Municipal Wastewater Treatment Plant Annual Report

2025

Submitted – March 2026

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Introduction

The City of Dryden (City) operates a Class 3 Wastewater Treatment plant that receives flow from the City's collection system. As per requirements under the Certificate of Approval, issued by the Ministry of Environment Conservation and Parks (MECP), the City is required to produce an annual report which includes:

- A summary and interpretation of all monitoring data with a comparison to the effluent objective, effluent limits including an overview of the success and adequacy of the treatment facility
- A description of any operating problems encountered, and corrective actions taken
- A summary of all maintenance carried out on any major structure and equipment
- A summary of any effluent quality assurance or control measures undertaken in the reporting period
- A summary of the calibration and maintenance of all effluent monitoring equipment
- Biosolids production for the operating year, disposal location and subsequent projection amounts for the following year
- A summary of complaints received a with related actions,
- A summary of any by-pass, spill or abnormal discharge events

Wastewater Treatment Plant Description

Dryden Wastewater Treatment Plant Certificate of Approval: 3788-88QNWV

Wastewater Collection Environmental Certificate of Approval: 223-W601

The City's Wastewater Treatment Plant (WWTP) is located at 129 Marguerite Street and was commissioned as a Sequencing Batch Reactor (SBR) Treatment process in 2014 with a Class III Plant Provincial rating. One pump station is located on plant property that receives all the wastewater from the collection system, commercial and private septage. This consolidated wastewater is pumped into the treatment process and is ultimately discharged into the Wabigoon River.

The SBR process receives wastewater from the onsite pump station, and consists of the following processes:

- Mechanical screening and Grit removal
- Sequencing Batch Reactor: On/Off Aerated Cycles with decant
- Seasonal Ultraviolet (UV) Disinfection
- Biosolids Management – Aerobically Digested, Rotary Presses for dewatering

Summary of Wastewater Treatment Plant Performance

Under the Certificate of Approval (C of A) granted by the MECP, the WWTP has effluent limits that must be met, and objectives wherein best efforts must by employed by the treatment facility to meet. A summary of the objectives and limits are tabled below.

Effluent Parameter	Objective	Limit	Unit of Measure
$CBOD_5$*	15	25	mg/L
Total Suspended Solids	15	25	mg/L
Total Ammonia Nitrogen	3+	-	mg/L
E. Coli	150	200	MPN/100ml Geometric Mean Density*
pH	-	6-9.5^	pH

+ Temperature at or above 14C

^Inclusive, at all times

***Terms**

$CBOD_5$ – Carbonaceous Biological Oxygen Demand 5-Day: Assessed amount of oxygen depleted by carbon-based organic matter

MPN/100ml Geometric Mean Density – Most Probable Number/100ml: Statistical Estimate of the number of viable microorganisms per 100ml of sample; Seasonal Regulation between May 1st, and October 31st

For the 2025 operating year, the City WWTP met all effluent limits which are assessed on a Running Annual Average, excluding the Limits for E. coli which are assessed monthly. Figures 1.0-1.4 outline the WWTP performance in relation to the objectives and limits prescribed.

Figure 1.0 – Final Effluent Ammonia

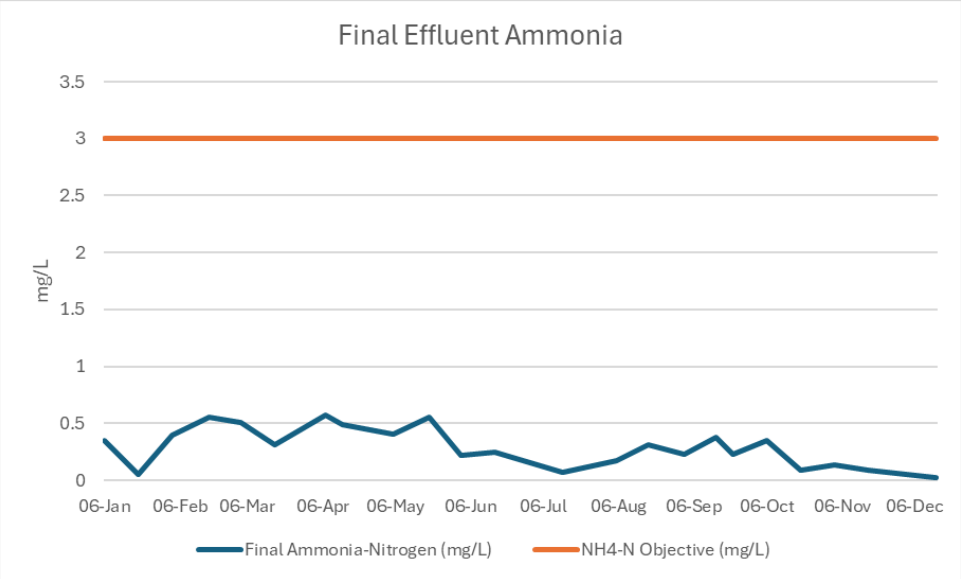


Figure 1.1 – Final Effluent Total Suspended Solids

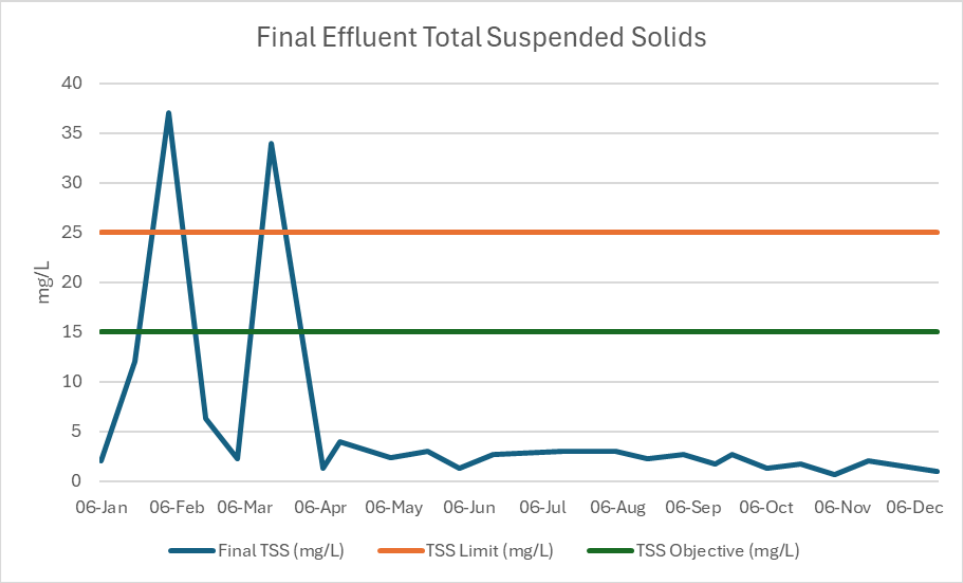


Figure 1.2 – Final Effluent Carbonaceous Oxygen Demand

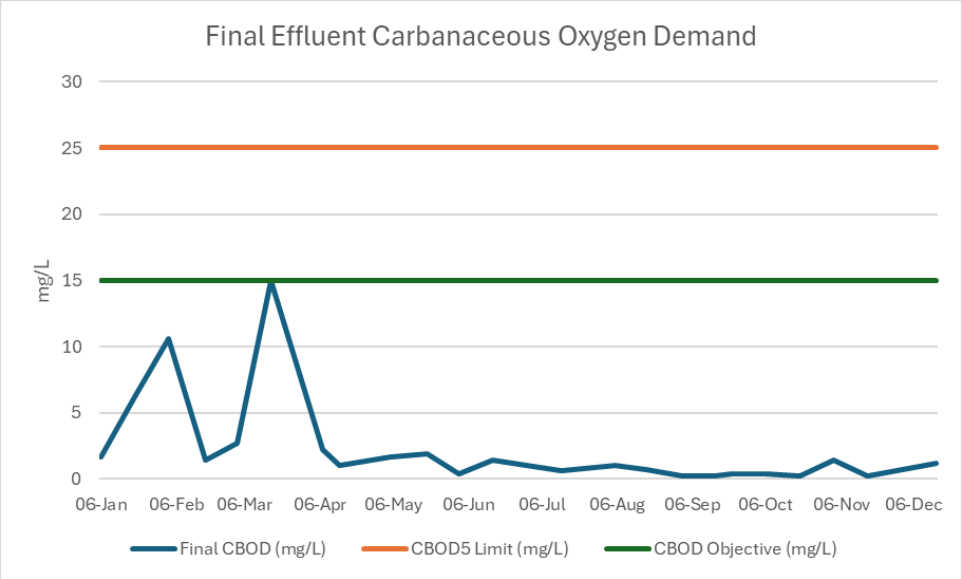


Figure 1.3 – Final Effluent E. Coli

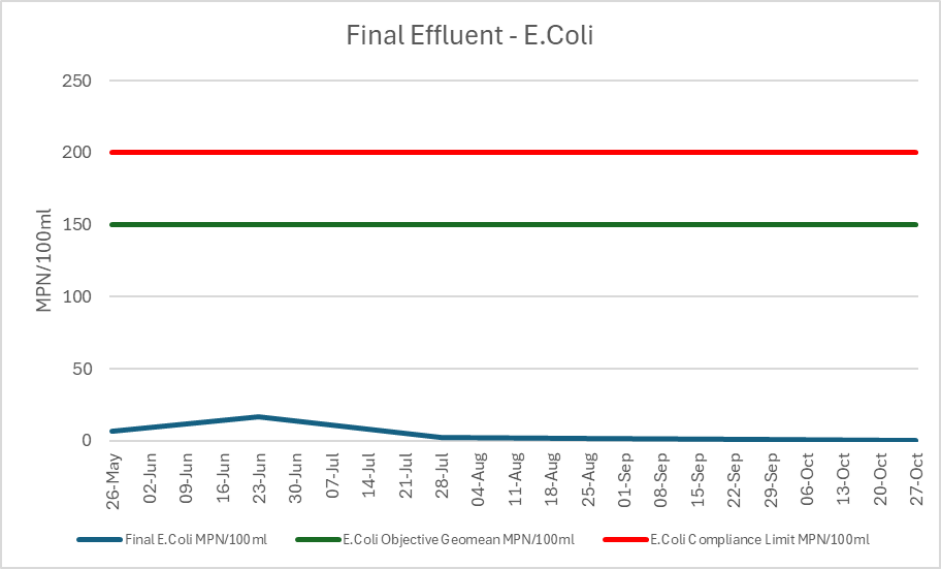
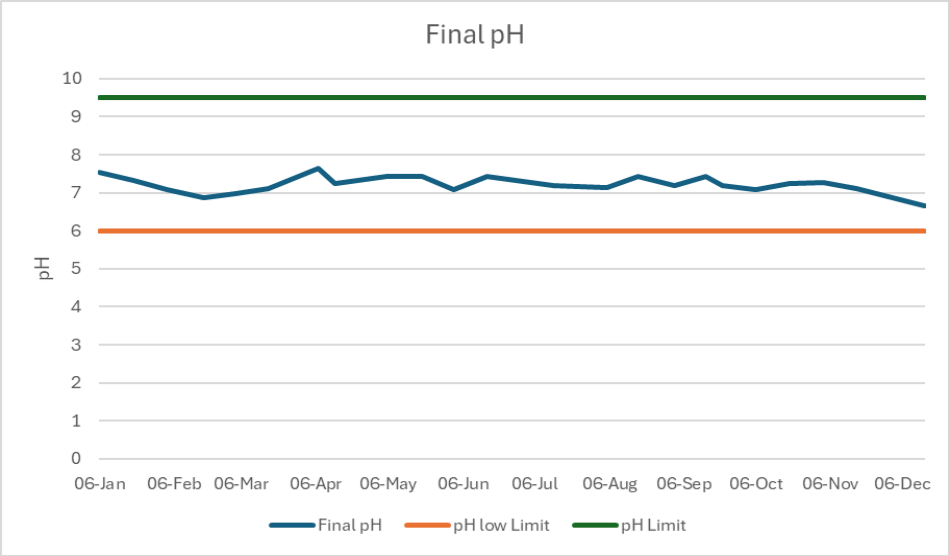


Figure 1.3 – Final Effluent pH



A summary of flows treated and discharged to the Wabigoon River can be found below. For the 2025 operating year, the WWTP treated a total of 1,125,174m^3 of wastewater. The maximum treated flow day occurred in the Month of April at 11,105 m^3/d, which is approximately 4 times larger than the yearly average flow rate of 2845 m^3/d. This suggests that the wastewater collection system is susceptible to inflow and infiltration from outside sources such as rainwater and or snow melt. The WWTP ECA has a rated capacity of 5,819m^3/d, therefore on an average day the plant has approximately 49% of its total capacity in use.

Month	Average Treated Effluent m^3/d	Maximum Day Treated Effluent m^3/d	Minimum Day Treated Effluent m^3/d	Total Treated Effluent m^3
January	2,507	2,758	2,286	77,726
February	2,396	2,629	2,192	67,085
March	2,811	4,927	2,283	87,134
April	5,634	11,105	2,807	169,031
May	3,799	6,382	2,944	117,768
June	2,851	4,094	2,329	85,531
July	2,869	4,707	2,434	88,926
August	3,004	3.717	2,552	93,125
September	2,767	3,028	2,551	83,021
October	3,004	4,971	2,150	93,110
November	2,760	2,957	2,574	82,789
December	2,578	2,905	2,250	79,928

The MECP conducted an inspection at the WWTP on August 13, 2025. Two compliance issues were uncovered by the inspector with one being administrative in nature, and the second relating to sampling.

The one administrative non-compliance found was with respect to not having a signed letter by a Professional Designated Engineer, for the completed works as per Condition 4 of the C of A. This would date back to the new facility construction in 2014. The letter has since been provided to the MECP.

The second non-compliance was associated with the type of E. Coli samples that had been submitted for comparison to the effluents. The E. Coli samples provided were composite samples instead of grab samples as per Condition 9 of the ECA. This has been corrected at the operations level.

Operating Problems Encountered

In January through to March of the operating year, higher solids than usual ended up being retained in the plant. This resulted in higher solids levels, which would have carried through the treatment process. This impact can be seen by two corresponding spikes in Total Suspended Solids (Figure 1.1) and $CBOD_5$ (Figure 1.2) for both January and March.

Operations had to focus on wasting more solids into the dewatering process, and it took some time for the plant to recover.

No other significant operational problems occurred in the 2025 operating year.

2025 Maintenance Activities

Major Maintenance Activities

Two major maintenance projects were conducted and funded through the City's Capital Budget which are tabled below with approximate expenditure value.

Project Name	Expense Type	Value
WWTP Heat Pump Replacement	Capital	$35,000
WWTP Roof Repair	Capital	$46,000

One of the plant heat pumps needed replacement, and a new roof was put on one of the outbuildings that is used for storage (part of the original onsite treatment works).

Minor Maintenance Activities

A small, insulated shelter was constructed to house the aerobic digester tank decant actuators, as freezing conditions were impacting the operation.

Routine maintenance for the plant pumps, process blowers, and other treatment equipment is conducted by a combination of contracted companies and the City's Operators. Stand-by Generator and UV system preventative maintenance is conducted by City of Dryden staff. A copy of the Generator maintenance records can be found in Appendix A.

The City's Supervisory Control and Data Acquisition system (SCADA), that controls and monitors plant performance is maintained by Indus Automation on a quarterly or as needed basis and is under contract with the City.

The lifting devices at the treatment facility are inspected by Kone Cranes, and this inspection was conducted on January 21, 2025. Records of inspection can be found in Appendix A.

Backflow Preventors are inspected by Clow Darling and this was completed on September 23, 2025. Results can be found in Appendix A.

Calibration and Maintenance of Effluent Monitoring Equipment

Lakeside Instrumentation was retained September 16, 2025 to ensure all effluent monitoring equipment was calibrated which includes one magnetic flow meter. The effluent flow meter is listed as Dry-FIT-401, was certified with a Pass. The Certificate can be found in Appendix B.

Lakeside Instrumentation also calibrates our low lift flow meters, and those records can also be found in Appendix B. The low lift certificates are labelled as Dry-Fit 101, 102, and 104 for the lowlift pumps. Pump 3 was out of service, so certification was not acquired.

Effluent Quality Assurance or Control Measures

Operators conduct daily in-house laboratory tests for influent pH, influent temperature, effluent pH, effluent temperature and dissolved oxygen. Daily tests are also done to determine sludge settling and process sludge blanket thickness. Mixed Liquor Volatile Suspended Solids and Sludge Volume Index are also completed weekly. Monthly and Bi-Monthly samples are sent to an Ontario accredited lab for assessment of plant performance against the compliance criteria of the ECA (Provincial Regulation).

As per the Federal Wastewater Systems Effluent Regulations (WSER), a yearly sample is required to be submitted for a Lethality assessment using the LC-50 method. Quarterly effluent quality reporting is also required. All submitted samples met Federal requirements.

For the 2025 operating year, our effluent quality has been assessed independently by regulatory authorities, confirming that operationally the City is meeting all required provincial effluent targets.

2025 Biosolids Production and Disposal

Approximately 1,100,000kg of biosolids was produced and transported to the Gordon Road Landfill over the past year. A monthly break down of the biosolids produced is tabled below.

Dryden WWTP Sludge Volumes 2025					
Month	Loads From Biosolids Holding Tank #1	Loads From Biosolids Holding Tank #3	Average Percent Feed Solids	Total Loads	Avg. Weight/Load Kg's
January	6	9	1.36	15	5400
February	12	12	1.52	24	5400
March	9	10	1.2	19	5400
April	10	11	1.27	21	5400
May	8	9	1.5	17	5400
June	8	8	1.48	16	5400
July	9	9	1.28	18	5400
August	7	8	1.33	15	5400
September	10	10	1.38	20	5400
October	9	8	1.27	17	5400
November	6	4	1.27	10	5400
December	6	6	1.17	12	5400
Totals				204	1,101,600
Sludge is dewatered to 16 -18 % solids					

In comparison to the past 5 years, biosolids production has remained relatively the same with some lower production values in 2023 and 2024. Disposal location and biosolids production are anticipated to be approximately the same for the 2026 operating year. The table below illustrates the past six years of biosolids production.

Operating Year	Biosolids Production kg	Production Increase Relative to 2020 %
2020	1,054,000	
2021	979,600	-7
2022	1,078,800	2.3
2023	911,400	-13.5
2024	861,800	-18.2
2025	1,101,600	4.5

Complaints Received

No complaints were received regarding plant operation in 2025.

By-Pass Summary

No by-pass occurred in 2025.

More Information or Questions

This report is available to the public free of charge to anyone who requests a copy. An electronic copy is available on the City of Dryden's website, and anyone wanting to be provided a paper copy can make arrangement to pick one up from the City's Public Works Office. Any concerns or inquiries of this report can be directed to:

Bill Mundy C.E.T.
Utilities and Environmental Services Manager
807-223-1407
bmundy@dryden.ca
www.dryden.ca

Appendix A
Maintenance Records

2025 W.W.T.P Emergency Generator Maintenance Log Off Site

Weekly inspection, test, and maintenance requirements (refer to Table 2 on page 1)

Consumables (No. 1)						Starter system (No. 2)					Signature	Date
							Air starter					
Auxiliary supply tank fuel level	Oil level	Coolant level	Check for leaks	Fuel transfer pump	Fuel filter	Electric starter	Air pressure	Valve leakage	Aux. engine	Bleed condensate		
X	X	X	X	X	X	X						1325
X	X	X	X	X	X	X						1625
X	X	X	X	X	X	X						11325
X	X	X	X	X	X	X						12225
X	X	X	X	X	X	X						13125
X	X	X	X	X	X	X						2325

Batteries and charging equipment (No. 3)			Engine (No. 4)				Signature	Date
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts		
X	X	X	X			X		1325
X	X	X	X			X		1625
X	X	X	X			X		11325
X	X	X	X			X		12225
X	X	X	X			X		13125
X	X	X	X			X		2325

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)				Signature	Date
Panel covers	Annunciator lamps	Panel settings	Visual and audible signals	Air control louvres	Emergency lighting	Room temp. (°C)	Room cleanliness and accessibility						
X	X	X	X	X	X	X	X						1325
X	X	X	X	X	X	X	X						1625
X	X	X	X	X	X	X	X						11325
X	X	X	X	X	X	X	X						12225
X	X	X	X	X	X	X	X						13125
X	X	X	X	X	X	X	X						2325

Notes:

(1) *Mark "X" for satisfactory or "O" for unsatisfactory.*

(2) *The work described in this Table shall be carried out by a competent person or individuals trained by the system manufacturer.*

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X	X	X	X	X	X	X						21025
X	X	X	X	X	X	X						21825
X	X	X	X	X	X	X						22425
X	X	X	X	X	X	X						3325
X	X	X	X	X	X	X						31025
X	X	X	X	X	X	X						31725

Batteries and charging equipment (No. 3)			Engine (No. 4)					
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts	Signature	Date
X	X	X	X			X		21025
X	X	X	X			X		21825
X	X	X	X			X		22425
X	X	X	X			X		3325
X	X	X	X			X		31025
X	X	X	X			X		31725

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)					
Panel covers	Annunciator lamps	Panel settings	Visual and audible signals	Air control louvres	Emergency lighting	Room temp. (°C)	Room cleanliness and accessibility					Signature	Date
X	X	X	X	X	X	X	X						21025
X	X	X	X	X	X	X	X						21825
X	X	X	X	X	X	X	X						22425
X	X	X	X	X	X	X	X						3325
X	X	X	X	X	X	X	X						31025
X	X	X	X	X	X	X	X						31725

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X	X	X	X	X	X	X						3 24 25
X	X	X	X	X	X	X						3 31 25
X	X	X	X	X	X	X						4 7 25
X	X	X	X	X	X	X						4 17 25
X	X	X	X	X	X	X						4 22 25
X	X	X	X	X	X	X						4 28 25

Batteries and charging equipment (No. 3)			Engine (No. 4)				Signature	Date
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts		
X	X	X	X			X		3 24 25
X	X	X	X			X		3 31 25
X	X	X	X			X		4 7 25
X	X	X	X			X		4 17 25
X	X	X	X			X		4 22 25
X	X	X	X			X		4 28 25

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)				Signature	Date
Panel covers	Annunciator lamps	Panel settings	Visual and audible signals	Air control louvres	Emergency lighting	Room temp. (°C)	Room cleanliness and accessibility						
X	X	X	X	X	X	X	X						3 24 25
X	X	X	X	X	X	X	X						3 31 25
X	X	X	X	X	X	X	X						4 7 25
X	X	X	X	X	X	X	X						4 17 25
X	X	X	X	X	X	X	X						4 22 25
X	X	X	X	X	X	X	X						4 28 25

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X	X	X	X	X	X	X						5 5 25
X	X	X	X	X	X	X						5 12 25
X	X	X	X	X	X	X						5 19 25
X	X	X	X	X	X	X						5 26 25
X	X	X	X	X	X	X						6 3 25
X	X	X	X	X	X	X						6 9 25

Batteries and charging equipment (No. 3)			Engine (No. 4)				Signature	Date
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts		
X	X	X	X			X		5 5 25
X	X	X	X			X		5 12 25
X	X	X	X			X		5 19 25
X	X	X	X			X		5 26 25
X	X	X	X			X		6 3 25
X	X	X	X			X		6 9 25

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)				Signature	Date
Panel covers	Annunciator lamps	Panel settings	Visual and audible signals	Air control louvres	Emergency lighting	Room temp. (°C)	Room cleanliness and accessibility						
X	X	X	X	X	X	X	X						5 5 25
X	X	X	X	X	X	X	X						5 12 25
X	X	X	X	X	X	X	X						5 19 25
X	X	X	X	X	X	X	X						5 26 25
X	X	X	X	X	X	X	X						6 3 25
X	X	X	X	X	X	X	X						6 9 25

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Auxiliary supply tank fuel level	Oil level	Coolant level	Check for leaks	Fuel transfer pump	Fuel filter	Electric starter	Air starter					
							Air pressure	Valve leakage	Aux. engine	Bleed condensate		
X	X	X	X	X	X	X						6 16 25
X	X	X	X	X	X	X						6 23 25
X	X	X	X	X	X	X						7 7 25
X	X	X	X	X	X	X						7 7 25
X	X	X	X	X	X	X						7 14 25
X	X	X	X	X	X	X						7 20 25

Batteries and charging equipment (No. 3)			Engine (No. 4)				Signature	Date
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts		
X	X	X	X			X		6 16 25
X	X	X	X			X		6 23 25
X	X	X	X			X		7 2 25
X	X	X	X			X		7 7 25
X	X	X	X			X		7 14 25
X	X	X	X			X		7 20 25

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)				Signature	Date
Panel covers	Annunciator lamps	Panel settings	Visual and audible signals	Air control louvres	Emergency lighting	Room temp. (°C)	Room cleanliness and accessibility						
X	X	X	X	X	X	X	X						6 16 25
X	X	X	X	X	X	X	X						6 23 25
X	X	X	X	X	X	X	X						7 2 25
X	X	X	X	X	X	X	X						7 7 25
X	X	X	X	X	X	X	X						7 14 25
X	X	X	X	X	X	X	X						7 20 25

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X	X	X	X	X	X	X						7 28 25
X	X	X	X	X	X	X						8 5 25
X	X	X	X	X	X	X						8 11 25
X	X	X	X	X	X	X						8 18 25
X	X	X	X	X	X	X						8 25 25
X	X	X	X	X	O	X						9 2 25

Batteries and charging equipment (No. 3)			Engine (No. 4)					
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts	Signature	Date
X	X	X	X			X		7 28 25
X	X	X	X			X		8 5 25
X	X	X	X			X		8 11 25
X	X	X	X			X		8 18 25
X	X	X	X			X		8 25 25
X	X	X	X			X		9 2 25

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)					
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X	X	X	X	X	X	X	X						7 28 25
X	X	X	X	X	X	X	X						8 5 25
X	X	X	X	X	X	X	X						8 11 25
X	X	X	X	X	X	X	X						8 18 25
X	X	X	X	X	X	X	X						8 25 25
X	X	X	X	X	X	X	X						9 2 25

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Consumables (No. 1)						Starter system (No. 2)					Signature	Date
							Air starter					
Auxiliary supply tank fuel level	Oil level	Coolant level	Check for leaks	Fuel transfer pump	Fuel filter	Electric starter	Air pressure	Valve leakage	Aux. engine	Bleed condensate		
												9825
												91525
												92225
												92925
												10625

Batteries and charging equipment (No. 3)			Engine (No. 4)				Signature	Date
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts		
								9825
								91525
								92225
								92925
								10625

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)				Signature	Date
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													92925
													10625

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X	X	X	X	X	X	X						101425
X	X	X	X	X	X	X						102025
X	X	X	X	X	X	X						102725
X	X	X	X	X	X	X						11 3 25
X	X	X	X	X	X	X						11 1025
X	X	X	X	X	X	X						11 1725

Batteries and charging equipment (No. 3)			Engine (No. 4)				Signature	Date
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts		
X	X	X	X	X			X	10 14 25
X	X	X	X	X			X	10 20 25
X	X	X	X	X			X	10 27 25
X	X	X	X	X				11 3 25
X	X	X	X	X				11 10 25
X	X	X	X	X				11 17 25

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)				Signature	Date
Panel covers	Annunciator lamps	Panel settings	Visual and audible signals	Air control louvres	Emergency lighting	Room temp. (°C)	Room cleanliness and accessibility						
X	X	X	X	X	X	X	X						101425
X	X	X	X	X	X	X	X						102025
X	X	X	X	X	X	X	X						102725
X	X	X	X	X	X	X	X						11 3 25
X	X	X	X	X	X	X	X						11 10 25
X	X	X	X	X	X	X	X						11 17 25

Notes:

(1) *Mark "X" for satisfactory or "O" for unsatisfactory.*

(2) *The work described in this Table shall be carried out by a competent person or individuals trained by the system manufacturer.*

DO NOT USE THIS LOG ~~AFTER~~ PAST DEC 31ST/25

Weekly inspection, test, and maintenance requirements (refer to Table 2 on page 1)

Consumables (No. 1)						Starter system (No. 2)					Signature	Date
							Air starter					
Auxiliary supply tank fuel level	Oil level	Coolant level	Check for leaks	Fuel transfer pump	Fuel filter	Electric starter	Air pressure	Valve leakage	Aux. engine	Bleed condensate		
X	X	X	X	X	X	X						11 25 25
X	X	X	X	X	X	X						12 2 25
X	X	X	X	X	X	X						12 8 25
X	X	X	X	X	X	X						12 15 25

Batteries and charging equipment (No. 3)			Engine (No. 4)				Signature	Date
Electrical connections	Battery terminals	Charger connections	Heater operation	Governor	Fuel pump oil sump	Fan belts		
X	X	X	X			X		11 25 25
X	X	X	X			X		12 2 25
X	X	X	X			X		12 8 25
X	X	X	X			X		12 15 25

Control panel (No. 5)				Other (Nos. 6 to 9)				Additional requirements, if applicable (see Clause 11.5.2)				Signature	Date
Panel covers	Annunciator lamps	Panel settings	Visual and audible signals	Air control louvres	Emergency lighting	Room temp. (°C)	Room cleanliness and accessibility						
X	X	X	X	X	X	X	X						11 25 25
X	X	X	X	X	X	X	X						12 2 25
X	X	X	X	X	X	X	X						12 8 25
X	X	X	X	X	X	X	X						12 15 25

Notes:

(1) *Mark "X" for satisfactory or "O" for unsatisfactory.*

(2) *The work described in this Table shall be carried out by a competent person or individuals trained by the system manufacturer.*

Monthly (weekly in health care facilities) inspection, test, and maintenance requirements (refer to Table 3 on page 1)

No. 1	Complete system test (No. 2)								No. 3	Batteries and charging equipment (No. 4)		Nos. 5 to 7				
Weekly items	Failure simulation	Battery charger output	40% load test for 60 min	Transfer switches	Brush operation	Bearing seals	Auxiliary equipment	Exhaust condensate trap	Block heater hoses & wires	Electrolyte fill level *	Electrolyte-specific gravity *	Defects found	Defects corrected	Electrical components	Signature	Date
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Jan 5/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Feb 12/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Mar 17/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Apr 9/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		May 27/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Jun 17/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Jul 14/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Aug 9/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Sep 16/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Oct 8/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Nov 20/25
X	X	X	X	X	X	X	X	X	X	X	X	NO	NONE	X		Dec 15/25

Instrument readings (No. 2(h)) (identify each instrument in box at top of each column)															Signature	Date
ON	OFF	L12V	L23V	L31V	L1A	L2A	L3A	OIL PR	COOL T	BATT V						
216.1	217.2	606	604	604	202	233	220	111.6	79	28.1						Jan 5/25
217.2	218.3	606	604	604	187	222	205	114.5	69	28.2						Feb 12/25
218.3	219.4	605	605	603	97	111	103	114.5	70	28.2						Mar 17/25
219.4	220.5	604	603	604	144	166	148	111.6	69	28.2						Apr 9/25
220.5	221.6	602	601	600	54	80	75	111.6	69	27.9						May 27/25
221.6	223.1	603	601	601	161	183	177	110.2	70	27.8						Jun 17/25
223.1	224.3	603	602	602	140	162	155	110.2	70	27.9						Jul 14/25
224.2	229.3	606	605	605	208	227	217	110.2	70	27.8						Aug 9/25
229.3	230.4	602	601	601	79	96	97	110.2	70	27.8						Sep 16/25
230.4	232.0	603	603	603	81	96	90	111.6	70	28.0						Oct 8/25
240.3	241.4	605	603	604	144	176	151	111.6	69	28.0						Nov 20/25
241.4	242.6	606	604	605	167	204	177	111.6	68	28.1						Dec 15/25

*Applicable to vented or flooded lead acid batteries only.

Notes:

(1) *Mark "X" for satisfactory or "O" for unsatisfactory.*

(2) *The work described in this Table shall be carried out by a competent person or individuals trained by the system manufacturer.*

OFF

Annual inspection, test, and maintenance requirements — Sheet #1 (refer to Table 5 on page 2)

No. 1	Control panel (No. 2)										
Weekly, monthly, and semi-annual items	Electrical connections	Breaker operation	Insulators and bushings	Voltage regulator	Operate moving parts	Clean and dress contacts	Remove dust	Gauge calibration	Valve rotation and audible alarm	Signature	Date
X	X	X	X	X	X	X	X	X	X	ZI	Jan 16/05

Engine (No. 3)													
Change engine oil and filters	Coolant strength and inhibitors	Change fuel filters etc.	Inspect and clean exhaust system	Clean and lubricate linkages	Inspect air filters	Inspect mechanical connections	Inspect electrical connections	Inspect heat exchanges	Inspect belts and hoses	Test and inspect ignition system(s)	Inspect coolant pump(s)	Signature	Date
N/A	X	N/A	X	X	X	X	X	X	X	X	X	ZI	Jan 16/05

Notes:
(1) *Mark "X" for satisfactory or "O" for unsatisfactory.*
(2) *The work described in this Table shall be carried out by a competent person or individuals trained by the system manufacturer.*

Annual inspection, test, and maintenance requirements — Sheet #2 (refer to Table 5 on page 2)

Diesel fuel storage tank(s) (No. 4)			Generator (No. 5)									
Test fuel oil (clear and bright test)	Chemical test for water	If fuel oil test fails: drain and refill fuel tanks or full filter fuel	Suppressor and rectifier	Grease bearings	Commutator and slip rings	Rotor and stator windings	Coupling bolts and alignment	Conduits (tightness)	Windings	Electrical connections	Signature	Date
X	X	X	n/A	n/A	n/A	n/A	X	X	X	X	ZT	Jan/14/25

Overcurrent protective devices (No. 6)			Transfer switches (No. 7)						
Electrical isolation	Remove dust	Test devices for proper operation	Electrical connections	Operate moving parts	Clean and dress contacts	Remove dust	Clean and lubricate linkages	Signature	Date
X	X	X	X	X	X	X	X	ZT	Jan/14/25

Notes:
(1) *Mark "X" for satisfactory or "O" for unsatisfactory.*
(2) *The work described in this Table shall be carried out by a competent person or individuals trained by the system manufacturer.*

Annual inspection, test, and maintenance requirements — Sheet #3 (refer to Table 5 on page 2)

Infrared thermal imaging (No. 8)									Signature	Date
40% site load			40% site load pre-cable connection			Full load				
Electrical connections	Contacts	Energized components	Electrical connections	Contacts	Energized components	Electrical connections	Contacts	Energized components		
X	X	X	X	X	X	X	X	X	ZT	Jan 4/23

No. 9	No. 10	No. 11	Defects found	Defects corrected	Signature	Date
Lubricate door locks and hinges	2 h full load test	Review and provide instructions				
NA	X	X			ZT	Jan 4/23

Notes:
(1) *Mark "X" for satisfactory or "O" for unsatisfactory.*
(2) *The work described in this Table shall be carried out by a competent person or individuals trained by the system manufacturer.*

WWTP 2025

GAL POWER SYSTEMS LTD.

GAL POWER SYSTEMS THUNDER BAY LTD.
219 Hardisty Street North, Thunder Bay, ON, P7C 3G8
PHONE 807-346-6888
FAX 807-346-0696

WO#: 1055578
CUSTOMER #: 800375
DATE: 07/17/2025 8:00 AM END: 07/17/2025 12:00 PM
HOUR METER START: 224.3
HOUR METER STOP: 226.3

Annual

CUSTOMER INFORMATION

CUSTOMER ADDRESS		GENERATOR	ALTERNATOR	ENGINE
City of Dryden-Waste Water Treatment Plant	MAKE	sdmo	n/a	mtu
	MODEL	X1000uc2	n/a	16v2000G85
CONTACT INFORMATION	SN	X1000uc211011225	n/a	536110357
NAME: merv	REASON FOR SERVICE			
PH#: 1807	annual			

GENERAL INSPECTION (WEEKLY / MONTHLY / QUARTERLY)

VISUAL	READING	OPERATION	MANUAL	OK	NA
FUEL LEVEL DAY TANK	n/a	FUEL TRANSFER PUMP			✓
FUEL LEVEL MAIN TANK	1/2	TRANSFER PUMP CONTROLS			✓
2 HR CAPACITY IN TANK YES/NO	Yes	VENTILATION SYSTEM		✓	
FUEL LINE CONDITION	ok	DRAIN EXHAUST SYSTEM		✓	
OIL LEVEL	full	**GENERATOR**	**READING**		
CRANKCASE BREATHER	ok	VOLTAGE	600	Vac	
COOLANT LEVEL	full	FREQUENCY	60	Hz	
COOLANT CONDITION	ok	AMPERAGE L1	960	A	
RADIATOR CONDITION/CLEAN	ok	AMPERAGE L2	960	A	
ALL HOSES	ok	AMPERAGE L3	960	A	
OPERATIONAL BLOCK HEATER	ok	ENGINE TEMP.	86C		
AIR FILTER	ok	OIL PRESSURE	110psi		
FAN BELT CONDITION/TIGHTNESS	ok	BATTERY	30	V	
VIBRATION MOUNTS	ok	DC CHARGING AMPS	10		
TRANSFER SWITCH VISUAL	ok	EXHAUST TEMP. LEFT	n/a		
LINKAGES	ok	EXHAUST TEMP. CENTRE	1000F		
STARTER CONNECTION	ok	EXHAUST TEMP. RIGHT	n/a		
BATTERY FLOAT LEVEL	26.8	ROOM TEMP.	20C		
BATTERY CHARGE RATE	2.0			YES	NO
		TRANSFER TEST PERFORMED			✓
		30% LOAD ACHIEVED		✓	

BATTERY INSPECTION

MAINTENANCE-FREE? Yes

BATTERY 1		BATTERY 2	
CELL	S.G.	CELL	S.G.
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
TEST	A	TEST	A
TEST	V	TEST	V

BATTERY 3		BATTERY 4	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
TEST	A	TEST	A
TEST	V	TEST	V

SEMI-ANUAL INSPECTION (INCLUDES GENERAL INSPECTION)

	YES	NO		YES	NO	OIL SAMPLE TRACKING:
OIL SAMPLE		✓	TEST SAFETIES	✓		
CLEAN BATT. CONNECTIONS	✓		INSPECT EXHAUST SYSTEM	✓		
INSPECT BATTERY CONNECTIONS	✓					

ANNUAL INSPECTION (INCLUDES GENERAL INSPECTION)

	YES	NO		YES	NO	EXHAUST BACK PRESSURE	n/a	
OIL CHANGE		✓	INSPECT BREAKERS	✓		TEST REQUIRED	YES	NO
OIL FILTER CHANGE		✓	INSPECT VOLTAGE REGULATOR	✓		WITH LOAD		✓
FUEL FILTER CHANGE		✓	CALIBRATION OF GAUGES	✓		IGNITION SYSTEM	ok	
LOAD TEST PERFORMED	✓		CLEAN PANELS	✓		COUPLER BOLTS	ok	
FUEL FILTERING PERFORMED		✓	INSPECT ELECTRICAL CONNECTIONS	✓		CHECK WINDINGS	n/a	
			INSPECT ATS CONTACTS		✓			
FUEL CLEAR AND BRIGHT TEST PERFORMED Yes				Pass		VOLTAGE AFTER 2X CRANK 23.8		

WORK PERFORMED/RECOMMENDATIONS

annual

DOES INSPECTION CONFORM TO CSA 282: Yes.

ADDITIONAL PARTS USED

	Yes	No		Yes	No
Fire Log Book Entry	✓		Generator Log Book Entry	✓	
Unit in Auto	✓		Battery Charger On	✓	
Alarms Cleared on All Panels	✓		Repair Recommendation		✓

SIGNATURE FOR RECEPTION OF SERVICE

yes
CUSTOMER ON SITE

CUSTOMER SIGNATURE

Zack Ischkin

GAL TECHNICIAN

MAINMAN ASSESSMENT REPORT

KONECRANES

Report created: Jan 27, 2025, 8:57:01 PM

Customer and Service Information

Customer	City of Dryden Public Works		
Business Location	City of Dryden Public Works		
Address	159 King St, Dryden		
Agreement	CA83-City of Dryden Public Works		
Service Request	1-101202182553		
Description	Routine Maintenance, MAINMAN Assessment - December/2024		
Equipment Needed	Test Weight (Not Required) Manlift (Konecranes Providing)		
PO Number	2 PO's -WTP & WWTP		
Billing Type	Time & Material		
Customer Contact	Blake Poole 807-223-1420 bpoole@dryden.ca	**Konecranes Contact**	Michael Grundy +1 807 473 1810 michael.grundy@konecranes.com

Summary

Service Request Status: Completed

Service Products: Routine Maintenance, MAINMAN Assessment

Assets Serviced: 7

Findings and Actions

1 Safety Risks

1 Quotes

Findings and Actions by Asset (Top 5)

Note! The condition of certain components on serviced/inspected cranes cannot be directly verified through visual inspection without further disassembly and/or the use of other inspection methods. These advanced services are excluded from the scope of this service. Inspection frequency for these components should follow OEM recommendations and/or governing regulations. These components are listed separately and identified as follows:

Undetermined Conditions (Unable to Inspect - Not in Scope)

MAINMAN ASSESSMENT REPORT

KONECRANES

Findings and Actions (7 Assets)

UV disinfection room

Pillar jib crane - electric chain hoist

Manufacturer	KONECRANES	**Model**	XN05050020M16T2D
Serial Number	1120202971	**Volt/Ph/Hz**	575-3-60
Site Location	Waste Plant	**Duty Class**	2m
Capacity/SWL	1/2 T		

Service Products Routine Maintenance & MAINMAN Assessment

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported: Jan 21, 2025
Technician: Eirik Chiodo
Task Type: Visual assessment
Fault Code: Acceptable
Risk: **No direct risk**
Recommendation: No Action

Comment:
Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection. However there is a safety concern which should be planned for repairs.

Crane

Structure

Boom

✔ **Boom structure** – Visual assessment

✔ **Joints and bolt connections** – Visual assessment, Lubricate, Operational assessment

✔ **Trolley rail** – Visual assessment

✔ **Trolley rail end stops** – Visual assessment

Pillar

✔ **Pillar structure** – Visual assessment

Joints

✔ **Boom - pillar joint** – Visual assessment, Lubricate, Operational assessment

✔ **Base - pillar joint** – Visual assessment

Trolley

Structure

- ✔ **Trolley intermediate structure** – Visual assessment
- Trolley side 1
  - ✔ **Trolley side structure** – Visual assessment
  - ✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
- Trolley side 2
  - ✔ **Trolley side structure** – Visual assessment
  - ✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
- ✔ **Frame** – Visual assessment
- ✔ **Hanging hook** – Visual assessment, Operational assessment

Hoisting machinery

- ✔ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment
- ✔ **Hoisting motor** – Visual assessment, Lubricate, Clean, Operational assessment
- ✔ **Hoisting brake - holding** – Visual assessment, Adjust, Clean, Operational assessment
- ✔ **Hoisting brake - control** – Visual assessment, Adjust, Clean, Operational assessment
- ✔ **Chain container** – Visual assessment
- ✔ **Chain guide** – Visual assessment, Operational assessment
- ✔ **Chain** – Visual assessment, Lubricate, Operational assessment
- ! **Hook block** **Quote**

  Date Reported: Jan 21, 2025
  Technician: Eirik Chiodo
  Task Type: Visual assessment
  Fault Code: Capacity mislabeled or not labeled
  Risk: **Safety Risk**
  Recommendation: Repair
  Comment:
  During inspection observed there is no capacity markers on hook block and should be planned for repair asap.

  - ✔ **Hook block structure and markings** – Visual assessment
  - ✔ **Chain wheel** – Visual assessment, Lubricate, Operational assessment
  - ✔ **Crosshead** – Visual assessment, Operational assessment
  - ✔ **Thrust ball bearing** – Lubricate, Operational assessment
  - ✔ **Hook forging** – Visual assessment
  - ✔ **Latch** – Visual assessment, Operational assessment

Electrics

Power supply

- ✔ **Mainline disconnect** – Visual assessment, Operational assessment

- ✔ **Conductor** – Visual assessment
- ✔ **Crane main switch** – Visual assessment, Operational assessment
- ✔ **Trolley power supply** – Visual assessment, Operational assessment
  - ✔ **Tow arm** – Visual assessment
  - ✔ **Festoon cable** – Visual assessment
  - ✔ **Cable trolley** – Visual assessment, Operational assessment
- ✔ **Pendant power supply** – Visual assessment, Operational assessment
  - ✔ **Connection box** – Visual assessment
  - ✔ **Festoon cable** – Visual assessment

Control system

- ✔ **Crane cubicle** – Visual assessment, Operational assessment
  - ✔ **General wiring and conduits** – Visual assessment
  - ✔ **Resistor cubicle** – Visual assessment
  - ✔ **Operation control** – Visual assessment, Operational assessment
- ✔ **Hoist cubicle** – Visual assessment
  - ✔ **General wiring and conduits** – Visual assessment
  - ✔ **Operation control** – Visual assessment, Operational assessment
- ✔ **Pushbutton pendant** – Visual assessment, Operational assessment
- ✔ **Hoisting limit switches** – Visual assessment, Adjust, Operational assessment
- ✔ **Overload protector** – Visual assessment, Lubricate, Clean, Operational assessment
- ✔ **Operation control** – Visual assessment, Operational assessment

CUST. ACCEPTED

Jan 24, 2025 Blake Poole, Customer

Jan 24, 2025 Eirik Chiodo, Technician

MAINMAN ASSESSMENT REPORT

KONECRANES

Lift station

Monorail system - 1 trolley electric chain hoist

Manufacturer	KONECRANES	**Model**	XN10100015M32T1D
Serial Number	1113304353	**Volt/Ph/Hz**	575-3-60
Site Location	Waste Plant - Lift station building	**Duty Class**	1Bm
Capacity/SWL	1000kg		

Service Products Routine Maintenance & MAINMAN Assessment

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported: Jan 21, 2025
Technician: Eirik Chiodo
Task Type: Visual assessment
Fault Code: Acceptable
Risk: **No direct risk**
Recommendation: No Action
Comment:
Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection.

Trolley

Structure

✔ **Trolley intermediate structure** – Visual assessment

Trolley side 1

✔ **Trolley side structure** – Visual assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

Trolley side 2

✔ **Trolley side structure** – Visual assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Frame** – Visual assessment

✔ **Hanging hook** – Visual assessment, Operational assessment

Trolley traversing machinery

✔ **Traversing gear** – Visual assessment, Lubricate, Operational assessment

✔ **Traversing coupling** – Visual assessment, Lubricate, Operational assessment

✔ **Guide roller** – Visual assessment, Lubricate, Operational assessment

✔ **Traversing motor** – Visual assessment, Lubricate, Clean, Operational assessment

- ✓ **Traversing brake** – Adjust, Visual assessment, Clean, Operational assessment
- ✓ **Protection guards and covers** – Visual assessment

Hoisting machinery

- ✓ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment
- ✓ **Hoisting motor** – Visual assessment, Lubricate, Clean, Operational assessment
- ✓ **Hoisting brake - holding** – Adjust, Visual assessment, Clean, Operational assessment
- ✓ **Hoisting brake - control** – Adjust, Visual assessment, Clean, Operational assessment
- ✓ **Chain anchorage** – Visual assessment, Operational assessment
- ✓ **Chain container** – Visual assessment
- ✓ **Chain guide** – Visual assessment, Operational assessment
- ✓ **Chain** – Visual assessment, Lubricate, Operational assessment

Hook block

- ✓ **Hook block structure and markings** – Visual assessment
- ✓ **Chain wheel** – Visual assessment, Lubricate, Operational assessment
- ✓ **Crosshead** – Visual assessment, Operational assessment
- ✓ **Thrust ball bearing** – Lubricate, Operational assessment
- ✓ **Hook forging** – Visual assessment
- ✓ **Latch** – Visual assessment, Operational assessment

Electrics

Power supply

- ✓ **Runway mainline disconnect** – Visual assessment, Operational assessment
- ✓ **Trolley power supply** – Visual assessment, Operational assessment
  - ✓ **Tow arm** – Visual assessment
  - ✓ **Festoon cable** – Visual assessment
  - ✓ **Cable trolley** – Visual assessment, Operational assessment
- ✓ **Crane main switch** – Visual assessment, Operational assessment
- ✓ **Pendant power supply** – Visual assessment, Operational assessment
  - ✓ **Connection box** – Visual assessment
  - ✓ **Festoon cable** – Visual assessment

Control system

- ✓ **Trolley cubicle** – Visual assessment
  - ✓ **General wiring and conduits** – Visual assessment
  - ✓ **Operation control** – Visual assessment, Operational assessment
- ✓ **Hoist cubicle** – Visual assessment

- ✓ **General wiring and conduits** – Visual assessment
- ✓ **Operation control** – Visual assessment, Operational assessment

- ✓ **Pushbutton pendant** – Visual assessment, Operational assessment
- ✓ **Pushbutton pendant cable** – Visual assessment
- ✓ **Hoisting limit switches** – Adjust, Visual assessment, Operational assessment
- ✓ **Overload protector** – Visual assessment, Lubricate, Clean, Operational assessment
- ✓ **Operation control** – Visual assessment, Operational assessment
- ✓ **Indicating devices** – Visual assessment, Operational assessment

Runway

Beam

- ✓ **End stops** – Visual assessment

CUST. ACCEPTED

Jan 24, 2025 Blake Poole, Customer

E Chiodo

Jan 24, 2025 Eirik Chiodo, Technician

MAINMAN ASSESSMENT REPORT

KONECRANES

Blower room North

Monorail system - 1 trolley manual chain hoist

Manufacturer	KONECRANES	**Model**	XNMS1 000 20TS
Serial Number	G1135471		
Site Location	Waste Plant		
Capacity/SWL	1000kg		

Service Products MAINMAN Assessment & Routine Maintenance

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported: Jan 21, 2025
Technician: Eirik Chiodo
Task Type: Visual assessment
Fault Code: Acceptable
Risk: **No direct risk**
Recommendation: No Action
Comment:
Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection.

Trolley

Structure

✔ **Trolley intermediate structure** – Visual assessment

Trolley side 1

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

Trolley side 2

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Frame** – Visual assessment
✔ **Hanging hook** – Visual assessment, Operational assessment

Hoisting machinery

✔ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment
✔ **Hand chain gear** – Visual assessment, Operational assessment

- ✔ **Chain container** – Visual assessment
- ✔ **Chain guide** – Visual assessment, Operational assessment
- ✔ **Chain** – Visual assessment, Lubricate, Operational assessment
- Hook block
  - ✔ **Hook block structure and markings** – Visual assessment
  - ✔ **Chain wheel** – Visual assessment, Lubricate, Operational assessment
  - ✔ **Crosshead** – Visual assessment, Operational assessment
  - ✔ **Thrust ball bearing** – Lubricate, Operational assessment
  - ✔ **Hook forging** – Visual assessment
  - ✔ **Latch** – Visual assessment, Operational assessment
- Runway
  - Beam
    - ✔ **End stops** – Visual assessment

CUST. ACCEPTED

Jan 24, 2025 Blake Poole, Customer

Jan 24, 2025 Eirik Chiodo, Technician

MAINMAN ASSESSMENT REPORT

KONECRANES

Blower room South

Monorail system - 1 trolley manual chain hoist

Manufacturer	KONECRANES	**Model**	XNMS1 000 20TS
Serial Number	G1135473		
Site Location	Waste Plant		
Capacity/SWL	1000kg		

Service Products MAINMAN Assessment & Routine Maintenance

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported: Jan 21, 2025
Technician: Eirik Chiodo
Task Type: Visual assessment
Fault Code: Acceptable
Risk: **No direct risk**
Recommendation: No Action
Comment:
Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection.

Trolley

Structure

✔ **Trolley intermediate structure** – Visual assessment

Trolley side 1

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

Trolley side 2

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Frame** – Visual assessment
✔ **Hanging hook** – Visual assessment, Operational assessment

Hoisting machinery

✔ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment
✔ **Hand chain gear** – Visual assessment, Operational assessment

- ✔ **Chain container** – Visual assessment
- ✔ **Chain guide** – Visual assessment, Operational assessment
- ✔ **Chain** – Visual assessment, Lubricate, Operational assessment
- Hook block
  - ✔ **Hook block structure and markings** – Visual assessment
  - ✔ **Chain wheel** – Visual assessment, Lubricate, Operational assessment
  - ✔ **Crosshead** – Visual assessment, Operational assessment
  - ✔ **Thrust ball bearing** – Lubricate, Operational assessment
  - ✔ **Hook forging** – Visual assessment
  - ✔ **Latch** – Visual assessment, Operational assessment
- Runway
  - Beam
    - ✔ **End stops** – Visual assessment

CUST. ACCEPTED

Jan 24, 2025 Blake Poole, Customer

Jan 24, 2025 Eirik Chiodo, Technician

MAINMAN ASSESSMENT REPORT

KONECRANES

Headworks room

Monorail system - 1 trolley manual chain hoist

Manufacturer	KONECRANES	**Model**	XNMS1 000 15TS
Serial Number	G1135469		
Site Location	Waste Plant		
Capacity/SWL	1000kg		

Service Products Routine Maintenance & MAINMAN Assessment

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported:	Jan 21, 2025
Technician:	Eirik Chiodo
Task Type:	Visual assessment
Fault Code:	Acceptable
Risk:	**No direct risk**
Recommendation:	No Action

Comment:

Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection.

Trolley

Structure

✔ **Trolley intermediate structure** – Visual assessment

Trolley side 1

✔ **Trolley side structure** – Visual assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

Trolley side 2

✔ **Trolley side structure** – Visual assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Frame** – Visual assessment

✔ **Hanging hook** – Visual assessment, Operational assessment

Hoisting machinery

✔ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment

✔ **Hand chain gear** – Visual assessment, Operational assessment

MAINMAN ASSESSMENT REPORT

KONECRANES

Headworks room

Monorail system - 1 trolley manual chain hoist

Manufacturer	KONECRANES	**Model**	XNMS1 000 15TS
Serial Number	G1135469		
Site Location	Waste Plant		
Capacity/SWL	1000kg		

Service Products Routine Maintenance & MAINMAN Assessment

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported:	Jan 21, 2025
Technician:	Eirik Chiodo
Task Type:	Visual assessment
Fault Code:	Acceptable
Risk:	**No direct risk**
Recommendation:	No Action

Comment:

Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection.

Trolley

Structure

✔ **Trolley intermediate structure** – Visual assessment

Trolley side 1

✔ **Trolley side structure** – Visual assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

Trolley side 2

✔ **Trolley side structure** – Visual assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Frame** – Visual assessment

✔ **Hanging hook** – Visual assessment, Operational assessment

Hoisting machinery

✔ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment

✔ **Hand chain gear** – Visual assessment, Operational assessment

- ✔ **Chain container** – Visual assessment
- ✔ **Chain guide** – Visual assessment, Operational assessment
- ✔ **Chain** – Visual assessment, Lubricate, Operational assessment
- Hook block
  - ✔ **Hook block structure and markings** – Visual assessment
  - ✔ **Chain wheel** – Visual assessment, Lubricate, Operational assessment
  - ✔ **Crosshead** – Visual assessment, Operational assessment
  - ✔ **Thrust ball bearing** – Lubricate, Operational assessment
  - ✔ **Hook forging** – Visual assessment
  - ✔ **Latch** – Visual assessment, Operational assessment
- Runway
  - Beam
    - ✔ **End stops** – Visual assessment

CUST. ACCEPTED

Jan 24, 2025 Blake Poole, Customer

Jan 24, 2025 Eirik Chiodo, Technician

MAINMAN ASSESSMENT REPORT

KONECRANES

Press Room

Monorail system - 1 trolley manual chain hoist

Manufacturer	CM	**Model**	Cyclone\
Serial Number	S1824UT		
Site Location	Waste Plant		
Capacity/SWL	2000kg		

Service Products MAINMAN Assessment & Routine Maintenance

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported: Jan 21, 2025
Technician: Eirik Chiodo
Task Type: Visual assessment
Fault Code: Acceptable
Risk: **No direct risk**
Recommendation: No Action
Comment:
Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection.

Trolley

Structure

✔ **Trolley intermediate structure** – Visual assessment

Trolley side 1

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

Trolley side 2

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Frame** – Visual assessment
✔ **Hanging hook** – Visual assessment, Operational assessment

Hoisting machinery

✔ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment
✔ **Hand chain gear** – Visual assessment, Operational assessment

- ✔ **Chain container** – Visual assessment
- ✔ **Chain guide** – Visual assessment, Operational assessment
- ✔ **Chain** – Visual assessment, Lubricate, Operational assessment
- Hook block
  - ✔ **Hook block structure and markings** – Visual assessment
  - ✔ **Chain wheel** – Visual assessment, Lubricate, Operational assessment
  - ✔ **Crosshead** – Visual assessment, Operational assessment
  - ✔ **Thrust ball bearing** – Lubricate, Operational assessment
  - ✔ **Hook forging** – Visual assessment
  - ✔ **Latch** – Visual assessment, Operational assessment
- Runway
  - Beam
    - ✔ **End stops** – Visual assessment

CUST. ACCEPTED

Jan 24, 2025 Blake Poole, Customer

Jan 24, 2025 Eirik Chiodo, Technician

MAINMAN ASSESSMENT REPORT

KONECRANES

UV disinfection room

Monorail system - 1 trolley manual chain hoist

Manufacturer	KONECRANES	**Model**	XNM2 000 20TS
Serial Number	G1135475	**Lift**	20ft
Site Location	Waste Plant - Equalisation pumps		
Capacity/SWL	2000kg		

Service Products MAINMAN Assessment & Routine Maintenance

	✔ / !	Comment
Maintenance log book	✔	

✔ **Markings** – Visual assessment

Documentation **Notification**

Date Reported: Jan 21, 2025
Technician: Eirik Chiodo
Task Type: Visual assessment
Fault Code: Acceptable
Risk: **No direct risk**
Recommendation: No Action
Comment:
Unit has been inspected and deemed safe for use, at the rated load, at the time of inspection.

Trolley

Structure

✔ **Trolley intermediate structure** – Visual assessment

Trolley side 1

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

Trolley side 2

✔ **Trolley side structure** – Visual assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment
✔ **Trolley wheel** – Visual assessment, Lubricate, Operational assessment

✔ **Frame** – Visual assessment
✔ **Hanging hook** – Visual assessment, Operational assessment

Hoisting machinery

✔ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment
✔ **Hand chain gear** – Visual assessment, Operational assessment

- ✔ **Chain container** – Visual assessment
- ✔ **Chain guide** – Visual assessment, Operational assessment
- ✔ **Chain** – Visual assessment, Lubricate, Operational assessment
- Hook block
  - ✔ **Hook block structure and markings** – Visual assessment
  - ✔ **Chain wheel** – Visual assessment, Lubricate, Operational assessment
  - ✔ **Crosshead** – Visual assessment, Operational assessment
  - ✔ **Thrust ball bearing** – Lubricate, Operational assessment
  - ✔ **Hook forging** – Visual assessment
  - ✔ **Latch** – Visual assessment, Operational assessment
- Runway
  - Beam
    - ✔ **End stops** – Visual assessment

CUST. ACCEPTED

Jan 24, 2025 Blake Poole, Customer

Jan 24, 2025 Eirik Chiodo, Technician

MAINMAN ASSESSMENT REPORT

KONECRANES

Undetermined Conditions: Unable to Inspect - Not in Scope (7 Assets)

UV disinfection room
Pillar jib crane - electric chain hoist

Jan 21, 2025

! Drive sprocket **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

! Hook nut and locking parts **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Lift station
Monorail system - 1 trolley electric chain hoist

Jan 21, 2025

! Drive sprocket **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Jan 21, 2025

! Hook nut and locking parts **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Blower room North
Monorail system - 1 trolley manual chain hoist

Jan 21, 2025

Hook nut and locking parts **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Blower room South

Monorail system - 1 trolley manual chain hoist

Jan 21, 2025

Hook nut and locking parts **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Headworks room

Monorail system - 1 trolley manual chain hoist

Jan 21, 2025

Hook nut and locking parts **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Press Room

Monorail system - 1 trolley manual chain hoist

Jan 21, 2025

Hook nut and locking parts **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

UV disinfection room

Monorail system - 1 trolley manual chain hoist

Jan 21, 2025

Hook nut and locking parts **Notification**

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

MAINMAN ASSESSMENT REPORT

KONECRANES

Component Condition

- ✔ Acceptable (No issues detected)
- ! Need Attention

Findings and Actions

Safety Risk ⚠ WARNING

Indicates an unsafe condition. Failure to remedy such condition before continued operation of the identified asset may result in personal injury, including death, or property damage.

Production Risk

Indicates an inefficient condition. Failure to remedy such condition before continued operation of the identified asset may result in inefficient asset performance or an interruption in production.

Undetermined Condition
Unable to Inspect - Not in Scope

Indicates that the component condition could not be directly verified through visual inspection without further disassembly and/or the use of other inspection methods.

These advanced services are generally excluded from the scope of typical compliance and preventive maintenance inspections. Consultation Services may be added to a Service Program or offered on a stand-alone basis to assess the condition of these components.

Inspection frequency for these components should follow OEM recommendations and/or governing regulations. If these are not readily available, Konecranes recommendations may be used.

If no records are available, disassembly/inspections of these components should be carried out without delay to determine their current condition and to establish a baseline for subsequent inspections.

Undetermined Condition
Not able to Complete

Indicates that the component condition could not be directly verified through visual inspection as a result of asset configuration and/or obstruction. In this case, the visual inspection was part of the service scope but it was not completed.

Improvement Opportunity

Indicates a potential opportunity to improve the safety, productivity, application or useful life of the asset.

Acceptable / Repaired Item

Component condition is verified by Konecranes service technician. No actions required. If a component or other object has been repaired within the service visit, green color code is shown as well.

Repaired Items correspond to those repairs performed by, observed by or reported to the Konecranes Technician during the delivery of the referenced Service Request.

Appendix B
Calibration Records

Calibration Certificate

Certificate Number: CAL-3614-2025

Position ID: DRY-FIT-401

Emerson Impact Partner

Position

Process Description	DRY-FIT-401
Work Order Number	
Location	Dryden Water
Plant	NW Ontario Water Treatment Plants/Dryden Water Treatment Facilities/

Device

Tag	DRY-FIT-401
Serial Number	N/A
Manufacturer	Rosemount 8712E

Function

Name	Clamp-On Flow Verification (COV)	
Transfer Function	Linear	
Range	0 ... 34700 m3/d	0 ... 34700 m3/d

Calibration Event

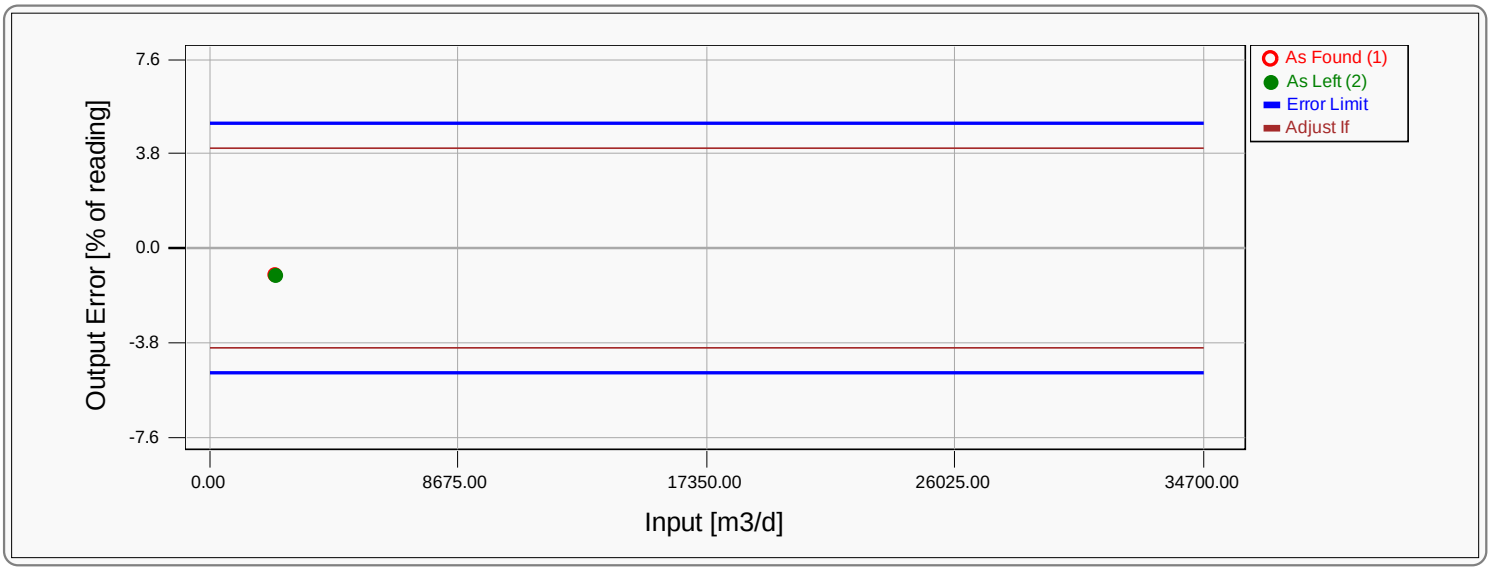
Calibration time	2025-09-16 10:35:16 AM
Next Calibration	2026-09-16

Calibration Procedure

Reject If Error >	5 % of reading	
Adjust To Error <	% of Reject If Error	Classification

Calibrators

Input Calibrator	FLUXUS G 601 ST : 60113644 (TBY KIT)	Due Date: 2026-03-25
Input Module	CDK1NZ7 : 173336	Due Date: 2027-02-14
Output Calibrator		Due Date:
Output Module		Due Date:



1. As Found — PASSED

Maximum Error: -1.1 % of reading

Nominal Input [m3/d]	Actual Input [m3/d]	Nominal Output [m3/d]	Actual Output [m3/d]	Found Error [% of reading]
0	2300	0	2275	-1.1

2. As Left — PASSED

Maximum Error: -1.1 % of reading

Nominal Input [m3/d]	Actual Input [m3/d]	Nominal Output [m3/d]	Actual Output [m3/d]	Found Error [% of reading]
0	2300	0	2275	-1.1

Calibration Note:

Calibrated by: Igor Riaboshapkin
2025-09-16 10:35:16 AM

Calibrated by:
2025-09-16 10:35:16 AM

Printed: 2025-09-16 2:32:52 PM
Printed by: Chris Foulds
CMX Version: 2.13.324.0 (2.12)

Calibration Certificate

Certificate Number: CAL-3613-2025

Position ID: DRY-FIT-104

Position

Process Description	DRY-FIT-104
Work Order Number	
Location	Dryden Water
Plant	NW Ontario Water Treatment Plants/Dryden Water Treatment Facilities/

Device

Tag	DRY-FIT-104
Serial Number	N/A
Manufacturer	Rosemount 8712E

Function

Name	Clamp-On Flow Verification (COV)	
Transfer Function	Linear	
Range	0 ... 200 L/s	0 ... 200 L/s

Calibration Event

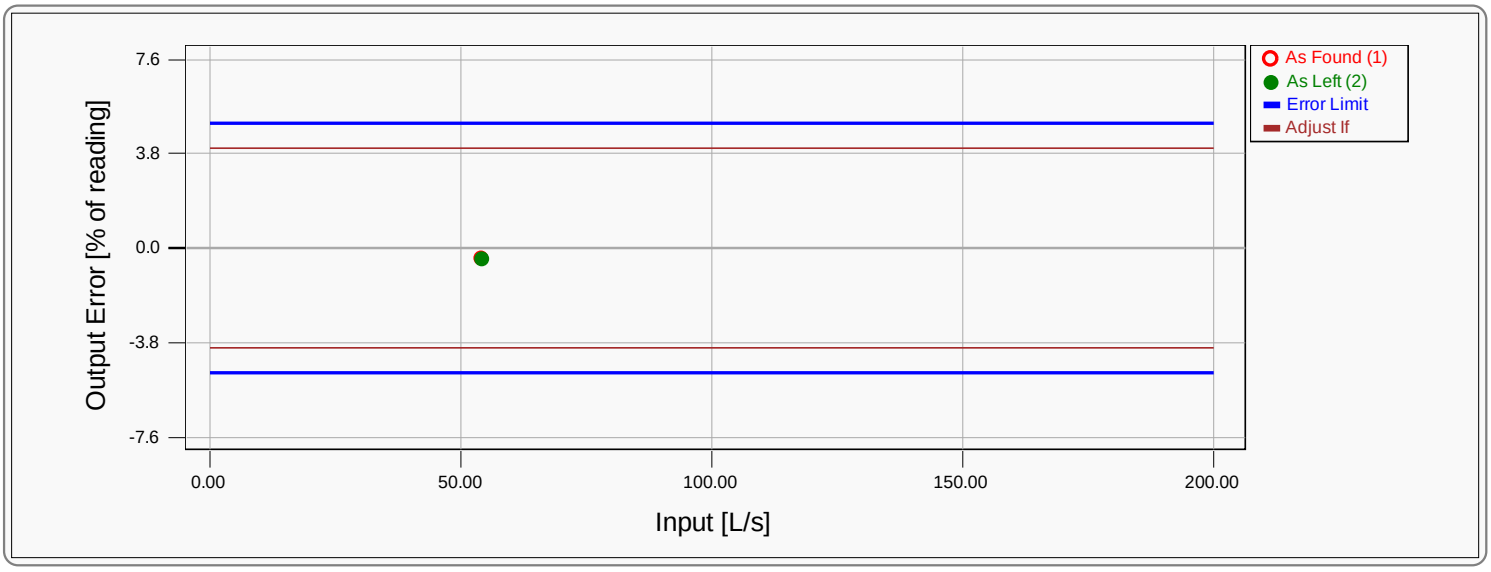
Calibration time	2025-09-16 11:28:14 AM
Next Calibration	2026-09-16

Calibration Procedure

Reject If Error >	5 % of reading	
Adjust To Error <	% of Reject If Error	Classification

Calibrators

Input Calibrator	FLUXUS G 601 ST : 60113644 (TBY KIT)	Due Date: 2026-03-25
Input Module	CDM1EZ7 : 173342	Due Date: 2027-02-15
Output Calibrator		Due Date:
Output Module		Due Date:



1. As Found — PASSED

Maximum Error: -0.4 % of reading

Nominal Input [L/s]	Actual Input [L/s]	Nominal Output [L/s]	Actual Output [L/s]	Found Error [% of reading]
0	54.2	0	54	-0.4

2. As Left — PASSED

Maximum Error: -0.4 % of reading

Nominal Input [L/s]	Actual Input [L/s]	Nominal Output [L/s]	Actual Output [L/s]	Found Error [% of reading]
0	54.2	0	54	-0.4

Calibration Note:

Calibrated by: Igor Riaboshapkin
2025-09-16 11:28:14 AM

Calibrated by:
2025-09-16 11:28:14 AM

Printed: 2025-09-16 2:32:52 PM
Printed by: Chris Foulds
CMX Version: 2.13.324.0 (2.12)

Calibration Certificate

Certificate Number: CAL-3612-2025
Position ID: DRY-FIT-102

Emerson Impact Partner

Position

Process Description	DRY-FIT-102
Work Order Number	
Location	Dryden Water
Plant	NW Ontario Water Treatment Plants/Dryden Water Treatment Facilities/

Device

Tag	DRY-FIT-102
Serial Number	N/A
Manufacturer	Rosemount 8712E

Function

Name	Clamp-On Flow Verification (COV)	
Transfer Function	Linear	
Range	0 ... 200 L/s	0 ... 200 L/s

Calibration Event

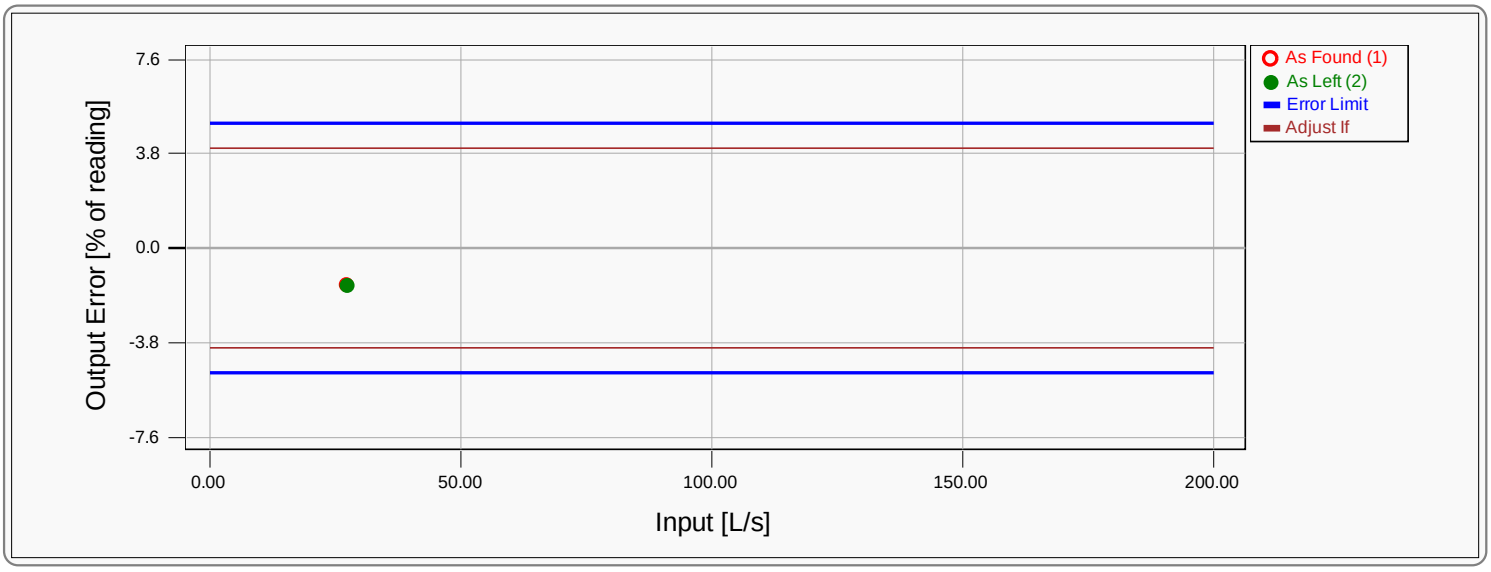
Calibration time	2025-09-16 11:27:21 AM
Next Calibration	2026-09-16

Calibration Procedure

Reject If Error >	5 % of reading	
Adjust To Error <	% of Reject If Error	Classification

Calibrators

Input Calibrator	FLUXUS G 601 ST : 60113644 (TBY KIT)	Due Date: 2026-03-25
Input Module	CDM1EZ7 : 173342	Due Date: 2027-02-15
Output Calibrator		Due Date:
Output Module		Due Date:



1. As Found — PASSED

Maximum Error: -1.5 % of reading

Nominal Input [L/s]	Actual Input [L/s]	Nominal Output [L/s]	Actual Output [L/s]	Found Error [% of reading]
0	27.3	0	26.9	-1.5

2. As Left — PASSED

Maximum Error: -1.5 % of reading

Nominal Input [L/s]	Actual Input [L/s]	Nominal Output [L/s]	Actual Output [L/s]	Found Error [% of reading]
0	27.3	0	26.9	-1.5

Calibration Note:

Calibrated by: Igor Riaboshapkin
2025-09-16 11:27:21 AM

Calibrated by:
2025-09-16 11:27:21 AM

Printed: 2025-09-16 2:32:52 PM
Printed by: Chris Foulds
CMX Version: 2.13.324.0 (2.12)

Calibration Certificate

Certificate Number: CAL-3611-2025

Position ID: DRY-FIT-101

Position

Process Description	DRY-FIT-101
Work Order Number	
Location	Dryden Water
Plant	NW Ontario Water Treatment Plants/Dryden Water Treatment Facilities/

Device

Tag	DRY-FIT-101
Serial Number	N/A
Manufacturer	Rosemount 8712E

Function

Name	Clamp-On Flow Verification (COV)	
Transfer Function	Linear	
Range	0 ... 200 L/s	0 ... 200 L/s

Calibration Event

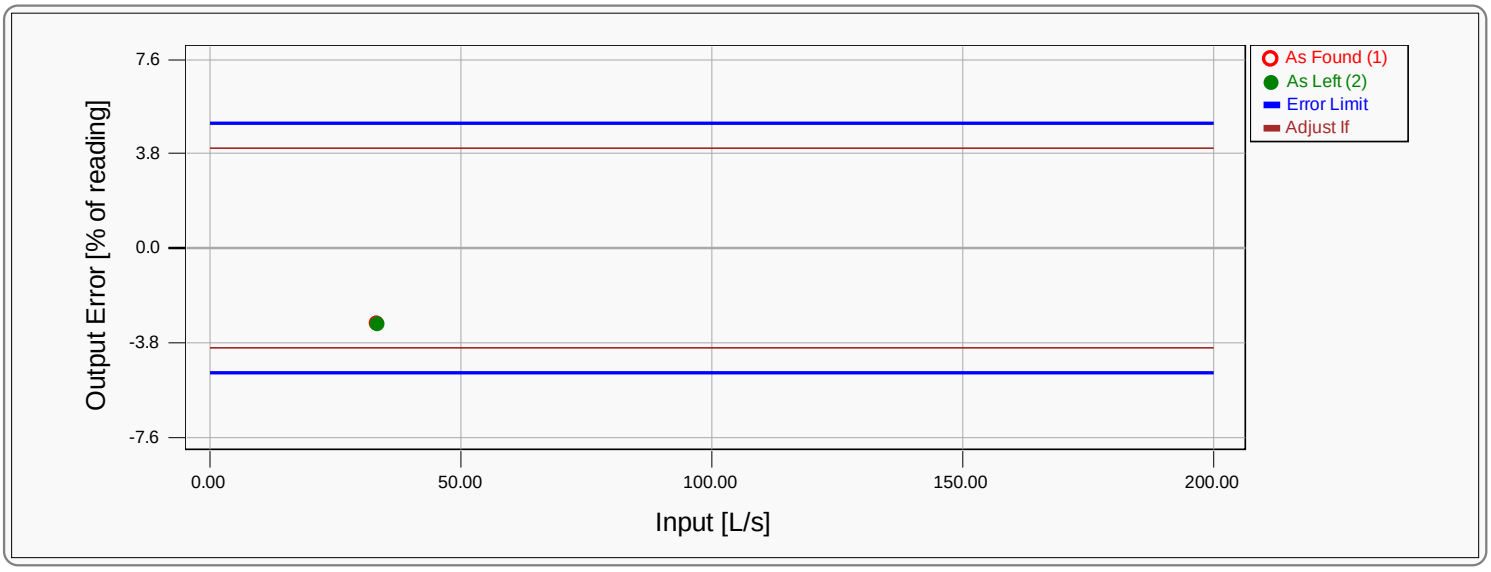
Calibration time	2025-09-16 11:24:39 AM
Next Calibration	2026-09-16

Calibration Procedure

Reject If Error >	5 % of reading	
Adjust To Error <	% of Reject If Error	Classification

Calibrators

Input Calibrator	FLUXUS G 601 ST : 60113644 (TBY KIT)	Due Date: 2026-03-25
Input Module	CDM1EZ7 : 173342	Due Date: 2027-02-15
Output Calibrator		Due Date:
Output Module		Due Date:



1. As Found — PASSED

Maximum Error: -3.0 % of reading

Nominal Input [L/s]	Actual Input [L/s]	Nominal Output [L/s]	Actual Output [L/s]	Found Error [% of reading]
0	33.4	0	32.4	-3.0

2. As Left — PASSED

Maximum Error: -3.0 % of reading

Nominal Input [L/s]	Actual Input [L/s]	Nominal Output [L/s]	Actual Output [L/s]	Found Error [% of reading]
0	33.4	0	32.4	-3.0

Calibration Note:

Calibrated by: Igor Riaboshapkin
2025-09-16 11:24:39 AM

Calibrated by:
2025-09-16 11:24:39 AM

Printed: 2025-09-16 2:32:52 PM
Printed by: Chris Foulds
CMX Version: 2.13.324.0 (2.12)

CLOW DARLING
1201 CAMERON ST
THUNDER BAY, ON P7C 0A1
807 623-7485
www.clowdarling.com

SV49848

BACKFLOW PREVENTION DEVICE TEST REPORT

Address: 130 MARGUERITE ST			Postal Code
Occupant: SEWAGE TREATMENT PLANT	**Contact Person/s** Bill 216-7380	Telephone 807-223-1452	
		E-mail WAHO@DRYDEN.CA	
Owner: CITY OF DRYDEN		Telephone (807) 216-7380	
Address of Owner DRYDEN, ONTARIO			Postal Code

Name of Certified Tester DARREN BJORKLUND	**Tester Certification Number** 21024	Telephone 807-623-7485	
Business Name & Address CLOW DARLING LIMITED - 1201 CAMERON ST, THUNDER BAY, ON		Postal Code P7C 0A1	E-mail kristyd@clowdarling.com
Make of TEST KIT WATTS	Model Number TK99E	Serial Number 859121	Calibration Expiry Date m/d/y 05/01/2026
Device Location HOUSEKEEPING ROOM	Purpose of Device TSP		
TEST DATE m/d/y 09/23/25	RP [X] DCVA [ ] S/PVB [ ]		
Make WATTS	Model 009M3	Serial # 313535	SIZE 3/4"
Initial Test [ ] Annual Test [X]	PASS [X] FAIL [ ]	LINE PRESSURE 75 psi	

REDUCED PRESSURE BACKFLOW ASSEMBLY

Check Valve No. 1	Check Valve No. 2	Relief Valve
[ ] Leaked [X] Closed Tight	[ ] Leaked [X] Closed Tight	Opened at 2.0 psi
Pressure Differential 7.2 psi	Pressure Differential 1.6 psi	Pressure differential across check 1 7.2 psi
		Minus the opening of relief valve 2.0 psi
Shut Off Valve #1 [ ] Leaked [X] Closed	Shut off valve #2 [ ] Leaked [X] Closed	BUFFER (3 psi or grater) 5.2 psi

DOUBLE CHECK VALVE

Check Valve No. 1	Check Valve No. 2
[ ] Leaked [ ] Closed Tight	[ ] Leaked [ ] Closed Tight
Pressure Differential _____ psi	Pressure Differential _____ psi
Shut Off Valve #1 [ ] Leaked [ ] Closed	Shut off valve #2 [ ] Leaked [ ] Closed

PRESSURE VACUUM BREAKER

Air Inlet Valve

Opened At _____ psi [ ] Failed to Open

Check Valve [ ] Leaked [ ] Closed Tight

Pressure Differential _____ psi

If assembly fails test, complete this section and note repairs: (If Device replaces an existing device list Serial # of existing device.)

Tester Signature:

09/23/25

Date m/d/y

CLOW DARLING
1201 CAMERON ST
THUNDER BAY, ON P7C 0A1
807 623-7485
www.clowdarling.com

SV49848

BACKFLOW PREVENTION DEVICE TEST REPORT

Address: 130 MARGUERITE ST			Postal Code
Occupant: SEWAGE TREATMENT PLANT	**Contact Person/s** Bill 216-7380	Telephone 807-22? 1450	
Owner: CITY OF DRYDEN		Telephone (807) 216-7380	
Address of Owner		DRYDEN, ONTARIO	Postal Code

Name of Certified Tester DARREN BJORKLUND	**Tester Certification Number** 21024	Telephone 807-623-7485	
Business Name & Address CLOW DARLING LIMITED - 1201 CAMERON ST, THUNDER BAY, ON	Postal Code P7C 0A1	E-mail kristyd@clowdarling.com	
Make of TEST KIT WATTS	Model Number TK99E	Serial Number 859121	**Calibration Expiry Date** m/d/y 05/01/2026

Device Location LOADING DOCK		Purpose of Device PREMISE	
TEST DATE m/d/y 09/23/25	RP [X]	DCVA [ ]	S/PVB [ ]
Make WATTS	Model 009M2	Serial # 303059	SIZE 2"
Initial Test [ ] Annual Test [X]	PASS [X]	FAIL [ ]	LINE PRESSURE 90 psi

REDUCED PRESSURE BACKFLOW ASSEMBLY

Check Valve No. 1	Check Valve No. 2	Relief Valve
[ ] Leaked [X] Closed Tight	[ ] Leaked [X] Closed Tight	Opened at 2.4 psi
Pressure Differential 6.4 psi	**Pressure Differential** 2.0 psi	Pressure differential across check 1 6.4 psi
		Minus the opening of relief valve 2.4 psi
Shut Off Valve #1 [ ] Leaked [X] Closed	**Shut off valve #2** [ ] Leaked [X] Closed	**BUFFER** (3 psi or grater) 4.0 psi

DOUBLE CHECK VALVE

Check Valve No. 1	Check Valve No. 2
[ ] Leaked [ ] Closed Tight	[ ] Leaked [ ] Closed Tight
Pressure Differential _____ psi	**Pressure Differential** _____ psi
Shut Off Valve #1 [ ] Leaked [ ] Closed	**Shut off valve #2** [ ] Leaked [ ] Closed

PRESSURE VACUUM BREAKER

Air Inlet Valve

Opened At _____ psi [ ] Failed to Open

Check Valve [ ] Leaked [ ] Closed Tight

Pressure Differential _____ psi

If assembly fails test, complete this section and note repairs: (If Device replaces an existing device list Serial # of existing device.)

Tester Signature:

09/23/25
Date m/d/y

CLOW DARLING
1201 CAMERON ST
THUNDER BAY ON P7C 0A1
807 623-7485
www.clowdarling.com

SV499848

BACKFLOW PREVENTION DEVICE TEST REPORT

Address: 130 MARGUERITE ST			Postal Code
Occupant: SEWAGE TREATMENT PLANT	**Contact Person/s** Bill 216-7380	Telephone 807-223-1450	
Owner: CITY OF DRYDEN		Telephone (807) 216-7380	
Address of Owner		DRYDEN, ONTARIO	Postal Code
Name of Certified Tester DARREN BJORKLUND	**Tester Certification Number** 21024	Telephone 807-623-7485	
Business Name & Address CLOW DARLING LIMITED - 1201 CAMERON ST, THUNDER BAY, ON		Postal Code P7C 0A1	E-mail kristyd@clowdarling.com
Make of TEST KIT WATTS	Model Number TK99E	Serial Number 859121	Calibration Expiry Date m/d/y 05/01/2026
Device Location LOADING DOCK		Purpose of Device CHEMICAL INJECTION	
TEST DATE m/d/y 09/23/25	RP ☐ DCVA ☒	S/PVB ☐	SIZE 1"
Make WATTS	Model 007M1	Serial # 400415	LINE PRESSURE 70 psi
Initial Test ☐ Annual Test ☒	PASS ☒	FAIL ☐	

REDUCED PRESSURE BACKFLOW ASSEMBLY

Check Valve No. 1
☐ Leaked ☒ Closed Tight
Pressure Differential 9.2 psi
Shut Off Valve #1 ☐ Leaked ☒ Closed

Check Valve No. 2
☐ Leaked ☒ Closed Tight
Pressure Differential 2.6 psi
Shut off valve #2 ☐ Leaked ☒ Closed

Relief Valve Opened at 32 psi
Pressure differential across check 1 9.2 psi
Minus the opening of relief valve 3.2 psi
BUFFER (3 psi or grater) 6.0 psi

DOUBLE CHECK VALVE

Check Valve No. 1
☐ Leaked ☐ Closed Tight
Pressure Differential _____ psi
Shut Off Valve #1 ☐ Leaked ☐ Closed

Check Valve No. 2
☐ Leaked ☐ Closed Tight
Pressure Differential _____ psi
Shut off valve #2 ☐ Leaked ☐ Closed

PRESSURE VACUUM BREAKER

Air Inlet Valve
Opened At _____ psi ☐ Failed to Open

Check Valve ☐ Leaked ☐ Closed Tight
Pressure Differential _____ psi

If assembly fails test, complete this section and note repairs: (If Device replaces an existing device list Serial # of existing device.)

09/23/25
Date m/d/y

Tester Signature:

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1201 CAMERON ST
THUNDER BAY, ON P7C 0A1
807 623-7485
www.clowdarling.com

SV49848

BACKFLOW PREVENTION DEVICE TEST REPORT

Address: 130 MARGUERITE ST			Postal Code
Occupant: SEWAGE TREATMENT PLANT	Contact Person/s: Bill 216-7380	Telephone 807-223-1450	
Owner: CITY OF DRYDEN		Telephone (807) 216-7380	
Address of Owner: DRYDEN, ONTARIO			Postal Code
Name of Certified Tester: DARREN BJORKLUND	Tester Certification Number: 21024	Telephone 807-623-7485	
Business Name & Address: CLOW DARLING LIMITED - 1201 CAMERON ST, THUNDER BAY, ON		Postal Code P7C 0A1	E-mail kristyd@clowdarling.com
Make of TEST KIT: WATTS	Model Number: TK99E	Serial Number: 859121	Calibration Expiry Date m/d/y: 05/01/2026
Device Location: PUMP HOUSE		Purpose of Device: PREMISE	
TEST DATE m/d/y: 09/23/25	RP ☒ DCVA ☐		S/PVB ☐
Make: WATTS	Model: 009M2	Serial #: 360896	SIZE: 1"
Initial Test ☐ Annual Test ☒	PASS ☒ FAIL ☐		LINE PRESSURE: 95 psi

REDUCED PRESSURE BACKFLOW ASSEMBLY

Check Valve No. 1
☐ Leaked ☒ Closed Tight
Pressure Differential: 7.2 psi
Shut Off Valve #1 ☐ Leaked ☒ Closed

Check Valve No. 2
☐ Leaked ☒ Closed Tight
Pressure Differential: 1.8 psi
Shut off valve #2 ☐ Leaked ☒ Closed

Relief Valve Opened at: 3.0 psi
Pressure differential across check 1: 7.2 psi
Minus the opening of relief valve: 3.0 psi
BUFFER (3 psi or grater): 4.2 psi

DOUBLE CHECK VALVE

Check Valve No. 1
☐ Leaked ☐ Closed Tight
Pressure Differential: _____ psi
Shut Off Valve #1 ☐ Leaked ☐ Closed

Check Valve No. 2
☐ Leaked ☐ Closed Tight
Pressure Differential: _____ psi
Shut off valve #2 ☐ Leaked ☐ Closed

PRESSURE VACUUM BREAKER

Air Inlet Valve
Opened At _____ psi ☐ Failed to Open

Check Valve
☐ Leaked
☐ Closed Tight
Pressure Differential _____ psi

If assembly fails test, complete this section and note repairs: (If Device replaces an existing device list Serial # of existing device.)

09/23/25
Date m/d/y

Tester Signature:

CLOW DARLING
1201 CAMERON ST
THUNDER BAY, ON P7C 0A1
807 623-7485
wwwclowdarling.com

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BACKFLOW PREVENTION DEVICE TEST REPORT

Address: 130 MARGUERITE ST			Postal Code
Occupant: SEWAGE TREATMENT PLANT	Contact Person/s Bill – 216-7380	Telephone 807-223-1450	
		E-mail	
Owner: CITY OF DRYDEN		Telephone (807) 216-7380	
Address of Owner DRYDEN, ONTARIO			Postal Code

Name of Certified Tester DARREN BJORKLUND	Tester Certification Number 21024	Telephone 807-623-7485	
Business Name & Address CLOW DARLING LIMITED - 1201 CAMERON ST, THUNDER BAY, ON		Postal Code P7C 0A1	E-mail kristyd@clowdarling.com
Make of TEST KIT WATTS	Model Number TK99E	Serial Number 859121	Calibration Expiry Date m/d/y 05/01/2026

Device Location PUMP HOUSE		Purpose of Device MOP SINK	
TEST DATE m/d/y 09/23/25	RP [X]	DCVA [ ]	S/PVB [ ]
Make WATTS	Model 009	Serial # 320135	SIZE 3/4"
Initial Test [ ] Annual Test [X]	PASS [X]	FAIL [ ]	LINE PRESSURE 85 psi

REDUCED PRESSURE BACKFLOW ASSEMBLY

Check Valve No. 1
[ ] Leaked [X] Closed Tight
Pressure Differential 8.2 psi
Shut Off Valve #1 [ ] Leaked [X] Closed

Check Valve No. 2
[ ] Leaked [X] Closed Tight
Pressure Differential 1.8 psi
Shut off valve #2 [ ] Leaked [X] Closed

Relief Valve Opened at 3.2 psi
Pressure differential across check 1 8.2 psi
Minus the opening of relief valve 3.2 psi
BUFFER (3 psi or grater) 5.0 psi

DOUBLE CHECK VALVE

Check Valve No. 1
[ ] Leaked [ ] Closed Tight
Pressure Differential _____ psi
Shut Off Valve #1 [ ] Leaked [ ] Closed

Check Valve No. 2
[ ] Leaked [ ] Closed Tight
Pressure Differential _____ psi
Shut off valve #2 [ ] Leaked [ ] Closed

PRESSURE VACUUM BREAKER

Air Inlet Valve
Opened At _____ psi [ ] Failed to Open

Check Valve [ ] Leaked [ ] Closed Tight
Pressure Differential _____ psi

If assembly fails test, complete this section and note repairs: (If Device replaces an existing device list Serial # of existing device.)

Tester Signature: [signature]

09/23/25
Date m/d/y

OW DARLING
01 CAMERON ST
UNDER BAY, ON P7C 0A1
7 623-7485
ww.clowdarling.com

SV498948

BACKFLOW PREVENTION DEVICE TEST REPORT

Address: 130 MARGUERITE ST			Postal Code
Occupant: SEWAGE TREATMENT PLANT	Contact Person/s: BILL / BLAKE	Telephone: 807-223-1452	
		E-mail: BPOOLE@DRYDEN.CA	
Owner: CITY OF DRYDEN	WAHO@DRYDEN.CA.	Telephone: (807) 216-7380	
Address of Owner: DRYDEN, ONTARIO			Postal Code

Name of Certified Tester: DARREN BJORKLUND	**Tester Certification Number:** 21024	Telephone: 807-623-7485	
Business Name & Address: CLOW DARLING LIMITED - 1201 CAMERON ST, THUNDER BAY, ON	Postal Code: P7C 0A1	E-mail: kristyd@clowdarling.com	
Make of TEST KIT: WATTS	Model Number: TK99E	Serial Number: 859121	Calibration Expiry Date m/d/y: 05/01/2026
Device Location: BULK WATER SHACK	Purpose of Device: PREMISE		
TEST DATE m/d/y: 09/23/25	RP ☐	DCVA ☒	S/PVB ☐
Make: APOLLO	Model: DC4A	Serial #: 956045	SIZE: 2"
Initial Test ☐	Annual Test ☒	PASS ☒	FAIL ☐ LINE PRESSURE: 90 psi

REDUCED PRESSURE BACKFLOW ASSEMBLY

Check Valve No. 1	Check Valve No. 2	Relief Valve
☐ Leaked ☐ Closed Tight	☐ Leaked ☐ Closed Tight	Opened at _____ psi
Pressure Differential _____ psi	Pressure Differential _____ psi	Pressure differential across check 1 _____ psi
		Minus the opening of relief valve _____ psi
Shut Off Valve #1 ☐ Leaked ☐ Closed	Shut off valve #2 ☐ Leaked ☐ Closed	BUFFER (3 psi or grater) _____ psi

DOUBLE CHECK VALVE

Check Valve No. 1	Check Valve No. 2
☐ Leaked ☒ Closed Tight	☐ Leaked ☒ Closed Tight
Pressure Differential 1.6 psi	Pressure Differential 1.8 psi
Shut Off Valve #1 ☐ Leaked ☒ Closed	Shut off valve #2 ☐ Leaked ☒ Closed

PRESSURE VACUUM BREAKER

Air Inlet Valve

Opened At _____ psi ☐ Failed to Open

Check Valve ☐ Leaked ☐ Closed Tight

Pressure Differential _____ psi

If assembly fails test, complete this section and note repairs: (If Device replaces an existing device list Serial # of existing device.)

Tester Signature:

09/23/25

Date m/d/y