PRESS RELEASE

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SURVEY REVEALS MAN'S IMPACT ON LONDON'S SOIL

The largest environmental survey of London's soils has just been completed by scientists at the British Geological Survey (BGS). The survey was carried out to provide baseline information for over 50 chemical elements. It will enable local authorities and others with an interest in the urban environment to assess the health of London's soil, in addition to stimulating and supporting environmental science research. This is the first time that the chemical composition of the soils for the whole of London has been measured, and maps are available to view online.

Few parts of London remain unaffected by human impact through urban development and industrialisation. The London parks are the exception and the surveys reveal they retain their original 'geological footprint' often obscured in other areas of London; our parks remain pristine.

Sampling at the O2, Greenwich, London

Dee Flight, Geochemist at the BGS said "This is the largest urban survey of its kind in Europe. As part of the *London Earth* project over 6200 individual locations were sampled across the entire city including industrial areas, domestic gardens and allotments. We tested these samples for elements such as calcium, lead, iron, copper and nickel which are typical indicators of urban activity. For example, increased levels of lead have been found in central London, most probably reflecting high traffic volumes and the legacy of leaded petrol."

The rocks underlying London are the main source of our capital's soil. The chemistry of these rocks can be detected as a 'geochemical footprint' in the soil. For example, we can clearly see the influence of the chalk, which underlies half of London south of the Thames and contributes to higher than normal amounts of calcium, nickel and cadmium in the soil.

Industries, including those long since vanished, have left their mark in the soils. For example, the northern part of the Lee Valley has a legacy of increased nickel and chromium in the soils. The value of the *London Earth* information is highlighted by the example of Canary Wharf where the area benefited from a clean-up operation before redevelopment. The survey shows that the soil has been reinstated to its pre-industrial condition.

Detailed maps will be freely available on the BGS website as of 13th May. The full dataset which includes nearly 400,000 data points will be available later for those who need it such as Local Authority planners, developers and researchers.

Ends

For further details or to arrange media interviews please contact:

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Notes for Editors

The BGS have carried out geochemical surveys for over 40 years as part of their national strategic geosciences surveying role. Urban geochemical surveys such as London Earth are a speciality of the BGS with past surveys including Glasgow, Cardiff and Belfast. This enables us to put the London Earth urban data in a national context.

The following are available for interview:

- Dr. Mark Cave, Medical Geologist, British Geological Survey
- Dee Flight, Geochemist, British Geological Survey

For additional information go to: http://www.bgs.ac.uk/gbase/londonearth.html

Photographs, maps, map explanations and a fly-through video are available from our ftp server: ftp://ftp.bgs.ac.uk/pubload/cjmi/LondonEarth

The British Geological Survey

The British Geological Survey (BGS), a component body of the Natural Environment Research Council (NERC), is the nation's principal supplier of objective, impartial and up-to-date geological expertise and information for decision making for governmental, commercial and individual users. The BGS maintains and develops the nation's understanding of its geology to improve policy making, enhance national wealth and reduce risk. It also collaborates with the national and international scientific community in carrying out research in strategic areas, including energy and natural resources, our vulnerability to environmental change and hazards, and our general knowledge of the Earth system. More about the BGS can be found at www.bgs.ac.uk.