

COCHRANE

WATER / WASTEWATER SERVICES



WASTEWATER TREATMENT PLANT

2025 ANNUAL REPORT

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2025 Annual Report

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ANNUAL
PERFORMANCE
REPORT

Annual Performance Report

This report is prepared to comply with Amended Environmental Compliance Approval Number 2737-BD4JYH issued June 28, 2019. The report shall contain:

- (a) A summary and interpretation of all Influent monitoring data, including sewage characteristics, flow rates and a comparison to the values used in the design of the Works;

FLOWS	
Total Flow	<i>674,741 cubic meters</i>
Average Daily Flow	<i>1,706 cubic meters</i>
Peak Hydraulic Flow	<i>7,411 cubic meters</i>

RAW SEWAGE RESULTS

RAW SEWAGE	MONTHLY AVERAGE RESULTS
BOD ₍₅₎	143 mg/l
TOTAL SUSPENDED SOLIDS	142.6 mg/l
TOTAL PHOSPHORUS	6.7 mg/l
TKN (as N)	45.25 mg/l
AMMONIA & AMMONIA NITROGEN	34.27 mg/l
pH	7.40 mg/L

- (b) A summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates, loading and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;

FINAL EFFLUENT RESULTS

FINAL EFFLUENT	ANNUAL AVERAGE RESULTS
BOD ₍₅₎	13.98 mg/l
TOTAL SUSPENDED SOLIDS	24.63 mg/l
TOTAL PHOSPHORUS	0.71 mg/l
TKN (as N)	9.83 mg/l
AMMONIA	2.43 mg/l
CHLORINE RESIDUAL	0.0 mg/l
NITRITE	0.23 mg/l
NITRATE	12.65 mg/l
CBOD ₍₅₎	7.46 mg/l
E.COLI	8575 CFU/100ml
WAS pH MAINTAINED BETWEEN 6.0-9.5 @ ALL TIMES?	Yes

The total flow in 2025 was 674,741 cubic meters which represents a 8.92 % increase from 2024. The total flow in 2025 was 33 % of the average day flow design capacity.

The following represents removal efficiencies for the year 2025.

BOD ₍₅₎	85.48%
TOTAL SUSPENDED SOLIDS	73.97%
TOTAL PHOSPHORUS	65.32%
TKN (as N)	64.86%
AMMONIA	85.95%
AVERAGE REMOVAL EFFICIENCY	75.12%

The above represents a decrease in overall operating efficiency of 14.98 % over 2025.

- (c) A summary of any deviations from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;

None

- (d) A summary of all operating issues encountered, and corrective actions taken;

1. Return sludge pump issues for both clarifiers. A new pump was purchased and installed.
2. New clarifier is down – waiting on parts for repairs.

- (e) A summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;

1. *Drained and cleaned Contact Chamber*
2. *Cleaned out Grit Chamber*
3. *Changed hose on Ferric Pump*
4. *Purchased and installed new ferric feed pump*
5. *Replaced bulbs on ultraviolet system*

6. *Replaced filters on Blower*
7. *Drained new clarifier, waiting on parts for repairs.*
8. *Drain and repair old clarifier*

Other maintenance involved routine oiling, greasing, cleaning, service etc.

- (f) A summary of any effluent quality assurance or control measures undertaken;

The monitoring program consists of regular daily rounds ensuring all equipment is functioning and that daily temperature, pH levels, chlorine residuals, dissolved oxygen, Phosphorus and Ammonia tests are recorded, and controlled. Sludge Blanket levels are also monitored and controlled daily along with scum removal. Monthly samples are taken for BOD, Suspended Solids, TKN, Nitrite, Nitrate, Weekly Samples were taken for E.Coli and Quarterly Samples were taken for Acute Lethality.

- (g) A summary of the calibration and maintenance carried out on all Influent and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in the Approval or recommended by the manufacturer;

Attached to this report is the 2025 calibration records for the instrumentation at the Wastewater Treatment Plant. In 2026 the instruments will once again be checked for their accuracy.

- (h) A summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions if any required under the following situations: (i) when any of the design objectives is not achieved more than 50% of the time in a year or there is an increasing trend in deterioration of Final Effluent quality and (ii) when the Annual Average Daily Influent Flow reaches 80% of the Rated Capacity;

The attached Data Summary shows the Cochrane Wastewater Treatment Plant has not exceeded the effluent concentrations for the Biochemical Oxygen Demand (20 mg/l) and Phosphorus Criteria (1.0 mg/l), as specified in Schedule C of the certificate of approval. The pH level has been maintained. However, the plant did exceed the Total Suspended Solids limit (20 mg/L). This was reported to spills action on January 13, 2026, after the annual average calculation, confirmation number 1-Q0XCDB. This was also reported to the MECP. The new clarifier has not been operational causing increase in suspended solids, parts have been ordered for the repairs for 2026.

Compliance - (Certificate of Approval) The peak hydraulic flow capacity of 11,500 cu. Meters / day was not exceeded during the year 2025.

- (i) A tabulation of the volume of sludge generated in the reporting period, an outlined of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;

It is anticipated that sludge volume haulage for the year 2026 should be equal to or less than that of 2025 as the Plant is operating at or close to its maximum efficiency.

SLUDGE VOLUME HAULED

YEAR	SLUDGE AMOUNT HAULED
2021	4325 M3
2022	1372 M3
2023	2214 M3
2024	2892 M3
2025	3890 M3

The Town has retained E360 of Timmins Ontario (C of A A-920134, R-004-1111521405) to haul and handle the sludge form the Water pollution Control Plant.

- (j) A summary of any complaints received, and any steps taken to address the complaints;

None

- (k) A summary of all Bypass, spill, Overflows within the meaning of Part X of EPA and abnormal discharge events and other abnormal operating conditions;

The bypass alarm signaled 11 overflows for the year 2025.

DATE	TYPE	DURATION (hours)	FLOW (m3)
2025-03-15	Overflow	22.5	2288
2025-04-13	Overflow	36	5866.93
2025-04-18	Overflow	27.5	4233
2025-04-29	Overflow	22.5	3040
2025-06-04	Overflow	2.3	16.39
2025-06-23	Overflow	14.5	1292
2025-06-30	Overflow	12.5	1747.609
2025-07-16	Overflow	12.5	187305
2025-07-23	Overflow	16	656.462
2025-09-18	Overflow	4.3	164.688
2025-10-19	Overflow	6.75	481.57

The Overflow events were triggered by spring runoff and heavy rains. All bypass /overflow events have been tested for all specified parameters, as per attached Bypass Summary.

The log date, time and duration of any bypasses (overflow) or upset condition will be recorded and sampled for BOD, suspended Solids and Total Phosphorus. Further, the Spills Action Centre (SAC) will be notified with the completed form sent to the MOE District Office, which is a requirement.

- (l) A copy of all Notice of Modifications to Sewage Works submitted to the Water Supervisor under paragraph 1.d. of Condition 10, with a summary report on status of implementation of all modifications;

None

- (m) A summary of efforts made to achieve conformance with Procedure F-5-1 including but not limited to projects undertaken and completed in the sanitary sewer system that result in overflow Bypass/Overflow elimination including expenditures and proposed projects to eliminate Bypass/Overflow with estimated budget forecast for the year following that for which the report is submitted.

None

This is the report on the Cochrane Wastewater Treatment Plant for the year 2025. I certify that the information in this document and all the attachments is correct, accurate and complete to the best of my knowledge.

Prepared by,
Melissa Hoogenhoud
Environmental Services and Compliance Supervisor

ANNUAL SUMMARY

ANNUAL SUMMARY 2025

Municipality: **Cochrane (PUC)**
 Project Name: **Cochrane Water Pollution Control Plant**
 Project Number: **120000355**
 Project Location: **Cochrane, ON**

Month	Parameter	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	AVERAGE	MAXIMUM	MINIMUM
	Total Flow	29184.46	21286.4	43740.06	115615.45	71104.56	76103.62	76385.9	48386.47	48143	51459.13	44250.94	49080.99	674740.98	56228.415	115615.45	21286.4
Influent	Peak Rate	1866.56	3144	3974	7411	4995	7143.82	6767	2398	2778	3909	0	3329.8	47716.18	3976.35	7411	0
Bypass	Plant-Vol.			2288	13139.93		3055.969	187961.46		164.688	481.57	0	0	207091.62	25886.45	187961.46	0
	Time - Hrs			22.5	86		28.9	28.5		4.2	6.75	0	0	176.85	22.11	86	0
Raw	Susp. solids	192	158	226	65	37.5	197	37.5	56	193	150	243	156	1711	142.58	243	37.5
	BOD	160	220	300	100	38	170	48	110	160	110	160	140	1716	143.00	300	38
	TKN	45.4	55.4	73.7	24.6	13.4	69.9	10.7	34	66.2	40	67.6	42.1	543	45.25	73.7	10.7
	Phosphorus	4.88	26.5	9.23	3.71	0.97	7.64	0.817	2.85	7.37	4.82	6.27	5.31	80.367	6.70	26.5	0.817
	Ammonia	34.9	43.4	57.1	21.8	7.56	50.4	6.64	24.2	46.9	32.1	53.4	32.8	411.2	34.27	57.1	6.64
	Nitrate	0.05	0.1	0.05	0.05	0.19	0.1	0.71	0.05	0.05	0.05	0.05	0.05	1.5	0.13	0.71	0.05
	Nitrite	0.05	0.1	0.05	0.05	0.8	0.1	1.05	0.05	0.05	0.05	0.05	0.05	2.45	0.20	1.05	0.05
	Phosphate	8.57	0.011	17.5	5.21	1.72	13.7	1.02	8.26	13.8	8.44	14	11.2	103.431	8.62	17.5	0.011
	pH	7.5	7.34	7.41	7.27	7.43	7.22	7.58	7.18	7.62	7.16	7.45	7.64	88.8	7.40	7.64	7.16
	CBOD	120	160	190	110	21	130	18	85	110	98	140	130	1312	109.33	190	18
Effluent	Susp. solids	24.5	36.5	38	51.7	34	43.3	13	1.7	3.5	4	16	29.3	295.5	24.63	51.7	1.7
	BOD	9.4	23	37	39	26	10.8	11.4	1	1.7	1.6	3.1	3.7	167.7	13.98	39	1
	Phosphorus	0.5821053	0.6630714	0.6368421	1.1221053	0.87	0.928	1.64085	1.444	0.13128571	0.1143182	0.17775	0.2241667	8.5319233	0.71	1.64085	0.1143182
	Ammonia	0.4766667	0.7066667	6.772	8.993333	4.405	4.0126316	2.8745455	0.418	0.14238095	0.1245455	0.176	0.0894444	29.191214	2.43	8.993333	0.0894444
	Nitrate	20	29.5	0.71	0.1	0.88	2.44	4.06	17.7	20.7	20.5	18.8	16.4	151.79	12.65	29.5	0.1
	Nitrite	0.24	0.5	0.05	0.05	0.05	0.05	1.54	0.05	0.05	0.05	0.05	0.05	2.73	0.23	1.54	0.05
	TKN	4.3	8.9	31.9	24.1	13.8	22.5	3.3	1.9	1.9	1.1	1.7	2.5	117.9	9.83	31.9	1.1
	CBOD	2.8	7.2	25	20	20	6	1.2	1	1	1	2	2.3	89.5	7.46	0.639	0.009
	Phosphate	0.073	0.009	0.033	0.639	0.165	0.138	0.026	0.01	0.051	0.107	0.269	0.279	1.799	0.18	35485	0.009
	E.Coli	21302	2705	7206.75	35485	1829	4624.25	1546.6	60.25	42.5	28030.2	33.75	35.5	102900.8	8575.07	35485	33.75
	Acute Lethality		0			0				10		0		10	2.50	10	0
Date	Air Used																
	Influent Temp	12.715789	13.205882	10.933333	11.41	12.17	13.185714	14.831818	16.545	16.6315	14.922727	15.065	14.194444	165.81121	13.82	16.6315	10.933333
	Influent pH	7.7036842	7.6511765	7.712381	7.5485	7.709	7.6104762	7.3368182	7.0645	7.1415	7.7836364	7.684	7.5744444	90.520117	7.54	7.7836364	
	Aeration Temp.	9.9833333	10.05	9.075	10.705882	12.099444	14.773684	16.81	17.947368	16.4444444	15.515789	13.642105	11.113333	158.16038	13.18	17.947368	9.075
	30 Min. S.S.	85.411765	48.866667	2.1764706	2.222222	16.285714	13.052632	13.315789	48.526316	41.0526316	54.684211	63.736842	66.615385	455.94664	38.00	85.411765	2.1764706
	D.O. % Level	7.4029412	8.8091667	8.305	6.1647059	5.3025	6.5833333	8.381	5.41	4.92105263	5.4947368	6.5263158	9.1	82.400752	6.87	9.1	4.9210526
	Effluent pH	7.0944444	7.16625	7.3375	7.1941176	7.1761111	7.447368	7.017	6.5652632	6.59111111	7.0721053	6.9773684	6.984	84.622639	7.05	7.447368	6.5652632
	Effluent Temp	10.736842	10.641176	9.8285714	10.735	12.13	15.457143	16.662727	13.605	12.625	11.909091	13.19	11.516667	149.03722	12.42	16.662727	9.8285714
Plant	Wasting Vol. m3	24643.95	20729.98	44083.57	121517.62	72035.32	75223.58	76927.5	40584.09	42692.37	46347.57	39710.27	45343.84	649839.66	54153.31	0	0
	Chlorine (Kg)													0	#DIV/0!		
	Cl Dosage (mg/l)													0		0	0
	Cl Residual(mg/l)	0	0	0	0	0.0000	0				0	0.0011	0	0.0011	0.00	0.0011	0
	Cl2 in Creek													0	#DIV/0!	0	0
Grit	Hauled (Volume)													0	0.00	0	0
Sludge Hauled	Liquid Volume	27	377		1489.5	305		264		585	162	480.6	200	3890.1			
Loading mg/L	Phosphorus	0.5480138	0.5040858	0.8985649	4.3244235	1.989617	2.3541386	4.043155	2.253873	0.21068294	0.189765	0.2621868	0.3549136	17.93342	1.4944517	4.3244235	0.189765
	BOD	8.8494814	17.485257	52.205878	150.30001	56.636083	27.397303	28.090299	1.5608539	2.72810333	2.6559551	4.5725971	5.8580536	358.33987	29.861656	150.30001	1.5608539
	Suspended Solids	23.065138	27.748343	53.616848	199.24396	77.985646	109.84289	32.032797	2.6534516	5.61668333	6.6398877	23.600501	46.389452	608.4356	50.702967	199.24396	2.6534516

PERFORMANCE

ASSESSMENT

REPORTS

BYPASS SUMMARY
NOTIFICATION AND LAB RESULTS

1

FACILITY NAME: **Cochrane Waste Water Treatment Plant** YEAR: **2025**

										Sample Results			
Date (yy/mm/dd)	Location	Type (PB/SB/STPO /CSO/SSO/STWO)	Start Time	Duration (hours)	Volume (m3)	M/E	Disinfection (Y/N)	Treatment (Y/N)	Reason Code*	BOD5 (mg/L)	SS (mg/L)	TP (mg/L)	E.Coli (/100ml)
2025-03-15	STP	STPO	15:05	22.5	2288	M	N	N	2	31.975	138.375	1.061	75180
2025-04-13	STP	STPO	19:50	36	5866.93	M	N	N	2	15.316666	75.083333	0.5993333	72333.2
2025-04-18	STP	STPO	6:45	27.5	4,233	M	N	N	2	28.36	76.76	0.5524	1166000
2025-04-29	STP	STPO	20:40	22.5	3040	M	N	N	2	25.36	48.84	0.6182	1431600
2025-06-04	STP	STPO	9:24	2.3	16.39	M	N	N	1	31	109	0.794	38
2025-06-23	STP	STPO	11:16	14.5	1,292	M	N	N	1	24.95	101.5	0.83175	
2025-06-30	STP	STPO	11:44	12.5	1747.609	M	N	N	1	27.13333	128.5	0.9996666	106000
2025-07-16	STP	STPO	9:35	12.5	187305.754	M	N	N	1	18.66	48.83	0.747333	
2025-07-23	STP	STPO	22:25	16	656.462	M	N	N	1	22.775	165	1.62375	975000
2025-09-18	STP	STPO	8:00	4.3	164.688	M	N	N	1	26	126	2.83	5440000
2025-10-19	STP	STPO	12:30	6.75	481.57	M	N	N	1	57.83	236	2.12	1725000

Legend

PB = Primary Bypass
 SB = Secondary Bypass
 STPO = Sewage Treatment Plant Overflow
 CSO = Combined Sewer Overflow
 SSO = Sanitary Sewer Overflow
 STWO = Satellite Treatment Works Overflow

M = Measured
 E = Estimated

Y = Yes
 N = No

*Reason Codes:
 1 = Heavy Precipitation
 2 = Spring Runoff
 3 = Infiltration
 4 = Mechanical/Equipment Failure
 5 = Pipe Failures(break/leak/plugged)

6 = Process Upsets
 7 = Power Outages
 8 = Unknown
 9 = Other, please comment below.

Comments:



TESTMARK Laboratories Ltd.

Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Client: Melissa Hoogenhoud
 Company: Town of Cochrane - Wastewater
 Address: 171 Fourth Ave, Box 490
 Cochrane, ON, P0L 1C0
 Phone: (705) 272-5086
 Email: Melissa.Hoogenhoud@cochraneontario.com

Work Order Number: 568702
 PO #: 12595
 Regulation: Information not provided
 Project #: Overflow
 DWS #:
 Sampled By: Michael Nelson

Date Order Received: 3/17/2025
 Arrival Temperature: 20 C

Analysis Started: 3/18/2025
 Analysis Completed: 3/24/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2118494	Wastewater	Grab		3/15/2025	3:00 PM
Sewage Plant Overflow	2118495	Wastewater	Grab		3/15/2025	11:00 PM
Sewage Plant Overflow	2118496	Wastewater	Grab		3/16/2025	7:00 AM
Sewage Plant Overflow	2118497	Wastewater	Grab		3/16/2025	1:15 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORRG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2.

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 568702

Method	Lab	Description	Reference
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540

REPORT COMMENTS

Sample 2118494 exceeded method hold time for E.coli analysis prior to receipt at lab. Samples 2118495 and 2118496 exceeded method hold time for E.coli analysis in-lab (NC# 24272). As per client, proceed with analysis. 03/18/25 LT.

This report has been approved by:



Aline de Chevigny
Production Coordinator

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	Result	MDL	Result	MDL	Result	MDL
Lab ID	2118494		2118496		2118497	
Anions	Result	MDL	Result	MDL	Result	MDL
Nitrate (as N)	<0.05	0.05	0.32	0.05	0.32	0.05
Nitrite (as N)	<0.05	0.05	0.27	0.05	0.71	0.05
Units						
						mg/L
						mg/L
Sample Description	Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	Result	MDL	Result	MDL	Result	MDL
Lab ID	2118494		2118495		2118497	
General Chemistry	Result	MDL	Result	MDL	Result	MDL
Ammonia (as N)	7.40	0.02*	2.56	0.01	8.71	0.02*
						mg/L

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 568702

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow
Sample Date	3/15/2025 3:00 PM	3/15/2025 11:00 PM	3/16/2025 7:00 AM	3/16/2025 1:15 PM
Lab ID	2118494	2118495	2118496	2118497
Solids	Result	MDL	Result	MDL
Total Suspended Solids	280	4	141	2
			63.5	1
			69	2
				mg/L

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.
 MDL: Method detection limit or minimum reporting limit.
 []: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison.
 Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.
 Quality Control: All associated Quality Control data is available on request.
 Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.
 Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.
 Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.
 ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.
 Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.
 Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060
MOH Phone No. 1-800-461-1818

Date: 04/13/2025

Time of Call: 19:58 a.m./p.m. (p.m. circled)

SAC Reference #: 1-NO#KMP

Person Who Called: Joel Robin

Called SAC at: 1955

Reported By: Joel Robin (DHARA 2080)

Called MOH at: 0800/04/15/25

Reported By: Joel Robin

Bypass:

Spill:

Leak:

Overflow:

Location of Incident: 503 water plant RD

Time of Incident: 1900 a.m./p.m. Receiver: Lillabelle creek

Details of Incident: high flows from warm weather/snow melt.

Downstream Users: none

Possible Effects on Receiver, Environment or Downstream Users: none

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272- 4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: 04/15/25 Time of Call: 0845 (no answer, left message) Person Contacted: SAC - DHARA

Time of Termination: 0705 Approximate Volume: 5866.93 Cu. Meters

Duration of Bypass: 36 hrs

Current Status: Chlorinating? Yes: No: Explain: no chlorination, no down stream users

Further Action Required: no

Reported By: Joel Robin



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CERTIFICATE OF ANALYSIS

Client: Michael Nelson
Company: Town of Cochrane - Wastewater
Address: 171 Fourth Ave, Box 490
Cochrane, ON, P0L 1C0
Phone: (705) 272-9093
Email: michael.nelson@cochraneontario.com

Date Order Received: 4/15/2025
Arrival Temperature: 18 C

Work Order Number: 573444
PO #: 12595
Regulation: Information not provided
Project #: Overflow
DWS #:
Sampled By: Joel Robin
Analysis Started: 4/16/2025
Analysis Completed: 4/28/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2130233	Wastewater	Grab		4/13/2025	7:30 PM
Sewage Plant Overflow	2130234	Wastewater	Grab		4/13/2025	11:00 PM
Sewage Plant Overflow	2130235	Wastewater	Grab		4/14/2025	7:00 AM
Sewage Plant Overflow	2130236	Wastewater	Grab		4/14/2025	3:00 PM
Sewage Plant Overflow	2130237	Wastewater	Grab		4/15/2025	7:00 AM
Sewage Plant Overflow	2130420	Wastewater	Grab		4/14/2025	11:00 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 573444

Method	Lab	Description	Reference
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2.
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540

REPORT COMMENTS

BOD on sample 2130426 ran past hold time due to lab error. 04/22/25 TP

This report has been approved by:

Aline Cheigny

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Units
Sample Date	4/13/2025 7:30 PM	4/13/2025 11:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM	
Lab ID	2130233	2130234	2130235	2130236	
Anions	Result	MDL	Result	MDL	Result
Nitrate (as N)	<0.05	0.05	2.05	0.05	0.53
Nitrite (as N)	<0.05	0.05	0.63	0.05	<0.05
					mg/L



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 573444

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow
Sample Date	4/15/2025 7:00 AM	4/14/2025 11:00 PM	4/13/2025 7:30 PM	4/13/2025 11:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM
Lab ID	2130237	2130420	2130233	2130234	2130235	2130236	2130235	2130236
Anions	Result	MDL	Result	MDL	Units	Result	MDL	Units
Nitrate (as N)	1.29	0.05	2.73	0.05	mg/L	<0.05	0.05	mg/L
Nitrite (as N)	<0.05	0.05	<0.05	0.05	mg/L			
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow
Sample Date	4/13/2025 7:30 PM	4/13/2025 11:00 PM	4/13/2025 7:30 PM	4/13/2025 11:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM
Lab ID	2130233	2130234	2130233	2130234	2130235	2130236	2130235	2130236
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Result	MDL
Ammonia (as N)	2.67	0.01	3.06	0.01	3.55	0.01	2.77	0.01
pH	7.1	N/A	7.33	N/A	7.71	N/A	7.54	N/A
Total Kjeldahl Nitrogen	8.1	0.4*	6.1	0.4*	8.6	0.4*	6.0	0.4*
Total Phosphorus (as P)	0.966	0.004*	0.441	0.002	0.511	0.002	0.600	0.004*
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow
Sample Date	4/15/2025 7:00 AM	4/14/2025 11:00 PM	4/15/2025 7:00 AM	4/14/2025 11:00 PM	4/15/2025 7:00 AM	4/14/2025 11:00 PM	4/15/2025 7:00 AM	4/14/2025 11:00 PM
Lab ID	2130237	2130420	2130237	2130420	2130237	2130420	2130237	2130420
General Chemistry	Result	MDL	Result	MDL	Units	Result	MDL	Units
Ammonia (as N)	6.76	0.02*	2.78	0.01	mg/L	6.76	0.02*	mg/L
pH	7.51	N/A	7.43	N/A	pH	7.51	N/A	pH
Total Kjeldahl Nitrogen	10.7 [10.4]	0.4*	4.7	0.4*	mg/L	10.7 [10.4]	0.4*	mg/L
Total Phosphorus (as P)	0.745	0.004*	0.333	0.002	mg/L	0.745	0.004*	mg/L



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 573444

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Units
Sample Date	4/13/2025 7:30 PM	4/13/2025 11:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM		
Lab ID	2130233	2130234	2130235	2130236		
Microbiology	Result	MDL	Result	MDL	Result	MDL
Escherichia coli	116000	1000	59000	1000	43000 [37000]	1000
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow		CFU/100mL
Sample Date	4/15/2025 7:00 AM	4/14/2025 11:00 PM				
Lab ID	2130237	2130420				
Microbiology	Result	MDL	Result	MDL	Units	
Escherichia coli	66000	1000	46000	1000	CFU/100mL	
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow		
Sample Date	4/13/2025 7:30 PM	4/13/2025 11:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM		
Lab ID	2130233	2130234	2130235	2130236		
Oxygen Demand	Result	MDL	Result	MDL	Result	MDL
BOD (5 day)	39	6	12.6	1	8.3	1
Carbonaceous BOD	39	6	12.6	1	6.9	1
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow				mg/L
Sample Date	4/15/2025 7:00 AM	4/14/2025 11:00 PM				
Lab ID	2130237	2130420				
Oxygen Demand	Result	MDL	Result	MDL	Units	
BOD (5 day)	9.6	1	11.1	1	mg/L	



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 573444

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow							
Sample Date	4/15/2025 7:00 AM	4/14/2025 11:00 PM							
Lab ID	2130237	2130420							
Oxygen Demand	Result	MDL	Result	MDL	Units				
Carbonaceous BOD	9.6	1	11.1	1	mg/L				
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow				
Sample Date	4/13/2025 7:30 PM	4/13/2025 11:00 PM	4/14/2025 7:00 AM	4/14/2025 3:00 PM					
Lab ID	2130233	2130234	2130235	2130236					
Solids	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units
Total Suspended Solids	133	2	29	2	36.5	1	148	2	mg/L
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow					
Sample Date	4/15/2025 7:00 AM	4/14/2025 11:00 PM							
Lab ID	2130237	2130420							
Solids	Result	MDL	Result	MDL	Units				
Total Suspended Solids	50	1	54	2	mg/L				



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 573444

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

[]: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060
MOH Phone No. 1-800-461-1818

Date: 04-18-25 Time of Call: _____ a.m./p.m.

SAC Reference #: 1-NUZF086 Person Who Called: Mike Nelson

Called SAC at: 0645 Reported By: _____

Called MOH at: _____ Reported By: _____

Bypass: _____ Spill: _____ Leak: _____ Overflow:

Location of Incident: Westward Plant

Time of Incident: 06:15 a.m./p.m. Receiver: L. LaBette creek

Details of Incident: Heavy Rain snow melt

Downstream Users: None

Possible Effects on Receiver, Environment or Downstream Users: None

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272- 4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: 04-19-25 Time of Call: 12:45 Person Contacted: D'Hara, Peter

Time of Termination: 10:30 Approximate Volume: 4,233 Cu. Meters

Duration of Bypass: 27.5 hrs

Current Status: Chlorinating? Yes: _____ No: Explain: _____

Further Action Required: None

Reported By: Michael Nelson



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CERTIFICATE OF ANALYSIS

Client: Melissa Hoogenhoud
 Company: Town of Cochrane - Wastewater
 Address: 171 Fourth Ave, Box 490
 Cochrane, ON, P0L 1C0
 Phone: (705) 272-9093
 Email: Melissa.Hoogenhoud@cochraneontario.com

Work Order Number: 573671
 PO #: 12595
 Regulation: Information not provided
 Project #: Overflow
 DWS #:
 Sampled By: Michael Nelson

Date Order Received: 4/19/2025
 Arrival Temperature: 13 C

Analysis Started: 4/19/2025
 Analysis Completed: 4/28/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2131043	Wastewater	Grab		4/18/2025	7:05 AM
Sewage Plant Overflow	2131044	Wastewater	Grab		4/18/2025	3:00 PM
Sewage Plant Overflow	2131045	Wastewater	Grab		4/18/2025	11:00 PM
Sewage Plant Overflow	2131046	Wastewater	Grab		4/19/2025	7:00 AM
Sewage Plant Overflow	2131047	Wastewater	Grab		4/19/2025	10:30 AM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NOR-G-D

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 573671

Method	Lab	Description	Reference
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2,
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540

This report has been approved by:



Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow			Sewage Plant Overflow			Sewage Plant Overflow		
Sample Date	Result	MDL	MDL	Result	MDL	MDL	Result	MDL	MDL
Lab ID	2131043	2131044	2131045	2131046	2131046	2131046	2131046	2131046	2131046
Anions									
Nitrate (as N)	1.03	0.05	0.05	2.48	0.05	0.05	1.64	0.05	0.05
Nitrite (as N)	0.36	0.05	0.05	<0.05	0.05	0.05	<0.05	0.05	0.05

Sample Description	Sewage Plant Overflow		
Sample Date	Result	MDL	MDL
Lab ID	2131047	2131047	2131047
Anions			
Nitrate (as N)	1.38	0.05	0.05
Nitrite (as N)	0.61	0.05	0.05

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 573671

Sample Description	Result	MDL	Sewage Plant Overflow	Result	MDL	Sewage Plant Overflow	Result	MDL	Sewage Plant Overflow	Result	MDL	Units	
Sample Date	4/18/2025 7:05 AM												
Lab ID	2131043												
General Chemistry	Ammonia (as N)	3.35	0.01	4/18/2025 3:00 PM	2.21	0.01	4/18/2025 11:00 PM	3.48	0.01	4/19/2025 7:00 AM	9.07	0.02*	mg/L
	pH	7.63	N/A		7.54	N/A		7.66	N/A		7.63	N/A	pH
	Total Kjeldahl Nitrogen	6.0	0.4*		4.9	0.4*		5.5	0.4*		10.7	0.4*	mg/L
	Total Phosphorus (as P)	0.529	0.004*		0.205	0.002		0.333	0.002		0.903	0.004*	mg/L
Sample Description	Sewage Plant Overflow												
Sample Date	4/19/2025 10:30 AM												
Lab ID	2131047												
General Chemistry	Ammonia (as N)	7.05	0.02*	4/18/2025 3:00 PM	860000	10000	4/18/2025 11:00 PM	1960000	10000	4/19/2025 7:00 AM	1260000	10000	CFU/100mL
	pH	7.48	N/A		[780000]								
	Total Kjeldahl Nitrogen	11.1	0.4*										
	Total Phosphorus (as P)	0.792	0.004*										
Sample Description	Sewage Plant Overflow												
Sample Date	4/18/2025 7:05 AM												
Lab ID	2131043												
Microbiology	Escherichia coli	140000	10000	4/18/2025 3:00 PM	860000	10000	4/18/2025 11:00 PM	1960000	10000	4/19/2025 7:00 AM	1260000	10000	CFU/100mL

CERTIFICATE OF ANALYSIS

Work Order Number: 573671

Town of Cochrane - Wastewater

Sample Description		Sewage Plant Overflow	
Sample Date	4/19/2025 10:30 AM	Result	MDL
Lab ID	2131047	1610000	10000
Microbiology			Units
Escherichia coli			CFU/100mL

Sample Description		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	4/18/2025 7:05 AM	Result	MDL	Result	MDL	Result	MDL
Lab ID	2131043	22	6	9.8	6	32	6
Oxygen Demand		45	6	9.1	1	19	6
BOD (5 day)							
Carbonaceous BOD							

Sample Description		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	4/19/2025 10:30 AM	Result	MDL	Result	MDL	Result	MDL
Lab ID	2131047	56	6	49	6		
Oxygen Demand							
BOD (5 day)							
Carbonaceous BOD							

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater
Work Order Number: 573671

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow
Sample Date	4/18/2025 7:05 AM	4/18/2025 3:00 PM	4/18/2025 11:00 PM	4/19/2025 7:00 AM
Lab ID	2131043	2131044	2131045	2131046
Solids	Result	MDL	Result	MDL
Total Suspended Solids	140	2	37.30	50.5
Sample Description	Sewage Plant Overflow			
Sample Date	4/19/2025 10:30 AM			
Lab ID	2131047			
Solids	Result	MDL	Result	MDL
Total Suspended Solids	105	1		

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.
 MDL: Method detection limit or minimum reporting limit.
 []: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison.
 Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.
 Quality Control: All associated Quality Control data is available on request.
 Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.
 Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.
 Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.
 ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.
 Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.
 Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060
MOH Phone No. 1-800-461-1818

Date: 04-28-25 Time of Call: 20:40 a.m./p.m.

SAC Reference #: 1-060042 Person Who Called: Michael Nelson

Called SAC at: 20:30 Reported By: _____

Called MOH at: _____ Reported By: _____

Bypass: _____ Spill: _____ Leak: _____ Overflow:

Location of Incident: Wastewater treatment plant

Time of Incident: 20:15 a.m./p.m. Receiver: L.L. Labelle creek

Details of Incident: overflow from well

Downstream Users: None

Possible Effects on Receiver, Environment or Downstream Users: None

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272-4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: 04-29-25 Time of Call: 07:26 Person Contacted: _____

Time of Termination: 19:00 Approximate Volume: 3070 Cu. Meters

Duration of Bypass: 22.5 hrs

Current Status: Chlorinating? Yes: _____ No: Explain: _____

Further Action Required: None

Reported By: Michael Nelson



TESTMARK Laboratories Ltd.

Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Client: Melissa Hoogenhoud
Company: Town of Cochrane - Wastewater
Address: 171 Fourth Ave, Box 490
Cochrane, ON, P0L 1C0
Phone/Fax: (705) 272-5086 / 705272
Email: Melissa.Hoogenhoud@cochraneontario.com

Work Order Number: 574614
PO #: 12595
Regulation: Information not provided
Project #: Overflow
DWS #:
Sampled By: Michael Nelson

Date Order Received: 4/29/2025
Arrival Temperature: 8 C

Analysis Started: 4/29/2025
Analysis Completed: 5/5/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2134152	Wastewater	Grab		4/28/2025	8:30 PM
Sewage Plant Overflow	2134153	Wastewater	Grab		4/28/2025	11:15 PM
Sewage Plant Overflow	2134154	Wastewater	Grab		4/29/2025	7:00 AM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2.
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 574614

This report has been approved by:

Aline de Chevigny

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow				
Sample Date	4/28/2025 8:30 PM	4/28/2025 11:15 PM	4/29/2025 7:00 AM				
Lab ID	2134152	2134153	2134154				
Anions	Result	MDL	Result	MDL	Result	MDL	Units
Nitrate (as N)	1.11 [1.11]	0.05	0.80	0.05	2.41	0.05	mg/L
Nitrite (as N)	0.57 [0.55]	0.05	0.65	0.05	<0.05	0.05	mg/L
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	
Sample Date	4/28/2025 8:30 PM	4/28/2025 11:15 PM	4/29/2025 7:00 AM				
Lab ID	2134152	2134153	2134154				
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Units
Ammonia (as N)	2.61	0.01	2.02	0.01	1.36	0.01	mg/L
pH	7.36	N/A	7.24	N/A	7.58	N/A	pH
Total Kjeldahl Nitrogen	7.9	0.4*	7.5	0.4*	6.4	0.4*	mg/L
Total Phosphorus (as P)	0.593	0.004*	0.538	0.004*	0.570	0.004*	mg/L



TESTMARK Laboratories Ltd.

Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 574614

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

[]: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison.

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.



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CERTIFICATE OF ANALYSIS

Client: Melissa Hoogenhoud
 Company: Town of Cochrane - Wastewater
 Address: 171 Fourth Ave, Box 490
 Cochrane, ON, P0L 1C0
 Phone: (705) 272-9093
 Email: Melissa.Hoogenhoud@cochraneontario.com

Date Order Received: 4/30/2025
 Arrival Temperature: 18 C

Work Order Number: 574720
 PO #: 12595
 Regulation: Information not provided
 Project #: Overflow
 DWS #:
 Sampled By: Michael Nelson
 Analysis Started: 4/30/2025
 Analysis Completed: 5/6/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2134563	Wastewater	Grab		4/29/2025	3:00 PM
Sewage Plant Overflow	2134564	Wastewater	Grab		4/29/2025	7:00 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2.
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 574720

This report has been approved by:

Aline de Chevigny

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow		
Sample Date	4/29/2025 3:00 PM	4/29/2025 7:00 PM		
Lab ID	2134563	2134564		
Anions	Result	MDL	Result	MDL
Nitrate (as N)	1.82	0.05	1.04	0.05
Nitrite (as N)	0.78	0.05	<0.05	0.05
Units	mg/L		mg/L	
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow		
Sample Date	4/29/2025 3:00 PM	4/29/2025 7:00 PM		
Lab ID	2134563	2134564		
General Chemistry	Result	MDL	Result	MDL
Ammonia (as N)	2.63	0.01	2.30	0.01
pH	7.64	N/A	7.64	N/A
Total Kjeldahl Nitrogen	7.3	0.4*	9.6	0.4*
Total Phosphorus (as P)	0.598	0.004*	0.792	0.004*
Units	mg/L		mg/L	



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 574720

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow			
Sample Date	4/29/2025 3:00 PM	4/29/2025 7:00 PM			
Lab ID	2134563	2134564			
Microbiology	Result	MDL	Result	MDL	Units
Escherchia coli	1610000	10000	1940000	10000	CFU/100mL
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow			
Sample Date	4/29/2025 3:00 PM	4/29/2025 7:00 PM			
Lab ID	2134563	2134564			
Oxygen Demand	Result	MDL	Result	MDL	Units
BOD (5 day)	10.8	1	23	6	mg/L
Carbonaceous BOD	11	1	17	6	mg/L
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow			
Sample Date	4/29/2025 3:00 PM	4/29/2025 7:00 PM			
Lab ID	2134563	2134564			
Solids	Result	MDL	Result	MDL	Units
Total Suspended Solids	39.70	0.67	43	1	mg/L



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Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 574720

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060
MOH Phone No. 1-800-461-1818

Date: 06/04/25 Time of Call: 0924 Q/p.m.
SAC Reference #: 1-0IVWA3 Person Who Called: Benoit Parent

Called SAC at: 0924 Reported By: Elaine

Called MOH at: 0938 Reported By: Abby

Bypass: _____ Spill: _____ Leak: _____ Overflow:

Location of Incident: Cochrane STP-

Time of Incident: _____ a.m./p.m. Receiver: Lilabelle Creek.

Details of Incident: Heavy Rain

Downstream Users: None

Possible Effects on Receiver, Environment or Downstream Users: no

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272- 4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: 06/04/25 Time of Call: 0924 Person Contacted: Elaine

Time of Termination: 0920 Approximate Volume: 16.39 Cu. Meters

Duration of Bypass: 2:20

Current Status: Chlorinating? Yes: _____ No: Explain: _____

Further Action Required: N/A

Reported By: Benoit Parent



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CERTIFICATE OF ANALYSIS

Client: Michael Nelson
 Company: Town of Cochrane - Wastewater
 Address: 171 Fourth Ave, Box 490
 Cochrane, ON, P0L 1C0
 Phone: (705) 272-9093
 Email: michael.nelson@cochraneontario.com

Work Order Number: 581286
 PO #: 12595
 Regulation: Information not provided
 Project #: Overflow
 DWS #:
 Sampled By: Benoit Parent

Date Order Received: 6/4/2025
 Arrival Temperature: 16 C

Analysis Started: 6/5/2025
 Analysis Completed: 6/13/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2152598	Wastewater	Grab		6/4/2025	7:30 AM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2,
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



TESTMARK Laboratories Ltd.

Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 581286

This report has been approved by:

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description		Sewage Plant Overflow		Units
Sample Date	6/4/2025 7:30 AM	Result	MDL	
Lab ID	2152598			
Anions				
Nitrate (as N)	0.57	0.05		mg/L
Nitrite (as N)	<0.05	0.05		mg/L

Sample Description		Sewage Plant Overflow		Units
Sample Date	6/4/2025 7:30 AM	Result	MDL	
Lab ID	2152598			
General Chemistry				
Ammonia (as N)	4.85	0.02*		mg/L
pH	7.56	N/A		pH
Total Kjeldahl Nitrogen	10.4	0.4*		mg/L
Total Phosphorus (as P)	0.794	0.004*		mg/L

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 581286

Sample Description	Sewage Plant Overflow		
Sample Date	6/4/2025 7:30 AM		
Lab ID	2152598		
Microbiology	Result	MDL	Units
Escherichia coli	38	2	CFU/100mL
Sample Description	Sewage Plant Overflow		
Sample Date	6/4/2025 7:30 AM		
Lab ID	2152598		
Oxygen Demand	Result	MDL	Units
BOD (5 day)	31	6	mg/L
Carbonaceous BOD	44	6	mg/L
Sample Description	Sewage Plant Overflow		
Sample Date	6/4/2025 7:30 AM		
Lab ID	2152598		
Solids	Result	MDL	Units
Total Suspended Solids	109	2	mg/L



TESTMARK Laboratories Ltd.
Committed to Quality and Service

Town of Cochrane - Wastewater

Work Order Number: 581286

CERTIFICATE OF ANALYSIS

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060

MOH Phone No. 1-800-461-1818

started @ 9:30

Date: June 23/25 Time of Call: 9:47 a.m./p.m.

SAC Reference #: AWQI# 1-0MIYQS Person Who Called: Chris Rousell

Called SAC at: 9:47 Reported ^{to} By: Grace Sutcliffe

Called MOH at: _____ Reported ^{to} By: _____

Bypass: Spill: Leak: Overflow:

Location of Incident: Cochrane wastewater treatment plant

Time of Incident: 9:30 a.m./p.m. Receiver: Lilabelle Creek

Details of Incident: heavy rain, infiltration

Downstream Users: NONE

Possible Effects on Receiver, Environment or Downstream Users: NO

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272-4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: 06-24-25 Time of Call: 05:35 Person Contacted: Jonathan

Time of Termination: 015 Approximate Volume: 1291.97 Cu. Meters

Duration of Bypass: 17.5

Current Status: Chlorinating? Yes: No: Explain: _____

Further Action Required: None

Reported By: Mila Nelson

DURATION
TOTAL VOLUME



TESTMARK Laboratories Ltd.

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CERTIFICATE OF ANALYSIS

Client: Melissa Hoogenhoud
 Company: Town of Cochrane - Wastewater
 Address: 171 Fourth Ave, Box 490
 Cochrane, ON, P0L 1C0
 (705) 272-5086
 Phone: (705) 272-5086
 Email: Melissa.Hoogenhoud@cochraneontario.com

Work Order Number: 585746
 PO #: 12595
 Regulation: Information not provided
 Project #: Overflow
 DWS #:
 Sampled By: Chris Rousell

Date Order Received: 6/24/2025
 Arrival Temperature: 21 C

Analysis Started: 6/26/2025
 Analysis Completed: 7/6/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Bypass	2163156	Wastewater	Grab		6/23/2025	10:00 AM
Sewage Plant Bypass	2163157	Wastewater	Grab		6/23/2025	4:00 PM
Sewage Plant Bypass	2163158	Wastewater	Grab		6/23/2025	10:00 PM
Sewage Plant Bypass	2163159	Wastewater	Grab		6/24/2025	12:15 AM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
Field pH (R112)	Timmins	Client Supplied Field Determination of pH of Water	Field Test
Field Temp (R113)	Timmins	Client Supplied Field Determination of Temperature of Water	Field Test
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2,
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



TESTMARK Laboratories Ltd.

Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 585746

This report has been approved by:

Adam Tam, M.Sc.

Director of Operations

WORK ORDER RESULTS

Sample Description	Sewage Plant Bypass	Sewage Plant Bypass	Sewage Plant Bypass	Units					
Sample Date	6/23/2025 10:00 AM	6/23/2025 4:00 PM	6/23/2025 10:00 PM						
Lab ID	2163156	2163157	2163158						
Field Parameters	Result	MDL	Result	MDL	Units				
Field pH	7.01	N/A	7.09	N/A	pH				
Field Temp	15.1	N/A	14.7	N/A	°C				
Sample Description	Sewage Plant Bypass	Sewage Plant Bypass	Sewage Plant Bypass	Sewage Plant Bypass	Units				
Sample Date	6/23/2025 10:00 AM	6/23/2025 4:00 PM	6/23/2025 10:00 PM	6/24/2025 12:15 AM					
Lab ID	2163156	2163157	2163158	2163159					
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Units		
pH	7.07	N/A	7.29	N/A	7.27	N/A	7.44	pH	
Total Kjeldahl Nitrogen	4.4 [4.0]	0.4*	3.6	0.4*	1.0	0.4*	0.8	0.4*	mg/L
Total Phosphorus (as P)	1.09	0.02*	0.362	0.002	0.375	0.002	1.50	0.02*	mg/L

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060
MOH Phone No. 1-800-461-1818

Date: June 30, 2025 Time of Call: 11:44 a (a.m)/p.m.

SAC Reference #: 17ONVSAP Person Who Called: Don KHOG

Called SAC at: 11:44 am Reported ^{To} By: GRACE SUTCLIFFE

Called MOH at: ✓ Reported ^{To} By: ✓

Bypass: ✓ Spill: _____ Leak: _____ Overflow: _____

Location of Incident: COCHRANE WASTEWATER TREATMENT PLANT

Time of Incident: 11:20 am a.m./p.m. Receiver: LILABELLE CREEK

Details of Incident: HEAVY RAIN INFILTRATION

Downstream Users: NONE

Possible Effects on Receiver, Environment or Downstream Users: No

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272- 4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: 06-30-25 Time of Call: 9:21 am Person Contacted: LORIANNE

Time of Termination: 2200 Approximate Volume: 1,747,609 Cu. Meters

Duration of Bypass: 12.5 Hr

Current Status: Chlorinating? Yes: _____ No: ✓ Explain: _____

Further Action Required: NONE

Reported By: Don KHOG

1,747,609



TESTMARK Laboratories Ltd.

Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Client:	Michael Nelson	Work Order Number:	587295
Company:	Town of Cochrane - Wastewater	PO #:	12595
Address:	171 Fourth Ave, Box 490 Cochrane, ON, P0L 1C0	Regulation:	Information not provided
Phone:		Project #:	Overflow
Email:	michael.nelson@cochraneontario.com	DWS #:	
Date Order Received:	7/2/2025	Analysis Started:	7/2/2025
Arrival Temperature:	22 C	Analysis Completed:	7/11/2025
		Sampled By:	Michael Nelson

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2166130	Wastewater	Grab		6/30/2025	11:35 AM
Sewage Plant Overflow	2166131	Wastewater	Grab		6/30/2025	3:18 PM
Sewage Plant Overflow	2166132	Wastewater	Grab		6/30/2025	10:00 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E. coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2.
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 587295

REPORT COMMENTS

Bact Ltd(s): N/A

This report has been approved by:

Aline Chevigny

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow				
Sample Date	6/30/2025 11:35 AM	6/30/2025 3:18 PM	6/30/2025 10:00 PM				
Lab ID	2166130	2166131	2166132				
Anions	Result	MDL	Result	MDL	Result	MDL	Units
Nitrate (as N)	<0.05	0.05	2.00	0.05	1.37	0.05	mg/L
Nitrite (as N)	<0.05	0.05	1.05	0.05	1.07	0.05	mg/L
Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow				
Sample Date	6/30/2025 11:35 AM	6/30/2025 3:18 PM	6/30/2025 10:00 PM				
Lab ID	2166130	2166131	2166132				
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Units
Ammonia (as N)	2.40	0.01	1.17	0.01	2.29	0.01	mg/L
pH	7.07	N/A	7.47	N/A	7.52	N/A	pH
Total Kjeldahl Nitrogen	7.2	0.4*	2.4	0.4*	3.0	0.4*	mg/L
Total Phosphorus (as P)	2.11	0.02*	0.422	0.002	0.467	0.002	mg/L



TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 587295

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Units
Sample Date	6/30/2025 11:35 AM	6/30/2025 3:18 PM	6/30/2025 10:00 PM	
Lab ID	2166130	2166131	2166132	
Microbiology	Result	MDL	Result	MDL
Escherichia coli	102000	92000 [96000]	1000	124000
	1000	1000	1000	CFU/100mL

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Units
Sample Date	6/30/2025 11:35 AM	6/30/2025 3:18 PM	6/30/2025 10:00 PM	
Lab ID	2166130	2166131	2166132	
Oxygen Demand	Result	MDL	Result	MDL
BOD (5 day)	57	11.7	1	12.7
Carbonaceous BOD	49	7.3	1	10.2
	10	1	1	mg/L

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Sewage Plant Overflow	Units
Sample Date	6/30/2025 11:35 AM	6/30/2025 3:18 PM	6/30/2025 10:00 PM	
Lab ID	2166130	2166131	2166132	
Solids	Result	MDL	Result	MDL
Total Suspended Solids	258	4	85	42.5
	4	1	1	mg/L



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 587295

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

[]: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison.

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.

Spills Action Center Phone No. 1-800-268-6000
MOH Phone No. 1-800-461-1818

Date: July 16, 2025 Time of Call: 9:35 (a.m./p.m.)

SAC Reference #: 1-P4I84D Person Who Called: Chris Russell

Called SAC at: 9:35 AM Reported By: Chris Russell

Called MOH at: _____ Reported ^{To} By: Akilko Dafe

Bypass: Spill: _____ Leak: _____ Overflow:

Location of Incident: GOCHRANG WASTEWATER COLLECTION & TREATMENT PLANT

Time of Incident: 9:20 (a.m./p.m.) Receiver: Libabelle Creek ^{CR July 16/25} libabelle creek

Details of Incident: over flow due to RAIN

Downstream Users: NONE

Possible Effects on Receiver, Environment or Downstream Users: NONE

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272-4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: July 17, 25 Time of Call: 7:35am Person Contacted: ALIM KHAN

Time of Termination: 22:00 Approximate Volume: 187,305.754 Cu. Meters

Duration of Bypass: 12 1/2 Hrs

Current Status: Chlorinating? Yes: _____ No: Explain: _____

Further Action Required: NONE

Reported By: Dora KHue



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CERTIFICATE OF ANALYSIS

Client: Michael Nelson
Company: Town of Cochrane - Wastewater
Address: 171 Fourth Ave, Box 490
Cochrane, ON, P0L 1C0
Phone: michael.nelson@cochraneontario.com
Email:

Work Order Number: 589276
PO #: 12595
Regulation: Information not provided
Project #: Overflow
DWS #: DK
Sampled By:

Date Order Received: 7/17/2025
Arrival Temperature: 19 C

Analysis Started: 7/17/2025
Analysis Completed: 7/23/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Bypass	2173272	Wastewater	Grab		7/16/2025	9:35 AM
Bypass	2173273	Wastewater	Grab		7/16/2025	3:00 PM
Bypass	2173274	Wastewater	Grab		7/16/2025	7:00 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
Field pH (R112)	Timmins	Client Supplied Field Determination of pH of Water	Field Test
Field Temp (R113)	Timmins	Client Supplied Field Determination of Temperature of Water	Field Test
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2.
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



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Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 589276

This report has been approved by:

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Bypass		Bypass		Bypass	
Sample Date	7/16/2025 9:35 AM		7/16/2025 3:00 PM		7/16/2025 7:00 PM	
Lab ID	2173272		2173273		2173274	
Field Parameters	Result	MDL	Result	MDL	Result	MDL
Field pH	7.07	N/A	7.24	N/A	7.33	N/A
Field Temp	16.3	N/A	14	N/A	15.3	N/A
Units						
						pH
						°C
Sample Description	Bypass		Bypass		Bypass	
Sample Date	7/16/2025 9:35 AM		7/16/2025 3:00 PM		7/16/2025 7:00 PM	
Lab ID	2173272		2173273		2173274	
General Chemistry	Result	MDL	Result	MDL	Result	MDL
pH	7.64	N/A	7.76	N/A	7.73	N/A
Total Kjeldahl Nitrogen	4.4	0.4*	6.6	0.4*	19.4	0.4*
Total Phosphorus (as P)	0.92	0.02*	0.555	0.004*	0.767	0.004*
Units						
						pH
						mg/L
						mg/L



CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 589276

Sample Description	Result	MDL	Bypass	Result	MDL	Bypass	Units
Sample Date			7/16/2025 9:35 AM			7/16/2025 3:00 PM	
Lab ID			2173272			2173273	2173274
Oxygen Demand							
BOD (5 day)	15	6	Result	21	6	Result	6
Carbonaceous BOD	45	6	MDL	15	6	MDL	6
Units							mg/L
							mg/L
Sample Description			Bypass			Bypass	
Sample Date			7/16/2025 9:35 AM			7/16/2025 3:00 PM	7/16/2025 7:00 PM
Lab ID			2173272			2173273	2173274
Solids							
Total Suspended Solids	78	1	Result	31.5	1	Result	37
			MDL			MDL	1
Units							mg/L

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.
 MDL: Method detection limit or minimum reporting limit.
 []: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison.
 Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.
 Quality Control: All associated Quality Control data is available on request.
 Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.
 Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.
 Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.
 ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.
 Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Spills Action Center Phone No. 1-800-200-6000
MOH Phone No. 1-800-461-1818

Date: 7-23-25 Time of Call: 22:25 a.m./p.m.
SAC Reference #: 1-P74P90 Person Who Called: Mica Nelson
Called SAC at: 22:35 Reported By: _____
Called MOH at: _____ Reported By: _____
Bypass: _____ Spill: _____ Leak: _____ Overflow:
Location of Incident: WWTP
Time of Incident: 21:40 a.m./p.m. Receiver: Lillebelle Creek
Details of Incident: overflow due to rain

Downstream Users: None
Possible Effects on Receiver, Environment or Downstream Users: None

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:
1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls
Town Hall: Phone No. 272-4361 Fax No. 272-6068 Time of Call: _____
Details of Call: _____

Termination of Incident

Date: July 24, 25 Time of Call: 13:17 Person Contacted: JULIAN ARISTIZABAL
Time of Termination: 13:00 Approximate Volume: 656.462 Cu. Meters
Duration of Bypass: 16 Hours
Current Status: Chlorinating? Yes: _____ No: Explain: _____
Further Action Required: None
Reported By: Don Kline



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CERTIFICATE OF ANALYSIS

Client: Melissa Hoogenhoud
 Company: Town of Cochrane - Wastewater
 Address: 171 Fourth Ave, Box 490
 Cochrane, ON, P0L 1C0
 Phone: Melissa.Hoogenhoud@cochraneontario.com
 Email:

Work Order Number: 590172
 PO #: 12595
 Regulation: Information not provided
 Project #: Overflow
 DWS #: Michael Nelson
 Sampled By:

Date Order Received: 7/25/2025
 Arrival Temperature: 25 C

Analysis Started: 7/25/2025
 Analysis Completed: 8/11/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2176532	Wastewater	Grab		7/23/2025	9:40 PM
Sewage Plant Overflow	2176533	Wastewater	Grab		7/23/2025	11:30 PM
Sewage Plant Overflow	2176534	Wastewater	Grab		7/24/2025	7:17 AM
Sewage Plant Overflow	2176535	Wastewater	Grab		7/24/2025	1:24 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2,



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 590172

Method	Lab	Description	Reference
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540

This report has been approved by:

Aline Chevalier

Aline de Chevaligny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	7/23/2025 9:40 PM	7/23/2025 11:30 PM	7/24/2025 7:17 AM	7/24/2025 11:30 PM	7/24/2025 7:17 AM	7/24/2025 1:24 PM
Lab ID	2176532		2176533		2176535	
Anions	Result	MDL	Result	MDL	Result	MDL
Nitrate (as N)	<0.05	0.05	<0.05	0.05	0.30	0.05
Nitrite (as N)	0.38	0.05	0.22	0.05	0.70	0.05
Sample Description	Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	7/23/2025 9:40 PM	7/23/2025 11:30 PM	7/24/2025 7:17 AM	7/24/2025 11:30 PM	7/24/2025 7:17 AM	7/24/2025 1:24 PM
Lab ID	2176532		2176533		2176535	
General Chemistry	Result	MDL	Result	MDL	Result	MDL
Ammonia (as N)	2.91	0.01	6.56	0.02*	9.03	0.01
pH	7.11	N/A	7.24	N/A	7.74	N/A
Total Kjeldahl Nitrogen	16.1	0.4*	16.8	0.4*	12.7	0.4*
Total Phosphorus (as P)	2.52	0.02*	2.21	0.02*	0.98	0.004*

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 590172

Sample Description		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	Lab ID	Result	MDL	Result	MDL	Result	MDL	Result	MDL
7/23/2025 9:40 PM	2176532	1380000	10000	7/23/2025 11:30 PM	2176533	340000	10000	7/24/2025 7:17 AM	2176534
Microbiology									
Escherichia coli						520000 (4800000)	10000	1660000	10000
Units									CFU/100mL
Sample Description		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	Lab ID	Result	MDL	Result	MDL	Result	MDL	Result	MDL
7/23/2025 9:40 PM	2176532	44	6	7/23/2025 11:30 PM	2176533	13.5	1	7/24/2025 7:17 AM	2176534
Oxygen Demand									
BOD (5 day)		44	6			11.6	1	22	6
Carbonaceous BOD		46	6			9.8	1	34	6
Units									mg/L
Sample Description		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date	Lab ID	Result	MDL	Result	MDL	Result	MDL	Result	MDL
7/23/2025 9:40 PM	2176532	302	4	7/23/2025 11:30 PM	2176533	204	4	7/24/2025 7:17 AM	2176534
Solids									
Total Suspended Solids		302	4			94	2	60	2
Units									mg/L



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 590172

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060
MOH Phone No. 1-800-461-1818

Date: Sept 18, 2025 Time of Call: 8:00 (a.m.) p.m.
SAC Reference #: 1-PIROD8 Person Who Called: LORIANNE GREEN
Called SAC at: 8:00 am Reported By: Don + Chris
Called MOH at: / Reported By: /
Bypass: Spill: Leak: Overflow:
Location of Incident: COCHRANE WASTEWATER PLANT, 503 WATER PLANT RD
Time of Incident: 22:30 a.m. (p.m.) Receiver: LILABELLE CREEK
Details of Incident: OVERFLOW DUE TO RAIN

Downstream Users: NONE
Possible Effects on Receiver, Environment or Downstream Users: NONE

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272- 4361 Fax No. 272-6068 Time of Call: _____
Details of Call: _____

Termination of Incident

Date: Sept 18, 25 Time of Call: 8:00 am Person Contacted: LORIANNE GREEN
Time of Termination: 2:50 am Approximate Volume: 164.688 Cu. Meters
Duration of Bypass: 4 Hours, 20 minutes
Current Status: Chlorinating? Yes: No: Explain: _____
Further Action Required: No
Reported By: Don Ichoe + Chris Rouse



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CERTIFICATE OF ANALYSIS

Client:	Melissa Hoogenhoud	Work Order Number:	597670
Company:	Town of Cochrane - Wastewater	PO #:	12595
Address:	171 Fourth Ave, Box 490 Cochrane, ON, P0L 1C0	Regulation:	Information not provided
Phone/Fax:	(705) 272-5086 / 705272	Project #:	Overflow
Email:	Melissa.Hoogenhoud@cochraneontario.com	DWS #:	
		Sampled By:	Don Khoc
Date Order Received:	9/18/2025	Analysis Started:	9/19/2025
Arrival Temperature:	17 C	Analysis Completed:	9/29/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Post Bypass	2200808	Wastewater	Grab		9/18/2025	8:13 AM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2,
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 597670

This report has been approved by:

Aline Chevigny

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Post Bypass	Result	MDL	Units
Sample Date	9/18/2025 8:13 AM			
Lab ID	2200808			
Anions				
Nitrate (as N)		<0.05	0.05	mg/L
Nitrite (as N)		<0.05	0.05	mg/L
Sample Description	Post Bypass			
Sample Date	9/18/2025 8:13 AM			
Lab ID	2200808			
General Chemistry				
Ammonia (as N)		25.8	0.1*	mg/L
pH		7.5	N/A	pH
Total Kjeldahl Nitrogen		24.8	0.4*	mg/L
Total Phosphorus (as P)		2.83	0.02*	mg/L



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 597670

Sample Description	Post Bypass	
Sample Date	9/18/2025 8:13 AM	
Lab ID	2200808	
Microbiology	Result	MIDL
Escherichia coli	5440000	100000
		CFU/100mL

Sample Description	Post Bypass	
Sample Date	9/18/2025 8:13 AM	
Lab ID	2200808	
Oxygen Demand	Result	MIDL
BOD (5 day)	26	6
Carbonaceous BOD	29	6
		mg/L

Sample Description	Post Bypass	
Sample Date	9/18/2025 8:13 AM	
Lab ID	2200808	
Solids	Result	MIDL
Total Suspended Solids	126	2
		mg/L

LEGEND

Dates: Dates are formatted as mm/dd/yy throughout this report.

MIDL: Method detection limit or minimum reporting limit.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Dilution: In the MIDL column an asterisk () indicates a sample dilution was performed.



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CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 597670

SEWAGE PLANT/LIFT STATION(S)
OVERFLOW BYPASS, SPILL, OR LEAK REPORTING ID #
120000355

Spills Action Center Phone No. 1-800-268-6060

MOH Phone No. 1-800-461-1818

Date: Oct 19 2025

1 8 7 7 - 4 4 2 - 1 2 1 2
Time of Call: 12:30 a.m. (p.m.)

SAC Reference #: 1-PWB DHI

Person Who Called: Mike Nelson

Called SAC at: 12:32 pm

Reported By: Cody

Called MOH at: 12:42

Reported By: left message

Bypass: _____

Spill: _____

Leak: _____

Overflow:

Location of Incident: WWTP

Time of Incident: 12:15 a.m. (p.m.)

Receiver: L.L. Labele Creek

Details of Incident: overflow due to Rain

Downstream Users: None

Possible Effects on Receiver, Environment or Downstream Users: None

NOTE: Take 3 Raw Sewage Samples Per Incident & Have them Tested For every 8 hours during the overflow:

1. 5-day BOD and CBOD, Suspended Solids, pH, TKN and Total phosphorus

Addition Calls

Town Hall: Phone No. 272- 4361 Fax No. 272-6068 Time of Call: _____

Details of Call: _____

Termination of Incident

Date: Oct 19 2025 Time of Call: 07:21 Person Contacted: John

Time of Termination: 19:75 Approximate Volume: 481.57 Cu. Meters

Duration of Bypass: 6.75 hrs

Current Status: Chlorinating? Yes: _____ No: / Explain: _____

Further Action Required: None

Reported By: Mike Nelson



TESTMARK Laboratories Ltd.

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CERTIFICATE OF ANALYSIS

Client: Michael Nelson
 Company: Town of Cochrane - Wastewater
 Address: 171 Fourth Ave, Box 490
 Cochrane, ON, P0L 1C0
 Phone: michael.nelson@cochraneontario.com
 Email: michael.nelson@cochraneontario.com

Work Order Number: 601237
 PO #: 12595
 Regulation: Information not provided
 Project #: Overflow
 DWS #: Michael Nelson
 Sampled By: Michael Nelson

Date Order Received: 10/20/2025
 Arrival Temperature: 15 C

Analysis Started: 10/21/2025
 Analysis Completed: 10/27/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
Sewage Plant Overflow	2215424	Wastewater	Grab		10/19/2025	12:30 PM
Sewage Plant Overflow	2215425	Wastewater	Grab		10/19/2025	7:15 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
Ammonia Water (A42)	Timmins	Determination of Ammonia/Ammonium in Water	Modified from EPA 350.1
Anions Water (mg/L by IC) (A5)	Timmins	Determination of Anions in Water by Ion Chromatography	Modified from SW846-9056A
BOD (A3)	Kirkland Lake	Determination of Biochemical Oxygen Demand (BOD) 5-Day	Modified from SM-5210 B
CBOD (A3)	Kirkland Lake	Determination of Carbonaceous Biochemical Oxygen Demand (CBOD) 5-Day.	Modified from SM-5210-B
E.coli by MF on mFC-BCIG (A10)	Timmins	Determination of E. coli in water by Membrane Filtration on mFC-BCIG media	Modified from MOE E3371
pH of Water (A2.0)	Timmins	Determination of Water pH by Ion Selective Electrode	Modified from APHA-4500H+ B
TKN Water Dig. (A58)	Kirkland Lake	Determination of Total Kjeldahl Nitrogen in Waters with Block Digestion.	Modified from SM-4500 NORG-D
TP Water (A23.2)	Timmins	Determination of Total Phosphorus in Water.	Modified from EPA 365.3 and ESS 310.2,
TSS (A27)	Timmins	Determination of Total Suspended Solids in water by gravimetry	Modified from SM-2540



TESTMARK Laboratories Ltd.

Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 601237

REPORT COMMENTS

Becti Lot(s): N/A

This report has been approved by:

Aline de Chevigny

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Units
Sample Date	10/19/2025 12:30 PM	10/19/2025 7:15 PM	
Lab ID	2215424	2215425	
Anions	Result	MDL	MDL
Nitrate (as N)	<0.05	0.05	0.05
Nitrite (as N)	<0.05	0.05	0.05

Sample Description	Sewage Plant Overflow	Sewage Plant Overflow	Units
Sample Date	10/19/2025 12:30 PM	10/19/2025 7:15 PM	
Lab ID	2215424	2215425	
General Chemistry	Result	MDL	MDL
Ammonia (as N)	11.60	0.05*	0.01
pH	6.66	N/A	N/A
Total Kjeldahl Nitrogen	21.6	0.4*	0.4*
Total Phosphorus (as P)	3.21	0.02*	0.02*

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 601237

Sample Description		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date		10/19/2025 12:30 PM		10/19/2025 7:15 PM	
Lab ID		2215424		2215425	
Microbiology	Result	MDL	Result	MDL	Units
Escherichia coli	1680000	10000	1770000	10000	CFU/100mL

Sample Description		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date		10/19/2025 12:30 PM		10/19/2025 7:15 PM	
Lab ID		2215424		2215425	
Oxygen Demand	Result	MDL	Result	MDL	Units
BOD (5 day)	72.7	6	43	6	mg/L
Carbonaceous BOD	86	30	43	6	mg/L

Sample Description		Sewage Plant Overflow		Sewage Plant Overflow	
Sample Date		10/19/2025 12:30 PM		10/19/2025 7:15 PM	
Lab ID		2215424		2215425	
Solids	Result	MDL	Result	MDL	Units
Total Suspended Solids	400	5	72	2	mg/L



TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Town of Cochrane - Wastewater

Work Order Number: 601237

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

Dilution: In the MDL column an asterisk () indicates a sample dilution was performed.

Calibration Reports



Instrument Information		Client Information		Quality Management Information	
Instrument Type	DO Analyzer	Location	Cochrane STP	Calibration Frequency	Quarterly
Manufacturer	ExTech	ORG #	1109		
Model	SDL150	Work Order #	4428533		
Serial Number	A.127178	Type of Work Order	Scheduled		
OCWA ID	n/a	Calibration Date (DD/MM/YY)	24/03/25		
Instrument Tag	n/a	Start Time (24hr Clock)	12:15		
		End Time (24hr Clock)	12:30		

Portable DO Calibration

Overall Calibration Result	PASS
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Procedure (As per unit manual):

- 1 - Power on probe and allow to stabilize for at least 5 minutes
- 2 - Change reading from mg/L mode to O2 mode and record reading
- 3 - Enter calibration mode and press enter to begin calibration countdown
- 4 - After countdown, if calibration is successful, record new reading
- 5 - If calibration is unstable, check electrolyte and/or replace probe head

Calibration Results:

As Found Reading

19.7 %O2

As Left Reading

20.9 %O2

Calibration Notes

Technician Name - Brendon Jacksic

Technician Signature -



Instrument Information		Client Information		Quality Management Information	
Instrument Type	Portable Spectrophotometer	Location	Cochrane STP	Low Range Lot #	A3263
Manufacturer	Hach	ORG #	1109	Low Range Expiry	Sep, 25
Model	DR3900	Work Order #	4428533	High Range Lot #	N/A
Serial Number	1415128	Type of Work Order	Scheduled	High Range Expiry	N/A
OCWA ID	xxx	Calibration Date (DD/MM/YY)	24/03/25	Absorbance Lot #	A3261
Instrument Tag	xxx	Start Time (24hr Clock)	12:30	Absorbance Expiry	Sep, 25
Calibration Frequency	Anually	End Time (24hr Clock)	12:45		

Spec-Colour Verification (DPD Chlorine)	Overall Calibration Result	PASS
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Program 80 Low Range					Program 85 Low Range					
Standard	STD Value mg/L	Allowable Error +/-	Reading mg/L	PASS FAIL	Standard	STD Value mg/L	Allowable Error +/-	Reading mg/L	PASS FAIL	
STD 1	0.19	0.09	0.19	PASS	STD 1	0.21	0.09	0.21	PASS	
STD 2	0.85	0.10	0.84	PASS	STD 2	0.94	0.10	0.92	PASS	
STD 3	1.52	0.14	1.51	PASS	STD 3	1.67	0.14	1.65	PASS	
				Overall Result					Overall Result	PASS

Program 88 High Range					
Standard	STD Value mg/L	Allowable Error +/-	Reading mg/L	PASS FAIL	
STD 1		0.2		PASS	
STD 2		0.3		PASS	
STD 3		0.6		PASS	
				Overall Result	PASS

Spec-Colour Verification (Absorbance)

Wavelength - 420					Wavelength - 520					
Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL	Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL	
STD 1	0.632	0.05	0.636	PASS	STD 1	0.635	0.05	0.647	PASS	
STD 2	1.17	0.10	1.175	PASS	STD 2	1.173	0.10	1.191	PASS	
STD 3	1.731	0.15	1.734	PASS	STD 3	1.737	0.15	1.755	PASS	
				Overall Result					Overall Result	PASS

Wavelength - 560					Wavelength 610					
Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL	Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL	
STD 1	0.647	0.05	0.651	PASS	STD 1	0.635	0.05	0.64	PASS	
STD 2	1.195	0.10	1.203	PASS	STD 2	1.174	0.10	1.169	PASS	
STD 3	1.764	0.15	1.783	PASS	STD 3	1.735	0.15	1.733	PASS	
				Overall Result					Overall Result	PASS

Calibration Notes

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information		Client Information		Quality Management Information	
Instrument Type	Portable Spectrophotometer	Location	Cochrane STP	Low Range Lot #	A3263
Manufacturer	Hach	ORG #	1109	Low Range Expiry	Sep, 25
Model	DR2800	Work Order #	4428533	High Range Lot #	N/A
Serial Number	1230881	Type of Work Order	Scheduled	High Range Expiry	N/A
OCWA ID	xxx	Calibration Date (DD/MM/YY)	24/03/25	Absorbance Lot #	A3261
Instrument Tag	xxx	Start Time (24hr Clock)	12:30	Absorbance Expiry	Sep, 25
Calibration Frequency	Anually	End Time (24hr Clock)	12:45		

Spec-Colour Verification (DPD Chlorine)	Overall Calibration Result	PASS
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Program 80 Low Range					Program 85 Low Range						
Standard	STD Value mg/L	Allowable Error +/-	Reading mg/L	PASS FAIL	Standard	STD Value mg/L	Allowable Error +/-	Reading mg/L	PASS FAIL		
STD 1	0.19	0.09	0.19	PASS	STD 1	0.21	0.09	0.21	PASS		
STD 2	0.85	0.10	0.85	PASS	STD 2	0.94	0.10	0.93	PASS		
STD 3	1.52	0.14	1.52	PASS	STD 3	1.67	0.14	1.66	PASS		
				Overall Result	PASS					Overall Result	PASS

Program 88 High Range					
Standard	STD Value mg/L	Allowable Error +/-	Reading mg/L	PASS FAIL	
STD 1		0.2		PASS	
STD 2		0.3		PASS	
STD 3		0.6		PASS	
				Overall Result	PASS

Spec-Colour Verification (Absorbance)

Wavelength - 420					Wavelength - 520						
Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL	Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL		
STD 1	0.632	0.05	0.632	PASS	STD 1	0.635	0.05	0.641	PASS		
STD 2	1.17	0.10	1.171	PASS	STD 2	1.173	0.10	1.184	PASS		
STD 3	1.731	0.15	1.738	PASS	STD 3	1.737	0.15	1.755	PASS		
				Overall Result	PASS					Overall Result	PASS

Wavelength - 560					Wavelength 610						
Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL	Standard	STD Value ABS	Allowable Error +/-	Reading ABS	PASS FAIL		
STD 1	0.647	0.05	0.651	PASS	STD 1	0.635	0.05	0.633	PASS		
STD 2	1.195	0.10	1.203	PASS	STD 2	1.174	0.10	1.171	PASS		
STD 3	1.764	0.15	1.783	PASS	STD 3	1.735	0.15	1.735	PASS		
				Overall Result	PASS					Overall Result	PASS

Calibration Notes

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information

Instrument Type **pH Analyzer**
 Manufacturer **Hach**
 Model **SensION pH3**
 Serial Number **n/a**
 OCWA ID **n/a**
 Instrument Tag **n/a**

Client Information

Location **Cochrane STP**
 ORG # **1109**
 Work Order # **4428533**
 Type of Work Order **Scheduled**
 Calibration Date (DD/MM/YY) **24/03/25**
 Start Time (24hr Clock) **12:45**
 End Time (24hr Clock) **13:00**

Quality Management Information

pH Buffer Stock
 Buffer Lot# **A2227**
 Buffer Expiry **Aug, 26**
 Allowable Error (%) **5**
 Calibration Frequency **Quarterly**

Turbidity Calibration

Overall Calibration Result	PASS
----------------------------	-------------

As Found

Buffer	As Found pH	As Found Temp °C	Error %	PASS FAIL
4.00	3.980		0.50	PASS
7.00	7.100		1.43	PASS
10.00	10.120		1.20	PASS
Overall Result				PASS

As Left

Buffer	As Found pH	As Found Temp °C	Error %	PASS FAIL
4.00	4.020		0.50	PASS
7.00	7.080		1.14	PASS
10.00	10.100		1.00	PASS
Overall Result				PASS

Calibration Information

Calibration Performed? **Yes**
 Slope Value **n/a mV/pH**
 Offset **n/a pH**

Calibration Notes

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information		Client Information		Quality Management Information	
Instrument Type	DO Analyzer	Location	Cochrane STP	Calibration Frequency	Quarterly
Manufacturer	ExTech	ORG #	1109		
Model	SDL150	Work Order #	4553955		
Serial Number	A.127178	Type of Work Order	Scheduled		
OCWA ID	n/a	Calibration Date (DD/MM/YY)	25/06/25		
Instrument Tag	n/a	Start Time (24hr Clock)	14:35		
		End Time (24hr Clock)	14:50		

Portable DO Calibration	Overall Calibration Result	PASS
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- Procedure (As per unit manual):**
- 1 - Power on probe and allow to stabilize for at least 5 minutes
 - 2 - Change reading from mg/L mode to O2 mode and record reading
 - 3 - Enter calibration mode and press enter to begin calibration countdown
 - 4 - After countdown, if calibration is successful, record new reading
 - 5 - If calibration is unstable, check electrolyte and/or replace probe head

Calibration Results:

As Found Reading
 13.9 %O2

As Left Reading
 20.6 %O2

Calibration Notes

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information		Client Information		Quality Management Information	
Instrument Type	DO Analyzer	Location	Cochrane STP	Calibration Frequency	Quarterly
Manufacturer	ExTech	ORG #	1109		
Model	SDL150	Work Order #	4762729		
Serial Number	A.127178	Type of Work Order	Scheduled		
OCWA ID	n/a	Calibration Date (DD/MM/YYYY)	24/09/25		
Instrument Tag	n/a	Start Time (24hr Clock)	12:15		
		End Time (24hr Clock)	12:30		

Portable DO Calibration

Overall Calibration Result	PASS
----------------------------	-------------

Procedure (As per unit manual):

- 1 - Power on probe and allow to stabilize for at least 5 minutes
- 2 - Change reading from **mg/L** mode to **O2** mode and record reading
- 3 - Enter calibration mode and press enter to begin calibration countdown
- 4 - After countdown, if calibration is successful, record new reading
- 5 - If calibration is unstable, check electrolyte and/or replace probe head

Calibration Results:

As Found Reading

18.6 %O2

As Left Reading

20.5 %O2

Calibration Notes

Technician Name - Brendon Jacksic

Technician Signature -



Instrument Information		Client Information		Quality Management Information	
Instrument Type	pH Analyzer	Location	Cochrane STP	pH Buffer Stock	
Manufacturer	Hach	ORG #	1109	Buffer Lot#	A2227
Model	SensION pH3	Work Order #	4762729	Buffer Expiry	Mar, 27
Serial Number	n/a	Type of Work Order	Scheduled	Allowable Error (%)	5
OCWA ID	n/a	Calibration Date (DD/MM/YY)	24/09/25	Calibration Frequency	Quarterly
Instrument Tag	n/a	Start Time (24hr Clock)	10:35		
		End Time (24hr Clock)	10:45		

Turbidity Calibration	Overall Calibration Result PASS
------------------------------	---

As Found

Buffer	As Found pH	As Found Temp °C	Error %	PASS FAIL
4.00	4.010		0.25	PASS
7.00	7.210		3.00	PASS
10.00	10.300		3.00	PASS
Overall Result				PASS

As Left

Buffer	As Found pH	As Found Temp °C	Error %	PASS FAIL
4.00	3.980		0.50	PASS
7.00	7.000		0.00	PASS
10.00	10.180		1.80	PASS
Overall Result				PASS

Calibration Information

Calibration Performed?	Yes
Slope Value	n/a mV/pH
Offset	n/a pH

Calibration Notes

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information

Instrument Type Open Channel Flowmeter
 Manufacturer Siemens
 Model LUT-440
 Serial Number PBD/E4170039
 OCWA ID n/a
 Instrument Tag n/a
 Process Location East Flow

Client Information

Location Cochrane STP
 ORG # 1109
 Work Order # 4762729
 Type of Work Order Scheduled
 Calibration Date (DD/MM/YY) 24/09/25
 Start Time (24hr Clock) 10:55
 End Time (24hr Clock) 11:00

Quality Management Information

Allowable Error (%) 15
 Calibration Frequency Anually
Reference Meter Used
 Manufacturer Siemens
 Model SITRANS Probe LU
 Serial PBD/T3070184
 OCWA ID N/A

Level Meter Verification

Overall Calibration Result	PASS
----------------------------	-------------

As Found

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
1	0.055	0.055	0.00	PASS
				N/A
				N/A
Overall Result				PASS

Verification Information

Level Units m
 Reference Method Measuring Tape (Visual)
 Adjustments Made? No
 Empty Distance n/a m
 Full Scale n/a m

As Left

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
			N/A	N/A
			N/A	N/A
			N/A	N/A
Overall Result				N/A

Verification Notes

Technician Name - Brendon Jacksic

Technician Signature -



Instrument Information

Instrument Type Open Channel Flowmeter
 Manufacturer Hach
 Model OCM
 Serial Number 120859005177
 OCWA ID n/a
 Instrument Tag n/a
 Process Location West Flow

Client Information

Location Cochrane STP
 ORG # 1109
 Work Order # 4762729
 Type of Work Order Scheduled
 Calibration Date (DD/MM/YY) 24/09/25
 Start Time (24hr Clock) 11:00
 End Time (24hr Clock) 11:05

Quality Management Information

Allowable Error (%) 15
 Calibration Frequency Annually
Reference Meter Used
 Manufacturer Siemens
 Model SITRANS Probe LU
 Serial PBD/T3070184
 OCWA ID N/A

Level Meter Verification

Overall Calibration Result	PASS
----------------------------	-------------

As Found

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
1	0.060	0.058	3.33	PASS
				N/A
				N/A
Overall Result				PASS

Verification Information

Level Units m
 Reference Method Measuring Tape (Visual)
 Adjustments Made? No
 Empty Distance n/a m
 Full Scale n/a m

As Left

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
			N/A	N/A
			N/A	N/A
			N/A	N/A
Overall Result				N/A

Verification Notes

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information		Client Information		Quality Management Information	
Instrument Type	Open Channel Flowmeter	Location	Cochrane STP	Allowable Error (%)	15
Manufacturer	Hach	ORG #	1109	Calibration Frequency	Anually
Model	OCM	Work Order #	4762729	Reference Meter Used	
Serial Number	120859005176	Type of Work Order	Scheduled	Manufacturer	Siemens
OCWA ID	n/a	Calibration Date (DD/MM/YY)	24/09/25	Model	SITRANS Probe LU
Instrument Tag	n/a	Start Time (24hr Clock)	11:15	Serial	PBD/T3070184
Process Location	Contact Flow	End Time (24hr Clock)	11:20	OCWA ID	N/A

Level Meter Verification

Overall Calibration Result	PASS
----------------------------	-------------

As Found

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
1	19.000	19.100	0.53	PASS
				N/A
				N/A
Overall Result				PASS

Verification Information

Level Units m
Reference Method Measuring Tape (Visual)
Adjustments Made? No
Empty Distance n/a m
Full Scale n/a m

As Left

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
			N/A	N/A
			N/A	N/A
			N/A	N/A
Overall Result				N/A

Verification Notes

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information		Client Information		Quality Management Information	
Instrument Type	Open Channel Flowmeter	Location	Cochrane STP	Allowable Error (%)	15
Manufacturer	Hach	ORG #	1109	Calibration Frequency	Annually
Model	OCM	Work Order #	4762729	Reference Meter Used	
Serial Number	120859005176	Type of Work Order	Scheduled	Manufacturer	Siemens
OCWA ID	n/a	Calibration Date (DD/MM/YYYY)	24/09/25	Model	SITRANS Probe LU
Instrument Tag	n/a	Start Time (24hr Clock)	11:10	Serial	PBD/T3070184
Process Location	Bypass Flow	End Time (24hr Clock)	11:15	OCWA ID	N/A

Level Meter Verification

Overall Calibration Result	PASS
----------------------------	-------------

As Found

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
1	0.000	0.000	0.00	PASS
				N/A
				N/A
Overall Result				PASS

Verification Information

Level Units	m
Reference Method	Measuring Tape (Visual)
Adjustments Made?	No
Empty Distance	n/a m
Full Scale	n/a m

As Left

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
			N/A	N/A
			N/A	N/A
			N/A	N/A
Overall Result				N/A

Verification Notes

No flow through bypass at time of verification, so verification of zero flow/head level was performed.

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information		Client Information		Quality Management Information	
Instrument Type	Open Channel Flowmeter	Location	Cochrane STP	Allowable Error (%)	15
Manufacturer	Siemens	ORG #	1109	Calibration Frequency	Anually
Model	LUT-430	Work Order #	4762729	Reference Meter Used	
Serial Number	PBD/LO280361	Type of Work Order	Scheduled	Manufacturer	Siemens
OCWA ID	n/a	Calibration Date (DD/MM/YY)	24/09/25	Model	SITRANS Probe LU
Instrument Tag	n/a	Start Time (24hr Clock)	11:05	Serial	PBD/T3070184
Process Location	Influent Bypass Flow	End Time (24hr Clock)	11:10	OCWA ID	N/A

Level Meter Verification

Overall Calibration Result	PASS
----------------------------	-------------

As Found

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
1	0.872	0.863	1.00	PASS
				N/A
				N/A
Overall Result				PASS

Verification Information

Level Units m
Reference Method Measuring Tape (Visual)
Adjustments Made? No
Empty Distance n/a m
Full Scale n/a m

As Left

Test #	Reference Meas. m	Level Meter m	Error %	PASS FAIL
			N/A	N/A
			N/A	N/A
			N/A	N/A
Overall Result				N/A

Verification Notes

Distance from sensor to water measured and compared to level meter distance reading]

Technician Name - Brendon Jacksic

Technician Signature - *Brendon Jacksic*



Instrument Information		Client Information		Quality Management Information	
Instrument Type	DO Analyzer	Location	Cochrane STP	Calibration Frequency	Quarterly
Manufacturer	ExTech	ORG #	1109		
Model	SDL150	Work Order #	4815737		
Serial Number	A.127178	Type of Work Order	Scheduled		
OCWA ID	n/a	Calibration Date (DD/MM/YY)	11/12/25		
Instrument Tag	n/a	Start Time (24hr Clock)	12:15		
		End Time (24hr Clock)	12:30		

Portable DO Calibration

Overall Calibration Result	PASS
----------------------------	-------------

Procedure (As per unit manual):

- 1 - Power on probe and allow to stabilize for at least 5 minutes
- 2 - Change reading from mg/L mode to O2 mode and record reading
- 3 - Enter calibration mode and press enter to begin calibration countdown
- 4 - After countdown, if calibration is successful, record new reading
- 5 - If calibration is unstable, check electrolyte and/or replace probe head

Calibration Results:

As Found Reading

20.7 %O2

As Left Reading

20.9 %O2

Calibration Notes

Probe reacting very slowly, recommend changing shelf spare probe, replacing electrolyte.

Technician Name - Brendon Jacksic

Technician Signature -