

Shawnigan Village Waterworks

ANNUAL REPORT

(Drinking Water System Name)

Reporting Period:	2009
Operating Permit Number:	0353
Drinking Water System Owner:	Lidstech Holdings
Drinking Water System Contact:	
Name:	<u>Rod Lidstone</u>
Phone No:	<u>(250) 743-4091</u>
Email:	<u>info@shawniganwater.com</u>

1 Microbiological testing completed during this reporting period:

- a. bacteriological results attached to this report.
- b. adverse bacteriological results: None detected
 Listed in table below:

Adverse Results:

Date	Total coliform	E. Coli	Reason	Corrective Action
08/05/2009	360	0	unexplained	Flushed System Checked residual chlorine

2 Chemical results for this reporting period:

- a. most recent chemical analysis attached to this report.
- b. chemical parameters listed in *The Guidelines for Canadian Drinking Water Quality* ("the Guidelines") are:
 all within GCDWQ
 above the GCDWQ and are listed below:

Parameters above the Guidelines:

Parameter	Result	Max. Acceptable Concentration	Aesthetic Objective	Treatment/Corrective Action

Shawnigan Village Waterworks ANNUAL REPORT

(Drinking Water System Name)

3 Summarize additional testing and sampling carried out in accordance with the requirement of a Water Source approval, Written Order or as per the conditions of your *Operating Permit*.

- no additional testing
 additional testing listed below:

Additional testing:

Description of parameter & reason for sampling	Health parameter or non-health related parameter	Corrective action necessary (Y/N?)	Corrective action taken
Turbidity monitoring started Oct.2009	<1 NTU	N	

4 Water Quality Complaints:

During the course of the year, the water system:

- did not receive water quality complaints (ie taste, odour, colour, etc)
 received water quality complaints and are listed below:

Water Quality Complaints:

Date	Water quality complaint	Corrective action taken
March 12	Chlorine smell	Cleaned kitchen faucet strainer, Mildew was reacting with chlorine
May 22	Chlorine smell	This house was at the end of the line stagnant water built up so we flushed the standpipe
June 20	Metallic taste	Flushed Gibson Rd. standpipe
July 27- Aug 9	Several low Pressure phone calls	These were all during our annual flushing period

Shawnigan Village Waterworks

ANNUAL REPORT

(Drinking Water System Name)

5 Adverse results: Total number of adverse results during this reporting period for insufficient water supply, malfunction of disinfection equipment or elevated turbidity:

- No adverse results
- Adverse results listed below:

Adverse Results:

Incident date	Corrective action	Corrected by
March 8	Some upper customers had no water	Running lake pumps on manual until remedied auto control problem
April 24	Some upper customers had no water	Pumps were inadvertently left turned off after lake pump house checks on previous day.

6 Description of the system:

Sources of raw water:

- Groundwater
- Surface water
- Other (specify): _____

Does the drinking water system have disinfection? Yes No

Disinfection methods (check boxes that apply):

- Chlorination
- Ultraviolet light
- Ozonation
- Other (specify): _____

Does the drinking water system have treatment? Yes No

Treatment type (check boxes that apply):

- Particulate cartridge filters
- Membrane filtration
- Carbon filter
- Sand filtration
- Reverse osmosis
- Other (specify): _____

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7 Major expenses incurred during the period covered by the report:

To purchase or install required equipment:	\$43,088
To repair equipment:	\$15,133
To replace equipment:	\$25,924
To complete annual maintenance of system: <i>(system flushing, replacement of carbon filters, etc)</i>	\$10,000
To complete specialist report (specify):	
<i>Engineer Composite Mapping updates</i>	\$14,516

8 Further communication with users:

a. Indicate how you notified system users that your annual report is available, and is free of charge:

- hand delivered
- public access/ notice via web
- public access/notice via government office
- public access/notice via newspaper
- public access/notice via bill stuffer
- public access/ notice via other method (specify):

b. Improvements or remedial actions required by the Drinking Water Officer:

- no action required
- Drinking Water Officer inspection report attached to report
- actions required by Drinking Water Officer listed below:

Improvements/Remedial Actions:

Required action	Completion date
Recommend fence around both reservoirs	Oct.2009
Screen on reservoir overflow	May 2009
Install Turbidity meter	Oct. 2009

c. Future water system improvements:

- no improvements planned
- improvements listed below:

Shawnigan Village Waterworks**ANNUAL REPORT**

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Future Improvements:

Future plans	Planned completion date
Rechlorination system at Jersey reservoirs	May 2010
Chlorine Monitors installed in all reservoirs	May 2010
Source water Temperature monitor	Mar. 2010
Chlorine Residual monitors	May 2010
PRV's installed and more houses changed over to new reservoir	Starting July 2010
Ultra violet disinfection	Mar. 2012

d. Emergency Response Plan can be accessed by:

- posting on web
- posting at nearest government office
- contacting water system owner
- Other (specify): _____

SYSTEM NAME <i>Shawnigan Village Water Works</i>		E.H.O. NAME <i>Cale Diptack</i>	
ADDRESS <i>1584 Shawnigan Lake Rd</i>		POSTAL CODE <i>Po Box 369 Shawnigan Ll</i>	SYSTEM NUMBER <i>1311718</i>
OPERATOR <i>Rod Lidstone</i>		INSPECTION DATE (DMY) <i>14/04/2009</i>	TIME SPENT (Hrs - nearest 1/4) <i>1.5</i>
SYSTEM TYPE (CHECK One)		TYPE OF INSPECTION	
<input type="checkbox"/> > 20,000 (DWP) <input type="checkbox"/> 10,001 - 20,000 (DWM) <input checked="" type="checkbox"/> 301 - 10,000 (DWT) <input type="checkbox"/> 15 - 300 (DWC) <input type="checkbox"/> 2 - 14 (DWS)		<input type="checkbox"/> INITIAL <input checked="" type="checkbox"/> ROUTINE <input type="checkbox"/> COMPLAINT <input type="checkbox"/> FOLLOW-UP	
<input type="checkbox"/> 1 - SERVES PUBLIC (DWQ) <input type="checkbox"/> 1 HAULER (DWH)			

CRITICAL HAZARD

These items relate to Public Health Safety & MUST RECEIVE IMMEDIATE ATTENTION

- Microbiological Contamination of Raw Water Supply Due to:
- 301 Flood
 - 302 Sewage
 - 303 Industrial
 - 304 Agriculture
 - 305 Other (Specify) _____
 - 306 Chemical Contamination of Raw Water Supply
 - 307 Contamination of Finished Water - Reservoir
 - 308 Contamination of Finished Water - Mains
 - 309 Cross-Connection
 - 310 Use of Unapproved Source
 - 311 Interruption of Treatment
 - 312 Inadequate Treatment
 - 313 Other (Specify) _____

SANITATION & MAINTENANCE

These items must be corrected within a designated time period

- 314 Improper Maintenance of Distribution System
- 315 Improper or No Disinfection of New or Repaired Main
- 316 Source Unprotected and Subject to Contamination
- 317 Inadequate or Improper Construction of Water Works
- 318 Inadequate Microbiological Analysis Data
- 319 Inadequate Chemical Analysis Data
- 320 Interruption of Treatment
- 321 Inadequate Treatment
- 322 Emergency Response Plan
- 323 Other (Specify) _____

CODE	FINDINGS AND ACTIONS REQUIRED
⊙	<ul style="list-style-type: none"> - Recommend providing a fence around both reservoirs. - Small cement reservoir requires a screen over the air intake. - Ensure the Emergency response Plan is updated annually. - Ensure Chlorine residuals are monitored and recorded. - Recommend installing an online turbidity meter. - Provide an annual report to this office by the end of April May 09. - Reviewed system and discussed 423-2-1 requirements with John Matherwells - Plans are underway, but we require a proposed completion date to issue a new permit. - System is well maintained.

At the time of inspection this system has a hazard rating of HIGH MODERATE LOW Issue Permit Conditions of Permit

FOLLOW UP VISIT PHONE. Date *1/1*

RECEIVED BY *To be mailed* PRINT NAME _____ E.H.O. _____

Water Sample Range Report

Vancouver Island Health Authority

Central Island

Facility Name: SHAWNIGAN VILLAGE WATER WORKS
Facility Type: DWC
Date Range: Jan 1 2009 to Dec 31 2009
Date Created: Feb 03 2010

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Shawnigan Lake,</u>				
<u>2730 Galland Road,</u>				
<u>Dist. site, Weekly</u>				
	01/13/2009	L1	L1	
	01/20/2009	L1	L1	
	01/27/2009	L1	L1	
	02/04/2009	L1	L1	
	02/11/2009	L1	L1	
	02/16/2009	L1	L1	
	02/24/2009	L1	L1	
	03/03/2009	L1	L1	
	03/11/2009	L1	L1	
	03/16/2009	L1	L1	
	03/24/2009	L1	L1	
	04/01/2009	L1	L1	
	04/08/2009	L1	L1	
	04/14/2009	L1	L1	
	04/21/2009	L1	L1	
	04/29/2009	L1	L1	
	05/06/2009	L1	L1	
	05/12/2009	L1	L1	
	05/19/2009	L1	L1	
	05/27/2009	L1	L1	
	06/02/2009	L1	L1	
	06/10/2009	L1	L1	
	06/16/2009	L1	L1	
	06/24/2009	L1	L1	
	06/29/2009	L1	L1	
	07/07/2009	L1	L1	
	07/14/2009	L1	L1	
	07/21/2009	L1	L1	
	07/28/2009	L1	L1	
	08/05/2009	EST 360	L1	
	08/11/2009	L1	L1	
	08/19/2009	L1	L1	
	08/25/2009	L1	L1	
	09/02/2009	L1	L1	
	09/09/2009	L1	L1	
	09/15/2009	L1	L1	
	09/23/2009	L1	L1	
	09/30/2009	L1	L1	
	10/06/2009	L1	L1	
	10/28/2009	L1	L1	
	11/03/2009	L1	L1	
	11/09/2009	L1	L1	
	11/18/2009	L1	L1	
	11/24/2009	L1	L1	
	12/02/2009	L1	L1	
	12/09/2009	L1	L1	
	12/15/2009	<u>L1</u>	<u>L1</u>	
Total Positive:		1	0	0

Shawnigan Lake,
Aitken & Fraser
Store, Dist. site,
Weekly

01/13/2009	L1	L1	
01/20/2009	L1	L1	
01/27/2009	L1	L1	
02/04/2009	L1	L1	
02/11/2009	L1	L1	
02/16/2009	L1	L1	
02/24/2009	L1	L1	
03/03/2009	L1	L1	
03/11/2009	L1	L1	
03/16/2009	L1	L1	
03/24/2009	L1	L1	
04/01/2009	L1	L1	
04/08/2009	L1	L1	
04/14/2009	L1	L1	
04/15/2009			L2
04/21/2009	L1	L1	
04/27/2009			L2
04/29/2009	L1	L1	
05/06/2009	L1	L1	
05/12/2009	L1	L1	
05/12/2009			6400
05/19/2009	L1	L1	
05/27/2009	L1	L1	
06/02/2009	L1	L1	
06/10/2009	L1	L1	
06/16/2009	L1	L1	
06/24/2009	L1	L1	
06/29/2009	L1	L1	
07/07/2009	L1	L1	
07/14/2009	L1	L1	
07/21/2009	L1	L1	
07/28/2009	L1	L1	
08/05/2009	L1	L1	
08/11/2009	L1	L1	
08/19/2009	L1	L1	
08/25/2009	L1	L1	
09/02/2009	L1	L1	
09/09/2009	L1	L1	
09/15/2009	L1	L1	
09/23/2009	L1	L1	
09/30/2009	L1	L1	
10/06/2009	L1	L1	
10/28/2009	L1	L1	
11/03/2009	L1	L1	
11/09/2009	L1	L1	
11/18/2009	L1	L1	
11/24/2009	L1	L1	
12/02/2009	L1	L1	
12/09/2009	L1	L1	
12/15/2009	<u>L1</u>	<u>L1</u>	
Total Positive:	0	0	1

#15, Shawnigan
Village MHP, Dist.
site, No Regular
Sampling

Result Values:

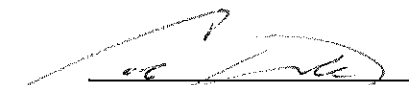
E - estimated

L - less than

G - greater than

Samples that contain total coliform:	1	1.03% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	1	1.03% of total
Number of positive samples in last 30 days:	0/6	
Total number of samples:	97	

Comments:


Environmental Health Officer
Feb 3 2010

FOR FURTHER INFORMATION PLEASE CALL: Diplock, Cole (250) 737-2010 Duncan

OperatorRod Lidstone
PO BOX 369
Shawnigan Lake, BC
V0R 2W0

(250) 389-4091

July 2009

Water Sample Report
Vancouver Island Health Authority
Central Island

Operator: Rod Lidstone
Person In Charge: Rod Lidstone
(250) 389-4091
PO BOX 369
Shawnigan Lake, BC
V0R 2W0

Water System: SHAWNIGAN VILLAGE WATER WORKS
Sample Location: Shawnigan Lake, 2730 Galland Road
Date Collected: 05-Aug-2009

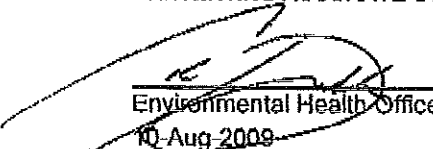
Water Test Results: BACTERIOLOGICALLY UNSATISFACTORY
Lab Reports: Total Coliform per 100 mL : EST 360
E. Coli: Less than 1

Corrective action to be taken by operator:

Issue Boil Water Advisory Disinfect water source / distribution system
 Flush water system (distribution / Resample water system
reservoirs

Comments:

EST: ESTIMATED COUNT L: LESS THAN EST RESULT INDICATES HIGH COLONY DENSITY ON MEMBRANE PREVENTING ACCURATE COLIFORM COUNTING.


Environmental Health Officer

10 Aug 2009

FOR FURTHER INFORMATION PLEASE CALL: Diplock, Cole (250) 737-2010

GUIDELINES FOR CANADIAN DRINKING WATER QUALITY

The maximum acceptable concentration (MAC) for coliforms in drinking water is 0 organism detectable per 100 mL. Please note that coliform organisms are not uniformly distributed in water and are subject to considerable variation in enumeration. However, drinking water that fulfills the following conditions is considered to be in compliance with coliform MAC:

- 1) Sample should contain 0 Fecal coliforms (L1: less than 1)
- 2) No sample should contain more than 10 Total coliform organisms per 100 mL
- 3) No consecutive samples from the same site should show the presence of coliform organisms
- 4) For community drinking water supplies:
 - a) not more than 1 sample from a set of samples taken on a given day should show the presence of coliform organisms; and
 - b) not more than 10% of the samples based on a minimum of 10 samples should show the presence of coliform organisms.

DEFINITIONS

- **Total Coliform** : bacteria, which indicate contamination from human, animal, soil or vegetation sources.
- **OG (Overgrown)** : a large number of organisms present in the water sample have prevented accurate counting of coliform bacteria