

1. Purpose

This document specifies the hazards, risk, controls and residual risk associated with the Welder B Pressure role for the Alberta region. It is applicable to the Journeyman Welder, Welding Foreman, and Welding Apprentice positions.

Table 1 – Hazard Assessment Dashboard

Scope						
It is applicable to the Journeyman Welder, Welding Foreman, and Welding Apprentice positions.						
Activities / Operations / Tasks			PPE (Field Site Visits)			
<ul style="list-style-type: none"> Driving (Between Locations) Working in Adverse Weather Conditions Natural Gas Leak (Exposure) Animal and Insect Encounters Customer and Employee Contact (Field and Shop) Open Excavation Working in Confined Spaces Use of the Drill Press Using Air Powered or Electrical Tools (Drills, Rivet, Guns, Grinders, Sanders) 	<ul style="list-style-type: none"> Overhead Doors General Electric Hazards Use of the Band Saw Brake (Press) Compressed Air Compressed Gases (Exposure) Electrode Stabilization Oven Exposure to Engine Exhaust Ergonomics Chemical and Flammable Products Use of a Hydraulic Press 	<ul style="list-style-type: none"> Iron Worker Ladder Use Material Storage Metal Scrap Bins Use of Overhead Cranes Oxy Acetylene Cutting Tools and Equipment Grinders (Pedestal, Air, Electric) and Sanders (Air, Electric) Pipe Threader Plasma Arc Cutter Forklift and Telehandler Operations 	<ul style="list-style-type: none"> Pipe Stands Use of a Metal Sheer Tiger Torch Trip Hazards Turn Tables (Positioners) Welding Machines, Rods and Wires (When Welding) Hand Tools (Pipe Wrenches, Wrenches and Screwdrivers, etc.) General Material Handling Other Tasks, as Required 	<ul style="list-style-type: none"> FR Coveralls Steel Toed Boots (6-8") Blackline Monitor Safety Glasses Respirators Gloves (various types) Leather Jacket/Sleeves Cotton Beanie Welding Helmet Hard Hat Hearing Protection Harness 		
Major Equipment /Office Equipment			Highest Risk Task (Residual Risk)			
<ul style="list-style-type: none"> Pneumatic Tools Electrical Power Tools Oxy Acetylene Cutters Ladder Cords 	<ul style="list-style-type: none"> Grinders Shoring Pipe Threader Forklift 	<ul style="list-style-type: none"> Trailers Sanders Wrenches Plasma 	<ul style="list-style-type: none"> Zoom Boom Arc Cutter Drill Press Hydraulic Press 	<ul style="list-style-type: none"> Brake, Extractor Forklift Band Saw Ladders 	<ul style="list-style-type: none"> Driving (Between Locations) Natural Gas Leak (Exposure) Working in Confined Spaces 	<h1>8</h1> <h2>MEDIUM</h2>
Applicable Work Procedures and Documents		Hazard Impacts				
<ul style="list-style-type: none"> GD 00152 Animal Encounters WP 00018 Forklift Operations WP 00107 Extreme Weather Conditions WP 00473 Vehicle and Equipment Operator Safety WP 00770 Barricading 	<ul style="list-style-type: none"> Personal Injury or Vehicle Damage MSD/RSI's Objects Impacting Persons or Property Driving Alone Inability to get Emergency Assistance Loss of Production Property Damage Death 	<ul style="list-style-type: none"> Electrical Contact Equipment or Tool Damage Hearing Impairment Sprains, Strains Hitting Head on Overhead Door Cage, Slips, Trips and Falls Damaged Forklift 	<ul style="list-style-type: none"> Tip Over, Driving too Fast Falling Loads Collisions and Pedestrians being Struck Crush Hazards Improperly Parked Truck and being Struck Overturning Forklift, Falling Load 			
Training Requirements		Critical Control				
<ul style="list-style-type: none"> Working Alone Ergonomics Training Onboarding WHMIS 2015 In Seat Driver Evaluation, Resources, Exam Confined and Restricted Space Entry Bite Prevention Training Biohazard Training Violence and Harassment Training Inclusive and Respectful Workplace 	<ul style="list-style-type: none"> Equipment Training Fit Testing SCBA/SABA Proper Lifting Techniques Forklift Rigging and Hoisting Welding Training Onboarding Code of Conduct 	<ul style="list-style-type: none"> Vehicle Equipment, Seatbelts, Airbags, Horn, Back-Up Alarm, Vehicle Lights, Telematics, GPS, Avoid Driving in Extreme Weather Clean Windows to Avoid Glare Alternate Route Planning Use Ratchet Straps with a Working Load Limit Blackline Personal Monitor Postpone Work In Extreme Weather Conditions Trench Rescue Device (TDR) Customer and Cattle Gates Emergency Shut Off/ESD Lockout/Tagout Securing Materials to Tabletop 	<ul style="list-style-type: none"> Bolt to Table Grounding Plug ESD Guards & Gauges Double Insulated Grounded Circuits Guards, Safety Switches Drive Chains, Electronic Sensor Manual Opener Impact Sensor Breakers Emergency Stops Emergency UP Button Lockout Check Valve, Tie Hose to Regulator Purge Petcock 	<ul style="list-style-type: none"> Fusible Discs, Safety Caps Insulation Thermostat Shut off Engine when Possible Anti-Fatigue Matting Proper Work Bench Height Flammable Cabinets Proper Storage Bins Adequate Ventilation Scenes, Pressure, Relief Valves Guard for Pedal, limit Switches Use Racks and Shelves Speed Controls 	<ul style="list-style-type: none"> Regulators, Flashback Arresters Fusible Rupture Discs, Plug Ruptures, Safety Caps Tool Resets and Face Plates Foot Pedal Clamp Air Regulators Concave Mirrors Roll Overprotective Structure (ROPS) Designed/Engineering Stands Certified Tank and Valving Air Extractors Safety Screen Use of Forklift, Dolly, Cart, Pallet Jack 	

Table 2 – Formal Hazard Assessment

#	Activity/ Operation/ Task	Hazard Description	Hazard Category	Routine (normal)/ Non-Routine / Emergency	Hazard Impact	Initial Risk Probability	Initial Risk Severity	Risk Ranking	Risk Level	ACTION Priority Level	Legal and Other Requirements	Controls 1-Elimination 2-Substitution 3-Engineering 4-Administrative 5- PPE	Residual Risk Probability	Residual Risk Severity	Residual Risk Ranking	Residual Risk Level	ACTION Priority Level	Further Control Rec.
1		Distracted Driv	People	Routine	Personal Injury or Vehicle Damage	4	4	16	HIGH	Requires Immediate Action		4 - Procedures on avoiding distracted driving, Pull off roadway to safe location to use electronic devices.	4	1	4	LOW	Acceptable Risk	
2		Static Position	Motion	Routine	MSD/RSI's	3	2	6	MEDIUM	Acceptable with Current Controls		4 - Rest Breaks and Body Stretches, Seat Adjustments and Proper Driving Posture, Ergonomic Program. 5 - Portable Back Supports.	3	1	3	LOW	Acceptable Risk	
3		Fatigue	Psychosocial	Routine	Personal Injury or Vehicle Damage	4	4	16	HIGH	Requires Immediate Action		4 - Rest Breaks and Body Stretches, Carpooling, Journey Management (Preplan Trip).	4	2	8	MEDIUM	Acceptable with Current Controls	
4		Weather	Temperature	Routine	Personal Injury or Vehicle Damage	4	3	12	HIGH	Requires Immediate Action		1 - Avoid Driving in Extreme Weather. 3 - Seatbelts, Airbags, Vehicle Lights, Telematics GPS Tracking System. 4 - Driver's License (Class 5): Standard Vehicles, Driver Abstract Consent Form Release (every 3 years), Vehicle Familiarization (Review Vehicle Operator Manual), Driver Resources and Exam, In-Seat Driver Evaluation, Follow Rules of the Road, WP 00107 - Extreme Weather Conditions.	4	2	8	MEDIUM	Acceptable with Current Controls	
5		Other Drivers	Mechanical and Motion	Routine	Personal Injury or Vehicle Damage	4	1	4	LOW	Acceptable Risk		3 - Seatbelts, Airbags, Vehicle Lights, Telematics GPS Tracking System. 4 - Follow Rules of the Road, Avoid Driver Conflicts (Road Rage).	4	1	4	LOW	Acceptable Risk	
6		Vehicle Condition	Mechanical and Motion	Routine	Personal Injury or Vehicle Damage	4	2	8	MEDIUM	Acceptable with Current Controls		4 - Fleet Shared Services Vehicle Preventative Maintenance (PM) Schedules, WP 00473 - Vehicle and Equipment Operator Safety (Vehicle Inspections), Vehicle Operator's Manual.	4	1	4	LOW	Acceptable Risk	

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7		Road Conditions	Mechanical and Motion	Routine	Personal Injury or Vehicle Damage	4	2	8	MEDIUM	Acceptable with Current Controls		2 - Alternate Route Planning. 3 - Seatbelts, Airbags, Vehicle Lights, Telematics GPS Tracking System. 4 - Driver Resources and Exam, In-Seat Driver Evaluation.	4	1	4	LOW	Acceptable Risk	
8		Securing Vehicle Loads	Gravity and Motion	Routine	Objects Impacting Persons or Property	4	4	16	HIGH	Requires Immediate Action		3 - Use Ratchet Straps with a Working Load Limit (WLL), Objects extending out of truck bed are flagged or to display red lights. 4 - Regular load inspections and criteria, Good Housekeeping inside vehicle and secure contents.	4	2	8	MEDIUM	Acceptable with Current Controls	
9		Driving Alone	Psychosocial	Routine	Driving Alone may lead to inability to get timely emergency assistance	4	3	12	HIGH	Requires Immediate Action		3 - Telematics GPS Tracking, Blackline Loner Device. 4 - Working Alone Procedure, CMIS 1505500 Working Alone Safety, Cellphone, Control Centre and Dispatch Check-in Protocols, Emergency Response Provisions.	4	1	4	LOW	Acceptable Risk	
10		Tip over	Motion and Gravity	Routine	Crushed or injury, forklift damage, load damage	4	3	12	HIGH	Requires Immediate Action	OHS Code: Powered Mobile Equipment	3 - Roll-over Protective Structure (ROPS), 4 - WP 00018 - Forklift Operations, Don't jump - stay in the forklift, hold tight to the steering wheel, brace feet, lean away from the impact, lean forward. 5 - Steel Toed Boots (6-8"), Safety Glasses, Seat Belt.	4	1	4	LOW	Acceptable Risk	