



REGULAR NEWS AND VIEWS FROM **ROGERS GEOTECHNICAL SERVICES**

> BUILDING CAREERS



ADAM, BRAD AND CAM ON THE ROAD

RESTRICTED SPACE?

GRANNY ROGERS' MUSINGS

TESTING, TESTING

MENTAL HEALTH AT WORK



Welcome to RGS insite issue 58

Our regular newsletter celebrates more than 15 years of drilling and keeps you up to date with RGS and industry news.

Rogers Geotechnical Services Ltd are **site investigation specialists** offering ground investigation and geotechnical services to developers, builders, structural and consulting engineers, architects, insurance companies, local authorities, piling and foundation engineers, private individuals and other geotechnical consultants.

ADAM, BRAD AND CAM ON THE ROAD FOR RGS!

Environmental
Geotechnical
Specialists



Handling projects the length and breadth of the UK means we need to move drilling rigs, compressors, water bowsers, welfare units and other heavy equipment around the country as flexibly and efficiently.

To tow these heavy trailers, drivers must pass a **B+E category test** and we're delighted that our **Assistant Drillers, Adam, Brad and Cam** have all recently achieved this. **Alan Gilleard, RGS Operations Manager**, knows that their success is great for efficiency.

“ Having **additional qualified B+E drivers on the team** means even **greater flexibility** in simultaneously meeting the needs of different clients on multiple sites across the UK. ”



CAM



ADAM



BRAD



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NEW
VEN

As key members of the RGS Fieldworks Team, **Adam, Cam and Brad** have already put their new skills to great use in recent weeks. For example, three important and concurrent projects saw **Rae and Cam in Newcastle** with the Dando rig, **Andrew and Brad in Scarborough** with the Tracker 110 and **Dave and Charlotte in London** with a cable percussion rig.



NEWCASTLE

ON THE ROAD!

CARLISLE

SCARBOROUGH

HUDDERSFIELD

HULL

BURTON-UPON-TRENT

LONDON

RGS OFFICES

RGS FIELDWORKS SITES

Alan adds:

“**Congratulations to Adam, Cam and Brad from all everyone at RGS!** It's **good news for our clients**, our business and of course for the guys' own career development: their **significant step forward** means they'll soon be **fully qualified RGS Lead Drillers**.”

.....
FROM PERTH TO PENZANCE, AND WICK TO WINCHESTER, THE RGS FIELDWORKS TEAM FULFILS YOUR GROUND INVESTIGATION PROFESSIONALLY, EFFECTIVELY AND COST-EFFICIENTLY.

WHY NOT CALL **01484 604354** AND TALK THROUGH YOUR PROJECT TODAY?
.....

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ENVIRONMENTAL
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THE ROGERS ARCHIVE

Granny Rogers' Musings



AN AVID GAMER, GRANNY REGULARLY CHALLENGED BOTH CHARLES AND DIANA TO BRUTAL DONKEYKONG BOUTS BETWEEN REPORTS FROM CAPE CANAVERAL...

You'll no doubt have seen in last month's edition our first Insite encounter with Steve Rogers' mythical granny - a mine of geotechnical knowledge, if ever there were one. Following on from her intriguing tale about the importance of a little c, Steve now brings you another pearl of wisdom from the one and only Granny Rogers.

“ I recall a time not so long ago (around 1981, I'd guess), when Granny Rogers declared, “**You do realise, my lad, that a little phi goes a long way...**” I confess that this confused me a little. “**But Granny,**” I said, “**I thought you'd taught me that it was a little c that went a long way.**” Granny Rogers grinned sagely. “**Ahhh,**” she said, “**but that was an effective stress issue. Now, I'm talking about total stress. You see, sometimes in a quick undrained triaxial compression test, the Mohr circle diagram suggests a significant cohesion, but a small angle of internal friction. If you consider the angle of friction in my old mate Karl's bearing capacity analysis, it'll overestimate the result**”.

I listened intently, wondering why there would be any friction angle in a total stress test. But Granny R had spotted my puzzled frown. “**You see,**” she said. “**if the sample was not fully saturated, dilation on the failure plane would produce partial effective conditions - hence the phi value!**” She chewed on a garibaldi with her few remaining teeth, then leaned towards me with a knowing smile, “**It's best to ignore the phi value, Steve. Just add the three shear strengths together and divide by six and you've got your cohesion. Simple!**”

Just then, her care worker came in. She asked me if I knew of someone called **Karl Terzaghi** as Granny kept saying she'd taught him everything he knew. I reassured her that KT was the acclaimed **Father of Soil Mechanics** and that there were no shenanigans. ”



Dr. E. Rogers
Tergazi Suite
Lower Ground Floor
Shenanigans Home for the Geotechnically Gifted
RGS15 GR8



THE RIGHT TOOLS

Ever needed a ground investigation where space or access is restricted?



A drilling rig is a remarkable piece of geotechnical kit, but sometimes, a job demands something on a smaller scale to get the job done. Where the ground to be sampled is in a **tight space**, has limited headroom or where access with a full rig is simply not possible, we have excellent alternative solutions.

A HAND AUGER can bore disturbed or undisturbed soil samples. Its sharp sampler blade can readily penetrate **stony, gravelly** or **compacted soils** and is especially useful in small spaces, both outdoors and in.

HYDRAULIC HAND SAMPLING is a valuable option where **access prohibits the use of a rig**, but where **undisturbed** samples must be extracted from challenging ground conditions.

CUT-DOWN RIGS are ideal allies for **deeper sampling** in restricted spaces. They are full rigs which can be stripped down for portable use. We use our cut-down windowless sampling rig for shallower depths and predominantly to gain samples for environmental testing, while our cut-down cable percussive rigs excel in water-bearing soils (eg sands and gravels) and in alternative sampling (U100s and UT100s). These versatile cut-down rigs have been invaluable in locations such as **multi-storey car parks, domestic cellars** and **commercial basements**, achieving **first-rate results** in these challenging locations.

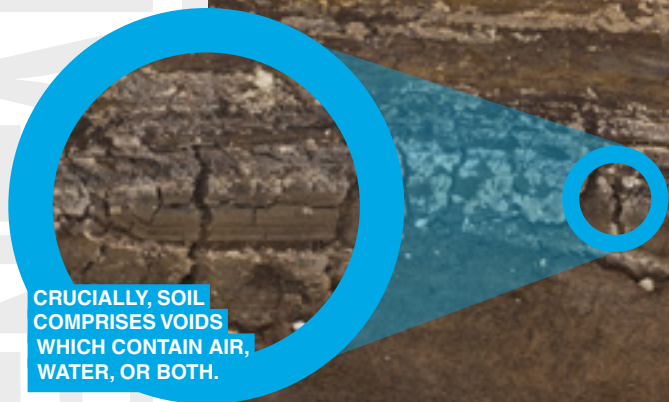
**NO MATTER THE SIZE, POSITION OR LOGISTICS OF YOUR SITE,
JUST CALL OUR HELPFUL TEAM ON [01484 604354](tel:01484604354)
FOR THE GEOTECHNICAL ADVICE AND EXPERTISE YOU NEED.**



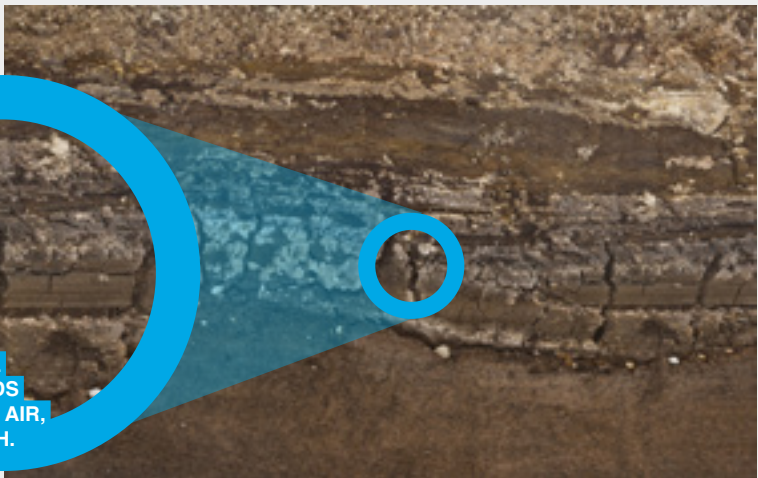
INDUSTRY STANDARDS

Testing, Testing...

Environmental
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CRUCIALLY, SOIL
COMPRISES VOIDS
WHICH CONTAIN AIR,
WATER, OR BOTH.



Last month's Insite saw the start of a series of features on some of the [key tests and analyses](#) that we carry out in our [UKAS accredited Soils Laboratory, here at RGS HQ](#). Having launched the series with the [Index Properties \(IP\)](#) and [Particle Size Distribution \(PSD\)](#) tests, we're now taking a closer look at another geotechnical procedure that generates fundamentally important information for most site investigations.

THE MOISTURE CONTENT TEST

One of the most important tests we run in the laboratory determines the moisture content of a soil. A soil's moisture content (MC) is regarded as the **fundamental property affecting its behaviour** (for example, its permeability, compaction, shear strength and bearing capacity). Therefore, understanding this value both **in situ and under laboratory conditions** is an important basis for soil classification and any further investigations.

A soil sample is made up mostly of solid mass, but crucially it also comprises **voids which contain air, water, or both**. When a soil is saturated, all the voids are fully filled with water. Conversely, when all free water is removed from a sample, these voids contain only air. In the natural state, a soil sample is never completely dry because **'water of hydration'** is contained within its solid particles.

A soil's MC is defined as the percentage ratio of the mass of water to the dry mass of solids. To measure MC in the lab, we expose the soil sample to temperatures that evaporate the water, usually in a temperature controlled oven (BS 1377 method) or, purely for rapid reference checking, in a microwave (non-standard method).



The MC test may seem very simple, but it acts as a **solid foundation** beneath most of the geotechnical testing that we carry out.



INSITE ISSUE 58



NEED SOIL TESTING EXPERTS? OUR SKILLED AND EXPERIENCED LAB SPECIALISTS OFFER A WIDE RANGE OF HIGHLY ACCURATE AND UKAS-ACCREDITED TESTS AND ANALYSES.

ALL OUR WORK IS COMPLETED QUICKLY, PROFESSIONALLY AND COST-EFFICIENTLY.

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a **phase one environmental
desk study report?**

RGS STANDARD **RGS PREMIUM**

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discuss your options for this service

> GEOTECHNICAL <



November is...
men's mental health month!



Inspired by the Movember Foundation's work on men's mental health and suicide, the UK-based Mental Health Foundation (MHF) runs a regular **men's mental health month** campaign throughout November.

The MHF campaign aims to help men to find their way towards better mental health, and suggests a number of great initiatives that you and your colleagues could try out this month:

// MESSAGE A MATE

We've all got male mates we've not spoken with for a while, and with lockdown in place, it's a tougher time than ever for those who are **going through hard times**. Just give them a call. Or send them a message.

Show you care – that you're there for them if they need you. Simply talking to someone who's got your back can be the first big step towards recovery.

// HOST A VIRTUAL 'CURRY & CHAAT'

You could either cook a shared recipe with a group of mates, or '**cheat chaat**' by ordering from your local takeaway. Whichever you choose, get together via Zoom (other virtual meeting channels are available!) and create a safe space for men to talk, listen and support.



// WEAR THE MHF'S GREEN RIBBON

This **green ribbon pin badge** is a proud symbol of mental health awareness. For the price of a cuppa, you can show your support for the charity's crucial work and that you're willing to listen.



// BE PART OF THE CONVERSATION

Tag the MHF and use **#PinItForMensMentalHealth** on Twitter, Facebook and Instagram.

[Click here](#) to find out more from the Mental Health Foundation website and get involved!

For more information about your investigation requirements please don't hesitate to contact us.

[Telephone on 01484 604 354](tel:01484604354)

[Click here to email us](#)

CLIENT FEEDBACK

Talk to us

“ RGS were professional and courteous throughout the whole process. Highly recommended! ”

We're always keen to hear **what clients think** of our service and welcome feedback from our clients, colleagues and associates.

We're looking forward to hearing from YOU!

[Click here](#) to email us your comments

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