

2025 Year End Report: Gravenhurst Wastewater Treatment Plant (WWTP)



Environmental Compliance Approval: # 7847-ABVPD3

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Introduction

The Gravenhurst Wastewater Treatment Plant (WWTP), which services the Town of Gravenhurst, is owned, and operated by the District Municipality of Muskoka. The plant is located at 1083 Muskoka Beach Road and was commissioned in May 1993. It is capable of servicing a population of 9,500 people.

The Beach Road WWTP receives influent wastewater from a gravity sewer main, which runs underneath Muskoka Beach Road. The majority of the wastewater is from the James St. Sewage Pumping Station that is located on the site of the original Gravenhurst sewage treatment plant in central Gravenhurst. In addition, the collection system contains fourteen other sewage pumping stations. The pumping stations serve residential areas of Gravenhurst as well as customers as diverse as the Taboo Resort and Beaver Creek Correctional Institution. The Wastewater Treatment Plant also has a septage receiving facility, which processes septic and holding tank wastes that are trucked in.

The Plant operates under the MECP Environmental Compliance Approval (ECA) # 7847-ABVPD3, issued September 9, 2016. Under the terms of the Environmental Compliance Approval, the plant is permitted to treat an average daily flow of 5,165 meters cubed per day, and a peak flow of 13,791 meters cubed per day. Additionally, effluent limit criteria are as follows:

Table 1 Effluent Limit Criteria

Effluent Parameter	Concentration	Total Effluent Loading
CBOD	10 mg/L	51.65 kg/day
Total Suspended Solids	10 mg/L	51.65 kg/day
Total Phosphorous	0.3 mg/L	1.6 kg/day
Total Ammonia Nitrogen Summer (May 15 to September 30)	5 mg/L	51.65 kg/day
Total Ammonia Nitrogen Winter (October 01 to May 14)	10 mg/L	25.8 kg/day
E. coli	100 organisms/100mL for any month	N/A
pH	To be between 6.0 and 9.5 at all times	N/A

The treatment process is conventional activated sludge with tertiary filtration and ultraviolet disinfection before discharge of the effluent to Lake Muskoka. Biosolids from the primary and secondary plant processes are sent to anaerobic digesters. The stabilized biosolids are then dewatered with a centrifuge. The centrifuge cake is hauled off site for disposal to Lystek's Organic Material Recovery Centre in Southgate.

General Information

A review of the District of Muskoka's infrastructure needs is conducted annually by the Director of Water and Sewer Services, Area Manager and Chief Operator, and recommendations for maintenance, rehabilitation and renewal programs are considered.

Efforts to eliminate the discharge of untreated or partially treated wastewater to receiving waters are being accomplished by a long-term financial commitment to correct excessive infiltration into the wastewater collection system by means of sewer main rehabilitation/replacement, manhole rehabilitation and pumping station rehabilitation programs.

The treatment facility is capable of effective operation during emergencies, maintenance shutdowns, and power failures. This is achieved through such measures as preventive maintenance of duty/standby units, the duplication of major treatment components, the provision of standby power sources and extensive use of the SCADA systems. All pumping stations and treatment control systems use SCADA (Supervisor Control and Data Acquisition), in combination with Data Highway Plus, and programmable logic controllers.

All operators are qualified to operate the systems efficiently and effectively to achieve the highest level of treatment at all times. A commitment to provide Operator training and certification is being sustained.

Regulatory sampling is carried out to meet the requirements outlined in the ECA. Additional in-house operational sampling beyond these regulatory requirements is being performed on a routine basis. These efforts have resulted in an effective treatment process which ensures that effluent discharges consistently meet effluent objectives and are environmentally safe.

All data in this report is a compilation of test results received from SGS Canada and their accredited laboratory, Lakefield Research. All in-plant sampling, analysis and recording of results conforms, in order of precedence, to the following 3 standards: Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works", Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" and the American Water Works Association/Water Environment Federation (AWWA/WEF) publication "Standard Methods for the Examination of Water and Wastewater".

Executive Summary

In all respects, test results of the treated effluent for the parameters of CBOD₅, suspended solids, ammonia, total phosphorous, and E. Coli are in compliance with the limits outlined in the ECA regarding monthly allowable concentrations and total effluent loading throughout 2025.

Overall, the plant treatment processes performed satisfactorily and are deemed to be adequate. All sample test results of the final effluent were within levels outlined in the plant ECA (#7847ABVPD3).

Quantity of Flow Summary

The plant has a daily average flow design capacity of 5,165 meters cubed per day. The actual average daily flow for 2025 was 3,364 meters cubed per day; however, the 3-year average is 3,200 meters cubed per day, which represents 62% of the plant capacity. None of the individual system components exceeded the design flow rating.

Plant Operational Upsets or Process Failures

During the month of March 2025, the objective for final effluent discharge ammonia residuals was not achieved. Lakefield reported values of 2.5 mg/L (March 4), 1.2 mg/L (March 11), 1.5 mg/L (March 18), and 0.4 mg/L (March 25). This resulted in a monthly average of 1.7, which exceeded the monthly objective of 1.0 mg/L. Aeration tank operating parameters including 30 min settling, MLSS, MLVSS, dissolved oxygen, pH, and alkalinity, were all normal during this time. The only abnormal plant conditions during March were high plant flows.

On Saturday March 29, 2025, from 11:00 to 17:00, a partial secondary treatment bypass occurred where 1206 m³ of partially treated sewage was discharged. This occurred during the power outage caused by the ice storm. The aeration tank blowers and mixing pumps had to be shut off to shed electrical load to keep the generator from overheating while still running the effluent pumps to prevent flooding. All chemical systems, filters, and UV were operational during this time. The occurrence was reported under event # 1-MZ114W and Action Report 2025-WW-AR-06.

Summary of Maintenance

There were no significant plant upgrades on major infrastructure in 2025.

All equipment information at this plant is entered into a computer database. From this information, a scheduled preventive maintenance program has been established. The maintenance program includes (and not limited to):

- Monthly emergency testing (under load) of the standby generators.
- Annual service of emergency standby generators.
- Annual calibration of flow metering devices.
- Annual cleaning of all sewage pumping stations.
- Marine inspection of effluent outfall and diffuser completed in 2022. (5-year cycle)

Evaluation of the Need for Improvement Works

The treatment facility is operating at a plant capacity of 62% and is in compliance with specified effluent parameter criteria. In addition, there has been no significant treatment process upsets and plant bypasses. There are planned major capital upgrades for life-cycle process equipment replacements to occur in 2026 with engineering design work occurring now.

Interpretation of Analytical Results

All sample results for Raw Sewage and Final Effluent are reported in this section. Other tables in this report include Chemical Usage, Biosolids Quality, and Biosolids Quantity.

Raw Sewage

The information reported in the Raw Sewage sample results summary table consists of test results of analysis conducted on composite samples of the plant influent flow as required by the plant ECA. Samples are sent for analysis to Lakefield Research, as well as analysis conducted on site using Standard Methods or equivalent. Weekly analysis has been performed and reported as specified under the terms outline in the ECA.

Influent Analysis

Table 2 Influent Analysis

Influent Parameter	Minimum	4 Week Average Maximum	Annual Average	Average loading kg/day
BOD5 (mg/L)	22	257	154	431
Suspended Solids (mg/L)	36	540	187	578
Total Phosphorus (mg/L)	0.65	10.3	3.64	10.36
TKN (mg/L)	1.30	56.9	29.00	84.00

Effluent Analysis

The information reported in the Final Effluent sample results summary table 3 consists of test results of analysis conducted on final effluent composite samples. Bacteriological samples, however, consisted of grab samples. Weekly analysis has been performed and reported as specified under the terms outlined in the ECA.

Effluent Objective Analysis

During the month of March 2025 there were higher than normal Ammonia residuals. Lakefield reported values of 2.5 mg/L (March 4), 1.2 mg/L (March 11), 1.5 mg/L (March 18), and 0.4 mg/L (March 25). This resulted in a monthly average of 1.7, which exceeded the monthly objective of 1.0 mg/L. Aeration tank operating parameters including 30 min settling, MLSS, MLVSS, dissolved oxygen, pH, and alkalinity, were all normal during this time. The only abnormal plant conditions during March were high plant flows.

Effluent Analysis Summary

All final effluent samples tested for CBOD5, suspended solids, ammonia, E. Coli, and total phosphorus were below non-compliance limits outlined in the ECA.

Table 3 Final Effluent Analysis Summary

Parameter	Minimum	4 Week Average Maximum	Annual Average	Average Loading kg/day
COBD5 (mg/L)	2	2.75 (Feb 1 - Mar 11)	2	7.17
Suspended Solids (mg/L)	2	5.25 (Mar 18 - Apr 8)	3	9.94
Total Phosphorus (mg/L)	0.03	0.08 (June 18 - July 8)	0.04	0.13
Ammonia(mg/L)	0.1	1.4 (Mar 4 - Mar 25)	0.26	1.16
E. Coli (#/100 mL) GEOMEAN	0	28 (Mar 18 - Apr 8)	0.46	N/A
pH	6.53	7.34 (Jan 7 - Jan 28)	7.08	N/A

Final Effluent Sampling Summary

All samples were collected following the frequency and methods required by the facility approval. For the coming year, 2026, no changes to the sampling plan are being considered.

Biosolids Generation

The quality and volume of biosolids hauled from the facility for disposal is outlined in the table provided. Dewatered biosolids from the plant are hauled off site for disposal at Lystek's Organic Material Recovery Centre in Southgate. A contractor was used by the District of Muskoka to transport all material for disposal in 2025 and will continue to do so in 2026. It is not anticipated that there will be a significant increase in the total volume of biosolids produced in 2026.

From April 4/25 to July 18/25 ROHES hauled liquid sludge from the Gravenhurst STP to their holding lagoons. The total volume of sludge hauled was 2,996 m³. This occurred due to the failure of the centrifuge and subsequent repair time.

Biosolids Co-Treatment

The treatment plant has the capability to co-treat additional wastes through the Hauled Waste Receiving Facility, which located on site at headworks of the plant. Septage and holding tank waste are hauled in by vacuum trucks and discharged into the 76 cubic meter tank, which is then blended into the plant influent flow. Biosolids and water treatment sludge generated by smaller municipal treatment facilities may be processed in this fashion as well. Tables summarizing the septage analytical characteristics and monthly loading rates of the hauled wastes that have been co-treated at the plant in 2024 are included in this report.

Co-Treatment Flow Summary

The plant ECA (Sewage) #7847-ABVPD3, issued September 9, 2016, states that the monthly average quantity of septage and holding tank waste being co-treated at the plant shall not exceed 20 meters cubed per day. The certificate further stipulates that the monthly average volume of biosolids being cotreated shall not exceed a monthly average flow of 20 meters cubed per day, and that volumes of water treatment plant sludges being co-treated shall not exceed a monthly average flow of 20 meters cubed per day as well.

The highest monthly average for septage was 11.77 meters cubed per day in July 2025 with no problems observed by this volume. Samples of the septage waste were collected monthly. No other plant biosolids or water plant sludges were received in 2025.

Summary of Complaints received throughout the reporting period.

There were no complaints received in the reporting period.

Gravenhurst Wastewater Collection Summary 2025

New and Replaced Sanitary Sewer

Total of 225.5 meters of 200mm sewer main replaced on Bay St. Part of the Bay and Beyond project 2025.

New Sewer Services:

37 new customers connected to existing municipal services in 2025.

Sewer Lateral Blockages:

2 lateral blockages on the municipal side, cleared and replaced as needed in 2025.

Sewer Pump Stations:

All maintenance was completed for 15 Pump stations in Gravenhurst in 2025

Main Line Sewer Blockages:

2 sewers blocked. Hotchkiss St. GHSAN0613 and Mary St S. GHSAN0641. Both cleared and video inspection completed.

Sewer Force Mains:

All the low-pressure sewage force mains within the collection system were flushed by field staff through our annual preventive maintenance program in 2025.

Air Release Valves:

All twenty (22) of the air release vacuum valves connected to the sewage force mains in our collection system were removed, cleaned, tested and reinstalled for the yearly maintenance inspection in 2025.

Sewer Flushing and Video Inspections:

Approximately 7650.0 meters of various size sanitary sewer mains were flushed using high pressure equipment. The two 250mm depressed (siphon) sewer mains from our Knister sewage pump station were swabbed from the collection chamber located in the Brydon Bay Road easement, through to the receiving chamber on Brydon Bay Road.

Sewer Rehabilitation:

No sanitary sewer rehab for 2025.

Locates:

Field staff addressed 758 locate requests for Ontario One Call in 2025

Table 4 Effluent Flow Summary

Month	Plant Total Monthly (m ³)	Average Day Flow (m ³ /d)	Maximum Day Flow (m ³ /d)	Minimum Day Flow (m ³ /d)	Lagoons Monthly Flow (m ³)	Facility Total Monthly Flow (m ³)
January	101,562	3,276	4,755	2,704	N/A	101,562
February	74,619	2,665	2,873	2,432	N/A	74,619
March	154,448	4,982	10,040	2,514	N/A	154,448
April	194,648	6,488	10,353	4,901	N/A	194,648
May	135,475	4,370	5,053	3,814	N/A	135,475
June	104,565	3,486	4,035	3,089	N/A	104,565
July	92,593	2,987	3,405	2,669	N/A	92,593
August	84,223	2,717	3,150	2,425	N/A	84,223
September	72,345	2,411	2,605	2,152	N/A	72,345
October	72,941	2,353	2,620	2,093	N/A	72,941
November	68,081	2,269	2,554	1,835	N/A	68,081
December	72,339	2,335	2,757	2,088	N/A	72,339

Total Flow: 1,227,899 m³
Average Day: 3,364 m³
Maximum Day: 10,353 m³
Minimum Day: 1,835 m³

Table 5 Influent Quarterly Analysis Summary – Weekly 24-Hour Composite Sample Part 1

Sample Date	Sample Identification Number	BOD5 mg/L	Total Phosphorus mg/L	Suspended Solids mg/L	Total Kjeldahl Nitrogen mg/L
Feb 11/25	CA12244	112	2.85	140	85.5
May 13/25	CA13704	283	2.02	49	18.5
Aug 5/25	CA12152	211	3.11	185	28.9
Nov 11/25	CA12393	365	10.00	580	61.0
Yearly Average		48.5	4.50	238.0	48.5
Maximum		365	10.0	580.0	85.5
Minimum		112	2.02	49.0	18.5

Table 6 Chemical Usage Summary: Alum

Month	Average Dosage mg/L	Total kg (dry)
January	84.5	8,580.0
February	115.0	8,580.0
March	55.6	8,580.0
April	44.1	8,580.0
May	63.3	8,580.0
June	82.1	8,580.0
July	92.7	8,580.0
August	101.9	8,580.0
September	118.6	8,580.0
October	117.6	8,580.0
November	126.0	8,580.0
December	118.5	8,580.0

Total Yearly Kilograms: 102,960 kg

Table 7 Chemical Usage Summary: Soda Ash

Month	Average Dosage mg/L	Total kg (dry)
January	128.0	13,000
February	107.2	8,000
March	77.7	12,000
April	51.4	10,000
May	59.1	8,000
June	86.1	9,000
July	140.4	13,000
August	130.6	11,000
September	152.0	11,000
October	178.2	13,000
November	161.6	11,000
December	165.7	12,000

Total Yearly Kilograms: 131,000 kg

Table 8 Chemical Usage Summary: Polymer

Month	Average Dosage mg/L	Total kg
January	161.3	150
February	132.5	75
March	151.8	75
April	0	0
May	0	0
June	0	0
July	87.5	75
August	158.9	200
September	169.6	200
October	154.0	150
November	172.0	150
December	130.4	100

Total Yearly kg: 1,175 kg

Table 9 Effluent Quarterly Analysis Summary – Weekly 24-Hour Composite Sample Part 1

Sample Date	Sample Identification Number	CBOD5 mg/L	Alkalinity (Total as CaCO3) mg/L	pH	Total Phosphorus mg/L	Suspended Solids mg/L
Feb 11/25	CA12244	2	56	7.06	0.03	5
May 13/25	CA13704	2	62	7.10	0.03	3
Aug 05/25	CA12152	2	75	7.09	0.09	3
Nov 11/25	CA12393	2	139	7.28	0.03	2
Yearly Average		2	83	7.13	0.05	3
Maximum		2	139	7.28	0.09	5
Minimum		2	56	7.06	0.03	2

Table 10 Effluent Quarterly Analysis Summary – Weekly 24-Hour Composite Sample Part 2

Sample Date	Sample Identification Number	Total Kjeldahl Nitrogen mg/L	Nitrate Nitrogen mg/L	Nitrite Nitrogen mg/L	Total Ammonia Nitrogen mg/L
Feb 11/25	CA12244	2.2	25.0	0.03	0.1
May 13/25	CA13704	0.5	14.2	0.03	0.1
Aug 05/25	CA12152	2.4	24.7	0.03	0.1
Nov 11/25	CA12393	0.5	28.2	0.03	0.1
Yearly Average		1.4	23.0	0.03	0.1
Maximum		2.4	28.2	0.03	0.1
Minimum		0.5	14.2	0.03	0.1

Table 11 Effluent Loading and Concentration Summary: COBD5

Month	Average mg/L	Average kg/day	Maximum Daily kg/day
January	2.20	6.55	9.51
February	2.75	7.33	7.90
March	2.20	9.96	20.08
April	2.00	12.98	20.71
May	2.00	8.74	10.11
June	2.00	6.97	8.07
July	2.20	6.57	7.49
August	2.30	6.25	7.25
September	2.40	5.79	6.25
October	2.00	4.71	5.24
November	2.00	4.54	5.11
December	2.40	5.61	6.62
Average Monthly	2.17	7.17	9.53
Effluent Objective	5.00	25.82	
Non-Compliance	10.00	51.65	

Table 12 Effluent Loading and Concentration Summary: Suspended Solids

Month	Average mg/L	Average kg/day	Maximum Daily kg/day
January	2.50	8.19	11.89
February	2.00	5.33	5.75
March	3.00	14.95	30.12
April	5.00	32.44	51.77
May	2.50	10.93	12.63
June	4.25	14.81	17.15
July	2.20	6.57	7.49
August	2.30	6.25	7.25
September	2.00	4.82	5.21
October	2.00	4.71	5.24
November	2.25	5.11	5.75
December	2.20	5.14	6.07
Average Monthly	2.68	9.94	13.86
Effluent Objective	5.00	25.82	
Non-Compliance	10.00	51.65	

Table 13 Effluent Loading and Concentration Summary: Total Ammonia Nitrogen Summer

Month	Average mg/L	Average kg/day	Maximum Daily kg/day
May	0.10	0.44	0.51
June	0.10	0.35	0.40
July	0.10	0.30	0.34
August	0.10	0.27	0.32
September	0.10	0.24	0.26
October	0.10	0.24	0.26
Average Monthly	0.10	0.31	0.35
Effluent Objective	1.00	5.16	
Non-Compliance	5.00	25.8	

Table 14 Effluent Loading and Concentration Summary: Total Ammonia Nitrogen Winter

Month	Average mg/L	Average kg/day	Maximum Daily kg/day
January	0.10	0.33	0.48
February	0.10	0.27	0.29
March	1.70	8.47	17.07
April	0.40	2.60	4.14
November	0.10	0.23	0.26
December	0.10	0.23	0.28
Average Monthly	0.42	2.02	3.75
Effluent Objective	1.00	5.16	
Non-Compliance	10.00	51.65	

Table 15 Effluent Loading and Concentration Summary: *E.coli*

Month	Geomean (#/100mL)	Maximum Daily (#/100mL)
January	0.00	0.00
February	0.00	0.00
March	1.56	110.00
April	0	1.00
May	0	1.00
June	0.41	4.00
July	0.51	8.00
August	0.00	0.00
September	1.17	8.00
October	0.00	0.00
November	0.32	3.00
December	1.06	37.00
Average Monthly	0.42	14.33
Effluent Objective	80.00	
Non-Compliance	100.00	

Table 16 Effluent Loading and Concentration Summary: Total Phosphorus

Month	Average mg/L	Average kg/day	Maximum Daily kg/day
January	0.03	0.10	0.14
February	0.03	0.08	0.09
March	0.04	0.20	0.40
April	0.04	0.26	0.41
May	0.03	0.13	0.15
June	0.06	0.21	0.24
July	0.05	0.15	0.17
August	0.05	0.14	0.16
September	0.04	0.10	0.10
October	0.03	0.07	0.08
November	0.03	0.07	0.08
December	0.03	0.07	0.08
Average Monthly	0.04	0.13	0.18
Effluent Objective	0.30	1.55	
Non-Compliance	0.30	1.55	

Table 16.1 Effluent Loading and Concentration Summary: pH

Month	Minimum	Maximum	Average
January	7.24	7.51	7.34
February	7.04	7.22	7.13
March	7.01	7.54	7.30
April	7.02	7.33	7.18
May	7.03	7.37	7.14
June	6.76	6.96	6.84
July	6.92	7.27	7.09
August	6.63	7.09	6.92
September	6.57	7.26	6.99
October	6.91	7.19	7.06
November	6.53	7.28	7.02
December	6.65	7.11	6.95
Annual Average	6.86	7.26	6.95
Effluent Objective	6.50	8.50	N/A
Non-Compliance	6.0	9.50	N/A

Table 17 Dewatered Sludge Production Summary

Month	Hauler	Liquid Volume m ³	Cake Weight Tonnes	Destination
January	ROHES	930	50.56	Lystek
February	ROHES	566	55.55	Lystek
March	ROHES	494	55.49	Lystek
April	ROHES	0	0	Lystek
May	ROHES	0	0	Lystek
June	ROHES	0	0	Lystek
July	ROHES	857	21.76	Lystek
August	ROHES	1259	78.36	Lystek
September	ROHES	1179	77.37	Lystek
October	ROHES	974	82.05	Lystek
November	ROHES	872	55.36	Lystek
December	ROHES	767	51.81	Lystek

Yearly Total Tonnes: 528.31
 Yearly Average Tonnes: 44.03
 Maximum Tonnes: 82.05
 Minimum Tonnes: 0.00

Table 17.1 Liquid Sludge Production Summary

Month	Hauler	Liquid Volume m ³	Cake Weight Tonnes	Destination
January				
February				
March				
April	ROHES	654	N/A	ROHES Lagoon
May	ROHES	740	N/A	ROHES Lagoon
June	ROHES	966	N/A	ROHES Lagoon
July	ROHES	636	N/A	ROHES Lagoon
August				
September				
October				
November				
December				

Yearly Total m3: 2996
 Yearly Average m3: 250
 Maximum m3: 966
 Minimum m3: 0.00

Table 18 Sludge Quality Analysis

Parameter Sampled (mg/L)	First Quarter (Feb 11)	Second Quarter (May 13)	Third Quarter (Aug 05)	Fourth Quarter (Nov 11)
Sample ID	CA12245	CA13705	CA14008	CA12394
Nitrate	<3	<3	<3	<3
Mercury	0.005	0.008	0.007	0.006
Chromium	0.20	0.30	0.024	0.22
Cobalt	0.03	0.05	0.03	0.03
Copper	7.2	9.5	9.9	9.0
Lead	0.2	0.2	0.3	0.2
Molybdenum	0.07	0.08	0.09	0.08
Nickel	0.15	0.23	0.17	0.18
Selenium	<0.1	< 0.1	< 0.1	<0.1
Arsenic	<0.1	< 0.1	< 0.1	<0.1
Zinc	7	9	10	9
Cadmium	0.008	0.011	0.014	0.023
Ammonia+ Ammonium	606	666	434	512
Total Kjeldahl Nitrogen	1230	1490	1130	934
Total Phosphorus	450	602	105	134
Total Solids	16000	20100	18000	14500
Total Suspended Solids	12200	17000	14500	12900
Nitrite	<3	<3	<3	<3
PO4	122	602	419	464

Table 19 Septage Quality and Quantity

Month	BOD5 Mg/L	TSS Mg/L	Total Solids Mg/L	COD Mg/L	TP Mg/L	TKN Mg/L	Volume Septage M³	Volume Biosolids M³
January	759	1710	2230	1430	47.6	108	16.24	0.00
February	2630	5230	4210	4900	32.2	186	0.00	0.00
March	46	69	497	108	2.5	6	84.77	0.00
April	105	112	450	216	4.1	14	20.00	0.00
May	1690	2970	5370	4750	39.7	271	247.04	0.00
June	1140	4770	6134	7200	37.0	379	272.62	0.00
July	2480	9360	8350	8400	59.0	396	365.27	0.00
August	1670	10800	11062	10800	67.4	432	270.99	0.00
September	3120	5380	8880	8300	49.0	252	328.67	0.00
October	752	2060	3230	2500	25.8	227	255.33	0.00
November	137	2010	2500	3300	14.8	90	141.73	0.00
December	795	4580	5170	5950	43.1	155	38.27	0.00

Certification of Reports

I certify that the information in this document and all attachments is correct, accurate, and complete to the best of my knowledge.

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