

APPENDIX D



August 6, 2015

CANADIAN ZINC PRAIRIE CREEK MINE ALL SEASON ROAD PROJECT

Air Quality Supplemental Information

Submitted to:
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REPORT

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Table of Contents

1.0 INTRODUCTION..... 3
2.0 GAP ANALYSIS RESULTS..... 3
3.0 SUPPLEMENTAL INFORMATION..... 5
3.1 Climate Data Analysis..... 5
3.2 Air Quality Assessment..... 10
3.2.1 Air quality pathway 10
3.2.2 Ambient air quality standards..... 10
3.2.2.1 Northwest Territories Ambient Air Quality Standards..... 11
3.2.2.2 Canadian Ambient Air Quality Standards 11
3.2.3 Project Emissions..... 11
3.2.4 Dispersion Modelling of the All Weather Road Emissions..... 14
3.2.5 Residual Effects Assessment..... 18
3.2.6 Potential Impacts on Environment (Humans, Wildlife, Vegetation and Waterbodies) 21
3.2.7 Mitigation..... 21
4.0 REVIEW OF THE AIR QUALITY AND EMISSIONS MONITORING AND MANAGEMENT PLAN AND THE CONTAMINANT LOADING MANAGEMENT PLAN 22
4.1 AQEMMP Potential Changes..... 22
4.2 CLMP Potential Changes 23
5.0 CLOSURE..... 24
6.0 REFERENCES..... 25
TABLES
Table 2-1: Results of Gap Analysis 4
Table 3-1: Measurement Indicators and Assessment Endpoint for Air Quality Pathway 10
Table 3-2: Ambient Air Quality Criteria 11
Table 3-3: Maximum Project Annual Emissions by Phase 13
Table 3-4: Project Emissions by Source Type..... 13
Table 3-5: Emission Rates used in SCREEN3 Modelling..... 14
Table 3-6: Predicted 1-Hour Ground-level Concentrations Based on SCREEN3 Modelling 15
Table 3-7: Predicted 8-Hour and 24-Hour Ground-level Concentrations Based on SCREEN3 Modelling 16



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 3-8: Predicted Annual Ground-level Concentrations Based on SCREEN3 Modelling 17

Table 3-9 Definitions of Residual Effects Criteria Used to Evaluate Significance for Air Quality 19

Table 3-10: Summary of Residual Impact Classification and Predicted Significance of Project Effects on Air Quality 20

FIGURES

Figure 3-1: Time Series of Daily Temperature and Precipitation for the Three Stations in Winter 6

Figure 3-2: Time Series of Daily Temperature and Precipitation for the Three Stations in Spring 7

Figure 3-3: Time Series of Daily Temperature and Precipitation for the Three Stations in Summer 8

Figure 3-4: Time Series of Daily Temperature and Precipitation for the Three Stations in Fall 9

APPENDICES

APPENDIX A

Summary Tables of Daily Temperature and Precipitation



1.0 INTRODUCTION

Canadian Zinc Corporation (CZN) owns the Prairie Creek Mine in Northwest Territories (NWT). The mine is located approximately 90 kilometers (km) northeast of Nahanni Butte, NWT. The original Prairie Creek Mine included a winter road connection to the Liard Highway. In April 2015, CZN submitted a Developer's Assessment Report (DAR) for the Prairie Creek All Season Road (the Project) to the Mackenzie Valley Review Board (MVRB). The all season road will replace the winter road that was originally proposed for the Prairie Creek Mine. The all season road will allow shipment of concentrates from an operating mine to the Liard Highway year-round. CZN also proposed an airstrip to be built on the Ram Plateau near the road to support road construction and maintenance and to act as an alternate to the existing airstrip located at the Mine in bad weather. A proposed re-alignment of the road onto firmer ground necessitated a slightly modified location for the Tetcela Transfer Facility (TTF). A subsequent adequacy review conducted by the MVRB on the DAR identified several gaps related to information provided in the DAR. The information gaps are summarized in the MVRB's adequacy review report (2015a) and a subsequent clarification letter (MVRB 2015b).

Golder Associates Ltd. (Golder) was retained by CZN to complete a review of the climate and air quality information gaps identified by the MVRB and to provide the necessary climate and air quality information to address the gaps identified by the MVRB's adequacy review. This report provides the findings of Golder's review and the necessary climate and air quality information to address the information gaps in the MVRB's adequacy review.

2.0 GAP ANALYSIS RESULTS

After reviewing the MVRB's adequacy review report, a subsequent clarification letter, and Terms of Reference (ToR; MVRB 2014) for the Project, the following gaps were identified regarding climate and air quality:

- MVRB requested a specific format for data presentation of climate conditions, trends, and extremes, an update of the data to 2014, as well as a more complete trend analysis of the maximum, mean and minimum daily temperature and precipitation data over the data period.
- An assessment of the project on air quality following the assessment steps provided in Section 4.1 and Appendix B of the ToR.
 - Conduct emission inventory (dust and carbon [CO and CO₂] by source for each phase including quantity, timing and duration, normal operation conditions and upsets.
 - Evaluation of how changes in air quality will affect the environment including, but not limited to humans, wildlife, vegetation and waterbodies.

Table 2-1 lists the results of a gap analysis, including the deficiencies MVRB identified and the MVRB's required items regarding climate and air quality.



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 2-1: Results of Gap Analysis

Subject	Section in the MVRB Adequacy Review	Deficiencies	Request	Suggested Action
Climate	9.1 climatic conditions, trends and extremes	Insufficient data	"Temperature and precipitation plots for all sites superimposed onto one chart."	The request data is too large to show on a single chart. Instead, provide the requested data in 12 monthly charts showing the long-term trends over a 53-year period.
			"A chart showing the average temperature and precipitation by month for each station for the duration in the record."	Same as above.
			"Updated charts to 2014."	Same as above.
			"A summary table describing the maximum, mean, and minimum daily temperatures and precipitation observed monthly for each climate station for each year of record, with a discussion of observed trends based on the tabulated information."	Provide a large table containing the requested data.
Air Quality	12	Missing information	"Please provide an assessment of the project on air quality. This will include emissions (such as dust and carbon) by source for each phase (construction, operation and maintenance, and closure), including quantity, timing and duration, normal operation conditions and upsets. The assessment will consider how changes in air quality may affect the environment including, but not limited to humans, wildlife, vegetation and waterbodies."	Provide an air quality assessment for the Project containing the requested information.
		Format Non-conformance	"The assessment of the project on air quality will follow the assessment steps provided in Section 4.1 and Appendix B of the ToR."	Provide an assessment matrix table in the air quality assessment based on Appendix B in the Project's ToR.



3.0 SUPPLEMENTAL INFORMATION

3.1 Climate Data Analysis

The Mackenzie Valley Review Board Adequacy Review letter required items regarding climate data that include:

- temperature and precipitation plots for all of the sites superimposed onto one chart;
- a chart showing the average temperature and precipitation by month for each station for the duration of the record;
- updated charts to 2014 (the Fort Simpson data end in 2008); and
- a summary table describing the maximum, mean and minimum daily temperatures and precipitation observed by month for each climate station for each year of record, with a discussion of observed trends based on the tabulated information.

To address these items, daily temperature and daily precipitation data collected from May 2005 to June, 2015 by the on-site meteorological station at Prairie Creek Mine were downloaded. There were missing daily precipitation data before August 2008 as the on-site station only recorded the rain data. Data logging at this station was interrupted between August 2008 and August 2009. Daily temperature and daily precipitation data from Environment Canada meteorological stations at the Fort Simpson and Fort Liard airports were downloaded from the Environment Canada website (Environment Canada, 2015a). The meteorological dataset for the Fort Simpson station has complete daily temperature and daily precipitation between November 1963 and June 2015. The time period of meteorological data for the Fort Liard Airport station was from July 1973 to December 2010. There were no precipitation data before 1980 from the Fort Liard Airport station. No temperature or precipitation data were recorded between September 2007 and February 2008 and all of 2009. The Fort Simpson station provides the meteorological data required to observe the long-term trend of daily temperature and daily precipitation.

Figures 3.1 to 3.4 show the annual variations of mean daily averaged temperature and precipitation for each season for the Prairie Creek Mine, and the Fort Simpson and Fort Liard Airport stations. The temperature data is shown as line series while the precipitation data is shown as bars. The long-term record in the winter months (December, January and February), especially in January, shows modest warming recorded at the Fort Simpson station. The average daily temperature in January increased from -28°C in the first 15 years (1964 to 1978) to -23°C in the recent 15 years (2001 to 2015). Generally, Fort Liard records higher daily temperatures than Fort Simpson. Daily temperature at Prairie Creek Mine was higher than Fort Simpson in December and January. No specific long-term trend of daily precipitation was observed in winter. From the limited precipitation data, Prairie Creek Mine records lower precipitation than Fort Simpson other than February 2012.

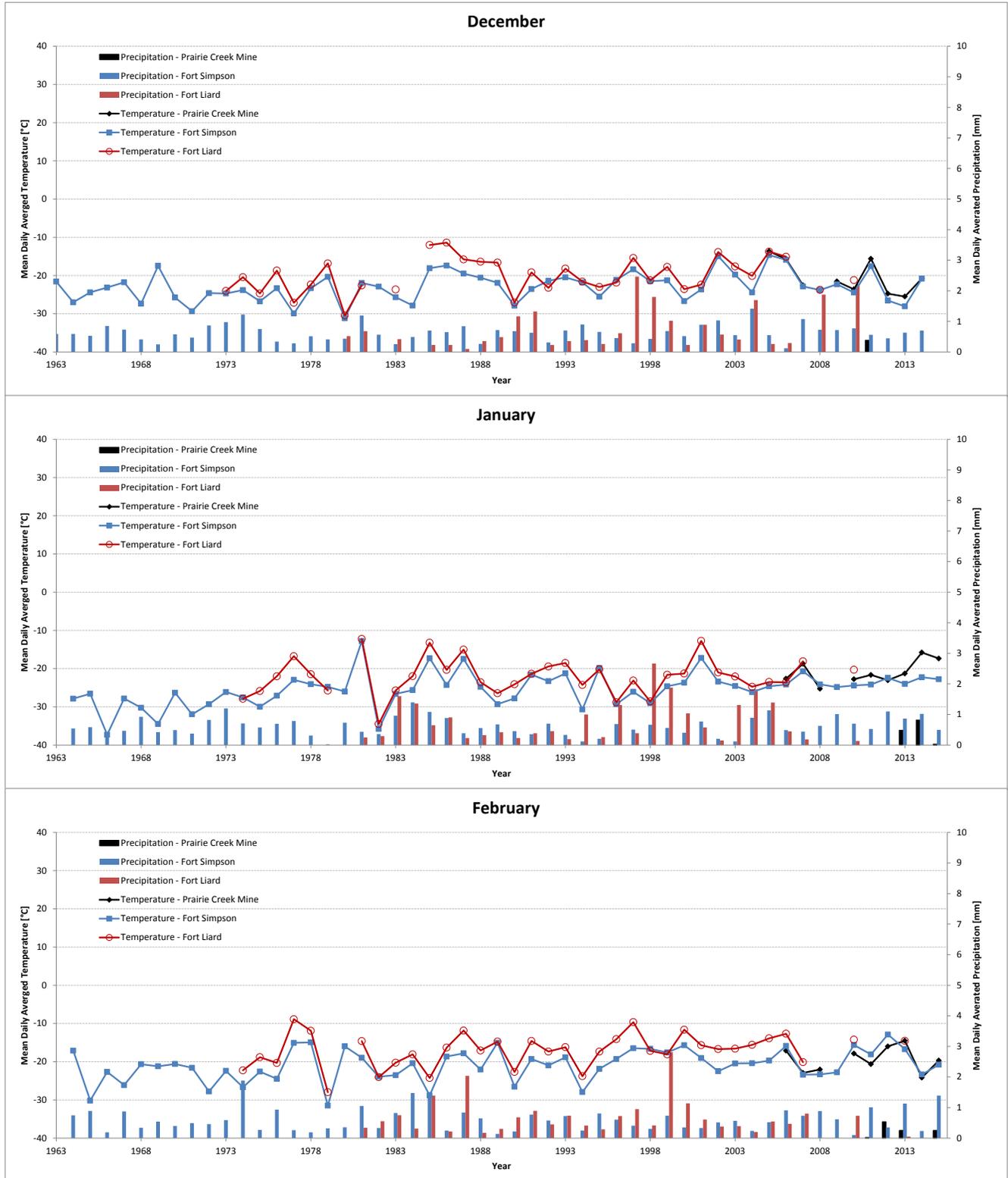
In the spring months (March, April and May), no specific long-term trend was observed for daily temperature or daily precipitation. The daily temperature of Fort Liard was higher than Fort Simpson, while the daily temperature of Prairie Creek Mine was a few degrees lower than that of Fort Simpson. In summer months (June, July and August), the daily temperatures were steady throughout the years. The daily temperatures at Fort Liard were comparable with Fort Simpson, while Prairie Creek Mine recorded lower temperatures. The Prairie Creek Mine station recorded higher daily precipitation than Fort Simpson for all three months in summer. In fall (September, October and November), Prairie Creek Mine recorded lower daily temperatures than Fort Simpson.

Summary tables describing the maximum, mean and minimum daily temperatures and precipitation observed by month for the three climate stations for each year of record can be found in Appendix A.



AIR QUALITY SUPPLEMENTAL INFORMATION

Figure 3-1: Time Series of Daily Temperature and Precipitation for the Three Stations in Winter





AIR QUALITY SUPPLEMENTAL INFORMATION

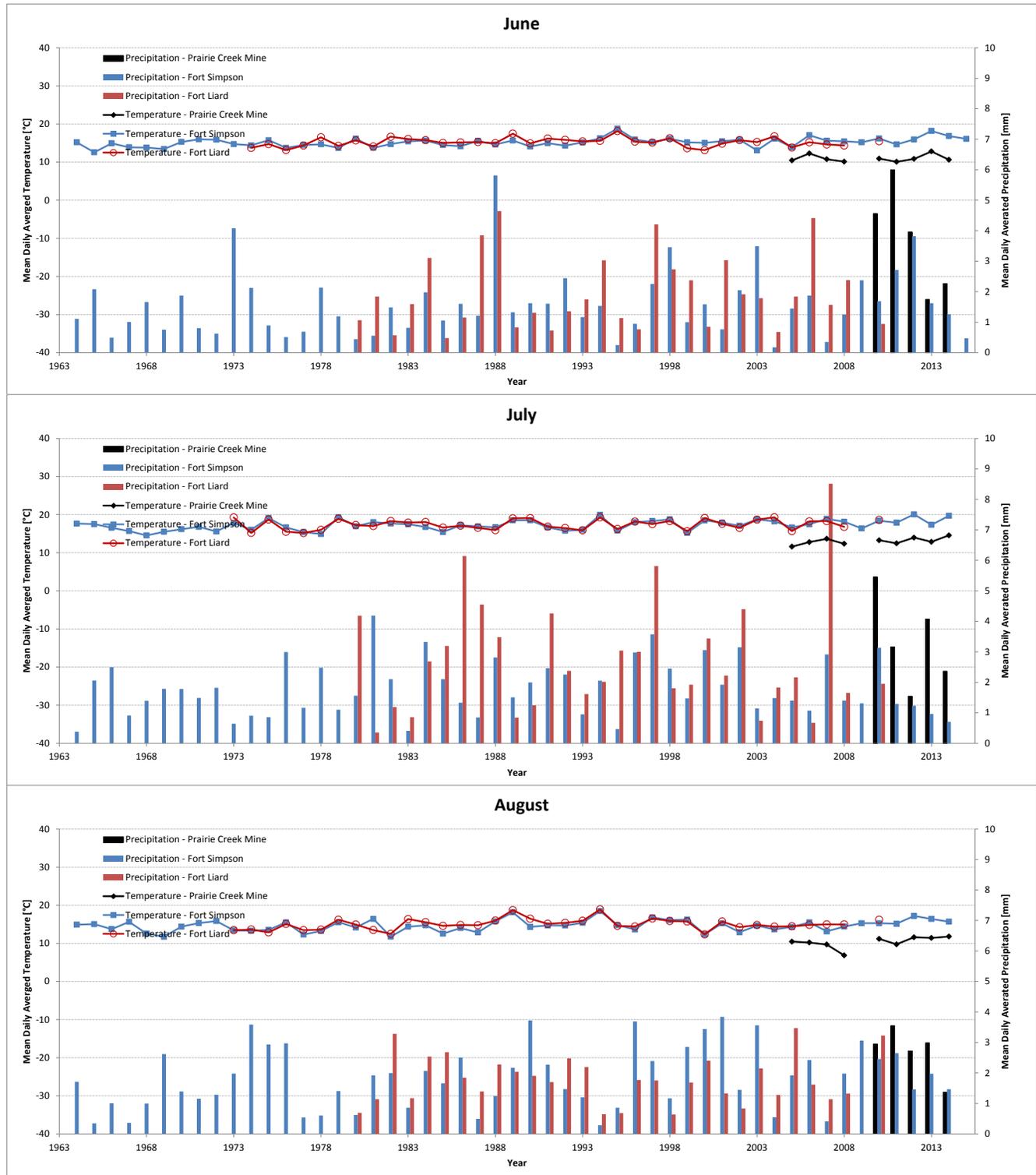
Figure 3-2: Time Series of Daily Temperature and Precipitation for the Three Stations in Spring





AIR QUALITY SUPPLEMENTAL INFORMATION

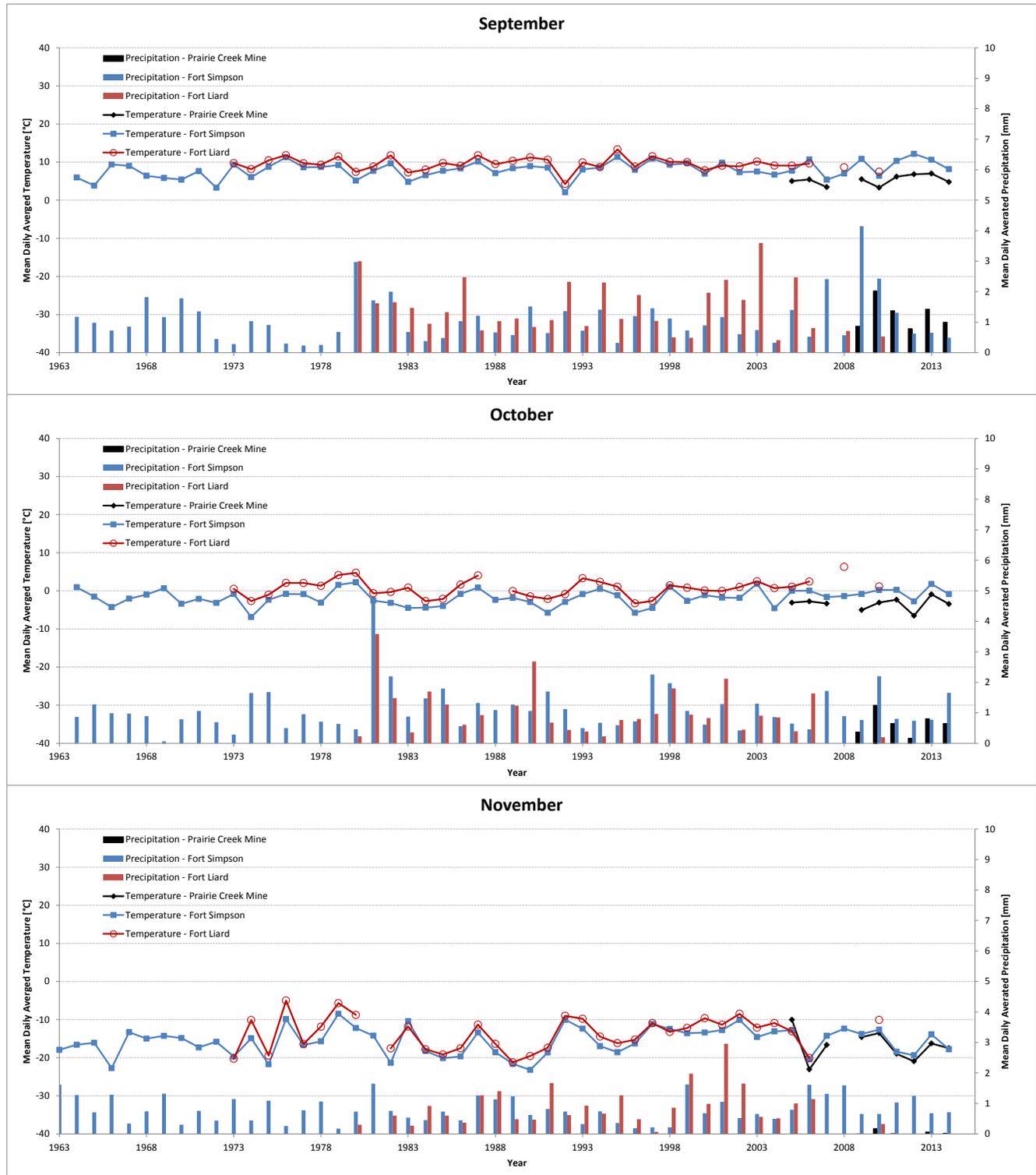
Figure 3-3: Time Series of Daily Temperature and Precipitation for the Three Stations in Summer





AIR QUALITY SUPPLEMENTAL INFORMATION

Figure 3-4: Time Series of Daily Temperature and Precipitation for the Three Stations in Fall





3.2 Air Quality Assessment

3.2.1 Air quality pathway

The Project's ToR identified Air Quality as a Subject of Note. Table 3-1 provides a summary of the respective pathways for Project activities to affect air quality as well as measurement indicators and assessment end points. The measurement indicators for the air quality subject of note include the following:

- carbon monoxide (CO);
- particulate matter (PM) including:
 - particulate matter with an aerodynamic diameter less than 2.5 micrometer (μm) ($\text{PM}_{2.5}$);
 - particulate matter with an aerodynamic diameter less than 10 micrometer (μm) (PM_{10}); and
 - total suspended particulate matter with an aerodynamic diameter less than 100 micrometer (μm) (TSP).

Table 3-1: Measurement Indicators and Assessment Endpoint for Air Quality Pathway

Project Phase	Project Activities	Measurement Indicators	Assessment Endpoints
Construction	Fugitive dust generated from construction activities	Ambient concentrations of $\text{PM}_{2.5}$ and TSP	Change in Ambient Air Quality
	Exhaust from stationary and mobile combustion equipment (e.g., construction vehicles, aircraft, camp power generators, waste incinerator)	Ambient concentration of CO, $\text{PM}_{2.5}$	
Operation	Fugitive dust generated from traffic on the all-weather road	Ambient concentrations of $\text{PM}_{2.5}$ and TSP	
	Vehicle exhaust from traffic on the all-weather road	Ambient concentration of CO, $\text{PM}_{2.5}$	
Closure	Fugitive dust generated from road decommissioning activities	Ambient concentrations of $\text{PM}_{2.5}$ and TSP	
	Vehicle exhaust from road decommission activities	Ambient concentration of CO, $\text{PM}_{2.5}$	

3.2.2 Ambient air quality standards

Air emissions introduced into the atmosphere by industrial activities can have direct and indirect effects on humans, wildlife, vegetation, soil and water. For these reasons, environmental regulatory agencies have established ambient air quality criteria. The Government of Northwest Territories have set ambient air quality standards (ENR 2014) to manage air quality in Northwest Territories. The Federal government has also set criteria such as the Canadian Ambient Air Quality Standards (CAAQS; CCME 2012). The air quality criteria are summarized in Table 3-2.



3.2.2.1 Northwest Territories Ambient Air Quality Standards

The Northwest Territories Ambient Air Quality Standards (NWT AAQS, ENR 2014) are applied to air quality assessments of proposed and existing developments in NWT, and to reporting on the state of air quality in the NWT.

3.2.2.2 Canadian Ambient Air Quality Standards

In 2012, the Canadian government finalized a framework to improve air quality management called the Comprehensive Air Management System (CAMS). The Air Management System is intended to replace the National Ambient Air Quality Objectives and Canada-Wide Standards with the more stringent Canadian Ambient Air Quality Standards.

One of the key elements of the CAMS is the development of new CAAQS. The CAAQS for PM2.5 will replace the current Canada-Wide Standard beginning in 2015, and will be adopted in two stages, with a set of values being adopted in 2015 and another set of more stringent values being adopted in 2020.

Table 3-2: Ambient Air Quality Criteria

Table with 3 columns: Substance, NWT Ambient Air Quality Standards(a), and Canadian Ambient Air Quality Standards(b) [µg/m³]. Rows include CO, PM2.5, and TSP with various time-based standards.

(a) Source: ENR (2014).

(b) Source: CCME (2012).

(c) Compliance with the NWT ambient air quality standard is based on measured maximum value (Veale 2008) whereas compliance with the Canada-Wide Standard is based on the 98th percentile of the annual monitored data averaged over three years of measurements.

(d) Canadian Ambient Air Quality Standards to be implemented in 2015 and 2020, respectively, which will replace the Canada-Wide Standards.

Note: - = No guideline available; µg/m³ = micrograms per cubic metre; TSP = total suspended particulates; PM = particular matter; CO = carbon monoxide; NWT = Northwest Territories.

3.2.3 Project Emissions

The MVRB adequacy letter requested a summary of the Project emissions by source for each phase (construction, operation and closure), including quantity, timing, and duration, normal operation conditions and upsets.



The methodology and assumptions for the Project emissions estimation are listed as follows:

- Construction phase:
 - Fugitive dust generated from overburden removal, material handling, rock crushing and screening, compacting, grading, vehicular traffic (road dust) and air transport were estimated from Project activities such as hours of construction, material handled, rock crushed and screened, vehicle weight and distance travelled, frequency of flights, etc. and the established emission factors found from the United States Environmental Protection Agency (US EPA) AP-42: Compilation of Air Pollutant Emission Factor (US EPA 2006).
 - Exhaust emissions from heavy equipment, off-road trucks, power generators, and aircraft were estimated using the US EPA NONROAD model.
 - The list of construction equipment was obtained from Table 6-2 in the DAR (Canadian Zinc Corporation 2015).
 - Emissions from the construction camp waste incinerator were estimated based on scaled down vendor stack tests results of the incinerator assessed in the Prairie Creek Mine DAR, with the ratio of road construction worker population to operations worker population at the Prairie Creek Mine being the basis for the de-rating of the emissions.
- Operation phase:
 - Fugitive dust generated from transport on the all-weather road was estimated using US EPA AP-42 emission factors.
 - Fugitive dust emissions from transfer operations at the TTF were not significant as the concentrate from the Mine will be transported in sealed bags or containers.
 - Exhaust emissions from haul trucks, loaders and power generators at the TTF, and support aircraft operating on the proposed Ram Plateau airstrip were estimated using the US EPA NONROAD model.
- Closure phase: the emission inventory for the closure phase was conducted in a similar manner to that of the construction phase.

Greenhouse house gas (GHG) emissions from each phase of the Project were estimated using the NONROAD model. The equivalent CO₂ (CO₂e) was calculated from the Project emitted CO₂ and methane (CH₄) using the global warming potentials (GWP) (1 for CO₂ and 25 for CH₄) in the intergovernmental panel on Climate change (IPCC)'s forth assessment report (Environment Canada 2015b).

Table 3-3 lists the maximum Project annual emissions by phase. The annual emission rates of CO and CO₂e, which are mainly emitted from equipment and vehicle exhaust, are highest in the construction phase. In the operation phase, the maximum annual emission rates of PM_{2.5}, PM₁₀, and TSP are 65.8, 651.0 and 2,608.6 tonnes per year, respectively. The particulate matter emissions from the operations phase are mainly from road dust generated by the road transport of concentrate on the all-weather road.



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 3-3: Maximum Project Annual Emissions by Phase

Phase	Annual Emission Rates [tonnes/year]					
	Duration [years]	CO	PM _{2.5}	PM ₁₀	TSP	CO _{2e}
Construction	3	6.7	3.3	15.4	58.3	32,005
Operation	20	4.1	65.8	651.0	2,608.6	10,673
Closure	1	1.1	2.1	5.1	22.6	1,171

Table 3-4 lists Project emissions by source for the construction, operation and closure phases. In the construction phase, vehicular traffic contributed the most emissions of all pollutants. General land clearing and compacting contributed the second most emissions of particulate matter. In the operation phase, most dust was generated with the road transport of concentrate; while in the closure phase, general land clearing emitted more than half of the total particulate matter.

Table 3-4: Project Emissions by Source Type

Source Type	Annual Emission Rates [tonnes/year]			
	CO	PM _{2.5}	PM ₁₀	TSP
General land clearing	0.11	0.53	0.94	4.92
Material Handling	0.23	0.06	0.25	0.49
Rock crushing and screening	0.16	0.04	0.14	0.36
Compacting	0.03	0.52	0.93	4.91
Grading	0.11	0.06	0.76	1.32
Vehicular traffic	5.40	1.87	12.01	45.83
Camp power generation	0.44	0.12	0.12	0.12
Camp incinerator	0.02	0.10	0.12	0.14
Air Transport	0.20	0.05	0.09	0.24
Total	6.70	3.35	15.36	58.34
Road Transport	0.85	65.13	650.24	2,607.73
Transfer operations at TTF	2.37	0.46	0.47	0.47
Aircraft Support	0.21	0.05	0.10	0.25
Power Generation at TTF	0.63	0.19	0.19	0.19
Total	4.07	65.82	651.01	2,608.64
General land clearing	0.14	1.56	2.79	14.74
Vehicular traffic	0.45	0.24	1.94	7.61
Camp power generation	0.44	0.12	0.12	0.12
Camp Incinerator	0.02	0.11	0.13	0.16
Total	1.05	2.03	4.98	22.63



3.2.4 Dispersion Modelling of the All Weather Road Emissions

To assess the air quality impact of the all-weather road emissions, a screening level modelling assessment was conducted using the US EPA SCREEN3 model. Since the emissions from the construction and closure of the all-weather road are short term and localized, screening modelling assessed emissions from the operation phase only. Emissions from the TTF would be unchanged from those presented in the original Prairie Creek Mine environmental assessment (EA0809-002; Canadian Zinc Corporation 2010) and were not re-assessed.

Similar to EA0809-002, a road segment with length equivalent to width was selected as a virtual source. For vehicular traffic on the all-weather road, it was assumed that vehicles could travel in convoy, resulting in maximum emissions in a given road segment. In addition to emissions from the virtual source, emissions from four adjacent road segments with the same dimensions as the virtual source (two on each end) were included in the model to account for the cumulative effects in motion. Maximum hourly emissions, maximum daily emissions, and maximum annual emissions were adjusted to the time needed for the vehicles to pass the road segments.

SCREEN3 was executed with rural and simple terrain options and the full built-in meteorology (i.e., all stability classes modelled). Ground-level concentrations resulting from emissions on the all-weather road were estimated as a function of distance from the road emission sources. SCREEN3 modelling considered three different emission rates, one for each of the 1-hour, 24-hour and annual averaging periods. Table 3-5 lists the emission rates used in the screening model for each of the averaging periods. The SCREEN3 model only provides predicted concentrations for a 1-hour period. These 1-hour concentrations were then converted to 8-hour, 24-hour, and annual average concentrations using factors of 0.7, 0.4, and 0.08 respectively, per the direction provided in the AERSCREEN modelling guidance document that lists these scaling factors as appropriate for AERSCREEN and SCREEN3.

Table 3-5: Emission Rates used in SCREEN3 Modelling

Table with 5 columns: Averaging Period, CO, PM2.5, PM10, TSP. Rows include 1-hour, 24-hour, and Annual averaging periods with corresponding emission rates in g/s.

g/s = Gram per second.

Ambient concentrations resulting from all-weather road emissions, calculated using SCREEN3, have been estimated as a function of distance from the road. The predicted ambient concentrations based on modelling results of all-weather road emissions are presented in Tables 3-6, 3-7 and 3-8.



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 3-6: Predicted 1-Hour Ground-level Concentrations Based on SCREEN3 Modelling

Distance from the Centre of the Source [m]	Concentrations [$\mu\text{g}/\text{m}^3$] – Maximum 1-hour values ^(a)			
	CO	PM _{2.5}	PM ₁₀	TSP
10	0.0	3.5	3.3	3.8
20	6.4	6.4	25.6	90.4
30	6.4	6.5	25.6	90.6
40	6.1	6.3	24.4	85.7
50	5.6	6.1	22.7	79.1
60	5.1	5.8	20.9	72.4
70	4.6	5.6	19.3	66.1
80	4.2	5.4	17.9	60.4
90	3.8	5.2	16.6	55.3
100	3.5	5.1	15.4	50.8
200	1.7	4.2	9.1	26.3
300	1.0	3.9	6.8	17.2
400	0.7	3.8	5.6	12.8
500	0.5	3.7	5.0	10.3
600	0.4	3.6	4.6	8.7
700	0.3	3.6	4.3	7.8
800	0.2	3.6	4.2	7.1
900	0.2	3.5	4.0	6.5
1000	0.2	3.5	3.9	6.2
Maximum Concentrations (11 m)	6.6	6.5	26.1	92.4
Ambient Air Quality Standard ^(b)	15,000	—	—	—

^(a) The values include background levels, calculated as the average of the monitoring data.

^(b) Air quality standards described in Section 3.2.2.

— Not applicable.



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 3-7: Predicted 8-Hour and 24-Hour Ground-level Concentrations Based on SCREEN3 Modelling

Distance from the Centre of the Source [m]	Concentrations [$\mu\text{g}/\text{m}^3$] – Maximum 8-hour and 24-hour values ^(a)			
	CO ^(c)	PM _{2.5} ^(b)	PM ₁₀ ^(b)	TSP ^(b)
10	0.0	1.4	1.3	1.5
20	4.5	1.4	1.3	1.5
30	4.5	1.4	1.3	1.5
40	4.3	1.6	2.1	4.2
50	3.9	1.6	2.1	4.2
60	3.6	1.6	2.1	4.0
70	3.2	1.6	2.0	3.8
80	2.9	1.6	2.0	3.6
90	2.7	1.6	1.9	3.4
100	2.4	1.5	1.9	3.3
200	1.2	1.5	1.8	3.1
300	0.7	1.5	1.8	3.0
400	0.5	1.4	1.5	2.2
500	0.3	1.4	1.5	1.9
600	0.3	1.4	1.4	1.8
700	0.2	1.4	1.4	1.7
800	0.2	1.4	1.4	1.7
900	0.1	1.4	1.4	1.6
1000	0.1	1.4	1.4	1.6
Maximum Concentrations (11 m)	4.6	1.6	2.1	4.2
Ambient Air Quality Standard ^(d)	6,000	28	—	120

^(a) The values include background levels, calculated as the average of the monitoring data.

^(b) 24-hour averaging.

^(c) 8-hour averaging.

^(d) Air quality standards described in Section 3.2.2.

— Not applicable.



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 3-8: Predicted Annual Ground-level Concentrations Based on SCREEN3 Modelling

Distance from the Centre of the Source (m)	Concentrations ($\mu\text{g}/\text{m}^3$) – Maximum Annual Values ^(a)			
	CO	PM _{2.5}	PM ₁₀	TSP
10	0.0	0.3	0.3	0.3
20	0.2	0.3	0.4	0.6
30	0.2	0.3	0.4	0.6
40	0.2	0.3	0.3	0.6
50	0.1	0.3	0.3	0.6
60	0.1	0.3	0.3	0.5
70	0.1	0.3	0.3	0.5
80	0.1	0.3	0.3	0.5
90	0.1	0.3	0.3	0.5
100	0.1	0.3	0.3	0.5
200	0.0	0.3	0.3	0.4
300	0.0	0.3	0.3	0.3
400	0.0	0.3	0.3	0.3
500	0.0	0.3	0.3	0.3
600	0.0	0.3	0.3	0.3
700	0.0	0.3	0.3	0.3
800	0.0	0.3	0.3	0.3
900	0.0	0.3	0.3	0.3
1000	0.0	0.3	0.3	0.3
Maximum Concentrations (11 m)	0.2	0.3	0.4	0.6
Ambient Air Quality Standard ^(b)	—	10	—	60

^(a) The values include background levels, calculated as the average of the monitoring data.

^(b) Air quality standards described in Section 3.2.2.

— Not applicable.

Predicted ground-level concentrations based on the modelling results have been compared with the air quality standards presented in Section 3.2.1. The predicted concentrations of these contaminants for all averaging periods are more than an order of magnitude lower than the respective ambient air quality standards for all distances from the all-weather road emission sources. The maximum annual emissions of all pollutants in the operation phase of the Project, as shown in Tables 3-2 and 3-3, are the total emissions for the year for the whole all-weather road with a total length of 184.2 km. Since the main emission sources are mobile, the duration of emissions from any specific road segment is very short (i.e., less than 1 minute for a 100-meter road segment), leading to low concentrations predicted by the screening model.



3.2.5 Residual Effects Assessment

Results from the residual effects classification are used to determine the environmental significance of the Project effects on the air quality assessment endpoint. Effects are described using the criteria defined in Table 3-9, and reflect the descriptions provided in Appendix B of the ToR. Together, these criteria are used to describe the nature (e.g., severity or intensity of change, and the area and amount of time over which the change occurs) and type (e.g., direction of the change) of an effect on air quality. The changes in measurement endpoints associated with the valued component provide the foundation for determining significance from the Project on air quality. Magnitude, geographic extent and timing are the principal factors of consideration used to predict significance. The magnitude of a residual adverse environmental effect is determined by the change in a measurement endpoint from a particular interaction. Geographic extent refers to the area affected. Duration is defined as the amount of time for a residual adverse environmental effect on the air quality to be reversed. Other criteria, such as frequency are used as modifiers, where applicable, in the determination of significance.

The Project effects on air quality were determined to be of low significance as shown in Table 3-10. The Project effects on air quality are local, infrequent, confined to the life of the project with low magnitude, and are completely reversible.



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 3-9 Definitions of Residual Effects Criteria Used to Evaluate Significance for Air Quality

Uncertainty	Geographical Extent	Timing	Magnitude	Reversibility	Likelihood
<p>High: Uncertainty of the predicted project effect is high.</p> <p>Low: Uncertainty of the predicted project effect is low</p>	<p>Local: Project effect is confined to area adjacent to the Project.</p> <p>Regional: Project effect extends beyond area adjacent to the Project.</p>	<p>Duration: The duration of the predicted project effect.</p> <p>Frequency: The frequency of the project effect that is expected to occur.</p>	<p>Negligible: The predicted change in concentration is less than or equal to 1% of the NWT or Canadian AAQS, and the maximum predicted concentration is below 25% of the AAQS.</p> <p>Low: The predicted change in concentration is less than or equal to 1% of the NWT or Canadian AAQS, and the maximum predicted concentration is between 25% and 50% of the NWT AAQS, or The predicted change in concentration is greater than 1% of the NWT or Canadian AAQS; and the maximum predicted concentration is below 25% of the AAQS.</p> <p>Moderate: The predicted change in concentration is less than or equal to 1% of the NWT or Canadian AAQS or, The predicted change in concentration is greater than 1% of the AAQS; and the maximum concentration is between 25% and 100% of the AAQS.</p> <p>High: The predicted maximum concentration is at or above the NWT or Canadian AAQS.</p>	<p>Reversible: Project effect is readily reversible once the project activities cease.</p> <p>Irreversible: Project effect cannot be reversed, or will take an extended time after project activities cease for the effects to be reversed.</p>	<p>Unlikely: Predicted maximum concentration is possible but unlikely due to conservatism in methodology, dispersion model limitations, and/or rare emission scenarios or meteorological that cause the predictions</p> <p>Likely: Predicted maximum concentration is possible, but is not certain due to conservatism in emission estimation methodology or dispersion model limitations</p> <p>Highly Likely: Predicted maximum concentration is likely to occur or is certain.</p>



AIR QUALITY SUPPLEMENTAL INFORMATION

Table 3-10: Summary of Residual Impact Classification and Predicted Significance of Project Effects on Air Quality

Impact	Significance	Summary of Rationale	Uncertainty	Geographic Range	Timing	Magnitude	Reversibility	Likelihood
Change to Air Quality	Low	Project effects are local, infrequent, confined to the life of the project with low magnitude and are reversible.	Low	Local	Duration: life of the project including all project phases Frequency: infrequent	Low	Reversible	Likely



3.2.6 Potential Impacts on Environment (Humans, Wildlife, Vegetation and Waterbodies)

The potential impacts of the Project air emissions on human and ecological components (wildlife, vegetation, and waterbodies) were assessed using the same approaches applied in EA0809-002. The approaches consisted of:

- Identification of the basis of the air quality standards used in this air quality assessment to verify if the values used for comparison with the predicted air concentrations are protective of human health and ecological components; and
- Identification of guidelines from the World Health organization (WHO) regarding human health protection and comparison with the predicted air concentrations.

The ambient air quality standards used in this air quality assessment are primarily related to effects on human health. Considering that standards based on human health are conservative regarding ecological effects, and the standards based on ecological effects are conservative regarding human health effects, the air quality standards used in this air quality assessment are likely to represent concentrations not harmful for both human health and ecological components. Based on the comparison with standards presented in Section 3.2.4, predicted maximum concentrations of TSP, PM₁₀, PM_{2.5}, and CO resulting from the Project emissions are not likely to cause adverse effects on human health and ecological components.

WHO guidelines (WHO 2005) for human health protection are more restrictive for 24-hour PM_{2.5} (25 µg/m³) than the ambient air quality standards in Table 3-2. In addition, WHO presents a guideline for annual PM₁₀ (20 µg/m³). Comparing the predicted concentrations resulting from the Project emissions, as presented in Tables 3-6, 3-7 and 3-8, to the WHO guidelines, emissions from the Project are not likely to cause adverse effects on human health.

3.2.7 Mitigation

The dust mitigation strategy for the Project is described in Section 11.3.3 of the DAR. Below is an excerpt from the DAR:

“The GNWT (1998) dust suppression guidelines will be implemented at the TTF and along portions of the road located in environments which are more prone to adverse effects from road dust accumulation (e.g., lakes, wetlands), as appropriate, to limit dust generation during the snow free months. Dust management will begin with road surfacing material which is coarse and minimally erodible, where practical. Where dust is problematic, watering will occur as and when required. Vehicles will adhere to speed limits on roads, which will help limit the re-suspension of particulate material.”

With the application of these mitigation measures, the potential effects due to dust generation from the construction and operation of the all season road and associated traffic are expected to be low.



4.0 REVIEW OF THE AIR QUALITY AND EMISSIONS MONITORING AND MANAGEMENT PLAN AND THE CONTAMINANT LOADING MANAGEMENT PLAN

A comprehensive review of the Air Quality and Emissions Management Plan (AQEMMP) and the Contaminant Loading Management Plan (CLMP) has been conducted. Below is a high-level summary of the changes that may be anticipated in each of the plans. The changes to the AQEMMP reflect the potential for revision based on the changes in the regulatory environment over the last few years rather than to Project changes including the operation of an all-weather road. The changes likely required in the CLMP specifically reflect the adaptation to the all-weather road.

4.1 AQEMMP Potential Changes

Section 1.2

Recent work on similar files does not include comparison to predictions in the DAR as a component of the adaptive management plan. However, we believe it should remain.

ENR has been asking for an equipment database to track BATEA efforts. Should this be requested, if CZN declines, this would be consistent with other northern operators.

Section 1.3 and global change regarding SO₂

We may be able to remove the SO₂ monitoring component. Combustion of sulphur in diesel is the dominant cause of SO₂ concentrations, and it has been all but removed from modern diesel.

Section 3.2.1.7

The global warming potentials listed in the calculations should be updated to reflect the most recent values.

Section 4.0

The threshold values that trigger actions may need to be revised to reflect an alignment with the triggers indicated in the new Canadian Air Quality Management System (AQMS).

The specific actions required per Action Levels I-III will likely need to incorporate the development and implementation of an action plan specific to each level.



4.2 CLMP Potential Changes

The potential changes are generally in the CLMP are minor and reflect editorial changes in wording to avoid constraining the time period of operation to only the winter months. Also, changes are required throughout the document to reflect the additional mode of concentrate transport in bulk using specially-designed containerized transport. The sampling locations, timing and procedures are expected to remain unchanged with the exception of the potential for an addition of a dustfall transect somewhere along the road.

Section 1.1

In the first bullet – remove “winter”, replace with “all-season”.

Section 1.3.2

Remove the term at the beginning of the second sentence “In late winter”.

Section 2.1

In the first and second-to-last paragraphs, there is a need for clarification that the concentrate will be in a frozen state only during winter conditions.

Section 2.2

The last paragraph of this section needs to be less restrictive regarding the operating season, suggest removal of the term “during the operating season”.

Section 3.5

This is the only section where specific dates for concentrate transport are mentioned, suggest deleting all but the first sentence in this section.



5.0 CLOSURE

We trust that this information meets CZN's requirement. Should there be any questions, please do not hesitate to contact the undersigned.

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ZY/CDM/rp

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APPENDIX A

Summary Tables of Daily Temperature and Precipitation

Table A-1 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Prairie Creek Mine Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2005	5	17.4	13.0	15.1	-	—	—
2005	6	15.0	5.8	10.4	—	—	—
2005	7	16.0	4.3	11.6	—	—	—
2005	8	15.4	4.3	10.5	—	—	—
2005	9	9.9	0.4	5.0	—	—	—
2005	10	2.8	-14.2	-3.1	—	—	—
2005	11	5.6	-27.6	-10.0	—	—	—
2005	12	-2.3	-27.9	-13.7	—	—	—
2006	1	-7.7	-37.9	-22.6	—	—	—
2006	2	-3.1	-34.3	-17.1	—	—	—
2006	3	-4.3	-28.2	-16.3	—	—	—
2006	4	4.4	-13.4	-1.7	—	—	—
2006	5	9.7	-1.6	5.4	—	—	—
2006	6	20.3	2.7	12.3	—	—	—
2006	7	16.1	9.7	12.8	—	—	—
2006	8	12.2	7.6	10.2	—	—	—
2006	9	12.4	-1.4	5.4	—	—	—
2006	10	8.6	-15.6	-2.8	—	—	—
2006	11	-13.8	-38.5	-23.1	—	—	—
2006	12	-1.7	-29.4	-15.7	—	—	—
2007	1	-2.3	-33.2	-18.7	—	—	—
2007	2	-13.4	-33.7	-22.9	—	—	—
2007	3	-1.8	-33.9	-18.9	—	—	—
2007	4	4.6	-18.4	-2.1	—	—	—
2007	5	11.4	-0.9	4.8	—	—	—
2007	6	17.4	7.2	10.7	—	—	—
2007	7	19.5	10.4	13.7	—	—	—
2007	8	15.2	6.0	9.7	—	—	—
2007	9	12.5	-5.5	3.4	—	—	—
2007	10	2.3	-12.3	-3.3	—	—	—
2007	11	-0.9	-33.8	-16.6	—	—	—
2007	12	-11.4	-36.3	-22.6	—	—	—
2008	1	-13.4	-43.4	-25.3	—	—	—
2008	2	-8.7	-40.9	-22.0	—	—	—
2008	3	-0.7	-29.8	-15.7	—	—	—
2008	4	4.7	-14.8	-4.9	—	—	—
2008	5	13.4	1.7	6.1	—	—	—
2008	6	13.5	6.0	10.1	—	—	—
2008	7	18.1	9.2	12.3	—	—	—
2008	8	6.8	6.8	6.8	—	—	—
2008	9	—	—	—	—	—	—
2008	10	—	—	—	—	—	—
2008	11	—	—	—	—	—	—

Table A-1 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Prairie Creek Mine Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2008	12	—	—	—	—	—	—
2009	1	—	—	—	—	—	—
2009	2	—	—	—	—	—	—
2009	3	—	—	—	—	—	—
2009	4	—	—	—	—	—	—
2009	5	—	—	—	—	—	—
2009	6	—	—	—	—	—	—
2009	7	—	—	—	—	—	—
2009	8	—	—	—	—	—	—
2009	9	11.9	-0.8	5.5	4.1	0.0	0.9
2009	10	1.8	-14.2	-5.0	1.4	0.0	0.4
2009	11	-3.0	-27.8	-14.6	0.1	0.0	0.0
2009	12	-7.0	-40.3	-21.6	0.0	0.0	0.0
2010	1	-9.7	-38.8	-22.8	0.0	0.0	0.0
2010	2	-10.1	-30.4	-17.9	0.0	0.0	0.0
2010	3	-2.0	-25.2	-11.9	8.1	0.0	0.8
2010	4	6.4	-7.8	-0.7	2.7	0.0	0.2
2010	5	12.9	-1.7	5.5	4.6	0.0	0.6
2010	6	15.9	6.0	10.9	22.3	0.0	4.6
2010	7	17.1	9.6	13.3	52.7	0.0	5.5
2010	8	17.5	4.9	11.2	15.0	0.0	3.0
2010	9	8.5	-3.3	3.3	33.9	0.0	2.0
2010	10	5.9	-14.4	-3.1	10.2	0.0	1.2
2010	11	0.7	-32.2	-13.5	5.1	0.0	0.2
2010	12	-12.6	-32.9	-23.6	0.0	0.0	0.0
2011	1	-10.5	-40.4	-21.7	0.0	0.0	0.0
2011	2	-1.6	-36.9	-20.7	0.5	0.0	0.0
2011	3	-5.2	-31.7	-19.4	11.9	0.0	0.7
2011	4	2.2	-11.3	-4.3	1.9	0.0	0.2
2011	5	13.7	-1.8	5.9	4.0	0.0	0.4
2011	6	14.0	0.9	10.1	28.1	0.0	6.0
2011	7	16.8	7.3	12.5	19.1	0.0	3.2
2011	8	15.3	6.3	9.7	49.0	0.0	3.5
2011	9	11.9	0.0	6.2	12.4	0.0	1.4
2011	10	2.0	-10.8	-2.3	8.0	0.0	0.7
2011	11	-3.4	-37.8	-19.0	0.3	0.0	0.0
2011	12	-0.4	-30.1	-15.6	11.9	0.0	0.4
2012	1	0.5	-39.3	-23.1	0.0	0.0	0.0
2012	2	-0.9	-23.4	-16.0	14.8	0.0	0.5
2012	3	-1.8	-26.5	-16.0	4.8	0.0	0.5
2012	4	3.8	-9.3	-2.3	12.1	0.0	0.6
2012	5	13.3	-0.2	5.7	12.3	0.0	1.2
2012	6	16.1	3.7	10.8	26.7	0.0	4.0

Table A-1 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Prairie Creek Mine Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2012	7	18.7	9.6	14.0	12.5	0.0	1.5
2012	8	17.1	6.1	11.6	26.2	0.0	2.7
2012	9	11.2	1.5	6.8	6.5	0.0	0.8
2012	10	4.4	-25.1	-6.5	3.2	0.0	0.2
2012	11	-9.0	-38.0	-21.0	0.0	0.0	0.0
2012	12	-12.8	-36.6	-24.7	0.0	0.0	0.0
2013	1	-3.3	-36.8	-21.3	15.0	0.0	0.5
2013	2	1.1	-23.8	-14.5	3.2	0.0	0.2
2013	3	-2.8	-29.5	-17.8	6.5	0.0	0.6
2013	4	0.4	-25.3	-9.9	6.3	0.0	0.4
2013	5	13.2	-11.8	5.7	2.6	0.0	0.2
2013	6	18.8	5.9	12.8	9.7	0.0	1.7
2013	7	18.7	4.9	12.9	33.1	0.0	4.1
2013	8	16.0	4.2	11.4	27.0	0.0	3.0
2013	9	14.6	-0.7	7.0	14.6	0.0	1.4
2013	10	3.3	-6.9	-0.9	7.8	0.0	0.8
2013	11	-2.4	-37.1	-16.3	1.9	0.0	0.1
2013	12	-9.5	-39.8	-25.5	0.0	0.0	0.0
2014	1	0.0	-39.0	-15.8	19.7	0.0	0.8
2014	2	-11.0	-36.2	-24.2	0.0	0.0	0.0
2014	3	-0.1	-31.2	-18.5	7.7	0.0	0.4
2014	4	3.3	-18.1	-5.6	2.4	0.0	0.2
2014	5	11.9	-2.8	4.5	11.3	0.0	1.0
2014	6	16.1	4.8	10.6	15.0	0.0	2.3
2014	7	20.2	10.1	14.6	44.3	0.0	2.4
2014	8	17.2	6.1	11.8	19.4	0.0	1.4
2014	9	10.8	-2.1	4.8	7.4	0.0	1.0
2014	10	4.5	-18.9	-3.4	3.2	0.0	0.6
2014	11	-2.2	-35.9	-17.5	0.5	0.0	0.0
2014	12	-13.0	-33.3	-20.8	0.0	0.0	0.0
2015	1	-0.6	-34.4	-17.4	0.9	0.0	0.0
2015	2	-2.4	-37.8	-19.7	2.1	0.0	0.2
2015	3	-2.4	-24.8	-11.9	6.0	0.0	0.7
2015	4	5.4	-6.4	-0.6	3.9	0.0	0.4
2015	5	14.3	-2.1	7.7	5.9	0.0	0.4
2015	6	15.1	2.6	10.8	6.6	0.0	1.4

—: No data

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1963	11	-2.0	-31.4	-18.0	12.2	0.0	1.6
1963	12	-3.1	-35.9	-21.6	7.6	0.0	0.6
1964	1	-14.8	-39.2	-27.9	2.8	0.0	0.5
1964	2	2.0	-31.1	-17.1	4.6	0.0	0.7
1964	3	-10.9	-31.2	-23.1	4.1	0.0	0.5
1964	4	3.9	-18.9	-6.0	15.7	0.0	1.2
1964	5	16.4	-3.1	6.9	6.1	0.0	0.9
1964	6	20.8	8.1	15.2	17.3	0.0	1.1
1964	7	27.3	12.0	17.6	4.1	0.0	0.4
1964	8	18.4	10.3	14.9	23.1	0.0	1.7
1964	9	11.7	0.6	6.0	23.1	0.0	1.2
1964	10	11.1	-12.5	0.9	14.2	0.0	0.9
1964	11	-6.4	-34.8	-16.6	16.5	0.0	1.3
1964	12	-5.9	-38.1	-27.0	3.3	0.0	0.6
1965	1	-3.6	-44.7	-26.6	2.8	0.0	0.6
1965	2	-25.3	-36.4	-30.2	5.8	0.0	0.9
1965	3	4.7	-23.9	-10.5	2.5	0.0	0.2
1965	4	12.0	-11.7	1.3	0.0	0.0	0.0
1965	5	16.4	2.0	8.9	0.8	0.0	0.0
1965	6	18.7	4.5	12.6	30.5	0.0	2.1
1965	7	22.0	12.8	17.5	21.8	0.0	2.1
1965	8	21.7	6.9	15.0	4.3	0.0	0.3
1965	9	8.9	-2.0	3.8	8.4	0.0	1.0
1965	10	4.7	-16.1	-1.5	16.8	0.0	1.3
1965	11	-8.6	-24.8	-16.1	5.8	0.0	0.7
1965	12	-14.5	-39.7	-24.4	3.3	0.0	0.5
1966	1	-28.9	-45.0	-37.3	3.8	0.0	0.3
1966	2	-4.2	-31.7	-22.7	2.0	0.0	0.2
1966	3	7.0	-30.6	-14.5	7.6	0.0	1.0
1966	4	5.6	-18.3	-6.8	3.6	0.0	0.6
1966	5	16.4	0.0	8.5	28.7	0.0	2.4
1966	6	23.4	8.4	14.9	5.3	0.0	0.5
1966	7	21.7	7.2	16.5	27.7	0.0	2.5
1966	8	20.9	6.4	13.7	11.7	0.0	1.0
1966	9	17.8	2.0	9.4	6.1	0.0	0.7
1966	10	6.2	-18.4	-4.3	5.6	0.0	1.0
1966	11	-8.6	-35.9	-22.8	10.4	0.0	1.3
1966	12	-13.4	-37.0	-23.1	5.1	0.0	0.8
1967	1	-14.5	-41.1	-27.8	3.3	0.0	0.5
1967	2	-13.6	-38.1	-26.1	6.1	0.0	0.9
1967	3	-10.0	-25.0	-18.4	5.6	0.0	0.5
1967	4	6.7	-17.0	-3.7	5.6	0.0	0.4

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1967	5	19.2	-0.3	7.0	9.7	0.0	0.7
1967	6	21.4	8.6	13.9	6.9	0.0	1.0
1967	7	21.4	8.9	15.7	11.4	0.0	0.9
1967	8	23.6	6.4	15.7	5.1	0.0	0.4
1967	9	22.0	0.0	9.0	16.5	0.0	0.9
1967	10	3.7	-10.3	-2.1	15.0	0.0	1.0
1967	11	-1.1	-28.9	-13.3	3.8	0.0	0.3
1967	12	1.1	-33.9	-21.8	7.9	0.0	0.7
1968	1	-19.2	-42.2	-30.2	5.1	0.0	0.9
1968	2	6.4	-46.7	-20.7	3.6	0.0	0.3
1968	3	2.2	-23.6	-9.3	2.0	0.0	0.3
1968	4	7.2	-11.1	-1.8	6.1	0.0	0.7
1968	5	16.2	2.2	7.4	8.1	0.0	0.6
1968	6	20.3	8.9	13.8	17.5	0.0	1.7
1968	7	21.4	9.2	14.5	28.4	0.0	1.4
1968	8	17.5	7.8	12.6	16.5	0.0	1.0
1968	9	14.7	2.5	6.4	24.9	0.0	1.8
1968	10	7.5	-8.7	-1.0	4.6	0.0	0.9
1968	11	-4.2	-28.9	-15.0	3.6	0.0	0.7
1968	12	-12.8	-38.6	-27.4	3.3	0.0	0.4
1969	1	-26.9	-40.6	-34.5	2.5	0.0	0.4
1969	2	-7.5	-34.7	-21.2	6.9	0.0	0.5
1969	3	-2.8	-24.5	-13.2	8.6	0.0	0.7
1969	4	7.8	-10.9	0.5	20.6	0.0	1.2
1969	5	14.8	1.1	7.7	8.6	0.0	0.7
1969	6	23.6	7.0	13.4	7.9	0.0	0.8
1969	7	21.4	8.1	15.5	14.5	0.0	1.8
1969	8	17.8	7.0	11.7	17.5	0.0	2.6
1969	9	13.4	0.0	5.8	13.7	0.0	1.2
1969	10	14.2	-10.3	0.7	0.8	0.0	0.1
1969	11	4.2	-31.1	-14.3	10.7	0.0	1.3
1969	12	-7.8	-27.5	-17.5	3.3	0.0	0.2
1970	1	-6.4	-37.5	-26.3	2.8	0.0	0.5
1970	2	-1.7	-38.6	-20.6	2.8	0.0	0.4
1970	3	-1.7	-25.6	-12.9	2.8	0.0	0.3
1970	4	8.4	-13.9	-1.2	4.6	0.0	0.4
1970	5	14.2	0.9	8.2	30.0	0.0	2.3
1970	6	22.5	8.3	15.3	9.7	0.0	1.9
1970	7	21.4	12.0	16.2	20.6	0.0	1.8
1970	8	20.6	8.9	14.4	11.7	0.0	1.4
1970	9	13.9	-2.0	5.4	21.1	0.0	1.8
1970	10	3.9	-12.5	-3.4	4.8	0.0	0.8

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1970	11	2.8	-33.1	-14.9	7.4	0.0	0.3
1970	12	-13.6	-38.6	-25.8	3.8	0.0	0.6
1971	1	-15.9	-44.5	-32.0	3.3	0.0	0.4
1971	2	-9.5	-35.0	-21.6	3.8	0.0	0.5
1971	3	-5.9	-27.5	-16.1	7.6	0.0	0.4
1971	4	10.8	-18.4	-2.0	8.1	0.0	0.6
1971	5	16.7	2.5	10.3	12.2	0.0	1.0
1971	6	20.9	9.8	16.0	9.9	0.0	0.8
1971	7	22.5	11.4	16.8	16.8	0.0	1.5
1971	8	25.6	8.6	15.3	9.7	0.0	1.2
1971	9	13.9	0.0	7.6	21.6	0.0	1.4
1971	10	10.6	-16.4	-2.1	9.7	0.0	1.1
1971	11	-13.1	-23.9	-17.3	6.9	0.0	0.8
1971	12	-16.7	-44.7	-29.4	3.0	0.0	0.5
1972	1	-8.3	-46.4	-29.3	5.8	0.0	0.8
1972	2	-16.7	-36.1	-27.8	2.0	0.0	0.5
1972	3	-2.0	-29.5	-15.3	9.4	0.0	0.9
1972	4	2.5	-20.6	-6.8	7.4	0.0	0.9
1972	5	17.5	0.9	7.9	7.6	0.0	1.1
1972	6	23.1	9.2	15.9	6.6	0.0	0.6
1972	7	21.1	11.4	15.6	11.2	0.0	1.8
1972	8	22.2	8.9	15.9	14.7	0.0	1.3
1972	9	14.2	-1.4	3.3	3.3	0.0	0.5
1972	10	4.8	-15.3	-3.2	5.3	0.0	0.7
1972	11	-5.0	-29.2	-15.8	2.5	0.0	0.4
1972	12	-7.5	-36.7	-24.6	4.1	0.0	0.9
1973	1	-16.4	-35.9	-26.1	12.7	0.0	1.2
1973	2	-9.7	-37.8	-22.4	7.1	0.0	0.6
1973	3	3.3	-24.7	-13.9	9.1	0.0	0.6
1973	4	9.2	-11.1	0.2	6.1	0.0	0.4
1973	5	17.5	6.7	12.6	8.4	0.0	0.6
1973	6	18.1	8.6	14.7	50.5	0.0	4.1
1973	7	22.0	10.6	17.8	6.1	0.0	0.6
1973	8	21.9	5.3	13.4	27.2	0.0	2.0
1973	9	15.0	1.9	9.3	4.8	0.0	0.3
1973	10	6.4	-7.8	-0.8	2.5	0.0	0.3
1973	11	-13.1	-26.7	-19.7	8.6	0.0	1.1
1973	12	-12.0	-35.0	-24.7	7.1	0.0	1.0
1974	1	-7.0	-40.0	-27.6	5.3	0.0	0.7
1974	2	-17.8	-37.8	-26.7	13.2	0.0	1.9
1974	3	-10.3	-31.7	-20.2	5.6	0.0	0.7
1974	4	6.7	-17.5	-2.7	2.3	0.0	0.1

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1974	5	13.6	-7.0	5.9	4.1	0.0	0.7
1974	6	19.5	10.3	14.4	14.2	0.0	2.1
1974	7	20.6	9.8	16.0	6.4	0.0	0.9
1974	8	22.2	5.0	13.3	30.5	0.0	3.6
1974	9	17.0	-6.1	6.0	12.4	0.0	1.0
1974	10	-2.0	-13.7	-6.9	14.0	0.0	1.6
1974	11	2.8	-25.9	-14.9	2.8	0.0	0.4
1974	12	-12.5	-32.5	-23.8	5.6	0.0	1.2
1975	1	-12.3	-42.8	-30.0	3.6	0.0	0.6
1975	2	-2.5	-40.6	-22.6	4.1	0.0	0.3
1975	3	-7.0	-23.1	-14.9	10.2	0.0	0.8
1975	4	7.5	-15.0	0.6	6.1	0.0	0.2
1975	5	18.1	0.6	9.4	4.3	0.0	0.4
1975	6	21.4	11.1	15.7	4.8	0.0	0.9
1975	7	26.1	12.3	19.1	7.6	0.0	0.9
1975	8	17.2	10.3	13.5	31.8	0.0	2.9
1975	9	14.8	-0.9	8.8	7.4	0.0	0.9
1975	10	11.7	-20.0	-2.3	20.3	0.0	1.7
1975	11	-13.1	-36.2	-21.7	19.3	0.0	1.1
1975	12	-4.8	-47.5	-26.8	5.3	0.0	0.7
1976	1	-11.7	-38.1	-27.1	9.9	0.0	0.7
1976	2	-3.7	-35.0	-24.5	7.6	0.0	0.9
1976	3	-1.1	-28.6	-15.5	7.9	0.0	0.8
1976	4	13.1	-9.2	4.4	4.1	0.0	0.1
1976	5	15.3	4.8	10.8	11.4	0.0	0.9
1976	6	21.7	6.4	13.7	6.6	0.0	0.5
1976	7	20.8	12.0	16.6	28.4	0.0	3.0
1976	8	22.2	8.4	15.5	34.0	0.0	3.0
1976	9	16.7	6.4	11.3	2.8	0.0	0.3
1976	10	7.5	-8.9	-0.8	7.9	0.0	0.5
1976	11	-0.3	-22.8	-9.9	4.3	0.0	0.3
1976	12	1.4	-35.6	-23.3	2.0	0.0	0.3
1977	1	-13.8	-37.1	-22.9	5.8	0.0	0.8
1977	2	-8.5	-26.2	-15.1	3.2	0.0	0.3
1977	3	-0.6	-26.4	-12.9	1.4	0.0	0.2
1977	4	15.3	-11.0	1.4	8.4	0.0	0.5
1977	5	16.5	1.2	9.2	28.2	0.0	3.2
1977	6	22.0	8.6	14.5	4.0	0.0	0.7
1977	7	19.7	9.3	15.4	6.7	0.0	1.2
1977	8	17.5	5.2	12.3	7.4	0.0	0.5
1977	9	12.8	4.9	8.6	1.3	0.0	0.2
1977	10	5.6	-8.2	-0.9	21.0	0.0	1.0

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1977	11	-4.8	-26.4	-16.7	6.6	0.0	0.8
1977	12	-16.7	-43.6	-29.9	2.2	0.0	0.3
1978	1	-15.2	-38.1	-24.1	5.4	0.0	0.3
1978	2	1.2	-32.3	-14.9	1.8	0.0	0.2
1978	3	-1.7	-26.3	-13.3	3.9	0.0	0.5
1978	4	7.2	-17.4	-3.0	7.1	0.0	0.5
1978	5	14.6	-0.8	7.6	2.8	0.0	0.1
1978	6	19.8	9.8	14.7	10.6	0.0	2.1
1978	7	19.2	10.7	14.9	31.2	0.0	2.5
1978	8	18.1	7.3	13.2	7.4	0.0	0.6
1978	9	15.7	3.5	8.7	5.1	0.0	0.3
1978	10	7.6	-13.0	-3.1	5.7	0.0	0.7
1978	11	-6.2	-28.1	-15.7	5.4	0.0	1.1
1978	12	-13.5	-34.8	-23.3	3.5	0.0	0.5
1979	1	-12.8	-36.7	-24.8	0.4	0.0	0.0
1979	2	-23.3	-40.3	-31.5	1.7	0.0	0.3
1979	3	-0.3	-26.9	-17.4	18.6	0.0	1.7
1979	4	5.8	-26.0	-5.8	2.7	0.0	0.3
1979	5	14.7	-6.3	6.4	14.2	0.0	1.2
1979	6	21.6	6.7	13.7	10.4	0.0	1.2
1979	7	23.3	14.6	19.4	8.9	0.0	1.1
1979	8	22.5	10.8	15.5	10.4	0.0	1.4
1979	9	14.7	4.0	9.2	15.4	0.0	0.7
1979	10	8.3	-6.9	1.6	4.8	0.0	0.6
1979	11	-0.1	-21.8	-8.5	2.1	0.0	0.2
1979	12	-2.8	-35.1	-20.4	3.6	0.0	0.4
1980	1	-9.0	-38.4	-26.0	7.0	0.0	0.7
1980	2	-1.1	-29.1	-16.0	6.9	0.0	0.4
1980	3	3.1	-27.6	-11.8	1.2	0.0	0.1
1980	4	13.7	-10.2	4.1	10.7	0.0	0.6
1980	5	18.0	3.5	10.5	10.9	0.0	1.1
1980	6	22.4	7.9	16.2	4.3	0.0	0.4
1980	7	20.1	10.9	16.9	34.2	0.0	1.6
1980	8	21.7	8.7	14.2	9.9	0.0	0.6
1980	9	13.8	-1.0	5.2	30.2	0.0	3.0
1980	10	14.9	-7.4	2.2	7.5	0.0	0.5
1980	11	-3.4	-29.0	-12.2	7.2	0.0	0.7
1980	12	-21.0	-38.8	-31.2	4.1	0.0	0.4
1981	1	-3.9	-25.1	-12.8	4.4	0.0	0.4
1981	2	-8.8	-30.9	-19.0	13.9	0.0	1.1
1981	3	3.2	-21.3	-9.3	2.7	0.0	0.4
1981	4	7.7	-17.0	-4.5	38.4	0.0	2.1

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1981	5	19.4	1.7	11.7	6.1	0.0	0.4
1981	6	17.9	8.5	13.8	6.0	0.0	0.6
1981	7	23.6	13.3	18.0	46.9	0.0	4.2
1981	8	24.0	5.2	16.4	28.0	0.0	1.9
1981	9	17.2	0.4	7.7	19.0	0.0	1.7
1981	10	5.5	-13.0	-2.5	45.9	0.0	4.8
1981	11	0.1	-22.7	-14.2	27.0	0.0	1.6
1981	12	-6.9	-42.1	-22.0	13.3	0.0	1.2
1982	1	-25.1	-42.7	-35.8	6.8	0.0	0.4
1982	2	-10.3	-35.8	-23.9	1.6	0.0	0.3
1982	3	0.4	-28.5	-16.9	5.2	0.0	0.3
1982	4	7.6	-19.4	-2.2	6.3	0.0	0.6
1982	5	14.4	-2.4	6.8	7.3	0.0	0.6
1982	6	24.0	5.2	14.7	18.2	0.0	1.5
1982	7	22.7	11.0	17.7	22.9	0.0	2.1
1982	8	22.7	4.6	11.8	16.0	0.0	2.0
1982	9	16.8	3.4	9.7	23.9	0.0	2.0
1982	10	10.7	-17.8	-3.2	17.8	0.0	2.2
1982	11	-4.7	-32.9	-21.4	5.6	0.0	0.8
1982	12	-14.4	-32.2	-22.9	6.7	0.0	0.6
1983	1	-17.1	-36.1	-26.6	5.1	0.0	1.0
1983	2	-13.2	-30.3	-23.5	4.7	0.0	0.8
1983	3	-8.2	-24.8	-17.9	6.5	0.0	0.8
1983	4	7.1	-15.9	-1.6	16.2	0.0	1.1
1983	5	19.8	-7.6	4.6	9.0	0.0	1.3
1983	6	24.2	8.0	15.5	7.0	0.0	0.8
1983	7	23.9	12.6	17.5	6.0	0.0	0.4
1983	8	21.0	8.2	14.4	13.4	0.0	0.9
1983	9	15.1	-8.5	4.8	14.2	0.0	0.7
1983	10	6.1	-14.5	-4.5	14.2	0.0	0.9
1983	11	-0.9	-22.2	-10.4	10.8	0.0	0.5
1983	12	-11.3	-40.6	-25.7	4.6	0.0	0.3
1984	1	-12.9	-39.1	-25.6	11.8	0.0	1.4
1984	2	-5.6	-31.8	-20.4	9.2	0.0	1.5
1984	3	6.7	-28.1	-14.1	4.1	0.0	0.4
1984	4	9.0	-6.4	2.7	2.2	0.0	0.2
1984	5	13.0	2.4	9.1	2.4	0.0	0.2
1984	6	19.6	9.1	15.7	26.2	0.0	2.0
1984	7	25.3	9.7	16.8	21.4	0.0	3.3
1984	8	26.0	1.4	14.7	20.8	0.0	2.1
1984	9	11.6	1.5	6.6	5.8	0.0	0.4
1984	10	7.1	-21.6	-4.4	20.4	0.0	1.5

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1984	11	-3.8	-26.5	-18.3	5.0	0.0	0.5
1984	12	-10.8	-41.9	-27.9	5.4	0.0	0.5
1985	1	3.4	-32.9	-17.3	12.0	0.0	1.1
1985	2	-6.3	-37.0	-28.8	8.3	0.0	1.5
1985	3	-0.3	-22.7	-9.3	1.4	0.0	0.1
1985	4	5.9	-10.6	-3.0	7.4	0.0	0.6
1985	5	13.0	1.9	8.4	11.4	0.0	0.5
1985	6	20.8	6.8	14.5	11.4	0.0	1.1
1985	7	22.6	9.1	15.4	19.2	0.0	2.1
1985	8	18.4	8.0	12.6	27.8	0.0	1.7
1985	9	18.0	-0.2	7.7	7.0	0.0	0.5
1985	10	6.1	-20.1	-4.0	12.4	0.0	1.8
1985	11	-7.9	-38.0	-20.1	9.8	0.0	0.7
1985	12	-4.6	-29.0	-18.1	7.4	0.0	0.7
1986	1	-16.3	-35.4	-24.3	6.0	0.0	0.9
1986	2	-6.2	-31.1	-18.7	1.5	0.0	0.2
1986	3	-6.1	-24.2	-15.2	18.8	0.0	1.4
1986	4	4.9	-21.1	-5.3	5.3	0.0	0.5
1986	5	18.7	2.5	8.9	7.2	0.0	0.5
1986	6	20.1	6.9	14.2	21.6	0.0	1.6
1986	7	21.4	12.3	17.2	12.8	0.0	1.3
1986	8	22.6	4.7	14.0	17.7	0.0	2.5
1986	9	14.5	-2.7	8.4	14.4	0.0	1.0
1986	10	10.3	-13.6	-0.8	6.6	0.0	0.6
1986	11	-4.0	-29.0	-19.7	4.8	0.0	0.4
1986	12	-2.6	-23.5	-17.4	6.6	0.0	0.6
1987	1	0.4	-31.5	-17.5	2.0	0.0	0.4
1987	2	-7.8	-26.4	-17.8	6.0	0.0	0.8
1987	3	1.0	-30.6	-14.3	4.3	0.0	0.4
1987	4	11.3	-15.2	0.5	4.6	0.0	0.4
1987	5	20.8	1.9	9.9	1.4	0.0	0.1
1987	6	21.8	8.7	15.6	11.4	0.0	1.2
1987	7	21.2	10.2	16.9	8.0	0.0	0.8
1987	8	20.7	3.8	12.9	6.4	0.0	0.5
1987	9	17.7	3.5	10.1	21.4	0.0	1.2
1987	10	13.1	-5.3	0.8	11.7	0.0	1.3
1987	11	-2.6	-22.8	-13.4	11.0	0.0	1.3
1987	12	-11.2	-29.2	-19.5	10.3	0.0	0.8
1988	1	-12.5	-39.4	-24.8	3.8	0.0	0.6
1988	2	1.0	-32.3	-22.1	5.6	0.0	0.6
1988	3	-1.3	-18.1	-8.6	5.5	0.0	0.5
1988	4	10.8	-10.9	0.6	2.8	0.0	0.2

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1988	5	14.4	1.5	6.9	24.1	0.0	1.6
1988	6	20.6	6.9	14.6	85.8	0.0	5.8
1988	7	22.5	10.0	16.7	26.0	0.0	2.8
1988	8	19.5	9.9	15.8	14.2	0.0	1.2
1988	9	18.1	-0.4	7.1	6.6	0.0	0.7
1988	10	15.5	-14.4	-2.4	11.8	0.0	1.1
1988	11	-6.3	-33.0	-18.6	4.2	0.0	1.1
1988	12	-6.2	-32.9	-20.6	3.0	0.0	0.3
1989	1	-11.7	-38.6	-29.3	3.8	0.0	0.7
1989	2	-6.0	-25.5	-15.1	2.0	0.0	0.1
1989	3	-5.5	-29.4	-18.3	2.2	0.0	0.4
1989	4	13.8	-12.6	1.1	5.6	0.0	0.3
1989	5	17.4	0.0	8.1	22.0	0.0	2.2
1989	6	24.2	11.4	15.7	10.9	0.0	1.3
1989	7	26.5	8.2	18.5	14.5	0.0	1.5
1989	8	25.8	10.0	18.2	39.4	0.0	2.2
1989	9	16.5	-2.3	8.4	6.0	0.0	0.6
1989	10	11.6	-16.8	-1.8	10.6	0.0	1.3
1989	11	-10.7	-34.4	-21.6	5.4	0.0	1.2
1989	12	-12.1	-37.5	-21.9	9.5	0.0	0.7
1990	1	-17.1	-40.9	-27.8	2.8	0.0	0.5
1990	2	-3.8	-38.2	-26.5	1.2	0.0	0.2
1990	3	5.7	-20.1	-7.7	0.2	0.0	0.0
1990	4	7.8	-6.9	1.4	1.4	0.0	0.1
1990	5	22.6	0.6	9.2	6.2	0.0	0.5
1990	6	19.9	4.7	14.1	17.5	0.0	1.6
1990	7	23.1	13.9	18.5	37.9	0.0	2.0
1990	8	22.7	8.2	14.3	38.6	0.0	3.7
1990	9	18.1	2.3	8.9	15.6	0.0	1.5
1990	10	4.4	-15.5	-2.9	9.2	0.0	1.1
1990	11	-10.2	-37.8	-23.2	4.4	0.0	0.6
1990	12	-9.7	-37.1	-27.9	3.8	0.0	0.7
1991	1	-1.5	-34.8	-21.6	4.3	0.0	0.4
1991	2	-5.7	-30.0	-19.3	4.8	0.0	0.8
1991	3	-1.0	-28.6	-13.6	3.4	0.0	0.3
1991	4	7.1	-4.5	2.9	0.8	0.0	0.0
1991	5	18.2	5.7	11.5	5.6	0.0	0.8
1991	6	20.1	9.0	15.0	22.4	0.0	1.6
1991	7	25.1	9.8	16.7	21.6	0.0	2.5
1991	8	21.9	3.4	14.7	23.4	0.0	2.3
1991	9	13.8	2.7	8.5	4.3	0.0	0.6
1991	10	9.9	-17.5	-5.8	20.4	0.0	1.7

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1991	11	-14.0	-26.1	-18.6	4.8	0.0	0.8
1991	12	-10.7	-34.9	-23.5	3.0	0.0	0.6
1992	1	-11.9	-33.3	-23.3	5.2	0.0	0.7
1992	2	-1.0	-29.3	-21.0	4.6	0.0	0.6
1992	3	4.8	-25.1	-7.8	1.2	0.0	0.1
1992	4	6.8	-18.3	-3.9	38.0	0.0	1.5
1992	5	17.9	-3.6	7.6	5.8	0.0	0.6
1992	6	24.6	5.0	14.3	26.7	0.0	2.4
1992	7	19.9	10.9	15.8	32.4	0.0	2.3
1992	8	22.8	4.5	14.7	16.6	0.0	1.5
1992	9	9.3	-5.6	2.1	8.4	0.0	1.4
1992	10	6.0	-15.3	-2.9	8.4	0.0	1.1
1992	11	-2.0	-23.2	-10.1	6.4	0.0	0.7
1992	12	-3.6	-32.9	-21.4	3.8	0.0	0.3
1993	1	-4.3	-35.0	-21.3	4.6	0.0	0.3
1993	2	-5.9	-29.0	-18.9	5.4	0.0	0.7
1993	3	5.4	-15.9	-7.5	5.0	0.0	0.3
1993	4	8.8	-4.9	2.4	2.4	0.0	0.1
1993	5	15.6	2.4	8.9	10.2	0.0	1.1
1993	6	21.5	9.3	15.2	15.4	0.0	1.2
1993	7	21.7	11.5	16.0	11.8	0.0	0.9
1993	8	22.7	8.1	15.4	13.0	0.0	1.2
1993	9	16.5	-0.2	8.1	4.6	0.0	0.7
1993	10	5.6	-10.8	-0.9	5.0	0.0	0.5
1993	11	-0.2	-29.5	-12.4	6.9	0.0	0.3
1993	12	-15.5	-33.5	-20.5	5.1	0.0	0.7
1994	1	-9.7	-44.2	-30.7	1.0	0.0	0.1
1994	2	-17.9	-33.5	-27.9	2.6	0.0	0.2
1994	3	6.7	-22.3	-10.5	2.0	0.0	0.2
1994	4	12.6	-9.5	-0.5	6.2	0.0	0.4
1994	5	18.5	5.0	11.1	22.6	0.0	1.8
1994	6	22.4	9.7	16.3	13.8	0.0	1.5
1994	7	28.0	15.7	19.9	37.8	0.0	2.1
1994	8	25.6	10.7	18.5	4.6	0.0	0.3
1994	9	16.5	1.4	8.6	15.8	0.0	1.4
1994	10	13.8	-10.2	0.5	5.2	0.0	0.7
1994	11	-3.7	-27.3	-17.0	6.6	0.0	0.7
1994	12	-10.0	-35.7	-21.8	12.0	0.0	0.9
1995	1	-12.6	-34.1	-19.8	2.8	0.0	0.2
1995	2	-11.8	-28.9	-21.9	11.4	0.0	0.8
1995	3	-2.5	-26.7	-16.6	11.9	0.0	1.0
1995	4	8.8	-18.8	0.4	6.2	0.0	0.4

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1995	5	23.3	2.5	11.1	3.8	0.0	0.3
1995	6	23.8	12.9	18.8	3.6	0.0	0.2
1995	7	21.3	10.7	15.8	3.2	0.0	0.5
1995	8	20.2	6.0	14.8	7.6	0.0	0.9
1995	9	19.3	2.8	11.4	6.2	0.0	0.3
1995	10	4.4	-11.0	-1.2	9.4	0.0	0.6
1995	11	-4.0	-32.9	-18.6	2.8	0.0	0.4
1995	12	-13.3	-39.0	-25.5	3.4	0.0	0.7
1996	1	-12.2	-43.1	-29.3	6.6	0.0	0.7
1996	2	-4.1	-30.8	-19.3	5.2	0.0	0.6
1996	3	-0.7	-23.1	-13.5	4.0	0.0	0.5
1996	4	7.8	-18.2	-1.3	5.8	0.0	0.6
1996	5	17.5	-6.8	7.6	4.8	0.0	0.6
1996	6	22.3	7.0	15.9	17.6	0.0	0.9
1996	7	26.5	11.7	18.0	32.4	0.0	3.0
1996	8	18.7	7.2	13.6	48.0	0.0	3.7
1996	9	16.5	-1.9	7.9	12.4	0.0	1.2
1996	10	3.1	-17.8	-5.8	5.4	0.0	0.7
1996	11	-2.6	-28.5	-16.3	1.6	0.0	0.2
1996	12	-12.9	-34.5	-21.1	4.4	0.0	0.5
1997	1	-13.6	-38.6	-26.1	3.4	0.0	0.5
1997	2	1.2	-25.9	-16.5	3.2	0.0	0.4
1997	3	-6.6	-27.2	-16.9	5.0	0.0	0.4
1997	4	10.5	-17.3	-0.8	9.4	0.0	0.5
1997	5	17.6	-0.5	7.7	19.8	0.0	1.4
1997	6	21.4	7.5	15.2	28.0	0.0	2.3
1997	7	22.8	10.6	18.3	22.2	0.0	3.6
1997	8	22.8	10.2	16.8	31.8	0.0	2.4
1997	9	17.6	4.2	11.0	28.8	0.0	1.5
1997	10	2.6	-11.6	-4.5	26.6	0.0	2.3
1997	11	-0.3	-21.9	-11.2	2.8	0.0	0.2
1997	12	-3.4	-30.7	-18.4	2.6	0.0	0.3
1998	1	-16.0	-40.8	-29.0	5.2	0.0	0.7
1998	2	-10.5	-22.1	-16.6	4.0	0.0	0.3
1998	3	2.7	-26.2	-9.4	1.6	0.0	0.1
1998	4	12.1	-2.1	4.9	11.4	0.0	0.7
1998	5	19.0	6.1	13.8	4.6	0.0	0.4
1998	6	22.6	6.0	16.1	43.0	0.0	3.5
1998	7	24.6	12.9	18.8	33.8	0.0	2.5
1998	8	21.6	10.3	16.1	11.4	0.0	1.2
1998	9	15.8	0.6	9.3	5.4	0.0	1.1
1998	10	13.1	-8.2	1.1	15.8	0.0	2.0

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1998	11	0.8	-24.3	-12.5	3.8	0.0	0.2
1998	12	-12.2	-34.8	-21.5	3.4	0.0	0.4
1999	1	-12.7	-38.4	-24.6	3.6	0.0	0.6
1999	2	-6.0	-30.5	-17.6	4.0	0.0	0.7
1999	3	5.1	-22.1	-8.5	4.4	0.0	0.5
1999	4	13.2	-8.3	2.1	26.0	0.0	1.2
1999	5	16.0	-0.8	7.9	10.6	0.0	1.7
1999	6	25.1	6.7	15.2	8.8	0.0	1.0
1999	7	23.4	9.1	15.2	12.8	0.0	1.5
1999	8	25.3	9.5	16.3	27.2	0.0	2.9
1999	9	17.6	-1.6	9.7	7.8	0.0	0.7
1999	10	5.4	-11.9	-2.6	8.0	0.0	1.1
1999	11	0.7	-21.5	-13.6	9.0	0.0	1.6
1999	12	2.2	-34.9	-21.3	4.2	0.0	0.7
2000	1	-1.7	-37.5	-23.7	3.0	0.0	0.4
2000	2	-7.1	-27.3	-15.7	7.6	0.0	0.4
2000	3	4.6	-22.3	-10.0	1.9	0.0	0.2
2000	4	10.1	-17.9	-1.9	2.6	0.0	0.1
2000	5	13.2	-1.7	8.2	11.6	0.0	0.6
2000	6	21.1	7.5	15.0	9.2	0.0	1.6
2000	7	23.2	12.5	18.5	57.2	0.0	3.1
2000	8	23.0	5.4	12.4	31.8	0.0	3.4
2000	9	12.7	-0.6	7.0	6.0	0.0	0.9
2000	10	10.8	-10.7	-1.1	5.4	0.0	0.6
2000	11	-4.8	-22.8	-13.4	9.4	0.0	0.7
2000	12	-16.7	-39.7	-26.7	6.0	0.0	0.5
2001	1	-9.7	-25.2	-17.2	6.8	0.0	0.8
2001	2	0.5	-32.5	-19.0	3.8	0.0	0.3
2001	3	-0.9	-28.2	-13.2	7.4	0.0	0.7
2001	4	8.4	-8.8	1.0	3.4	0.0	0.2
2001	5	15.3	0.6	7.5	30.8	0.0	2.6
2001	6	20.3	8.1	15.5	6.9	0.0	0.8
2001	7	23.6	13.5	17.9	19.6	0.0	1.9
2001	8	23.6	9.6	15.3	37.4	0.0	3.8
2001	9	17.1	3.5	9.8	21.2	0.0	1.2
2001	10	8.9	-11.5	-1.8	12.8	0.0	1.3
2001	11	-6.4	-26.7	-12.8	11.8	0.0	1.1
2001	12	-7.8	-32.9	-23.7	7.2	0.0	0.9
2002	1	-3.9	-41.9	-23.4	3.4	0.0	0.2
2002	2	-12.6	-29.5	-22.5	4.2	0.0	0.5
2002	3	-2.9	-27.5	-16.3	5.4	0.0	0.6
2002	4	5.2	-18.7	-6.5	2.4	0.0	0.3

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2002	5	16.9	-11.9	4.1	17.1	0.0	1.5
2002	6	22.1	9.8	15.9	17.4	0.0	2.0
2002	7	22.9	9.1	17.1	39.8	0.0	3.1
2002	8	18.7	5.8	12.9	10.2	0.0	1.4
2002	9	14.1	-1.9	7.3	4.6	0.0	0.6
2002	10	5.6	-8.3	-1.9	4.2	0.0	0.4
2002	11	3.0	-19.3	-10.1	5.8	0.0	0.5
2002	12	-5.2	-27.3	-14.9	10.6	0.0	1.0
2003	1	0.0	-38.1	-24.6	3.0	0.0	0.1
2003	2	-11.9	-32.7	-20.5	6.2	0.0	0.6
2003	3	-0.3	-31.3	-15.3	7.2	0.0	0.7
2003	4	9.6	-12.7	1.0	8.6	0.0	0.9
2003	5	19.1	-2.7	9.5	0.6	0.0	0.0
2003	6	18.9	4.1	13.1	41.0	0.0	3.5
2003	7	25.3	13.9	18.7	13.2	0.0	1.1
2003	8	21.8	6.6	14.7	52.4	0.0	3.6
2003	9	18.2	-0.6	7.5	5.4	0.0	0.7
2003	10	13.7	-11.5	1.8	15.4	0.0	1.3
2003	11	-2.7	-28.7	-14.6	5.6	0.0	0.7
2003	12	-7.1	-30.7	-19.8	5.8	0.0	0.5
2004	1	-13.2	-36.1	-26.2	5.2	0.0	0.9
2004	2	-7.9	-35.1	-20.4	1.6	0.0	0.2
2004	3	9.6	-30.1	-15.5	1.8	0.0	0.3
2004	4	6.4	-11.4	-1.1	2.8	0.0	0.2
2004	5	14.2	-5.3	5.1	23.8	0.0	1.2
2004	6	22.6	11.8	16.1	2.6	0.0	0.2
2004	7	24.8	11.0	18.2	17.2	0.0	1.5
2004	8	22.2	3.5	13.7	4.8	0.0	0.5
2004	9	16.1	0.4	6.7	4.6	0.0	0.3
2004	10	3.4	-14.2	-4.6	6.0	0.0	0.9
2004	11	0.3	-22.7	-13.1	3.4	0.0	0.5
2004	12	-14.7	-36.7	-24.4	7.6	0.0	1.4
2005	1	-9.5	-36.4	-24.6	8.2	0.0	1.1
2005	2	-8.2	-37.2	-19.7	8.4	0.0	0.5
2005	3	1.7	-17.8	-11.2	3.4	0.0	0.3
2005	4	12.1	-11.2	1.0	7.8	0.0	1.3
2005	5	21.3	1.8	10.2	12.8	0.0	1.1
2005	6	21.8	8.5	13.9	23.8	0.0	1.4
2005	7	22.3	9.5	16.6	10.6	0.0	1.4
2005	8	20.0	7.9	14.3	26.2	0.0	1.9
2005	9	13.4	-0.5	7.7	11.6	0.0	1.4
2005	10	5.3	-8.7	0.0	7.0	0.0	0.6

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2005	11	-4.1	-20.9	-12.8	7.2	0.0	0.8
2005	12	-6.5	-26.3	-14.7	3.8	0.0	0.5
2006	1	-11.5	-33.5	-24.2	4.8	0.0	0.5
2006	2	-4.1	-27.7	-15.9	14.2	0.0	0.9
2006	3	1.8	-27.9	-13.9	6.4	0.0	0.9
2006	4	11.8	-9.7	0.6	8.4	0.0	0.6
2006	5	15.8	1.7	9.9	10.6	0.0	1.1
2006	6	24.7	3.4	17.1	31.8	0.0	1.9
2006	7	21.9	13.3	17.5	12.8	0.0	1.1
2006	8	19.6	11.3	15.5	12.2	0.0	2.4
2006	9	17.4	3.3	10.7	4.0	0.0	0.5
2006	10	8.1	-10.5	0.0	6.6	0.0	0.5
2006	11	-9.8	-36.6	-20.4	12.6	0.0	1.6
2006	12	-4.3	-34.3	-15.9	1.8	0.0	0.1
2007	1	-10.1	-28.8	-20.7	4.6	0.0	0.4
2007	2	-16.2	-29.4	-23.4	3.2	0.0	0.7
2007	3	-3.3	-27.9	-16.9	6.0	0.0	0.8
2007	4	10.8	-16.0	1.5	4.5	0.0	0.4
2007	5	19.2	0.2	9.2	7.4	0.0	0.9
2007	6	20.0	10.7	15.6	5.4	0.0	0.4
2007	7	24.1	14.2	18.9	31.6	0.0	2.9
2007	8	19.3	5.8	13.1	4.0	0.0	0.4
2007	9	13.6	-2.6	5.4	12.8	0.0	2.4
2007	10	4.4	-11.4	-1.6	13.2	0.0	1.7
2007	11	-4.8	-29.4	-14.3	13.4	0.0	1.3
2007	12	-12.9	-36.1	-22.9	7.2	0.0	1.1
2008	1	-5.7	-41.8	-24.1	6.4	0.0	0.6
2008	2	-8.4	-40.1	-23.3	5.4	0.0	0.9
2008	3	-1.1	-30.1	-15.7	5.2	0.0	0.5
2008	4	7.2	-13.9	-3.0	3.8	0.0	0.5
2008	5	18.7	5.1	10.4	14.0	0.0	1.1
2008	6	19.3	11.8	15.4	11.6	0.0	1.3
2008	7	22.8	13.3	18.1	30.4	0.0	1.4
2008	8	21.8	6.1	14.4	20.8	0.0	2.0
2008	9	10.9	2.6	7.0	5.4	0.0	0.6
2008	10	11.4	-16.0	-1.4	6.4	0.0	0.9
2008	11	-5.8	-22.3	-12.4	10.4	0.0	1.6
2008	12	-11.6	-34.2	-23.8	4.2	0.0	0.7
2009	1	7.0	-41.7	-24.9	9.4	0.0	1.0
2009	2	-9.7	-30.6	-22.8	7.6	0.0	0.6
2009	3	-4.3	-29.0	-18.2	7.4	0.0	1.0
2009	4	9.6	-10.9	-0.5	2.2	0.0	0.3

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2009	5	12.2	-1.3	6.2	19.0	0.0	1.1
2009	6	18.5	9.3	15.2	23.6	0.0	2.4
2009	7	23.1	9.5	16.4	8.0	0.0	1.3
2009	8	20.5	11.0	15.3	27.4	0.0	3.1
2009	9	18.7	2.9	10.8	42.4	0.0	4.1
2009	10	6.2	-7.2	-0.8	6.8	0.0	0.8
2009	11	-6.6	-22.0	-13.8	4.8	0.0	0.7
2009	12	-5.1	-40.3	-22.3	11.6	0.0	0.7
2010	1	-13.2	-39.6	-24.4	5.0	0.0	0.7
2010	2	-7.2	-26.3	-15.6	1.0	0.0	0.1
2010	3	3.8	-22.1	-6.4	4.2	0.0	0.5
2010	4	15.7	-7.8	3.4	7.0	0.0	0.7
2010	5	19.0	-0.5	8.8	11.6	0.0	1.2
2010	6	21.0	10.5	16.2	8.0	0.0	1.7
2010	7	23.5	13.0	18.4	20.6	0.0	3.1
2010	8	22.6	9.9	15.3	28.2	0.0	2.5
2010	9	14.0	-0.8	6.4	30.2	0.0	2.4
2010	10	12.6	-6.5	0.2	23.2	0.0	2.2
2010	11	2.9	-26.3	-12.6	8.0	0.0	0.7
2010	12	-17.0	-35.0	-24.5	4.2	0.0	0.8
2011	1	-14.3	-37.8	-24.2	6.8	0.0	0.5
2011	2	2.6	-29.8	-18.1	7.6	0.0	1.0
2011	3	4.4	-28.0	-14.5	3.4	0.0	0.1
2011	4	5.2	-11.7	-2.7	1.2	0.0	0.1
2011	5	17.3	0.6	10.4	27.0	0.0	1.8
2011	6	20.3	3.3	14.6	32.0	0.0	2.7
2011	7	23.3	12.1	17.9	16.8	0.0	1.3
2011	8	23.0	9.3	15.1	32.2	0.0	2.6
2011	9	18.4	3.4	10.3	10.8	0.0	1.3
2011	10	6.7	-8.8	0.3	12.8	0.0	0.8
2011	11	-7.2	-29.2	-18.4	7.8	0.0	1.0
2011	12	-2.7	-30.5	-17.5	4.8	0.0	0.6
2012	1	-11.8	-33.6	-22.4	6.2	0.0	1.1
2012	2	2.6	-23.5	-12.9	6.4	0.0	0.4
2012	3	1.5	-25.9	-14.7	8.8	0.0	1.1
2012	4	8.1	-10.0	-0.8	6.2	0.0	0.4
2012	5	21.8	1.2	11.5	40.2	0.0	2.4
2012	6	21.1	9.7	15.9	31.6	0.0	3.8
2012	7	25.0	15.4	20.1	28.6	0.0	1.2
2012	8	22.9	11.9	17.2	13.6	0.0	1.5
2012	9	16.9	6.8	12.1	12.4	0.0	0.6
2012	10	8.4	-17.9	-2.8	7.6	0.0	0.7

Table A-2 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Fort Simpson Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2012	11	-9.3	-33.3	-19.4	8.0	0.0	1.2
2012	12	-20.5	-32.1	-26.5	2.8	0.0	0.4
2013	1	-8.0	-34.3	-24.0	6.4	0.0	0.9
2013	2	-2.9	-22.0	-16.7	7.0	0.0	1.1
2013	3	-10.1	-26.9	-18.9	10.8	0.0	0.7
2013	4	3.5	-20.5	-5.6	13.0	0.0	0.6
2013	5	20.1	0.1	10.8	1.8	0.0	0.1
2013	6	26.3	10.3	18.2	27.0	0.0	1.6
2013	7	26.1	9.0	17.3	11.6	0.0	1.0
2013	8	24.3	5.4	16.4	16.6	0.0	2.0
2013	9	20.0	2.3	10.6	9.0	0.0	0.7
2013	10	7.2	-5.0	1.8	6.0	0.0	0.8
2013	11	-1.6	-30.0	-13.9	4.6	0.0	0.7
2013	12	-13.7	-41.5	-28.1	4.2	0.0	0.6
2014	1	-10.5	-36.5	-22.3	8.0	0.0	1.0
2014	2	-11.3	-30.1	-23.4	3.0	0.0	0.2
2014	3	-4.3	-23.9	-14.5	1.6	0.0	0.1
2014	4	11.2	-15.8	-2.1	1.8	0.0	0.2
2014	5	17.1	-1.9	8.4	5.8	0.0	0.5
2014	6	23.4	7.3	16.8	11.8	0.0	1.3
2014	7	27.3	11.3	19.7	4.0	0.0	0.7
2014	8	23.2	8.9	15.7	16.4	0.0	1.5
2014	9	15.6	0.8	8.1	3.6	0.0	0.5
2014	10	5.4	-8.4	-0.9	13.4	0.0	1.7
2014	11	-5.7	-31.0	-17.8	9.2	0.0	0.7
2014	12	-11.3	-27.8	-20.8	5.8	0.0	0.7
2015	1	-14.3	-32.9	-22.8	3.0	0.0	0.5
2015	2	-6.3	-32.9	-20.8	8.4	0.0	1.4
2015	3	2.7	-23.2	-10.7	6.6	0.0	0.6
2015	4	8.7	-12.4	1.0	9.2	0.0	0.8
2015	5	20.1	0.1	12.5	6.8	0.0	0.3
2015	6	22.7	4.7	16.1	3.8	0.0	0.5

—: No data

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1973	7	21.1	17.8	19.3	—	—	—
1973	8	21.4	5.3	13.5	—	—	—
1973	9	16.2	3.6	9.7	—	—	—
1973	10	9.5	-6.4	0.5	—	—	—
1973	11	-9.8	-29.7	-20.3	—	—	—
1973	12	-20.6	-29.5	-24.1	—	—	—
1974	1	-8.6	-39.7	-27.9	—	—	—
1974	2	-8.9	-32.2	-22.3	—	—	—
1974	3	-6.4	-26.7	-16.9	—	—	—
1974	4	9.7	-14.7	-0.2	—	—	—
1974	5	13.1	-4.2	6.9	—	—	—
1974	6	17.5	10.6	13.7	—	—	—
1974	7	18.1	11.1	15.2	—	—	—
1974	8	18.3	5.3	13.6	—	—	—
1974	9	17.5	-5.9	8.1	—	—	—
1974	10	6.7	-10.6	-2.7	—	—	—
1974	11	3.6	-22.3	-10.1	—	—	—
1974	12	-5.6	-28.1	-20.4	—	—	—
1975	1	-6.1	-40.8	-25.9	—	—	—
1975	2	-0.6	-36.4	-18.8	—	—	—
1975	3	-5.9	-23.6	-12.0	—	—	—
1975	4	9.7	-10.9	1.4	—	—	—
1975	5	17.5	1.1	9.7	—	—	—
1975	6	18.9	10.9	14.7	—	—	—
1975	7	25.3	11.7	18.7	—	—	—
1975	8	17.0	8.9	12.9	—	—	—
1975	9	15.6	0.0	10.5	—	—	—
1975	10	11.7	-17.8	-1.0	—	—	—
1975	11	-12.0	-32.5	-19.5	—	—	—
1975	12	-2.8	-38.7	-24.7	—	—	—
1976	1	1.7	-40.6	-22.0	—	—	—
1976	2	0.6	-31.9	-20.3	—	—	—
1976	3	-1.4	-28.1	-12.6	—	—	—
1976	4	11.7	-1.7	3.9	—	—	—
1976	5	13.9	6.4	10.8	—	—	—
1976	6	19.5	5.3	13.2	—	—	—
1976	7	20.3	10.0	15.5	—	—	—
1976	8	21.4	10.3	15.1	—	—	—
1976	9	17.2	8.6	11.8	—	—	—
1976	10	12.3	-5.3	2.1	—	—	—
1976	11	5.3	-18.1	-5.0	—	—	—
1976	12	4.5	-28.4	-18.7	—	—	—
1977	1	2.2	-32.8	-16.8	—	—	—

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1977	2	0.3	-20.6	-8.9	—	—	—
1977	3	1.5	-20.5	-9.1	—	—	—
1977	4	13.5	-9.8	4.4	—	—	—
1977	5	16.0	4.0	9.9	—	—	—
1977	6	19.8	9.5	14.4	—	—	—
1977	7	20.3	9.0	15.2	—	—	—
1977	8	20.0	4.0	13.5	—	—	—
1977	9	14.8	6.0	9.7	—	—	—
1977	10	8.0	-2.8	2.1	—	—	—
1977	11	-4.0	-34.0	-16.4	—	—	—
1977	12	-16.0	-41.0	-27.1	—	—	—
1978	1	-14.3	-36.0	-21.5	—	—	—
1978	2	1.8	-28.5	-11.9	—	—	—
1978	3	1.8	-26.5	-9.8	—	—	—
1978	4	9.8	-15.3	0.6	—	—	—
1978	5	15.0	1.0	8.9	—	—	—
1978	6	21.5	11.0	16.5	—	—	—
1978	7	19.8	10.5	16.0	—	—	—
1978	8	19.3	8.0	13.6	—	—	—
1978	9	14.3	3.3	9.3	—	—	—
1978	10	7.8	-6.0	1.3	—	—	—
1978	11	-2.0	-23.0	-11.9	—	—	—
1978	12	-0.5	-38.5	-22.4	—	—	—
1979	1	-11.3	-34.8	-25.8	—	—	—
1979	2	-18.0	-36.8	-28.0	—	—	—
1979	3	7.5	-25.0	-12.9	—	—	—
1979	4	13.0	-19.3	-1.3	—	—	—
1979	5	16.3	-1.5	8.0	—	—	—
1979	6	20.3	10.0	14.3	—	—	—
1979	7	22.8	14.8	18.9	—	—	—
1979	8	20.3	10.0	16.2	—	—	—
1979	9	17.0	5.3	11.5	—	—	—
1979	10	11.5	-2.5	4.1	—	—	—
1979	11	4.5	-15.5	-5.7	—	—	—
1979	12	0.8	-29.0	-16.8	—	—	—
1980	1	—	—	—	—	—	—
1980	2	—	—	—	—	—	—
1980	3	5.5	-23.5	-8.7	12.0	0.0	0.8
1980	4	12.5	-6.8	6.0	1.4	0.0	0.1
1980	5	19.5	7.8	12.0	4.2	0.0	0.5
1980	6	20.0	9.3	15.7	10.6	0.0	1.1
1980	7	22.5	13.3	17.3	36.0	0.0	4.2
1980	8	20.5	10.3	14.9	6.3	0.0	0.7

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1980	9	14.0	-0.3	7.4	22.2	0.0	3.0
1980	10	12.8	-2.8	4.7	4.4	0.0	0.2
1980	11	1.0	-22.3	-8.8	3.0	0.0	0.3
1980	12	-16.8	-38.5	-30.5	3.0	0.0	0.5
1981	1	-3.3	-22.0	-12.2	3.0	0.0	0.2
1981	2	1.5	-26.3	-14.6	4.0	0.0	0.3
1981	3	4.8	-14.3	-4.1	4.0	0.0	0.2
1981	4	6.3	-13.8	-1.5	31.0	0.0	2.8
1981	5	20.0	4.5	12.4	0.4	0.0	0.0
1981	6	18.8	10.0	14.1	22.2	0.0	1.8
1981	7	28.5	10.3	17.0	6.4	0.0	0.4
1981	8	22.3	5.5	13.5	29.0	0.0	1.1
1981	9	17.3	1.3	8.8	10.5	0.0	1.6
1981	10	10.5	-12.0	-0.6	25.0	0.0	3.6
1981	11	—	—	—	—	—	—
1981	12	-10.0	-37.0	-22.6	5.0	0.0	0.7
1982	1	-25.8	-42.0	-34.5	1.5	0.0	0.3
1982	2	-5.8	-37.0	-24.1	4.0	0.0	0.6
1982	3	-8.5	-29.5	-19.3	6.0	0.0	0.4
1982	4	8.8	-15.8	-0.3	36.0	0.0	2.3
1982	5	16.0	-0.3	8.0	19.0	0.0	1.5
1982	6	22.5	9.3	16.7	9.8	0.0	0.6
1982	7	23.3	10.8	18.3	8.0	0.0	1.2
1982	8	20.8	6.8	12.5	29.7	0.0	3.3
1982	9	17.5	4.8	11.8	25.4	0.0	1.7
1982	10	10.8	-11.3	-0.3	20.0	0.0	1.5
1982	11	-6.8	-29.0	-17.6	10.0	0.0	0.6
1982	12	—	—	—	—	—	—
1983	1	-17.5	-34.3	-25.7	20.0	0.0	1.6
1983	2	-13.5	-29.5	-20.3	3.0	0.0	0.8
1983	3	-8.8	-25.8	-15.7	10.0	0.0	1.1
1983	4	9.3	-7.8	2.3	14.2	0.0	0.7
1983	5	21.8	-2.8	7.2	8.6	0.0	1.6
1983	6	21.8	8.5	16.1	20.6	0.0	1.6
1983	7	22.0	13.3	17.9	7.0	0.0	0.9
1983	8	22.5	10.8	16.4	10.4	0.0	1.2
1983	9	16.5	-5.3	7.3	12.6	0.0	1.5
1983	10	12.8	-7.3	0.8	10.0	0.0	0.4
1983	11	-1.8	-23.3	-11.8	4.0	0.0	0.3
1983	12	-14.0	-36.0	-23.7	4.0	0.0	0.4
1984	1	-8.8	-31.5	-22.0	10.0	0.0	1.4
1984	2	-5.0	-29.8	-18.1	5.0	0.0	0.3
1984	3	6.8	-22.5	-9.4	7.0	0.0	0.5

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1984	4	9.0	-1.5	4.4	10.0	0.0	0.7
1984	5	13.5	4.3	10.5	6.0	0.0	0.4
1984	6	19.3	10.5	15.8	17.4	0.0	3.1
1984	7	24.0	13.0	18.0	25.6	0.0	2.7
1984	8	25.3	4.0	15.6	24.4	0.0	2.5
1984	9	14.5	3.3	8.0	9.4	0.0	0.9
1984	10	8.3	-23.5	-2.7	8.0	0.0	1.7
1984	11	-5.3	-26.0	-17.8	8.0	0.0	0.9
1984	12	—	—	—	—	—	—
1985	1	4.0	-29.8	-13.2	6.0	0.0	0.6
1985	2	3.3	-33.5	-24.3	8.0	0.0	1.4
1985	3	3.5	-16.3	-4.4	4.0	0.0	0.3
1985	4	6.0	-3.0	1.7	8.6	0.0	0.4
1985	5	14.8	2.3	9.6	14.4	0.0	1.2
1985	6	23.5	10.0	15.0	4.2	0.0	0.5
1985	7	22.3	11.3	16.6	25.0	0.0	3.2
1985	8	22.0	5.5	14.6	17.8	0.0	2.7
1985	9	16.0	0.8	9.8	10.2	0.0	1.3
1985	10	11.5	-18.0	-2.1	25.0	0.0	1.3
1985	11	-9.3	-32.0	-19.2	8.0	0.0	0.6
1985	12	11.3	-29.3	-12.0	3.0	0.0	0.2
1986	1	-10.5	-27.0	-20.4	6.0	0.0	0.9
1986	2	1.0	-28.0	-16.3	3.0	0.0	0.2
1986	3	3.5	-21.8	-10.8	10.0	0.0	1.2
1986	4	7.3	-18.3	-2.0	10.0	0.0	0.9
1986	5	16.3	1.8	9.7	11.8	0.0	1.6
1986	6	20.3	8.3	15.2	9.6	0.0	1.2
1986	7	20.8	11.5	17.1	100.0	0.0	6.1
1986	8	21.0	2.3	14.8	15.1	0.0	1.8
1986	9	16.8	1.0	9.0	31.0	0.0	2.5
1986	10	11.8	-13.0	1.6	5.2	0.0	0.6
1986	11	6.5	-26.3	-17.5	3.0	0.0	0.4
1986	12	3.3	-24.5	-11.4	3.0	0.0	0.2
1987	1	2.5	-28.5	-15.0	3.0	0.0	0.2
1987	2	1.5	-25.5	-11.9	28.0	0.0	2.0
1987	3	4.8	-31.0	-11.8	6.0	0.0	0.4
1987	4	9.5	-8.3	3.4	4.0	0.0	0.4
1987	5	18.3	1.8	9.9	29.0	0.0	1.6
1987	6	21.8	7.8	15.3	42.6	0.0	3.9
1987	7	21.3	10.0	16.5	26.4	0.0	4.5
1987	8	18.8	7.0	14.8	15.4	0.0	1.4
1987	9	17.5	6.3	11.8	9.2	0.0	0.7
1987	10	13.5	-3.5	4.0	6.0	0.0	0.9

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1987	11	0.0	-19.8	-11.3	9.0	0.0	1.3
1987	12	2.8	-22.3	-15.8	3.0	0.0	0.1
1988	1	-10.5	-33.8	-23.6	7.0	0.0	0.3
1988	2	0.3	-32.3	-17.1	3.0	0.0	0.2
1988	3	5.8	-16.5	-4.9	5.0	0.0	0.5
1988	4	10.0	-9.3	2.1	27.5	0.0	1.8
1988	5	15.8	1.5	8.6	24.9	0.0	2.4
1988	6	21.0	10.3	15.0	36.8	0.0	4.6
1988	7	20.0	9.8	15.9	34.2	0.0	3.5
1988	8	21.3	10.5	16.0	26.8	0.0	2.3
1988	9	17.3	3.5	9.5	10.5	0.0	1.0
1988	10	—	—	—	—	—	—
1988	11	-7.5	-26.5	-16.4	7.0	0.0	1.4
1988	12	4.0	-30.8	-16.4	3.0	0.0	0.4
1989	1	-10.3	-35.5	-26.5	4.0	0.0	0.4
1989	2	-2.0	-26.5	-14.7	2.5	0.0	0.3
1989	3	0.5	-24.0	-14.6	3.0	0.0	0.5
1989	4	12.5	-5.0	3.6	4.0	0.0	0.4
1989	5	18.8	1.5	10.4	15.4	0.0	2.0
1989	6	24.5	12.8	17.5	6.0	0.0	0.8
1989	7	24.3	8.5	19.0	10.8	0.0	0.8
1989	8	25.0	11.0	18.7	15.5	0.0	2.0
1989	9	19.0	-2.3	10.3	10.0	0.0	1.1
1989	10	14.5	-14.0	-0.1	16.0	0.0	1.2
1989	11	-8.8	-35.3	-21.2	3.0	0.0	0.5
1989	12	1.0	-34.0	-16.6	7.0	0.0	0.5
1990	1	-7.3	-39.8	-24.1	4.0	0.0	0.2
1990	2	0.5	-38.5	-22.7	13.0	0.0	0.7
1990	3	3.5	-15.8	-4.8	3.0	0.0	0.2
1990	4	9.5	-1.3	3.9	9.7	0.0	0.6
1990	5	21.0	2.5	10.3	28.0	0.0	2.7
1990	6	19.5	8.3	14.9	15.3	0.0	1.3
1990	7	23.8	14.0	19.1	10.0	0.0	1.2
1990	8	25.0	8.3	16.5	27.0	0.0	1.9
1990	9	18.0	5.0	11.2	14.4	0.0	0.8
1990	10	5.8	-12.0	-1.4	15.2	0.0	2.7
1990	11	-7.8	-33.8	-19.6	3.0	0.0	0.5
1990	12	-8.0	-36.0	-27.1	10.0	0.0	1.2
1991	1	0.3	-36.5	-21.4	5.0	0.0	0.4
1991	2	-0.5	-25.8	-14.6	10.0	0.0	0.9
1991	3	5.8	-18.8	-6.4	7.0	0.0	0.5
1991	4	9.3	-1.3	4.7	1.7	0.0	0.1
1991	5	19.0	7.3	12.0	19.8	0.0	2.2

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1991	6	20.8	11.0	16.2	12.2	0.0	0.7
1991	7	23.5	9.8	16.8	45.0	0.0	4.3
1991	8	22.8	1.8	15.1	10.7	0.0	1.7
1991	9	15.5	4.0	10.6	6.2	0.0	1.1
1991	10	10.0	-16.0	-2.1	9.0	0.0	0.7
1991	11	-11.5	-26.0	-17.4	12.0	0.0	1.7
1991	12	-7.8	-30.3	-19.2	11.0	0.0	1.3
1992	1	-12.8	-26.0	-19.4	3.0	0.0	0.5
1992	2	4.5	-29.5	-17.4	3.0	0.0	0.4
1992	3	6.5	-20.0	-3.1	0.8	0.0	0.0
1992	4	7.5	-10.8	-0.8	22.0	0.0	1.8
1992	5	17.5	1.8	8.9	12.2	0.0	1.1
1992	6	21.8	7.3	15.8	25.4	0.0	1.4
1992	7	20.5	10.0	16.5	26.0	0.0	2.4
1992	8	22.5	6.0	15.4	30.1	0.0	2.5
1992	9	11.5	-3.8	4.3	26.1	0.0	2.3
1992	10	9.3	-12.0	-0.9	4.0	0.0	0.4
1992	11	1.8	-19.8	-9.0	3.5	0.0	0.6
1992	12	-2.5	-37.8	-23.2	5.0	0.0	0.2
1993	1	-1.0	-31.0	-18.5	2.0	0.0	0.2
1993	2	-2.0	-26.0	-16.2	6.0	0.0	0.7
1993	3	3.8	-16.8	-4.3	4.0	0.0	0.2
1993	4	10.3	-1.3	4.7	3.0	0.0	0.3
1993	5	14.8	4.0	10.3	14.2	0.0	2.0
1993	6	20.3	9.3	15.4	12.4	0.0	1.8
1993	7	20.0	11.3	15.9	19.6	0.0	1.6
1993	8	21.8	9.8	15.9	26.0	0.0	2.2
1993	9	15.3	1.0	9.9	5.6	0.0	0.9
1993	10	10.8	-1.8	3.3	4.4	0.0	0.4
1993	11	1.8	-23.5	-9.8	10.0	0.0	0.9
1993	12	-12.5	-23.8	-18.2	5.0	0.0	0.4
1994	1	-3.3	-38.5	-24.3	5.5	0.0	1.0
1994	2	-9.3	-30.5	-23.8	3.0	0.0	0.4
1994	3	7.8	-19.3	-4.9	13.0	0.0	0.6
1994	4	15.0	-5.5	3.7	3.0	0.0	0.2
1994	5	17.3	8.0	12.6	14.4	0.0	0.7
1994	6	20.5	10.0	15.6	34.1	0.0	3.0
1994	7	24.0	13.3	19.3	22.2	0.0	2.0
1994	8	23.8	13.5	18.9	17.0	0.0	0.6
1994	9	14.3	1.5	8.7	17.0	0.0	2.3
1994	10	10.5	-7.8	2.3	5.0	0.0	0.2
1994	11	-1.8	-23.3	-14.4	7.0	0.0	0.7
1994	12	-11.8	-34.3	-21.6	4.0	0.0	0.4

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1995	1	-11.0	-30.5	-20.2	3.0	0.0	0.3
1995	2	3.3	-26.0	-17.4	5.0	0.0	0.3
1995	3	0.0	-23.0	-14.2	8.0	0.0	0.7
1995	4	10.3	-14.3	3.0	8.0	0.0	0.6
1995	5	22.0	3.3	12.2	12.0	0.0	1.2
1995	6	21.3	12.5	18.1	13.0	0.0	1.1
1995	7	21.0	8.5	16.2	22.8	0.0	3.0
1995	8	18.3	8.5	14.6	13.0	0.0	0.7
1995	9	22.8	4.3	13.3	8.2	0.0	1.1
1995	10	7.5	-6.0	1.1	6.5	0.0	0.8
1995	11	-3.8	-25.0	-16.2	12.5	0.0	1.3
1995	12	0.0	-40.0	-23.0	5.0	0.0	0.3
1996	1	-11.8	-41.8	-28.8	12.0	0.0	1.3
1996	2	-1.5	-27.3	-14.1	7.0	0.0	0.7
1996	3	-3.3	-21.8	-11.5	4.5	0.0	0.3
1996	4	7.3	-16.5	0.7	5.0	0.0	0.2
1996	5	15.8	-0.5	8.8	5.8	0.0	0.7
1996	6	21.5	7.5	15.4	13.6	0.0	0.8
1996	7	24.3	13.3	18.2	31.5	0.0	3.0
1996	8	18.3	8.8	14.4	13.6	0.0	1.8
1996	9	16.3	2.3	8.8	25.2	0.0	1.9
1996	10	5.5	-12.8	-3.3	6.5	0.0	0.8
1996	11	-1.8	-28.5	-15.3	5.0	0.0	0.5
1996	12	-13.0	-32.8	-21.8	7.0	0.0	0.6
1997	1	-8.0	-34.3	-23.1	5.0	0.0	0.4
1997	2	4.5	-20.3	-9.6	6.0	0.0	0.9
1997	3	-3.5	-21.3	-13.3	4.5	0.0	0.5
1997	4	10.0	-10.3	0.7	18.0	0.0	1.3
1997	5	15.5	2.5	8.7	4.0	0.0	0.9
1997	6	19.3	10.8	15.1	20.4	0.0	4.2
1997	7	22.5	11.5	17.5	50.0	0.0	5.8
1997	8	21.8	12.3	16.5	9.4	0.0	1.8
1997	9	17.3	4.8	11.5	11.4	0.0	1.0
1997	10	3.8	-10.0	-2.6	8.0	0.0	1.0
1997	11	3.0	-20.5	-10.9	2.0	0.0	0.1
1997	12	-3.0	-28.4	-15.4	23.8	0.0	2.5
1998	1	-15.3	-40.0	-28.6	28.2	0.0	2.7
1998	2	-12.1	-22.7	-17.2	5.4	0.0	0.4
1998	3	4.9	-23.0	-6.4	8.0	0.0	0.3
1998	4	11.1	0.6	6.1	13.8	0.0	1.2
1998	5	19.9	7.5	13.7	12.2	0.0	0.9
1998	6	22.8	9.3	16.3	25.2	0.0	2.7
1998	7	22.3	13.0	18.3	26.6	0.0	1.8

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
1998	8	20.5	11.7	15.9	5.6	0.0	0.6
1998	9	14.9	3.0	10.1	2.8	0.0	0.5
1998	10	10.7	-9.0	1.4	26.6	0.0	1.8
1998	11	-0.3	-23.9	-13.2	12.2	0.0	0.9
1998	12	-8.6	-29.5	-21.3	14.0	0.0	1.8
1999	1	-5.8	-35.2	-21.6	16.0	0.0	1.9
1999	2	-6.6	-29.1	-18.1	22.0	0.0	2.8
1999	3	4.4	-18.4	-8.1	4.0	0.0	0.4
1999	4	10.6	-5.2	3.5	7.0	0.0	0.4
1999	5	16.6	-0.8	8.1	9.0	0.0	1.2
1999	6	21.6	7.5	13.6	40.1	0.0	2.4
1999	7	20.9	10.5	15.6	15.7	0.0	1.9
1999	8	23.5	10.2	15.7	5.7	0.0	1.7
1999	9	16.3	-1.4	10.0	3.2	0.0	0.5
1999	10	9.4	-3.6	0.8	9.0	0.0	0.9
1999	11	-1.6	-20.8	-12.2	13.0	0.0	2.0
1999	12	9.7	-30.7	-17.7	6.4	0.0	1.0
2000	1	-3.2	-37.7	-21.3	12.0	0.0	1.0
2000	2	5.5	-21.7	-11.6	16.6	0.0	1.1
2000	3	6.0	-16.9	-4.1	2.8	0.0	0.2
2000	4	9.4	-13.3	0.3	5.0	0.0	0.4
2000	5	13.1	-2.1	8.0	19.4	0.0	1.6
2000	6	17.5	8.4	13.1	6.6	0.0	0.8
2000	7	21.0	15.4	19.1	93.0	0.0	3.4
2000	8	21.6	6.4	12.4	25.4	0.0	2.4
2000	9	13.1	1.5	7.9	16.2	0.0	2.0
2000	10	8.3	-9.7	0.1	8.2	0.0	0.8
2000	11	3.0	-21.2	-9.6	7.2	0.0	1.0
2000	12	-16.2	-34.5	-23.6	5.0	0.0	0.2
2001	1	2.2	-22.4	-12.8	15.0	0.0	0.6
2001	2	0.9	-28.4	-15.7	8.0	0.0	0.6
2001	3	-0.2	-26.5	-10.4	6.0	0.0	0.5
2001	4	11.6	-4.2	3.1	0.8	0.0	0.0
2001	5	13.3	5.2	8.5	32.2	0.0	2.6
2001	6	19.6	6.2	14.9	31.4	0.0	3.0
2001	7	21.6	12.3	17.6	25.6	0.0	2.2
2001	8	22.1	9.3	15.7	17.8	0.0	1.3
2001	9	16.7	2.9	9.0	32.4	0.0	2.4
2001	10	11.3	-10.4	0.0	18.0	0.0	2.1
2001	11	-3.2	-28.5	-11.3	17.0	0.0	3.0
2001	12	-10.2	-30.7	-22.4	6.0	0.0	0.9
2002	1	1.5	-38.9	-21.0	3.4	0.0	0.1
2002	2	1.2	-28.7	-16.7	3.0	0.0	0.4

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2002	3	-3.8	-25.6	-14.4	4.0	0.0	0.5
2002	4	6.1	-16.0	-3.8	3.0	0.0	0.4
2002	5	15.6	-9.4	5.8	2.0	0.0	0.2
2002	6	19.5	10.8	15.8	20.2	0.0	1.9
2002	7	21.8	8.9	16.5	39.2	0.0	4.4
2002	8	19.1	7.9	14.2	5.6	0.0	0.8
2002	9	15.6	2.3	8.9	18.2	0.0	1.7
2002	10	13.9	-4.7	1.0	4.6	0.0	0.4
2002	11	4.5	-16.5	-8.5	12.9	0.0	1.7
2002	12	1.4	-27.8	-13.8	6.8	0.0	0.6
2003	1	-4.9	-39.5	-22.1	20.0	0.0	1.3
2003	2	-0.3	-28.6	-16.6	4.9	0.0	0.4
2003	3	-0.5	-23.4	-12.3	10.6	0.0	1.4
2003	4	7.0	-12.6	-2.2	3.6	0.0	0.8
2003	5	13.9	-0.4	8.2	2.7	0.0	0.2
2003	6	20.0	10.7	15.3	18.0	0.0	1.8
2003	7	23.5	13.4	18.7	6.2	0.0	0.7
2003	8	20.7	6.3	14.8	21.0	0.0	2.1
2003	9	14.8	1.0	10.2	30.0	0.0	3.6
2003	10	14.9	-7.3	2.5	8.6	0.0	0.9
2003	11	1.7	-24.1	-12.1	4.0	0.0	0.6
2003	12	-4.2	-28.7	-17.6	6.0	0.0	0.4
2004	1	-13.8	-37.3	-24.8	8.0	0.0	1.8
2004	2	-1.6	-27.2	-15.6	1.0	0.0	0.2
2004	3	5.4	-22.2	-13.4	3.4	0.0	0.7
2004	4	10.5	-8.0	2.7	4.2	0.0	0.2
2004	5	16.2	-1.9	6.7	6.4	0.0	1.1
2004	6	20.7	11.9	16.8	7.4	0.0	0.7
2004	7	22.3	14.7	19.3	25.4	0.0	1.8
2004	8	20.5	3.5	14.4	8.0	0.0	1.3
2004	9	17.3	2.7	9.1	9.8	0.0	0.4
2004	10	11.1	-9.0	0.7	10.0	0.0	0.8
2004	11	1.3	-21.7	-10.9	5.6	0.0	0.5
2004	12	-6.7	-35.5	-20.1	15.4	0.0	1.7
2005	1	-6.7	-42.6	-23.5	6.8	0.0	1.4
2005	2	-2.1	-27.3	-13.9	6.2	0.0	0.5
2005	3	1.5	-16.4	-9.1	4.0	0.0	0.4
2005	4	12.4	-5.0	4.3	6.6	0.0	0.9
2005	5	21.1	2.5	11.0	30.2	0.0	1.6
2005	6	18.5	10.3	13.8	15.0	0.0	1.8
2005	7	20.6	7.8	15.7	11.4	0.0	2.2
2005	8	20.0	6.1	14.5	28.6	0.0	3.5
2005	9	15.5	2.5	9.1	14.0	0.0	2.5

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2005	10	6.2	-6.2	1.1	5.0	0.0	0.4
2005	11	-2.9	-20.0	-13.1	8.9	0.0	1.0
2005	12	4.0	-24.0	-13.8	2.6	0.0	0.3
2006	1	-16.0	-32.0	-23.6	3.4	0.0	0.4
2006	2	4.4	-25.5	-12.7	6.0	0.0	0.5
2006	3	1.9	-25.0	-12.5	6.8	0.0	0.6
2006	4	10.1	-10.6	3.1	10.6	0.0	0.6
2006	5	15.1	2.8	10.3	17.0	0.0	1.2
2006	6	20.6	5.3	15.2	37.4	0.0	4.4
2006	7	20.7	16.2	18.2	5.0	0.0	0.7
2006	8	18.2	11.6	14.8	12.0	0.0	1.6
2006	9	15.8	0.8	9.6	5.8	0.0	0.8
2006	10	10.1	-3.4	2.4	23.0	0.0	1.6
2006	11	-9.9	-33.8	-20.1	12.0	0.0	1.1
2006	12	-5.7	-27.5	-15.1	2.2	0.0	0.3
2007	1	-7.3	-27.7	-18.1	1.8	0.0	0.2
2007	2	-10.0	-27.7	-20.1	5.9	0.0	0.8
2007	3	-0.2	-30.2	-15.2	4.8	0.0	0.8
2007	4	9.0	-16.1	3.3	13.0	0.0	0.9
2007	5	18.8	2.2	9.5	10.8	0.0	1.7
2007	6	17.7	10.0	14.6	25.2	0.0	1.6
2007	7	22.3	12.4	18.3	37.8	0.0	8.5
2007	8	19.9	9.7	15.0	14.2	0.0	1.1
2007	9	—	—	—	—	—	—
2007	10	—	—	—	—	—	—
2007	11	—	—	—	—	—	—
2007	12	—	—	—	—	—	—
2008	1	—	—	—	—	—	—
2008	2	—	—	—	—	—	—
2008	3	2.7	-23.2	-11.5	5.0	0.0	0.5
2008	4	7.9	-7.9	-0.7	0.8	0.0	0.1
2008	5	19.7	6.8	11.2	26.8	0.0	1.6
2008	6	17.8	11.1	14.4	25.3	0.0	2.4
2008	7	19.9	13.4	16.8	13.2	0.0	1.7
2008	8	21.9	10.0	15.0	9.0	0.0	1.3
2008	9	12.8	3.0	8.7	5.4	0.0	0.7
2008	10	8.9	1.9	6.3	0.0	0.0	0.0
2008	11	—	—	—	—	—	—
2008	12	-15.0	-35.0	-23.8	8.4	0.0	1.9
2009	1	—	—	—	—	—	—
2009	2	—	—	—	—	—	—
2009	3	—	—	—	—	—	—
2009	4	—	—	—	—	—	—

Table A-3 Summary Table of Maximum, Mean, and Minimum Daily Temperature and Precipitation by Month for the Ford Liard Station

Year	Month	Daily Averaged Temperature [°C]			Daily Averaged Precipitation [mm]		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
2009	5	—	—	—	—	—	—
2009	6	—	—	—	—	—	—
2009	7	—	—	—	—	—	—
2009	8	—	—	—	—	—	—
2009	9	—	—	—	—	—	—
2009	10	—	—	—	—	—	—
2009	11	—	—	—	—	—	—
2009	12	—	—	—	—	—	—
2010	1	-14.1	-25.6	-20.3	0.6	0.0	0.1
2010	2	-4.6	-21.1	-14.2	3.8	0.0	0.7
2010	3	1.6	-19.5	-6.6	8.6	0.0	1.3
2010	4	11.4	-4.4	5.7	1.0	0.0	0.1
2010	5	16.7	0.2	9.1	10.0	0.0	0.7
2010	6	19.7	12.0	15.5	9.2	0.0	0.9
2010	7	21.7	13.0	18.6	24.4	0.0	2.0
2010	8	22.2	10.5	16.2	24.2	0.0	3.2
2010	9	13.3	0.8	7.5	3.0	0.0	0.5
2010	10	7.0	-4.4	1.1	1.2	0.0	0.2
2010	11	5.7	-25.2	-10.1	2.0	0.0	0.3
2010	12	-15.8	-26.2	-21.2	9.0	0.0	2.2
2013	2	-0.5	-20.5	-14.5	0.4	0.0	0.1

—: No data

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