HEAVY EQUIPMENT OPERATOR

KIND OF WORK

Heavy construction equipment operation.

NATURE AND PURPOSE

Under general supervision, an employee in this class is responsible for skilled operation of heavy motorized equipment while performing construction, snow removal, and/or bituminous work. May provide lead work direction to semiskilled and unskilled workers. Performs related work as required.

This class differs from the Heavy Equipment Mechanic in that it does not repair heavy equipment.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Set up drill and support equipment so that foundation investigations can be accomplished by directing the moving of equipment onto the site; arranging equipment within work area; leveling drill rig and related tanks; ensuring safe working conditions for crew within work area; direct preparation of site in the areas of buldozing, tree-cutting, and snow plowing; tear down drill units, load tools, and clean up work areas.

Operate drill rigs to obtain undisturbed soil samples and ground water information so that parameters can be selected for foundation design by choosing and mixing correct types and viscosity of drilling fluids; selecting proper drill bits and/or tools to advance borehole; ensuring that borehole is straight, to the proper depth, and cleaned before sampling; performing standard penetration tests, setting split tube samplers and retracting identification samples; obtaining thin wall samples with minimal disturbance and fluid contamination; setting and sealing off casing; sealing off water tables and preventing contamination of ground water aquifers; backflushing boreholes and obtaining static water table levels; sealing off surface.

Operate drill rigs to obtain rock core so that strength, competency, and type of bedrock can be determined for foundation design by determining that bedrock has been encountered and not just a boulder or float material; selecting and driving casing as required to prevent hole cave-in and to ensure water return circulation; selecting proper diamond bit, reaming shell, and core barrel to obtain rock core; operating drill at proper RPM, rate of feed, and bit pressure; retrieving and protecting rock core for future inspection; sealing off water tables; backfilling boreholes and sealing surface.
Maintain drilling equipment and other heavy equipment, such as dozers, motor graders, front end loaders, etc., to support foundation investigation, construction, and snow removal activities by making field repairs when required; performing routine greasing, oiling, replacement of minor parts, and making minor adjustments; ensuring that equipment such as drill rigs, tool trucks and water trucks are serviced at proper intervals; ensuring that manufacturer's specifications are adhered to during warranty periods; performing weekly equipment inspections; overseeing equipment cleaning; ordering extra or replacement parts; recommending major maintenance or modifications on equipment.

Recommend purchase, inventory level, type, and quality of drilling supplies and tools so that foundation drilling can be conducted efficiently and effectively by recommending purchase of supplies, parts, and equipment; reviewing inventory levels; recommending modifications to drilling tools; ensuring that drill rig and associated equipment is operational daily.

Operate heavy equipment so that equipment is operated in a safe, efficient manner by operating dozers, scrapers, motor graders, front end loaders, ten yard dump trucks, agricultural tractors with attachments, and other power equipment; removing snow; packing and grooming trails; working safely, checking equipment before, during and after operation; wearing required protective equipment.

**KNOWLEDGE, SKILLS, AND ABILITIES**

Knowledge of:

- Heavy equipment operation sufficient to set up, operate, and transport heavy motorized equipment.

State laws and agency regulations pertaining to operation of heavy motorized equipment on public roadways sufficient to apply and adhere to all regulations in completing work.

Ability to:

- Make emergency repairs or assist in diagnosing and/or making repairs to heavy equipment sufficient to keep equipment operational for required work.

- Understand and follow oral and written instructions sufficient to carry out work orders and understand equipment operation specifications.

**LEGAL AND LICENSURE REQUIREMENTS**

Class "A" or "B" driver's license or a Commercial class "A" or "B" license with Air Brakes, Combination Vehicle designations.
SPECIAL WORK CONDITIONS

Positions in this class may require the employee to lift and handle medium to heavy weight materials, such as tools and equipment. The work environment may include exposure to dust, heat, noise, as well as exposure to adverse weather conditions (cold, heat, snow, rain, wind).

Est: 05/42
Rev: 04/52
Rev: 05/60
Rev: 07/67
Ckd: 06/70
Rev: 05/78
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