



**GEOTECHNICAL
EXPLORATION
SERVICES
COMPANY PROFILE**

BOREHOLES ARE OUR BUSINESS



GEOTECHNICAL
EXPLORATION
SERVICES

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INTRODUCTION

GEOTECHNICAL EXPLORATION SERVICES (GES) IS THE DIVISION OF DRILCORP DEDICATED TO PROVIDING HIGH QUALITY PROFESSIONAL DRILLING, SAMPLING AND TESTING SERVICES TO THE MULTI-FACETED GROUND INVESTIGATION SECTOR OF THE UK DRILLING MARKET.

WE OPERATE THROUGHOUT THE UK WITH A NATIONWIDE CLIENT BASE COMPRISING GEOTECHNICAL CONSULTANTS AS WELL AS SPECIALIST EXPLORATION, GROUND SOURCE AND DEWATERING CONTRACTORS, GOVERNMENT AUTHORITIES AND MANY MORE.

WE OWN A FLEET OF DRILLING RIGS COMPRISING ROTARY, CABLE PERCUSSION AND DYNAMIC PROBING MACHINES AS WELL AS A WIDE RANGE OF ASSOCIATED IN-HOLE DRILLING AND SAMPLING EQUIPMENT.

WE HAVE AN ASSORTMENT OF SPECIALIST EQUIPMENT INCLUDING OUR UNIQUE REMOTE CONTROLLED TRACK MOUNTED COMPRESSORS, CCTV SURVEYING EQUIPMENT, VERTICALITY SURVEYING TOOL AND A RANGE OF PACKERS.

WE RUN FOUR CONTROL SYSTEMS WITHIN THE COMPANY KNOWN AS QEST (QUALITY, ENVIRONMENTAL, SAFETY AND TRAINING) AND HAVE DETAILED WRITTEN POLICIES FOR EACH SYSTEM ENSURING THAT EVERYONE WITHIN THE COMPANY IS AWARE AND COMPLIANT WITH ALL OF OUR PROCEDURES.

WE HOLD THE FOLLOWING ACCREDITATIONS AND MEMBERSHIPS;

- ISO 9001
- ACHILLES UVDB
- FORS BRONZE
- CHAS
- SAFE CONTRACTOR
- CONSTRUCTIONLINE
- SMAS
- ALL SSIP SCHEMES
- CONSTRUCTING BETTER HEALTH
- OCCUPATIONAL HEALTH MEDICAL SCREENING.
- MEMBER OF THE BRITISH DRILLING ASSOCIATION
- MEMBER OF WELLDRIILLERS ASSOCIATION
- MEMBER OF THE NATIONAL GROUNDWATER ASSOCIATION
- MEMBER OF THE INTERNATIONAL ASSOCIATION OF HYDROGEOLOGISTS

OUR OPERATORS ARE NVQ LEVEL 2 IN LAND DRILLING QUALIFIED AS WELL AS HAVING CERTIFICATION FROM DRILCORP'S COMPREHENSIVE IN-HOUSE TRAINING SYSTEM.

THE KEY MOTIVATION WITHIN THE GES TEAM IS TO PROVIDE AN UNRIVALLED LEVEL OF SERVICE TO CLIENTS DELIVERING ALL THEIR NEEDS IN A TIMELY, PROFESSIONAL AND COST EFFECTIVE MANNER. OUR CLIENTS RECEIVE TYPED DAILY DRILLING REPORTS ELECTRONICALLY EVERY MORNING FOR THE PREVIOUS DAY'S OPERATIONS (COMMUNICATIONS PERMITTING).



SOME SPECIFIC SERVICES



ROTARY DRILLING



CABLE PERCUSSION
DRILLING



DYNAMIC PROBING



IN-HOLE DRILLING
EQUIPMENT



SPECIALIST EQUIPMENT

ROTARY DRILLING

ROTARY DRILLING METHODS CAN PENETRATE ALL FORMS OF STRATA FROM LOOSE SUPERFICIAL DEPOSITS TO VERY HARD BEDROCK. THERE ARE MANY VARIED DRILLING TECHNIQUES TO CATER FOR DIFFERENT TYPES OF STRATA. A FLUSHING MEDIUM IS NEEDED TO CLEAR THE DRILL CUTTINGS, LUBRICATE THE DRILL BIT AND IN SOME INSTANCES TO STABILISE COLLAPSING STRATA. FLUSHING MEDIUMS MAY BE; AIR; AIR MIST; FOAM; WATER AND VARIOUS MUD/POLYMERS.

GES HAS A FLEET OF ROTARY TOP DRIVE DRILLING RIGS MOUNTED ON BOTH TRUCK AND TRACKS. ALL RIGS ARE FULLY CERTIFIED AND COMPLY WITH LOLER AND PUWER REGULATIONS AND ARE APPROPRIATELY GUARDED ACCORDING TO GUIDELINES. OUR MACHINES ARE REGULARLY SERVICED IN OUR WELL-EQUIPPED WORKSHOPS AND ALL MAINTENANCE RECORDS ARE KEPT DIGITALLY.

THE DRILLING FLEET HAS A HOISTING CAPACITY RANGING BETWEEN 4000KG AND 12000 KG AND IS ABLE TO DRILL VERTICAL AS WELL AS INCLINED BOREHOLES UP TO 300MM DIAMETER. OUR COMPACT RUBBER TRACKED RIGS ENSURE THAT WE CAN ACCESS RESTRICTED LOCATIONS AND MOVE OVER SENSITIVE TERRAIN WHILE CAUSING MINIMAL SURFACE DAMAGE.

WHILE ABLE TO CARRY OUT THE FULL RANGE OF DRILLING, TESTING AND SAMPLING PROCEDURES WE ARE PARTICULARLY SPECIALISED IN GEOPOR SCORING AND HAVE COMPLETED FULLY CORED BOREHOLES UP TO 500MTR DEPTH.

OUR OPERATORS ARE NVQ LEVEL 2 IN LAND DRILLING QUALIFIED AND ALSO HOLD IN-HOUSE COMPANY CERTIFICATION THAT THEY ARE FULLY TRAINED AND COMPETENT TO OPERATE OUR MACHINES.

CABLE PERCUSSION

CABLE PERCUSSION, OFTEN REFERRED TO AS 'SHELL AND AUGER' IS A REGULARLY USED DRILLING TECHNIQUE IN THE GEOTECHNICAL INVESTIGATION INDUSTRY MAINLY FOR PENETRATING AND SAMPLING SUPERFICIAL DEPOSITS AND INTO WEATHERED BEDROCK.

GES HAS DANDO 2000 DRILLING RIGS AND ASSOCIATED EQUIPMENT SIZES 150MM; 200MM; 250MM; 300MM DIAMETERS. A BROAD RANGE OF IN-HOLE DRILLING TOOLS ENSURE THAT WE ARE ABLE TO CARRY OUT ALL OF THE DRILLING, TESTING AND SAMPLING PROCEDURES NEEDED IN GEOTECHNICAL INVESTIGATIONS.

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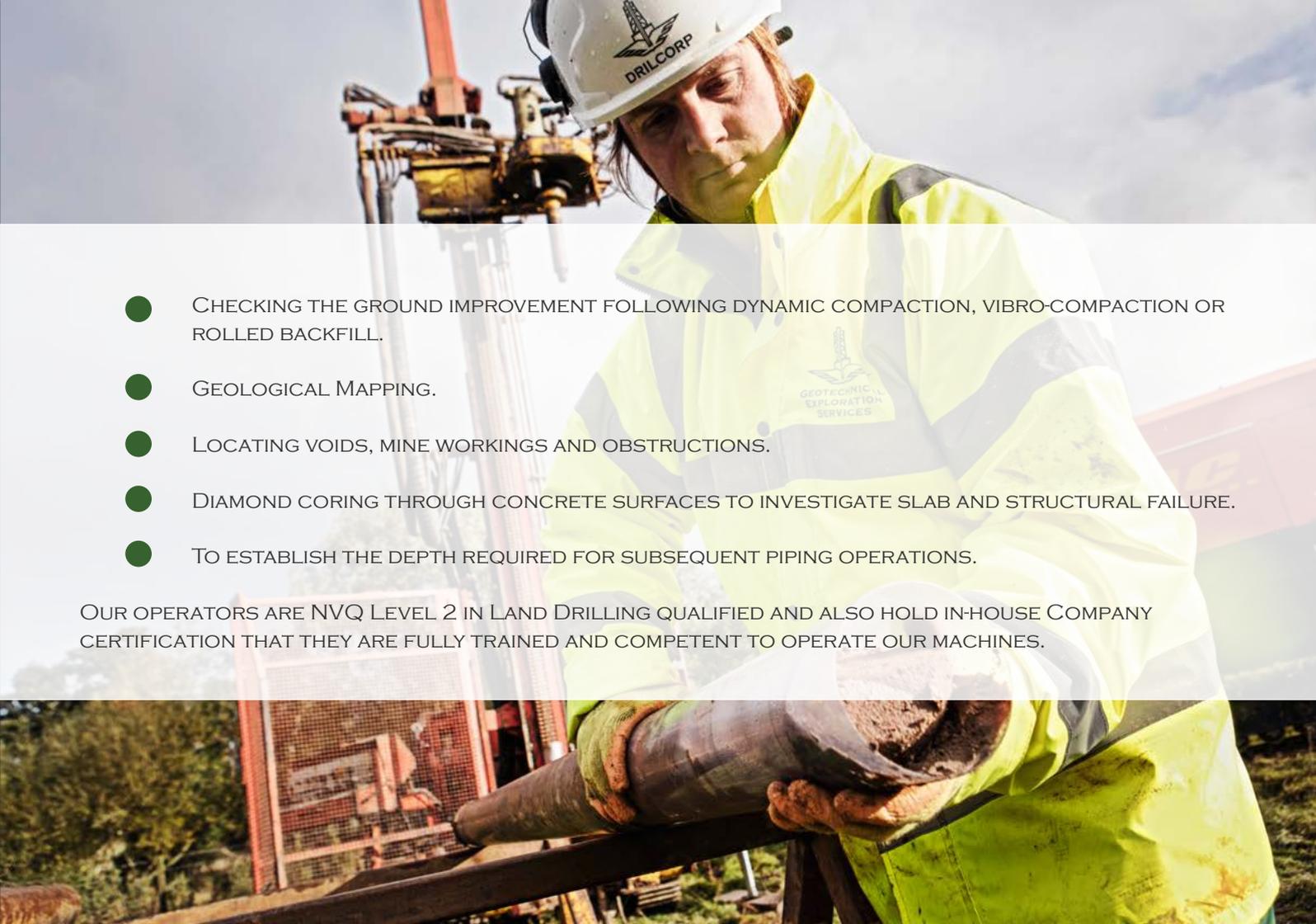
DYNAMIC PROBING

AT GES WE CARRY OUT THIS OPERATION WITH OUR PREMIER COMPACT 110 SERIES DYNAMIC PROBING/SOIL SAMPLING DRILLING RIG. THIS MACHINE IS A SELF-CONTAINED, PERCUSSIVE PROBING/SAMPLING RIG MOUNTED ON A REMOTE CONTROLLED PURPOSE BUILT RUBBER TRACKED UNDERCARRIAGE. THE DROP-HAMMER HEAD CAN BE QUICKLY REMOVED ALLOWING A ROTARY TOP DRIVE HEAD TO BE FITTED THUS ALLOWING THE MACHINE TO BE USED FOR ROTARY DRILLING.

TYPICAL APPLICATIONS INCLUDE;

- IN-SITU PENETRATION TESTING TO BS EN ISO 22476-3 IN THE FORM OF DYNAMIC PROBE HEAVY (DPH), DYNAMIC PROBE SUPER HEAVY (DPSH) AND STANDARD PENETRATION TESTING (SPT).
- INSTALLING AND EXTRACTING SOIL SAMPLING TUBES FROM 40MM – 130MM.
- INSTALLING PIEZOMETERS FOR GROUNDWATER OR GAS MONITORING.



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- CHECKING THE GROUND IMPROVEMENT FOLLOWING DYNAMIC COMPACTION, VIBRO-COMPACTION OR ROLLED BACKFILL.
 - GEOLOGICAL MAPPING.
 - LOCATING VOIDS, MINE WORKINGS AND OBSTRUCTIONS.
 - DIAMOND CORING THROUGH CONCRETE SURFACES TO INVESTIGATE SLAB AND STRUCTURAL FAILURE.
 - TO ESTABLISH THE DEPTH REQUIRED FOR SUBSEQUENT PIPING OPERATIONS.

OUR OPERATORS ARE NVQ LEVEL 2 IN LAND DRILLING QUALIFIED AND ALSO HOLD IN-HOUSE COMPANY CERTIFICATION THAT THEY ARE FULLY TRAINED AND COMPETENT TO OPERATE OUR MACHINES.



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TC1





IN-HOLE DRILLING EQUIPMENT

WE OWN A BROAD RANGE OF DRILLING EQUIPMENT INCLUDING;

ROTARY – GEOBOR S WIRELINE CORING SYSTEMS, CONVENTIONAL CORING SYSTEMS (MANY SIZES), SIMULTANEOUS CASING SYSTEMS, DOWN-THE-HOLE-HAMMERS, TRICONES, PDC BITS, FLIGHT AUGERS, HOLLOW STEM AUGERS, FULL RANGE OF CASINGS 100MM – 300MM.

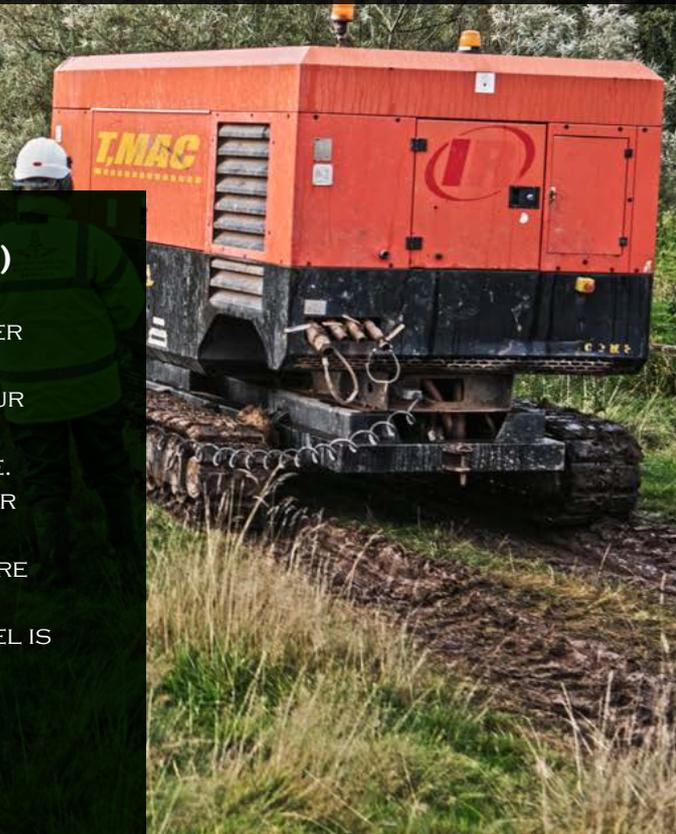
CABLE PERCUSSION – CASING SYSTEMS – 150MM; 200MM; 250MM AND 300MM, FULL RANGE OF SHELLS (BAILERS), CLAY CUTTERS, CHISELS, SPT, CPT, U100 SAMPLING EQUIPMENT

DYNAMIC SAMPLING – FULL RANGE OF SAMPLING AND PROBING EQUIPMENT.

SPECIALIST EQUIPMENT

TMAC (TRACK MOUNTED AIR COMPRESSOR)

THE COMPANY RUNS A FLEET OF REMOTE CONTROLLED RUBBER TRACK MOUNTED AIR COMPRESSORS. THESE LOW GROUND PRESSURE MACHINES ARE IDEALLY SUITED TO COMPLEMENT OUR LOW GROUND PRESSURE DRILLING RIGS ENSURING THAT WE CAN MOVE ACROSS DELICATE SITES CAUSING MINIMAL DAMAGE. RATHER THAN NEEDING TO BE TOWED AROUND SITE LIKE OTHER COMPRESSORS, THESE INDEPENDENT MACHINES CAN TOW ANCILLARY DRILLING EQUIPMENT USING LOW GROUND PRESSURE TRAILERS WHICH SAVES ON COST FOR ADDITIONAL TOWING EQUIPMENT. A DETAILED SPECIFICATION ON EACH TMAC MODEL IS AVAILABLE ON REQUEST.





CCTV

THERE ARE MANY OCCASIONS WHEN A CCTV SURVEY CAN BE OF ASSISTANCE;

- TO PROVIDE CLIENTS WITH VIDEO EVIDENCE THAT THE BOREHOLE HAS BEEN DRILLED AND INSTALLED CORRECTLY.
- TO INVESTIGATE FRACTURING TO DETERMINE SUBSEQUENT INSTALLATION DEPTHS.
- TO EXAMINE THE CONDITION OF CASINGS IN AN OLD BOREHOLE AND TO ASSESS WHETHER REHABILITATION IS NEEDED. THEN TO PROVIDE VIDEO EVIDENCE THAT REHABILITATION HAS BEEN SUCCESSFUL.
- TO ASSESS THE SITUATION WHEN 'FISHING' FOR LOST OR DROPPED DRILLING EQUIPMENT.

THE COMPANY OWNS AND OPERATES SEVERAL CCTV SYSTEMS FOR DIFFERENT APPLICATIONS. WE CAN SURVEY UP TO A DEPTH OF 650MTR PROVIDING FULL COLOUR DIGITAL RECORDINGS. OUR SMALL HAND PORTABLE UNIT IS IDEAL WHEN A 'QUICK LOOK' WOULD BE USEFUL DURING 'FISHING' OPERATIONS.



VERTICALITY AND BOREHOLE ALIGNMENT

IT IS OFTEN A CONTRACTUAL REQUIREMENT TO SURVEY A BOREHOLE DURING CONSTRUCTION TO PROVE VERTICALITY.

OUR FLEXIT TOOL WILL GIVE THE EXACT LOCATION OF A BOREHOLE AT ANY DEPTH AS WELL AS FULL PATH ORIENTATION AND DEVIATION OVER THE FULL LENGTH OF THE BOREHOLE.

IT ALSO MEASURES TEMPERATURE WITHIN THE BOREHOLE.

OUR ENGINEERS WILL VISIT YOUR SITE AND SURVEY YOUR BOREHOLE GIVING IMMEDIATE RESULTS ON A PLOTTED GRAPH.



BOREHOLE PACKERS

A PACKER IS AN INFLATABLE DEVICE USED TO ISOLATE A SEGMENT OF A BOREHOLE.

'PACKER-TESTING' (OFTEN REFERRED TO AS LUGEON TESTING) REFERS TO HYDRAULIC TESTS FACILITATED BY

THE USE OF A PACKER TO DETERMINE HYDRAULIC CONDUCTIVITY OF A PARTICULAR SECTION OF STRATA AND IS

OFTEN SPECIFIED IN GEOTECHNICAL INVESTIGATION CONTRACTS.

GES HAS A SELECTION OF PACKERS AND ASSOCIATED EQUIPMENT ABLE TO TEST BOREHOLES UP TO 300MM DIAMETER.

MARKET SECTORS



SOME PARTICULAR MARKET SECTORS WHERE GES CARRIES OUT WORK;

GEOTECHNICAL
SITE
INVESTIGATION

EXPOLORATION

GROUND SOURCE

DEWATERING

MINING

LIGHTNING
CONDUCTOR

ENVIRONMENTAL
INVESTIGATION

CONTAMINATED
LAND
ASSESSMENT

CIVIL
ENGINEERING AND
CONSTRUCTION



QEST

EFFECTIVE MANAGEMENT SYSTEMS HAVE ENABLED THE COMPANY TO PROVIDE SERVICES TO A WIDE RANGE OF CLIENTS WITH WHOM WE HAVE DEVELOPED EXCELLENT WORKING RELATIONSHIPS. THE COMPANY HAS A BESPOKE SERIES OF INTEGRATED MANAGEMENT SYSTEMS WHICH RUN ALONGSIDE ONE ANOTHER TO COVER THE FULL SCOPE OF COMPANY SERVICES.

OUR MANAGEMENT SYSTEMS COMPRISE OF:

Q - QUALITY MANAGEMENT SYSTEM

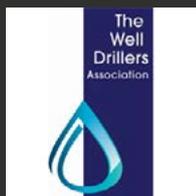
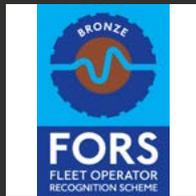
E - ENVIRONMENTAL MANAGEMENT SYSTEM

S - HEALTH & SAFETY MANAGEMENT SYSTEM

T - TRAINING MANAGEMENT SYSTEM

THESE SYSTEMS HAVE ENABLED THE COMPANY TO ACHIEVE ISO 9001:2008 ACCREDITATION WHICH IS AUDITED ANNUALLY BY AN EXTERNAL ASSESSOR.

TO SEE OUR FULL POLICY DOCUMENTS PLEASE CONTACT DAVE HASTINGS ON 0191 5273970



MEMBERSHIPS AND ACCREDITATIONS





CLIENT COMMITMENT STATEMENT

GEOTECHNICAL EXPLORATION SERVICES IS A DIVISION OF THE DRILCORP GROUP OFFERING EXCELLENCE IN SITE INVESTIGATION AND GEOTECHNICAL EXPLORATION. OUR CLIENTS RECEIVE THE BEST ADVICE AND GUIDANCE DRAWN FROM OUR UNPARALLELED EXPERIENCE WORKING ON HIGH PROFILE PROJECTS.



KEY CONTACT

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