Ideagen Machine Safety

outside ideas

RISK MANAGEMENT REPORT

TYPE	Loader, Skidsteer Tracked - Seated
MAKE	Caterpillar
MODEL	259D
ASSET NUMBER	M40
SERIAL NUMBER	CAT0259DVFTK01227



Report Number	OI 20260511-1058
Date	11-May-2026
Assessment Purpose	Plant in use
State	SA
Created By	Dylan Thomson
Owner	Outside Ideas
Assessor	Dylan Thomson
Assist. Assessor(s)	
Completed By	Dylan Thomson

SUMMARY

Risk Treatments

✅ **In Place: 90**

⚠ **Required: 0**

Critical: 0

High: 0

Medium: 0

Low: 0

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SECTION 1 — **IMPORTANT INFORMATION**
Contains information outlining the scope and any limitations applicable to this Risk Management Report

SECTION 2 — **MACHINE DETAILS**
Contains standard machine specifications and details of any extras fitted

SECTION 3 — **RISK ANALYSIS, RISK EVALUATION & RISK TREATMENT**
Contains details of the technique used to calculate risk ratings, time frame and risk treatments. Please refer to this information when reviewing and interpreting the information in section 4 & 5

SECTION 4 — **RISK TREATMENTS REQUIRED**
Contains detailed information regarding the risk treatments to be implemented including hazard, risk rating, time frame, relevant standards & legislative references

SECTION 5 — **RISK TREATMENTS IN PLACE**
Contains detailed information regarding the risk treatments in place including hazard, risk rating, relevant standards & legislative references

SECTION 6 — **IMAGES AND NOTES**
Contains images & any relevant information entered by the assessor

SECTION 1 IMPORTANT INFORMATION

This report was generated by Ideagen Machine Safety on Monday, 11 May 2026 10:32 AM

All operators of this item of plant must read and understand this report prior to operating this item of plant. This report pertains to this item of plant as it appeared on the day of inspection.

The safety hazards associated with the operating and maintaining of this item of plant have been identified as far as practical by visual inspection.The condition of this item of plant will change with use. No physical testing has been conducted (eg. Wire rope tests, stress tests, structural/non-destructive tests, noise tests, vibration tests, brake tests, insulation tests etc.) unless stated otherwise in the notes.

Controls outlined in both section 4 & 5 of this report must be maintained at all times whilst this item of plant is in operation. Any information contained in the notes section of this report shall be read in conjunction with section 3. Any information relating to the standard features have been supplied via the manufacturer and shall be used as a guide only until verified.

Additional Risk Assessment may be required, specific to the operating environment, for this item of plant.
All operators and maintenance personnel must be appropriately trained in the use & maintenance of this item of plant.

For further information regarding this report contact Ideagen Machine Safety on 1300 72 88 52

SECTION 2 MACHINE DETAILS

MACHINE DETAILS

- NOISE TEST RESULTS	1. Manufacturers specified noise level dBA	
	2. Ambient noise level dBA	
	3. Noise level - Operator position (high idle) dBA	
	4. Noise level - Operator position (low idle) dBA	
	5. Noise level LHS dBA @ m (high idle)	
	6. Noise level Front dBA @ m (high idle)	
	7. Noise level RHS dBA @ m (high idle)	
	8. Noise level Rear dBA @ m (high idle)	
	Operator Sound Level (dBA)	
	Sound Level @ 85dB(A) distance from attachment (m)	
BUCKET	Buckets width, min-max (mm)	1680-1830
CAPACITIES	Bucket capacity, min-max (m3)	0.34-0.44
	Capacity (lit/min)	
	Fuel Tank Capacity (Litres)	
	Hydraulic Oil Tank Capacity (Litres)	
	Rated operating load (kg)	921
	System Pressure (bar)	
DIMENSIONS/WEIGHTS	Dump height (mm)	2283
	Height (mm)	2111
	Length (mm)	3486
	Load height (mm)	
	Weight with loader (kg)	4013
	Width (mm)	1676
ENGINE	Engine Displacement (Litres)	3.3
	Engine Hours	
	Engine Make & Model	Cat C3.3B DIT
	Engine Number	
	Engine Petrol/Diesel	Diesel
	Number of Cylinders	4
	Power (kW@rpm)	54.2@2400
HYDRAULICS	Hydraulic Oil Flow (l/min)	
	Hydraulic Oil Pressure (Bar)	
	Hydraulic Pump Type	Gear
OPTIONS	Ride control (Std/Opt/NA)	
PLANT CLASSIFICATIONS	Class	900
	Year	
SAFETY STRUCTURES	FOPS Compliance No.	
	FOPS Serial No.	
	ROPS Compliance No.	
	ROPS Serial No.	
TRACKS	Track length on ground (mm)	
	Track pad width (mm)	
TRANSMISSION	Maximum speed F/R (km/h)	
	Transmission Type	HS
WORK CAPABILITIES	Bucket breakout (kgf)	2284
EXTRAS	Air Conditioning	
	Bucket - 4 in 1	
	Lifting Point	
	ROPS - Cabin	

SECTION 3 RISK ANALYSIS / RISK EVALUATION

RISK ANALYSIS

CONSEQUENCE

LIKELIHOOD

	1. INSIGNIFICANT Dealt with by in house first aid	2. MINOR Treated by medical professionals, hospital out patients	3. MODERATE Significant non permanent injury overnight hospital stay	4. MAJOR Extensive permanent injury eg. Loss of fingers, extended hospital stay	5. CATASTROPHIC Death, permanent disabling injury eg. Loss of hand, quadriplegia
A. Almost certain to occur in most circumstances	MEDIUM 8	HIGH 16	HIGH 18	CRITICAL 23	CRITICAL 25
B. Likely to occur frequently	MEDIUM 7	MEDIUM 10	HIGH 17	HIGH 20	CRITICAL 24
C. Possibly and likely to occur at sometime	LOW 3	MEDIUM 9	MEDIUM 12	HIGH 19	HIGH 22
D. Unlikely to occur but could happen	LOW 2	LOW 5	MEDIUM 11	MEDIUM 14	HIGH 21
E. May occur but only in rare circumstances	LOW 1	LOW 4	LOW 6	MEDIUM 13	MEDIUM 15

RISK EVALUATION

CRITICAL	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below.
HIGH	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below. If the appropriate risk treatments are not immediately accessible establish interim risk treatment strategies. Permanent risk treatments must be implemented within one week.
MEDIUM	Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the risk treatment table below. Permanent risk treatments must be implemented within one month.
LOW	Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the risk treatment table below. Permanent risk treatments must be implemented within three months.

RISK TREATMENT

Selecting the most appropriate risk treatment option involves balancing the costs and efforts of implementation against the benefits derived, with regard to legal, regulatory and other requirements. (source AS/NZS ISO 31000:2018)

Eliminate	Eliminate the risk source.
Substitute	Provide an alternative that is capable of performing the same task which is safer.
Isolate	Isolate people from the hazard.
Engineering	Provide or construct a physical barrier or guard.
Administration	Develop policies, procedures, practices and guidelines in consultation with employees to mitigate the risk. Provide training, instruction and supervision about the risk source.
Personal protective	Provide personal protective equipment to protect the individual from the risk source.

SECTION 4 RISK TREATMENTS REQUIRED

This section of the report pertains to hazards created by use of this item of plant which currently do not have risk treatments in place. The risk treatments recommended in this section have been developed based on relevant Australian Standards, health & safety legislation, the hierarchy of risk treatment in accordance with the guidelines set forth in AS/NZS ISO 31000 – Risk Management and various other sources. The recommended risk treatment measures must be developed, implemented and validated as effective prior to the operation, maintenance or testing of this item of plant. Treatments applied must be dated and initialled adjacent the recommendations. All operators must read and understand the entire contents of this section prior to operating this item of plant.

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating	Time Frame	Due Date	Date Rectified	Initial

SECTION 5 RISK TREATMENTS IN PLACE

This section of the report pertains to risk treatments currently in place on this item of plant. This section must be read in conjunction with the safety section of the manufacturers handbook. All operators must read and understand the entire contents of this section prior to operating this item of plant. These treatments or equivalent must remain in place at all times whilst this item of plant is in operation.

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
DELIVERY	**CRUSHING**	HIGH 22	**MEDIUM 15**
	Risk Treatments in Place: **SWMS Load Restraint** Ensure that all operators follow the approved SWMS/SOP when restraining this machine for transport.		
	References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations		
	CRUSHING	HIGH 22	**MEDIUM 15**
	Risk Treatments in Place: **SWMS Loading/Unloading** Ensure that all operators follow approved SWMS/SOP when loading and unloading this machine to and from a flat top truck or trailer, low loader or tilt tray.		
	References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations		
OPERATION	**CRUSHING**	CRITICAL 24	**MEDIUM 15**
	Risk Treatments in Place: **Manual Hitch** This item of plant is fitted with a manual hitch that meets the following requirements - 1. Has a primary retention system and a secondary safety system fitted 2. The primary retention system must be engaged and disengaged at the hitch 3. The secondary safety system must be retained on the hitch so that it cannot be removed without the use of tools. These requirements must be met at all times whilst this item of plant is in operation.		
	References: AS13031		
	INCORRECT OPERATION	CRITICAL 24	**MEDIUM 15**
	Risk Treatments in Place: **Operator Competency** Only persons who are qualified, trained and experienced and/or hold the relevant certification/license can operate this item of plant. If there is not a competent/licensed person available for operation of this item of plant then only persons who are supervised by a competent/licensed person can operate this item of plant.		
	References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations		
	CRUSHING	CRITICAL 24	**MEDIUM 15**
	Risk Treatments in Place: **Quick Hitch Movement** This item of plant is fitted with a quick hitch which will not allow unintended movement of the attachment if the primary retention system fails.		
	References: AS/ISO24410, AS13031		
	ELECTROCUTION, EXPLOSION	HIGH 22	**MEDIUM 15**
	Risk Treatments in Place: **Before You Dig (AUS)** This item of plant is fitted with a clear hazard warning label re: underground services and advice "Before You Dig, visit www.byda.com.au" to the operator work area. This advice must be adhered to strictly. Digging into an electricity cable or gas pipe can cause serious injury or death. Damaging a pipe or cable may also lead to isolating a community from emergency services such as fire, police or ambulance. This label must be present, clear and legible at all times.		
	References: ISO31000		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
INCORRECT OPERATION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Control Labels** All controls including all levers, buttons, pedals, switches etc. are clearly labelled as to their purpose and method of operation. These labels must be maintained in a clean and serviceable condition at all times.		
References: AS/NZS4024.1905		
INCORRECT OPERATION, OPERATIONAL MALFUNCTION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Drawbar Capacity Label** The item of plant has a drawbar and a hazard warning label attached adjacent the drawbar/tow hitch re: maximum towing capacity, crushing, keep clear. It must be present and fully functional and serviceable at all times.		
References: ISO31000		
ELECTROCUTION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Electrical Approach Distances** This item of plant has a hazard warning label re: overhead electrical hazards and minimum approach distances fitted. These distances must be adhered to strictly. These labels and tables must be present, clear and legible at all times. Spotters are required when working within 5 metres of the minimum approach distance of any live electrical apparatus. Any encroach within the minimum approach distances must only occur if the following provisions have been met - 1. The machine is designed to work within the minimum approach distances 2. Permission has been granted by the electricity company and 3. Safe systems of work have been documented and approved.		
References: ISO31000		
CRUSHING, ENTANGLEMENT, FIRE	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Emergency Stop/Shutdown Device** This item of plant is fitted with an emergency stop/shutdown device, capable of shutting the machine down, located at the normal operating position. This device must be fully functional at all times whilst this item of plant is in operation.		
References: AS20474.1		
CRUSHING, ENTANGLEMENT, FIRE	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **External Emergency Stop/Shutdown Device** This item of plant is fitted with an emergency stop/shutdown device, capable of shutting the machine down located on at least one external surface of the machine and is easily accessible. This device must be fully functional at all times whilst this item of plant is in operation.		
References: AS20474.1		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
INCORRECT OPERATION, NON COMPLIANCE	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Fork Attachment**

This item of plant is fitted with a fork attachment. This attachment must be inspected as part of the daily pre start check or before each use.

For safe operation of this attachment ensure all operators are familiar with at least the following as a minimum;

Training: Ensure operators are qualified, trained and experienced in the use of this attachment.
Inspection: Regularly inspect attachments for any signs of wear or damage. This includes checking for cracks, bends, or other deformities.
Compatibility: Ensure the attachment is compatible with the carrier unit.
Load Capacity: Be aware that attachments can alter the carrier unit's load capacity and center of gravity. Never exceed manufacturer's rated capacity.
Stability: Use attachments on level ground to maintain stability and prevent tipping.
Visibility: Attachments can affect the operator's visibility. Ensure the operator has a clear view of their surroundings, always carry the load as low as possible.
Attaching: Follow the manufacturer's instructions for coupling and uncoupling of the attachment.

Ensure that fork tynes are of sufficient length to support 75% of the load, fork tynes should be spread apart as wide as practicable so that the load is stable and evenly distributed on both fork tynes to ensure stability of the load prior to lifting.

References: ISO31000

INCORRECT OPERATION	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Operation Handbook**

The manufacturer's operation handbook has been supplied for this item of plant.

This handbook must be available at all times to all potential operators and supervisory staff. All potential operators must read and be familiar with this handbook prior to operating.

A complete risk assessment/Job Safety Analysis must be undertaken covering all operating processes and environments associated with this item of plant. SWMS should be produced for specific tasks associated with use of this item of plant.

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations

CRUSHING, FALLING	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Passenger Seat Label**

This item of plant is fitted with a clear hazard warning label re: Operator only, No passengers. Passengers must not be carried at anytime. This label must be clear and legible at all times whilst this item of plant is in operation.

Legislation: State Health & Safety Legislation & Regulation

References: AS1319

COLLISION	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Phone Use label**

This item of plant is fitted with an instruction label advising that mobile phones must not be used whilst operating this machine. Accordingly all operators must not use a mobile phone at any time whilst operating machine. If phone use is necessary then operator must place machine in park configuration in a safe position prior to phone use. Operators MUST adhere to this advice at all times.

This label must be clear and legible at all times whilst this item of plant is in operation.

References: AS1319, ISO31000

INCORRECT OPERATION	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Pre-op Checklist Loader, Skidsteer Tracked Seated**

A pre-operational checklist is available for this Loader, Skidsteer Tracked - Seated. All operators must complete this checklist prior to operating this Loader, Skidsteer Tracked - Seated.

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
INCORRECT OPERATION	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Quick Hitch Operation Handbook**

The manufacturer's operation handbook has been supplied for this quick hitch.

This handbook must be available at all times to all potential operators and supervisory staff. All potential operators must read and be familiar with this handbook prior to operating.

A complete risk assessment/Job Safety Analysis must be undertaken covering all operating processes and environments associated with this quick hitch. SWMS should be produced for specific tasks associated with use of this quick hitch.

References: AS13031

POOR VISIBILITY, COLLISION	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Rear Camera**

This item of plant is fitted with a rear camera which is suitable for day and night operations.
This camera and screen must be fully functional at all times whilst this item of plant is in operation.

References: AS/NZS4024.1201, ISO31000

CRUSHING	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **ROPS Label**

The warning label stating that the ROPS must not be damaged at any time (including cuts, drill holes and welds) must be present, clean and legible at all times.

References: ISO3471

CRUSHING	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **ROPS seat belt label**

This item of plant is fitted with a ROPS and has an advisory label stating that "seatbelts must be worn".
This label must be present, clean and legible at all times.
All operators and passengers must wear seatbelts whilst on this item of plant.

References: AS2294, ISO3471

INCORRECT OPERATION	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **SOP Loader, Skidsteer Tracked - Seated**

Safe Operation Procedures are available for this Loader, Skidsteer Tracked - Seated. The information in the Safe Operation Procedures must be followed at all times whilst operating this Loader, Skidsteer Tracked - Seated.

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations

POISONING, EXPLOSION, BURNS	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Tank ID Label**

The tank(s) on this item of plant have clear, legible label(s) identifying their contents, and if appropriate any necessary controls re: the contents. These must be present, clear and legible at all times. (this includes radiator, hydraulic, water and petrol/diesel tanks etc.)

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations

INSTABILITY, CRUSHING	HIGH 21	**MEDIUM 15**

Risk Treatments in Place: **Boom Lifting Point Table**

This item of plant has a lifting point fitted to the boom, accordingly a load/distance table is present at the operator work area. This must be clear and legible at all times. This item of plant must comply with the relevant parts of AS 1418 at all times. All operators must be appropriately trained to use this item of plant and licenced where necessary.

References: AS1418.8

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
INSTABILITY, CRUSHING	HIGH 21	**MEDIUM 15**
Risk Treatments in Place: **Boom Rated Capacity Label** This item of plant has a rated capacity label fitted to each side of the boom. Ensure that these labels are clear and legible at all times whilst this item of plant is in operation. Operators must not exceed this rated capacity at any time during operation.		
References: AS1418.8		
FIRE	HIGH 21	**MEDIUM 15**
Risk Treatments in Place: **Fire Extinguisher** This item of plant is fitted with an approved and maintained fire extinguisher. Fire extinguisher(s) must be present and fully functional at all times. They must be readily accessible to the operator. Regular inspections must also be carried out in accordance with the manufacturer's requirements and AS 1851 – 1995		
References: AS1851		
CRUSHING	HIGH 21	**MEDIUM 15**
Risk Treatments in Place: **Loader Crush Zone Label** The loader boom on this item of plant is fitted with a hazard warning label re: crush zone, keep clear. This label must be present and fully functional and serviceable at all times.		
References: AS1319, ISO20474-		
CRUSHING, INCORRECT OPERATION	HIGH 21	**MEDIUM 15**
Risk Treatments in Place: **Quick Hitch Information** This hydraulic quick hitch has the following information marked upon it - 1. The manufacturer's name and address 2. Model 3. Serial number 4. The year of manufacture 5. The mass of the hitch in kilograms 6. The lift point capacity (if fitted) in kilograms This information must be considered by all operators when assessing the suitability of the hitch for any task. Failure to consider and or comply with this information could lead to serious injury or death.		
References: AS13031		
HEARING LOSS	HIGH 19	**MEDIUM 14**
Risk Treatments in Place: **Hearing Protection Label - Bystanders** The hazard warning labels re: wearing of hearing protection for bystanders attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation.		
References: AS3781- , AS/NZS1269		
HEARING LOSS	HIGH 19	**MEDIUM 14**
Risk Treatments in Place: **Hearing Protection Label - Operator** The hazard warning label(s) re: wearing of hearing protection attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation.		
References: AS3781- , AS/NZS1269		
CRUSHING, STRIKING, COLLISION	HIGH 19	**MEDIUM 14**
Risk Treatments in Place: **Tail Swing Label** The rear of this item of plant has a hazard warning label re: general plant movement, tail swing, keep clear. It must be present and fully functional and serviceable at all times.		
References: ISO20474-		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
ENTANGLEMENT, SHEARING, BURNS	MEDIUM 14	**MEDIUM 13**
Risk Treatments in Place: **Engine Guard Label** The engine fan and alternator belts, pulleys and gears are guarded. These guards have clear legible hazard warning labels re do not open or remove guards while engine is running. These labels must be present, legible and easily seen at all times whilst this item of plant is in operation.		
References: AS/NZS4024.1201, AS1319		
CRUSHING	MEDIUM 14	**MEDIUM 13**
Risk Treatments in Place: **Ripper Crush Zone Label** The rippers on this item of plant are fitted with a hazard warning label re: crush zone, keep clear. This label must be present and fully functional and serviceable at all times.		
References: AS/NZS4024.1201, ISO20474-		
CRUSHING	MEDIUM 14	**MEDIUM 13**
Risk Treatments in Place: **Stabiliser Legs** This item of plant has a hazard warning label re: crushing, adjacent the stabiliser legs. These labels must be present, clear and legible at all times.		
References: AS/NZS4024.1201, AS1319		
BURNS	MEDIUM 12	**MEDIUM 12**
Risk Treatments in Place: **Open Cabin** Dust, exhaust fumes, chemical fumes, sunstroke and sunburn pose serious risk to the operator both short and long term. The appropriate controls for all of these hazards must always be available whilst this item of plant is in operation. If these controls e.g. hats, sunscreen, dust masks etc are not available then operation of this item of plant must cease until these are made available to all operators.		
References: ISO31000		
CRUSHING, COLLISION	MEDIUM 12	**LOW 6**
Risk Treatments in Place: **Warning Device (horn)** This item of plant is fitted with a fully functional audible warning device such as a horn. This must be easily accessed by the operator, and easily identifiable by nearby pedestrians. All operators should ensure the warning devices are functional at the start of each shift, by completing pre-start checklists. Warning devices should operate automatically where appropriate (eg reversing)		
References: ISO7731, ISO9533		
COLLISION	MEDIUM 9	**LOW 5**
Risk Treatments in Place: **Recovery Point Label** This item of plant is fitted with a hazard warning label adjacent the recovery tow point which states “Recovery tow point – Read manufacturer’s towing instructions before towing". Failure to do so could result in DEATH or SERIOUS INJURY. This label must be clear and legible at all times whilst this item of plant is in operation.		
References: ISO31000		
CRUSHING	CRITICAL 24	**MEDIUM 15**
Risk Treatments in Place: **Automatic(Quick) Hitch** This item of plant is fitted with a quick hitch that is fitted with a primary retention device and safety system that meet the following requirements - 1. Must be intentionally disengaged to remove attachments 2. The safety system is automatically activated as part of the engagement process 3. Has means of verifying engagement of both the primary retention device and the safety system from the operator position. These requirements must be met at all times whilst this item of plant is in operation.		
References: AS13031		

DESIGN COMPLIANCE

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
CRUSHING	CRITICAL 24	**MEDIUM 15**
Risk Treatments in Place: **Closed Eye Lifting Point** The lifting point fitted to this item of plant is the closed eye type. Hooks with out latching devices must not be used as a lifting point at any time.		
References: AS13031		
CRUSHING	CRITICAL 24	**MEDIUM 15**
Risk Treatments in Place: **Closed Eye Lifting Point With Latch** The lifting point fitted to this item of plant is the open hook with latch type. Hooks with out latching devices must not be used as a lifting point at any time.		
References: AS13031		
CRUSHING	CRITICAL 24	**MEDIUM 15**
Risk Treatments in Place: **Level Lift Loader** This item of plant is fitted with a level lift type loader. The level lift functionality must be operational at all times whilst this item of plant is in operation. OR This item of plant is fitted with a FOPS to control the crushing hazard created by the non level lift loader. The FOPS must be present at all times whilst this item of plant is in operation and a restraining device must be used to hold loads in place which a risk assessment indicates are unstable and may fall.		
References: ISO20474-		
CRUSHING, COLLISION	CRITICAL 24	**MEDIUM 15**
Risk Treatments in Place: **Park Brake** This item of plant is fitted with a fully functional park (hand) brake which meets the following requirements – 1. Is separate to the service brakes 2. Has a device which maintains the brake in the on position until intentionally disengaged The park brake must be regularly inspected and tested. These inspections and tests must be documented as part of your plant safety programme.		
References: AS3450		
NON COMPLIANCE	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Battery Isolator** This item of plant is fitted with a fully functional battery isolation switch that is clearly and legibly marked and lockable in the off position. The battery isolation switch must remain clearly and legibly marked and lockable at all times whilst this item of plant is in operation.		
References: AS20474.1		
COLLISION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Beacon** This item of plant is fitted with a safety beacon. This beacon must meet the following criteria at all times whilst this item of plant fitted is in operation - - Is visible up to 200m in all directions (allowing for intermittent obstruction from the plant structure whilst the plant is in operation) - Is fitted in the most appropriate location on machine to maximise visibility without risking continual damage NOTE: more than one beacon may be fitted to meet these criteria.		
References: ISO20474-		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
CRUSHING, NON COMPLIANCE	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Control Lock out**

The primary operator controls are fitted with an isolation device which meets the following requirements -
a) Must be engaged to allow entry & exit of the machine
b) Is not easily bypassed.

This device deactivates the primary operator controls. This must be employed during entry, exit and while performing maintenance on this item of plant.
This device must be fully functional at all times whilst this item of plant is in operation.

References: ISO10968

CRUSHING	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Earthmoving ROPS**

A Roll Over Protective Structure (ROPS) to AS 2294, ISO 3471, ISO 12117.1 or 2 or SAE J1040 is fitted to this item of plant. A permanent label stating this standard must be attached to the structure at all times. It must also carry a warning label re: wearing of seat belts at all times whilst this item of plant is in operation, and accordingly seat belts must be worn at all times during operation.

References: AS2294, ISO3471

ENTANGLEMENT	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Engine Guards**

The engine fan and alternator belts, pulleys and gears are guarded. These guards must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

References: AS/NZS4024.1601

STRIKING	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Forestry OPS**

This item of plant is fitted with an Operator Protective Structure (OPS = Devices intended to provide reasonable protection from penetrating objects to the front, side and top of the operator station e.g heavy duty mesh).
This guard must be present and fully functional at all times whilst his item of plant is in operation. If the OPS is damaged all forestry operations must cease until the guard is either repaired or certified safe for use by a competent person.

References: AS2294, ISO3449, ISO3471

CRUSHING	HIGH 22	**LOW 5**

Risk Treatments in Place: **Fork Lift Tyne Extensions**

This item of plant is fitted with fork-arm extensions which meet the following criteria –
- The parent fork-arm length is at least 60% of the fork extension length
- The total lateral internal clearance of the fork-arm extension does not exceed 10% of the parent fork-arm width
- The fork extensions are designed to prevent unintentional disengagement &
- Each fork extension is free from structural damage including deformation

Ensure that these criteria are met at all times whilst this item of plant is in operation.

References: AS2359.15

NON COMPLIANCE	HIGH 22	**HIGH 21**

Risk Treatments in Place: **Fork Tyne Extension Marking**

This item of plant is fitted with fork-arm extensions which are permanently marked with the following information –
a) Manufacturer's mark
b) Serial number and year of manufacturer
c) The rated capacity and load centre distance for the fork-arm extension
d) The required blade cross-section and minimum blade length for the parent fork-arm

These markings must be visible and legible at all times whilst this item of plant is in operation.

References: AS2359.15

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
CRUSHING, NON COMPLIANCE	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Forklift Tyne Movement Lock** The fork tynes are fitted with a lateral movement locking device. This device must be employed and fully functional at all times whilst this item of plant is in use. Always follow manufacturers instructions for adjusting and locking the fork tynes.		
References: AS2359		
STRIKING, BURNS	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Hydraulic Hose Failure Shield** This item of plant is fitted with a sturdy, permanent shield(s) between the hydraulic hoses and any body parts of the operator to provide protection during a hose or component failure. This shield(s) must be present and fully functional at all times whilst this item of plant is in operation.		
References: AS4024, ISO4413, AS2671		
STRIKING, BURNS	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Hydraulic Hoses** This item of plant has hydraulic hoses. These hoses must be inspected each day or before each use for wear and tear. If there are visible signs of wear, immediate action must be taken to control the risk arising from this wear. These inspections must be documented. Hydraulic fluid at high pressure can penetrate the skin, never use any part of your body to check for leaks. If oil penetrates the skin seek medical advice immediately. Always use a piece of cardboard or similar to check for suspected leaks. Always wear appropriate gloves when handling hydraulic hoses. Hydraulic pressure can be stored and is a hazard. Always connect and disconnect hydraulic hoses as per the manufacturer's manual.		
References: AS4024, AS2671		
CRUSHING	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Loader Prop** The loader boom on this item of plant is fitted with a safety support and instruction label. These must be fully functional and serviceable at all times. The support must be used when accessing the area under the boom and bucket for maintenance or any other purpose.		
References: ISO20474-		
CRUSHING, COLLISION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Loose Items - Operator Work Area** All items that could cause harm to the operator in the event of a collision or rollover are securely restrained.		
References: ISO31000		
POOR VISIBILITY, COLLISION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Machine Lights** This item of plant is fitted with self contained lighting. All of these lights must be fully functional and serviceable whilst this item of plant is in operation in areas of reduced light. If any of these lights stop working the operation must cease immediately and the faulty light be repaired before operation can continue in the areas of reduced light.		
References: ISO20474-		
CRUSHING, ENTANGLEMENT, STRIKING, COLLISION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Neutral Start** This item of plant has neutral start control in place. It must be fully functional and serviceable at all times whilst this item of plant is in operation.		
References: AS4024.1603		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
OPERATIONAL MALFUNCTION	HIGH 22	**LOW 2**
Risk Treatments in Place: **Plant Modification** The plant is in original condition.		
References: ISO31000		
CRUSHING	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Quick Hitch Controls** The quick hitch operation control is fitted with a device/method to prevent accidental operation. This device must be fully functional at all times whilst this item of plant is in operation.		
References: AS13031		
CRUSHING	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Quick Hitch Operation Alarm** This item of plant is fitted with a quick hitch with a fully functional audible alarm fitted to the operator work area to alert the operator that the host machine is in the mode that allows for the controls to be operated to engage or disengage attachments. This alarm must be fully functional at all times whilst this item of plant is in operation.		
References: AS13031		
CRUSHING, COLLISION	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Reverse Movement Alarm** This item of plant is fitted with a reverse movement awareness alarm which is automatically activated when reverse gear is selected. This alarm must be fully functional and serviceable at all times whilst this item of plant is in operation.		
References: ISO7731, ISO9533		
CRUSHING	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Seat Belt** This item of plant is fitted with an operator seat belt. This seat belt must be free from damage, and permanently and sturdily attached at all times whilst this item of plant is in operation. Operators must use this seat belt at all times during operation.		
References: ISO6683		
INSTABILITY, TIP OVER	HIGH 22	**MEDIUM 15**
Risk Treatments in Place: **Slope Indicator** This item of plant is fitted with a slope indicator that meets the following requirements - 1. Clearly indicates that the slope of the plant is within the manufacturers parameters while travelling with a freely suspended load 2. Is within view of the operator at all times. NB. This information provided by this device may need to be considered in conjunction with maximum slope information from the load chart. This slope indicator must be present and fully functional at all times whilst this item of plant is in operation.		
References: AS1418.8		
CRUSHING	HIGH 21	**MEDIUM 15**
Risk Treatments in Place: **1T Controlled Lowering Device** This item of plant is fitted with a controlled lowering device which is activated in the event of hydraulic failure. If this device is not fully functional then lifting of freely suspended loads in excess of 1T must not occur until this controlled lowering device is repaired. The requirements of AS 1418.8 must also be met prior to lifting freely suspended loads in excess of 1T. Freely suspended loads regardless of weight must never be lifted over any personnel.		
References: ISO8643, AS1418.8		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
ENTRAPMENT	HIGH 21	**MEDIUM 15**

Risk Treatments in Place: **Emergency Exits**

The emergency exits for this item of plant meet the following requirements -

1. Clearly and legibly labelled
2. Instructions for use are clear and legible and located adjacent the exit
3. Any required tools required for use are available e.g. Emergency hammers

These exits must be legibly labelled and fully functional at all times whenever the item of plant is manned, whether during operation or maintenance activities.

References: ISO31000

CRUSHING	HIGH 21	**LOW 5**

Risk Treatments in Place: **FOPS General**

This item of plant is fitted with a Level I Falling Objects Protective Structure (FOPS). This structure is designed to protect the operator from small falling objects (e.g. bricks, small concrete blocks, hand tools)

Before operating this item of plant a task based risk assessment must be conducted to determine the level of FOPS required.
Level I - withstands 1,365 joules (e.g. 20kgs @ 7m drop, 70kgs @ 2m drop)
- operations such as highway maintenance, landscaping and other construction site services
Level II - withstands 11,600 joules (e.g. 200kgs @ 6m drop, 394kgs @ 3m drop)
- operations such as site clearing, overhead demolition or forestry

This task risk assessment must be undertaken before each operation, in particular when the item of plant is moved to a new location, even if it is within the same site.

References: AS2294, ISO3449, ISO10262

CRUSHING	HIGH 21	**LOW 5**

Risk Treatments in Place: **FOPS Level II**

This item of plant is fitted with a level II Falling Objects Protective Structure (FOPS). This structure is designed to protect the operator from heavy falling objects (e.g. trees, rocks). Care should still be exercised when operating in an area with a risk of falling objects.

References: AS2294, ISO3449

ENTRAPMENT	HIGH 21	**MEDIUM 15**

Risk Treatments in Place: **Two Operator Exits**

The operator cabin/work area on this item of plant has a minimum of two (2) possible exits. These must be functional and accessible at all times whenever the item of plant is manned, whether during operation or maintenance activities.

References: AS5327

POOR VISIBILITY, COLLISION	HIGH 21	**MEDIUM 15**

Risk Treatments in Place: **Windscreen Wipers**

The windscreen wipers and washers fitted to this item of plant must be fully functional at all times.

References: AS/NZS4024.1201

INCORRECT OPERATION	HIGH 20	**MEDIUM 14**

Risk Treatments in Place: **Intuitive Controls**

The controls fitted to this item of plant are orientated so that the movement of the control is consistent with the action of the machine e.g. moving a control lever to the left results in the machine turning to the left. This design feature must be maintained at all times whilst this item of plant is in operation.

References: AS/NZS4024.1906

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
STRAINS	HIGH 19	**LOW 5**
Risk Treatments in Place: **Controls Ergonomics** All controls including all levers, buttons, pedals, switches etc, are placed near the operator work position and are easy to reach and operate during the execution of the operator's normal duties. This applies for all persons within the 95th percentile of the normal population distribution.		
References: AS/NZS4024.1901		
INCORRECT OPERATION, SLIPPING	HIGH 17	**LOW 6**
Risk Treatments in Place: **Control Levers/Pedals/Buttons** All controls including all levers, buttons, pedals, switches etc. must be kept non-slip and free from damage at all times.		
References: AS/NZS4024.1901		
INCORRECT OPERATION, OPERATIONAL MALFUNCTION	MEDIUM 14	**MEDIUM 13**
Risk Treatments in Place: **Restricted Access Switches** This item of plant is fitted with a device to restrict operators. A code/key must only be given to those that have appropriate experience or training.		
References: AS20474.1		
FALLING, SLIPPING	MEDIUM 12	**LOW 6**
Risk Treatments in Place: **Access/Egress Instruction Label** An instruction label is fitted adjacent access/egress areas to advise all personnel of the following - 1. Always face the item of plant during access and egress. 2. Always maintain three points of contact during access and egress. 3. Ensure the steps are clean. 4. Never jump off machine. This label must be clear and legible at all times whilst this item of plant is in operation.		
References: ISO31000		
ELECTRIC SHOCK, BURNS	MEDIUM 12	**LOW 6**
Risk Treatments in Place: **Battery Cover** All batteries fitted to this item of plant are constrained to prevent displacement & fitted with a permanent sturdy cover which allows for ventilation & ensures the terminals are protected. The constraint and cover must be present and fully functional and serviceable at all times whilst this item of plant is in operation.		
References: AS/NZS4024.1201		
FIRE, BURNS	MEDIUM 12	**LOW 6**
Risk Treatments in Place: **Exhaust** The engine exhaust on this item of plant is located/fitted with a guard to prevent injury to any person and control the risk of initiating a fire. Guards must be present, fully functional and serviceable at all times whilst this item of plant is in operation.		
References: AS/NZS4024.1201		
 **POOR VISIBILITY, COLLISION**	MEDIUM 12	**MEDIUM 11**
Risk Treatments in Place: **Operator Mirror** This item of plant is fitted with at least one rear vision mirror. This mirror must be fully functional and clean at all times whislt this item of plant is in operation.		
References: ISO5006		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
SLIPPING	MEDIUM 12	**LOW 6**

Risk Treatments in Place: **Operator Work Area Access/Egress**

Safe access and egress to the cabin/work area(s) must be maintained at all times whilst this item of plant is in operation. It must be non slip, free from damage, located at a height so as to not cause undue body stresses and strains with three points of contact available to personnel at all times.

All personnel must -
1. Always face the item of plant during access and egress.
2. Always maintain three points of contact during access and egress.
3. Never carry an object(s) in his/her hand(s) during access and egress.
4. Never jump off machine.

References: AS5327

HEAT STROKE, DEHYDRATION	MEDIUM 9	**LOW 4**

Risk Treatments in Place: **Air Conditioning**

This item of plant is fitted with an air conditioned cabin. This air conditioned cabin helps control the air quality and temperature for the operator and also provides shade from the sun. The air conditioner must be fully functional and serviceable at all times whilst this item of plant is in operation.

References: ISO31000

NON COMPLIANCE, STRAINS	MEDIUM 9	**LOW 1**

Risk Treatments in Place: **Operator Seat**

The operator seat fitted to this item of plant must remain free from damage and tears, and be permanently and securely fitted at all times.

References: AS/NZS4024.1401, ISO20474-

INCORRECT OPERATION, SLIPPING	MEDIUM 9	**LOW 4**

Risk Treatments in Place: **Work Area Floors**

All work area floors are non-slip and free from damage & debris.

Floor area must remain non-slip and free from damage & debris, including rubbish, tools and other items, at all times whilst this item of plant is in use.

References: AS/NZS4024.1201, ISO20474-

MAINTENANCE

CURRENT OR PREVIOUS STRUCTURAL DAMAGE	CRITICAL 25	**MEDIUM 15**

Risk Treatments in Place: **Structural Integrity**

Regular checks for structural damage must be undertaken. Look for cracks in frames/chassis (current or repaired), bends or damage to structural components, etc.

References: ISO31000

STRIKING, BURNS	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Hydraulic Damage**

The hydraulic hoses to this item of plant are free from damage and protected against damage arising from contact with the plant structure. Ensure that hoses are free from damage and that protection is in place at all times whilst this item of plant is in operation. Inspection of the hydraulic hoses and protection system should be conducted regularly and documented as part of your plant safety programme.

References: AS4024, ISO4413, AS2671

CRUSHING	HIGH 22	**LOW 5**

Risk Treatments in Place: **Lift Tynes**

The fork tynes fitted to this item of plant are free from structural damage including deformation. If at anytime the fork tynes do become damaged including deformation then operation must cease and a competent person carry out the necessary repairs prior to operating item of plant again.

References: AS2359

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
INCORRECT OPERATION	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **Maintenance Manual**

The manufacturer's maintenance manual(s) has been supplied for this item of plant

These manual(s) must be available at all times to all users and maintenance staff of this item of plant. All users and maintenance staff must read and be familiar with these handbook(s) prior to maintaining or repairing this item of plant.

A complete risk assessment/JSEA must be undertaken covering all inspection, maintenance, servicing and transportation requirements of this piece of plant prior to use.

A full assessment of the competence of people using the book(s) must also be undertaken

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations

OPERATIONAL MALFUNCTION	HIGH 22	**LOW 2**

Risk Treatments in Place: **Major Fluid Leaks**

This item of plant must remain free from leaks at all times whilst in operation (this includes engine, transmission, cooling system, air, fuel, drive line, wheel hubs, steering and hydraulics). Development of a major leak will require this item of plant to be stood-down until repaired. Minor leaks detected must be repaired within 1-14 days.

References: ISO31000

CRUSHING	HIGH 22	**MEDIUM 15**

Risk Treatments in Place: **ROPS Damage**

The Roll Over Protective Structure (ROPS) fitted to this item of plant must remain free from damage at all times whilst this item of plant is in operation.

References: AS2294, ISO3471

OPERATIONAL MALFUNCTION	HIGH 21	**MEDIUM 15**

Risk Treatments in Place: **Service Records**

Service and maintenance records are available for this item of plant.

These records must continue to be managed and available at all times as part of your service and maintenance programme. (This programme includes the undertaking of regular inspections of the item of plant with specific reference to all OEM prescribed, scheduled and non scheduled service and maintenance requirements).

References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations

POOR VISIBILITY, COLLISION	HIGH 21	**MEDIUM 15**

Risk Treatments in Place: **Windows & Screens**

Ensure the cabin/work area safety glass windows and screens are kept clean and free from cracks and other damage at all times whilst this item of plant is in use.

References: AS/NZS4024.1201, ISO20474-

NON COMPLIANCE	MEDIUM 14	**LOW 6**

Risk Treatments in Place: **Engine/Motor Compartment**

The engine/motor compartment is fully enclosed and lockable to prevent unauthorised access.
A code/key must only be given to those that have appropriate experience or training. These points of access must remain fully lockable at all times whilst this item of plant is in operation.

References: AS20474.1

INSTABILITY	MEDIUM 9	**LOW 4**

Risk Treatments in Place: **Tracks**

The tracks and track components must be inspected as part of a "pre start" checklist. These inspections must be documented as part of your plant safety programme.

References: ISO20474-

SECTION 6 IMAGES AND NOTES

IMAGES

- No Images Available -

NOTES

- No Notes Available -

Ideagen Machine Safety

RISK MANAGEMENT REPORT

TYPE	Loader, Skidsteer Tracked - Seated	**Report Number**	OI 20260511-1058
MAKE	Caterpillar	**Date**	11-May-2026
MODEL	259D	**Created By**	Dylan Thomson
ASSET NUMBER	M40	**Assessor**	Dylan Thomson
SERIAL NUMBER	CAT0259DVFTK01227	**Assist. Assessor(s)**	
		Owner	Outside Ideas
		Assessment Purpose	Plant in use
		State	SA

OPERATOR ACKNOWLEDGEMENT

I the undersigned acknowledge that I have read and understand the risk management report described above.
I also acknowledge that I have received a copy of this risk management report.

DATE	NAME	COMPANY/POSITION	SIGNATURE