

# **Drinking Water Annual Report -2008**

## **City of Quesnel Water System**

### **INTRODUCTION**

The City of Quesnel annual water report describes the water system and provides a summary of quality testing and water management during 2008.

### **WATER SYSTEM OVERVIEW**

The City of Quesnel water system is comprised of 6 operating groundwater wells (Main System), 8 reservoirs, 5 booster pump stations, 2 main PRV stations and approximately 100 km of water main. In addition the City also maintains one independent well on Sword Road (small system) in South Quesnel to provide water to the soccer fields. At present there is no treatment or disinfection provided to the City's water system. Approximately 10,500 residents are serviced by the City water system. In 2008, water usage in the City system resulted in 698,179,912 imperial gallons used. This was an approximate 13% increase from 2007.

### **WATER MANAGEMENT**

SCADA monitoring system upgrades have enabled City staff to observe real-time data and information of changing water system conditions. This includes well operation and reservoir levels. System operators have the ability to remotely respond to system conditions and demands. This reduces failure of equipment as well as increases pumping efficiency.

Staff continue to update the water system emergency plan. A number of operating procedures have been created in order to improve reliability of the distribution network.

Water system operators are certified under the Environmental Operators Certification Program. In order to maintain certification, operators must receive 24 hours of approved training in every two year period and achieve a minimum of 70% on written examinations.

### **WATER MONITORING**

To ensure the delivery of safe drinking water, the City has a program to monitor water quality at the source. Water monitoring stations were added which eliminated sampling taken from private properties.

Historically, drinking water quality within the City has been monitored in consultation with the Provincial Health Inspector. The challenge and responsibility to ensure safe drinking water has been assisted by the adoption, in May 2003, by the province of the "British Columbia Drinking Water Regulations". In accordance with these regulations, the City has developed a drinking water quality monitoring program to enhance present practices.

(Drinking Water Annual Report 2008 cont'd)

In May 2004 the City commenced sending their water samples to Cantest Laboratory in Burnaby, for all sampling points. The City has direct contact with the lab on results and concerns. Our local Drinking Water Officer at Northern Health Authority, also has access to these results. From the laboratory, the results are downloaded directly to Water Trax, the City's water quality database.

The sampling parameters used to monitor potability are listed in the Guidelines for Canadian Drinking Water Quality (GCDWQ) & the British Columbia Drinking Water Regulations (BCDWR). These sampling parameters are used as indicators for bacteriological, chemical and physical contaminants.

Sampling frequency is also important in obtaining an accurate overview of water quality within the distribution system. As a minimum, the number of samples to be taken of the source and distribution system, as required by provincial regulations, are based on population. The minimum number of samples to be taken for the City of Quesnel's approximately 10,500 people, is 12 per month. The City exceeds that number of monthly sampling. The City samples 15 individual sites bi-weekly, for total coliforms, E. Coli, heterotrophic plate count and turbidity. As well, all reservoirs and wells are tested on a monthly basis for bacterial contaminants. In addition to the bacteriological parameters, additional testing is done for chemical & physical contaminants.

## **WATER QUALITY**

Samples are taken at the start, middle and end of the entire City water distribution system. Lab results are transmitted to the City via email, as well as to the Drinking Water Officer. Results are downloaded into the City's water quality database, Water Trax.

If it is observed during testing that certain parameters exceed the limits specified in the GCDWQ or BCDWR guidelines, a procedure is in place for retesting and notification of any results or conditions that render or could render the water unfit to drink.

The standard protocol when a water sample is found to contain the presence of coliforms, however minute, is to resample the water immediately at the same location and resubmit for testing. The provincial Drinking Water Officer will determine if any action by the City is necessary only after a second test also shows the presence of coliforms.

In accordance with the regulations of our operating permit, the City has a plan in effect to respond to emergencies to ensure the delivery of safe drinking water to all its residents.

In 2008, 347 samples were tested for E.coli with one exceedence at Pedersen Road. This site was retested and found negative for E.coli. There were 347 samples tested for total coliform with six exceedences. One exceedence at the Airport, one at Mills Rd, one at Graham Avenue, one at West Fraser Road, one at Pederson Road and one at Well #7. All sites were resampled and found negative for coliform.

(Drinking Water Annual Report 2008 cont'd)

## **CONCLUSION**

The 2008 City of Quesnel Water System Annual Report is presented to Council as required by the British Columbia Drinking Water Regulations Drinking Water Protection Act. It has been established as a requirement to ensure accountability to the community for the water service provided. In order to meet the terms and conditions of the City's Water System Operating Permit issued by the BC Drinking Water Officer, this report is made available to the public.

Attachment "A" contains:

- a list of the sampling point sites and the parameters tested at Cantest Labs for the City of Quesnel

Attachment "B" contains:

- Water sampling result summary reports for 2008 from Cantest Labs on both of the City's water systems; Main System, & Small System (on Sword Road)

### **LINKS:**

The Health Canada website ( [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca) ) contains "Summary of Guidelines for Canadian Drinking Water Quality", which Health Canada publishes on current guidelines and updates each spring on their website.

# Attachment "A"

## City of Quesnel Water Quality Monitoring Program

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SITE	LOCATION	PARAMETERS
<b>BI-WEEKLY (Distribution System)</b> (every other Tues between 10am and 2pm)		
<b>First Week</b>		Parameters: Total coliforms, Ecoli, HPC's, turbidity, temp
S-A	Airport (Watertrax Locator #94E4)	
S-C	Mills Rd (94E5)	
S-E	Marsh Dr- (94E7)	
S-G	Graham Avenue (94E8)	
S-I	W. Fraser Rd. (94E9)	
S-L	Pederson Rd (94FO)	
S-N	Standpipe at Carson Pit (94EF)	
S-O	Dennis Road (179CA)	
<b>Third Week</b>		Parameters: Total coliforms, Ecoli, HPC's, turbidity, temp
S-B	Carradice Rd (94E6)	
S-D	Dixon St (94F1)	
S-F	Front St – Hospital (94F2)	
S-H	Nason St (94F3)	
S-J	N Star Rd – Booster Dragon Hill Feed (94F4)	
S-K	N Star Booster -S. Hill Feed (94F6)	
S-M	Chew Rd (94F7)	
<b>MONTHLY (Reservoirs)</b>		Parameters: Total coliforms, Ecoli, Temp
R-1	Hwy 97 – Shadow Heights (94EA)	
R-2	Pinecrest Rd (94F9)	
R-3	Baker Dr – Sugar Loaf (94FA)	
R-4 (2)	Abbott Dr (Abbott #1, Abbott #2) (94EB) (94EC)	
R-5	Dragon Hill (94FC)	
R-6 (2)	Tatchell (Southills #1, Southills #2) (94FF)	
	(old) (new)	
<b>MONTHLY (Wells)</b>		Parameters: Total coliforms, Ecoli, Temp
W-A	Sword Rd – Soccer Field Well (94ED)	
W-3	Rolph St at Roddis Dr (94D1)	
W-5	Hillborn Rd (94D8)	
W-6	Rolph St at Robertson Ave (94DC)	
W-7	Off North Fraser Dr (94EO)	
W-8	Hillborn Rd (94E1)	
W-9	Carson Subdivision Flats (94DF)	

# City of Quesnel Water Quality Monitoring Program

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<b>QUARTERLY (Wells)</b> (first week of March, June, Sept, Dec)		Parameters: Chloride, Nitrate, Nitrite, Temperature
W-A	Sword Rd - Soccer Field Well	
W-3	Rolph St at Roddis Dr	
W-5	Hillborn Rd	
W-6	Rolph St at Robertson Ave	
W-7	Off North Fraser Dr	
W-8	Hillborn Rd	
W-9	Carson Subdivision Flats	
<b>SEMI - ANNUALLY (Distribution System)</b> (first week Oct & April)		Parameters: Copper, Zinc, Lead, Iron, Vinyl chloride, Manganese, Temperature
S-C	Mills Rd (94E5)	
S-L	Pederson Rd (94F0)	
<b>ANNUALLY (Wells)</b>		Parameters: Enhanced Potability, molybdenum, nickel, phosphorus, silver, Aggressive Index Number (Langelier saturation index) , Volatile Organic Compounds, Temperature
W-A	Sword Rd – Soccer Field well	
W-3	Rolph St at Roddis Dr.	
W-5	Hillborn Rd	
W-6	Rolph St at Robertson Ave	
W-7	Off North Fraser Dr	
W-8	Hillborn Rd	
W-9	Carson Sub Flats	

## **Attachment "B"**

**Water sample result reports in pdf format :**

- 2008 Quesnel Main System Coliform Summary**
- 2008 Quesnel Small System Coliform Summary**
- 2008 Quesnel Main System Coliform Exceedences**
- 2008 Quesnel Small System Coliform Exceedences**
- 2008 April & October Semi-Annual Summary**
- 2008 Quarterly Summary**

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

**Facility:** Distribution System  
**Sampling Point:** 1 - S-A Airport (7-1-MR, 94E4)

### Escherichia coli / E. coli (counts)

# samples: 14      min: < 1.00000 CFU/100mL  
# detects: 0      max: < 1.00000 CFU/100mL  
# non-detects: 14      avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

# samples: 14      min: < 1.00000 counts/100mL  
# detects: 1      max: 1 counts/100mL  
# non-detects: 13      avg: 1.000 counts/100mL (based on 1 numerical results)  
# exceedances: 1

**Facility:** Distribution System  
**Sampling Point:** 1 - S-C Mills Rd (7-2-MR, 94E5)

### Escherichia coli / E. coli (counts)

# samples: 14      min: < 1.00000 CFU/100mL  
# detects: 0      max: < 1.00000 CFU/100mL  
# non-detects: 14      avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

# samples: 14      min: < 1.00000 counts/100mL  
# detects: 1      max: 460 counts/100mL

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# non-detects: 13      avg: 460.000 counts/100mL (based on 1 numerical results)  
# exceedances: 1

Facility: Distribution System  
Sampling Point: 1 - S-E Marsh Drive (7-4-MD, 94E7)

### Escherichia coli / E. coli (counts)

# samples: 13      min: < 1.00000 CFU/100mL  
# detects: 0      max: < 1.00000 CFU/100mL  
# non-detects: 13      avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

# samples: 13      min: < 1.00000 counts/100mL  
# detects: 0      max: < 1.00000 counts/100mL  
# non-detects: 13      avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility: Distribution System  
Sampling Point: 1 - S-G Graham Ave (7-5-MD, 94E8)

### Escherichia coli / E. coli (counts)

# samples: 14      min: < 1.00000 CFU/100mL  
# detects: 0      max: < 1.00000 CFU/100mL  
# non-detects: 14      avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)



## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# samples: 14	min: < 1.00000 counts/100mL
# detects: 1	max: 1 counts/100mL
# non-detects: 13	avg: 1.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility:	Distribution System
Sampling Point:	1 - S-I West Fraser Rd (7-6-MR, 94E9)

### Escherichia coli / E. coli (counts)

# samples: 12	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 12	min: < 1.00000 counts/100mL
# detects: 1	max: 4 counts/100mL
# non-detects: 11	avg: 4.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility:	Distribution System
Sampling Point:	1 - S-L Pederson Rd (7-7-MD, 94F0)

### Escherichia coli / E. coli (counts)

# samples: 14	min: < 1.00000 CFU/100mL
# detects: 1	max: 1 CFU/100mL
# non-detects: 13	avg: 1.000 CFU/100mL (based on 1 numerical results)
# exceedances: 0	

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

### Total coliforms (counts)

# samples: 14	min: < 1.00000 counts/100mL
# detects: 1	max: 2 counts/100mL
# non-detects: 13	avg: 2.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility:	Distribution System
Sampling Point:	1 -S-O Dennis Road (7-14-MD, 179CA)

### Escherichia coli / E. coli (counts)

# samples: 10	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 10	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 10	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 10	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Distribution System
Sampling Point:	2 - S-B Carradice Rd (7-3-MR, 94E6)

### Escherichia coli / E. coli (counts)

# samples: 11	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# exceedances: 0

### Total coliforms (counts)

# samples: 11      min: < 1.00000 counts/100mL  
# detects: 0      max: < 1.00000 counts/100mL  
# non-detects: 11      avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility: Distribution System  
Sampling Point: 2 - S-D Dixon (7-8-MR, 94F1)

### Escherichia coli / E. coli (counts)

# samples: 11      min: < 1.00000 CFU/100mL  
# detects: 0      max: < 1.00000 CFU/100mL  
# non-detects: 11      avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

# samples: 11      min: < 1.00000 counts/100mL  
# detects: 0      max: < 1.00000 counts/100mL  
# non-detects: 11      avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility: Distribution System  
Sampling Point: 2 - S-F Hospital (7-9-MD, 94F2)

### Escherichia coli / E. coli (counts)

# samples: 11      min: < 1.00000 CFU/100mL

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 11	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Distribution System
Sampling Point:	2 - S-H Nason (7-10-MD, 94F3)

### Escherichia coli / E. coli (counts)

# samples: 11	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 11	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Distribution System
Sampling Point:	2 - S-J North Star-Dragon Hill (7-11-MD, 94F4)

### Escherichia coli / E. coli (counts)

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# samples: 11	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 11	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Distribution System
Sampling Point:	2 - S-K North Star -South Hill (7-12-MD, 94F6)

### Escherichia coli / E. coli (counts)

# samples: 11	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 11	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Distribution System
Sampling Point:	2 - S-M Chew Rd N (7-13-MR, 94F7)

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

### Escherichia coli / E. coli (counts)

# samples: 11	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 11	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Reservoirs
Sampling Point:	R-1 Shadow Heights (8-1-MR, 94EA)

### Escherichia coli / E. coli (counts)

# samples: 12	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 12	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Reservoirs
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## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

**Sampling Point:** R-2 Pinecrest (8-4-MR, 94F9)

### Escherichia coli / E. coli (counts)

# samples: 11	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 11	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# exceedances: 0	

**Facility:** Reservoirs  
**Sampling Point:** R-3 Sugarloaf (8-5-MR, 94FA)

### Escherichia coli / E. coli (counts)

# samples: 12	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 12	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# exceedances: 0	

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Facility: Reservoirs  
Sampling Point: R-4 #1 Abbott Dr (8-2-MR, 94EB)

### Escherichia coli / E. coli (counts)

# samples: 12 min: < 1.00000 CFU/100mL  
# detects: 0 max: < 1.00000 CFU/100mL  
# non-detects: 12 avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

# samples: 12 min: < 1.00000 counts/100mL  
# detects: 0 max: < 1.00000 counts/100mL  
# non-detects: 12 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility: Reservoirs  
Sampling Point: R-4 #2 Abbott Dr (8-3-MR, 94EC)

### Escherichia coli / E. coli (counts)

# samples: 12 min: < 1.00000 CFU/100mL  
# detects: 0 max: < 1.00000 CFU/100mL  
# non-detects: 12 avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

# samples: 12 min: < 1.00000 counts/100mL  
# detects: 0 max: < 1.00000 counts/100mL  
# non-detects: 12 avg: n/a (based on 0 numerical results)



## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# exceedances: 0

Facility: Reservoirs  
Sampling Point: R-5 Dragon Hill (8-6-MR, 94FC)

Escherichia coli / E. coli (counts)

# samples: 12 min: < 1.00000 CFU/100mL  
# detects: 0 max: < 1.00000 CFU/100mL  
# non-detects: 12 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Total coliforms (counts)

# samples: 12 min: < 1.00000 counts/100mL  
# detects: 0 max: < 1.00000 counts/100mL  
# non-detects: 12 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility: Reservoirs  
Sampling Point: R-6 #2 Tatchell New Reservoir (8-8-MR, 94FF)

Escherichia coli / E. coli (counts)

# samples: 11 min: < 1.00000 CFU/100mL  
# detects: 0 max: < 1.00000 CFU/100mL  
# non-detects: 11 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Total coliforms (counts)

# samples: 11 min: < 1.00000 counts/100mL

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 0                      max: < 1.00000 counts/100mL  
# non-detects: 11                avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility:                      Well No 5 Hilborn Rd; Well No 5  
Sampling Point:              Well No 5 at entry point to distribution (2-2-EP, 94D8)

### Escherichia coli / E. coli (counts)

# samples: 14                    min: < 1.00000 CFU/100mL  
# detects: 0                      max: < 1.00000 CFU/100mL  
# non-detects: 14                avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

# samples: 14                    min: < 1.00000 counts/100mL  
# detects: 0                      max: < 1.00000 counts/100mL  
# non-detects: 14                avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility:                      Well No 6 Rolph at Robertson; Well No 6  
Sampling Point:              Well No 6 at entry point to distribution (3-2-EP, 94DC)

### Escherichia coli / E. coli (counts)

# samples: 13                    min: < 1.00000 CFU/100mL  
# detects: 0                      max: < 1.00000 CFU/100mL  
# non-detects: 13                avg: n/a (based on 0 numerical results)  
# exceedances: 0

### Total coliforms (counts)

Report created on 01/19/2009 1:22:16 PM

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## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# samples: 13	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Well No 7 off N. Fraser Dr; Well No 7
Sampling Point:	Well No 7 at entry point to distribution (4-2-EP, 94E0)

### Escherichia coli / E. coli (counts)

# samples: 15	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 15	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 15	min: < 1.00000 counts/100mL
# detects: 1	max: 21 counts/100mL
# non-detects: 14	avg: 21.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility:	Well No 8 Hilborn Rd; Well No 8
Sampling Point:	Well No 8 at entry point to distribution (5-1-EP, 94E1)

### Escherichia coli / E. coli (counts)

# samples: 14	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# exceedances: 0	

## 2008 Quesnel Main System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

### Total coliforms (counts)

# samples: 14	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Well No 9 Carson Field; Well No 9
Sampling Point:	Well No 9 at entry point to distribution (6-2-EP, 94DF)

### Escherichia coli / E. coli (counts)

# samples: 14	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Total coliforms (counts)

# samples: 14	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# exceedances: 0	

### Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, U=non-detect, OR=over-range, OG=overgrown, TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

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\* Indicates Criteria is exceeded

Report created on 01/19/2009 1:22:16 PM

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## 2008 Quesnel Small System Coliform Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Small System

Facility: Distribution System  
Sampling Point: S-N Standpipe Carson Plt (2-1-MR, 94EF)

Escherichia coli / E. coli (counts)

# samples: 13 min: < 1.00000 CFU/100mL  
# detects: 0 max: < 1.00000 CFU/100mL  
# non-detects: 13 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Total coliforms (counts)

# samples: 13 min: < 1.00000 counts/100mL  
# detects: 0 max: < 1.00000 counts/100mL  
# non-detects: 13 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility: W-A; Well No W-A at entry to distribution  
Sampling Point: Well W-A Sword RdTreated water tap (1-1-EP, 94ED)

Escherichia coli / E. coli (counts)

# samples: 14 min: < 1.00000 CFU/100mL  
# detects: 0 max: < 1.00000 CFU/100mL  
# non-detects: 14 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Total coliforms (counts)

# samples: 14 min: < 1.00000 counts/100mL  
# detects: 0 max: < 1.00000 counts/100mL

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2008 Quesnel Small System Coliform  
Summary

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Small System

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# non-detects: 14                      avg: n/a (based on 0 numerical results)  
# exceedances: 0

Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, U=non-detect, OR=over-range, OG=overgrown,  
TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

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## 2008 Quesnel Main Syst Coliform/Ecoli Exceedences

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Facility: Distribution System  
Sampling Point: 1 - S-A Airport (7-1-MR, 94E4)

Total coliforms (counts) Criteria  
\* 06/10/2008 09:20 1 counts/100mL <=0, OG, P User-Defined

# samples: 14 min: < 1.00000 counts/100mL  
# detects: 1 max: 1 counts/100mL  
# non-detects: 13 avg: 1.000 counts/100mL (based on 1 numerical results)  
# exceedances: 1

Facility: Distribution System  
Sampling Point: 1 - S-C Mills Rd (7-2-MR, 94E5)

Total coliforms (counts) Criteria  
\* 05/13/2008 00:00 460 counts/100mL <=0, OG, P User-Defined

# samples: 14 min: < 1.00000 counts/100mL  
# detects: 1 max: 460 counts/100mL  
# non-detects: 13 avg: 460.000 counts/100mL (based on 1 numerical results)  
# exceedances: 1

Facility: Distribution System  
Sampling Point: 1 - S-E Marsh Drive (7-4-MD, 94E7)

Facility: Distribution System  
Sampling Point: 1 - S-G Graham Ave (7-5-MD, 94E8)

Total coliforms (counts) Criteria  
\* 08/19/2008 00:00 1 counts/100mL <=0, OG, P User-Defined

# samples: 14 min: < 1.00000 counts/100mL

## 2008 Quesnel Main Syst Coliform/Ecoli Exceedences

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 1	max: 1 counts/100mL
# non-detects: 13	avg: 1.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility:	Distribution System
Sampling Point:	1 - S-I West Fraser Rd (7-6-MR, 94E9)

Total coliforms (counts)	Criteria
* 08/19/2008 00:00	4 counts/100mL <=0, OG, P User-Defined

# samples: 12	min: < 1.00000 counts/100mL
# detects: 1	max: 4 counts/100mL
# non-detects: 11	avg: 4.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility:	Distribution System
Sampling Point:	1 - S-L Pederson Rd (7-7-MD, 94F0)

Total coliforms (counts)	Criteria
* 10/15/2008 13:35	2 counts/100mL <=0, OG, P User-Defined

# samples: 14	min: < 1.00000 counts/100mL
# detects: 1	max: 2 counts/100mL
# non-detects: 13	avg: 2.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility:	Distribution System
Sampling Point:	1 -S-O Dennis Road (7-14-MD, 179CA)

Facility:	Distribution System
Sampling Point:	2 - S-B Carradice Rd (7-3-MR, 94E6)



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2008 Quesnel Main Syst Coliform/Ecoli  
Exceedences

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

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Facility:	Distribution System
Sampling Point:	2 - S-D Dixon (7-8-MR, 94F1)
Facility:	Distribution System
Sampling Point:	2 - S-F Hospital (7-9-MD, 94F2)
Facility:	Distribution System
Sampling Point:	2 - S-H Nason (7-10-MD, 94F3)
Facility:	Distribution System
Sampling Point:	2 - S-J North Star-Dragon Hill (7-11-MD, 94F4)
Facility:	Distribution System
Sampling Point:	2 - S-K North Star -South Hill (7-12-MD, 94F6)
Facility:	Distribution System
Sampling Point:	2 - S-M Chew Rd N (7-13-MR, 94F7)
Facility:	Reservoirs
Sampling Point:	R-1 Shadow Heights (8-1-MR, 94EA)
Facility:	Reservoirs
Sampling Point:	R-2 Pinecrest (8-4-MR, 94F9)
Facility:	Reservoirs
Sampling Point:	R-3 Sugarloaf (8-5-MR, 94FA)
Facility:	Reservoirs
Sampling Point:	R-4 #1 Abbott Dr (8-2-MR, 94EB)
Facility:	Reservoirs
Sampling Point:	R-4 #2 Abbott Dr (8-3-MR, 94EC)
Facility:	Reservoirs
Sampling Point:	R-5 Dragon Hill (8-6-MR, 94FC)
Facility:	Reservoirs

## 2008 Quesnel Main Syst Coliform/Ecoli Exceedences

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Sampling Point: R-6 #2 Tatchell New Reservoir (8-8-MR, 94FF)

Facility: Well No 5 Hilborn Rd; Well No 5  
Sampling Point: Well No 5 at entry point to distribution (2-2-EP, 94D8)

Facility: Well No 6 Rolph at Robertson; Well No 6  
Sampling Point: Well No 6 at entry point to distribution (3-2-EP, 94DC)

Facility: Well No 7 off N. Fraser Dr; Well No 7  
Sampling Point: Well No 7 at entry point to distribution (4-2-EP, 94E0)

Total coliforms (counts)	Criteria
* 11/18/2008 10:45                      21 counts/100mL	<=0, OG, P      User-Defined

# samples: 15	min: < 1.00000 counts/100mL
# detects: 1	max: 21 counts/100mL
# non-detects: 14	avg: 21.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

Facility: Well No 8 Hilborn Rd; Well No 8  
Sampling Point: Well No 8 at entry point to distribution (5-1-EP, 94E1)

Facility: Well No 9 Carson Field; Well No 9  
Sampling Point: Well No 9 at entry point to distribution (6-2-EP, 94DF)

### Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, U=non-detect, OR=over-range, OG=overgrown, TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

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» means detected & greater than number shown

\* Indicates Criteria is exceeded

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2008 Quesnel Sm Syst Coliform/Ecoli  
Exceedences

City of Quesnel

01/01/2008 to 12/31/2008 (mm/dd/yyyy)

City of Quesnel – Small System

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Facility:	Distribution System
Sampling Point:	S-N Standpipe Carson Plt (2-1-MR, 94EF)

Facility:	W-A; Well No W-A at entry to distribution
Sampling Point:	Well W-A Sword RdTreated water tap (1-1-EP, 94ED)

Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, U=non-detect, OR=over-range, OG=overgrown,  
TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

< means less than lower detection limit shown  
> means greater than upper detection limit shown  
« means detected & less than number shown  
» means detected & greater than number shown

\* Indicates Criteria is exceeded

## 2008 April Semi Annual Summary

City of Quesnel

04/15/2008 to 04/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Facility: Distribution System  
Sampling Point: 1 - S-C Mills Rd (7-2-MR, 94E5)

Copper (total) Criteria  
04/15/2008 10:40 0.007 mg/L <=1.0 AO

# samples: 1 min: 0.007 mg/L  
# detects: 1 max: 0.007 mg/L  
# non-detects: 0 avg: 0.007 mg/L (based on 1 numerical results)  
# exceedances: 0

Escherichia coli / E. coli (counts) Criteria  
04/15/2008 10:40 < 1.00000 CFU/100mL

# samples: 1 min: < 1.00000 CFU/100mL  
# detects: 0 max: < 1.00000 CFU/100mL  
# non-detects: 1 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Heterotrophic Plate Count / HPC Criteria  
04/15/2008 10:40 < 1.00000 CFU/mL <=500 User-Defined

# samples: 1 min: < 1.00000 CFU/mL  
# detects: 0 max: < 1.00000 CFU/mL  
# non-detects: 1 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Iron (total) Criteria  
04/15/2008 10:40 < 0.05000 mg/L <=0.3 AO

# samples: 1 min: < 0.05000 mg/L

# 2008 April Semi Annual Summary

City of Quesnel

04/15/2008 to 04/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 0	max: < 0.05000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Lead (total)	Criteria
04/15/2008 10:40 < 0.00100 mg/L	<=0.010 MAC

# samples: 1	min: < 0.00100 mg/L
# detects: 0	max: < 0.00100 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Manganese (total)	Criteria
04/15/2008 10:40 0.004 mg/L	<=0.05 AO

# samples: 1	min: 0.004 mg/L
# detects: 1	max: 0.004 mg/L
# non-detects: 0	avg: 0.004 mg/L (based on 1 numerical results)
# exceedances: 0	

Temperature	Criteria
04/15/2008 10:40 5 degrees C	

# samples: 1	min: 5 degrees C
# detects: 1	max: 5 degrees C
# non-detects: 0	avg: 5.000 degrees C (based on 1 numerical results)
# exceedances: 0	

Total coliforms (counts)	Criteria
04/15/2008 10:40 < 1.00000 counts/100mL	<=0, OG, P User-Defined

# 2008 April Semi Annual Summary

City of Quesnel

04/15/2008 to 04/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# samples: 1	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Turbidity	Criteria
04/15/2008 10:40      0.10 NTU	<=1      User-Defined

# samples: 1	min: 0.10 NTU
# detects: 1	max: 0.10 NTU
# non-detects: 0	avg: 0.100 NTU (based on 1 numerical results)
# exceedances: 0	95th percentile: 0.100 NTU

Vinyl chloride	Criteria
04/15/2008 10:40      < 0.00020000 mg/L	<=0.002      MAC

# samples: 1	min: < 0.00020000 mg/L
# detects: 0	max: < 0.00020000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Zinc (total)	Criteria
04/15/2008 10:40      0.008 mg/L	<=5      AO

# samples: 1	min: 0.008 mg/L
# detects: 1	max: 0.008 mg/L
# non-detects: 0	avg: 0.008 mg/L (based on 1 numerical results)
# exceedances: 0	

Facility:	Distribution System
Sampling Point:	1 - S-L Pederson Rd (7-7-MD, 94F0)

## 2008 April Semi Annual Summary

City of Quesnel

04/15/2008 to 04/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Copper (total)		Criteria	
04/15/2008 12:50	0.002 mg/L	<=1.0	AO

# samples: 1	min: 0.002 mg/L
# detects: 1	max: 0.002 mg/L
# non-detects: 0	avg: 0.002 mg/L (based on 1 numerical results)
# exceedances: 0	

Escherichia coli / E. coli (counts)		Criteria	
04/15/2008 12:50	< 1.00000 CFU/100mL		

# samples: 1	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Heterotrophic Plate Count / HPC		Criteria	
04/15/2008 12:50	< 1.00000 CFU/mL	<=500	User-Defined

# samples: 1	min: < 1.00000 CFU/mL
# detects: 0	max: < 1.00000 CFU/mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Iron (total)		Criteria	
04/15/2008 12:50	< 0.05000 mg/L	<=0.3	AO

# samples: 1	min: < 0.05000 mg/L
# detects: 0	max: < 0.05000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

## 2008 April Semi Annual Summary

City of Quesnel

04/15/2008 to 04/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Lead (total)		Criteria	
04/15/2008 12:50	< 0.00100 mg/L	<=0.010	MAC

# samples: 1	min: < 0.00100 mg/L
# detects: 0	max: < 0.00100 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Manganese (total)		Criteria	
04/15/2008 12:50	< 0.00100 mg/L	<=0.05	AO

# samples: 1	min: < 0.00100 mg/L
# detects: 0	max: < 0.00100 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Temperature		Criteria	
04/15/2008 12:50	6 degrees C		

# samples: 1	min: 6 degrees C
# detects: 1	max: 6 degrees C
# non-detects: 0	avg: 6.000 degrees C (based on 1 numerical results)
# exceedances: 0	

Total coliforms (counts)		Criteria	
04/15/2008 12:50	< 1.00000 counts/100mL	<=0, OG, P	User-Defined

# samples: 1	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	



## 2008 April Semi Annual Summary

City of Quesnel

04/15/2008 to 04/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Turbidity		Criteria	
04/15/2008 12:50	< 0.10000 NTU	<=1	User-Defined

# samples: 1	min: < 0.10000 NTU
# detects: 0	max: < 0.10000 NTU
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Vinyl chloride		Criteria	
04/15/2008 12:50	< 0.00020000 mg/L	<=0.002	MAC

# samples: 1	min: < 0.00020000 mg/L
# detects: 0	max: < 0.00020000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Zinc (total)		Criteria	
04/15/2008 12:50	< 0.00500 mg/L	<=5	AO

# samples: 1	min: < 0.00500 mg/L
# detects: 0	max: < 0.00500 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, U=non-detect, OR=over-range, OG=overgrown,  
TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

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> means greater than upper detection limit shown  
« means detected & less than number shown  
» means detected & greater than number shown

\* Indicates Criteria is exceeded

Facility:	Distribution System
Sampling Point:	1 - S-C Mills Rd (7-2-MR, 94E5)

Copper (total)		Criteria	
10/15/2008 09:45	< 0.02000 mg/L	<=1.0	AO

# samples: 1	min: < 0.02000 mg/L
# detects: 0	max: < 0.02000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Escherichia coli / E. coli (counts)	Criteria
10/15/2008 09:45	< 1.00000 CFU/100mL

# samples: 1	min: < 1.00000 CFU/100mL
# detects: 0	max: < 1.00000 CFU/100mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Heterotrophic Plate Count / HPC	Criteria	
10/15/2008 09:45	< 1.00000 CFU/mL	<=500 User-Defined

# samples: 1	min: < 1.00000 CFU/mL
# detects: 0	max: < 1.00000 CFU/mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Iron (total)	Criteria	
10/15/2008 09:45	< 0.01000 mg/L	<=0.3 AO

# samples: 1	min: < 0.01000 mg/L
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# 2008 October Semi Annual Summary

City of Quesnel

10/15/2008 to 10/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 0	max: < 0.01000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Lead (total)	Criteria
10/15/2008 09:45 < 0.03000 mg/L	<=0.010 MAC

# samples: 1	min: < 0.03000 mg/L
# detects: 0	max: < 0.03000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Manganese (total)	Criteria
10/15/2008 09:45 0.003 mg/L	<=0.05 AO

# samples: 1	min: 0.003 mg/L
# detects: 1	max: 0.003 mg/L
# non-detects: 0	avg: 0.003 mg/L (based on 1 numerical results)
# exceedances: 0	

Temperature	Criteria
10/15/2008 09:45 11 degrees C	

# samples: 1	min: 11 degrees C
# detects: 1	max: 11 degrees C
# non-detects: 0	avg: 11.000 degrees C (based on 1 numerical results)
# exceedances: 0	

Total coliforms (counts)	Criteria
10/15/2008 09:45 < 1.00000 counts/100mL	<=0, OG, P User-Defined

# 2008 October Semi Annual Summary

City of Quesnel

10/15/2008 to 10/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

# samples: 1	min: < 1.00000 counts/100mL
# detects: 0	max: < 1.00000 counts/100mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Turbidity	Criteria
10/15/2008 09:45      0.11 NTU	<=1      User-Defined

# samples: 1	min: 0.11 NTU
# detects: 1	max: 0.11 NTU
# non-detects: 0	avg: 0.110 NTU (based on 1 numerical results)
# exceedances: 0	95th percentile: 0.110 NTU

Vinyl chloride	Criteria
10/15/2008 09:45      < 0.00020000 mg/L	<=0.002      MAC

# samples: 1	min: < 0.00020000 mg/L
# detects: 0	max: < 0.00020000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Zinc (total)	Criteria
10/15/2008 09:45      0.010 mg/L	<=5      AO

# samples: 1	min: 0.010 mg/L
# detects: 1	max: 0.010 mg/L
# non-detects: 0	avg: 0.010 mg/L (based on 1 numerical results)
# exceedances: 0	

Facility:	Distribution System
Sampling Point:	1 - S-L Pederson Rd (7-7-MD, 94F0)

# 2008 October Semi Annual Summary

City of Quesnel

10/15/2008 to 10/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Copper (total)		Criteria	
10/15/2008 13:35	< 0.02000 mg/L	<=1.0	AO

# samples: 1	min: < 0.02000 mg/L
# detects: 0	max: < 0.02000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Escherichia coli / E. coli (counts)		Criteria	
10/15/2008 13:35	1 CFU/100mL		

# samples: 1	min: 1 CFU/100mL
# detects: 1	max: 1 CFU/100mL
# non-detects: 0	avg: 1.000 CFU/100mL (based on 1 numerical results)
# exceedances: 0	

Heterotrophic Plate Count / HPC		Criteria	
10/15/2008 13:35	< 1.00000 CFU/mL	<=500	User-Defined

# samples: 1	min: < 1.00000 CFU/mL
# detects: 0	max: < 1.00000 CFU/mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Iron (total)		Criteria	
10/15/2008 13:35	< 0.01000 mg/L	<=0.3	AO

# samples: 1	min: < 0.01000 mg/L
# detects: 0	max: < 0.01000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

## 2008 October Semi Annual Summary

City of Quesnel

10/15/2008 to 10/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Lead (total)	Criteria
10/15/2008 13:35 < 0.03000 mg/L	<=0.010 MAC

# samples: 1	min: < 0.03000 mg/L
# detects: 0	max: < 0.03000 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Manganese (total)	Criteria
10/15/2008 13:35 < 0.00300 mg/L	<=0.05 AO

# samples: 1	min: < 0.00300 mg/L
# detects: 0	max: < 0.00300 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Temperature	Criteria
10/15/2008 13:35 10 degrees C	

# samples: 1	min: 10 degrees C
# detects: 1	max: 10 degrees C
# non-detects: 0	avg: 10.000 degrees C (based on 1 numerical results)
# exceedances: 0	

Total coliforms (counts)	Criteria
* 10/15/2008 13:35 2 counts/100mL	<=0, OG, P User-Defined

# samples: 1	min: 2 counts/100mL
# detects: 1	max: 2 counts/100mL
# non-detects: 0	avg: 2.000 counts/100mL (based on 1 numerical results)
# exceedances: 1	

# 2008 October Semi Annual Summary

City of Quesnel

10/15/2008 to 10/15/2008 (mm/dd/yyyy)

City of Quesnel – Main System

Turbidity		Criteria	
10/15/2008 13:35	< 0.10000 NTU	<=1	User-Defined

# samples: 1 min: < 0.10000 NTU  
 # detects: 0 max: < 0.10000 NTU  
 # non-detects: 1 avg: n/a (based on 0 numerical results)  
 # exceedances: 0

Vinyl chloride		Criteria	
10/15/2008 13:35	< 0.00020000 mg/L	<=0.002	MAC

# samples: 1 min: < 0.00020000 mg/L  
 # detects: 0 max: < 0.00020000 mg/L  
 # non-detects: 1 avg: n/a (based on 0 numerical results)  
 # exceedances: 0

Zinc (total)		Criteria	
10/15/2008 13:35	0.010 mg/L	<=5	AO

# samples: 1 min: 0.010 mg/L  
 # detects: 1 max: 0.010 mg/L  
 # non-detects: 0 avg: 0.010 mg/L (based on 1 numerical results)  
 # exceedances: 0



Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, U=non-detect, OR=over-range, OG=overgrown,  
TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

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> means greater than upper detection limit shown  
« means detected & less than number shown  
» means detected & greater than number shown

\* Indicates Criteria is exceeded

Facility: Well No 5 Hilborn Rd; Well No 5  
Sampling Point: Well No 5 at entry point to distribution (2-2-EP, 94D8)

## Chloride

# samples: 4 min: 7.18 mg/L  
# detects: 4 max: 12.4 mg/L  
# non-detects: 0 avg: 10.670 mg/L (based on 4 numerical results)  
# exceedances: 0

## Nitrate (as N)

# samples: 4 min: < 0.01000 mg/L  
# detects: 0 max: < 0.05000 mg/L  
# non-detects: 4 avg: n/a (based on 0 numerical results)  
# exceedances: 0

## Nitrite (as N)

# samples: 4 min: < 0.00200 mg/L  
# detects: 0 max: < 0.00200 mg/L  
# non-detects: 4 avg: n/a (based on 0 numerical results)  
# exceedances: 0

Facility: Well No 6 Rolph at Robertson; Well No 6  
Sampling Point: Well No 6 at entry point to distribution (3-2-EP, 94DC)

## Chloride

# samples: 4 min: 9.94 mg/L  
# detects: 4 max: 12.7 mg/L  
# non-detects: 0 avg: 11.510 mg/L (based on 4 numerical results)

# exceedances: 0

## Nitrate (as N)

# samples: 4	min: 0.14 mg/L
# detects: 4	max: 0.95 mg/L
# non-detects: 0	avg: 0.535 mg/L (based on 4 numerical results)
# exceedances: 0	

## Nitrite (as N)

# samples: 4	min: < 0.00200 mg/L
# detects: 2	max: 0.004 mg/L
# non-detects: 2	avg: 0.004 mg/L (based on 2 numerical results)
# exceedances: 0	

Facility:	Well No 7 off N. Fraser Dr; Well No 7
Sampling Point:	Well No 7 at entry point to distribution (4-2-EP, 94E0)

## Chloride

# samples: 4	min: 7.50 mg/L
# detects: 4	max: 12.2 mg/L
# non-detects: 0	avg: 10.033 mg/L (based on 4 numerical results)
# exceedances: 0	

## Nitrate (as N)

# samples: 4	min: 0.08 mg/L
# detects: 4	max: 0.36 mg/L
# non-detects: 0	avg: 0.210 mg/L (based on 4 numerical results)
# exceedances: 0	

## Nitrite (as N)

# samples: 4	min: < 0.00200 mg/L
# detects: 1	max: 0.037 mg/L
# non-detects: 3	avg: 0.037 mg/L (based on 1 numerical results)
# exceedances: 0	

Facility:	Well No 8 Hilborn Rd; Well No 8
Sampling Point:	Well No 8 at entry point to distribution (5-1-EP, 94E1)

## Chloride

# samples: 4	min: 2.17 mg/L
# detects: 4	max: 3.47 mg/L
# non-detects: 0	avg: 2.938 mg/L (based on 4 numerical results)
# exceedances: 0	

## Nitrate (as N)

# samples: 4	min: < 0.01000 mg/L
# detects: 0	max: < 0.05000 mg/L
# non-detects: 4	avg: n/a (based on 0 numerical results)
# exceedances: 0	

## Nitrite (as N)

# samples: 4	min: < 0.00200 mg/L
# detects: 0	max: < 0.00200 mg/L
# non-detects: 4	avg: n/a (based on 0 numerical results)
# exceedances: 0	

Facility:	Well No 9 Carson Field; Well No 9
Sampling Point:	Well No 9 at entry point to distribution (6-2-EP, 94DF)

## Chloride

# samples: 4	min: 1.07 mg/L
# detects: 4	max: 1.41 mg/L
# non-detects: 0	avg: 1.213 mg/L (based on 4 numerical results)
# exceedances: 0	

## Nitrate (as N)

# samples: 4	min: 0.03 mg/L
# detects: 1	max: < 0.05000 mg/L
# non-detects: 3	avg: 0.030 mg/L (based on 1 numerical results)
# exceedances: 0	

## Nitrite (as N)

# samples: 4	min: < 0.00200 mg/L
# detects: 0	max: < 0.00200 mg/L
# non-detects: 4	avg: n/a (based on 0 numerical results)
# exceedances: 0	

## Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, U=non-detect, OR=over-range, OG=overgrown, TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

< means less than lower detection limit shown  
> means greater than upper detection limit shown  
« means detected & less than number shown  
» means detected & greater than number shown

\* Indicates Criteria is exceeded