

**Work Process Schedule and Related Instruction Outline for: Oil Field
Equipment Mechanic (Operator I Frac-Acid)**

O*NET CODE: 49-3031.00 RAIS CODE: 0364CB

Description: Performs repair procedures on PSL oil field equipment, pre/post job equipment inspections, completing preventative maintenance procedures, maintaining support equipment (i.e., pumps, treating lines etc.), assist with the rigging up and down of service line equipment at the well site, practices basic operations safety, operates commercial vehicles, complies with all applicable health, safety and environmental procedures and regulations, promotes safety awareness, environmental consciousness, and quality improvement processes.

ON-THE-JOB LEARNING

The apprentice will learn the following work processes, demonstrating competency over the one year term of the program. This constitutes the on-the-job learning portion of the apprenticeship program. For clarification each general work process is broken down by specific tasks.

| “Operator I FRAC-Acid” Competencies/Tasks | | OJL Hours |
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| 1. | <p>Competency Statement: PE-FA-OA1-4-Completes preparation for deployment to field operations - Data Acquisition.</p> <p>Scope: Operator I competency development for electronic instruments components, control systems care, operation and installation.</p> <p>Objective: Provide the Candidate with the knowledge and skills necessary to perform routine instrumentation equipment field installation safely and reliably as deployed in the Country/NWA.</p> | OJL Hours <u>364</u> |
| 1.1 | <p>Complete an appropriate safety orientation including a demonstration of all hand tools, power tools and PPE requirements for working in the Tech Shop.</p> <p>Ability to assess the Health & Safety risks present at jobsite.</p> | |
| 1.2 | Demonstrate the ability to physically identify the following equipment monitoring and control systems; Automatic Control Equipment (ACE), Automatic Remote Control (ARC), Unipro 2 and Unipro 1. | |
| 1.3 | Demonstrate knowledge of a Radioactive Densometer and its sub-components, PM Tube, Source Cover, shielding and lock, Proper Labeling and Calibration Barrel (hi/lo). | |
| 1.4 | Demonstrate the ability to explain the importance of calibrating the Radioactive Densometer. | |
| 1.5 | Demonstrate proper care, installation and safe handling procedures of the Radioactive Densometer. | |

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| 1.6 | Demonstrate knowledge of high Pressure Transducers and their purpose. Have the candidate state the different pressure ratings used and why, how they are identified in the field and what to do if unsure about which pressure rating is in service. | |
| 1.7 | Demonstrate the ability to correctly install Pressure Transducers and to discuss the installation procedure. | |
| 1.8 | Demonstrate knowledge of Turbine and Mass Flow (Micro-Motion) Meters and be able to identify them, in particular the difference between a fluid and gaseous (Nitrogen) Flow Meter. | |
| 1.9 | Demonstrate the ability to explain the proper care, handling and maintenance of Flow Meters, to include flow meter kits for turbine flow meters. | |
| 1.10 | Demonstrate the ability to properly install a Flow Meter using its procedure/s while observing the flow direction orientation. | |
| 1.11 | Demonstrate knowledge of Cables and Connectors, to include Pressure, Flow, Density, ILAN, JLAN and CAT 5. | |
| 1.12 | Demonstrate proper care, maintenance and handling of data acquisition cables. | |
| 1.13 | Demonstrate the ability to explain the purpose of the Technical Command Center (TCC) communication system and the individual remote radio functionality. | |
| 1.14 | Demonstrate the proper care and safe handling of individual radios. For Example, "Push to Talk", the Head Set and the Battery Charger. | |
| 2. | Competency Statement: PE-FA-OA1-5-Completes preparation for deployment to field operations - Discharge Manifold Equipment (DME). Scope: Provide the Candidate with the knowledge and skills necessary to install and maintain High Pressure Manifold Components. Objective: Provide the Candidate with essential knowledge and skills for installation and maintenance of Discharge Manifold Equipment | OJL Hours <u>364</u> |
| 2.1 | Safety Orientation: <input type="checkbox"/> iLearn - Personal Protective Equipment - LA-HSE_-GLB-XPSL-PPE-REV_0001 <input type="checkbox"/> iLearn - Back Safety - LA-HSE_-GLB-XPSL-BACKSAFE-REV_0000 <input type="checkbox"/> iLearn - Hoisting & Rigging - LA-HSE_-GLB-XPSL-HOISTRIG-REV_0000 <input type="checkbox"/> iLearn - Lock-Out/Tag-Out - LA-HSE_-GLB-XPSL-LOCKTAG-REV_0000 <input type="checkbox"/> Video - Hand Held/Power Tool Safety – HTLS04707 <input type="checkbox"/> I Learn – Hand and Finger Safety Training - LA-HSE_-GLB-XPSL-HAN_FING-REV_0000 | |

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| 2.2 | <p>General Knowledge – Obtaining Information/Navigating HalWorld: Demonstrate the ability to obtain, electronically or hard copy, Global Service Standards & Processes, Manuals, Catalogues, and product information listed below.</p> | |
| 2.3 | <p>Global Manifold Equipment Service Standards:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review Global Service Standards & Process: <ul style="list-style-type: none"> • Stimulation Global Service Standard - Manifold Equipment <u>Qualification</u> ST-GL-HES-PSL-501 • Stimulation Global Service Standard - Periodic Manifold Equipment <u>Maintenance</u> ST-GL-HES-PSL-502 • Stimulation Global Process - Surface Manifold Equipment Catalog • Stimulation Global Service Standard – Perform Job Rig-Up ST-GL-HES-STIM-403 <input type="checkbox"/> Demonstrate knowledge of “manufacturer’s working pressure rating color codes.” <input type="checkbox"/> Discuss the difference between qualification vs. certification of manifold equipment. <input type="checkbox"/> Demonstrate the ability to specify the frequency of qualification testing and maintenance for manifold equipment. <input type="checkbox"/> Demonstrate the ability to retrieve Manifold Equipment Qualification/Maintenance records <input type="checkbox"/> Discuss the purpose of designated safety perimeters for field operations/safety barriers for a test bay. | |
| 2.4 | <p>Surface Manifold Equipment Catalogue:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review the Surface Manifold Equipment Catalogue. <input type="checkbox"/> Demonstrate the ability to use the Surface Manifold Equipment Catalog – Given a piece of manifold equipment, identify the equipment type, then obtain the part number, weight and inside diameter data. <input type="checkbox"/> Demonstrate the ability to calculate the maximum fluid rate for Discharge Manifold Equipment. <input type="checkbox"/> Discuss the effects on manifold equipment when the flow-rate exceeds 35ft/sec. | |
| 2.5 | <p>Surface Manifold Equipment Evaluation Manual:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review the Surface Manifold Equipment Evaluation Manual. <input type="checkbox"/> Identify and describe the numeric information on the equipment identification bands. <input type="checkbox"/> Use the Surface Manifold Equipment Catalog and Surface Manifold Equipment Evaluation Manual to obtain dimensional qualification data for a specified piece of manifold equipment. <p><u>For the components listed below</u>, demonstrate the ability to visually examine DME Threads & Wings (Union Ends), Sealing & Interior Surfaces for damage or excessive corrosion, erosion and wear.</p> | |

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| 2.6 | <p>LoTorc Valve (Master Valve):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review the LoTorc Valve Catalogue. <input type="checkbox"/> Demonstrate the ability, via computer simulation and/or practical assessment, to: <ul style="list-style-type: none"> • Disassemble a LoTorc Valve • Visually inspect a LoTorc Valve for damage/signs of failure, including the body, plug & inserts. • Reassemble a LoTorc Valve • Witness the Qualification Pressure Test if possible <input type="checkbox"/> Application - Discuss the application/use for a LoTorc Valve, including the function of specific parts - inserts, plug & seals. <input type="checkbox"/> Operation: <ul style="list-style-type: none"> • Demonstrate the ability to adjust a leaking LoTorc Valve. • Discuss the purpose for counting the turns when opening/closing any wheel style valve. • Demonstrate knowledge of the insert replacement “rule” (for reassembling a LoTorc). <input type="checkbox"/> Safety – Discuss the importance of protecting the Grease Fitting when handling a LoTorc Valve. <input type="checkbox"/> Safety – Demonstrate the ability to properly lift & handle a LoTorc Valve. | |
| 2.7 | <p>Chiksan/Swivel Joint:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate the ability, via computer simulation and/or practical assessment, to: <ul style="list-style-type: none"> • Disassemble a Chiksan/Swivel Joint • Visually inspect a Chiksan/Swivel Joint for damage/signs of failure, including Ball Plugs & Leak Detector Port • Reassemble a Chiksan/Swivel Joint, verifying proper operation • Witness the Qualification Pressure Test if possible <input type="checkbox"/> Application - Discuss the application/use for Chiksan/Swivel Joints. Identify two types (minimum) of Chiksan/Swivel Joints. <input type="checkbox"/> Operation – Discuss how properly installed Chiksan/Swivel Joints provide flexibility (kick) in the discharge line. <input type="checkbox"/> Safety - Discuss the importance of properly installed Ball Plugs. <input type="checkbox"/> Safety - Discuss the purpose of the Leak Detector Port. <input type="checkbox"/> Safety – Demonstrate the ability to properly lift & handle a Chiksan/Swivel Joint. | |
| 2.8 | <p>Discharge Joints, Tee’s, Wye’s, Laterals & Manifolds:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate the ability, via computer simulation and/or practical assessment, to: <ul style="list-style-type: none"> • Disassemble Discharge Joint, Tee, Wye, Lateral, or Manifold • Visually inspect Discharge Joint, Tee, Wye, Lateral, or Manifold for damage/signs of failure, including using | |

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| | <p>Calipers to measure sealing surface dimensions</p> <ul style="list-style-type: none"> • Reassemble Discharge Joint, Tee, Wye, Lateral, or Manifold • Witness the Qualification Pressure Test if possible <p><input type="checkbox"/> Application - Discuss the application/use of Discharge Joints, Tee's, Wye's, Laterals, Manifolds and how each functions.</p> <p><input type="checkbox"/> Safety - Demonstrate ability to discuss connection compatibility and explain structural differences and consequential safety implications of high pressure connections including pressure ratings. For example, difference between Fig 602 and 1502 compatibility.</p> <p>Safety – Demonstrate the ability to properly lift & handle a Discharge Joint, Tee, Wye & Lateral.</p> | |
| 2.9 | <p>Check Valves:</p> <p><input type="checkbox"/> Demonstrate the ability, via computer simulation and/or practical assessment, to:</p> <ul style="list-style-type: none"> • Disassemble a check valve • Visually inspect a Check Valve for damage/signs of failure, including erosion on dart, flapper, & inlets • Reassemble a Check Valve, verifying hex socket screws are in place & secure • Witness the Qualification Pressure Test if possible <p><input type="checkbox"/> Application - Discuss the application/use for a Check Valve. Identify the two types of Check Valves.</p> <p><input type="checkbox"/> Operation – Demonstrate the ability to orient (direction of arrow) a check valve to ensure installation matches with flow direction.</p> <p><input type="checkbox"/> Safety - Discuss why a release valve is installed between a check valve and the well-head.</p> <p><input type="checkbox"/> Safety – Discuss the consequences of installing a check valve in the wrong direction.</p> <p><input type="checkbox"/> Safety – Demonstrate the ability to properly lift & handle a Check Valve.</p> | |
| 2.10 | <p>Pressure Release Valve (pop-off):</p> <p><input type="checkbox"/> Review the following OTECO Bulletins:</p> <ul style="list-style-type: none"> • Pressure Relief Valve: Disassembly, Inspection, & Assembly Bulletin • Safe Piping Design for Pressure Relief Valves: Reaction Forces & the Discharge Stream <p><input type="checkbox"/> Demonstrate the ability, via computer simulation and/or practical assessment, to:</p> <ul style="list-style-type: none"> • Disassemble a Pressure Relief Valve • Visually inspect a Pressure Relief Valves for damage/signs of failure • Reassemble a Pressure Relief Valve • Witness the Qualification Pressure Test if possible <p><input type="checkbox"/> Application - Discuss the application/use of a Pressure Release Valve (pop-off) and how it functions.</p> | |

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| | <input type="checkbox"/> Operation – Discuss pressure rating and flow capacity considerations when using a Pressure Release Valve. <input type="checkbox"/> Safety – Demonstrate knowledge of the proper relief line configuration for a Pressure Release Valve. <input type="checkbox"/> Safety – Demonstrate the ability to properly lift & handle a Pressure Release Valve. | |
| 2.11 | <p>Ball Injector:</p> <input type="checkbox"/> Demonstrate the ability, via computer simulation and/or practical assessment, to: <ul style="list-style-type: none"> • Disassemble a Ball Injector • Visually inspect a Ball Injector for damage/signs of failure • Reassemble Ball Injector, verifying that ratchet mechanism functions smoothly, without too much effort • Witness the Qualification Pressure Test if possible <input type="checkbox"/> Application - Discuss the application/use of a Ball Injector and how the balls function. <input type="checkbox"/> Operation – Demonstrate the ability to load & operate the Ball Injector. <input type="checkbox"/> Safety – Demonstrate knowledge for proper handle orientation when manually operating the Ball Injector. <input type="checkbox"/> Safety – Demonstrate the ability to specify the frequency of qualification testing and maintenance for Ball Injectors. <input type="checkbox"/> Safety – Demonstrate the ability to properly lift & handle a Ball Injector. | |
| 2.12 | <p>DME Assembly Sequence:</p> <input type="checkbox"/> Via simulation, demonstrate the ability to arrange DME components, from pump to well-head, in the proper order. | |
| 2.13 | <p>Hand and Finger Safety:</p> <input type="checkbox"/> Safety – Correctly positions hands and fingers when performing any task that can result in injuries such as, pinching, mashing and cutting while wearing appropriate gloves and other PPE in accordance with HSE C7-S7 Hand and Arm Protection Guidelines. | |
| 3. | <p>Competency Statement: PE-FA-OA1-6-Completes preparation for deployment to field operations - Equipment & Drive Off Maintenance</p> <p>Scope: Operator Assistant I competency development for Equipment Maintenance and Procedures for Field Operations including Housekeeping</p> <p>Objective: Provide the Candidate with the knowledge and skills necessary to perform routine maintenance safely and reliably for equipment deployed in the Country/NWA.</p> | OJL Hours <u>364</u> |
| 3.1 | <p>Complete a safety orientation including a demonstration of all hand tools, power tools, high pressure test fixtures/wash pumps and PPE requirements for working in the Equipment Maintenance Shop, Wash Bay and Fuel Island. Assess the Health & Safety risks present (review JSAs).</p> | |

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| 3.2 | Complete an appropriate safety and environmental induction to include HAZMAT regulations as they pertain to the control of hazardous chemicals in and around the wash bay and fuel island. Demonstrate a proficiency in discussing these controls and unplanned spills. | |
| 3.3 | Demonstrate the ability to identify sub components of our pumping and blending trailers, their use and how they each function. IE, power train, cooling & lubrication systems, liquid fill points, starting systems, shutdown systems and electronic controls systems (ACE, ARC, etc). | |
| 3.4 | Point out the 'Kill Switch' to the Assessor discussing its purpose and non-normal operating conditions under which the 'Kill Switch' is used. | |
| 3.5 | Demonstrate the ability to explain how the braking & lighting systems function on "rolling stock". Have Candidate perform a DOT Brake Leak Test and explain the reasoning behind it. | |
| 3.6 | Demonstrate the ability to explain the safety features and principles of operation for lifting and hoisting systems used at the Field Facility (Yard). For example the overhead hoists and Forklifts. Have Candidate Identify what certification is required? | |
| 3.7 | Demonstrate ability to perform a periodic preventative maintenance check (PM) for pumping and blending equipment. For example, both pumping and blender trailers and or body load equipment. | |
| 3.9 | Demonstrate ability to operate wash bay high pressure equipment safely, perform a risk assessment and or Safety Meeting each morning prior to commencing work. | |
| 3.10 | Demonstrate ability to properly clean equipment and prevent damage from high pressure water ingress to shaft seals, lubricant reservoirs, cooling systems and other components sensitive to high pressure water and or cleaning solutions. This includes maintaining good house keeping in the tractor cabs and blender control areas and pump control areas. | |
| 3.11 | Demonstrate ability to safely fuel the equipment, add lubricants and knowledge of associated documentation (Trip Sheet) controls. Demonstrate ability to point out all safety equipment at the fuel island and aboard the fracturing equipment, identify class of extinguishers and safety procedure for reporting unsafe acts or fires. | |
| 3.12 | Candidate must complete the I Learn online module, Essential Vehicle Trip Inspections before completing Phase 1 of the development program. | |
| 3.13 | Demonstrate the ability to identify sub components of our proppant handling equipment - Mountain Movers, Hi Lo Sand Trucks, ARC/ACE Gathering Conveyor, their use and how they each function. IE, bin "gates", hydraulic systems and power pack, belts and rollers, support pads, and fill tubes and electronic controls systems (ACE, ARC). Discuss the safe practices while working at heights on top of bins. | |
| 3.12 | Demonstrate ability to perform a periodic preventative maintenance checks for Frac equipment in your location. Be Assessed for performing Pre & Post Trip Sheet Inspections. | |

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| 3.13 | Read and demonstrate understanding of the Equipment Maintenance Standards ST-GL-HES-MA-001. Candidate completes an assessment of its contents. | |
| 3.14 | Demonstrate ability to perform a Lock Out – Tag Out (global HSE Standard C6–S2) procedure while performing a periodic PM. | |
| 4. | Competency Statement: PE-FA-OA1-7-Completes preparation for deployment to field operations - High Pressure Pump Maintenance. Scope: Operator I competency development for High Pressure Pump Maintenance. Objective: Provide the Candidate with the knowledge and skills necessary to perform High Pressure Pump Maintenance and understand the theory of operation. | OJL Hours <u>364</u> |
| 4.1 | Completes a safety orientation including a demonstration of all hand tools, power tools, high pressure test fixtures and test pumps and PPE requirements for working in the High Pressure Shop. Assess the Health & Safety risks present (review JSA). | |
| 4.2 | Read and demonstrate an understanding of the HT-400 Maintenance and Repair Manual, 8 th edition. Completes an assessment of HT-400 Maintenance and Repair Manual, 8 th edition, content paying particular attention to the components of the “fluid ends”, and the difference between parts sizes (3 3/8” - 6”), how the Fluid End is lubricated and the packing & sealing mechanism functions. | |
| 4.3 | Disassemble, inspect and reassemble a minimum of 5 ea. HT-400 fluid end pots paying particular attention to worn/damaged components. Demonstrate ability to identify fluid cutting and pump seats and seat interface where “wash outs” have occurred. Have Candidate witness the Pressure Test. | |
| 4.4 | Read and demonstrate an understanding of the HQ-2000 Pump Manual Supplement (December 1996). Completes an assessment of its content paying particular attention to the components of the “fluid ends”, and the difference between parts sizes (33/8” - 6”), and how the Fluid End is lubricated and the packing & sealing mechanism functions. | |
| 4.5 | Disassemble, inspect and reassemble a minimum of 5 ea. HQ-2000 fluid end pots paying particular attention to worn/damaged components. Demonstrate ability to identify “fluid cutting” and pump seats and seat interface where “wash outs” have occurred. Have Candidate witness the Pressure Test. | |
| 4.6 | Read and demonstrate an understanding of the HT-2000 Pump (4.5”) Fluid End Manual 334.1600. Complete an assessment of its content paying particular attention to the components of the fluid ends, and the difference between parts sizes (4.5in, 5in) how the Fluid End is lubricated and the packing & sealing mechanism functions. | |

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| 4.7 | <p>Disassemble, inspect and reassemble a minimum of 5 ea. HT-2000 fluid end pots paying particular attention to worn/damaged components.</p> <p>Demonstrate ability to identify “fluid cutting” and pump seats and seat interface where “wash outs” have occurred.</p> <p>Have Candidate witness the Pressure Test.</p> | |
| 4.8 | <p>Read and demonstrate understanding of the HT-150 Maintenance and Repair Manual, October 1996 Edition.</p> <p>Complete an assessment of its content paying particular attention to the components of the “fluid ends”, and the difference between parts sizes (2” – 4.5”), how the Fluid End is lubricated and the packing & sealing mechanism functions.</p> | |
| 4.10 | <p>Disassemble, inspect and reassemble a minimum of 5 ea. HT-150 fluid end pots paying particular attention to worn/damaged components. Demonstrate ability to identify “fluid cutting” and pump seats and seat interface where “wash outs” have occurred.</p> <p>Have Candidate witness the Pressure Test.</p> | |
| 4.11 | <p>Disassemble, inspect and reassemble a minimum of 5 ea. SPM fluid end pots from Crown Units paying particular attention to worn/damaged components.</p> <p>Demonstrate ability to identify “fluid cutting” and pump seats and seat interface where “wash outs” have occurred.</p> <p>Have Candidate witness the Pressure Test.</p> | |
| 4.12 | <p>Demonstrate the ability to select proper pump elastomers due to pressure influences or when hostile fluids are to be pumped. For example, pressures in excess of 10,000 psi and fluids such as CO₂ or Xylene.</p> | |
| 5. | <p>Competency Statement: PE-FA-OA1-8-Completes preparation for deployment to field operations, Phase-1 Lifting & Handling - Rigging Level I.</p> <p>Scope: Operator Assistant I competency development for field rigging. Primary focus is to support crane and hoisting operations for routine rig-up and rig-down of loose equipment and components with engineered lifting ‘pads’ with a dedicated sling or sling set frequently used in the course of HES work.</p> <p>Objective: Provide the Candidate with the knowledge and skills necessary to perform routine rigging operations safely and reliably. Candidate completes Crane Awareness and Rigging 1 learning activities.</p> | OJL Hours <u>364</u> |
| 5.1 | <p>Completes a safety orientation including a demonstration of all hand tools, power tools, high pressure test fixtures/wash pumps and PPE requirements for working in the Facility Yard, Equipment Lay-Down Area, Maintenance Shop, Wash Bay and Fuel Island. Assess the Health & Safety risks present (review JSAs).</p> <p>Note: This is the same criteria found in Equipment Maintenance.</p> | |
| 5.2 | <p>Verbally identifies major mobile crane components (winch brake, winch, wire rope, sheaves, main block, hook, outriggers, and the like).</p> | |

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| 5.3 | Verbally identifies major overhead hoist components, including shop overhead hoist control functions, involved with lifting and hoisting operations for the purpose of understanding applied loads and loading limitations. | |
| 5.4 | Visually, before each use, inspects web/mesh slings, chains, synthetic slings, wire rope slings, hooks, other end connections and rigging accessories such as shackles and eye hooks for safe working condition and maintains current certification per HSE C4-S6, C4-S7 and OSHA Standards 1910.184, ANSI B30.9 (Slings), ANSI B30.10 (Hooks) and other Country/NWA standards. | |
| 5.5 | Demonstrates ensuring all rigging equipment has identification tags and properly stowed and secured on crane prior to leaving the facility or well site. | |
| 5.6 | Demonstrates disposal of faulty or obsolete lifting and handling equipment while identifying approved manufactures products for replacement. | |
| 5.7 | Demonstrates recognition of proper sling angles, principles of centre-of-gravity and load stability when preparing for a lift. | |
| 5.8 | Demonstrates providing assistance to Crane Operator in deploying/stowing crane outrigger pads and or mats using correct body positioning for back safety. Demonstrates awareness of body position during lifting operations avoiding the potential for pinching or crushing impact on whole body or extremities including hands and fingers. | |
| 5.9 | Demonstrates the following prior to commencing a lift; <ul style="list-style-type: none"> • Participates in Safety Huddle to obtain knowledge of the lifting plan including existing or potential hazards (i.e. ground support requirement, crane level, overhead power lines/safe working distances, swing radius, etc). • Specifies lifting equipment to be used and that it is fit-for-purpose. • Identified all loads ensuring they are free and clear and not fixed through mechanical or other means to other structures (such as bolted, welded or frozen to ground). • Discusses communication between Crane Operator/Lift Supervisor the designated Rigger/s and all other personnel to ensure the communication methods are fit-for-purpose (i.e. hand signals, 2 way radio, loud speaker, signage, etc). | |
| 5.10 | Demonstrates maintaining communications with Crane Operator/Lift Supervisor throughout crane operations (stops rigging operations when communication is interrupted requesting Crane Operator to cease operation). Demonstrates use of correct hand signals proficiently during crane or hoisting operations. | |
| 5.11 | Demonstrate safe connects and disconnects of rigging equipment to/from crane or hoist hook and load aware of pinch points and potential for crushing impact. | |

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| 5.12 | Demonstrates ensuring loads are properly balanced, stable and well secured prior to the lift (using appropriate rigging equipment and techniques for unbalanced loads). Demonstrates installation of tag lines to loads prior to lift. | |
| 5.13 | Demonstrates ensuring the load travel path is unobstructed and free of hazards during the lift including its final placement point prior to releasing the load from the crane or hoist hook. | |
| 5.14 | Determines safe working distance from power lines and other hazardous surroundings (i.e. equipment in adjacent bay, pressurized piping systems, etc). Demonstrates knowledge of safety standards regulating lifting and hoisting operations around electrical or other energized sources. | |
| 5.15 | Demonstrate safely assisted non-normal lifting operations such as, blind lifts and off-centre lifts during the job preventing side loading and swinging loads through effective communication with the crane operator. | |
| 5.16 | Demonstrate good housekeeping practices and general maintenance for all rigging equipment. | |
| 5.17 | Read and demonstrate an understanding of the HSE Standard C4-S6, Lifting & Hoisting Equipment Inspections. Complete an assessment of the HSE Standard C4-S6, Lifting & Hoisting Equipment Inspections contents. | |
| 5.18 | Read and demonstrate an understanding of the HSE Standard C4-S7, Lifting & Hoisting Equipment. Complete an assessment of the contents. | |
| 5.19 | Read and demonstrate an understanding of OSHA 1926.550 Standard for power line safety where applicable. Complete an assessment of the OSHA 1926.550 Standard for power line safety contents. | |
| 5.20 | Read and demonstrate an understanding of the ANSI B30-5 Standard for Power Line Safety where applicable. Complete an assessment of the ANSI B30-5 Standard for power line safety contents. | |
| 5.21 | Read and demonstrate an understanding of the National Country Standards for power line safety where applicable. Complete an assessment of the National Country Standards for power line safety contents. | |
| 6. | Competency Statement: Obtain State/Country Commercial Drivers License (CDL) to drive commercial vehicles. Scope: Operator Assistant I competency development for driving of commercial equipment. Objective: Provide the Candidate with the knowledge and skills necessary to safely drive and operate commercial equipment in the field safely and reliably as deployed in the Country/NWA. | OJL Hours <u>180</u> |
| Total OJL Hours | | 2,000 |

B. RELATED INSTRUCTION OUTLINE

| Course Name | Contact Hours |
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| 1. New Hire Orientation | 32 |
| 2. OSHA Awareness Training | 40 |
| 3. Drop-off Maintenance | 40 |
| 4. Pump Maintenance Non-Logging | 40 |
| 5. Electrical/Mechanical Maintenance | 24 |
| 6. Discharge Iron and Manifolds | 24 |
| 7. Rigging | 8 |
| 8 Driving School to obtain/validate CDL | 50 |
| Total RI Hours | 258 |