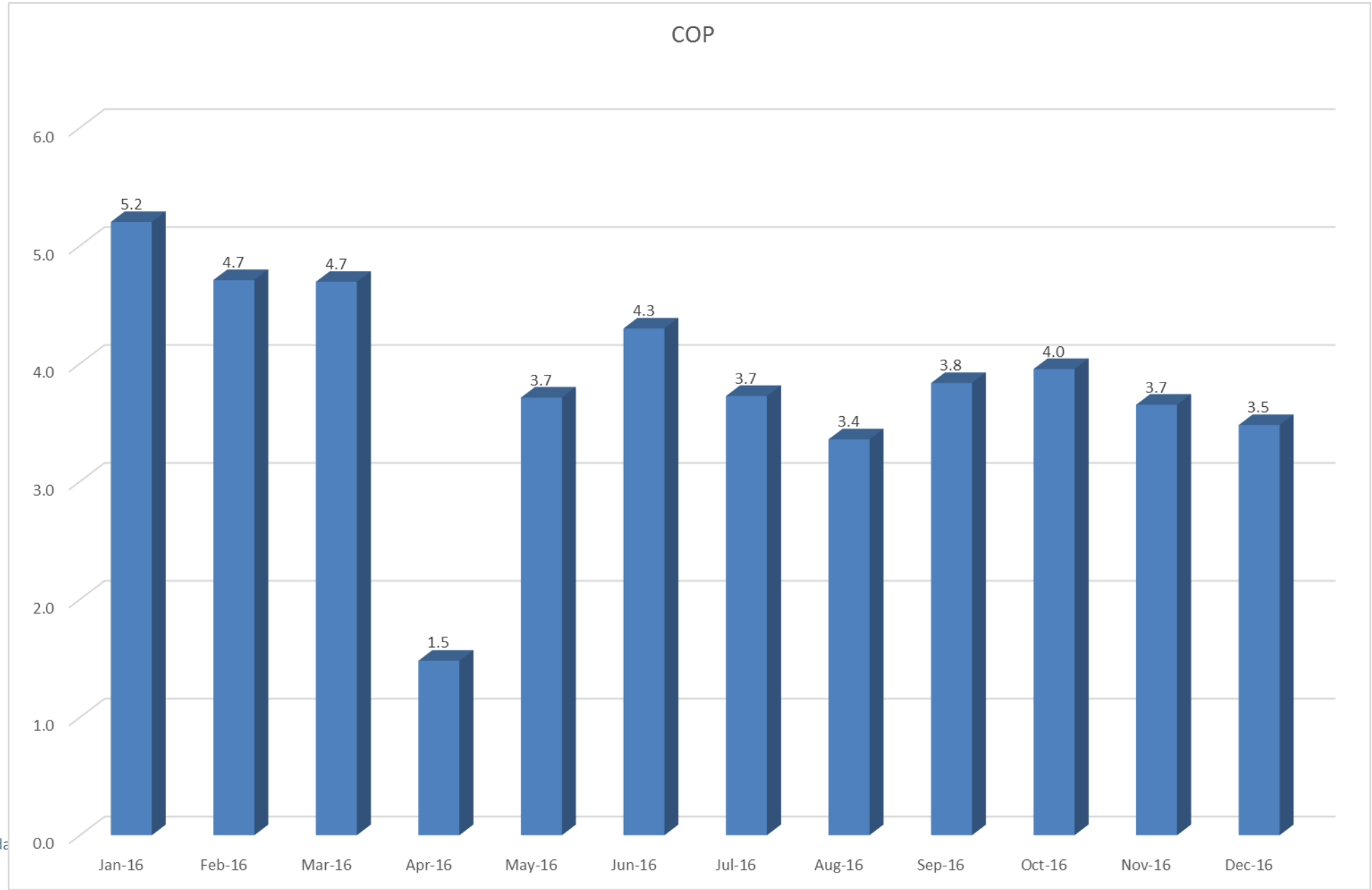
Key Facts

- Ground Source Heat Pump System
- Energy Piles™ (1.5MW)
- Open Loop (min. 600kW)
- Hybrid System
- Up to 2,300 kW Cooling
- Up to 2,400 kW Heating
- Advanced Controls
- 192 Piles up to 45m Deep & 2.4m Wide
- One Pair of Reversible Open Loop Wells
- Completed 2010



Opened by Greg Barker, Minister of State for Climate Change


Energy Delivered by GSHP
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Energy kWh
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Total Heating kWh
Total cooling (kWh)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Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16

Any questions?