The purpose of the exploratory drill operator occupation is to operate & maintain core drill rigs, auger rigs, tandem-axle trucks, truck mounted drill rigs, support vehicles & accessory equipment.

At the first level, incumbents assist higher-level exploratory drill operators.

At the second level, incumbents act as lead worker or field leader over team of assistant drill operators.

**CLASS TITLE:** Exploratory Drill Operator 1  
**CLASS NUMBER:** 52821

**EFFECTIVE DATE:** 10/04/1992

**CLASS CONCEPT:**
The developmental level class works under close supervision & requires basic knowledge of geologic drilling procedures in order to assist higher-level exploratory drill operator in all phases of drilling operations.

**CLASS TITLE:** Exploratory Drill Operator 2  
**CLASS NUMBER:** 52822

**EFFECTIVE DATE:** 10/04/1992

**CLASS CONCEPT:**
The full performance level class works under general direction & requires working knowledge of geologic drilling procedures in order to act as lead worker or field leader over team of lower-level geologic drilling staff.
**EFFECTIVE DATE**
10/04/1992

**JOB DUTIES IN ORDER OF IMPORTANCE:** (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)
Assists higher level exploratory drill operator in all phases of drilling operations to include transport, set up & breakdown of drilling equipment, operation, maintenance & servicing of drill rigs, support vehicles & accessory equipment, assists in obtaining core samples, preparation of drill holes for geophysical logging & preparation, mixing, calibration & pumping of drilling fluids, makes & labels containers for transport & storage, prepares & packages drill cuttings, maintains sample repository & participates in cleaning & reclamation of drill sites.

Assists in fabrication of specialty drilling tools; transports drilling equipment, tools & supplies to &/or from facilities.

**MAJOR WORKER CHARACTERISTICS:**
Knowledge of geological drilling policies, procedures, regulations & safety practices*. Skill in operation of core &/or auger drilling rigs; installation of monitoring wells; operation & maintenance of diesel & gasoline engines. Ability to recognize unusual or threatening conditions & take appropriate action; climb & work from 30 to 40 feet high drill rig mast; lift 50-80 lb. drilling tools & supplies; constantly monitor high speed mechanical equipment & high pressure fluid systems.

(*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**
6 mos. trg. or 6 mos. exp. in installation, repair, operation & maintenance of wells, diesel & gasoline engines; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**
Not applicable.

**UNUSUAL WORKING CONDITIONS:**
Exposed to loud noises of drill rigs & ancillary equipment; exposed to mud due to water based drilling fluids & precipitation; may be exposed to hydrogen sulfide &/or methane gas in potentially hazardous concentrations during drilling operations; exposed to high speed rotating machines & wire cable hoists which may cause hazards to limbs & fingers.
**JOB DUTIES IN ORDER OF IMPORTANCE:** (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Acts as lead worker & field leader over team of lower-level geologic drilling staff & provides work direction & training, monitors equipment assembly, disassembly & transport to & from drill sites, ensures adequate access, water supply & highway & railway overpass clearance for drilling sites, ensures safety of drilling personnel, ensures security of drilling equipment, enforces drilling policies & procedures & makes recommendations regarding all aspects of drilling operational policies & procedures for efficiency, production, safety & reduced costs.

Operates & maintains truck-mounted drill rigs, support vehicles & accessory equipment to include wire-line core drilling rigs (e.g., Longyear 44 & Module B-61 core drilling rigs, auger rigs & tandem-axle trucks), services all equipment & inspects all equipment for wear &/or damage.

Performs drilling operations (e.g., rotors &/or cores drill hole to bedrock using tri-cone bits, core bits, casing advancers & sets casing into bedrock; drills &/or cores into subsoils &/or bedrock to prescribed depth & obtains continuous core samples or rock cuttings using wire-line retrieval or mud/ water circulation systems); constantly monitors high speed mechanical equipment & high pressure fluid systems; maintains sample repository.

Prepares weekly progress reports, daily drilling progress notes & logs of work hours; advises supervisor of environmental, mechanical or technical problems associated with drilling activities; prepares & packages cutting &/or core samples; oversees & assists in fabrication of specialty drill tools (e.g., cutting torches, welding equipment).

**MAJOR WORKER CHARACTERISTICS:**
Knowledge of employee training & development*; geological drilling policies, procedures, regulations & safety practices*. Skill in operation of core &/or auger drill rig, water pumps & wire cable hoists; preparation & use of drilling fluids; installation of monitoring wells; operation & maintenance of wells, diesel or gasoline engines. Ability to recognize unusual or threatening conditions & take appropriate action; prepare meaningful, concise & accurate reports; climb & work from 30 to 40 feet high drill rig mast; lift 50-80 lb. drilling tools & supplies; constantly monitor high speed mechanical equipment & high pressure fluid systems.

(*) Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**
6 mos. trg. or 6 mos. exp. in operation of core &/or auger drill rig, water pumps & wire cable hoists; 6 mos. trg. or 6 mos. exp. in operation & maintenance of diesel & gasoline engines; 3 mos. trg. or 3 mos. exp. in preparation &/or use of drilling fluids; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**
Not applicable.

**UNUSUAL WORKING CONDITIONS:**
Exposed to loud noises of drill rigs & ancillary equipment; exposed to mud due to water based drilling fluids & precipitation; may be exposed to hydrogen sulfide &/or methane gas in potentially hazardous concentrations during drilling operations; exposed to high speed rotating machines & wire cable hoists which may cause hazards to limbs & fingers.