# **DRILLER SERIES**

		Occ.	Work	Prob.	Effective	Last
Code No.	Class Title	Area	Area	Period	Date	Action
2290	Driller Laborer	15	171	6 mo.	08/15/12	New
2291	Driller Assistant	15	171	6 mo.	08/15/12	New
2292	Driller	15	171	6 mo.	08/15/12	New

## Promotional Line: 366

## Series Narrative

Employees in this series operate and maintain a variety of equipment during geological exploration and soil testing. They may also conduct skilled manual work including, but not limited to, metal fabrication, welding, basic carpentry and rebuilding, minor repair and painting of equipment body, automotive painting.

## DESCRIPTIONS OF LEVELS OF WORK

## Level I: Driller Laborer

Employees at this level perform basic entry-level duties related to operating and maintaining a variety of tools and equipment used during geological exploration and soil testing. They work under direct supervision of a Driller or other designated supervisor.

A Driller Laborer typically-

- 1. supplies water to the drill rig; operates the water pumps
- 2. mixes drilling mud; adds drill pipe, unloads sampler, assists in installing monitoring wells, and assists in downhole logging operations
- 3. assists in pulling the drill string out of the wellbore and then running it back in
- 4. operates and maintains a variety of equipment and machinery including, but not limited to, water trucks, pipe trailers, enclosed trailers, lathes, milling machines, drill presses, grinders, welders, and power tools used in carpentry or construction trade (such as saws, routers, etc.) or painting (such as sprayers); completes semi-skilled manual work including metal fabrication, welding, light carpentry work and painting equipment
- 5. performs preventative maintenance on drill rigs , probe truck, and support equipment (e.g. water truck, pipe trailer, enclosed trailer)
- 6. assists higher level staff in obtaining samples of geologic materials and geophysical data
- 7. assists with moving, setting up, tearing down, loading, unloading, and securing equipment, commodities, and/or supplies; assists with vehicle shuttling and shop security

2290

8. performs other related duties as assigned

#### Level II: Driller Assistant

Employees at this level perform skilled work related to operating and maintaining a variety of equipment used during geological exploration and soil testing. They work under general supervision of a Driller or other designated supervisor.

A Driller Assistant typically-

- 1. assists in the monitoring of the drilling operations; complies with and ensures that standards of work and safety regulations are performed
- 2. assists in site-related logistics
- 3. assesses and makes recommendations related to ground/environmental conditions
- 4. operates more advanced equipment/vehicles such as probe trucks, water trucks, etc. , may operate a drill rig as directed
- 5. obtains and ensures high-quality samples of geologic materials; collects, identifies, and describes soil, rock, and coal samples as to kind, depth and thickness and records all descriptions and depths
- 6. assists in communications with geologists and other participants on project-related issues and changes
- 7. participates in training and directing lower rank staff in procedures to complete drilling projects; may provide input for personnel matters/activities
- 8. performs tasks related to the maintenance or completion of drilling activity reports (e.g. locations, dates, daily drilling totals) and regulatory documentation (e.g. well construction forms, plugging forms, drilling logs)
- 9. may assist in the monitoring of supplies
- 10. performs all duties peculiar to (characteristic/ universal /distinctive/ common/typical) and normally required in the lower level of this series
- 11. performs other related duties as assigned

## Level III: Driller

2292

Employees at this level supervise, perform work, and are immediately responsible for ensuring optimal planning and execution of drilling activities during geological exploration and soil testing. They work under general supervision of a designated supervisor.

2291

A Driller typically-

- 1. plans, manages and monitors the execution of drilling operations; ensures that standards of work and safety regulations are performed
- 2. coordinates site-related logistics, determining staff and equipment needed, drilling techniques to utilize, procedures to implement, and supplies needed in the field
- 3. assesses and approves ground/environmental conditions before the moving of equipment onto location
- 4. operates and maintains drill rigs, probe trucks, and various support equipment including determining, identifying, assembling, and utilizing required parts and tools; assessing drilling conditions; adhering to drilling requirements; and identifying and solving problems
- 5. ensures that repairs and maintenance are performed on assigned equipment; anticipates mechanical problems and takes corrective actions
- 6. supervises obtaining high-quality samples of geologic materials; collects, identifies, and describes soil, rock, and coal samples as to kind, depth and thickness and records all descriptions and depths
- 7. communicates with geologists and other participants on project-related issues and changes
- 8. supervises and trains staff in procedures to complete drilling projects; may participate in the management of personnel matters/activities (e.g. hiring, evaluating staff, time cards, leave approval)
- 9. participates and may lead in incident investigations
- 10. maintains daily drilling activity reports (e.g. locations, dates, methods and bits used, problems encountered, downtime experienced, daily drilling totals, how much time was spent on each operation)
- 11. completes state required documentation (well construction forms, plugging forms, drilling logs)
- 12. reviews and monitors the drilling budget; determines, calculates, and submits drilling expenses
- 13. orders drilling materials and supplies
- 14. performs all duties peculiar to and normally required in the lower levels of this series as necessary
- 15. performs other related duties as assigned

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## MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:

Level I: Driller Laborer	2290

## CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. High school diploma or equivalent
- 2. One (1) year/12 months of volunteer and/or work experience in the operation, maintenance and light repair of industrial or heavy equipment (with a load capacity requiring a CDL) commonly used in such operations as drilling, farming, trucking, or labor
- 3. Possess a current/valid Illinois Commercial Driver's License (Class A with airbrake and tanker endorsements)

#### KNOWLEDGE, SKILLS, AND ABILITIES (KSAs)

- 1. Knowledge of machines and tools, including their designs, uses, repair, and maintenance
- 2. Knowledge of mathematics, algebra, geometry and their applications
- 3. Working knowledge of safety procedures
- 4. Controlling operations of equipment or systems
- 5. Watching gauges, dials, or other indicators to make sure a machine is working properly
- 6. Performing routine maintenance on equipment and determining when and what kind of maintenance is needed
- 7. Repairing machines using the needed tools
- 8. Determining causes of operating errors and deciding what to do about it
- 9. Ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions
- 10. Ability to quickly respond (with the hand, finger or foot) to a signal (sound, light, picture) when it appears
- 11. Ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem
- 12. Ability to perform physical activities that require considerable use of arms, hands, and legs including lifting, carrying, and handling equipment and materials weighing up to 100 pounds
- 13. Ability to perform field work in remote locations and under adverse conditions
- 14. Ability to travel extensively

2291

## 15. Mechanical ability

16. Ability to follow, read, listen to, and understand instructions

## Level II: Driller Assistant

## CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. High school diploma or equivalent
- 2. Two (2) years/24 months of work experience on a drilling crew

#### OR

One (1) year/12 months of work experience comparable to that performed at the Driller Laborer level of this series or in other positions of comparable responsibilities

3. Possess a current/valid Illinois Commercial Driver's License (Class A with airbrake and tanker endorsements)

#### KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

- 1. Working knowledge of drill rigs and related equipment, machines, and tools including their designs, uses, operation, maintenance, and repair
- 2. Working knowledge of safety procedures
- 3. Ability to perform physical activities that require considerable use of arms, hands, and legs including lifting, carrying, and handling equipment and materials weighing up to 100 pounds
- 4. Ability to perform field work in remote locations and under adverse conditions
- 5. Ability to travel extensively
- 6. Mechanical ability
- 7. Ability to follow, read, listen to, and understand instructions
- 8. Supervisory ability

#### Level III: Driller

2292

#### CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

- 1. High school diploma or equivalent
- 2. Three (3) years/ 36 months of drilling experience that includes three (3) years/36 months of coring experience

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- 3. Possess a current/valid Illinois Commercial Driver's License (Class A with airbrake and tanker endorsements)
- 4. Applicable to the work assignments of the position to be filled:
  - Possession of a valid Illinois Water Well Drilling License or the ability to obtain one once license eligibility requirements have been met
  - Ability to obtain additional out-of-state Water Well Drilling Licenses as needed

## KNOWLEDGE, SKILLS, AND ABILITIES (KSAs)

- 1. Advanced working knowledge of drill rigs and related equipment, machines, and tools including their designs, uses, operation, maintenance, and repair
- 2. Working knowledge of safety procedures
- 3. Experience with drilling deep through a variety of glacial deposits and geologic materials
- 4. Mechanical ability
- 5. Ability to perform physical activities that require considerable use of arms, hands, and legs including lifting, carrying, and handling equipment and materials weighing up to 100 pounds
- 6. Ability to perform field work in remote locations and under adverse conditions
- 7. Ability to travel extensively
- 8. Supervisory ability