

Appendix A

Monitoring Program Station No. ALT-1

Year: 2013

Name: Water Supply at Raw Water Intake

Licence Daily Water Use (to not exceed) Limit: 185 cubic metres [m³].

Results for: All Purpose Water Monitoring

Daily Water Usage Quantity: 639 cubic metres [m³].

Annual Water Usage Quantity: 233,211 cubic metres [m³].

Please note: Water Usage Data is monitored and collected daily.

Average Daily Water Usage at CFS Alert - 3BC-ALT1015							
Year [yr]	Month [mo]	Days [day]	Average Daily Raw Intake (Usage) [m ³ /day]	Average Daily Raw Returned [m ³ /day]	Average Daily Utilized (Consumed) [m ³ /day]	Metered [Y/N]	Quantity of Usage [m ³]
2013	JAN	31	677	525	152	Y	20,987
2013	FEB	28	684	542	142	Y	19,152
2013	MAR	31	631	491	140	Y	19,561
2013	APR	30	672	537	135	Y	20,160
2013	MAY	31	659	521	138	Y	20,429
2013	JUN	30	677	521	157	Y	20,310
2013	JUL	31	657	515	142	Y	20,367
2013	AUG	31	656	518	137	Y	20,336
2013	SEP	30	649	506	143	Y	19,470
2013	OCT	31	610	467	143	Y	18,910
2013	NOV	30	622	481	142	Y	18,660
2013	DEC	31	479	338	141	Y	14,849
Annual Average [m³/day]:			639	497	143	Total Annual [m³]:	<u>233,211</u>
Observed Minimum [m ³ /day]:			479	338	135		
Observed Maximum [m ³ /day]:			684	542	157		

As advised by AANDC during the 2013 July Inspection Visit, DND is now reporting the Daily Raw Water Intake value as the “Usage” quantity. In previous years (2010-12), usage quantity was calculated as the difference between the ‘Raw Intake’ and ‘Raw Return’ quantities, as summarized by the equation: Usage = Intake – Return.

The ‘Usage’ quantity reflected the actual quantity of water sent to processing/treatment and for Station consumption and general usages. The ‘Raw Return’ is the quantity of raw

(untreated) lake water that is returned to the source in a parallel water pipeline to the Intake pipeline that spans a 2 km length. The significant purpose of the Raw Return is to provide constant circular flow and pressure within the water pipeline network system to prevent damages from winter freezing and pressure change.

Average Daily Water Intake (Usage) from Source:	639	cubic metres [m ³].
Average Daily Water Return to Source:	497	cubic metres [m ³].
Average Daily Water Utilized (Consumed):	143	cubic metres [m ³].

As the usage for 2013 exceed the Licence Daily Water Use Limit, DND is submitting, at the same time as this Annual Report submission, an application to the NWB for Water Licence Amendment to review and increase the usage quantity limits at CFS Alert.

Note: Values were rounded to nearest whole digit.