

Drinking Water Annual Report -2011

City of Quesnel Water System

PURPOSE

The City of Quesnel annual water report describes the water system and provides a summary of quality testing and water management during 2011. It is a requirement under the British Columbia Drinking Water Regulations Drinking Water Protection Act.

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 ball parks. 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 2011, water usage in the City system resulted in 615,139,562 US gallons used.

WATER MANAGEMENT

The SCADA monitoring system enables 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.

The water system emergency plan is updated annually. Operating procedures continue to be 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.

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.

In May 2004 the City commenced sending their water samples to Maxxam Analytics 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) and 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 13 per month. The City exceeds that number of monthly samples. The City samples 16 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 2011, 367 samples were tested for E.Coli with zero exceedences. There were 367 samples tested for total coliform with three exceedences. One exceedence at the Tatchell Reservoir, one at Well #7 and one at Well #8. Subsequent testing proved negative for coliform.

CONCLUSION

The 2011 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.

Additional information may be obtained from the City of Quesnel Utilities Department at 250 992-6330, attention: Chris Coben, Utilities Superintendent.

Attachment "A" contains:

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

Attachment "B" contains:

- Water sampling result summary reports for 2011 from Maxxam 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) 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		
Page 1 of 2		
SITE	LOCATION	PARAMETERS
BI-WEEKLY (Distribution System) (every other Tues between 10am and 2pm)		
FIRST WEEK		
Water Trax Locator #		
94 E4	Airport	Parameters: Total coliforms, Ecoli, HPC’s, turbidity, temp
94 E5	Mills Rd	
94 E7	Marsh Dr	
94 E8	Graham Avenue	
94 E9	West Fraser Rd	
94 FO	Pederson Rd	
94 EF	Carson Pit	
179 CA	Dennis Road	
THIRD WEEK		
94 E6	Carradice Rd	Parameters: Total coliforms, Ecoli, HPC’s, turbidity, temp
94 F1	Dixon St	
94 F2	Front St – Hospital	
94 F3	Nason St	
94 F4	N. Star Dragon Hill	
94 F6	N Star South Hill	
94 F7	Chew Rd	
21 D9B	Bulk Water on North Star	
MONTHLY (Reservoirs)		
94 EA	R-1 Shadow Heights	Parameters: Total coliforms, Ecoli, Temp
94 F9	R-2 Pinecrest	
94 FA	R-3 Sugar Loaf	
94 EB	R-4 Abbott Dr 1	
94 EC	R-4 Abbott Dr 2	
94 FC	R-5 Dragon Hill	
94 FF	R-6 New Tatchell Reservoir	
MONTHLY (Wells)		
94 ED	Well A Sword Rd	Parameters: Total coliforms, Ecoli, Temp
94 D1	Well 3 Rolph at Roddis	
94 D8	Well 5 Hilborn Rd	
94 DC	Well 6 Rolph at Robertson	
94 EO	Well 7 N. Fraser Dr	

94 E1	Well 8 Hilborn Rd	
94 DF	Well 9 Carson Sub	

City of Quesnel
Water Quality Monitoring Program

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QUARTERLY (Wells)

(first week of March, June, Sept, Dec)

Water Trax Locator #		
94 ED	Well A Sword Rd	Parameters: Chloride, Nitrate, Nitrite, Temperature
94 D1	Well 3 Rolph at Roddis	
94 D8	Well 5 Hilborn Rd	
94 DC	Well 6 Rolph at Robertson	
94 EO	Well 7 N. Fraser Drive	
94 E1	Well 8 Hilborn Rd	
94 DF	Well 9 Carson Sub	
SEMI - ANNUALLY (Distribution System) (first week Oct & April)		
94 E5	Mills Rd (94E5)	Parameters: Copper, Zinc, Lead, Iron, Vinyl chloride, Manganese, Temperature
94 FO	Pederson Rd (94F0)	
ANNUALLY (Wells)		
94 ED	Well A Sword Rd	Parameters: Enhanced Potability , Metals, Langelier saturation index (LSI) Volatile Organic Compounds, Temp.
94 D1	Well 3 Rolph at Roddis	
94 D8	Well 5 Hilborn Rd	
94 DC	Well 6 Rolph at Robertson	
94 EO	Well 7 N. Fraser Drive	
94 E1	Well 8 Hilborn Rd	
94 DF	Well 9 Carson Sub	

Attachment "B"

Water sample result reports (in pdf format):

- 2011 Quesnel Main System Coliform Summary**
- 2011 Quesnel Small System Coliform Summary**
- 2011 Quesnel Main System Coliform/Ecoli Exceedences**
- 2011 Quesnel Small System Coliform/Ecoli Exceedences**
- 2011 April & October Semi-Annual Summary**
- 2011 Quarterly on Small & Main System**

2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Facility: Distribution System
Sampling Point: Bulk Water Site #1 (7-15-QC, 21D9B)

Escherichia coli / E. coli (counts)

# samples: 15	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 15	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 15	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 15	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL

2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

non-detects: 12
of Exceedences: 0
avg: n/a (based on 0 numerical results)

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

Escherichia coli / E. coli (counts)

samples: 13
detects: 0
non-detects: 13
of Exceedences: 0
min: < 1 CFU/100mL
max: < 1 CFU/100mL
avg: n/a (based on 0 numerical results)

Total coliforms (counts)

samples: 13
detects: 0
non-detects: 13
of Exceedences: 0
min: < 1 counts/100mL
max: < 1 counts/100mL
avg: n/a (based on 0 numerical results)

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

Escherichia coli / E. coli (counts)

samples: 11
detects: 0
non-detects: 11
of Exceedences: 0
min: < 1 CFU/100mL
max: < 1 CFU/100mL
avg: n/a (based on 0 numerical results)

Total coliforms (counts)

2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

# samples: 11	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 13	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 13	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 14	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

2011 Main System Coliform Summary
01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel
City of Quesnel – Main System

Total coliforms (counts)

# samples: 14	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 13	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 13	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 13	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)

2011 Main System Coliform Summary
01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel
City of Quesnel – Main System

of Exceedences: 0

Total coliforms (counts)

# samples: 13	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Facility:	Distribution System
Sampling Point:	S- N. Star Dragon Hill (7-11-MD, 94F4)

Escherichia coli / E. coli (counts)

# samples: 14	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 14	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Facility:	Distribution System
Sampling Point:	S- N.Star South Hill (7-12-MD, 94F6)

Escherichia coli / E. coli (counts)

# samples: 14	min: < 1 CFU/100mL
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2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 0	max: < 1 CFU/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 14	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 14	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 14	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

2011 Main System Coliform Summary
01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel
City of Quesnel – Main System

Escherichia coli / E. coli (counts)

# samples: 11	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 11	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 11	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 11	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Facility:	Distribution System
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2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Sampling Point: S-Graham Ave (7-5-MD, 94E8)

Escherichia coli / E. coli (counts)

# samples: 13	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 13	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Facility: Distribution System

Sampling Point: S-Hospital (7-9-MD, 94F2)

Escherichia coli / E. coli (counts)

# samples: 15	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 15	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 15	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 15	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

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

Escherichia coli / E. coli (counts)

# samples: 11	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 11	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)

2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

of Exceedences: 0

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
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2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 0	max: < 1 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 1	max: 1 counts/100mL
# non-detects: 11	avg: 1.000 counts/100mL (based on 1 numerical results)
# of Exceedences: 1	

Facility:	Well 3 Rolph at Roddis; Well No 3
Sampling Point:	Well 3 Rolph at Roddis (1-2-EP, 94D1)

Escherichia coli / E. coli (counts)

# samples: 11	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)

2011 Main System Coliform Summary
01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel
City of Quesnel – Main System

of Exceedences: 0

Total coliforms (counts)

# samples: 11	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 11	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Facility:	Well 5 Hilborn Rd; Well No 5
Sampling Point:	Well 5 Hilborn Rd (2-2-EP, 94D8)

Escherichia coli / E. coli (counts)

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

Total coliforms (counts)

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

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
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2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Facility:	Well 7 N. Fraser Dr; Well No 7
Sampling Point:	Well 7 N. Fraser Dr (4-2-EP, 94E0)

Escherichia coli / E. coli (counts)

# samples: 13	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 13	min: < 1 counts/100mL
# detects: 1	max: 2 counts/100mL
# non-detects: 12	avg: 2.000 counts/100mL (based on 1 numerical results)
# of Exceedences: 1	

Facility:	Well 8 Hilborn Rd; Well No 8
Sampling Point:	Well 8 Hilborn Rd (5-1-EP, 94E1)

2011 Main System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Escherichia coli / E. coli (counts)

# samples: 13	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 13	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 13	min: < 1 counts/100mL
# detects: 1	max: 1 counts/100mL
# non-detects: 12	avg: 1.000 counts/100mL (based on 1 numerical results)
# of Exceedences: 1	

Facility:	Well 9 Carson Sub; Well No 9
Sampling Point:	Well 9 Carson Sub (6-2-EP, 94DF)

Escherichia coli / E. coli (counts)

# samples: 14	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 14	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 14	avg: n/a (based on 0 numerical results)
# of Exceedences: 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**

2011 Main System Coliform Ecoli
Exceedences

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Facility:	Distribution System
Sampling Point:	Bulk Water Site #1 (7-15-QC, 21D9B)
Facility:	Distribution System
Sampling Point:	S- Airport (7-1-MR, 94E4)
Facility:	Distribution System
Sampling Point:	S- Carradice Rd (7-3-MR, 94E6)
Facility:	Distribution System
Sampling Point:	S- Chew Rd (7-13-MR, 94F7)
Facility:	Distribution System
Sampling Point:	S- Dennis Road (7-14-MD, 179CA)
Facility:	Distribution System
Sampling Point:	S- Dixon (7-8-MR, 94F1)
Facility:	Distribution System
Sampling Point:	S- Marsh Drive (7-4-MD, 94E7)
Facility:	Distribution System
Sampling Point:	S- Mills Rd (7-2-MR, 94E5)
Facility:	Distribution System
Sampling Point:	S- N. Star Dragon Hill (7-11-MD, 94F4)
Facility:	Distribution System
Sampling Point:	S- N.Star South Hill (7-12-MD, 94F6)
Facility:	Distribution System
Sampling Point:	S- Nason (7-10-MD, 94F3)
Facility:	Distribution System
Sampling Point:	S- Pederson Rd (7-7-MD, 94F0)

2011 Main System Coliform Ecoli Exceedences

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Facility:	Distribution System
Sampling Point:	S- West Fraser Rd (7-6-MR, 94E9)
Facility:	Distribution System
Sampling Point:	S-Graham Ave (7-5-MD, 94E8)
Facility:	Distribution System
Sampling Point:	S-Hospital (7-9-MD, 94F2)
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 Abbott Dr 1 (8-2-MR, 94EB)
Facility:	Reservoirs
Sampling Point:	R-4 Abbott Dr 2 (8-3-MR, 94EC)
Facility:	Reservoirs
Sampling Point:	R-5 Dragon Hill (8-6-MR, 94FC)
Facility:	Reservoirs
Sampling Point:	R-6 New Tatchell Reservoir (8-8-MR, 94FF)

Total coliforms (counts)	Criteria
* 08/16/2011 10:30	1 counts/100mL <=0, OG, P User-Defined

# samples: 12	min: < 1 counts/100mL
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2011 Main System Coliform Ecoli Exceedences

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

non-detects: 11
of Exceedences: 1

avg: 1.000 counts/100mL (based on 1 numerical results)

Facility: Well 3 Rolph at Roddis; Well No 3
Sampling Point: Well 3 Rolph at Roddis (1-2-EP, 94D1)

Facility: Well 5 Hilborn Rd; Well No 5
Sampling Point: Well 5 Hilborn Rd (2-2-EP, 94D8)

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

Facility: Well 7 N. Fraser Dr; Well No 7
Sampling Point: Well 7 N. Fraser Dr (4-2-EP, 94E0)

Total coliforms (counts) Criteria
* 12/13/2011 11:30 2 counts/100mL <=0, OG, P User-Defined

samples: 13 min: < 1 counts/100mL
detects: 1 max: 2 counts/100mL
non-detects: 12 avg: 2.000 counts/100mL (based on 1 numerical results)
of Exceedences: 1

Facility: Well 8 Hilborn Rd; Well No 8
Sampling Point: Well 8 Hilborn Rd (5-1-EP, 94E1)

Total coliforms (counts) Criteria
* 07/26/2011 11:10 1 counts/100mL <=0, OG, P User-Defined

samples: 13 min: < 1 counts/100mL
detects: 1 max: 1 counts/100mL

2011 Main System Coliform Ecoli
Exceedences

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

non-detects: 12
of Exceedences: 1

avg: 1.000 counts/100mL (based on 1 numerical results)

Facility: Well 9 Carson Sub; Well No 9
Sampling Point: Well 9 Carson Sub (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

< 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

2011 Quarterly Main System

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Facility: Well 3 Rolph at Roddis; Well No 3
Sampling Point: Well 3 Rolph at Roddis (1-2-EP, 94D1)

Chloride	Criteria
02/08/2011 10:45 8.7 mg/L	<=250 AO
04/05/2011 15:10 9.0 mg/L	<=250 AO
06/21/2011 10:30 5.3 mg/L	<=250 AO
06/28/2011 13:25 5.0 mg/L	<=250 AO
08/30/2011 14:00 7.8 mg/L	<=250 AO
10/19/2011 14:05 11 mg/L	<=250 AO

Nitrate (as N)	Criteria
02/08/2011 10:45 < 0.02 mg/L	
04/05/2011 15:10 < 0.02 mg/L	
06/21/2011 10:30 0.03 mg/L	
06/28/2011 13:25 0.06 mg/L	
08/30/2011 14:00 < 0.02 mg/L	
10/19/2011 14:05 0.31 mg/L	

Nitrate + Nitrite (as N)	Criteria
02/08/2011 10:45 < 0.02 mg/L	
04/05/2011 15:10 < 0.02 mg/L	
06/21/2011 10:30 0.03 mg/L	
06/28/2011 13:25 0.06 mg/L	
08/30/2011 14:00 < 0.02 mg/L	
10/19/2011 14:05 0.32 mg/L	

Nitrite (as N)	Criteria
02/08/2011 10:45 < 0.005 mg/L	
04/05/2011 15:10 < 0.005 mg/L	
06/21/2011 10:30 < 0.005 mg/L	
06/28/2011 13:25 < 0.005 mg/L	
08/30/2011 14:00 < 0.005 mg/L	



2011 Quarterly Main System

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Nitrite (as N)

Criteria

10/19/2011 14:05 0.007 mg/L

Facility:

Well 6 Rolph at Robertson; Well No 6

Sampling Point:

Well 6 Rolph at Robertson (3-2-EP, 94DC)

Chloride

Criteria

02/08/2011 11:15	10 mg/L	<=250	AO
04/05/2011 11:40	11 mg/L	<=250	AO
06/21/2011 11:15	9.0 mg/L	<=250	AO
06/28/2011 13:00	9.3 mg/L	<=250	AO
08/30/2011 13:35	13 mg/L	<=250	AO
10/19/2011 13:50	15 mg/L	<=250	AO

Nitrate (as N)

Criteria

02/08/2011 11:15	0.12 mg/L
04/05/2011 11:40	0.14 mg/L
06/21/2011 11:15	0.14 mg/L
06/28/2011 13:00	< 0.02 mg/L
08/30/2011 13:35	1.23 mg/L
10/19/2011 13:50	0.90 mg/L

Nitrate + Nitrite (as N)

Criteria

02/08/2011 11:15	0.12 mg/L
04/05/2011 11:40	0.14 mg/L
06/21/2011 11:15	0.14 mg/L
06/28/2011 13:00	< 0.02 mg/L
08/30/2011 13:35	1.23 mg/L
10/19/2011 13:50	0.91 mg/L

Nitrite (as N)

Criteria

02/08/2011 11:15	< 0.005 mg/L
04/05/2011 11:40	< 0.005 mg/L

2011 Quarterly Main System

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Nitrite (as N)

Criteria

06/21/2011 11:15	< 0.005 mg/L
06/28/2011 13:00	< 0.005 mg/L
08/30/2011 13:35	< 0.005 mg/L
10/19/2011 13:50	0.010 mg/L

Facility: Well 7 N. Fraser Dr; Well No 7
Sampling Point: Well 7 N. Fraser Dr (4-2-EP, 94E0)

Chloride

Criteria

02/08/2011 14:15	6.3 mg/L	<=250	AO
04/05/2011 11:20	9.5 mg/L	<=250	AO
06/21/2011 12:50	12 mg/L	<=250	AO
06/28/2011 11:50	11 mg/L	<=250	AO
08/30/2011 13:00	15 mg/L	<=250	AO
10/19/2011 12:05	10 mg/L	<=250	AO

Nitrate (as N)

Criteria

02/08/2011 14:15	0.07 mg/L
04/05/2011 11:20	0.10 mg/L
06/21/2011 12:50	0.36 mg/L
06/28/2011 11:50	0.08 mg/L
08/30/2011 13:00	0.39 mg/L
10/19/2011 12:05	0.17 mg/L

Nitrate + Nitrite (as N)

Criteria

02/08/2011 14:15	0.07 mg/L
04/05/2011 11:20	0.10 mg/L
06/21/2011 12:50	0.36 mg/L
06/28/2011 11:50	0.08 mg/L
08/30/2011 13:00	0.39 mg/L
10/19/2011 12:05	0.17 mg/L

2011 Quarterly Main System

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Nitrite (as N) Criteria

02/08/2011 14:15	< 0.005 mg/L
04/05/2011 11:20	< 0.005 mg/L
06/21/2011 12:50	< 0.005 mg/L
06/28/2011 11:50	< 0.005 mg/L
08/30/2011 13:00	< 0.005 mg/L
10/19/2011 12:05	< 0.005 mg/L

Facility: Well 8 Hilborn Rd; Well No 8
Sampling Point: Well 8 Hilborn Rd (5-1-EP, 94E1)

Chloride Criteria

02/08/2011 13:20	4.9 mg/L	<=250	AO
04/05/2011 13:45	5.9 mg/L	<=250	AO
06/21/2011 13:45	5.7 mg/L	<=250	AO
06/28/2011 11:20	6.3 mg/L	<=250	AO
08/30/2011 10:30	5.7 mg/L	<=250	AO
10/19/2011 11:25	3.4 mg/L	<=250	AO

Nitrate (as N) Criteria

02/08/2011 13:20	< 0.02 mg/L
04/05/2011 13:45	< 0.02 mg/L
06/21/2011 13:45	< 0.02 mg/L
06/28/2011 11:20	0.37 mg/L
08/30/2011 10:30	< 0.02 mg/L
10/19/2011 11:25	< 0.02 mg/L

Nitrate + Nitrite (as N) Criteria

02/08/2011 13:20	< 0.02 mg/L
04/05/2011 13:45	< 0.02 mg/L
06/21/2011 13:45	< 0.02 mg/L
06/28/2011 11:20	0.37 mg/L
08/30/2011 10:30	< 0.02 mg/L
10/19/2011 11:25	< 0.02 mg/L



2011 Quarterly Main System

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Nitrite (as N)

Criteria

02/08/2011 13:20	< 0.005 mg/L
04/05/2011 13:45	< 0.005 mg/L
06/21/2011 13:45	< 0.005 mg/L
06/28/2011 11:20	< 0.005 mg/L
08/30/2011 10:30	< 0.005 mg/L
10/19/2011 11:25	< 0.005 mg/L

Facility: Well 9 Carson Sub; Well No 9

Sampling Point: Well 9 Carson Sub (6-2-EP, 94DF)

Chloride

Criteria

02/08/2011 15:15	0.8 mg/L	<=250	AO
04/05/2011 10:50	1.8 mg/L	<=250	AO
06/21/2011 09:00	1.0 mg/L	<=250	AO
06/28/2011 10:50	1.7 mg/L	<=250	AO
08/30/2011 11:00	1.6 mg/L	<=250	AO
10/19/2011 10:45	1.3 mg/L	<=250	AO

Nitrate (as N)

Criteria

02/08/2011 15:15	< 0.02 mg/L
04/05/2011 10:50	< 0.02 mg/L
06/21/2011 09:00	< 0.02 mg/L
06/28/2011 10:50	0.03 mg/L
08/30/2011 11:00	< 0.02 mg/L
10/19/2011 10:45	< 0.02 mg/L

Nitrate + Nitrite (as N)

Criteria

02/08/2011 15:15	< 0.02 mg/L
04/05/2011 10:50	< 0.02 mg/L
06/21/2011 09:00	< 0.02 mg/L
06/28/2011 10:50	0.03 mg/L
08/30/2011 11:00	< 0.02 mg/L
10/19/2011 10:45	< 0.02 mg/L

Nitrite (as N)		Criteria
02/08/2011 15:15	< 0.005 mg/L	
04/05/2011 10:50	< 0.005 mg/L	
06/21/2011 09:00	< 0.005 mg/L	
06/28/2011 10:50	< 0.005 mg/L	
08/30/2011 11:00	< 0.005 mg/L	
10/19/2011 10:45	< 0.005 mg/L	

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

Facility: Well A Sword Rd; Well A Sword Rd
Sampling Point: Well A Sword Rd (1-1-EP, 94ED)

Chloride		Criteria	
02/08/2011 14:50	< 0.5 mg/L	<=250	AO
04/05/2011 13:00	0.9 mg/L	<=250	AO
06/21/2011 09:30	< 0.5 mg/L	<=250	AO
06/28/2011 10:20	0.7 mg/L	<=250	AO
08/30/2011 11:30	1.1 mg/L	<=250	AO
10/19/2011 10:15	0.5 mg/L	<=250	AO

Nitrate (as N)		Criteria	
02/08/2011 14:50	0.12 mg/L		
04/05/2011 13:00	0.13 mg/L		
06/21/2011 09:30	0.16 mg/L		
06/28/2011 10:20	0.19 mg/L		
08/30/2011 11:30	0.14 mg/L		
10/19/2011 10:15	0.15 mg/L		

Nitrate + Nitrite (as N)		Criteria	
02/08/2011 14:50	0.12 mg/L		
04/05/2011 13:00	0.13 mg/L		
06/21/2011 09:30	0.16 mg/L		
06/28/2011 10:20	0.19 mg/L		
08/30/2011 11:30	0.14 mg/L		
10/19/2011 10:15	0.15 mg/L		

Nitrite (as N)		Criteria	
02/08/2011 14:50	< 0.005 mg/L		
04/05/2011 13:00	< 0.005 mg/L		
06/21/2011 09:30	< 0.005 mg/L		
06/28/2011 10:20	< 0.005 mg/L		
08/30/2011 11:30	< 0.005 mg/L		

2011 Quarterly Small System

City of Quesnel

01/01/2011 to 12/31/2012 (mm/dd/yyyy)

City of Quesnel – Small System

Nitrite (as N)

Criteria

10/19/2011 10:15 < 0.005 mg/L

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

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

Escherichia coli / E. coli (counts) Criteria
04/27/2011 08:50 < 1 CFU/100mL <=0, P, PR User-Defined

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

Heterotrophic Plate Count / HPC Criteria
04/27/2011 08:50 < 1.0 CFU/mL <=500 User-Defined

samples: 1 min: < 1.0 CFU/mL
detects: 0 max: < 1.0 CFU/mL
non-detects: 1 avg: n/a (based on 0 numerical results)
of Exceedences: 0

Temperature Criteria
04/27/2011 08:50 4 degrees C

samples: 1 min: 4 degrees C
detects: 1 max: 4 degrees C
non-detects: 0 avg: 4.000 degrees C (based on 1 numerical results)
of Exceedences: 0

Total coliforms (counts) Criteria
04/27/2011 08:50 < 1 counts/100mL <=0, OG, P User-Defined

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

Turbidity		Criteria	
04/27/2011 08:50	< 0.1 NTU	<=1	User-Defined

# samples: 1	min: < 0.1 NTU
# detects: 0	max: < 0.1 NTU
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)		Criteria	
04/27/2011 11:05	< 1 CFU/100mL	<=0, P, PR	User-Defined

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

Heterotrophic Plate Count / HPC		Criteria	
04/27/2011 11:05	< 1.0 CFU/mL	<=500	User-Defined

# samples: 1	min: < 1.0 CFU/mL
# detects: 0	max: < 1.0 CFU/mL
# non-detects: 1	avg: n/a (based on 0 numerical results)

of Exceedences: 0

Temperature Criteria

04/27/2011 11:05 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)
of Exceedences: 0

Total coliforms (counts) Criteria
04/27/2011 11:05 < 1 counts/100mL <=0, OG, P User-Defined

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

Turbidity Criteria
04/27/2011 11:05 < 0.1 NTU <=1 User-Defined

samples: 1 min: < 0.1 NTU
detects: 0 max: < 0.1 NTU
non-detects: 1 avg: n/a (based on 0 numerical results)
of Exceedences: 0

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

Escherichia coli / E. coli (counts) Criteria

Escherichia coli / E. coli (counts)		Criteria	
04/27/2011 12:45	< 1 CFU/100mL	<=0, P, PR	User-Defined

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

Heterotrophic Plate Count / HPC		Criteria	
04/27/2011 12:45	1.0 CFU/mL	<=500	User-Defined

# samples: 1	min: 1.0 CFU/mL
# detects: 1	max: 1.0 CFU/mL
# non-detects: 0	avg: 1.000 CFU/mL (based on 1 numerical results)
# of Exceedences: 0	

Temperature		Criteria	
04/27/2011 12:45	7 degrees C		

# samples: 1	min: 7 degrees C
# detects: 1	max: 7 degrees C
# non-detects: 0	avg: 7.000 degrees C (based on 1 numerical results)
# of Exceedences: 0	

Total coliforms (counts)		Criteria	
04/27/2011 12:45	< 1 counts/100mL	<=0, OG, P	User-Defined

# samples: 1	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL

# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Turbidity	Criteria
04/27/2011 12:45 0.1 NTU	<=1 User-Defined

# samples: 1	min: 0.1 NTU
# detects: 1	max: 0.1 NTU
# non-detects: 0	avg: 0.100 NTU (based on 1 numerical results)
# of Exceedences: 0	95th percentile: 0.100 NTU

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

Copper (total)	Criteria
04/27/2011 11:35 0.0059 mg/L	<=1.0 AO

# samples: 1	min: 0.0059 mg/L
# detects: 1	max: 0.0059 mg/L
# non-detects: 0	avg: 0.0059 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Escherichia coli / E. coli (counts)	Criteria
04/27/2011 11:35 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Hardness (total, as CaCO₃)

Criteria

04/27/2011 11:35 191 mg/L

samples: 1

min: 191 mg/L

detects: 1

max: 191 mg/L

non-detects: 0

avg: 191.000 mg/L (based on 1 numerical results)

of Exceedences: 0

Heterotrophic Plate Count / HPC

Criteria

04/27/2011 11:35 < 1.0 CFU/mL <=500 User-Defined

samples: 1

min: < 1.0 CFU/mL

detects: 0

max: < 1.0 CFU/mL

non-detects: 1

avg: n/a (based on 0 numerical results)

of Exceedences: 0

Iron (total)

Criteria

04/27/2011 11:35 0.016 mg/L <=0.3 AO

samples: 1

min: 0.016 mg/L

detects: 1

max: 0.016 mg/L

non-detects: 0

avg: 0.016 mg/L (based on 1 numerical results)

of Exceedences: 0

Lead (total)

Criteria

04/27/2011 11:35 0.0005 mg/L <=0.010 MAC

samples: 1

min: 0.0005 mg/L

detects: 1

max: 0.0005 mg/L

# non-detects: 0	avg: 0.0005 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Manganese (total)	Criteria
04/27/2011 11:35 0.005 mg/L	<=0.05 AO

# samples: 1	min: 0.005 mg/L
# detects: 1	max: 0.005 mg/L
# non-detects: 0	avg: 0.005 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Temperature	Criteria
04/27/2011 11:35 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)
# of Exceedences: 0	

Total coliforms (counts)	Criteria
04/27/2011 11:35 < 1 counts/100mL	<=0, OG, P User-Defined

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

Turbidity	Criteria
04/27/2011 11:35 0.1 NTU	<=1 User-Defined

# samples: 1	min: 0.1 NTU
# detects: 1	max: 0.1 NTU
# non-detects: 0	avg: 0.100 NTU (based on 1 numerical results)
# of Exceedences: 0	95th percentile: 0.100 NTU

Vinyl chloride	Criteria
04/27/2011 11:35 < 0.0005 mg/L	<=0.002 MAC

# samples: 1	min: < 0.0005 mg/L
# detects: 0	max: < 0.0005 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10	Criteria
04/27/2011 11:35 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10 (less BTEX)	Criteria
04/27/2011 11:35 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Zinc (total)		Criteria	
04/27/2011 11:35	< 0.005 mg/L	<=5	AO

# samples: 1	min: < 0.005 mg/L
# detects: 0	max: < 0.005 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Copper (total)		Criteria	
04/27/2011 10:40	0.0033 mg/L	<=1.0	AO

# samples: 1	min: 0.0033 mg/L
# detects: 1	max: 0.0033 mg/L
# non-detects: 0	avg: 0.0033 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Escherichia coli / E. coli (counts)		Criteria	
04/27/2011 10:40	< 1 CFU/100mL	<=0, P, PR	User-Defined

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

Hardness (total, as CaCO3)		Criteria	
04/27/2011 10:40	125 mg/L		

# samples: 1	min: 125 mg/L
# detects: 1	max: 125 mg/L
# non-detects: 0	avg: 125.000 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Heterotrophic Plate Count / HPC		Criteria	
04/27/2011 10:40	< 1.0 CFU/mL	<=500	User-Defined

# samples: 1	min: < 1.0 CFU/mL
# detects: 0	max: < 1.0 CFU/mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Iron (total)		Criteria	
04/27/2011 10:40	0.006 mg/L	<=0.3	AO

# samples: 1	min: 0.006 mg/L
# detects: 1	max: 0.006 mg/L
# non-detects: 0	avg: 0.006 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Lead (total)		Criteria	
04/27/2011 10:40	0.0008 mg/L	<=0.010	MAC

# samples: 1	min: 0.0008 mg/L
# detects: 1	max: 0.0008 mg/L
# non-detects: 0	avg: 0.0008 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Manganese (total)

Criteria

* 04/27/2011 10:40 0.108 mg/L <=0.05 AO

samples: 1

min: 0.108 mg/L

detects: 1

max: 0.108 mg/L

non-detects: 0

avg: 0.108 mg/L (based on 1 numerical results)

of Exceedences: 1

Temperature

Criteria

04/27/2011 10:40 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)

of Exceedences: 0

Total coliforms (counts)

Criteria

04/27/2011 10:40 < 1 counts/100mL <=0, OG, P User-Defined

samples: 1

min: < 1 counts/100mL

detects: 0

max: < 1 counts/100mL

non-detects: 1

avg: n/a (based on 0 numerical results)

of Exceedences: 0

Turbidity

Criteria

04/27/2011 10:40 < 0.1 NTU <=1 User-Defined

samples: 1

min: < 0.1 NTU

detects: 0

max: < 0.1 NTU

# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Vinyl chloride	Criteria
04/27/2011 10:40 < 0.0005 mg/L	<=0.002 MAC

# samples: 1	min: < 0.0005 mg/L
# detects: 0	max: < 0.0005 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10	Criteria
04/27/2011 10:40 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10 (less BTEX)	Criteria
04/27/2011 10:40 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Zinc (total)	Criteria
04/27/2011 10:40 < 0.005 mg/L	<=5 AO

# samples: 1	min: < 0.005 mg/L
# detects: 0	max: < 0.005 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)	Criteria
04/27/2011 13:00 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Heterotrophic Plate Count / HPC	Criteria
04/27/2011 13:00 1.0 CFU/mL	<=500 User-Defined

# samples: 1	min: 1.0 CFU/mL
# detects: 1	max: 1.0 CFU/mL
# non-detects: 0	avg: 1.000 CFU/mL (based on 1 numerical results)
# of Exceedences: 0	

Temperature	Criteria
04/27/2011 13:00 4 degrees C	

# samples: 1	min: 4 degrees C
# detects: 1	max: 4 degrees C
# non-detects: 0	avg: 4.000 degrees C (based on 1 numerical results)

of Exceedences: 0

Total coliforms (counts)	Criteria
04/27/2011 13:00 < 1 counts/100mL	<=0, OG, P User-Defined

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

Turbidity	Criteria
04/27/2011 13:00 < 0.1 NTU	<=1 User-Defined

# samples: 1	min: < 0.1 NTU
# detects: 0	max: < 0.1 NTU
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)	Criteria
04/27/2011 09:20 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Heterotrophic Plate Count / HPC	Criteria
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Heterotrophic Plate Count / HPC

Criteria

04/27/2011 09:20 < 1.0 CFU/mL <=500 User-Defined

samples: 1

min: < 1.0 CFU/mL

detects: 0

max: < 1.0 CFU/mL

non-detects: 1

avg: n/a (based on 0 numerical results)

of Exceedences: 0

Temperature

Criteria

04/27/2011 09:20 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)

of Exceedences: 0

Total coliforms (counts)

Criteria

04/27/2011 09:20 < 1 counts/100mL <=0, OG, P User-Defined

samples: 1

min: < 1 counts/100mL

detects: 0

max: < 1 counts/100mL

non-detects: 1

avg: n/a (based on 0 numerical results)

of Exceedences: 0

Turbidity

Criteria

04/27/2011 09:20 < 0.1 NTU <=1 User-Defined

samples: 1

min: < 0.1 NTU

detects: 0

max: < 0.1 NTU

# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 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

2011 April Semi-Annual Summary

City of Quesnel

04/27/2011 to 04/27/2011 (mm/dd/yyyy)

City of Quesnel – Small System

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

Escherichia coli / E. coli (counts) Criteria

04/27/2011 09:40 < 1 CFU/100mL

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

Heterotrophic Plate Count / HPC Criteria

04/27/2011 09:40 130 CFU/mL <=500 User-Defined

samples: 1 min: 130 CFU/mL
detects: 1 max: 130 CFU/mL
non-detects: 0 avg: 130.000 CFU/mL (based on 1 numerical results)
of Exceedences: 0

Temperature Criteria

04/27/2011 09:40 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)
of Exceedences: 0

Total coliforms (counts) Criteria

04/27/2011 09:40 < 1 counts/100mL <=0, OG, P User-Defined



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

Turbidity		Criteria	
* 04/27/2011 09:40	6.8 NTU	<=1	User-Defined

# samples: 1	min: 6.8 NTU
# detects: 1	max: 6.8 NTU
# non-detects: 0	avg: 6.800 NTU (based on 1 numerical results)
# of Exceedences: 1	95th percentile: 6.800 NTU

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

2011 October Semi-Annual Summary

City of Quesnel

10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel – Main System

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

Escherichia coli / E. coli (counts)	Criteria
10/12/2011 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Heterotrophic Plate Count / HPC	Criteria
10/12/2011 1.0 CFU/mL	<=500 User-Defined

# samples: 1	min: 1.0 CFU/mL
# detects: 1	max: 1.0 CFU/mL
# non-detects: 0	avg: 1.000 CFU/mL (based on 1 numerical results)
# of Exceedences: 0	

Temperature	Criteria
10/12/2011 12.6 degrees C	

# samples: 1	min: 12.6 degrees C
# detects: 1	max: 12.6 degrees C
# non-detects: 0	avg: 12.600 degrees C (based on 1 numerical results)
# of Exceedences: 0	

Total coliforms (counts)	Criteria
10/12/2011 < 1 counts/100mL	<=0, OG, P User-Defined

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

Turbidity		Criteria	
10/12/2011	< 0.1 NTU	<=1	User-Defined

# samples: 1	min: < 0.1 NTU
# detects: 0	max: < 0.1 NTU
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)		Criteria	
10/12/2011	< 1 CFU/100mL	<=0, P, PR	User-Defined

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

Heterotrophic Plate Count / HPC		Criteria	
10/12/2011	< 1.0 CFU/mL	<=500	User-Defined

# samples: 1	min: < 1.0 CFU/mL
# detects: 0	max: < 1.0 CFU/mL
# non-detects: 1	avg: n/a (based on 0 numerical results)

2011 October Semi-Annual Summary
10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel
City of Quesnel – Main System

of Exceedences: 0

Temperature
10/12/2011 11.7 degrees C

samples: 1 min: 11.7 degrees C
detects: 1 max: 11.7 degrees C
non-detects: 0 avg: 11.700 degrees C (based on 1 numerical results)
of Exceedences: 0

Total coliforms (counts)
10/12/2011 < 1 counts/100mL

Criteria
<=0, OG, P User-Defined

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

Turbidity
10/12/2011 < 0.1 NTU

Criteria
<=1 User-Defined

samples: 1 min: < 0.1 NTU
detects: 0 max: < 0.1 NTU
non-detects: 1 avg: n/a (based on 0 numerical results)
of Exceedences: 0

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

Escherichia coli / E. coli (counts)
Criteria

2011 October Semi-Annual Summary

City of Quesnel

10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Escherichia coli / E. coli (counts)	Criteria
10/12/2011 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Heterotrophic Plate Count / HPC	Criteria
10/12/2011 < 1.0 CFU/mL	<=500 User-Defined

# samples: 1	min: < 1.0 CFU/mL
# detects: 0	max: < 1.0 CFU/mL
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Temperature	Criteria
10/12/2011 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)
# of Exceedences: 0	

Total coliforms (counts)	Criteria
10/12/2011 < 1 counts/100mL	<=0, OG, P User-Defined

# samples: 1	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL

# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Turbidity	Criteria
10/12/2011 < 0.1 NTU	<=1 User-Defined

# samples: 1	min: < 0.1 NTU
# detects: 0	max: < 0.1 NTU
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Copper (total)	Criteria
10/12/2011 0.0072 mg/L	<=1.0 AO

# samples: 1	min: 0.0072 mg/L
# detects: 1	max: 0.0072 mg/L
# non-detects: 0	avg: 0.0072 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Escherichia coli / E. coli (counts)	Criteria
10/12/2011 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Hardness (total, as CaCO₃)

Criteria

10/12/2011 206 mg/L

samples: 1

min: 206 mg/L

detects: 1

max: 206 mg/L

non-detects: 0

avg: 206.000 mg/L (based on 1 numerical results)

of Exceedences: 0

Heterotrophic Plate Count / HPC

Criteria

10/12/2011 2.0 CFU/mL <=500 User-Defined

samples: 1

min: 2.0 CFU/mL

detects: 1

max: 2.0 CFU/mL

non-detects: 0

avg: 2.000 CFU/mL (based on 1 numerical results)

of Exceedences: 0

Iron (total)

Criteria

10/12/2011 0.071 mg/L <=0.3 AO

samples: 1

min: 0.071 mg/L

detects: 1

max: 0.071 mg/L

non-detects: 0

avg: 0.071 mg/L (based on 1 numerical results)

of Exceedences: 0

Lead (total)

Criteria

10/12/2011 0.0007 mg/L <=0.010 MAC

samples: 1

min: 0.0007 mg/L

detects: 1

max: 0.0007 mg/L

2011 October Semi-Annual Summary
10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel
City of Quesnel – Main System

# non-detects: 0	avg: 0.0007 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Manganese (total)	Criteria
10/12/2011 0.005 mg/L	<=0.05 AO

# samples: 1	min: 0.005 mg/L
# detects: 1	max: 0.005 mg/L
# non-detects: 0	avg: 0.005 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Temperature	Criteria
10/12/2011 12.8 degrees C	

# samples: 1	min: 12.8 degrees C
# detects: 1	max: 12.8 degrees C
# non-detects: 0	avg: 12.800 degrees C (based on 1 numerical results)
# of Exceedences: 0	

Total coliforms (counts)	Criteria
10/12/2011 < 1 counts/100mL	<=0, OG, P User-Defined

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

Turbidity	Criteria
10/12/2011 < 0.1 NTU	<=1 User-Defined

# samples: 1	min: < 0.1 NTU
# detects: 0	max: < 0.1 NTU
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Vinyl chloride	Criteria
10/12/2011 < 0.0005 mg/L	<=0.002 MAC

# samples: 1	min: < 0.0005 mg/L
# detects: 0	max: < 0.0005 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10	Criteria
10/12/2011 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10 (less BTEX)	Criteria
10/12/2011 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

2011 October Semi-Annual Summary

City of Quesnel

10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Zinc (total)		Criteria	
10/12/2011	0.019 mg/L	<=5	AO

# samples: 1	min: 0.019 mg/L
# detects: 1	max: 0.019 mg/L
# non-detects: 0	avg: 0.019 mg/L (based on 1 numerical results)
# of Exceedences: 0	

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

Copper (total)		Criteria	
10/12/2011	0.0104 mg/L	<=1.0	AO

# samples: 1	min: 0.0104 mg/L
# detects: 1	max: 0.0104 mg/L
# non-detects: 0	avg: 0.0104 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Escherichia coli / E. coli (counts)		Criteria	
10/12/2011	< 1 CFU/100mL	<=0, P, PR	User-Defined

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

Hardness (total, as CaCO3)		Criteria	
10/12/2011	121 mg/L		

2011 October Semi-Annual Summary

City of Quesnel

10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel – Main System

# samples: 1	min: 121 mg/L
# detects: 1	max: 121 mg/L
# non-detects: 0	avg: 121.000 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Heterotrophic Plate Count / HPC	Criteria
10/12/2011 1.0 CFU/mL	<=500 User-Defined

# samples: 1	min: 1.0 CFU/mL
# detects: 1	max: 1.0 CFU/mL
# non-detects: 0	avg: 1.000 CFU/mL (based on 1 numerical results)
# of Exceedences: 0	

Iron (total)	Criteria
10/12/2011 0.069 mg/L	<=0.3 AO

# samples: 1	min: 0.069 mg/L
# detects: 1	max: 0.069 mg/L
# non-detects: 0	avg: 0.069 mg/L (based on 1 numerical results)
# of Exceedences: 0	

Lead (total)	Criteria
10/12/2011 0.0013 mg/L	<=0.010 MAC

# samples: 1	min: 0.0013 mg/L
# detects: 1	max: 0.0013 mg/L
# non-detects: 0	avg: 0.0013 mg/L (based on 1 numerical results)
# of Exceedences: 0	

2011 October Semi-Annual Summary

City of Quesnel

10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Manganese (total)

Criteria

10/12/2011 0.031 mg/L <=0.05 AO

samples: 1

min: 0.031 mg/L

detects: 1

max: 0.031 mg/L

non-detects: 0

avg: 0.031 mg/L (based on 1 numerical results)

of Exceedences: 0

Temperature

Criteria

10/12/2011 12.2 degrees C

samples: 1

min: 12.2 degrees C

detects: 1

max: 12.2 degrees C

non-detects: 0

avg: 12.200 degrees C (based on 1 numerical results)

of Exceedences: 0

Total coliforms (counts)

Criteria

10/12/2011 < 1 counts/100mL <=0, OG, P User-Defined

samples: 1

min: < 1 counts/100mL

detects: 0

max: < 1 counts/100mL

non-detects: 1

avg: n/a (based on 0 numerical results)

of Exceedences: 0

Turbidity

Criteria

10/12/2011 < 0.1 NTU <=1 User-Defined

samples: 1

min: < 0.1 NTU

detects: 0

max: < 0.1 NTU

# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Vinyl chloride	Criteria
10/12/2011 < 0.0005 mg/L	<=0.002 MAC

# samples: 1	min: < 0.0005 mg/L
# detects: 0	max: < 0.0005 mg/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10	Criteria
10/12/2011 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Volatile Petroleum Hydrocarbons C6-C10 (less BTEX)	Criteria
10/12/2011 < 300 micro g/L	

# samples: 1	min: < 300 micro g/L
# detects: 0	max: < 300 micro g/L
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Zinc (total)	Criteria
10/12/2011 0.02 mg/L	<=5 AO

# samples: 1	min: 0.02 mg/L
# detects: 1	max: 0.02 mg/L
# non-detects: 0	avg: 0.020 mg/L (based on 1 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)	Criteria
10/12/2011 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Heterotrophic Plate Count / HPC	Criteria
10/12/2011 2.0 CFU/mL	<=500 User-Defined

# samples: 1	min: 2.0 CFU/mL
# detects: 1	max: 2.0 CFU/mL
# non-detects: 0	avg: 2.000 CFU/mL (based on 1 numerical results)
# of Exceedences: 0	

Temperature	Criteria
10/12/2011 12.2 degrees C	

# samples: 1	min: 12.2 degrees C
# detects: 1	max: 12.2 degrees C
# non-detects: 0	avg: 12.200 degrees C (based on 1 numerical results)

2011 October Semi-Annual Summary
10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel
City of Quesnel – Main System

of Exceedences: 0

Total coliforms (counts)	Criteria
10/12/2011 < 1 counts/100mL	<=0, OG, P User-Defined

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

Turbidity	Criteria
10/12/2011 < 0.1 NTU	<=1 User-Defined

# samples: 1	min: < 0.1 NTU
# detects: 0	max: < 0.1 NTU
# non-detects: 1	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

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

Escherichia coli / E. coli (counts)	Criteria
10/12/2011 < 1 CFU/100mL	<=0, P, PR User-Defined

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

Heterotrophic Plate Count / HPC	Criteria
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2011 October Semi-Annual Summary

City of Quesnel

10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel – Main System

Heterotrophic Plate Count / HPC

Criteria

10/12/2011 < 1.0 CFU/mL <=500 User-Defined

samples: 1

min: < 1.0 CFU/mL

detects: 0

max: < 1.0 CFU/mL

non-detects: 1

avg: n/a (based on 0 numerical results)

of Exceedences: 0

Temperature

Criteria

10/12/2011 12.2 degrees C

samples: 1

min: 12.2 degrees C

detects: 1

max: 12.2 degrees C

non-detects: 0

avg: 12.200 degrees C (based on 1 numerical results)

of Exceedences: 0

Total coliforms (counts)

Criteria

10/12/2011 < 1 counts/100mL <=0, OG, P User-Defined

samples: 1

min: < 1 counts/100mL

detects: 0

max: < 1 counts/100mL

non-detects: 1

avg: n/a (based on 0 numerical results)

of Exceedences: 0

Turbidity

Criteria

10/12/2011 0.2 NTU <=1 User-Defined

samples: 1

min: 0.2 NTU

detects: 1

max: 0.2 NTU



non-detects: 0

avg: 0.200 NTU (based on 1 numerical results)

of Exceedences: 0

95th percentile: 0.200 NTU

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

2011 October Semi-Annual Summary

City of Quesnel

10/12/2011 to 10/12/2011 (mm/dd/yyyy)

City of Quesnel – Small System

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

Escherichia coli / E. coli (counts) Criteria

10/12/2011 < 1 CFU/100mL

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

Heterotrophic Plate Count / HPC Criteria

10/12/2011 430 CFU/mL <=500 User-Defined

samples: 1 min: 430 CFU/mL
detects: 1 max: 430 CFU/mL
non-detects: 0 avg: 430.000 CFU/mL (based on 1 numerical results)
of Exceedences: 0

Temperature Criteria

10/12/2011 11.7 degrees C

samples: 1 min: 11.7 degrees C
detects: 1 max: 11.7 degrees C
non-detects: 0 avg: 11.700 degrees C (based on 1 numerical results)
of Exceedences: 0

Total coliforms (counts) Criteria

10/12/2011 < 1 counts/100mL <=0, OG, P User-Defined



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

Turbidity		Criteria	
10/12/2011	0.1 NTU	<=1	User-Defined

# samples: 1	min: 0.1 NTU
# detects: 1	max: 0.1 NTU
# non-detects: 0	avg: 0.100 NTU (based on 1 numerical results)
# of Exceedences: 0	95th percentile: 0.100 NTU

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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2011 Small System Coliform Ecoli
Exceedences

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Small System

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

Facility:	Well A Sword Rd; Well A Sword Rd
Sampling Point:	Well A Sword Rd (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

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2011 Samll System Coliform Summary

City of Quesnel

01/01/2011 to 12/31/2011 (mm/dd/yyyy)

City of Quesnel – Small System

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

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Facility: Well A Sword Rd; Well A Sword Rd
Sampling Point: Well A Sword Rd (1-1-EP, 94ED)

Escherichia coli / E. coli (counts)

# samples: 12	min: < 1 CFU/100mL
# detects: 0	max: < 1 CFU/100mL
# non-detects: 12	avg: n/a (based on 0 numerical results)
# of Exceedences: 0	

Total coliforms (counts)

# samples: 12	min: < 1 counts/100mL
# detects: 0	max: < 1 counts/100mL

non-detects: 12
of Exceedences: 0

avg: n/a (based on 0 numerical results)

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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