



**Disability Services**  
**Safety and Claims Management**  
Department of Executive Services  
Human Resources Management Division  
P.O. Box 80283  
Seattle, WA 98108  
(206) 205-8575  
(206) 296-0514 FAX

## JOB ANALYSIS

Job Title:	Marine Oiler	DOT Title:	Oiler
SVP:	8	DOT #:	699.687-018
Location of Analysis:	Pier 51	Name of Employee:	
Analyst:	Kyle Pletz, VRC, CDMS	JA Source:	Laura Merritt
Presenting VRC:		Employer Contact:	Ron Panzero
Date Analysis Completed:	6/5/13	Supervisor Contact Information	Phone: 206-263-5039 E-mail: ron.panzero@kingcounty.gov

☒ On-Site    ☐ Interview    ☐ Representative

### JOB DUTIES:

#### Essential Functions according to the employer:

All King County jobs require ability/essential function to:

- Demonstrate predictable, reliable, and timely attendance.
- Follow written and verbal directions to complete assigned tasks on schedule.
- Read, write, and communicate in English & understand basic math.
- Learn from directions, observations, and mistakes and apply procedures using good judgment.
- Work independently or as part of a team and interact appropriately with others.



The incumbent in this classification is responsible for overall ferryboat and marine facility maintenance and repair, and maintaining all operating machinery and mechanical equipment located on a passenger ferryboat.

1. Assist Captain with vessel startup and shutdown.
2. Perform daily vessel safety checks.
3. Perform preventive maintenance and minor repair on dock lines and boarding ramps, gates and security systems.
4. Perform oil and filter changes, operating fluids and bilge pumping and cleaning.
5. Pump sewage; replenish potable water.
6. Perform minor vessel and facility light maintenance, painting and preservation.
7. Replace windshield wipers.



King County Job Analysis Completed on: 6/5/13

Employee:

DOT #: 699.687-018

Job Title: Marine Oiler

Claim #:

8. Work on spare/backup vessel while other vessels are in service.
9. Perform other duties as assigned.

## EXPERIENCE, QUALIFICATIONS, KNOWLEDGE, SKILLS:

### MINIMUM QUALIFICATIONS:

- Knowledge of the operation and maintenance of vessel machinery and mechanical equipment.
- Knowledge of proper and safe operation of propulsion and auxiliary machinery.
- Knowledge of engineering logs and operating records.
- Knowledge of proper use of fire extinguishers and lifesaving equipment.
- Knowledge of safe lifting techniques.
- Skill in the general maintenance of a ship's machinery and mechanical equipment.
- Skill in the use of hand or power tools for maintenance and repair.
- Skill in communications.
- Skill in establishing and maintaining effectively working relationships.
- Skill working with a variety of individuals from diverse backgrounds.
- Ability to respond safely, effectively and expeditiously during an emergency.

### NECESSARY SPECIAL QUALIFICATIONS:

- A valid United States Coast Guard (USCG) Merchant Mariner's Document (MMD) with the endorsement Qualified Member of the Engine Department (QMED) — Oiler and possession of a valid Transportation Worker's Identification Card issued by the Transportation Security Administration (TSA).
- May be required to work a split shift
- Additional licenses, certifications and other requirements determined to be necessary to meet the business needs of the employing unit may be required.

### Machines, Tools, Special Equipment, Personal Protective Equipment Used:

Gloves, glasses, ear protection, welding helmet, welders (acetylene, MIG and TIG), plasma cutter, grinders, reciprocating saw, drills, band saw, pipe threading machine, various hand tools, impact tools, engine parts, jig saw, drill press, welding table, magnetic drill press, fuel lines, engine fluids, sewage lines, electrical testers, flashlight, breakers, shore lines, engines, generators, batteries, pumps, etc. The employee works on all components of 3 different passenger ferries.

## PHYSICAL REQUIREMENTS

Frequency Scale	Strength	Work Pattern
<b>N</b> = Never	<input type="checkbox"/> Sedentary	<input checked="" type="checkbox"/> Full-time*
<b>S</b> = Seldom (1-10 %, up to 48 min)	<input type="checkbox"/> Light	<input type="checkbox"/> Part-time
<b>O</b> = Occasional (11-33%, 48 min. – 2 hr 25 min)	<input type="checkbox"/> Medium	<input checked="" type="checkbox"/> Seasonal*
<b>F</b> = Frequent (34-66%, 2 hr 26 min – 5 hr 35 min)	<input checked="" type="checkbox"/> Heavy	* Hours Per Day
<b>C</b> = Constant (67-100%, more than 5 hr 35 min)	<input type="checkbox"/> Very Heavy	* Days Per Week

This is classified as a MEDIUM job by the US Department of Labor, but is adjusted to HEAVY for this particular job. Work is performed on a smaller vessel which does not have a spacious engine room with hoists like larger vessels.

\*Peak Season



King County Job Analysis Completed on: 6/5/13

Employee:

DOT #: 699.687-018

Job Title: Marine Oiler

Claim #:

Engine Room			Saturday			Sunday			Monday		
			Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day
Oiler 1 - week 1			4:30	16:00	11.5	4:30	16:00	11.5	4:30	16:00	11.5
Oiler 2 - week 2			4:30	16:00	11.5	4:30	16:00	11.5	4:30	16:00	11.5
Tuesday			Wednesday			Thursday			Friday		
Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day
4:30	16:00	11.5			0	4:30	16:00	11.5	4:30	16:00	11.5
4:30	16:00	11.5			0	4:30	16:00	11.5	4:30	16:00	11.5

\*Winter

Winter

Crew			Monday			Tuesday			Wednesday		
			Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day
Oiler A - week 1			4:30	16:00	11.5	4:30	16:00	11.5			0
Oiler B - week 2			4:30	16:00	11.5	4:30	16:00	11.5			0
Thursday			Friday			Saturday			Sunday		
Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day	Start Time	Stop Time	Hours/Day
4:30	16:00	11.5	4:30	16:00	11.5	4:30	16:00	11.5	4:30	16:00	11.5
4:30	16:00	11.5	4:30	16:00	11.5	4:30	16:00	11.5	4:30	16:00	11.5

PHYSICAL DEMANDS		FREQUENCY						ACTIVITY DESCRIPTION			
	% Time	N	S	O	F	C					
Sitting				X				Up to 1 hr./time for up to 2 hrs. total while ordering parts, completing engine log, computer duties and driving.			
Standing						X		Up to 1 hr./time for up to 6-8 hrs. total while welding as well as performing bench work inspections and repairs.			
Walking						X		Up to 1 hr./time for up to 6-8 hrs. total while preparing vessels for daily operation, performing inspections, transferring to/from shore power, fueling, emptying sewage tank, etc. Employee regularly walks between piers, vessels and a workshop on a barge, up to 1000' at a time.			
Lifting floor – waist	N	S		O		F	C	lbs.	Up to 5 min./time for up to 2 hrs. total with weights of 40-50 pounds to manipulate parts during installation and removal. Manipulates magnetic drill press (80 lbs.) and large parts		
		75-100		40-60							



King County Job Analysis Completed on: 6/5/13

Employee:

DOT #: 699.687-018

Job Title: Marine Oiler

Claim #:

							such as sewage pump or turbo (75 lbs.). Loads ramps and life rafts.
<b>Lifting</b> waist–shoulder	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>		Up to 5 min./time for up to 2 hrs. total with weights of 40-50 pounds to manipulate parts during installation and removal. Manipulates magnetic drill press (80 lbs.) and large parts such as sewage pump or turbo (75 lbs.). Loads ramps and life rafts.
		75-100	40-60			lbs.	
<b>Lifting *</b> above shoulder	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>		Up to 5 min./time for up to 2 hrs. total with weights of 40-50 pounds to manipulate parts during installation and removal. Manipulates magnetic drill press (80 lbs.) and large parts such as sewage pump or turbo (75 lbs.). Items are passed up/down hatch of engine room.*
		61-100	40-60			lbs.	
<b>Carry *</b> (Dist.)	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>		Up to 50' at a time for up to 2 hrs. total with weights of 40-50 pounds to move a tool box or parts to/from work area. Seldom carry large parts such as sewage pump or turbo (75 lbs.) between engine room and cart. A cart is available, but does not fit in engine rooms and cannot always be used to transfer on/off the vessels.
		51-100  25'	4-50  50'			lbs.	
<b>Pushing/ Pulling</b>	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>	Minimal	Up to 150' with up to 100 lbs. of force when pushing a lube-oil drum on a hand cart.
		100	50+			lbs force	

\*Lifting and carrying can be performed while entering/exiting engine room via hatch:



	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>	
Climbing				X		Up to 5 min/time up to 3 hrs. total when climbing 6-7 rung vertical ladder for engine rooms, 12 stairs to upper deck, roof of vessel, on/off vessel and within small engine room.



King County Job Analysis Completed on: 6/5/13

Employee:

DOT #: 699.687-018

Job Title: Marine Oiler

Claim #:

Balancing					X	Work is performed on a floating dock as well as a moving passenger ferry that are swaying due to waves; some areas do not have railings so there are exposed heights on edges of docks and vessels with water below. Works in engine rooms (ceiling height of 4'7" and confined space) while crawling around hot engines while in a moving vessel. See pictures.
Stooping / Bending				X		Up to 30 min/time up to 4 hrs. total while inspecting engine rooms (ceiling height of 4'7") and performing repairs.
Twisting				X		Up to 30 min/time up to 4 hrs. total while inspecting engine rooms (ceiling height of 4'7") and performing repairs in awkward positions.
Squatting / Kneeling				X		Up to 30 min/time up to 4 hrs. total while inspecting engine rooms (ceiling height of 4'7") and performing repairs.
Crawling			X			Up to 5 min/time up to 2 hrs. total while inspecting engine rooms (ceiling height of 4'7") and performing repairs.
Foot Controls			X			Up to 1 hr./time for up to 2.5 hrs. total while driving work truck between worksites and vendors in order to obtain parts.
<b>Reaching</b> (Level)  Forward   Below Waist   Above Shoulder					X	For up to 1 hr./time for up to 6 hrs. total while performing maintenance and repairs, driving, performing computer duties, ordering parts and using a flashlight as well manipulating hand tools and parts.
				X		For up to 1 hr./time for up to 4 hrs. total while performing maintenance and repairs, driving, performing computer duties, ordering parts and using a flashlight as well manipulating hand tools and parts.
			X			For up to 2 min/time for up to 1 hr. total in a shift while performing overhead repairs as well as when moving tools and parts in/out of engine compartment. Replacing light bulbs.
Handle/Grasp					X	For up to 1 hr./time for up to 6 hrs. total while performing maintenance and repairs, driving, and using a flashlight as well manipulating hand tools and parts.
Fine Finger Manipulation				X		For up to 30 min/time for up to 5 hrs. total when threading bolts, using testing equipment, operating buttons and switches, welding and manipulating small hand tools
	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>	
Hand Controls				X		For up to 5 min/time for up to 4 hrs. total while operating power tools such as saws, drills, testers, grinders, pumps, fans and pipe threading machine. Also uses hand controls when using welding



King County Job Analysis Completed on: 6/5/13

Employee:

DOT #: 699.687-018

Job Title: Marine Oiler

Claim #:

						equipment.
Repetitive Motion	X					Body part: Cycles/hr.
Vibratory Tasks			X			For up to 5 min./time for up to 1 hr. total while undoing bolts with an impact wrench to inspect voids.

	N	S	O	F	C	
Talking				X		Interacting with coworkers and providing customer service to the general public.
Hearing				X		Interacting with coworkers and providing customer service to the general public.

Visual:

Uses dual computer monitors.

ENVIRONMENTAL CONDITIONS	FREQUENCY						ENVIRONMENTAL CONDITIONS	FREQUENCY				
	N	S	O	F	C			N	S	O	F	C
Exposure to Weather				X			Noise Intensity				X	
Extreme Cold		X					Atmospheric Conditions				X	
Extreme Hot				X			Exposed Heights				X	
Wet and / or Humidity				X			Exposure to Electricity				X	
Proximity to Moving Mechanical Parts				X			Exposure to Toxic / Caustic Chemicals			X		
Exposure to Explosives	X						Exposure to Radiation	X				
Other:												

### Analyst's Comments:

The employee inspects and works in engine rooms (ceiling height of 4'7" and confined space) while crawling around hot engines while in a moving vessel. Arrow indicates travel path to front of engine where the generators are located. Orange line indicates ceiling height of 4'7".

Work is performed on a floating dock as well as a moving passenger ferry that are swaying due to waves; some areas do not have railings so there are exposed heights on edges of docks and vessels with water below; constant balancing is essential for safety.







King County Job Analysis Completed on: 6/5/13

Employee:

DOT #: 699.687-018

Job Title: Marine Oiler

Claim #:

**Possible Employer Modifications:**

**Note:** The information for this job analysis was gathered by either on-site observation, interview and / or is representative of the labor market as indicated on page one. Additional data may have been obtained from standardized industry resources such as the DOT, GOE, COJ, OOH, WOIS and O-NET. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective, quantifiable data. For this reason, a “best estimate” may have been used.

**Analyst:**

**Presenting VRC signature:**

\_\_\_\_\_  
Vocational Consultant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Vocational Consultant

\_\_\_\_\_  
Date

**Employer Verification:**

**Employee Verification:** (optional)

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date



King County Job Analysis Completed on: 6/5/13

Employee:

DOT #: 699.687-018

Job Title: Marine Oiler

Claim #:

**MEDICAL PROVIDER:**

- ☐ I agree that the employee can perform the physical activities described in this job analysis and can return to work.

State date employee is released to return to work if different from today's date \_\_\_\_\_

- ☐ I agree the employee can perform the described job but only with modifications (describe in comments section). Modifications are needed on a permanent ☐ or temporary ☐ basis.

- ☐ The employee **temporarily** cannot perform this job based on the following physical limitations:

**Anticipated release date:** \_\_\_\_\_

**Treatment plan:** \_\_\_\_\_

- ☐ The employee is **permanently** restricted from performing the physical activities described in this job analysis based on the following physical limitations (state objective medical findings):

**Comments:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Attending Physician | <input type="checkbox"/> Consulting Physician | <input type="checkbox"/> Pain Program Physician |
| <input type="checkbox"/> IME Physican        | <input type="checkbox"/> PCE Therapist        | <input type="checkbox"/> OT / PT Therapist      |
| <input type="checkbox"/> PEP Physician       |   |   |