



Ripley Sewage Treatment Plant

2010 Compliance and Operations Record

Ripley Sewage Treatment Plant

Certificate of Approval # 3-0724-88-006 Compliance

Since Jan 2005, Veolia Water Canada (VWC) has operated the Ripley Sewage Treatment Plant.

The sewage pumping station is located on Lot 56, Plan 100, north of Park St. The sewage treatment works is on part of Lot 14, Concession VII, Township of Huron. The sewage treatment works consists of waste stabilization ponds, post aeration cell, and a sub-surface diffused air aeration system. The final effluent is discharge into the South Pine River.

During 2010, the Ripley STP was consistently below the Non-Compliance Limits as set forth in the C of A.

Condition 3. (1), (5), (6), (7), (8) Compliance Limits

Compliance limits as determined by the C of A are tabulated in the "Compliance Summary" along with the average monthly values.

Condition 3. (2) Average flows for the year not to exceed 380 m³ per day.

The annual average daily raw sewage flow was 307.72 m³.

Condition 3. (4) Unionized ammonia concentration not to exceed 0.02mg/L

The unionized ammonia was calculated per Provincial Water Quality Objectives.

Condition 4. Final Effluent Sampling

Sampling was carried out weekly during the discharge periods.

Discharging began on April 14 until April 30, 2010, with a discharge flow of 17,692 m³.

Also on October 25, the fall discharging began until December 2, 2010 with a total volume of 79,745 m³.

Cell # 3 contents and upstream were sampled to discharge and quality was found acceptable.

The final sampling that was done on December 2, 2010 had an exceedance in Total Suspended Solids with the result of 32 mg/L. The E-coli was also in exceedance on this sample of 600 cfu/100ml.

Condition 5. Raw Sewage Sampling

Sampling was carried out on a biweekly basis for the required parameters. A composite sample was taken every other month.

Condition 9. (3) (d) (e) Bypass and Maintenance Events

Regular daily checks and readings were taken as required. No Bypasses and no major maintenance events except for the following.

On August 17, 2010, Kim and Bill Dineen were on site to retrieve pump # 2. They entered the wetwell and pulled the pump out, They installed a new chain and reinstalled pump. They then put the pump on duty.

Calibration reports can be found in "Appendix C".

Condition 10.(3) Annual Report

The daily tabulations for Raw Effluent can be found in the monthly summaries under "Appendix D".

10. The Commission shall have the authority to issue orders to any person who is a party to a proceeding under this Act, or to any person who is in possession or control of any property or interest in property which is the subject of a proceeding under this Act, or to any person who is in possession or control of any information which is the subject of a proceeding under this Act, or to any person who is in possession or control of any document which is the subject of a proceeding under this Act, or to any person who is in possession or control of any other property or interest in property which is the subject of a proceeding under this Act, or to any person who is in possession or control of any other information which is the subject of a proceeding under this Act, or to any person who is in possession or control of any other document which is the subject of a proceeding under this Act, or to any person who is in possession or control of any other property or interest in property which is the subject of a proceeding under this Act, or to any person who is in possession or control of any other information which is the subject of a proceeding under this Act, or to any person who is in possession or control of any other document which is the subject of a proceeding under this Act.

Appendix A

Compliance & Summary Reports

Appendix B
Final Effluent Monthly Reports

April 2010

Ripley Logsheet

	Daily Com	Totalizer	Flow m3	Blower Total	Cell Depth #2 M	Cell Depth #3 M	Discharge DO	Discharge Temp	Discharge PH	Upstream Discharge DO	Upstream Discharge Temp
1 Thu											
2 Fri											
3 Sat											
4 Sun											
5 Mon											
6 Tue											
7 Wed											
8 Thu											
9 Fri											
10 Sat											
11 Sun											
12 Mon											
13 Tue											
14 Wed		6294377.00	0	7111.68	1.22	1.37					
15 Thu		6295606.00	1229	7111.68	1.23	1.17	12.36	17.20	8.14	10.46	14.30
16 Fri		6296534.00	929	7111.68	1.21	1.14					
17 Sat		6297886.00	1352	7111.68							
18 Sun		6299333.00	1447	7111.68							
19 Mon		6300601.00	1268	7111.68	1.22	1.04					
20 Tue		6301705.00	1104	7111.68	1.24	1.00					
21 Wed		6302858.00	1153	7111.68	1.23	0.98	13.69	13.90	8.94	10.89	14.10
22 Thu		6303916.00	1088	7111.68	1.23	0.95					
23 Fri		6305023.00	1107	7111.68	1.25	0.91					
24 Sat		6306012.00	989	7111.68							
25 Sun		6307068.00	1056	7111.68							
26 Mon		6308100.00	1092	7111.68	1.25	0.85					
27 Tue		6308938.00	898	7111.68	1.31	0.72					
28 Wed		6310115.00	1177	7111.68	1.22	0.77					
29 Thu		6311327.00	1212	7111.68	1.56	0.97	12.20	10.20	9.61	10.30	12.20
30 Fri		6312069.00	742	7111.68	1.60	1.00					
MIN		6,294,377.00	0	7,111.68	1.21	0.72	12.20	10.20	8.14	10.30	12.20
MAX		6,312,069.00	1,447	7,111.68	1.60	1.37	13.69	17.20	9.61	10.89	14.30
AVG		6,303,615.76	1,041	7,111.68	1.29	0.99	12.75	13.77	8.90	10.55	13.53
SUM		107,161,468.00	17,692	120,898.56	16.77	12.87	38.25	41.30	26.69	31.65	40.60

April 2010

Ripley Logsheet

	Daily Com	Upstream Discharge PH	Dowstream Discharge DO	Dowstream Discharge Temp	Dowstream Discharge PH	Stream Flows CMS	Discharge Rate
1 Thu							
2 Fri							
3 Sat							
4 Sun							
5 Mon							
6 Tue							
7 Wed							
8 Thu							
9 Fri							
10 Sat							
11 Sun							
12 Mon							
13 Tue							
14 Wed						1934.000	
15 Thu		7.80	10.70	15.20	8.14	1936.000	
16 Fri						1940.000	
17 Sat						1938.000	
18 Sun						1936.000	
19 Mon						1931.000	
20 Tue						1928.000	
21 Wed		8.08	11.00	11.90	8.04	1932.000	
22 Thu						1926.000	
23 Fri						1921.000	
24 Sat						1922.000	
25 Sun						1924.000	
26 Mon						1928.000	
27 Tue						1918.000	
28 Wed						1905.000	
29 Thu		8.13	10.80	10.10	7.93	1899.000	
30 Fri						1899.000	
MIN		7.80	10.70	10.10	7.93	1,899.000	
MAX		8.13	11.00	15.20	8.14	1,940.000	
AVG		8.00	10.83	12.40	8.04	1,924.529	
SUM		24.01	32.50	37.20	24.11	32,717.000	

October 2010

Ripley Logsheet

	Daily Com	Totalizer	Flow m3	Blower Total	Cell Depth #2 M	Cell Depth #3 M	Discharge DO	Discharge Temp	Discharge PH	Upstream Discharge DO	Upstream Discharge Temp
1 Fri											
2 Sat											
3 Sun											
4 Mon											
5 Tue					1.11	1.48				11.50	11.00
6 Wed											
7 Thu											
8 Fri											
9 Sat											
10 Sun											
11 Mon											
12 Tue											
13 Wed											
14 Thu					1.14	1.48					
15 Fri											
16 Sat											
17 Sun											
18 Mon											
19 Tue											
20 Wed											
21 Thu											
22 Fri					1.13	1.48					
23 Sat											
24 Sun											
25 Mon		6312258.00	0	7111.68	1.11	1.49					
26 Tue		6315417.00	3159	7111.68	1.11	1.43					
27 Wed		6318039.00	2622	7111.68	1.11	1.35	9.18	13.20	9.18	9.08	12.60
28 Thu		6320922.00	2889	7111.68	1.00	1.31					
29 Fri		6322910.00	1988	7111.68	1.10	1.25					
30 Sat											
31 Sun											
MIN		6,312,258.00	0	7,111.68	1.00	1.25	9.18	13.20	9.18	9.08	11.00
MAX		6,322,910.00	3,159	7,111.68	1.14	1.49	9.18	13.20	9.18	11.50	12.60
AVG		6,317,909.20	2,130	7,111.68	1.10	1.41	9.18	13.20	9.18	10.29	11.80
SUM		31,589,546.00	10,652	35,558.40	8.81	11.27	9.18	13.20	9.18	20.58	23.60

October 2010

Ripley Logsheet

	Daily Com	Upstream Discharge PH	Dowstream Discharge DO	Dowstream Discharge Temp	Dowstream Discharge PH	Stream Flows CMS	Discharge Rate
1 Fri							
2 Sat							
3 Sun							
4 Mon							
5 Tue		7.96				15.740	
6 Wed							
7 Thu							
8 Fri							
9 Sat							
10 Sun							
11 Mon							
12 Tue							
13 Wed							
14 Thu						1563.000	
15 Fri							
16 Sat							
17 Sun							
18 Mon							
19 Tue							
20 Wed						1887.000	
21 Thu							
22 Fri						1904.000	
23 Sat							
24 Sun							
25 Mon						2103.000	3400.00
26 Tue						2047.000	2600.00
27 Wed		7.73	9.50	12.50	7.85	2072.000	3000.00
28 Thu						2022.000	2000.00
29 Fri						1995.000	1900.00
30 Sat							
31 Sun							
MIN		7.73	9.50	12.50	7.85	15.740	1,900.00
MAX		7.96	9.50	12.50	7.85	2,103.000	3,400.00
AVG		7.85	9.50	12.50	7.85	1,734.304	2,580.00
SUM		15.69	9.50	12.50	7.85	15,608.740	12,900.00

November 2010

Ripley Logsheet

	Daily Com	Totalizer	Flow m3	Blower Total	Cell Depth #2 M	Cell Depth #3 M	Discharge DO	Discharge Temp	Discharge PH	Upstream Discharge DO	Upstream Discharge Temp
1 Mon	6327617.00	4707	7111.68	1.13	1.10						
2 Tue	6329012.00	1335	7111.68	1.13	1.11						
3 Wed	6330498.00	1485	7111.68	1.14	0.94						
4 Thu	6331705.00	1207	7111.68	1.14	1.10	9.87	7.80	7.84	11.18	6.80	
5 Fri	6333048.00	1343	7111.68	1.29	1.17						
6 Sat											
7 Sun											
8 Mon	6338386.00	5338	7111.68	1.44	1.15						
9 Tue	6340030.00	1644	7111.68	1.47	1.13						
10 Wed	6341439.00	1405	7111.68	1.48	1.11	10.87	6.60	8.07	11.62	5.30	
11 Thu	6342734.00	1235	7111.68	1.50	1.11						
12 Fri	6344158.00	1424	7111.68	1.52	1.09						
13 Sat											
14 Sun											
15 Mon	6348020.00	3682	7111.68	1.57	1.04						
16 Tue	6349372.00	1952	7111.68	1.58	1.02						
17 Wed	6350556.00	1164	7111.68	1.55	1.01	10.81	7.20	8.11	10.42	7.40	
18 Thu	6353747.00	3191	7111.68	1.59	0.99						
19 Fri	6359075.00	5325	7111.68	1.60	1.00						
20 Sat	6360289.00	1214	7111.68	1.50	0.98						
21 Sun	6362549.00	2260	7111.68	1.50	0.97						
22 Mon	6364257.00	1708	7111.68	1.72	0.88						
23 Tue	6366794.00	2537	7111.68	1.70	0.90						
24 Wed	6370863.00	4069	7111.68	1.75	0.81	10.61	4.60	8.05	11.39	5.20	
25 Thu	6375334.00	4471	7111.68	1.70	0.80						
26 Fri	6379114.00	3760	7111.68	1.81	0.76						
27 Sat											
28 Sun											
29 Mon	6391298.00	12184	7111.68	1.81	0.48						
30 Tue	6391691.00	393	7111.68								
MIN	6,327,617.00	393	7,111.68	1.13	0.48	9.87	4.60	7.84	10.42	5.20	
MAX	6,391,691.00	12,184	7,111.68	1.81	1.17	10.87	7.80	8.11	11.62	7.40	
AVG	6,353,399.42	2,866	7,111.68	1.51	0.98	10.54	6.55	8.02	11.15	6.18	
SUM	152,481,586.00	68,781	170,680.32	34.62	22.65	42.16	26.20	32.07	44.61	24.70	

November 2010

Ripley Logsheets

	Daily Com	Upstream Discharge PH	Dowstream Discharge DO	Dowstream Discharge Temp	Dowstream Discharge PH	Stream Flows CMS	Discharge Rate
1 Mon						1950.000	1600.00
2 Tue						1936.000	1600.00
3 Wed						1943.000	1500.00
4 Thu		7.82	11.11	6.90	7.85	1956.000	1550.00
5 Fri						1990.000	1600.00
6 Sat							1900.00
7 Sun							
8 Mon						1958.000	1650.00
9 Tue						1948.000	1580.00
10 Wed		8.07	11.56	6.00	7.98	1932.000	1500.00
11 Thu						1932.000	1500.00
12 Fri						1921.000	1425.00
13 Sat							
14 Sun							
15 Mon						1932.000	1500.00
16 Tue						1925.000	1420.00
17 Wed		7.79	10.96	7.10	7.90	2516.000	4200.00
18 Thu						2235.000	4200.00
19 Fri						2114.000	2000.00
20 Sat						2103.000	2400.00
21 Sun						2067.000	2400.00
22 Mon						2056.000	2750.00
23 Tue						3125.000	4200.00
24 Wed		7.88	11.62	4.70	7.92	2333.000	4200.00
25 Thu						2194.000	4200.00
26 Fri						2474.000	4200.00
27 Sat							
28 Sun							
29 Mon						2117.000	450.00
30 Tue						2367.000	300.00
MIN		7.79	10.96	4.70	7.85	1,921.000	300.00
MAX		8.07	11.62	7.10	7.98	3,125.000	4,200.00
AVG		7.89	11.31	6.18	7.91	2,126.000	2,233.00
SUM		31.56	45.25	24.70	31.65	51,024.000	55,825.00

December 2010

Ripley Logsheet

	Daily Conn	Totalizer	Flow m3	Blower Total	Cell Depth #2 M	Cell Depth #3 M	Discharge DO	Discharge Temp	Discharge PH	Upstream Discharge DO	Upstream Discharge Temp
1	Wed	6391808.00	117	7111.68							
2	Thu	6292003.00	195	7111.68							
3	Fri										
4	Sat										
5	Sun										
6	Mon										
7	Tue										
8	Wed										
9	Thu										
10	Fri										
11	Sat										
12	Sun										
13	Mon										
14	Tue										
15	Wed										
16	Thu										
17	Fri										
18	Sat										
19	Sun										
20	Mon										
21	Tue										
22	Wed										
23	Thu										
24	Fri										
25	Sat										
26	Sun										
27	Mon										
28	Tue										
29	Wed										
30	Thu										
31	Fri										
MIN		6,292,003.00	117	7,111.68	-	-	-	-	-	-	-
MAX		6,391,808.00	195	7,111.68	-	-	-	-	-	-	-
AVG		6,341,905.50	156	7,111.68	-	-	-	-	-	-	-
SUM		12,683,811.00	312	14,223.36	-	-	-	-	-	-	-

December 2010

Ripley Logsheet

	Daily Com	Upstream Discharge PH	Dowstream Discharge DO	Dowstream Discharge Temp	Dowstream Discharge PH	Stream Flows CMS	Discharge Rate
1	Wed					2548.000	600.00
2	Thu					2338.000	400.00
3	Fri						
4	Sat						
5	Sun						
6	Mon						
7	Tue						
8	Wed						
9	Thu						
10	Fri						
11	Sat						
12	Sun						
13	Mon						
14	Tue						
15	Wed						
16	Thu						
17	Fri						
18	Sat						
19	Sun						
20	Mon						
21	Tue						
22	Wed						
23	Thu						
24	Fri						
25	Sat						
26	Sun						
27	Mon						
28	Tue						
29	Wed						
30	Thu						
31	Fri						
MIN		-	-	-	-	2,338.000	400.00
MAX		-	-	-	-	2,548.000	600.00
AVG		-	-	-	-	2,443.000	500.00
SUM		-	-	-	-	4,886.000	1,000.00

INSTRUMENTATION CALIBRATION REPORT

CUSTOMER INFORMATION

Customer Veolia Water
 City/Town Ripley ON
 Customer PO
 Our Job # B13 6708

R&R Instrumentation Services Inc

24 Midale Crescent
 London ON N5X 3B9
 Phone (519) 642-7197; Fax: (519) 642 1311
 E-Mail: rthachuk@rrinstrumentation.com

UNIT UNDER TEST (UUT)

Tag # FIT/FQ 01
 Cal Date Aug. 24/10
 Due Date Aug. 24/11
 Cal Freq Yearly
 Location PS (near lagoon)
 Description Flow Transmitter/Integrator
 Manufacturer Milltronics
 Model Multiranger+
 Serial # N/A
 Accuracy 5%
 Range
 Pump #1 Run 19.33 L/s
 Time 1 Pump cycle off 2.8; on 2.2 2 min. 35 s .17s

MEASURING EQUIPMENT

Manufacturer Prosonic
 Model 93
 Serial # 570B6E19000
 Cal Due Date
 Cal Reference E + H
 Traceability NIST
 Accuracy .5%
 Prosonic 93 Par.
 Traverse 2x
 Pipe OD 168.28 mm
 Pipe Thickness 3.484 mm
 Pipe Mat SS
 Dis. Sensors D 29

INPUT m ³	OUTPUT-AAV m ³ /D	UUT READING AS FOUND	UUT READING AS LEFT	Meter Acc AS FOUND	Meter Acc AS LEFT
Prosonic 93 m ³					
0.000	0.000	0	0	0.00	0.00
3.977	3.977	3	3	75.43	75.43
3.424	3.424	4	4	116.82	116.82
7.401	7.401	7	7	94.58	94.58

Prosonic 93 L/s	Time in sec	m ³	FIT 01 L/s	FQ 01
Pump #1 Cycle 1				
20.32	188.61	3.83	18.74	3
Pump #1 Cycle 2				
20.81	157.32	3.29	18.94	3

*Actual Applied Value

% Error = $\frac{\text{UUT Reading} - \text{AAV}}{\text{Span}} \times 100$

Test Unit Results

AS FOUND	AS LEFT
Pass:	Pass:
Fail: x	Fail: x

TECHNICIAN'S NOTES
 Poor resolution on Totalizer

CERTIFIED BY:



CET, CCST Level III Technician

INSTRUMENTATION CALIBRATION REPORT**CUSTOMER INFORMATION**

Customer Veolia Water
 City/Town Ripley ON
 Customer PO
 Our Job # B13 6708

R&R Instrumentation Services Inc
 24 Midale Crescent
 London ON N5X 3B9
 Phone (519) 642-7197; Fax: (519) 642 1311
 E-Mail: rthachuk@rrinstrumentation.com

UNIT UNDER TEST (UUT)

Tag # FIT/FQ 01
 Cal Date Aug. 24/10
 Due Date Aug. 24/11
 Cal Freq Yearly
 Location PS
 Description Flow Transmitter/Integrator
 Manufacturer Milltronics
 Model Multiranger+
 Serial # N/A
 Accuracy 10%
 Range

MEASURING EQUIPMENT

Manufacturer Math Calculation Tape Measure
 Model
 Serial #
 Cal Due Date
 Cal Reference
 Traceability
 Accuracy 1/4"

Volume Calculations
 $V = A \times H$
 Area = 4.35 m²
 Head = .60 m
 Vol. = 2.61 m
 Rate of Change 0.06

Math Calculations		Pump Totals	
Pump #1	Cycle 1	Multiranger Total	
Flow Total = Fixed Volume + (Area x Rate of Change x Time)		Low Total	6957
= 2.61 + (4.35 x 0.06 x 3.14)			<u>6954</u>
= 3.43 m ³			3
		Meters to Litre	1000
		Time	188.61
		Pump Flow Rate	15.91 L/s
Pump #1	Cycle 2	Multiranger Total	
Flow Total = Fixed Volume + (Area x Rate of Change x Time)		Low Total	6961
= 2.61 + (4.35 x 0.06 x 2.64)			<u>6957</u>
= 3.30 m ³			4
		Meters to Litre	1000
		Time	180.00
		Pump Flow Rate	22.22 L/s

Test Unit Results

AS FOUND	AS LEFT
Pass:	Pass:
Fail: x	Fail: x

TECHNICIAN'S NOTES

CERTIFIED BY:



CET, CCST Level III Technician

INSTRUMENTATION CALIBRATION REPORT**CUSTOMER INFORMATION**

Customer Veolia Water
 City/Town Ripley ON
 Customer PO
 Our Job # B13 6708

R&R Instrumentation Services Inc

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 London ON N5X 3B9
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UNIT UNDER TEST (UUT)

Tag # FIT/FQ 01
 Cal Date Aug. 24/10
 Due Date Aug. 24/11
 Cal Freq Yearly
 Location PS (near lagoon)
 Description Flow Transmitter/Integrator
 Manufacturer Milltronics
 Model Multiranger+
 Serial # N/A
 Accuracy 5%
 Range
 Pump #1 Run 19.33 L/s
 Time 1 Pump cycle off 2.8; on 2.2 2 min. 35 s .17s

MEASURING EQUIPMENT

Manufacturer Prosonic
 Model 93
 Serial # 570B6E19000
 Cal Due Date
 Cal Reference E + H
 Traceability NIST
 Accuracy .5%
 Prosonic 93 Par.
 Traverse 2x
 Pipe OD 168.28 mm
 Pipe Thickness 3.484 mm
 Pipe Mat SS
 Dis. Sensors D 29

INPUT m ³		OUTPUT*AAV V.m ³ /D	UUT READING AS FOUND	UUT READING AS LEFT	Meter Acc AS FOUND	Meter Acc AS LEFT
Prosonic 93 m ³						
0.000		0.000	0.00	0.00	0.00	0.00
3.495	Cycle 3	3.495	3.53	3.53	101.00	101.00
3.480	Cycle 4	3.480	3.73	3.73	107.18	107.18
6.975	Total 3 & 4	6.975	7.26	7.26	104.09	104.09

Prosonic 93 L/s Pump #1 Cycle 3	Time in sec	m ³	FIT 01 L/s	FQ 01
20.32	188.61	3.83	18.72	3.53
Pump #1 Cycle 4				
20.81	180.01	3.75	20.72	3.73

*Actual Applied Value

% Error = $\frac{\text{UUT Reading} - \text{AAV}}{\text{AAV}} \times 100$
Span**Test Unit Results**

AS FOUND	AS LEFT
Pass: ✓	Pass: ✓
Fail:	Fail:

TECHNICIAN'S NOTES

CERTIFIED BY:



CET, CCST Level III Technician

INSTRUMENTATION CALIBRATION REPORT

CUSTOMER INFORMATION

Customer: Veolia Water
 City/Town: Ripley ON
 Customer PO:
 Our Job #: B13 6708

R&R Instrumentation Services Inc
 24 Midale Crescent
 London ON N5X 3B9
 Phone (519) 642-7197; Fax: (519) 642 1311
 E-Mail: rthachuk@rrinstrumentation.com

UNIT UNDER TEST (UUT)

Tag #: FIT 06
 Cal Date: Aug. 24/10
 Due Date: Aug. 24/11
 Cal Freq: Yearly
 Location: Lagoon
 Description: Flow Ind. Transmitter
 Manufacturer: Milltronics
 Model: Multiranger+
 Serial #:
 Accuracy: 2%
 Range: 0 - 416.6 m³/hr; 0 - 37.103 cm
 Empty Dist: 185.0 cm
 Span: 37.1 cm

MEASURING EQUIPMENT

Manufacturer: Spare Sensor & Tape
 Model:
 Serial #:
 Cal Due Date:
 Cal Reference:
 Traceability:
 Accuracy: 1/4"

INPUT cm WC	meters WC	OUTPUT*AAV m ³ /hr	UUT READING AS FOUND	UUT READING AS LEFT	% ERROR AS FOUND	% ERROR AS LEFT
5.27	0.0527	3.17	3.17	3.17	0.00	0.00
15.86	0.1586	49.78	48.03	48.03	-0.42	-0.42
30.39	0.3039	252.99	253.00	253.00	0.00	0.00
43.06	0.4306	604.58	607.10	607.10	0.60	0.60
31.760	0.3176	282.47	282.00	282.00	-0.11	-0.11
37.103	0.3710	416.67				

*Actual Applied Value

% Error = $\frac{\text{UUT Reading} - \text{AAV}}{\text{Span}} \times 100$

Test Unit Results

AS FOUND	AS LEFT
Pass: ✓	Pass: ✓
Fail:	Fail:

TECHNICIAN'S NOTES
 Calibrated transmitter using spare sensor.

CERTIFIED BY:



CET, CCST Level III Technician

INSTRUMENTATION CALIBRATION REPORT

CUSTOMER INFORMATION

Customer: Veolia Water
 City/Town: Ripley ON
 Customer PO:
 Our Job #: B13 6708

R&R Instrumentation Services Inc
 24 Midale Crescent
 London ON N5X 3B9
 Phone (519) 642-7197; Fax: (519) 642 1311
 E-Mail: rthachuk@rriinstrumentation.com

UNIT UNDER TEST (UUT)

Tag #: FQ 06/FQ 06A
 Cal Date: Aug. 24/10
 Due Date: Aug. 24/11
 Cal Freq: Yearly
 Location: Lagoon
 Description: Flow Integrator
 Manufacturer: Milltronics
 Model: Multiranger+
 Serial #:
 Accuracy: 2%
 Range: 0 - 416.6 m³/hr; 0 - 6.945 PPM
 90° V Notch Weir

MEASURING EQUIPMENT

Manufacturer: Monarch
 Model: Tach 4AR
 Serial #: 1130705
 Cal Due Date:
 Cal Reference: TechniCAL
 Traceability: NIST
 Accuracy: .0001

INPUT m ³ /hr	%	OUTPUT-AAV PPM	UUT READING AS FOUND	UUT READING AS LEFT	% ERROR AS FOUND	% ERROR AS LEFT
3.17		0.053	0.054	0.054	0.01	0.01
49.78		0.830	0.834	0.834	0.06	0.06
252.99		4.217	4.225	4.225	0.12	0.12
416.7		6.9450				
Red Lyon	FQ 06A					
0.00		0.000	0.000	0.000	0.00	0.00
*Actual Applied Value					% Error = $\frac{\text{UUT Reading} - \text{AAV}}{\text{Span}} \times 100$	

Test Unit Results

AS FOUND	AS LEFT
Pass: ✓	Pass: ✓
Fail:	Fail:

TECHNICIAN'S NOTES

CERTIFIED BY:



CET, CCST Level III Technician

INSTRUMENTATION CALIBRATION REPORT

CUSTOMER INFORMATION

Customer Veolia Water
 City/Town Ripley ON
 Customer PO
 Our Job # B13 6708

R&R Instrumentation Services Inc

24 Midale Crescent
 London ON N5X 3B9
 Phone (519) 642-7197; Fax: (519) 642 1311
 E-Mail: rthachuk@rrinstrumentation.com

UNIT UNDER TEST (UUT)

Tag # FE 06
 Cal Date Aug. 24/10
 Due Date Aug. 24/11
 Cal Freq Yearly
 Location Lagoon
 Description Flow Element
 Manufacturer
 Model
 Range 0 - 416.6 m³/hr: 0 - 37.1 cm
 Floor Reading -66.35 to -66.73 with no sand on floor
 No flow

MEASURING EQUIPMENT

Manufacturer Gauge Board & Tape
 Model
 Serial #
 Cal Due Date
 Cal Reference
 Traceability
 Accuracy

NO.	CHECKED	CALIBRATION CHECKS FOR WIERS AND FLUMES
1	No	Check weir with no flow to see if level transmitter output 4mA
2	✓	Check span using gauge board at 5 different levels.
3	✓	Check cleanliness of weir or flume.
4	✓	Check for hydrostatic head.
5	N/A	Check for free flow for Parshall flume.
6	✓	Check for size of flume or weir.
7	No Flow	Check for turbulence.
8	✓	Check transmitter locaton
9		Description of measuring element: 90° V Notch Weir Comments:

CERTIFIED BY:  CET, CCST Level III Technician

MULTIRANGER+ REPORT

USER Veolia Water

DATE Aug. 2010

TAG # FIT 06

LOCATION Ripley Lagoon

JOB # B13 6708

PARAMETER #	AS FOUND	AS LEFT	PARAMETER #	AS FOUND	AS LEFT	PARAMETER #	AS FOUND	AS LEFT	PARAMETER #	AS FOUND	AS LEFT				
UNITS M, CM, FT, IN, %	1	2	2	PUMP 3 RUN HOURS	26	0.000	0.000	OCM SIMULATION	51	1981	1981	DISP/SIM READING	76	69.22	69.22
MODE L, S, B, T, OCM	2	5	5	PUMP 4 RUN HOURS	27	0.000	0.000	TOTAL SCALE FACTOR -3/7	52	0	0	DISP/SIM MAT'L CAL UNITS	77	69.220	69.220
EMPTY DIST. TO XDCR	3	185.0	185.0	PUMP 5 RUN HOURS	28	0.000	0.000	TOTAL DEC'L POS. 0,1,2, 3	53	1	1	DISP/SIM SPACE UNITS	78	115.8	115.8
SPAN	4	37.10	37.10	PUMP RUN ON INTERVAL HRS	29	0.000	0.000	LOW TOTAL	54	270.7	270.7	SCOPE DISPLAY	79		
NEAR BLANKING	5	30.00	30.00	PUMP RUN ON DURATION SEC	30	0	0	HIGH TOTAL	55	6312	6312	ECHO CONFIDENCE	80	0.6	0.6
mA, O/P, 0-20, 4-20, 20-4	6	2	2		31			RLY TOT SCALE FACTOR -3/7	56	-1	-1	CONFIDENCE LVL SHORT	81	10	10
DECIMAL POS. 0, 1, 2, 3	7	2	2	DLD MILLIAMP D.F	32	1	1	FLOW SAMPLE EXP FACTOR -3/7	57	0	0	CONFIDENCE LVL LONG	82	5	5
RELAY 1 MODE	8	0	0	INFLOW TOT. ADD, OMIT	33	1	1	FLOW SAMPLER MANTISSA 1/9.999	58	1.000	1.000	ECHO STRENGTH IN dB	83	14	14
RELAY 1 ON	9			TANK SHAPE 0,1,2,3,4,5,6,7,8,9	34	0	0	TIME SAMPLER HOURS	59			NOISE IN dB AVG-PEAK	84	2:10	2:10
RELAY 1 OFF	10			TANK DIM A	35	0.000	0.000	FULL CAL (AUTO ZERO)	60			ECHO PROCESS BEST, FST, LRG	85	1	1
RELAY 2 MODE	11	0	0	TANK DIM L	36	0.000	0.000	EMPTY CAL (AUTO VELOCITY)	61			TVI CURVE STAND, FLAT	86	1	1
RELAY 2 ON	12			CONVERT DISPLAY	37	1.000	1.000	MEASUREMENT OFFSET	62	0.000	0.000	FARE END BLANKING %	87	225	225
RELAY 2 OFF	13			DISPLAY OFFSET	38	0.000	0.000	VELOCITY @ 20C (344.1/1129)	63	344.1	344.1	# XMIT PULSE S S_L_SLL	88	4	4
RELAY 3 MODE	14	0	0	DEFAULT LCD HLD, HT, LT, HD, F, R	39	0	0	VELOCITY @ P65	64	345.2	345.2	SOFTWARE REV NO	89	15.8	15.8
RELAY 3 ON	15			OCM TYPE EXP PB H-FLUME R.P.	40	1	1	AIR TEMP IN °C	65	22	22	MEMORY TEST	90		
RELAY 3 OFF	16			OCM TIME UNITS S, M, H, D	41	3	3	MAX. AIR TEMP IN °C	66	22	22	HARDWARE TEST	91		
RELAY 4 MODE	17	0	0	OCM EXPONENT	42	2.500	2.500	MIN. AIR TEMP IN °C	67	0	0	mA O/P TEST	92	4.000	4.000
RELAY 4 ON	18			OCM FLUME DIMENSION	43	100.0	100.0	FILL DAMPING UNITS/MIN	68	1000	1000	TEMP SENSOR RESISTANCE	93	9.45	9.45
RELAY 4 OFF	19				44			EMPTY DAMPING UNITS/MIN	69	1000	1000	XMTR TEST	94		
RELAY 5 MODE	20	0	0	OCM MAX HEAD	45	37.10	37.10	PROCESS RATE DISPLAY	70	0.000	0.000	CALIBRATOR TEST	95		
RELAY 5 ON	21			OCM MAX FLOW	46	416.67	416.67	RATE FILTER AVG. 1, 5, 10 MIN	71	1	1	WATCHDOG RESET TEST	96		
RELAY 5 OFF	22			AUTO ZERO	47			FUZZ FILTER OFF/ON	72	1	1	TRIM 4 mA ABOUT 200	97	240	240
SUBMERSIBLES XDCR NO. YES	23	0	0	OCM LO HEAD CUTOFF % HD	48	1.000	1.000	AGITATOR OFF, ON	73	1	1	TRIM 20mA ABOUT 3499	98	3531	3531
PUMP 1 RUN HOURS	24	0.000	0.000	OCM FLO RATE DEC LOC 0,1,2,3	49	2	2	FAILSAFE HI, LO, HOL	74	3	3	MASTER RESET [C] [E]	99		
PUMP 2 RUN HOURS	25	0.000	0.000	OCM mA HEAD, FLOW	50	2	2	FS TIME XX MIN	75	15.00	15.00				

MULTIRANGER+ REPORT

USER Veolia Water

DATE Aug. 2010

TAG # FIT/FQ 01

LOCATION Ripley PS

JOB # B13 6708

PARAMETER #	AS FOUND	AS LEFT	PARAMETER #	AS FOUND	AS LEFT	PARAMETER #	AS FOUND	AS LEFT	PARAMETER #	AS FOUND	AS LEFT			
UNITS M, CM, FT, IN, %	1	1	PUMP 3 RUN HOURS	26	5395	5695	OCM SIMULATION	51			DISP/SIM READING	76	3.27	3.27
MODE L, S, D, P, OCM	2	4	PUMP 4 RUN HOURS	27	0.000	0.000	TOTAL SCALE FACTOR -3/7	52	0	0	DISP/SIM MAT'L CAL UNITS	77	0.75	0.75
EMPTY DIST. TO XDCR	3	3.300	PUMP 5 RUN HOURS	28	0.000	0.000	TOTAL DEC'L POS.0,1,2, 3	53	0	2	DISP/SIM SPACE UNITS	78	2.5	2.5
SPAN	4	3.000	PUMP RUN ON INTERVAL HRS	29	0.000	0.000	LOW TOTAL	54	6961	6961	SCOPE DISPLAY	79		
NEAR BLANKING	5	0.300	PUMP RUN ON DURATION SEC	30	0	0	HIGH TOTAL	55	0088	0088	ECHO CONFIDENCE	80	0:41	0:41
mA, O/P, 0-20, 4-20, 20-4	6	2		31			RLY TOT SCALE FACTOR -3/7	56	0	0	CONFIDENCE LVL SHORT	81	10	10
DECIMAL POS. 0, 1, 2, 3	7	2	DLI MILLIAMP D.F	32	1	1	FLOW SAMPLE EXP FACTOR -3/7	57	0	0	CONFIDENCE LVL LONG	82	5	5
RELAY 1 MODE	8	En 8	INFLOW TOT. ADD. OMIT	33	1	1	FLOW SAMPLER MANTISSA 1/9.999	58	1.000	1.000	ECHO STRENGTH IN dB	83	74	74
RELAY 1 ON	9	1.100	TANK SHAPE 0,1,2,3,4,5,6,7,8,9,	34	0	0	TIME SAMPLER HOURS	59			NOISE IN dB AVG:PEAK	84	-4.9	-4.9
RELAY 1 OFF	10	0.500	TANK DIM A	35	0.000	0.000	FULL CAL (AUTO ZERO)	60			ECHO PROCESS RESL FST, LRG	85	1	1
RELAY 2 MODE	11	EN 8	TANK DIM L	36	0.000	0.000	EMPTY CAL (AUTO VELOCITY)	61			TVT CURVE STAND,FLAT	86	1	1
RELAY 2 ON	12	1.500	CONVERT DISPLAY	37	4.350	4.870	MEASUREMENT OFFSET	62	0.000	0.000	PAR END BLANKING %	87	20	20
RELAY 2 OFF	13	0.500	DISPLAY OFFSET	38	0.000	0.000	VELOCITY @ 20C (344.1/1129)	63	344.1	344.1	# XMIT PULSE S S,L,SL	88	3	3
RELAY 3 MODE	14	En 8	DEFAULT LCD HLD,RT,L,T,HD,F, R	39	0	0	VELOCITY @ P55	64	341.8	341.8	SOFTWARE REV NO	89	13.0	13.0
RELAY 3 ON	15	0.900	OCM TYPE EXP PB H-FLUME R.P.	40	1	1	AIR TEMP IN °C	65	16	16	MEMORY TEST	90		
RELAY 3 OFF	16	0.850	OCM TIME UNITS S, M, H, D	41	4	4	MAX. AIR TEMP IN °C	66	16	16	HARDWARE TEST	91		
RELAY 4 MODE	17	0	OCM EXPONENT	42	1.550	1.550	MIN. AIR TEMP IN °C	67	16	16	mA O/P TEST	92	8.014	8.014
RELAY 4 ON	18		OCM FLUME DIMENSION	43	1.000	1.000	FILL DAMPING UNITS/MIN	68	500.0	500.0	TEMP SENSOR RESISTANCE	93	0.00	0.00
RELAY 4 OFF	19			44			EMPTY DAMPING UNITS/MIN	69	500.0	500.0	XMTR TEST	94		
RELAY 5 MODE	20	0	OCM MAX HEAD	45	3.000	3.000	PROCESS RATE DISPLAY	70	0.035	0.035	CALIBRATOR TEST	95		
RELAY 5 ON	21		OCM MAX FLOW	46	1000	1000	RATE FILTER AVG. 1, 5, 10 MIN	71	0	0	WATCHDOG RESET TEST	96		
RELAY 5 OFF	22		AUTO ZERO	47			FUZZ FILTER OFF/ON	72	1	1	TRIM 4 mA ABOUT 200	97	227	227
SUBMERSIBLES XDCR NO. YES	23	1	OCM LO HEAD CUTOFF % HD	48	5.000	5.000	AGITATOR OFF, ON	73	1	1	TRIM 20mA ABOUT 3490	98	3481	3481
PUMP 1 RUN HOURS	24	6257	OCM FLO RATE DEC LOC 0,1,2,3	49	2	2	FAILSAFE H, L.O, HOL	74	3	3	MASTER RESET [C] [E]	99		
PUMP 2 RUN HOURS	25	2461	OCM mA HEAD, FLOW	50	1	1	FS TIME XX MIN	75	15.00	15.00				

Appendix D
Monthly Summaries

Municipality: Huron Kinloss	Operating Authority: L. Cox: Project Manager Kevin Merian-Assistant Manager
Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 0 2 1 0 16 19	Days 2 8 20 21	Discharge Type 2 22	Update Code R 80
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C.P. 3 5 12 13	FLOWS	Parameter Code	Dec.	Monthly Results
	Total Flow (10 3 m3)	5 0 0 1 0 30 34	3 35	7.92 38
	Average Daily Flow (10 3 m3/d)	5 0 0 1 5 30 34	3 35	0.28 38
	Maximum Daily Flow (10 3 m3/d)	5 0 0 2 0 30 34	3 35	0.41 38

3 5 12 13	BYPASS	Plant Bypass Volume Duration (10 3 m3) (hours)	5 0 0 2 6 8 0 6 6 3 30 34	3 1 35	# of Occurrences 48 51
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3 6 12 13	RAW SEWAGE	BOD5 (mg/L)	0 0 0 0 1 30 34	0 35	# of Samples 0 48 51
	Suspended Solids (mg/L)	0 0 0 0 6 30 34	0 35	148.00 38	2 48 51
	TKN (mg/L)	0 0 0 2 0 30 34	2 35	28.65 38	2 48 51
	Total Phosphorus (mg/L)	0 0 0 3 3 30 34	1 35	3.53 38	2 48 51

3 9 12 13	FINAL EFFLUENT	Total Eff. Volume To Watercours (m3)	5 0 2 8 0 30 34	3 35	# of Samples 0 48 51
	Flow Duration (Hrs)	8 1 6 8 0 30 34	1 35	0 48 51	
	Cell Depth (m)	5 0 2 9 0 30 34	1 35	0 48 51	
	BOD5 (mg/L)	0 0 0 0 1 30 34	1 35	0 48 51	
	Suspended Solids (mg/L)	0 0 0 0 6 30 34	1 35	0 48 51	
	Ammonia + Ammonium (mg/L)	0 0 0 1 9 30 34	2 35	0 48 51	
	TKN (mg/L)	0 0 0 2 0 30 34	2 35	0 48 51	
	Total Phosphorus (mg/L)	0 0 0 3 3 30 34	2 35	0 48 51	

0 9 12 13	DISINFECTION	Used - (kg as Cl2)	5 0 1 0 0 30 34	1 35	# of Samples 0 48 51
	Chlorine Dosage - (mg/L as Cl2)	8 0 4 1 0 30 34	1 35	0 48 51	
	Chlorine Residual - (mg/L as Cl2)	8 0 4 2 0 30 34	1 35	0 48 51	

Laurie Cox 519-524-6583 lawrence.cox@veoliawaterma.com

Return completed form to: Ministry of the Environment

Municipality: Huron Kinloss	Operating Authority: L. Cox: Project Manager Kevin Merian-Assistant Manager
Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No.

4	6
1	2

Works Number

1	1	0	0	0	2	7	7	3
3								11

Data Period

Month	Year
0	3
1	0
16	19

Days

3	1
20	21

Discharge Type

2
22

Update Code

R
89

C.P.	
3	6
12	13

FLOWS

Total Flow (10.3 m3)
Average Daily Flow (10.3 m3/d)
Maximum Daily Flow (10.3 m3/d)

Parameter Code				
5	0	0	1	0
8	0	0	1	5
5	0	0	2	0
30				34

Dec.
3
3
3
35

Monthly Results
10.74
0.35
0.69
38

3	5
12	13

BYPASS

Plant Bypass Volume Duration (10.3 m3) (hours)

5	0	0	2	6
8	0	5	6	3
30				34

3
1
35

38

# of Occurrences	
48	51

3	6
12	13

RAW SEWAGE

BOD5 (mg/L)
Suspended Solids (mg/L)
TKN (mg/L)
Total Phosphorus (mg/L)

0	0	0	0	1
0	0	0	0	6
0	0	0	2	0
0	0	0	3	3
30				34

0
0
2
1
35

88.00
14.15
1.49
38

# of Samples	
0	
2	
2	
2	
48	51

3	9
12	13

FINAL EFFLUENT

Total Effl. Volume To Watercours (m3)
Flow Duration (Hrs)
Cell Depth (m)
BOD5 (mg/L)
Suspended Solids (mg/L)
Ammonia + Ammonium (mg/L)
TKN (mg/L)
Total Phosphorus (mg/L)

5	0	2	8	0
8	1	6	8	0
5	0	2	9	0
0	0	0	0	1
0	0	0	0	6
0	0	0	1	9
0	0	0	2	0
0	0	0	3	3
30				34

3
1
1
1
1
2
2
2
35

38

0	
0	
0	
0	
0	
48	51

0	9
12	13

DISINFECTION

Used - (kg as Cl2)
Chlorine Dosage - (mg/L as Cl2)
Chlorine Residual - (mg/L as Cl2)

5	0	1	0	0
8	0	4	1	0
8	0	4	2	0
30				34

1
1
1
35

38

Laurie Cox 519-524-6583 lawrence.cox@veoliawaterna.com

Return completed form to: Ministry of the Environment

Municipality: Huron Kinloss	Operating Authority: L. Cox: Project Manager Kevin Merian-Assistant Manager
Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No.

4 6
1 2

Works Number

1 1 0 0 0 2 7 7 3
3 11

Data Period
Month Year

0 4 1 0
16 19

Days

3 0
20 21

Discharge Type

2
22

Update Code

R
50

C.P.
3 5

12 13 FLOWS

Total Flow
Average Daily Flow
Maximum Daily Flow

(10 3 m3)
(10 3 m3/d)
(10 3 m3/d)

Parameter Code	
5 0 0 1 0	30 34
5 0 0 1 6	30 34
5 0 0 2 0	30 34

Dec.
3
3
3

Monthly Results

					7.19
					0.24
					0.35

3 5

12 13 BYPASS

Plant Bypass Volume
Duration

(10 3 m3)
(hours)

5 0 0 2 6	30 34
8 0 5 6 3	30 34

3
1

# of Occurrences	

3 6

12 13 RAW SEWAGE

BOD5
Suspended Solids
TKN
Total Phosphorus

(mg/L)
(mg/L)
(mg/L)
(mg/L)

0 0 0 0 1	30 34
0 0 0 0 6	30 34
0 0 0 2 0	30 34
0 0 0 3 3	30 34

0
0
2
1

					143.00
					25.40
					3.04

# of Samples	
0	
2	
2	
2	

3 9

12 13 FINAL EFFLUENT

Total Eff. Volume To Watercours
Flow Duration
Cell Depth
BOD5
Suspended Solids
Ammonia + Ammonium
TKN
Total Phosphorus

(m3)
(Hrs)
(m)
(mg/L)
(mg/L)
(mg/L)
(mg/L)
(mg/L)

5 0 2 8 0	30 34
8 1 6 8 0	30 34
5 0 2 9 0	30 34
0 0 0 0 1	30 34
0 0 0 0 6	30 34
0 0 0 1 9	30 34
0 0 0 2 0	30 34
0 0 0 3 3	30 34

3
1
1
1
1
2
2
2

					17,692.00
					0.99
					1.50
					24.50
					0.25
					1.05
					0.03

4	
4	
4	
4	
4	

0 9

12 13 DISINFECTION

Used - (kg as Cl2)
Chlorine Dosage - (mg/L as Cl2)
Chlorine Residual - (mg/L as Cl2)

5 0 1 0 0	30 34
8 0 4 1 0	30 34
8 0 4 2 0	30 34

1
1
1

Laurie Cox 519-524-6583 lawrence.cox@veoliawatema.com

Return completed form to: Ministry of the Environment

Municipality: Huron Kinloss	Operating Authority: L. Cox: Project Manager Kevin Merian-Assistant Manager
Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 0 5 1 0 16 19	Days 3 1 20 21	Discharge Type 2 22	Update Code R 80
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C.P. 3 5 FLOWS 12 13	Total Flow (10 3 m3) Average Daily Flow (10 3 m3/d) Maximum Daily Flow (10 3 m3/d)	Parameter Code 5 0 0 1 0 5 0 0 1 6 5 0 0 2 0 30 34	Dec. 3 3 3 35	Monthly Results 7.92 0.26 0.42 38
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3 5 BYPASS 12 13	Plant Bypass Volume Duration (10 3 m3) (hours)	5 0 0 2 6 8 0 5 6 3 30 34	3 1 35	# of Occurrences 48 51
---------------------	--	---------------------------------	--------------	---------------------------

3 6 RAW SEWAGE 12 13	BOD5 (mg/L) Suspended Solids (mg/L) TKN (mg/L) Total Phosphorus (mg/L)	0 0 0 0 1 0 0 0 0 6 0 0 0 2 0 0 0 0 3 3 30 34	0 0 2 1 35	151.50 23.40 2.64 38	# of Samples 0 2 2 2 48 51
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3 9 FINAL EFFLUENT	Total Effl. Volume To Watercours (m3) Flow Duration (Hrs) Cell Depth (m) BOD5 (mg/L) Suspended Solids (mg/L) Ammonia + Ammonium (mg/L) TKN (mg/L) Total Phosphorus (mg/L)	5 0 2 8 0 8 1 6 8 0 5 0 2 9 0 0 0 0 0 1 0 0 0 0 6 0 0 0 1 9 0 0 0 2 0 0 0 0 3 3 30 34	3 1 1 1 1 2 2 2 35	0 0 0 0 0 0 0 0 48 51
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0 9 DISINFECTION 12 13	Used - (kg as Cl2) Chlorine Dosage - (mg/L as Cl2) Chlorine Residual - (mg/L as Cl2)	5 0 1 0 0 8 0 4 1 0 8 0 4 2 0 30 34	1 1 1 35	38
---------------------------	--	--	-------------------	----

Laurie Cox 519-524-6583 lawrence.cox@veoliawatema.com

Return completed form to: Ministry of the Environment

Municipality: Huron Kinloss	Operating Authority: L. Cox: Project Manager Kevin Merian-Assistant Manager
Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 0 7 1 0 16 19	Days 3 1 20 21	Discharge Type 2 22	Update Code R 80
------------------------	---	---	----------------------	---------------------------	------------------------

C.P. 3 5 12 13	Parameter Code 30 34	Dec. 35	Monthly Results 38
3 5 FLOWS			
Total Flow (10 3 m3)	6 0 0 1 0	3	10.67
Average Daily Flow (10 3 m3/d)	5 0 0 1 6	3	0.34
Maximum Daily Flow (10 3 m3/d)	5 0 0 2 0	3	0.64

3 6 BYPASS	Parameter Code 30 34	Dec. 35	Monthly Results 38	# of Occurrences 48 51
12 13 Plant Bypass Volume Duration	(10 3 m3) 5 0 0 2 6 (hours) 8 0 5 6 3	3 1		

3 6 RAW SEWAGE	Parameter Code 30 34	Dec. 35	Monthly Results 38	# of Samples 48 51
12 13 BOD5	(mg/L) 0 0 0 0 1	0		0
Suspended Solids (mg/L)	0 0 0 0 6	0	128.00	2
TKN (mg/L)	0 0 0 2 0	2	18.45	2
Total Phosphorus (mg/L)	0 0 0 3 3	1	1.98	2

3 9 FINAL EFFLUENT	Parameter Code 30 34	Dec. 35	Monthly Results 38	# of Samples 48 51
Total Eff. Volume To Watercours (m3)	6 0 2 8 0	3		
Flow Duration (Hrs)	8 1 6 8 0	1		
Cell Depth (m)	5 0 2 9 0	1		
BOD5 (mg/L)	0 0 0 0 1	1		0
Suspended Solids (mg/L)	0 0 0 0 6	1		0
Ammonia + Ammonium (mg/L)	0 0 0 1 9	2		0
TKN (mg/L)	0 0 0 2 0	2		0
Total Phosphorus (mg/L)	0 0 0 3 3	2		0

0 9 DISINFECTION	Parameter Code 30 34	Dec. 35	Monthly Results 38
12 13 Used - (kg as Cl2)	5 0 1 0 0	1	
Chlorine Dosage - (mg/L as Cl2)	8 0 4 1 0	1	
Chlorine Residual - (mg/L as Cl2)	8 0 4 2 0	1	

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Return completed form to: Ministry of the Environment

Municipality: Huron Kinloss	Operating Authority: L. Cox: Project Manager Kevin Merian-Assistant Manager
Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 138, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 0 8 1 0 15 19	Days 3 1 20 21	Discharge Type 2 22	Update Code R 40
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C.P. 3 5	Flows 12 13	Parameter Code 5 0 0 1 0 30 34	Dec. 3 35	Monthly Results 38	# of Occurrence 48 51
	Total Flow (10 3 m3)	5 0 0 1 0	3	8.64	
	Average Daily Flow (10 3 m3/d)	5 0 0 1 5	3	0.28	
	Maximum Daily Flow (10 3 m3/d)	5 0 0 2 0	3	0.54	

3 5	BYPASS 12 13	Parameter Code 5 0 0 2 6 8 0 5 6 3 30 34	Dec. 3 35	38	# of Occurrence 48 51
	Plant Bypass Volume Duration (10 3 m3) (hours)	5 0 0 2 6 8 0 5 6 3	3 1		

3 6	RAW SEWAGE 12 13	Parameter Code 0 0 0 0 1 0 0 0 0 6 0 0 0 2 0 0 0 0 3 3 30 34	Dec. 0 0 2 1 35	Monthly Results 38	# of Samples 48 51
	BOD5 (mg/L)	0 0 0 0 1	0		0
	Suspended Solids (mg/L)	0 0 0 0 6	0	130.50	2
	TKN (mg/L)	0 0 0 2 0	2	19.70	2
	Total Phosphorus (mg/L)	0 0 0 3 3	1	2.46	2

3 9	FINAL EFFLUENT 12 13	Parameter Code 5 0 2 8 0 8 1 6 8 0 5 0 2 9 0 0 0 0 0 1 0 0 0 0 6 0 0 0 1 9 0 0 0 2 0 0 0 0 3 3 30 34	Dec. 3 1 1 1 1 2 2 2 35	Monthly Results 38	# of Samples 48 51
	Total Effl. Volume To Watercours (m3)	5 0 2 8 0	3		
	Flow Duration (Hrs)	8 1 6 8 0	1		
	Cell Depth (m)	5 0 2 9 0	1		
	BOD5 (mg/L)	0 0 0 0 1	1		0
	Suspended Solids (mg/L)	0 0 0 0 6	1		0
	Ammonia + Ammonium (mg/L)	0 0 0 1 9	2		0
	TKN (mg/L)	0 0 0 2 0	2		0
	Total Phosphorus (mg/L)	0 0 0 3 3	2		0

0 9	DISINFECTION 12 13	Parameter Code 5 0 1 0 0 8 0 4 1 0 8 0 4 2 0 30 34	Dec. 1 1 1 35	Monthly Results 38	# of Samples 48 51
	Used - (kg as Cl2)	5 0 1 0 0	1		
	Chlorine Dosage - (mg/L as Cl2)	8 0 4 1 0	1		
	Chlorine Residual - (mg/L as Cl2)	8 0 4 2 0	1		

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Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 0 9 1 0 16 19	Days 3 0 20 21	Discharge Type 2 22	Update Code R 80
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C.P. 3 5	Flows 12 13	Parameter Code 30 34	Dec. 35	Monthly Results 38
Total Flow (10 3 m3)	5 0 0 1 0	3	8.64	
Average Daily Flow (10 3 m3/d)	5 0 0 1 5	3	0.28	
Maximum Daily Flow (10 3 m3/d)	5 0 0 2 0	3	0.39	

3 5	BYPASS 12 13	Parameter Code 30 34	Dec. 35	# of Occurrences 48 51
Plant Bypass Volume (10 3 m3)	5 0 0 2 6	3		
Duration (hours)	8 0 5 6 3	1		

3 6	RAW SEWAGE 12 13	Parameter Code 30 34	Dec. 35	# of Samples 48 51
BOD5 (mg/L)	0 0 0 0 1	0		0
Suspended Solids (mg/L)	0 0 0 0 6	0	160.00	2
TKN (mg/L)	0 0 0 2 0	2	18.15	2
Total Phosphorus (mg/L)	0 0 0 3 3	1	3.02	2

3 9	FINAL EFFLUENT 12 13	Parameter Code 30 34	Dec. 35	# of Samples 48 51
Total Effl. Volume To Watercours (m3)	5 0 2 8 0	3		
Flow Duration (Hrs)	8 1 6 8 0	1		
Cell Depth (m)	5 0 2 9 0	1		
BOD5 (mg/L)	0 0 0 0 1	1		0
Suspended Solids (mg/L)	0 0 0 0 6	1		0
Ammonia + Ammonium (mg/L)	0 0 0 1 9	2		0
TKN (mg/L)	0 0 0 2 0	2		0
Total Phosphorus (mg/L)	0 0 0 3 3	2		0

0 9	DISINFECTION 12 13	Parameter Code 30 34	Dec. 35
Used - (kg as Cl2)	6 0 1 0 0	1	
Chlorine Dosage - (mg/L as Cl2)	8 0 4 1 0	1	
Chlorine Residual - (mg/L as Cl2)	8 0 4 2 0	1	

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Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 1 0 1 0 16 19	Days 3 1 20 21	Discharge Type 2 22	Update Code R 80
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C.P. 3 6	Flows	Parameter Code	Dec.	Monthly Results
12 13	Total Flow (10 3 m3)	5 0 0 1 0	3	8.58
	Average Daily Flow (10 3 m3/d)	5 0 0 1 8	3	0.28
	Maximum Daily Flow (10 3 m3/d)	5 0 0 2 0	3	0.43
		30 34	35	38

3 5	BYPASS	Parameter Code	Dec.	Monthly Results	# of Occurrences
12 13	Plant Bypass Volume Duration (10 3 m3) (hours)	5 0 0 2 6	3		
		8 0 6 6 3	1		
		30 34	35	38	48 51

3 6	RAW SEWAGE	Parameter Code	Dec.	Monthly Results	# of Samples
12 13	BOD5 (mg/L)	0 0 0 0 1	0		0
	Suspended Solids (mg/L)	0 0 0 0 6	0	151.50	2
	TKN (mg/L)	0 0 0 2 0	2	18.00	2
	Total Phosphorus (mg/L)	0 0 0 3 3	1	2.16	2
		30 34	35	38	48 51

3 9	FINAL EFFLUENT	Parameter Code	Dec.	Monthly Results	# of Samples
	Total Eff. Volume To Watercours (m3)	5 0 2 8 0	3	10,662.00	
	Flow Duration (Hrs)	8 1 6 8 0	1		
	Cell Depth (m)	5 0 2 9 0	1	1.41	
	BOD5 (mg/L)	0 0 0 0 1	1	2.50	2
	Suspended Solids (mg/L)	0 0 0 0 6	1	14.00	2
	Ammonia + Ammonium (mg/L)	0 0 0 1 9	2	0.35	2
	TKN (mg/L)	0 0 0 2 0	2	1.15	2
	Total Phosphorus (mg/L)	0 0 0 3 3	2	0.03	2
		30 34	35	38	48 51

0 9	DISINFECTION	Parameter Code	Dec.	Monthly Results
12 13	Used - (kg as Cl2)	5 0 1 0 0	1	
	Chlorine Dosage - (mg/L as Cl2)	8 0 4 1 0	1	
	Chlorine Residual - (mg/L as Cl2)	8 0 4 2 0	1	
		30 34	35	38

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Project Name: Ripley Waste Water	Mailing Address: Veolia Water Canada, P. O. Box 185, Goderich N7A 3Z2
Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 1 1 1 0 16 19	Days 3 0 20 21	Discharge Type 2 22	Update Code R 88
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C.P. 3 5 12 13	FLOWS	Parameter Code	Dec.	Monthly Results
Total Flow	(10 3 m3)	5 0 0 1 0	3	9.31
Average Daily Flow	(10 3 m3/d)	6 0 0 1 6	3	0.31
Maximum Daily Flow	(10 3 m3/d)	6 0 0 2 0	3	0.48
		30 34	35	38

3 6 12 13	BYPASS	Plant Bypass Volume Duration	(10 3 m3) (hours)	5 0 0 2 6 8 0 5 6 3	3 1		# of Occurrences
				30 34	35	38	48 51

3 6 12 13	RAW SEWAGE	BOD5	(mg/L)	0 0 0 0 1	0		# of Samples
Suspended Solids	(mg/L)	0 0 0 0 6	0	123.00			0
TKN	(mg/L)	0 0 0 2 0	2	21.40			2
Total Phosphorus	(mg/L)	0 0 0 3 3	1	2.58			2
		30 34	35	38			48 51

3 9 12 13	FINAL EFFLUENT	Total Effl. Volume To Watercours	(m3)	5 0 2 8 0	3	68,781.00	
Flow Duration	(Hrs)	8 1 6 8 0	1				
Cell Depth	(m)	5 0 2 9 0	1	0.98			
BOD5	(mg/L)	0 0 0 0 1	1	3.25			4
Suspended Solids	(mg/L)	0 0 0 0 6	1	21.00			4
Ammonia + Ammonium	(mg/L)	0 0 0 1 9	2	1.03			4
TKN	(mg/L)	0 0 0 2 0	2	1.80			4
Total Phosphorus	(mg/L)	0 0 0 3 3	2	0.07			4
		30 34	35	38			48 51

0 9 12 13	DISINFECTION	Used - (kg as Cl2)	5 0 1 0 0	1	
Chlorine Dosage - (mg/L as Cl2)	8 0 4 1 0	1			
Chlorine Residual - (mg/L as Cl2)	8 0 4 2 0	1			
		30 34	35	38	

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Mailing Address: P.O Box 130, Ripley, Ontario, N0G 2R0	

File No. 4 6 1 2	Works Number 1 1 0 0 0 2 7 7 3 3 11	Data Period Month Year 1 2 1 0 16 19	Days 3 1 20 21	Discharge Type 2 22	Update Code R 80
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C.P. 3 5 FLOWS 12 13	Total Flow (10 3 m3)	Parameter Code 5 0 0 1 0 30 34	Dec. 3 35	Monthly Results 10.30	
	Average Daily Flow (10 3 m3/d)	5 0 0 1 5 30 34	3 35	0.36	
	Maximum Daily Flow (10 3 m3/d)	5 0 0 2 0 30 34	3 35	0.71	
3 5 BYPASS 12 13	Plant Bypass Volume Duration (10 3 m3) (hours)	5 0 0 2 6 8 0 5 6 3 30 34	3 1 35		# of Occurrences 48 51
3 6 RAW SEWAGE 12 13	BOD5 (mg/L)	0 0 0 0 1 30 34	0 35		# of Samples 0 48 51
	Suspended Solids (mg/L)	0 0 0 0 6 30 34	0 35	146.33	3
	TKN (mg/L)	0 0 0 2 0 30 34	2 35	16.60	3
	Total Phosphorus (mg/L)	0 0 0 3 3 30 34	1 35	2.97	3
3 9 FINAL EFFLUENT 12 13	Total Effl. Volume To Watercours (m3)	5 0 2 8 0 30 34	3 35	312.00	
	Flow Duration (Hrs)	8 1 6 8 0 30 34	1 35		
	Cell Depth (m)	5 0 2 9 0 30 34	1 35		
	BOD5 (mg/L)	0 0 0 0 1 30 34	1 35	5.00	1
	Suspended Solids (mg/L)	0 0 0 0 6 30 34	1 35	32.00	1
	Ammonia + Ammonium (mg/L)	0 0 0 1 9 30 34	2 35	3.30	1
	TKN (mg/L)	0 0 0 2 0 30 34	2 35	3.30	1
	Total Phosphorus (mg/L)	0 0 0 3 3 30 34	2 35	0.10	1
0 9 DISINFECTION 12 13	Used - (kg as Cl2)	5 0 1 0 0 30 34	1 35		
	Chlorine Dosage - (mg/L as Cl2)	8 0 4 1 0 30 34	1 35		
	Chlorine Residual - (mg/L as Cl2)	8 0 4 2 0 30 34	1 35		

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