

**2005 ANNUAL COMPLIANCE REPORT**

**OPERATION & MAINTENANCE  
OF  
OSLER BLUFF SKI CLUB  
WATER SYSTEMS**

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## **1.0 INTRODUCTION AND BACKGROUND**

The Osler Bluff Ski Club has three (3) Year Round Residential water systems under its authority. The water systems are located throughout the limits of Clearview Township.

Henderson Paddon & Associates Limited (HPA) and subsequently Oweson Water Services, a division of Oweson Ltd. (OWS), began managing the water systems on August 22, 2001. The water systems are now operated by Mr. Harry Wright, who holds a MOE licence WD II, Mr. Randy Carriere who holds WT I licence, Mr. Mike Doucette, who holds a WT I licence and Mr. Lloyd Adams who holds a WTI Licence. Operation of the water systems are supervised by Mr. Kyle Snell who holds a WT Class IV licence and WD Class III licence.

Generally, the operation and collection of data during 2005, was as per the Regulations.

Part III, Form 2, Titled – Annual Report is attached in **Appendix L** and was submitted electronically.

## **2.0 DESCRIPTION OF WATER SYSTEMS**

### **2.1 Angus Water System**

The Angus Subdivision water system was constructed in 1975. It is located at Lot 40, Concession 12 in the Township of Clearview, and consists of forty-five (45) lots, forty-two (42) of which have been developed. This system is serviced by one (1) well with a submersible pump and a small pumphouse. The Permit to Take Water (PTTW), 7761-632NB9, was issued for the taking of 90.9 L/min. Inside the pumphouse, there are two (2) pressure tanks, both with a capacity of 454 L. There are metering pumps provided for both Sodium Hypochlorite (NaOCl) and Sodium Silicate. The controls, for the well pump, and both chemical feed pumps, are located in the pumphouse. At present, it is not known what model the well pump or motor is. This should be confirmed through field inspection next time the pump is pulled out for servicing. Refer to **Figure 1**.

Iron and manganese are sequestered by Sodium Hypochlorite (NaOCl) and Sodium Silicate. These treatments help protect the water supply from possible bacterial contamination by lowering the turbidity which could harbour or hide bacteria. The Certificate of Approval (C of A) and the Permit to Take Water (PTTW) can be found in **Appendix E and F**, respectively.

### **2.2 Osler Pines Water System**

The Osler Pines Subdivision was constructed in 1999. It is located on Lot 40, Concession 12 in the Township of Clearview and consists of twenty eight (28) lots, fifteen (15) of which have been developed.

The Osler Pines water system currently has three (3) wells. Only Well 1 and Well 3 are functional. Well 2 is used as an observation well only. Well 1 has a submersible pump with a rated capacity of 0.61 L/sec. The Permit to Take Water (PTTW) for Well 1 allows for a maximum day withdrawal of 52.704 m<sup>3</sup>/day. Well 3 also contains a submersible pump which is rated for a capacity of 0.76 L/sec. The PTTW allows Well 3 a maximum day withdrawal of 65.664 m<sup>3</sup>/day. The TDH for this system is 70.3 metres. Water from each well is delivered to the pumphouse via 50 mm  $\varnothing$  watermains. Both watermains empty into the underground reservoir. Refer to **Figure 2**.

Chlorination is achieved through a sodium hypochlorite (NaOCl) solution system consisting of one (1) 114 L chemical storage tank. There are two (2) chemical feed pumps capable of delivering 0.54 L/hour, and an inline injector for Well 1. Well 3 does not have an inline injector. NaOCl is added to the raw water from Well

3 via a 6 mm  $\varnothing$  feed line to the top of the inground reservoir. Sodium Silicate is added to the raw water just prior to chlorination. The purpose of sodium silicate is to sequester iron, a naturally occurring element in ground water.

Water is delivered to the high lift pump via a 50 mm  $\varnothing$  suction line. The high lift pump is capable of delivering 3.6 L/sec through a 50 mm  $\varnothing$  discharge line to three (3) 454 L hydropneumatic tanks. There is a 100 mm  $\varnothing$  watermain connected to the water distribution system. The inground reservoir has a total storage capacity of 45.4 m<sup>3</sup>.

### **2.3 Oslerview Water System**

The Oslerview Subdivision was constructed in 1985. It is located at Lots 38 and 39, Concession 12 in the Township of Clearview, and consists of fifty-five (55) lots, forty nine (49) of which have been developed in the County of Simcoe.

The Oslerview Subdivision is serviced by two (2) wells. The Permit to Take Water (PTTW) allows the first well, No. 85-P3038, a maximum day withdrawal of 54.5 m<sup>3</sup>/day (10 GPM). The second well has a PTTW, No. 85-P3039, which allows for a maximum day withdrawal of 109 m<sup>3</sup>/day (20 GPM). Both PTTW's expire on March 31, 2006. At the present time, only one well is operating and operates in the pressure range of 40 to 60 PSI. Refer to **Figure 3**.

Iron and manganese are sequestered by Sodium Hypochlorite (NaOCl) and Sodium Silicate. This treatment is designed to protect the water supply from possible bacterial contamination, by lowering the turbidity which could hide or harbour bacteria.

The raw water is pumped into a 10,000 gallon storage tank and includes a booster pump at this location. The system is then equipped with four (4) 473 litre pressure tanks.

**3.0 SUMMARY OF WATER QUALITY MONITORING**

**3.1 Bacteriological Sampling – Schedule 11**

All bacteriological analysis for all three (3) water systems at the Osler Bluff Ski Club were analyzed by SGS Lakefield Research. Samples were analyzed for E.Coli Count, Total Coliform Count and Heterotrophic Plate Count on raw water, treated Point of Entry (POE) and the distribution system.

A summary of the bacteriological sampling and analysis for all three (3) water systems is provided in **Table 1**. In **Table 1**, information has been provided to indicate the number of safe and unsafe water samples out of the total number of samples for raw water, treated water (POE) and the distribution system. A breakdown of bacteriological sampling and analysis of all three water systems is provided in **Appendix B**.

**TABLE 1  
 Summary of Bacteriological Sampling and Analysis  
 January 1, 2005 to December 31, 2005**

	Raw Water			Treated			Distribution Sample		
	Total No. of Samples Taken	No. Unsafe	No. Safe	Total No. of Samples Taken	No. Unsafe	No. Safe	Total No. of Samples Taken	No. Unsafe	No. Safe
Angus Subdivision	12	0	12	53	1	52	54	0	54
Osler Pines Subdivision	12	0	12	52	0	52	55	2	53
Oslerview Subdivision	12	0	12	52	0	52	53	0	53

During 2005, one (1) treated water sample at the Angus pumphouse was found to have an adverse heterotrophic plate count (HPC). Resampling indicated the system to be within compliance. Also during 2005, two (2) distribution samples collected in the Osler Pines subdivision had adverse HPC counts. In both cases resampling indicated the system to be in compliance. During 2005, all bacteriological results collected from the Oslerview subdivision were found to be within compliance.

### **3.2 Treated Water Turbidity and Chlorine Residual Monitoring – Schedule 8**

A summary of the treated water turbidity and chlorine residual monitoring for all three (3) water systems is provided in the enclosed **Tables 2.1-3** and **3.1-3**, respectively. Turbidity and chlorine monitoring was conducted daily in 2005. A monthly breakdown of turbidity and chlorine residual in the treated water and the distribution system is provided in **Appendix A**. The free chlorine was monitored daily in the distribution system.

During the 2005 calendar year, the free chlorine at the Angus Subdivision POE ranged from a low of 0.15 mg/L to a high of 3.49 mg/L. The Angus distribution system free chlorine residual ranged from a low of 0.10 mg/L to a high of 2.36 mg/L. The ODWQS requires that any free chlorine residual less than 0.05 mg/L to be reported to the Spills Action Centre (SAC) and the Ministry of Health (MOH). All Free Chlorine analysis results were within compliance. Refer to **Table 2.1**.

The Osler Pines Subdivision had a Free Chlorine residual at the POE ranging from a low of 0.18 mg/L to a high of 4.00 mg/L. The Osler Pines distribution Free Chlorine residual ranged from a low of 0.11 mg/L to a high of 2.22 mg/L. All Free Chlorine residuals were within compliance. Refer to **Table 2.2**.

The Free Chlorine residual analyzed at the Oslerview Pumphouse (POE) ranged from a low of 0.65 mg/L to a high of 2.20 mg/L. The Oslerview distribution system Free Chlorine ranged from a low of 0.47 mg/L to a high of 3.69 mg/L. All Free Chlorine residuals were within compliance. Refer to **Table 2.3**.

In 2005, there were a total of 365 samples collected at each of the three respective pumphouses and analyzed for turbidity. In each pumphouse, the samples were collected at the POE. The ODWQS have set a MAC of 1 NTU for a sample analyzed at the POE. However, as of June 12, 2003, the Barrie District MOE office informed Henderson Paddon & Associates Limited that since none of the wells have been labeled GUDI, nor do any of the existing Certificates of Approval require filtration, it is no longer necessary to report turbidity > 1 NTU. Additionally on July 22, 2005 Sr. Environmental Office, Rick Neubrand, addressed this issue. Refer to **Appendix D** for selected correspondence.

Of the 365 turbidity samples analyzed from the Angus pumphouse, none of the samples exceeded 1 NTU. The ODWQS have set an Aesthetic Objective (AO) of 5 NTU for turbidity sampled from the distribution system. Of the 54 samples collected from the distribution system, none exceeded the AO of 5 NTU. The highest turbidity in the distribution system was 1.10 NTU which was recorded on March 14, 2005.

Of the 365 POE samples collected at the Osler Pines pumphouse and analyzed for turbidity, 55 exceeded the MAC of 1 NTU. The highest was 1.84 NTU recorded on September 20, 2005. Of the 55 samples collected from the Osler Pine distribution system none exceeded the AO of 5 NTU. The highest turbidity reading from the distribution system was 1.29 NTU recorded on September 27, 2005.

Of the 365 samples collected at the Oslerview pumphouse at the POE, 55 exceeded 1 NTU. The highest turbidity was 1.40 NTU which was recorded on November 24, 2005. Of the 50 samples collected from the distribution system, none exceeded the ODWQS AO of 5 NTU. The highest turbidity reading was 1.85 NTU recorded on July 25, 2005. Refer to **Table 3.3**.

### **3.3 Chemical Sampling and Testing – Schedule 13**

#### **3.3.1 Inorganics**

Schedule 13-2 of Ontario Regulation 253/05 requires that at least one (1) water sample is taken every 12 months and analyzed for all the Inorganics as listed in Schedule 23. These samples were collected at Angus, Osler Pines and Oslerview on September 15, 2005. All parameters were found to be within compliance. Inorganics are required to be sampled and analyzed again before September 15, 2006. Refer to **Appendix C** for analysis results.

#### **3.3.2 Lead**

Schedule 13-3 of Ontario Regulation 253/05 requires that at least one (1) distribution sample be taken every 12 months and be tested for Lead. Samples were collected from Angus, Osler Pines and Oslerview on June 22, 2005 and were found to have concentrations of 0.0002 mg/L, 0.0002 mg/L and 0.0003 mg/L, respectively. All three lead samples were found to be within compliance. Lead is not required to be sampled and analyzed again from all three distribution systems until June 22, 2006. Refer to **Appendix C** for analysis results.

#### **3.3.3 Organics**

Schedule 13-4 of Ontario Regulation 253/05 requires that at least one (1) water sample be taken every 12 months and analyzed for all the Organic parameters as listed in Schedule 24. Samples were collected from Angus, Osler Pines and Oslerview on September 15, 2005 and were all found to be within compliance.

Organics are not required to be sampled and analyzed again from all three systems until September 15, 2006. Refer to **Appendix C** for analysis results.

### 3.3.4 Trihalomethanes

Schedule 13-6 of Ontario Regulation 253/05 requires that at least one (1) distribution sample be taken every 3 months from the Angus, Osler Pines and Oslerview distribution systems and be analyzed for Trihalomethanes (THMs). In 2005, samples were collected during the months of March, June, September and December, 2005. The Ontario Drinking Water Quality Standards (ODWQS) have set a Maximum Allowable Concentration (MAC) of 100 µg/L for this parameter and it is expressed as a running annual average. The 2005, annual average for Angus is 12.2 µg/L, Osler Pines is 27.7 µg/L and Oslerview is 7.1 µg/L. All are within compliance. Please refer to **Table 4** below for the Summary of Trihalomethanes and **Appendix C** for the analytical results. In 2006 THMs should be sampled and analyzed in March, June, September and December.

**TABLE 4**  
**Summary of Trihalomethanes (THMs)**  
**January 1, 2005-December 31, 2005**

Sample Date	Result (µg/L)		
	Oslerview	Osler Pines	Angus
March 16, 2005	3.2	22.3	3.6
June 17, 2005	4.7	26.2	10.8
September 20, 2005	10.	31.0	20.3
December 15, 2005	10.5	30.5	13.9
<b>ANNUAL AVERAGE</b>	<b>7.1</b>	<b>27.7</b>	<b>12.2</b>

### 3.3.5 Nitrate and Nitrite

Schedule 13-7 of Ontario Regulation 253/05 requires that at least one (1) water sample be taken every 3 months and tested for Nitrate and Nitrite. Samples were collected from Angus, Osler Pines and Oslerview during the months of March, June, September and December. All analytical results were found to be within compliance. Refer to **Appendix C** for analytical results. In 2006, samples should be collected in March, June, September and December.

### 3.3.6 Sodium

Schedule 13-8 of Ontario Regulation 253/05 requires that at least one (1) water sample be taken every 60 months and tested for Sodium. The ODWQS have set a MAC of 200 mg/L for Sodium and require the Medical Officer of Health to be notified if the concentration exceeds 20 mg/L. On November 16, 2001, samples were collected at Angus, Osler Pines and Oslerview and were found to have concentrations of 13.4 mg/L, 12.5 mg/L and 21.2 mg/L, respectively. These samples will need to be tested and analyzed again before November 16, 2006. Refer to **Appendix H** for analysis results.

### 3.3.7 Fluoride

Schedule 13-9 of Ontario Regulation 253/05 requires that at least one (1) treated water sample be taken every 60 months and be tested for Fluoride. The ODWQS have set a MAC of 1.5 mg/L. On November 16, 2001, samples were collected from Angus, Osler Pines and Oslerview and were found to have no detectable concentration which is within compliance. These samples will need to be collected and analyzed again before November 16, 2006. Refer to **Appendix H** for analysis results.

Please refer to **Table 5** for a Summary of Monthly, Quarterly and Annual sampling.

All physical/chemical analysis were performed by Caduceon Environmental Laboratories which is an accredited lab.

### **3.4 Certificate of Approval Sampling**

The existing Certificate of Approval for the Osler Pines water system requires that quarterly raw water samples be collected and analyzed for the following:

S	Colour	- Sodium
S	Conductivity	- DOC
S	Hardness	- Magnesium
S	pH	- Calcium
S	Turbidity	- Nitrogen - Organic
S	Nitrate	- Nitrogen - Ammonia
S	Nitrogen - Kjeldahl	
S	Nitrite	

This sampling was completed during March, June, September and December, 2005. The variation in the analysis result was consistent with historical data. Refer to **Appendix I** for analysis results.

### **3.5 Static Water Levels**

#### **3.5.1 Angus Water System**

On July 21, 2004, the Osler Bluff Ski Club was issued a renewed Permit to Take Water (PTTW) for the Angus Water System. This new PTTW will expire on July 31, 2014. Condition 4.3 requires the PTTW holder to measure and record static water levels in the production well on a monthly basis. Refer to **Table 6.1** below for a Summary of the 2005 Static Water Levels.

**TABLE 6.1**  
**Summary of Static Water Levels (SWL)**  
**Angus Water System**  
**January 1, 2005 - December 31, 2005**

<b>Date</b>	<b>SWL (Feet)</b>
January 25, 2005	9'
February 22, 2005	12' 9"
March 10, 2005	9'
April 27, 2005	7' 9"
May 31, 2005	12'
June 30, 2005	15' 11"
July 28, 2005	19' 6"
August 31, 2005	28' 2"
September 21, 2005	28'
October 15, 2005	27' 8"
October 28, 2005	26' 10"
November 18, 2005	26' 7"
November 29, 2005	26' 5"
December 20, 2005	25' 7"
December 30, 2005	27' 5"

### **3.5.2 Osler Pines Water System**

On July 21, 2004, the Osler Bluff Ski Club issued a renewed Permit to Take Water (PTTW) for the Osler Pines Water System. This renewed PTTW will expire on July 31, 2014. Condition 4.3 requires the PTTW holder to measure and record static water levels in the production well on a monthly basis. Refer to **Table 6.2** below for a Summary of the 2005 Static Water Levels.

**TABLE 6.2**  
**Summary of Static Water Levels (SWL)**  
**Osler Pines Water System**  
**January 1, 2005 - December 31, 2005**

<b>Date</b>	<b>Production Well SWL (Feet)</b>	<b>Standby Well SWL (Feet)</b>
January 25, 2005	43' 9"	38' 8"
February 22, 2005	41' 6"	36' 4"
March 10, 2005	45'	36'
April 27, 2005	40'	35'
May 31, 2005	43' 6"	35' 8"
June 30, 2005	48' 6"	n/a
July 28, 2005	n/a	36' 6"
August 31, 2005	50' 7"	39' 1"
September 21, 2005	52'	40' 2"
October 14, 2005	52' 4"	40' 6"
October 28, 2005	50' 9"	40' 9"
November 18, 2005	49' 4"	40' 9"
November 29, 2005	48' 5"	40' 4"
December 20, 2005	50' 2"	40' 4"
December 30, 2005	53' 4"	40' 6"

Refer to **Appendix F** for the Permits to Take Water. Refer to **Appendix G** for the Water Well Records.

#### **4.0 WATER USAGE AND WELL LEVEL MONITORING**

A summary of water usage for all three (3) water systems is provided in **Table 7**. The table also provides information on the average daily water use and maximum daily water usage. Note that the water usage also includes the amount of water wasted for flushing the watermains and the operating of blowoffs. Refer to **Appendix A** for a monthly breakdown of each system.

The overall water usage in 2005 on the Angus Water System was 4680.6 m<sup>3</sup>, Osler Pines 2547 m<sup>3</sup> and Oslerview 6835.5 m<sup>3</sup>. The Annual Record of Water Taking can be found in **Appendix J**.

The water meters at Oslerview and Osler Pines were calibrated on September 27, 2005. The water meter at the Angus pumphouse was calibrated on December 22, 2005. All water meters were found to be within compliance. This work was performed by R&R Instrumentation. Refer to **Appendix M** for their Instrumentation Calibration Report. The water meters should be calibrated again before September 27, 2006.

## 5.0 COMPLIANCE

This section provides assessment of compliance of each water system with O.Reg 170/03 as amended and the Ontario Drinking Water Quality Standards (ODWQS).

SGS Lakefield Research in London, Ontario is the analytical laboratory for bacteriological analysis. All other chemical analysis are performed by Caduceon Environmental Laboratories. Both of these laboratories are accredited labs.

1. Water samples for bacteriological water quality were always collected in accordance with the MOE Guidelines/Standards and as directed by ODWQS.
2. The sampling of treated water chlorine residual was always carried out in compliance with the Regulation. Please refer to **Table 2** and **Appendix A**.
3. The sampling of all of the distribution water samples for chlorine residuals were as per ODWQS and all samples were found to have detectable chlorine residuals in compliance with the Regulation. Refer to **Table 2** and **Appendix A**.
4. Treated water samples for turbidity analysis were generally within the turbidity level of 1 NTU. Complete monthly data for chlorinated samples collected at the POE and the distribution system can be found in **Appendix A**.
5. THM's, NO<sub>2</sub> and NO<sub>3</sub> were taken at the required frequency and all analysis results were below the maximum acceptable concentration as stated in the ODWQS. Please refer to **Appendix C**.
6. Fluoride sampling was carried out at the required frequency as per ODWQS. Refer to Section 3.3. Fluoride analysis data is located in **Appendix H**.
7. Sodium sampling was carried out at the required frequency as per ODWQS. Refer to Section 3.3. Sodium analysis data is located in **Appendix H**.

### **5.1 Angus Water System**

**Table 8** documents all Adverse Water Quality Incidences (AWQI's) for the Angus water system from January 1, 2005 to December 31, 2005.

From January 1, 2005 to December 31, 2005, the Angus water system used a total of 4680.6 m<sup>3</sup> of water with a maximum day demand of 49 m<sup>3</sup> and averaged 12.8 m<sup>3</sup>/day . The Permit to Take Water (PTTW) allows for a maximum day demand of 131 m<sup>3</sup>/day. The total water usage, including maximum day and average day demand, are consistent with historical values and do not violate the Permit to Take Water.

During the 2005 calendar year, the Angus water system required 216.9 L of Sodium Hypochlorite (NaOCl) with an average dosage of 5.88 mg/L. Following the injection of NaOCl, sodium silicate is added to the water to sequester such naturally occurring elements as Iron and Manganese. The Angus water system required 149.9 L of Sodium Silicate with an average dosage of 12.77 mg/L. The volume and dosage of both NaOCl and Silicate are reasonable considering the volume of water that was treated and sequestered. Refer to **Table 9**.

Both the NaOCl and the Silicate are NSF 60 approved. Refer to **Appendix N** for their NSF 60 Approval.

### **5.2 Osler Pines Water System**

**Table 9** documents all non-compliance for the Pines water system from January 1, 2005 to December 31, 2005.

From January 1, 2005 to December 31, 2005, the Osler Pines water system pumped a total of 2,613.8 m<sup>3</sup> of raw water into the reservoir to be chlorinated. The well experienced an average day demand of 7.2 m<sup>3</sup>/day and had a maximum day demand of 49.7 m<sup>3</sup>/day. The total volume of water chlorinated and supplied to the distribution system was 2,547 m<sup>3</sup>. The distribution system experienced an average day demand of 7 m<sup>3</sup>/day and had a maximum day demand of 42.4 m<sup>3</sup>/day. It should be noted that there are two (2) production wells for the Osler Pines water system, however, only Well 1 is in production.

The Permit to Take Water (PTTW) for Well 1 was not exceeded. The average daily demand and the maximum daily demand were consistent with historical values.

The Osler Pines water system required a total of 296.7 L of Sodium Hypochlorite (NaOCl) with an average dosage of 14.78 mg/L. Refer to **Table 10**. NaOCl is added to disinfect the water provided to the distribution system. The system also required 41 L of Sodium Silicate with an average dosage of 6.42 mg/L. Sodium Silicate is added to sequester any naturally occurring elements such as Iron or Manganese. The volume and dosage of NaOCl is higher than expected. The sodium silicate however, is of a reasonable volume and had a reasonable average dosage considering the volume of water that was treated. Refer to **Table 10**.

The Certificate of Approval (C of A) requires that raw water sampling be completed quarterly for various parameters from the production well. This was completed. Refer to **Appendix I**.

Both the NaOCl and the Silicate are NSF 60 approved. Refer to **Appendix N** for their NSF 60 Approval.

### **5.3 Oslerview Water System**

There were no Adverse Water Quality Incidences (AWQI) during 2005 for Oslerview.

From January 1, 2005 to December 31, 2005, the Oslerview water system pumped a total of 7359.6 m<sup>3</sup> into the reservoir. The well experienced an average day demand of 20.2 m<sup>3</sup>/day and a maximum day demand of 70.7 m<sup>3</sup>/day. The Oslerview water system treated and provided 6835.5 m<sup>3</sup> of water to the distribution system during the monitoring period. The distribution system averaged 18.7 m<sup>3</sup>/day and had a maximum day demand of 71.3 m<sup>3</sup>/day. The Permit to Take Water (PTTW) for Well 1 allows for a maximum day withdrawal of 54 m<sup>3</sup>/day (10 IGPM) and the PTTW for Well 2 has a maximum day withdrawal of 108 m<sup>3</sup>/day (20 IGPM). It should be noted that at this time only Well 2 is in operation. The PTTW was not exceeded this year and the average flow as well as the maximum day demand were consistent with historical values.

The Oslerview water system required a total of 578.8 L of Sodium Hypochlorite (NaOCl) with an average dosage of 11.05 mg/L. The system also required 185.2 L of Sodium Silicate with an average dosage of 11.12 mg/L. NaOCl is added to disinfect the water, while Sodium Silicate is added to sequester any naturally occurring elements such as Iron or Manganese. Both volume and dosage for both chemicals is slightly high considering the volume of water that was treated. Refer to **Table 10**.

Both the NaOCl and the Silicate are NSF 60 approved. Refer to **Appendix M** for their NSF 60 Approval.

#### **5.4 Regulation 170/03, Section 11 – Annual Report**

Part III - Form 2 was submitted electronically. Refer to **Appendix K**.

##### **Section 11 (6) (a) of O.Reg 170/03**

Refer to **Section 2** of this report, titled “Description of Water System”.

##### **Section 11 (6) (b) of O.Reg 170/03**

Refer to **Section 5.0** of this report, titled “Compliance with Terms and Conditions of the Certificate of Approval.”

##### **Section 11 (6) (c) of O.Reg 170/03**

Refer to **Tables 1-9** of this report.

##### **Section 11 (6) (d) of O.Reg 170/03**

Refer to **Section 5.1** through **Section 5.4** of this report.

##### **Section 11 (6) (e) of O.Reg 170/03**

The only major expense incurred during the period covered by this report was the preparation of the Engineers Evaluation Reports.

##### **Section 11 (6) (f) of O.Reg 170/03**

This report was prepared as per Section 11 of Regulation 170/03 and a copy of the report can be viewed at either the offices of Oweson Water Services, at 945 Third Avenue East, Suite 230, Owen Sound, Ontario N4K 2K8, or at the Osler Bluff Ski Club.

##### **Section 11 (9) (1) of O.Reg 170/03**

Once this report has been presented to the Owner (Osler Bluff Ski Club), the Owner will take all reasonable steps to notify all users of the system that the report is complete and where it may be viewed.

##### **Section 11 (11) of O.Reg 170/03**

1. There are no known public or designated facilities served by these three (3) facilities.
2. There are no known children’s camps served by these three (3) facilities.
3. There are no known senior’s residences served by these three (3) facilities.

## **6.0 CONSTRUCTION IMPROVEMENTS**

There were no major upgrades to any of the three (3) systems during 2005.

## **7.0 RESPONSE TO INSPECTION REPORT**

The 2001 Annual Inspection Report was completed verbally over the telephone. The MOE Inspector reviewed the 2001 Annual Compliance Report for the Osler Bluff Ski Club and called to discuss any questions or concerns.

The only concern expressed at that time was an invalid PTTW for Angus.

There was no inspection during 2002, 2003, 2004 or 2005.

An application has been submitted for the renewal of the PTTW for the Oslerview system. At the time of writing this report, no renewal has been received.

## **8.0 CONCLUSIONS AND RECOMMENDATIONS**

1. Sampling and analysis should be completed as per Schedules 8, 11 and 13.
2. As per discussions between Henderson Paddon & Associates Limited and the Ministry of the Environment, Barrie District Office. The appropriate compliance date for a non-Municipal, Year-Round, Residential System, for Schedule 2 of O.Reg 170/03, Treatment of Equipment is December 31, 2005. As a result, turbidities >1 NTU have not been reported.
3. The Ministry of the Environment, Barrie District Office, clarified their position on this issue, so that the Osler Bluff Ski Club can ensure compliance with the appropriate date and all appropriate non-compliance issues can be reported.
4. All water meters should be calibrated by September 27, 2006.
5. Sodium and Fluoride samples should be collected and analyzed from all three (3) pumphouses by November 16, 2006.
6. The PTTW for Oslerview expires March 31, 2006 and the PTTW for Angus and Osler Pines expires on July 31, 2014.
7. An Engineers Evaluation Report has been completed and submitted for Angus and Oslerview.

Respectfully submitted:

**OWESON WATER SERVICES**  
*(a division of Oweson Ltd.)*

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Geoff Aitken, A.Sc.T.  
Compliance Manager  
GWA/tah

**APPENDIX A**

Treated Water Flows, Turbidity and Disinfectant Residual

**APPENDIX B**

Bacteriological Sampling & Analysis

**APPENDIX C**

Quarterly and Annual Sampling and Analysis

**APPENDIX D**

Selected MOE Correspondence

**APPENDIX E**

Certificates of Approval (C of A)  
Angus and Osler Pines

**APPENDIX F**

Permit to Take Water (PTTW)

Angus  
Osler Pines  
Oslerview

**APPENDIX G**

Water Well Records

**APPENDIX H**

60 Month Sampling

**APPENDIX I**

Osler Pines - Quarterly Raw Water Sampling

**APPENDIX J**

Annual Record of Water Taking

**APPENDIX K**

Part III - Form 2  
(submitted electronically)

**APPENDIX L**

Water Meter Calibration

**APPENDIX M**

NSF 60 Approval