

**TINTINA RESOURCES, INC.  
BLACK BUTTE COPPER  
PROJECT AMBIENT AIR  
MONITORING PROGRAM  
Quarterly Data Report  
First Quarter 2017**

*Prepared for:*

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## CERTIFICATION OF DATA INTEGRITY

Bison Engineering, Inc., certifies the data in this report is an accurate summary of the air quality conditions measured at the Black Butte Copper Project air monitoring site. Every effort was made to obtain accurate and representative data and to comply with the procedures set forth in the project-specific *Quality Assurance Project Plan*, the *State of Montana Ambient Air Monitoring Program Quality Assurance Project Plan (April 2013)*, and the Environmental Protection Agency's *Quality Assurance Handbook for Air Pollution Measurement Systems: Volume I, A Field Guide to Environmental Quality Assurance (April 1994)*, *Volume II, Ambient Air Quality Program (May 2013)*, and *Volume IV, Meteorological Measurements (March 2008)*.

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## **APPENDICES**

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- Appendix A: Meteorological Data
- Appendix B: Performance Audit Reports
- Appendix C: Calibration Report
- Appendix D: Comparative Precipitation Summary

## 1.0 INTRODUCTION

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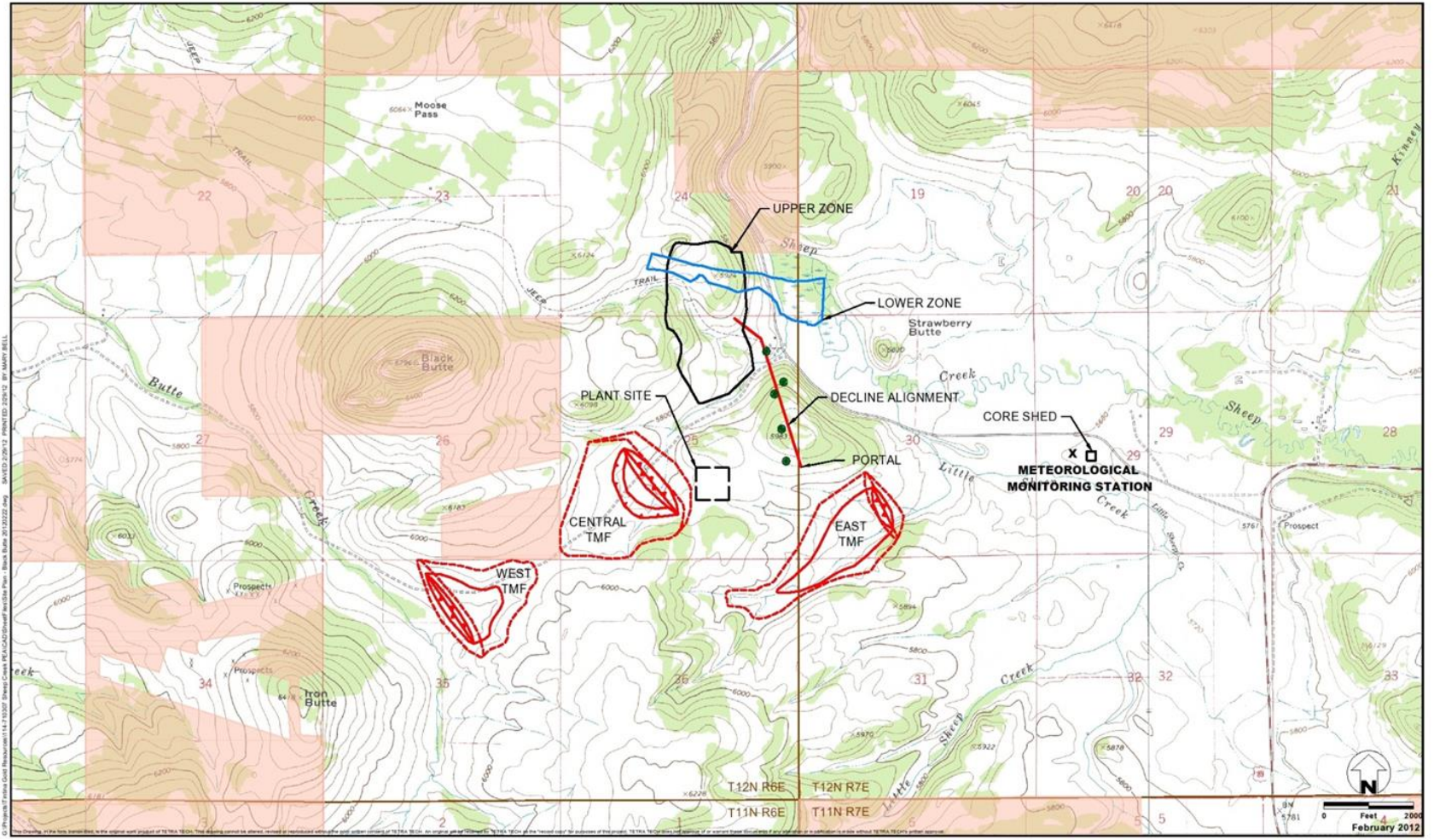
Tintina Resources, Inc. established an ambient air monitoring site to measure wind speed, wind direction, standard deviation of wind direction, temperature at 9 meters and 2 meters, delta temperature, solar radiation, barometric pressure, and precipitation. The station was established to accurately characterize the local meteorology and collect baseline data in support of an operating permit application and various environmental studies.

The meteorological monitoring system was installed in April 2012. The site is operated by Bison Engineering, Inc., of Helena and Billings. Figure 1 shows the location of the monitoring site.

This report presents the data collected during the first quarter (January through April) of 2017. In addition, a description of the monitoring system operations is presented, together with summaries of quality assurance activities, including calibrations and performance audits. Tabular summaries of the data completeness achieved and the periods of missing data also are presented. Appendix A presents hourly meteorological data collected.

On June 23, 2015, an evaporation pan and manual precipitation gauge were installed adjacent to the existing meteorological system. The evaporation data will be used for hydrological / water balance studies. The manual rain gauge was installed to provide a backup data source for the existing automatic rain gauge, which has experienced occasional mechanical problems. Also, the automatic rain gauge is sometimes unreliable for measuring frozen precipitation.

**Figure 1. Monitoring Site Location**



- ADIT ALIGNMENT HOLES
- ▭ TAILINGS MANAGEMENT FACILITY
- USFS PROPERTY

Site Plan  
 Black Butte Copper Project  
 Meagher County, Montana  
 FIGURE 1



## **2.0 MONITORING SYSTEM OPERATIONS**

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The installation of the monitoring meteorological system equipment took place in April 2012, soon after the equipment was received from the manufacturers. The installation and calibration of the equipment required about two weeks to complete. All meteorological sensors were in full operation and producing valid data by April 30, 2012.

Jeff Bell of Bison conducted performance audits of the meteorological system on March 23, 2017, and made any necessary calibration adjustments to the meteorological system following the audits. The Bison report of the audits is presented in Appendix B.

Manual measurements of precipitation were recorded by Tintina's on-site personnel one to two times per week. Operation of the evaporation pan was suspended over the winter due to frequent subfreezing temperatures.

### **3.0 CALIBRATION DATA**

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As discussed in Section 4.0, the system's as-found condition was audited March 23, 2017. The wind direction potentiometer was replaced and calibrated; no other changes were made to the system. The Bison report of the calibration is presented in Appendix C.

## **4.0 PERFORMANCE AUDIT DATA**

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Jeff Bell of Bison conducted performance audits of the meteorological system on March 23, 2017, and made any necessary calibration adjustments to the meteorological system following the audits. The Bison report of the audits is presented in Appendix B and calibration adjustments are shown in Appendix C.



## 5.0 DATA COMPLETENESS

The meteorological percentages of data recovery achieved during the first quarter of 2017 are given in Tables 1 and 2. In these tables, the number of possible data values during each month of the quarter is given, together with the number of valid readings and the number of hours spent on quality assurance activities (such as calibrations, performance audits, and maintenance on the sensors). The quality assurance hours are added to the number of hours of valid data to compute the net percentage data recovery. Eight hours of wind speed data were lost in March due to frozen anemometer cups; otherwise, no data losses occurred during the quarter.

During the first quarter the net percentage data recovery was 100.0 percent for all parameters at the site.

**Table 1. Monthly Data Completeness**

<b>January 2017</b>					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
<b>Black Butte Copper Project Met Tower</b>					
Wind Speed	744	744	100.0	0	100.0
Wind Direction	744	744	100.0	0	100.0
Standard Deviation	744	744	100.0	0	100.0
Temperature 9 Meters	744	744	100.0	0	100.0
Temperature 2 Meters	744	744	100.0	0	100.0
Temperature Delta T	744	744	100.0	0	100.0
Solar Radiation	744	744	100.0	0	100.0
Barometric Pressure	744	744	100.0	0	100.0
Relative Humidity	744	744	100.0	0	100.0
Precipitation	744	744	100.0	0	100.0
<b>Total</b>	<b>7,440</b>	<b>7,440</b>	<b>100.0</b>	<b>0</b>	<b>100.0</b>

**Table 1. Monthly Data Completeness (Continued)**

<b>February 2017</b>					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
<b>Black Butte Copper Project Met Tower</b>					
Wind Speed	672	672	100.0	0	100.0
Wind Direction	672	672	100.0	0	100.0
Standard Deviation	672	672	100.0	0	100.0
Temperature 9 Meters	672	672	100.0	0	100.0
Temperature 2 Meters	672	672	100.0	0	100.0
Temperature Delta T	672	672	100.0	0	100.0
Solar Radiation	672	672	100.0	0	100.0
Barometric Pressure	672	672	100.0	0	100.0
Relative Humidity	672	672	100.0	0	100.0
Precipitation	672	672	100.0	0	100.0
<b>Total</b>	<b>6,720</b>	<b>6,720</b>	<b>100.0</b>	<b>0</b>	<b>100.0</b>

**Table 1. Monthly Data Completeness (Continued)**

<b>March 2017</b>					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
<b>Black Butte Copper Project Met Tower</b>					
Wind Speed	744	733	98.5	3	98.9
Wind Direction	744	741	99.6	3	100.0
Standard Deviation	744	741	99.6	3	100.0
Temperature 9 Meters	744	741	99.6	3	100.0
Temperature 2 Meters	744	741	99.6	3	100.0
Temperature Delta T	744	741	99.6	3	100.0
Solar Radiation	744	741	99.6	3	100.0
Barometric Pressure	744	741	99.6	3	100.0
Relative Humidity	744	741	99.6	3	100.0
Precipitation	744	741	99.6	3	100.0
<b>Total</b>	<b>7,440</b>	<b>7,402</b>	<b>99.5</b>	<b>30</b>	<b>99.9</b>

**Table 2. Quarterly Data Completeness**

<b>First Quarter 2017</b>					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
<b>Black Butte Copper Project Met Tower</b>					
Wind Speed	2,160	2,149	99.5	3	99.6
Wind Direction	2,160	2,157	99.9	3	100.0
Standard Deviation	2,160	2,157	99.9	3	100.0
Temperature 9 Meters	2,160	2,157	99.9	3	100.0
Temperature 2 Meters	2,160	2,157	99.9	3	100.0
Temperature Delta T	2,160	2,157	99.9	3	100.0
Solar Radiation	2,160	2,157	99.9	3	100.0
Barometric Pressure	2,160	2,157	99.9	3	100.0
Relative Humidity	2,160	2,157	99.9	3	100.0
Precipitation	2,160	2,157	99.9	3	100.0
<b>Total</b>	<b>21,600</b>	<b>21,562</b>	<b>99.8</b>	<b>30</b>	<b>100.0</b>

## 6.0 MONITORING DATA

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The hourly data values collected at the monitoring site are given in the data tables in Appendix A. Each of these tables presents one month's data for one parameter in the monitoring system. In addition, the average, maximum, and minimum values for each parameter for each day are listed (for wind direction, the prevailing wind direction for the day is given). For those hours with missing data, a code is given that explains the reason the data were missing. These codes are given in Table 3.

Monthly and quarterly wind rose distributions from the monitoring site are presented in Tables 4 through 7. These tables give the percentage frequency of occurrence of winds from 16 cardinal directions and from 22 wind speed ranges. These same data are presented graphically in Figures 2 through 5. In the wind rose figures, the length of each "petal" of the rose is proportional to the percentage of time the wind blew from that direction. On the bottom of each figure is a histogram showing the average wind speed from each of the cardinal wind directions.

Appendix D summarizes monthly precipitation totals from the site's automatic rain gauge versus the manual gauge. Additionally, it shows data for the Millegan 14SE cooperative observing station located 15 miles west-northwest of the Black Butte site. The monthly precipitation amounts obtained from the three gauges were comparable, indicating that the Black Butte site's automated gauge was working properly.

**Table 3. Missing Data Codes**

<b>Mnemonic Code</b>	<b>Description</b>	<b>Equivalent EPA Null Value Reason Code</b>
Sc	Scheduled but not collected	9972
Ti	Sample time out of limits	9973
Fi	Filter damage	9976
Op	Voided by operator	9978
ND	Machine malfunction	9980
Wx	Bad weather	9981
Co	Collection error	9983
Lb	Lab error	9984
QA	Poor quality assurance results	9985
Pwr	Power failure	9988
Wi	Wildlife damage	9989
AZ	Automatic zero/span check	9991
ZS	Manual zero/span check	9986
Au	Performance audit	9992
Ma	Routine maintenance/repairs	9993
Ca	Multipoint calibration	9995
PZ	Precision/zero/span	9998

**Table 4. Monthly Wind Rose Summary, Black Butte Copper Project Met Tower**

January 2017																		
Direction>>>	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	
Wind Speed (meters per second)	0.1 - 1.0	2.3	1.7	3.1	3.2	3.2	3.2	5.0	3.0	1.9	0.9	0.5	0.5	0.8	0.3	1.7	1.3	32.8
	1.1 - 2.0	1.5	1.3	2.4	3.4	3.2	5.1	6.0	3.0	1.5	0.4	0.1	0.4	1.2	2.0	1.6	1.2	34.4
	2.1 - 3.0	0.1	0.0	0.3	1.3	1.9	1.5	1.3	0.7	0.3	0.3	0.0	0.1	1.7	1.2	1.5	0.4	12.6
	3.1 - 4.0	0.0	0.0	0.0	0.4	1.1	0.3	0.7	1.1	0.4	0.1	0.1	0.4	1.5	1.6	1.7	0.3	9.7
	4.1 - 5.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.8	0.1	0.1	0.0	0.3	0.7	0.8	0.4	0.3	4.4
	5.1 - 6.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.5	0.3	0.0	0.0	0.3	0.8	0.5	0.1	0.0	2.8
	6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.7	0.5	0.3	0.1	1.9
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.5	0.1	0.0	1.1
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.3
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	13.1 - 14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	14.1 - 15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16.1 - 17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17.1 - 18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18.1 - 19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19.1 - 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
> 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Calm																		0.0
Total	3.9	3.1	5.8	8.5	9.7	10.3	13.6	9.0	4.6	1.9	0.8	2.4	7.7	7.5	7.7	3.6	100.0	
Average Speed	1.0	1.0	1.1	1.5	1.8	1.5	1.6	2.1	1.8	1.5	1.3	3.3	3.4	3.5	2.6	1.8	2.0	

**Table 5. Monthly Wind Rose Summary, Black Butte Copper Project Met Tower**

February 2017																		
Direction>>>	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	
Wind Speed (meters per second)	0.1 - 1.0	1.8	1.5	0.7	0.1	1.2	1.3	1.9	1.3	1.0	0.6	0.3	0.0	0.3	1.0	1.0	0.6	14.9
	1.1 - 2.0	0.3	1.3	1.2	2.1	3.3	3.9	5.7	3.0	0.7	0.3	0.0	0.7	1.0	0.6	1.9	1.6	27.7
	2.1 - 3.0	0.3	0.3	0.0	0.4	2.1	2.8	2.5	1.2	1.0	0.6	0.3	0.7	1.5	1.9	0.9	0.4	17.1
	3.1 - 4.0	0.1	0.4	0.1	0.0	1.3	0.3	0.4	1.8	0.4	0.1	0.4	1.6	1.6	1.3	1.5	0.0	11.8
	4.1 - 5.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.3	1.3	0.6	0.1	0.7	1.8	1.0	0.9	0.0	7.7
	5.1 - 6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	0.7	0.6	0.7	0.7	1.8	0.7	0.4	0.0	7.0
	6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	1.2	0.7	0.4	1.3	0.3	0.0	0.0	5.2
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.7	0.9	0.0	0.7	0.3	0.0	0.0	3.7
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.0	1.2	0.3	0.0	0.0	2.7
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	1.0	0.1	0.0	0.0	1.6
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.6
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	13.1 - 14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	14.1 - 15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16.1 - 17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17.1 - 18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18.1 - 19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19.1 - 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
> 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Calm																		0.0
Total	2.5	3.6	2.1	2.7	8.3	8.3	11.5	9.5	6.4	6.0	4.3	5.1	12.6	7.7	6.7	2.7	100.0	
Average Speed	1.2	1.5	1.3	1.6	2.2	1.8	2.0	3.0	3.7	5.6	5.9	3.8	5.3	3.7	2.6	1.4	3.2	



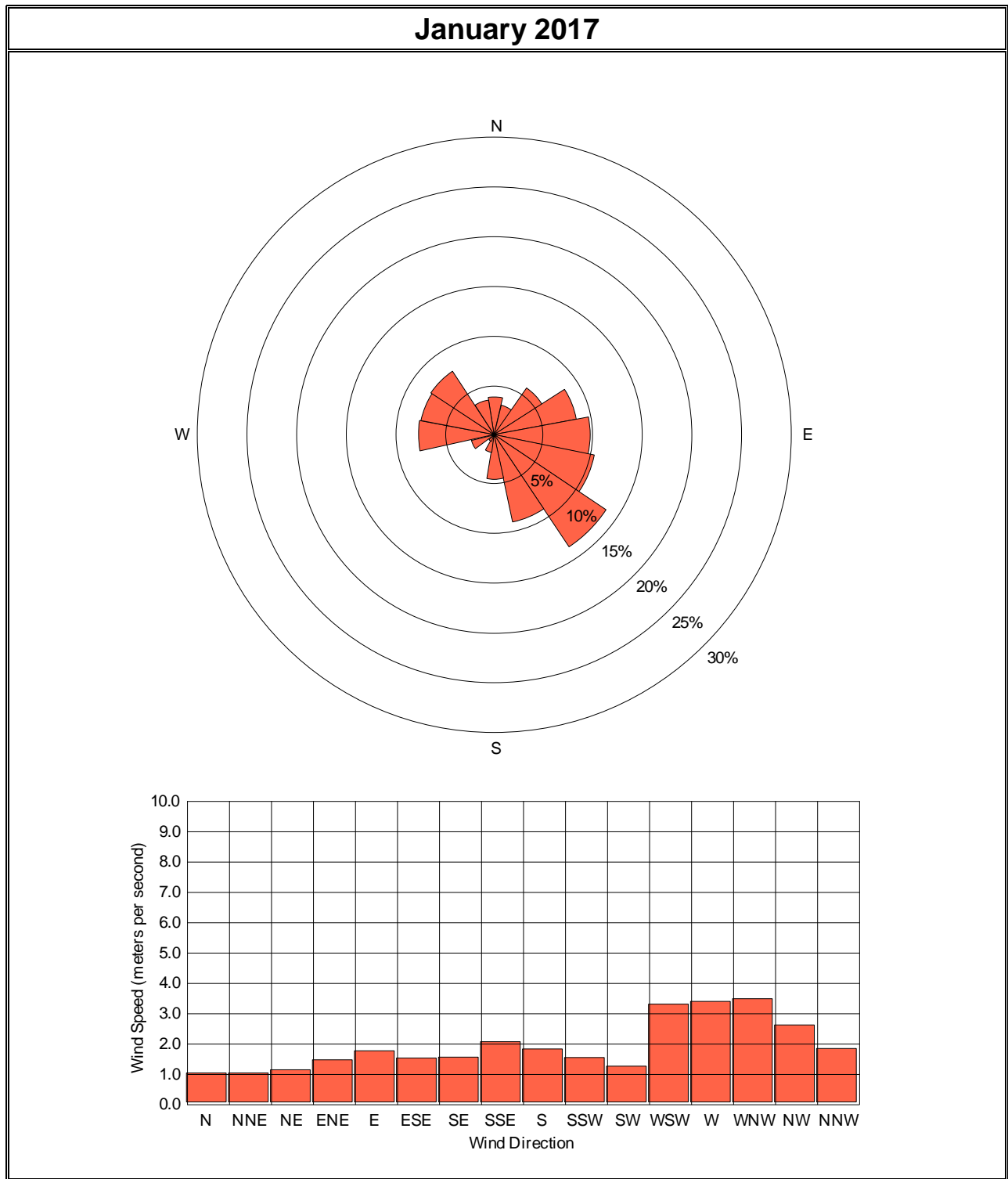
**Table 6. Monthly Wind Rose Summary, Black Butte Copper Project Met Tower**

March 2017																		
Direction>>>	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	
Wind Speed (meters per second)	0.1 - 1.0	1.0	0.3	0.5	0.3	1.4	1.4	1.6	1.1	0.1	0.1	0.0	0.0	0.3	0.1	0.3	0.7	9.1
	1.1 - 2.0	0.3	0.7	1.1	1.2	2.7	3.5	3.1	1.9	0.5	0.4	0.7	0.3	1.1	0.8	1.4	0.3	20.1
	2.1 - 3.0	0.1	0.0	0.5	0.3	1.9	1.2	1.1	0.5	1.0	0.1	0.8	0.8	2.6	2.5	1.5	0.3	15.3
	3.1 - 4.0	0.3	0.0	0.0	0.3	0.5	0.3	0.5	0.8	0.8	1.0	0.5	1.4	2.6	1.9	1.0	0.3	12.1
	4.1 - 5.0	0.0	0.3	0.0	0.1	0.3	0.0	0.3	0.5	1.2	0.3	0.8	1.2	3.4	1.1	0.4	0.0	10.0
	5.1 - 6.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.6	0.5	1.0	0.4	0.8	3.4	2.0	0.1	0.3	10.4
	6.1 - 7.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.7	1.0	0.5	1.0	2.7	0.5	0.1	0.3	8.9
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.7	0.3	0.3	0.1	2.6	1.5	0.0	0.0	6.5
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.8	0.3	0.3	1.1	0.5	0.0	0.0	4.2
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	1.8	0.0	0.0	0.0	2.2
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.1	0.0	0.0	1.1
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	13.1 - 14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	14.1 - 15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16.1 - 17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17.1 - 18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18.1 - 19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19.1 - 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
> 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Calm																		0.0
Total	1.8	1.2	2.2	2.2	6.8	6.5	6.7	10.1	6.4	5.0	4.4	6.0	22.5	11.3	4.8	2.0	100.0	
Average Speed	1.9	2.0	1.5	2.0	1.9	1.7	1.7	4.4	4.9	5.5	4.3	4.8	5.6	4.7	2.7	2.9	4.0	

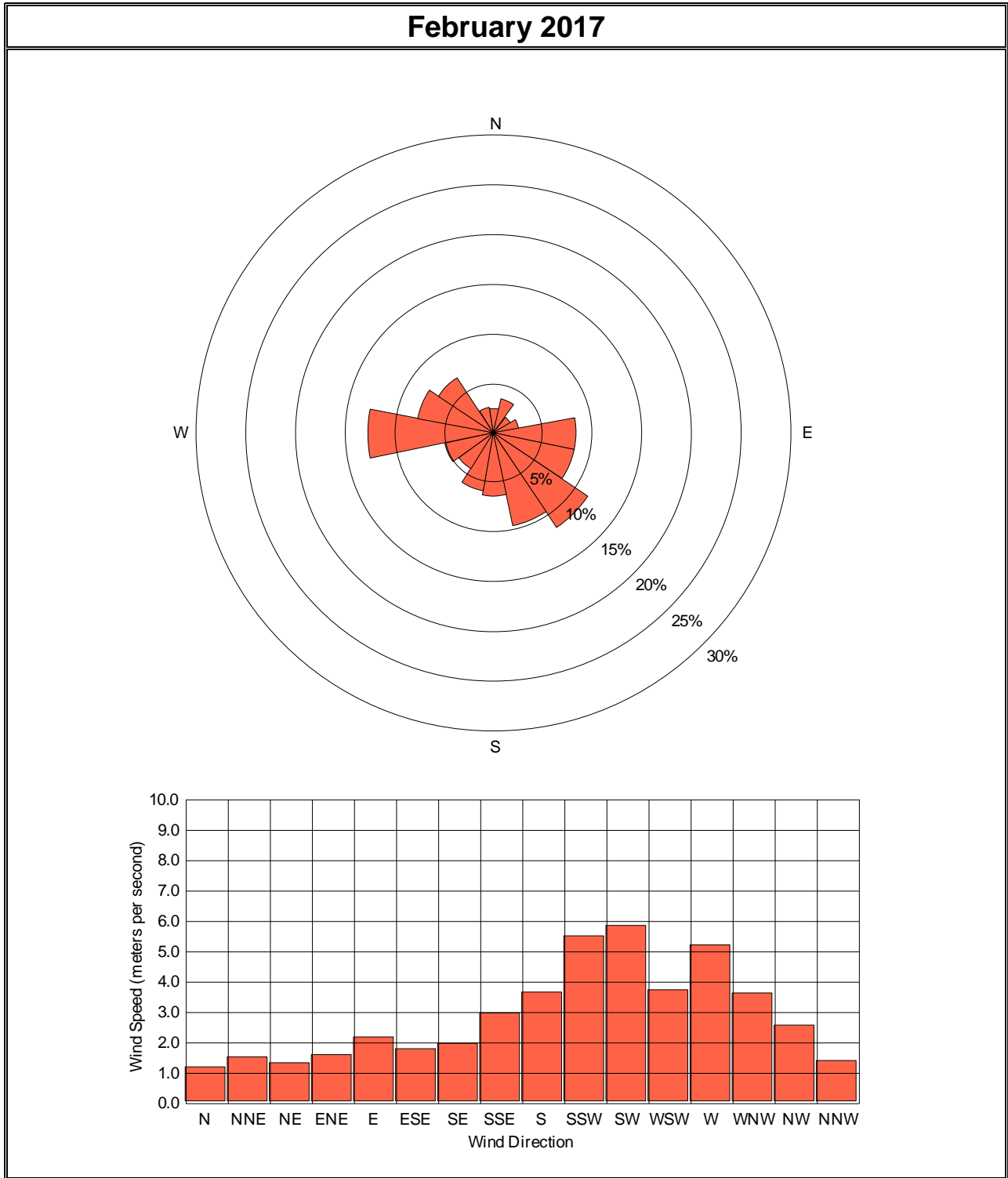
**Table 7. Quarterly Wind Rose Summary, Black Butte Copper Project Met Tower**

<b>First Quarter 2017</b>																		
Direction>>>	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	
Wind Speed (meters per second)	0.1 - 1.0	1.7	1.2	1.5	1.3	1.9	2.0	3.0	1.8	1.1	0.6	0.3	0.3	0.5	0.5	1.0	0.9	19.4
	1.1 - 2.0	0.7	1.1	1.6	2.2	3.1	4.2	4.9	2.6	0.9	0.4	0.3	0.5	1.1	1.2	1.6	1.0	27.3
	2.1 - 3.0	0.2	0.1	0.3	0.7	1.9	1.8	1.6	0.8	0.7	0.3	0.4	0.6	1.9	1.9	1.3	0.4	14.9
	3.1 - 4.0	0.1	0.1	0.0	0.2	1.0	0.3	0.6	1.2	0.6	0.4	0.4	1.1	1.9	1.6	1.4	0.2	11.1
	4.1 - 5.0	0.0	0.1	0.0	0.1	0.3	0.1	0.4	0.6	0.9	0.3	0.3	0.7	1.9	1.0	0.6	0.1	7.3
	5.1 - 6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.1	0.5	0.5	0.4	0.6	2.0	1.1	0.2	0.1	6.7
	6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.7	0.4	0.5	1.6	0.5	0.1	0.1	5.3
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.3	0.4	0.1	1.2	0.8	0.0	0.0	3.8
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.5	0.3	0.1	0.8	0.3	0.0	0.0	2.4
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.9	0.0	0.0	0.0	1.3
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.6
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	13.1 - 14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	14.1 - 15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16.1 - 17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17.1 - 18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18.1 - 19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19.1 - 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
> 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Calm																		0.0
Total	2.7	2.6	3.4	4.5	8.3	8.4	10.6	9.5	5.8	4.2	3.1	4.5	14.3	8.9	6.4	2.8		100.0
Average Speed	1.3	1.4	1.2	1.6	2.0	1.7	1.7	3.2	3.6	4.9	4.7	4.1	5.1	4.1	2.6	2.0		3.0

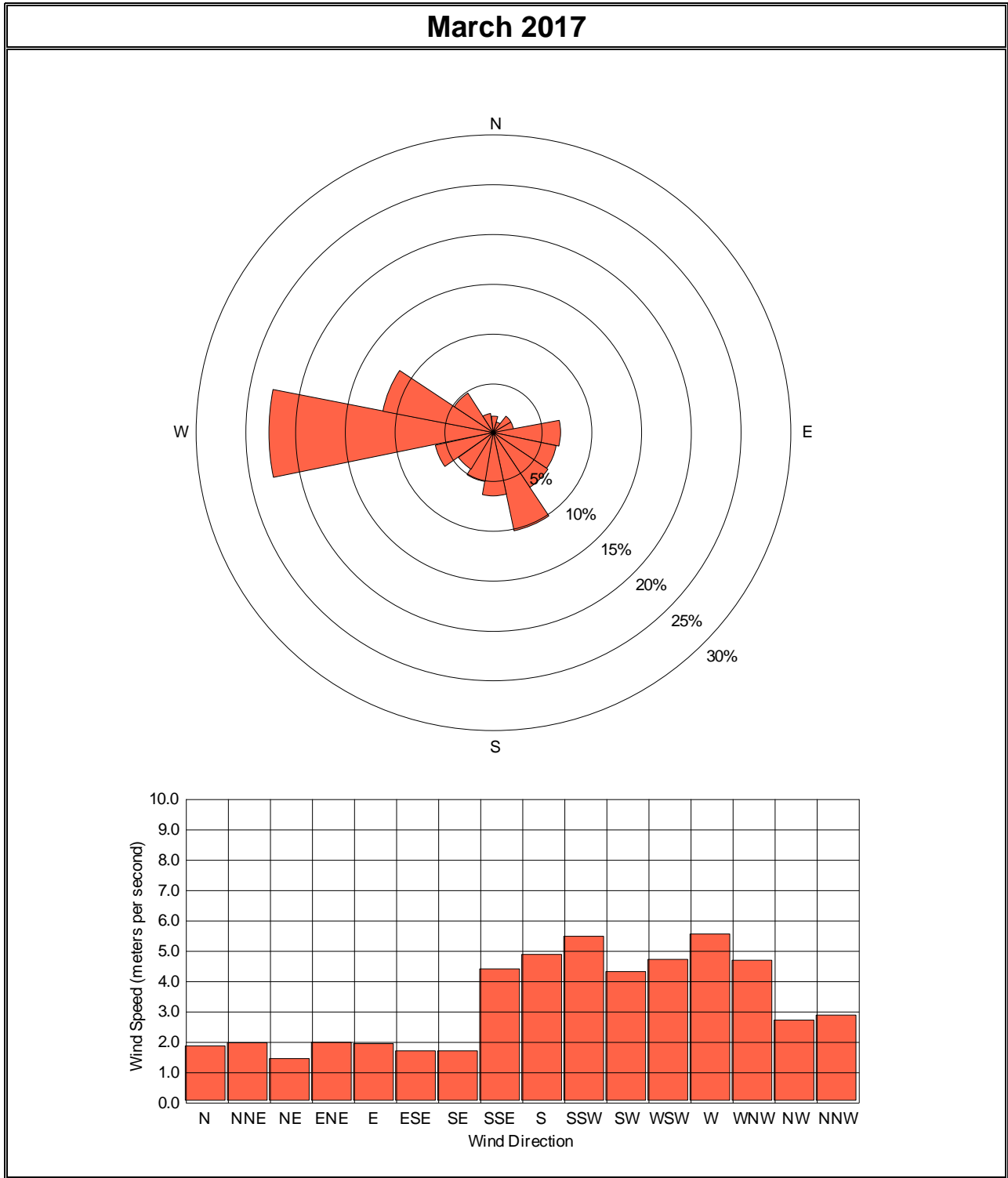
**Figure 2. Monthly Wind Rose, Black Butte Copper Project Met Tower**



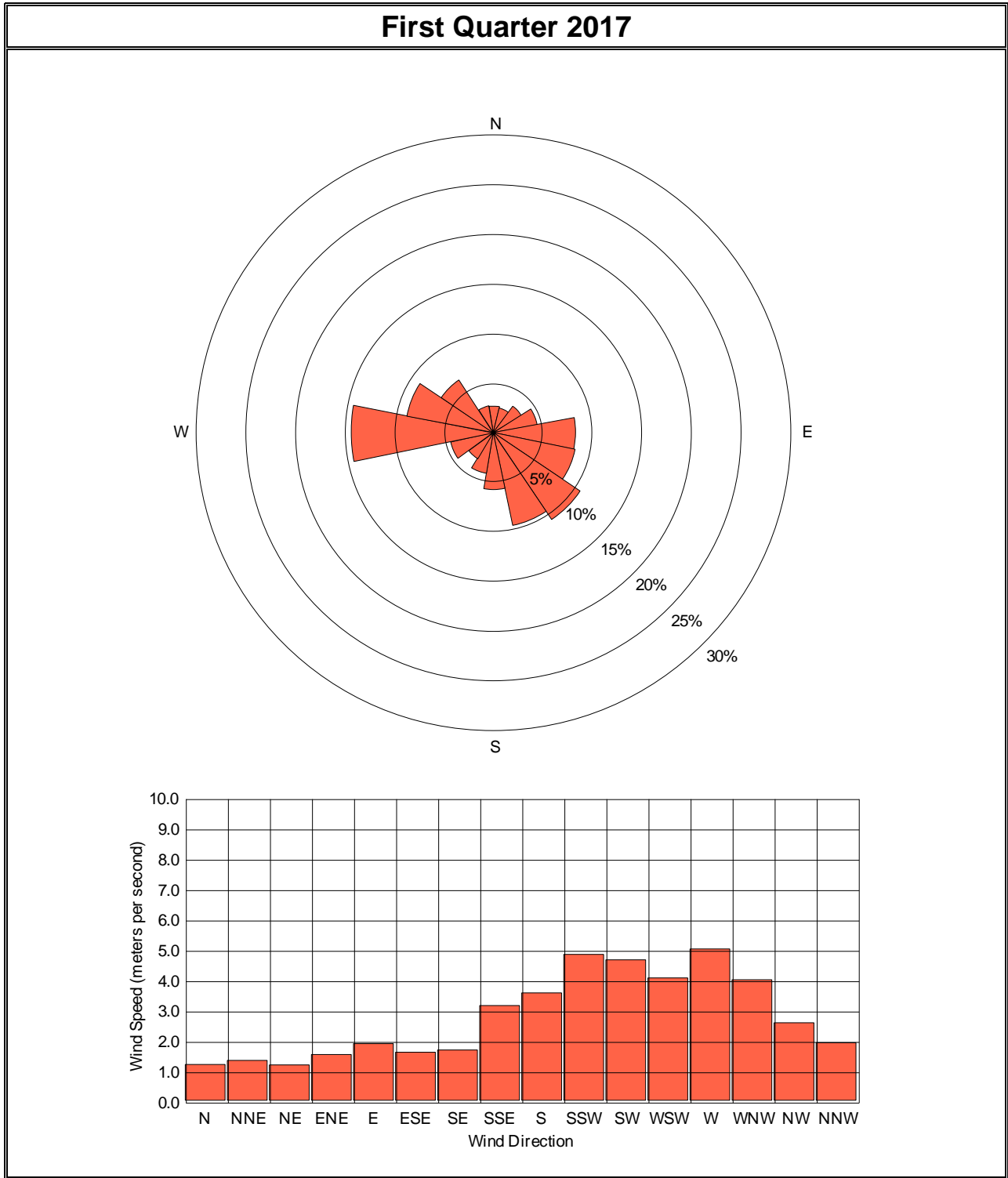
**Figure 3. Monthly Wind Rose, Black Butte Copper Project Met Tower**



**Figure 4. Monthly Wind Rose, Black Butte Copper Project Met Tower**



**Figure 5. Quarterly Wind Rose, Black Butte Copper Project Met Tower**



**APPENDIX A: HOURLY AIR QUALITY AND  
METEOROLOGICAL DATA, FIRST QUARTER 2017**

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Speed (meters per second)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	1.0	1.0	0.9	0.7	1.0	1.1	0.8	0.6	0.6	0.5	0.5	2.1	3.3	5.1	5.0	6.4	7.4	6.9	5.0	4.0	3.1	2.4	2.9	3.5	2.7	7.4	0.5
2	3.2	2.2	2.1	1.1	1.1	1.1	0.6	0.9	0.5	0.8	0.6	0.5	2.0	2.8	3.0	2.7	1.9	1.5	0.4	0.7	1.2	0.8	0.5	0.9	1.4	3.2	0.4
3	0.7	0.5	0.5	0.6	0.6	0.6	0.7	0.9	0.7	1.1	0.7	0.6	0.7	1.1	2.9	1.7	1.5	0.7	0.8	3.4	1.3	1.0	1.0	0.8	1.0	3.4	0.5
4	1.1	2.3	1.0	1.3	1.1	1.5	1.4	1.8	2.1	1.4	1.4	0.8	1.8	4.9	6.6	6.1	5.1	3.2	2.3	3.7	3.7	1.3	1.1	1.6	2.4	6.6	0.8
5	1.2	2.6	2.9	3.6	4.0	3.9	4.1	3.2	2.8	0.9	0.8	0.6	1.1	1.2	1.3	2.3	1.0	2.0	1.8	1.9	1.3	0.8	1.4	1.3	2.0	4.1	0.6
6	1.1	1.1	0.7	1.0	1.0	0.7	0.6	1.0	0.8	1.2	1.3	1.1	1.4	1.1	0.8	0.7	0.8	1.5	1.2	1.5	2.8	2.4	2.6	1.8	1.3	2.8	0.6
7	1.8	2.1	1.5	1.4	1.5	1.3	1.8	1.5	1.3	1.1	0.9	0.6	0.9	3.7	3.5	1.8	1.3	1.9	4.4	2.8	3.2	2.4	1.6	1.6	1.9	4.4	0.6
8	1.3	0.7	0.8	0.9	0.9	0.6	0.9	0.7	0.8	0.8	0.7	1.0	2.2	2.4	1.9	1.3	1.6	1.7	3.0	5.0	5.0	5.0	3.1	1.7	1.8	5.0	0.6
9	2.6	3.3	3.2	3.4	2.3	4.2	1.6	1.2	1.7	1.5	1.8	4.2	4.7	5.5	1.4	6.4	7.2	5.4	3.3	5.0	6.0	6.5	3.7	4.1	3.8	7.2	1.2
10	3.1	3.3	1.8	2.0	1.7	1.5	1.0	0.8	1.3	0.9	0.9	1.9	5.3	5.5	4.3	3.7	7.4	6.2	7.8	8.5	4.9	3.3	2.4	1.9	3.4	8.5	0.8
11	1.4	0.9	1.1	1.1	0.9	0.8	0.7	0.7	1.0	1.4	1.1	1.1	0.9	1.6	2.9	1.9	0.8	0.6	0.8	1.2	1.6	1.0	1.2	0.7	1.1	2.9	0.6
12	1.3	0.7	0.9	0.6	0.9	0.4	0.9	1.3	0.7	1.1	0.5	0.5	0.7	0.8	1.4	0.8	1.4	2.5	2.1	1.8	2.1	1.5	1.2	1.1	1.1	2.5	0.4
13	0.8	1.1	1.1	1.0	0.8	0.9	0.8	1.1	1.0	0.8	0.7	0.7	1.7	1.7	1.4	1.2	2.0	2.2	3.8	3.0	1.6	1.4	1.4	1.2	1.4	3.8	0.7
14	1.0	1.3	1.1	0.8	1.0	1.3	0.9	0.7	0.7	0.6	0.7	0.6	0.9	0.9	1.3	2.6	1.5	2.6	2.4	2.5	1.9	1.3	0.9	1.0	1.3	2.6	0.6
15	1.2	0.9	1.0	1.0	1.2	1.1	0.9	1.2	0.9	0.9	0.9	0.8	1.4	3.3	2.1	2.9	0.9	1.6	2.6	1.9	1.9	1.4	1.3	1.1	1.4	3.3	0.8
16	1.1	1.2	1.3	1.2	1.1	1.0	1.2	0.8	1.3	0.8	0.6	0.6	0.9	2.2	3.3	2.6	1.3	2.1	2.4	1.8	1.9	1.1	0.9	0.9	1.4	3.3	0.6
17	1.2	1.2	1.2	1.3	0.9	1.5	1.0	0.8	0.8	0.7	1.0	0.7	0.8	0.9	1.7	1.2	1.3	1.7	1.3	1.2	1.9	1.5	2.2	2.5	1.3	2.5	0.7
18	2.6	2.5	2.0	1.8	1.6	1.8	3.5	4.7	6.0	5.8	3.0	5.5	6.4	5.8	5.1	4.6	3.4	2.2	5.1	4.2	3.1	1.8	2.3	1.8	3.6	6.4	1.6
19	2.5	3.4	4.3	5.5	4.6	5.6	4.1	2.6	2.0	1.3	1.4	1.8	1.6	2.3	4.1	3.1	3.3	2.8	3.8	2.4	1.2	1.4	1.7	0.6	2.8	5.6	0.6
20	0.8	0.9	1.1	0.8	1.0	0.9	0.8	0.8	0.8	0.5	1.5	1.7	3.3	3.5	2.5	3.4	3.1	2.2	1.5	1.7	1.8	1.3	1.5	0.9	1.6	3.5	0.5
21	1.8	1.3	1.2	0.7	0.8	1.0	0.9	0.9	0.7	0.5	0.3	0.5	0.5	0.9	3.2	2.5	2.6	1.0	1.0	1.5	1.5	1.4	1.0	0.9	1.2	3.2	0.3
22	0.8	0.9	1.1	1.2	1.3	1.2	0.6	1.1	0.8	0.4	0.5	0.7	0.9	2.7	3.8	4.0	2.9	2.0	1.3	0.8	1.0	3.3	3.7	1.6	1.6	4.0	0.4
23	1.1	1.2	1.0	1.3	0.7	0.6	1.0	1.3	0.6	1.1	1.4	2.5	2.4	2.6	4.0	5.4	5.3	2.7	1.2	1.4	1.3	1.5	1.2	0.8	1.8	5.4	0.6
24	0.6	0.8	1.1	0.6	0.4	0.3	0.3	0.5	0.3	0.6	0.4	0.4	1.4	2.0	3.1	3.7	3.5	3.8	1.1	0.8	2.2	3.2	3.2	2.3	1.5	3.8	0.3
25	1.6	0.6	0.6	0.4	0.6	0.7	0.9	1.0	0.9	0.4	0.5	1.2	3.1	4.0	3.6	3.0	1.9	1.3	1.0	0.8	1.9	1.2	1.0	0.5	1.4	4.0	0.4
26	0.5	0.4	0.5	0.4	0.4	0.6	0.4	0.6	0.4	0.5	1.1	3.4	4.7	5.2	5.3	4.7	3.9	3.1	1.6	1.9	1.6	3.6	2.9	2.3	2.1	5.3	0.4
27	1.9	2.2	2.0	2.2	1.3	0.9	1.1	0.9	1.4	0.7	1.0	1.4	2.8	3.4	4.0	3.2	3.6	2.0	1.8	2.5	2.0	1.6	1.5	0.9	1.9	4.0	0.7
28	1.0	1.1	0.8	1.4	0.9	0.8	0.7	0.7	0.9	1.1	0.8	0.6	2.4	3.8	3.8	3.0	1.6	1.9	1.6	1.0	1.2	1.5	2.5	2.1	1.6	3.8	0.6
29	2.3	2.1	1.4	1.2	1.4	1.5	1.2	0.8	0.8	0.9	1.1	1.1	1.8	3.9	2.0	5.0	2.1	1.7	2.6	3.4	2.0	2.9	6.4	4.7	2.3	6.4	0.8
30	3.7	4.6	2.2	1.7	1.3	1.7	1.9	1.9	1.0	1.8	1.7	7.2	8.4	5.9	6.8	6.6	6.2	4.7	7.1	7.5	7.2	6.2	7.0	5.8	4.6	8.4	1.0
31	4.6	4.3	5.0	3.5	2.7	2.2	3.5	3.9	4.6	4.3	3.4	2.2	2.5	2.6	2.8	2.8	1.7	1.9	1.2	1.0	1.1	0.9	2.3	2.0	2.8	5.0	0.9
Avg	1.6	1.7	1.5	1.5	1.3	1.4	1.3	1.3	1.3	1.2	1.1	1.6	2.4	3.0	3.2	3.3	2.9	2.5	2.5	2.6	2.4	2.2	2.2	1.8	2.0	4.6	0.6
Max	4.6	4.6	5.0	5.5	4.6	5.6	4.1	4.7	6.0	5.8	3.4	7.2	8.4	5.9	6.8	6.6	7.4	6.9	7.8	8.5	7.2	6.5	7.0	5.8	4.6	8.5	1.6
Min	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.5	0.3	0.4	0.3	0.4	0.5	0.8	0.8	0.7	0.8	0.6	0.4	0.7	1.0	0.8	0.5	0.5	1.0	2.5	0.3

A-1



**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Speed (meters per second)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	2.1	2.5	2.3	4.0	2.4	2.4	2.4	3.3	4.6	2.7	2.2	3.8	3.3	2.7	2.9	3.5	3.8	3.1	1.3	1.2	1.7	1.0	0.6	1.0	2.5	4.6	0.6
2	0.5	0.7	0.5	0.5	0.5	0.4	0.4	0.8	0.5	0.7	0.4	0.6	0.8	2.9	3.5	3.7	2.6	1.9	1.3	1.3	1.9	1.8	1.4	1.5	1.3	3.7	0.4
3	1.6	2.2	2.3	1.6	1.8	1.8	1.7	1.9	2.6	2.1	0.9	2.4	3.0	3.3	3.7	2.5	2.8	1.9	2.8	3.1	1.0	2.2	2.2	1.6	2.2	3.7	0.9
4	1.8	0.9	1.4	1.0	4.3	4.3	1.2	4.0	2.0	1.2	1.1	0.8	0.7	0.8	1.3	2.3	0.9	1.3	1.3	1.4	1.0	2.8	1.8	1.7	1.7	4.3	0.7
5	1.4	1.3	1.3	1.4	2.6	2.9	3.7	3.9	4.5	6.2	5.5	5.7	7.2	8.8	8.1	9.0	8.1	5.1	4.5	6.6	4.9	7.1	5.3	5.0	5.0	9.0	1.3
6	5.8	4.2	4.3	5.1	3.4	1.3	6.0	3.9	1.6	1.9	2.3	2.6	4.7	7.2	4.3	4.5	1.2	3.4	5.6	3.1	1.7	1.2	2.4	0.8	3.4	7.2	0.8
7	0.9	1.1	0.8	0.9	0.6	0.8	0.7	0.5	0.9	0.6	0.7	0.7	1.1	1.1	1.9	5.5	4.5	2.8	3.9	1.9	1.3	1.4	1.2	1.2	1.5	5.5	0.5
8	0.5	0.4	0.8	1.0	0.9	0.7	0.5	0.6	0.7	0.9	1.1	1.2	4.2	4.1	1.4	1.4	1.2	2.3	2.3	1.4	1.2	1.6	1.6	1.5	1.4	4.2	0.4
9	3.2	3.4	2.1	1.3	2.7	1.4	2.3	3.4	2.8	3.4	6.9	7.7	6.7	6.8	9.2	6.8	9.5	8.1	7.5	7.4	7.6	7.7	8.8	8.3	5.6	9.5	1.3
10	5.5	6.9	4.8	4.7	2.6	1.3	1.2	4.3	4.0	3.8	3.7	4.1	6.2	6.0	5.2	5.5	5.4	3.5	2.8	1.7	2.4	2.8	2.0	5.2	4.0	6.9	1.2
11	7.6	3.6	4.5	2.2	4.3	9.6	5.5	7.6	8.8	9.2	8.2	7.6	8.6	8.5	8.8	8.4	6.7	5.8	4.7	4.2	2.6	1.2	2.9	2.7	6.0	9.6	1.2
12	1.5	2.9	3.3	2.9	2.5	1.9	1.6	1.1	1.2	1.1	1.2	2.6	5.3	4.6	3.8	3.1	1.7	1.5	1.5	1.9	2.4	2.0	2.7	1.2	2.3	5.3	1.1
13	1.5	1.4	1.1	1.3	1.5	1.2	1.3	1.0	0.9	0.6	0.6	0.6	3.4	4.9	4.5	2.5	2.1	1.0	2.4	1.8	1.3	1.5	1.3	1.2	1.7	4.9	0.6
14	1.1	0.9	1.3	1.0	1.0	0.9	1.4	1.4	1.0	1.4	0.6	0.8	0.7	0.9	1.3	1.0	0.8	0.7	2.1	2.3	2.3	1.8	1.8	1.4	1.2	2.3	0.6
15	2.0	1.6	1.5	1.8	1.5	1.1	1.7	1.1	1.2	1.0	0.8	1.6	3.0	4.3	3.4	2.8	1.5	1.7	2.9	4.7	2.9	2.1	1.7	3.4	2.1	4.7	0.8
16	5.2	5.7	6.5	4.2	3.9	4.0	4.7	4.8	5.9	5.5	7.0	8.7	6.8	7.0	10.5	9.8	10.4	8.0	6.3	5.3	6.3	6.0	2.9	3.4	6.2	10.5	2.9
17	7.3	6.3	2.5	2.8	1.3	3.1	1.6	2.3	3.0	4.2	6.2	6.6	4.5	2.9	3.2	2.0	1.5	1.4	2.4	2.6	2.7	2.7	1.6	1.4	3.2	7.3	1.3
18	1.0	2.0	4.8	2.7	3.2	4.4	3.0	2.2	1.9	1.0	2.3	5.1	5.0	5.5	5.2	5.9	6.4	3.2	2.1	1.5	1.8	3.3	2.9	2.8	3.3	6.4	1.0
19	4.1	2.5	3.0	1.3	1.5	3.3	3.7	3.3	4.3	3.3	2.9	1.1	3.3	3.5	1.8	2.8	3.0	3.0	2.8	3.2	2.0	3.2	2.8	1.4	2.8	4.3	1.1
20	1.8	1.5	1.6	1.9	1.5	1.6	1.8	2.0	1.3	1.9	4.1	7.4	6.5	5.7	2.4	1.3	7.7	5.2	6.4	6.1	3.8	2.6	3.5	3.2	3.4	7.7	1.3
21	2.1	0.9	1.5	2.0	1.5	0.8	1.2	1.4	1.4	6.4	7.4	7.1	6.4	3.6	1.9	3.5	2.8	3.3	5.3	3.2	4.6	7.1	5.9	6.0	3.6	7.4	0.8
22	5.9	6.6	5.8	6.0	3.9	4.4	4.1	2.9	3.1	3.3	3.7	3.5	5.2	3.7	2.6	3.6	2.8	2.8	1.1	1.1	1.4	0.7	1.2	1.7	3.4	6.6	0.7
23	1.4	1.2	1.5	1.6	1.4	1.4	1.5	1.7	2.4	3.7	3.1	3.3	3.7	3.5	6.4	7.4	7.1	7.8	7.0	6.0	6.1	5.3	4.3	2.3	3.8	7.8	1.2
24	2.6	2.5	2.8	2.8	1.5	1.3	0.5	0.4	0.7	0.4	0.6	1.2	3.7	4.3	5.1	4.9	4.2	3.2	1.2	1.0	1.5	2.1	2.0	1.0	2.1	5.1	0.4
25	1.5	0.9	0.8	0.7	0.7	0.6	0.8	0.8	0.9	4.3	7.4	7.7	10.3	9.6	10.4	8.2	7.1	9.1	6.6	5.7	5.6	5.4	5.7	6.1	4.9	10.4	0.6
26	7.0	5.3	5.2	4.3	2.2	2.5	3.0	2.2	1.7	2.0	2.4	3.7	3.8	4.4	5.7	3.4	3.7	2.1	1.6	1.5	1.4	1.3	1.0	1.5	3.0	7.0	1.0
27	2.3	1.5	1.8	1.3	0.6	1.1	0.8	0.7	0.8	0.8	1.0	1.2	4.6	4.5	3.3	2.4	3.2	2.4	2.4	1.4	1.4	1.7	1.1	1.1	1.8	4.6	0.6
28	0.7	0.6	0.7	0.9	1.0	0.8	1.4	3.7	2.7	2.6	3.0	4.3	6.6	6.7	8.1	9.7	8.2	6.2	6.8	7.5	8.3	9.9	9.2	10.0	5.0	10.0	0.6
Avg	2.9	2.6	2.5	2.3	2.0	2.2	2.1	2.4	2.4	2.7	3.1	3.7	4.6	4.7	4.6	4.6	4.3	3.6	3.5	3.2	3.0	3.2	2.9	2.8	3.2	6.4	0.9
Max	7.6	6.9	6.5	6.0	4.3	9.6	6.0	7.6	8.8	9.2	8.2	8.7	10.3	9.6	10.5	9.8	10.4	9.1	7.5	7.5	8.3	9.9	9.2	10.0	6.2	10.5	2.9
Min	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.6	0.7	0.8	1.3	1.0	0.8	0.7	1.1	1.0	1.0	0.7	0.6	0.8	1.2	2.3	0.4

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Speed (meters per second)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	11.1	9.0	6.6	3.2	3.2	2.9	2.6	2.4	3.9	5.0	4.7	7.4	8.5	7.5	9.5	9.0	9.3	10.5	10.4	9.1	7.4	6.5	5.7	3.9	6.6	11.1	2.4
2	3.8	3.0	1.2	0.9	1.8	3.6	4.0	3.6	2.8	4.8	6.3	7.0	5.0	3.6	3.1	4.7	4.4	4.6	3.2	1.9	0.7	2.8	4.5	5.2	3.6	7.0	0.7
3	3.0	6.5	4.7	1.6	1.8	2.9	4.0	4.9	4.2	4.6	4.7	7.0	6.4	4.4	4.9	3.9	4.2	5.1	6.9	4.6	3.5	6.6	6.1	5.5	4.7	7.0	1.6
4	4.0	3.9	8.7	6.9	6.5	5.6	5.2	4.1	2.8	3.6	3.6	7.3	5.9	5.9	5.7	6.0	7.2	7.8	6.5	4.8	4.8	3.3	2.8	2.1	5.2	8.7	2.1
5	2.0	1.8	1.2	1.4	1.1	0.9	0.9	1.4	3.8	7.3	9.3	8.7	8.7	6.3	5.2	6.1	2.5	4.0	3.0	1.4	2.0	2.3	3.0	2.7	3.6	9.3	0.9
6	3.3	3.1	3.6	5.4	4.9	2.1	1.4	1.6	1.4	5.3	7.6	8.4	7.9	8.4	9.1	7.2	6.9	7.2	2.6	0.8	1.7	2.8	3.9	2.5	4.5	9.1	0.8
7	5.0	7.0	6.1	7.7	7.5	7.8	5.2	5.9	7.8	9.2	10.2	10.2	10.2	10.1	7.5	7.8	6.0	4.3	1.9	1.3	1.8	2.9	2.7	2.1	6.2	10.2	1.3
8	1.5	3.4	3.0	3.1	2.6	1.0	0.8	2.4	4.4	5.6	6.2	4.5	4.9	8.4	7.7	8.0	8.7	10.7	7.1	5.2	4.5	1.1	1.6	2.9	4.6	10.7	0.8
9	3.5	3.4	2.6	1.5	1.0	2.0	2.1	2.3	2.4	2.1	1.3	1.0	2.2	5.9	7.6	8.8	8.2	8.0	6.7	5.7	6.0	6.8	6.4	6.1	4.3	8.8	1.0
10	5.0	3.4	1.4	1.0	0.8	0.7	0.7	0.6	1.6	0.9	1.2	0.8	1.4	5.3	5.6	5.7	7.7	6.4	6.8	5.0	5.3	5.8	3.8	1.4	3.3	7.7	0.6
11	2.1	2.0	1.4	1.2	1.3	1.4	1.1	0.8	0.8	0.8	0.7	2.6	4.1	3.0	3.3	3.5	2.5	1.7	1.3	1.2	4.0	6.9	4.9	6.0	2.4	6.9	0.7
12	6.8	7.2	8.6	8.0	7.5	6.3	7.5	7.7	9.5	9.8	9.1	9.3	9.3	9.5	8.8	7.1	5.9	6.5	5.0	2.9	1.2	2.0	1.4	1.3	6.6	9.8	1.2
13	1.1	0.6	0.8	1.0	3.0	5.4	5.8	6.4	6.6	8.3	8.4	7.8	6.3	7.2	6.5	4.9	6.7	8.1	6.4	5.3	4.5	3.4	5.3	3.4	5.1	8.4	0.6
14	3.0	2.1	2.6	0.8	1.6	1.2	1.1	0.8	0.9	1.1	2.8	2.4	2.6	1.7	1.3	2.1	1.8	2.0	3.6	2.8	3.4	3.8	1.9	2.1	2.1	3.8	0.8
15	2.1	1.4	1.3	2.1	0.9	0.8	1.0	5.6	5.4	2.4	3.1	4.2	4.3	3.9	3.3	2.7	3.4	1.7	1.4	1.3	1.3	1.3	1.8	2.3	2.5	5.6	0.8
16	5.0	2.6	5.5	5.8	5.6	2.0	2.3	1.5	5.3	3.9	6.7	8.9	9.7	10.3	8.0	8.0	9.2	9.8	7.8	7.0	6.0	4.0	2.5	2.3	5.8	10.3	1.5
17	3.5	3.4	1.3	2.3	2.3	2.3	2.6	1.5	1.0	1.2	1.1	1.9	3.6	3.8	4.1	4.4	2.6	4.2	5.0	7.1	6.2	4.6	2.9	1.8	3.1	7.1	1.0
18	1.0	0.7	1.1	1.4	1.4	2.5	2.5	1.1	3.7	6.0	6.2	4.0	6.6	8.8	8.2	7.2	7.7	6.0	7.2	4.5	6.2	4.6	2.8	3.6	4.4	8.8	0.7
19	6.0	4.6	3.5	2.8	1.7	1.3	1.4	1.5	2.9	4.9	5.1	4.5	5.2	7.5	8.0	7.7	6.3	6.2	5.1	5.1	2.7	1.2	1.2	1.8	4.1	8.0	1.2
20	2.1	1.3	1.3	0.8	1.3	1.3	0.9	0.8	1.0	1.0	2.3	2.3	4.9	7.0	7.2	7.8	8.5	6.2	5.0	5.0	4.0	5.5	5.2	5.2	3.7	8.5	0.8
21	5.6	5.6	6.0	6.7	6.6	6.2	6.1	5.2	6.4	7.5	8.1	8.8	9.1	7.9	6.9	7.6	8.3	7.9	6.5	3.1	1.8	1.9	2.0	1.7	6.0	9.1	1.7
22	1.0	1.4	2.8	2.5	2.0	1.7	1.4	1.0	1.2	4.8	5.2	5.1	5.3	5.4	4.9	4.2	3.6	2.6	0.9	1.5	2.1	2.4	1.8	0.8	2.7	5.4	0.8
23	1.0	0.7	0.9	1.3	1.4	1.4	1.4	1.1	2.1	Au	Au	Ca	5.2	4.5	5.2	5.3	5.0	4.4	3.4	2.3	2.5	2.4	1.2	1.4	2.6	5.3	0.7
24	1.3	1.0	1.7	1.4	1.2	1.8	1.5	1.2	1.7	5.5	7.1	6.3	8.3	8.8	8.9	8.1	6.3	6.4	8.3	8.1	6.6	6.4	8.8	5.8	5.1	8.9	1.0
25	5.3	6.8	2.9	1.0	3.4	3.1	3.1	2.4	4.7	4.6	3.4	4.5	5.3	6.2	4.7	3.4	2.7	2.5	1.7	2.2	2.7	1.9	1.4	1.5	3.4	6.8	1.0
26	1.2	1.0	1.3	1.2	0.9	0.8	0.8	0.8	2.2	4.2	5.6	3.8	4.0	3.8	4.2	4.2	3.7	2.9	1.7	3.1	2.3	3.1	3.1	1.1	2.5	5.6	0.8
27	1.8	1.1	0.9	1.1	0.7	0.5	1.0	1.1	0.7	1.0	3.5	3.1	3.7	4.0	3.8	3.8	4.0	3.0	1.9	1.2	0.8	1.1	1.0	0.7	1.9	4.0	0.5
28	Wx	Wx	Wx	Wx	Wx	Wx	Wx	Wx	1.8	4.5	5.0	5.9	6.0	6.3	6.1	5.8	6.6	5.7	3.5	3.3	2.5	2.9	1.2	2.8	4.4	6.6	1.2
29	2.1	1.5	2.5	3.4	2.7	0.9	1.4	1.1	2.1	3.1	3.8	4.6	5.1	5.0	5.3	3.1	3.6	2.2	2.6	2.0	2.4	2.9	1.6	1.2	2.8	5.3	0.9
30	1.6	1.3	1.2	0.8	1.0	1.3	0.9	0.7	0.7	1.1	1.0	1.9	2.5	5.6	2.8	2.6	5.2	3.7	2.7	5.0	3.0	2.3	1.8	1.7	2.2	5.6	0.7
31	2.5	2.8	3.3	3.5	3.8	4.9	3.6	5.6	6.8	6.7	6.6	4.6	4.9	4.5	5.2	5.5	4.8	3.6	2.3	2.6	1.7	1.1	1.4	1.9	3.9	6.8	1.1
Avg	3.3	3.1	3.0	2.7	2.7	2.6	2.5	2.6	3.3	4.4	5.0	5.3	5.7	6.1	5.9	5.7	5.6	5.4	4.5	3.8	3.4	3.4	3.1	2.7	4.0	7.6	1.0
Max	11.1	9.0	8.7	8.0	7.5	7.8	7.5	7.7	9.5	9.8	10.2	10.2	10.2	10.3	9.5	9.0	9.3	10.7	10.4	9.1	7.4	6.9	8.8	6.1	6.6	11.1	2.4
Min	1.0	0.6	0.8	0.8	0.7	0.5	0.7	0.6	0.7	0.8	0.7	0.8	1.4	1.7	1.3	2.1	1.8	1.7	0.9	0.8	0.7	1.1	1.0	0.7	1.9	3.8	0.5

A-3

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Direction (degrees)**  
**January 2017**

Day	<< Hour >>																								Prev
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	138	116	175	65	152	163	343	121	279	72	352	295	293	298	304	320	323	328	332	325	334	275	269	283	312
2	291	205	197	202	165	126	100	127	159	128	349	336	307	273	304	304	266	274	319	222	177	155	57	82	219
3	52	73	39	34	90	164	85	161	92	125	6	320	327	297	314	308	304	352	307	308	306	63	71	34	17
4	277	286	246	285	350	202	129	102	95	66	40	137	8	301	282	287	292	300	314	305	307	239	27	35	314
5	295	84	89	83	82	75	73	62	61	25	152	11	351	310	300	308	116	90	57	84	176	177	105	109	71
6	71	70	40	66	133	158	47	141	143	72	244	98	110	337	192	187	109	139	144	118	84	124	100	141	113
7	135	115	112	151	116	72	114	103	150	173	152	212	60	149	138	117	129	134	101	121	101	130	90	111	124
8	136	317	234	176	133	116	64	196	144	56	325	91	82	82	111	93	121	139	152	165	166	167	165	144	132
9	103	129	97	90	160	183	164	126	84	149	127	162	205	259	259	305	283	287	260	290	263	288	273	251	205
10	235	256	167	116	142	147	62	96	141	173	146	301	246	250	258	293	256	280	300	320	326	319	244	189	234
11	288	173	332	98	329	86	53	322	96	68	106	183	281	270	306	267	318	338	35	27	85	7	155	356	7
12	84	175	145	18	127	159	158	131	312	169	139	185	352	307	341	357	171	92	112	80	128	59	99	108	114
13	90	77	130	116	132	16	33	107	207	129	62	34	332	321	311	268	290	101	82	59	40	54	57	78	64
14	56	115	116	112	118	137	112	72	123	149	94	174	97	34	312	269	327	98	103	77	103	126	143	166	109
15	138	132	97	92	96	125	93	145	66	120	132	75	322	307	277	286	321	132	84	36	51	53	50	15	80
16	351	56	38	2	65	79	85	53	96	82	181	16	28	324	307	307	16	77	106	76	47	32	38	66	45
17	119	142	148	161	111	153	135	177	130	112	98	92	153	18	117	350	175	106	103	139	132	186	131	127	129
18	129	115	131	151	142	119	108	123	159	165	155	163	176	182	183	165	197	120	91	102	118	134	135	104	140
19	77	149	136	135	132	154	132	109	118	118	153	136	168	150	153	150	151	143	140	123	133	150	156	181	140
20	8	183	162	232	144	130	146	40	144	31	126	158	177	187	188	183	145	154	126	106	125	87	107	44	137
21	142	133	147	92	69	93	88	117	158	159	143	73	117	342	264	266	269	245	189	72	94	103	24	11	114
22	28	153	69	29	87	123	281	127	124	119	344	323	127	141	162	145	141	104	125	295	144	150	160	153	123
23	169	140	145	155	277	193	135	81	314	9	295	292	296	260	317	322	266	283	82	172	3	111	72	59	277
24	38	292	135	242	107	27	92	140	195	121	167	328	327	299	284	288	296	318	273	128	122	84	77	83	69
25	79	71	102	343	107	163	147	139	159	357	57	315	256	262	259	272	287	336	1	142	80	113	146	155	110
26	137	67	159	27	339	59	34	103	267	119	232	269	265	268	260	263	269	270	289	292	78	89	68	84	316
27	66	64	33	52	66	10	134	326	92	47	25	325	313	313	306	301	301	333	51	81	76	90	39	2	25
28	100	9	6	68	46	45	140	68	69	326	102	266	271	253	261	274	205	113	133	116	21	58	66	55	60
29	62	72	72	41	40	53	35	39	350	47	341	11	286	263	277	300	261	139	298	308	32	343	275	283	355
30	293	291	305	286	76	55	61	89	221	121	145	251	265	273	272	266	257	274	276	286	283	277	288	287	278
31	285	281	274	268	294	279	303	323	331	318	333	344	183	290	327	8	23	9	112	210	240	239	306	296	301
Prev	85	116	119	90	103	117	95	106	127	100	106	332	290	286	274	285	263	84	85	90	88	106	91	84	102

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Direction (degrees)**  
**February 2017**

Day	<< Hour >>																								Prev
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	299	301	311	323	307	300	291	301	326	344	343	307	300	307	333	315	293	14	94	68	81	104	168	102	328
2	92	150	3	112	132	37	351	130	340	77	165	7	331	268	275	258	241	160	129	114	110	143	134	144	117
3	154	141	140	158	139	152	162	149	136	124	106	91	134	127	148	113	108	69	79	100	130	180	128	127	129
4	87	10	344	26	317	297	310	312	17	306	327	9	303	29	318	259	340	314	168	168	319	283	187	144	326
5	153	102	136	118	166	178	185	190	196	210	214	217	222	219	220	214	212	194	187	183	184	181	187	179	187
6	190	192	186	184	294	312	160	167	84	80	96	117	160	211	175	313	133	317	311	314	327	97	154	153	169
7	90	115	134	93	352	123	300	294	155	22	174	166	201	331	293	314	295	297	312	292	326	326	317	322	313
8	300	324	3	152	134	119	290	39	131	93	132	188	294	308	288	143	118	118	99	132	130	119	121	123	121
9	99	113	135	168	194	338	113	93	82	123	202	206	203	216	212	200	212	205	194	181	182	195	211	227	178
10	262	292	292	269	258	194	160	256	262	247	242	261	263	257	252	250	281	233	211	130	106	186	244	272	245
11	281	256	253	23	255	262	287	267	274	277	281	286	286	272	266	265	264	257	263	263	251	289	267	282	272
12	6	87	90	91	109	100	126	99	123	119	140	350	288	281	284	281	66	244	122	127	106	100	73	39	94
13	94	62	74	25	107	31	50	35	84	304	163	17	267	260	264	270	301	141	110	74	37	60	31	37	47
14	61	5	45	9	32	20	24	21	19	141	107	122	124	22	305	265	322	227	111	115	94	109	135	137	64
15	150	138	154	137	125	99	150	119	157	173	32	123	183	193	189	210	159	133	101	90	111	92	83	168	138
16	147	164	176	128	125	95	171	177	158	141	152	204	222	200	209	219	206	207	214	216	214	228	164	155	180
17	225	247	236	196	254	252	182	244	275	266	253	272	275	282	258	247	65	140	101	112	114	123	115	137	219
18	353	105	95	133	148	171	146	147	164	144	131	189	188	194	189	163	175	164	113	71	65	155	100	102	141
19	88	128	111	111	32	149	147	153	163	168	268	135	203	158	146	141	166	130	28	322	117	145	162	141	140
20	86	102	72	97	91	107	106	147	160	85	142	159	183	205	180	100	219	212	211	211	217	182	90	100	143
21	128	98	143	127	131	287	73	129	95	206	216	216	226	320	332	292	320	295	270	238	218	223	230	247	220
22	273	268	283	287	293	289	287	268	270	265	269	274	286	300	290	264	293	360	345	350	186	307	28	105	290
23	132	105	68	49	90	107	56	19	66	30	352	26	54	82	139	146	164	152	157	153	156	152	142	158	104
24	145	124	90	85	332	344	197	194	317	333	360	328	276	288	323	321	307	306	317	28	42	59	94	52	352
25	95	48	95	314	207	151	171	106	125	271	266	266	264	267	270	278	278	268	278	272	270	273	274	273	259
26	273	278	277	273	249	283	304	308	318	280	266	247	225	261	278	261	256	268	265	261	263	259	262	304	271
27	300	264	278	246	179	162	178	228	91	294	357	331	212	237	251	269	246	179	143	179	135	124	124	132	210
28	174	170	195	140	125	126	81	82	122	159	214	243	246	261	268	270	267	276	283	285	284	281	281	285	230
Prev	128	125	117	114	153	135	155	157	122	184	204	239	239	258	254	250	247	219	164	155	142	161	149	144	188

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Direction (degrees)**  
**March 2017**

Day	<< Hour >>																								Prev
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	286	281	284	277	261	277	292	264	281	254	263	268	266	257	262	262	272	277	279	278	277	279	278	285	273
2	302	311	237	157	275	269	256	265	270	266	255	256	266	274	105	75	82	82	100	119	123	224	231	242	243
3	226	234	244	318	297	274	258	277	272	235	219	252	242	212	224	192	174	190	202	184	171	173	166	187	224
4	128	186	208	208	202	194	176	195	178	161	178	222	211	208	206	208	197	190	181	184	255	11	108	135	189
5	147	151	156	154	149	354	356	284	184	177	203	205	206	246	228	283	93	203	281	149	322	311	315	296	219
6	309	286	297	300	307	303	160	88	48	296	287	285	268	261	262	283	265	278	268	35	110	98	282	302	291
7	275	270	267	274	273	268	273	267	268	267	270	268	272	269	273	287	296	301	277	300	119	90	92	121	273
8	115	131	127	164	170	100	133	268	268	274	281	285	264	283	295	291	284	287	280	295	302	276	277	295	266
9	280	309	316	314	327	313	314	291	291	264	321	336	329	165	166	163	162	161	161	162	159	161	158	155	245
10	160	162	145	156	203	344	50	165	108	76	25	314	324	272	266	291	286	280	274	292	277	284	287	132	267
11	129	79	86	76	115	104	75	110	55	127	8	285	246	211	209	161	132	109	121	128	200	221	245	282	133
12	277	285	279	280	277	274	277	282	280	280	275	273	276	281	282	290	294	277	275	261	158	120	120	81	274
13	87	45	144	114	264	268	266	266	265	269	265	266	261	272	283	269	269	257	277	278	310	247	288	271	269
14	290	311	310	95	46	109	133	139	162	46	84	79	78	58	86	64	106	90	78	79	86	91	97	108	85
15	93	166	154	107	24	99	353	269	289	271	284	281	292	257	261	262	238	337	121	116	72	357	287	292	286
16	272	190	240	277	279	220	146	56	272	269	267	262	261	269	289	289	277	254	271	276	291	280	283	283	267
17	304	331	141	108	93	85	93	62	128	39	27	265	165	184	191	183	158	154	172	160	166	170	153	146	141
18	103	147	203	138	134	114	127	110	120	162	199	196	196	201	203	192	188	196	236	182	220	216	215	197	177
19	290	296	299	282	241	195	29	44	287	292	294	281	263	267	262	268	296	306	314	298	258	221	3	75	288
20	116	102	92	84	101	83	80	116	100	321	183	261	154	149	148	149	155	153	154	145	159	155	157	159	134
21	158	158	158	150	155	156	158	163	162	165	167	169	175	171	170	170	170	168	167	138	114	113	87	99	154
22	90	320	334	149	301	235	161	96	54	283	281	284	274	263	265	271	286	280	276	130	56	48	75	81	297
23	109	5	18	23	88	33	80	103	313	Au	Au	Ca	262	266	271	281	259	249	247	224	104	99	89	139	26
24	130	79	131	120	138	152	166	176	135	168	165	177	174	192	186	190	199	179	214	214	202	217	250	260	176
25	236	281	305	73	288	255	277	227	262	263	262	260	261	265	277	266	246	287	280	130	92	101	61	70	266
26	86	135	125	135	166	146	118	154	184	266	267	268	264	228	242	250	231	183	130	100	116	142	225	56	174
27	116	140	131	141	137	358	163	131	344	360	294	287	250	257	303	297	307	269	292	179	137	313	301	279	267
28	269	237	252	180	136	138	123	38	259	264	263	244	236	242	252	259	263	258	259	233	248	238	225	257	240
29	264	202	300	266	271	173	167	89	290	265	251	228	213	175	175	187	203	161	216	235	273	242	263	169	223
30	120	137	138	138	111	143	119	133	119	332	327	174	135	102	191	269	343	327	358	22	45	305	307	323	94
31	310	297	304	307	313	323	359	334	327	338	350	21	144	257	254	247	262	72	53	89	112	113	95	114	340
Prev	186	223	217	152	215	199	137	161	254	269	268	260	241	237	237	246	238	233	239	181	161	196	234	183	230

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Standard Deviation of Wind Direction (degrees)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	76	53	64	78	51	73	85	72	83	96	84	22	13	9	10	7	7	10	14	10	31	36	14	24	43	96	7
2	15	70	34	53	43	66	89	42	100	37	46	87	17	19	15	7	21	36	44	52	54	73	87	31	47	100	7
3	51	56	58	85	83	90	76	86	94	51	86	58	50	42	22	14	36	75	39	19	62	65	98	49	60	98	14
4	54	24	33	46	52	77	44	47	22	38	87	89	48	14	7	9	10	14	19	11	9	48	78	39	38	89	7
5	71	9	9	7	7	9	9	16	18	44	88	86	44	35	28	11	98	25	33	28	38	89	41	41	37	98	7
6	48	48	51	45	38	74	85	50	84	71	98	82	65	79	50	87	90	35	30	39	17	28	22	30	56	98	17
7	23	28	27	38	30	58	43	49	40	46	90	86	86	15	10	64	54	29	21	15	18	26	38	24	40	90	10
8	42	43	84	71	57	98	65	101	92	66	53	55	13	13	28	74	46	19	13	7	8	7	7	32	46	101	7
9	22	10	16	13	24	6	93	73	50	47	19	22	12	40	41	10	15	10	22	19	22	10	18	22	27	93	6
10	24	17	34	40	47	12	72	86	84	84	79	66	12	11	10	15	12	13	14	6	15	14	49	49	36	86	6
11	40	81	63	72	53	31	56	92	61	65	80	97	66	63	12	27	43	62	64	43	39	93	91	83	62	97	12
12	91	92	82	79	75	93	62	69	76	67	80	84	71	63	54	71	87	36	23	73	47	63	48	56	68	93	23
13	94	100	68	67	101	70	83	66	97	89	97	93	55	65	83	78	67	46	23	41	31	50	52	50	69	101	23
14	62	54	58	80	55	85	79	92	82	74	95	87	94	72	38	13	71	26	29	49	35	40	60	55	62	95	13
15	55	66	34	42	67	38	65	38	76	68	44	66	42	15	47	12	88	43	38	35	35	35	41	56	48	88	12
16	46	77	54	64	60	53	54	65	52	83	88	83	54	40	16	14	39	30	32	40	43	41	68	79	53	88	14
17	52	57	65	81	76	80	80	52	76	76	82	69	87	66	73	91	77	52	89	71	61	75	37	30	69	91	30
18	24	28	56	30	32	38	25	12	18	21	19	22	17	9	9	14	47	64	9	15	20	52	38	70	29	70	9
19	52	57	46	18	30	10	24	14	26	80	48	28	83	10	5	14	7	8	6	17	48	17	28	64	31	83	5
20	71	69	27	82	56	74	81	96	68	87	31	19	9	23	37	22	14	20	38	27	30	54	28	52	46	96	9
21	25	23	14	54	50	49	54	59	54	78	59	65	53	62	11	12	26	93	76	29	67	35	71	34	48	93	11
22	72	66	58	53	38	45	67	48	74	88	80	32	56	16	13	7	23	18	49	57	86	14	6	13	45	88	6
23	23	23	67	59	93	88	56	67	97	42	23	14	17	13	33	18	12	28	67	49	76	23	41	83	46	97	12
24	67	91	38	87	75	92	69	78	71	43	62	84	14	30	17	15	28	11	36	49	35	12	13	15	47	92	11
25	12	29	83	34	66	68	53	89	56	75	45	78	8	5	8	13	26	63	65	60	10	21	32	46	44	89	5
26	81	88	67	59	56	42	91	79	71	79	63	13	10	12	7	8	10	10	33	13	93	14	42	39	45	93	7
27	50	42	43	35	61	60	66	79	83	72	72	29	19	17	12	17	14	18	38	24	31	27	33	63	42	83	12
28	59	60	57	51	38	83	64	96	68	92	66	94	36	10	12	13	45	36	37	67	53	29	23	23	51	96	10
29	39	35	46	44	46	51	74	56	78	72	83	82	36	8	33	12	59	63	23	14	46	72	14	18	46	83	8
30	16	21	46	49	72	73	61	72	81	57	75	8	9	15	14	11	9	11	10	8	9	11	8	7	31	81	7
31	9	9	9	21	11	14	6	18	13	7	13	44	49	23	13	61	27	25	64	30	66	52	31	20	26	66	6
Avg	47	49	48	53	53	58	62	63	66	64	66	59	40	29	25	27	39	33	35	33	40	40	41	42	46	91	11
Max	94	100	84	87	101	98	93	101	100	96	98	97	94	79	83	91	98	93	89	73	93	93	98	83	69	101	30
Min	9	9	9	7	7	6	6	12	13	7	13	8	8	5	5	7	7	8	6	6	8	7	6	7	26	66	5

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Standard Deviation of Wind Direction (degrees)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	12	12	10	5	17	6	19	19	5	21	35	15	20	16	36	17	17	26	47	46	47	50	83	43	26	83	5
2	63	78	81	86	81	80	97	40	49	63	76	62	49	25	12	6	40	18	37	34	18	31	29	19	49	97	6
3	22	32	26	29	27	23	30	27	21	25	49	15	13	12	29	22	14	21	13	23	78	38	27	57	28	78	12
4	53	47	71	91	18	13	44	18	91	83	39	60	98	65	76	30	56	49	38	36	80	20	34	45	52	98	13
5	39	64	93	46	21	17	13	11	14	11	14	14	11	10	10	8	8	10	9	7	9	6	8	10	19	93	6
6	7	14	22	14	74	85	7	35	42	30	21	24	23	17	74	25	76	32	26	72	64	50	40	61	39	85	7
7	61	72	75	47	73	95	94	97	72	91	90	78	90	44	66	14	10	14	4	14	23	19	23	7	53	97	4
8	55	76	65	85	46	72	75	90	62	87	69	69	7	14	64	13	28	24	20	21	24	36	30	36	49	90	7
9	19	25	28	46	47	93	45	31	35	29	11	10	10	12	14	18	14	11	9	8	7	8	10	14	23	93	7
10	14	11	12	9	13	31	74	15	13	12	15	10	9	9	11	15	14	37	17	44	27	57	34	15	22	74	9
11	11	12	25	56	74	11	19	13	11	11	10	12	10	12	11	8	8	10	9	13	29	72	37	39	22	74	8
12	69	31	29	40	43	45	28	98	81	69	89	65	11	14	13	34	74	73	70	48	35	39	38	58	50	98	11
13	42	82	47	71	50	66	54	43	63	73	78	63	21	8	9	12	41	51	19	38	53	38	39	44	46	82	8
14	49	51	80	49	81	43	72	35	54	31	87	84	55	26	13	20	52	92	25	26	16	32	37	37	48	92	13
15	17	34	45	37	86	77	23	80	37	76	78	53	24	13	18	21	66	38	14	4	47	50	59	26	43	86	4
16	21	28	23	12	16	13	36	13	12	14	26	8	19	14	8	10	6	7	10	8	10	14	45	36	17	45	6
17	11	11	50	36	66	13	64	43	15	13	11	15	14	25	32	24	48	56	27	18	16	19	64	53	31	66	11
18	97	64	20	54	16	13	13	13	16	73	22	21	18	15	16	12	10	14	21	81	64	24	35	33	32	97	10
19	10	38	19	92	86	48	15	9	11	12	37	42	35	22	14	11	19	26	52	18	28	37	63	82	34	92	9
20	38	52	45	45	65	42	60	14	51	50	18	11	16	15	36	76	11	10	10	9	12	44	7	18	31	76	7
21	22	61	44	26	27	50	96	86	83	15	12	12	43	11	19	18	18	27	24	11	11	10	11	10	31	96	10
22	13	10	10	9	10	9	8	18	11	11	15	14	9	18	24	17	21	50	49	97	31	61	64	45	26	97	8
23	61	58	68	27	28	42	36	46	64	22	16	34	33	23	24	7	7	7	6	8	6	7	17	14	28	68	6
24	25	18	8	11	38	29	86	98	62	32	25	48	20	16	16	10	17	19	41	68	68	21	32	37	35	98	8
25	33	59	83	91	92	47	64	60	45	63	10	11	10	11	13	12	11	10	10	13	13	10	9	10	33	92	9
26	10	11	12	11	15	16	14	14	14	28	14	15	19	21	14	17	7	35	14	17	14	10	17	17	16	35	7
27	7	12	16	38	57	26	66	81	46	63	47	41	18	17	17	18	41	39	10	64	33	25	35	46	36	81	7
28	61	80	79	66	78	91	30	12	35	45	38	19	14	11	13	14	13	10	8	10	8	8	8	7	32	91	7
Avg	34	41	42	44	48	43	46	41	40	41	38	33	26	18	25	18	27	29	23	31	31	30	33	33	34	84	8
Max	97	82	93	92	92	95	97	98	91	91	90	84	98	65	76	76	76	92	70	97	80	72	83	82	53	98	13
Min	7	10	8	5	10	6	7	9	5	11	10	8	7	8	8	6	6	7	4	4	6	6	7	7	16	35	4

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Standard Deviation of Wind Direction (degrees)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	7	8	9	61	29	17	20	30	27	11	15	11	10	11	13	10	11	9	9	8	8	9	10	12	15	61	7
2	8	8	62	42	43	16	13	10	10	14	9	11	18	24	49	14	9	8	18	26	88	60	17	10	24	88	8
3	58	11	14	41	60	34	9	15	16	22	17	14	18	31	30	28	13	12	9	17	17	13	9	18	22	60	9
4	27	23	7	11	10	15	16	13	34	27	61	12	17	11	11	9	14	8	11	17	53	86	27	40	23	86	7
5	13	16	58	55	63	56	56	80	13	16	10	12	14	15	22	20	42	98	49	70	65	24	18	26	38	98	10
6	11	15	9	8	9	52	63	25	50	11	13	13	14	11	11	10	15	14	32	89	49	19	74	22	27	89	8
7	11	12	10	10	10	10	11	9	10	11	12	11	11	15	12	10	13	10	19	78	41	8	7	27	16	78	7
8	56	11	14	13	25	61	96	26	9	12	9	10	18	14	13	13	13	10	11	10	22	49	15	19	23	96	9
9	12	13	7	15	25	8	6	13	16	17	15	18	88	10	6	5	5	6	8	8	7	6	6	6	14	88	5
10	8	9	25	28	74	72	69	99	70	86	86	42	49	13	13	13	9	10	11	13	12	8	16	79	38	99	8
11	19	44	59	61	62	41	66	83	69	57	28	64	23	19	16	14	10	27	45	44	31	11	22	10	39	83	10
12	11	9	9	9	10	10	9	7	9	9	11	11	11	9	9	11	11	8	10	24	61	50	25	63	17	63	7
13	86	79	64	40	77	11	9	9	8	10	12	13	10	11	10	12	12	9	11	10	16	49	15	14	25	86	8
14	16	20	36	48	30	15	39	21	25	47	10	11	12	40	46	28	43	47	14	27	54	46	53	56	33	56	10
15	28	59	43	27	53	64	89	21	14	38	14	10	35	16	12	16	13	80	52	30	65	58	46	42	39	89	10
16	17	58	16	10	10	81	68	71	15	23	15	10	14	13	19	12	11	9	12	9	13	19	55	39	26	81	9
17	13	52	92	25	29	16	28	43	68	45	33	82	27	28	20	15	13	16	11	9	8	9	13	28	30	92	8
18	85	93	77	58	46	29	20	67	42	21	12	26	16	9	8	8	8	15	28	26	16	20	38	16	33	93	8
19	13	6	11	12	56	89	69	49	16	18	12	24	17	15	13	14	13	12	9	12	39	41	91	31	28	91	6
20	33	53	57	62	45	51	81	87	46	32	74	58	16	10	8	8	7	9	8	12	10	10	9	10	33	87	7
21	7	11	9	10	9	6	8	11	11	9	8	7	8	8	9	7	7	8	10	21	27	27	38	67	14	67	6
22	89	61	68	29	79	71	31	59	57	28	19	26	21	23	26	22	20	15	39	28	50	34	44	68	42	89	15
23	53	76	73	74	42	59	67	87	67	Au	Au	Ca	28	31	23	17	22	15	11	62	31	46	39	30	45	87	11
24	20	66	18	36	40	17	24	38	59	18	15	22	18	19	16	15	13	15	12	8	16	25	16	12	23	66	8
25	11	27	25	93	54	12	25	49	17	13	31	18	22	20	21	18	39	16	42	43	19	40	60	56	32	93	11
26	64	64	38	38	79	76	34	53	76	17	14	22	18	36	32	24	26	35	19	13	26	75	29	46	40	79	13
27	26	20	25	31	47	78	65	60	38	50	34	28	17	24	29	45	26	38	31	69	83	64	51	57	43	83	17
28	26	40	63	47	61	51	54	92	89	21	18	21	17	22	20	19	13	16	13	30	22	28	50	16	35	92	13
29	33	83	65	18	32	39	34	69	28	25	24	36	13	19	12	23	21	40	37	56	21	13	31	55	34	83	12
30	39	52	46	49	59	31	69	53	68	84	69	78	56	15	25	45	26	33	31	15	53	30	25	49	46	84	15
31	39	23	18	8	9	20	21	16	12	10	14	33	58	21	13	14	17	36	49	24	28	68	29	21	25	68	8
Avg	30	36	36	34	41	39	41	44	35	27	24	25	23	18	18	17	17	22	22	29	34	34	32	34	30	82	9
Max	89	93	92	93	79	89	96	99	89	86	86	82	88	40	49	45	43	98	52	89	88	86	91	79	46	99	17
Min	7	6	7	8	9	6	6	7	8	9	8	7	8	8	6	5	5	6	8	8	7	6	6	6	14	56	5

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 9 Meters (degrees Celsius)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	-18.9	-18.5	-19.7	-19.8	-19.6	-19.3	-17.8	-16.0	-15.2	-14.1	-12.8	-11.2	-11.0	-12.2	-13.1	-13.3	-14.0	-15.2	-15.6	-16.1	-16.1	-16.8	-16.9	-17.8	-15.9	-11.0	-19.8
2	-18.2	-19.2	-20.7	-23.0	-25.4	-26.7	-29.1	-29.3	-30.1	-28.6	-26.9	-23.1	-20.7	-19.8	-19.8	-20.0	-20.5	-21.2	-21.7	-22.6	-23.5	-24.0	-24.4	-25.8	-23.5	-18.2	-30.1
3	-27.2	-28.2	-29.2	-30.3	-29.8	-29.1	-27.9	-26.9	-26.2	-25.2	-23.9	-22.0	-20.0	-18.1	-18.0	-18.2	-19.4	-20.1	-20.7	-21.4	-22.6	-22.5	-22.0	-22.0	-23.8	-18.0	-30.3
4	-21.9	-21.8	-21.6	-21.6	-22.3	-23.7	-23.2	-25.8	-28.3	-28.6	-26.4	-22.9	-19.7	-17.6	-16.9	-17.0	-16.9	-16.3	-16.2	-16.8	-18.3	-19.8	-21.3	-21.2	-21.1	-16.2	-28.6
5	-20.5	-22.0	-22.5	-22.7	-23.2	-24.0	-24.7	-25.6	-26.6	-27.6	-26.3	-23.4	-19.6	-16.4	-15.8	-15.8	-17.1	-20.6	-22.0	-22.8	-22.7	-22.9	-23.5	-25.2	-22.2	-15.8	-27.6
6	-25.4	-26.2	-26.6	-26.6	-26.2	-25.5	-25.0	-24.6	-24.5	-22.9	-20.4	-17.4	-14.2	-12.0	-10.4	-10.5	-13.2	-14.6	-15.2	-16.3	-16.3	-18.7	-18.5	-20.8	-19.7	-10.4	-26.6
7	-20.9	-21.3	-20.8	-21.5	-22.6	-23.0	-22.0	-22.7	-22.2	-22.0	-19.7	-17.1	-12.7	-7.1	-6.3	-6.3	-8.7	-10.1	-10.0	-10.5	-9.0	-8.3	-8.5	-8.3	-15.1	-6.3	-23.0
8	-8.3	-8.4	-8.4	-8.8	-8.9	-8.5	-8.2	-7.8	-7.3	-7.0	-6.2	-5.1	-3.1	-2.4	-2.2	-1.8	-2.3	-2.3	-2.6	-3.9	-4.4	-4.1	-4.1	-3.6	-5.4	-1.8	-8.9
9	-1.8	-0.8	-0.3	0.0	-0.6	0.6	0.0	-0.6	-0.2	0.3	1.1	2.6	3.4	1.3	0.0	0.0	-2.4	-2.5	-2.5	-3.1	-3.7	-4.5	-5.0	-6.1	-1.0	3.4	-6.1
10	-6.3	-6.3	-8.6	-9.6	-10.8	-12.8	-13.3	-12.3	-11.7	-11.7	-10.8	-7.7	-4.4	-4.9	-5.1	-5.4	-14.3	-19.4	-18.5	-19.2	-20.0	-20.6	-21.5	-21.8	-12.4	-4.4	-21.8
11	-21.8	-21.5	-21.2	-20.8	-21.5	-22.7	-23.7	-24.0	-24.3	-25.4	-24.5	-21.6	-18.9	-17.1	-17.1	-17.2	-17.1	-16.9	-17.6	-18.8	-21.7	-23.5	-25.0	-26.5	-21.3	-16.9	-26.5
12	-26.7	-27.4	-27.1	-28.3	-27.2	-28.4	-28.3	-26.7	-24.8	-21.7	-20.3	-18.2	-15.3	-12.7	-9.4	-8.6	-9.3	-12.0	-15.8	-18.5	-18.6	-20.2	-20.4	-21.4	-20.3	-8.6	-28.4
13	-22.1	-22.3	-22.2	-22.7	-23.1	-22.6	-22.7	-22.8	-23.6	-22.0	-19.6	-16.4	-12.0	-6.5	-4.9	-5.0	-5.4	-10.0	-13.4	-15.3	-16.8	-18.7	-19.7	-20.1	-17.1	-4.9	-23.6
14	-20.8	-20.9	-21.9	-22.3	-22.7	-23.6	-23.3	-24.2	-22.4	-21.9	-19.3	-16.6	-13.0	-8.1	-3.8	-3.1	-4.2	-8.3	-12.1	-14.3	-15.9	-16.4	-16.9	-17.5	-16.4	-3.1	-24.2
15	-19.1	-19.0	-18.3	-18.4	-18.2	-19.0	-18.9	-18.8	-19.6	-17.1	-14.6	-11.9	-6.3	-2.5	-2.3	-2.4	-3.7	-7.6	-10.8	-12.0	-13.4	-14.7	-16.4	-17.3	-13.4	-2.3	-19.6
16	-17.4	-18.2	-19.2	-18.9	-19.2	-19.5	-19.8	-20.2	-20.8	-19.3	-17.3	-13.9	-6.5	-3.5	-2.5	-2.5	-2.8	-4.5	-8.2	-9.8	-10.8	-12.1	-12.6	-12.8	-13.0	-2.5	-20.8
17	-13.8	-13.6	-14.1	-14.0	-14.1	-14.0	-13.2	-13.5	-13.7	-13.0	-11.9	-9.6	-6.9	-4.5	-1.2	0.2	0.6	-1.7	-3.9	-5.3	-6.0	-5.4	-4.7	-2.5	-8.3	0.6	-14.1
18	0.7	-2.0	-2.9	-4.4	-3.9	-2.1	1.8	2.5	2.8	3.2	4.2	5.5	5.9	5.8	5.0	5.0	3.8	1.0	0.5	-1.7	-3.2	-3.9	-3.9	-4.0	0.7	5.9	-4.4
19	-4.8	-2.3	1.9	1.6	1.8	0.7	0.3	0.6	0.8	0.6	1.2	1.5	1.9	1.9	1.8	1.7	1.1	0.4	0.4	0.3	0.2	-0.3	-1.3	-1.9	0.4	1.9	-4.8
20	-2.1	-2.6	-3.3	-3.2	-3.3	-4.3	-5.4	-6.3	-5.9	-5.6	-3.8	-2.9	-1.2	-0.7	-0.4	-0.5	-1.1	-4.5	-6.0	-8.8	-11.2	-12.7	-13.5	-14.1	-5.1	-0.4	-14.1
21	-14.6	-14.7	-14.7	-16.0	-15.9	-16.8	-16.2	-16.5	-16.2	-14.8	-12.9	-10.7	-8.7	-4.1	-1.7	-2.2	-2.7	-3.5	-4.4	-4.4	-6.8	-9.1	-9.1	-8.2	-10.2	-1.7	-16.8
22	-8.5	-8.8	-10.4	-9.9	-10.4	-11.8	-12.3	-13.3	-15.0	-14.7	-12.3	-10.0	-4.7	-1.2	-0.7	-0.9	-2.2	-3.7	-5.0	-5.2	-4.1	-2.9	-3.7	-4.8	-7.4	-0.7	-15.0
23	-5.1	-5.7	-6.8	-7.6	-8.5	-10.3	-12.3	-10.8	-10.3	-8.8	-8.0	-7.6	-7.4	-7.2	-6.9	-6.6	-7.7	-8.2	-8.0	-8.1	-10.8	-12.6	-15.7	-16.4	-9.1	-5.1	-16.4
24	-16.8	-17.1	-18.1	-19.2	-20.1	-21.8	-22.4	-22.7	-23.3	-21.2	-19.6	-15.5	-10.8	-8.8	-7.3	-7.2	-6.6	-6.8	-8.5	-8.8	-10.0	-11.3	-11.8	-12.1	-14.5	-6.6	-23.3
25	-12.3	-12.7	-12.8	-12.9	-12.7	-12.9	-13.0	-13.3	-13.0	-12.5	-11.3	-8.7	-7.5	-7.2	-6.8	-6.7	-6.9	-7.5	-7.4	-8.2	-8.8	-9.7	-10.0	-10.3	-10.2	-6.7	-13.3
26	-10.8	-11.5	-11.7	-11.5	-12.2	-11.9	-12.0	-12.7	-14.1	-14.1	-11.1	-8.3	-7.0	-6.4	-5.9	-5.7	-5.8	-6.1	-6.4	-6.9	-8.7	-11.4	-14.0	-15.2	-10.1	-5.7	-15.2
27	-16.6	-16.7	-17.0	-17.3	-18.4	-18.6	-18.9	-18.9	-19.0	-17.4	-12.5	-9.3	-6.2	-5.5	-4.9	-4.8	-4.8	-5.5	-7.5	-10.2	-12.3	-13.0	-14.5	-14.3	-12.7	-4.8	-19.0
28	-15.2	-15.5	-14.7	-15.3	-16.6	-16.7	-16.6	-16.8	-16.9	-14.9	-12.4	-9.4	-2.5	0.1	0.1	0.4	-0.4	-2.3	-5.0	-6.8	-7.1	-7.1	-7.6	-8.6	-9.5	0.4	-16.9
29	-9.5	-10.7	-11.3	-12.0	-12.2	-12.9	-12.9	-12.1	-11.4	-9.8	-6.9	-1.6	3.3	4.9	4.9	5.4	5.3	3.5	3.3	2.7	0.2	-0.3	3.8	3.4	-3.5	5.4	-12.9
30	2.4	2.3	1.8	0.5	-0.1	-0.6	-1.1	-2.8	-5.6	-4.2	-1.9	0.6	0.8	1.0	1.5	1.6	1.7	1.4	1.6	1.2	0.7	0.0	-0.6	-1.0	0.0	2.4	-5.6
31	-1.3	-1.7	-3.0	-4.9	-5.6	-6.2	-6.3	-7.4	-8.6	-9.2	-8.8	-8.8	-9.5	-9.5	-9.4	-9.9	-11.0	-11.6	-12.4	-12.8	-13.2	-13.2	-13.3	-13.5	-8.8	-1.3	-13.5
Avg	-13.7	-14.0	-14.4	-14.9	-15.3	-15.7	-15.8	-15.9	-16.0	-15.2	-13.4	-11.0	-8.2	-6.5	-5.8	-5.7	-6.7	-8.3	-9.4	-10.5	-11.4	-12.3	-12.8	-13.3	-11.9	-4.9	-18.4
Max	2.4	2.3	1.9	1.6	1.8	0.7	1.8	2.5	2.8	3.2	4.2	5.5	5.9	5.8	5.0	5.4	5.3	3.5	3.3	2.7	0.7	0.0	3.8	3.4	0.7	5.9	-4.4
Min	-27.2	-28.2	-29.2	-30.3	-29.8	-29.1	-29.1	-29.3	-30.1	-28.6	-26.9	-23.4	-20.7	-19.8	-19.8	-20.0	-20.5	-21.2	-22.0	-22.8	-23.5	-24.0	-25.0	-26.5	-23.8	-18.2	-30.3

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 9 Meters (degrees Celsius)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	-13.8	-14.5	-15.7	-15.5	-16.8	-16.7	-18.2	-19.8	-19.1	-18.3	-16.9	-15.8	-15.2	-14.5	-14.1	-14.3	-15.1	-16.2	-18.6	-20.9	-23.6	-25.2	-26.6	-27.0	-18.0	-13.8	-27.0
2	-28.1	-28.9	-29.8	-30.1	-30.5	-31.7	-31.3	-31.6	-32.5	-30.1	-28.2	-24.8	-20.3	-17.3	-16.5	-16.3	-16.5	-19.2	-22.6	-25.0	-26.0	-26.8	-27.5	-27.3	-25.8	-16.3	-32.5
3	-27.0	-26.3	-26.2	-25.6	-25.2	-24.6	-23.5	-20.3	-15.6	-11.5	-7.6	-4.1	-2.4	-0.8	-0.8	-1.7	0.0	0.2	-0.8	-0.9	-0.9	0.0	0.0	-0.3	-10.2	0.2	-27.0
4	-1.2	-2.6	-4.2	-4.9	-9.5	-12.2	-11.8	-13.0	-13.3	-12.4	-10.3	-8.7	-6.4	-3.2	-0.5	0.6	0.8	0.1	-2.1	-2.5	-2.0	-0.8	-2.1	-3.8	-5.3	0.8	-13.3
5	-3.5	-3.6	-3.2	-2.1	-0.7	0.1	0.3	0.7	0.8	1.8	2.6	2.9	3.6	4.1	4.2	4.0	4.1	3.2	2.5	2.8	2.7	2.7	2.6	2.8	1.5	4.2	-3.6
6	3.1	3.0	3.4	3.4	-2.7	-5.0	-3.7	-5.2	-4.9	-3.5	-1.9	-0.7	0.5	0.2	-1.8	-8.6	-6.0	-7.2	-12.3	-10.7	-9.9	-9.6	-8.8	-10.4	-4.1	3.4	-12.3
7	-10.8	-11.6	-12.1	-13.2	-15.8	-17.2	-18.7	-18.4	-19.5	-19.0	-16.7	-14.3	-11.3	-10.5	-11.3	-14.6	-15.3	-15.2	-17.0	-16.9	-16.7	-16.8	-17.0	-17.1	-15.3	-10.5	-19.5
8	-17.0	-16.6	-16.0	-17.1	-16.8	-16.5	-15.6	-14.7	-13.8	-12.7	-10.1	-7.3	-5.0	-4.6	-4.5	-4.4	-4.0	-4.4	-4.5	-4.6	-4.3	-3.9	-3.3	-2.9	-9.4	-2.9	-17.1
9	-1.8	-1.7	-1.5	-1.5	0.1	0.8	1.5	2.5	2.6	3.8	6.9	7.7	7.9	8.4	8.2	7.7	7.9	7.3	6.9	6.3	6.3	6.6	6.6	6.8	4.4	8.4	-1.8
10	5.4	2.8	2.2	2.2	2.0	1.3	0.9	1.5	1.3	1.3	1.4	1.1	1.0	0.7	1.0	1.0	0.9	0.1	-0.6	-1.3	-2.6	-1.3	-0.4	-1.4	0.9	5.4	-2.6
11	-2.7	-3.3	-3.6	-3.9	-3.8	-3.6	-4.1	-4.5	-4.5	-4.5	-4.4	-3.9	-3.1	-2.9	-2.9	-3.2	-3.4	-4.0	-4.7	-5.4	-6.5	-6.3	-6.1	-6.4	-4.2	-2.7	-6.5
12	-7.0	-9.9	-10.8	-13.8	-14.6	-15.4	-16.2	-16.6	-15.5	-14.4	-9.8	-3.3	-0.8	-0.1	0.2	0.4	0.4	-0.5	-1.9	-4.4	-6.2	-8.1	-9.0	-10.0	-7.8	0.4	-16.6
13	-11.5	-11.9	-13.0	-13.1	-13.2	-13.7	-13.7	-13.7	-13.6	-11.4	-8.0	-2.9	1.9	2.9	3.3	3.3	3.1	1.8	-2.9	-4.1	-5.3	-6.8	-7.9	-8.4	-6.6	3.3	-13.7
14	-9.5	-9.7	-10.5	-11.1	-11.1	-11.7	-11.0	-11.5	-10.3	-8.4	-4.9	-1.0	3.4	5.0	5.6	6.4	5.5	3.7	-0.4	-2.3	-3.4	-5.0	-6.1	-6.4	-4.4	6.4	-11.7
15	-7.6	-7.5	-8.3	-8.3	-9.4	-10.0	-9.9	-10.1	-9.8	-8.0	-2.7	5.9	8.5	9.4	9.5	9.2	9.0	7.3	4.3	2.4	1.7	1.0	1.9	4.8	-0.7	9.5	-10.1
16	5.8	6.1	5.8	4.5	4.7	4.3	5.1	5.5	5.9	6.4	7.6	7.8	8.4	8.1	8.0	7.6	6.9	6.3	5.7	5.1	4.5	3.4	2.3	2.2	5.8	8.4	2.2
17	1.7	0.6	1.2	1.0	1.4	0.7	-0.6	0.9	1.2	1.5	1.9	2.1	2.3	2.6	3.4	3.3	2.9	2.0	1.2	0.5	-0.7	-1.9	-1.4	-0.8	1.1	3.4	-1.9
18	1.0	1.5	1.9	1.5	1.5	1.5	1.1	0.8	1.1	1.6	3.8	5.4	5.9	6.6	7.0	6.9	6.9	6.1	5.7	4.3	4.2	3.3	3.2	2.3	3.5	7.0	0.8
19	1.3	0.0	-0.6	-1.7	-0.1	2.5	2.2	2.3	2.5	2.8	2.2	0.7	1.4	1.4	2.0	2.6	2.2	1.6	1.0	0.2	-0.9	-0.5	-0.5	-1.7	1.0	2.8	-1.7
20	-3.1	-4.3	-5.9	-6.5	-6.5	-7.7	-6.8	-6.7	-5.1	-2.2	1.3	3.1	4.4	2.8	2.1	2.7	4.9	4.6	4.1	3.6	3.2	2.7	-0.1	-1.1	-0.7	4.9	-7.7
21	-1.9	-2.1	-2.6	-1.6	-1.4	-1.5	-0.9	0.6	1.7	5.0	4.9	4.2	4.0	1.3	2.3	4.1	4.3	4.0	3.9	3.2	2.9	1.4	0.4	-0.1	1.5	5.0	-2.6
22	-0.4	-1.0	-1.7	-2.0	-2.4	-2.7	-2.9	-3.2	-3.0	-2.8	-2.7	-2.4	-2.2	-2.6	-2.2	-2.0	-2.9	-2.9	-3.2	-3.6	-4.5	-5.3	-5.9	-8.1	-3.0	-0.4	-8.1
23	-9.9	-10.7	-9.5	-8.2	-7.7	-7.2	-6.8	-6.2	-5.8	-5.1	-4.5	-4.1	-4.0	-3.8	-4.7	-5.7	-6.8	-7.4	-7.8	-7.8	-8.1	-8.2	-8.2	-8.6	-6.9	-3.8	-10.7
24	-9.0	-9.8	-10.0	-10.4	-11.4	-12.1	-12.1	-11.6	-11.4	-10.3	-8.9	-7.1	-6.6	-6.2	-6.1	-5.8	-5.9	-6.4	-7.3	-8.6	-9.2	-9.5	-10.6	-12.1	-9.1	-5.8	-12.1
25	-12.4	-12.8	-13.7	-13.4	-14.3	-14.7	-15.1	-16.0	-16.2	-11.2	-9.0	-8.4	-7.4	-7.4	-6.9	-7.1	-7.1	-7.1	-7.9	-8.3	-8.4	-8.4	-8.1	-8.0	-10.4	-6.9	-16.2
26	-8.2	-8.4	-8.4	-8.5	-8.8	-8.7	-8.8	-8.7	-8.6	-7.9	-7.3	-6.8	-6.3	-5.5	-6.3	-7.5	-8.2	-8.9	-9.4	-10.3	-10.8	-11.3	-11.5	-11.6	-8.6	-5.5	-11.6
27	-12.0	-12.3	-12.7	-13.5	-14.9	-17.2	-18.7	-17.9	-17.1	-15.4	-11.6	-8.0	-5.5	-5.5	-5.2	-5.2	-5.2	-6.3	-7.2	-9.4	-11.2	-13.3	-14.6	-15.3	-11.5	-5.2	-18.7
28	-14.8	-15.1	-14.5	-13.6	-13.8	-14.2	-11.6	-9.5	-7.9	-6.9	-6.2	-5.6	-5.6	-6.0	-5.8	-5.0	-6.0	-6.8	-7.2	-7.8	-8.3	-8.5	-9.0	-9.4	-9.1	-5.0	-15.1
Avg	-7.0	-7.5	-7.9	-8.1	-8.6	-9.0	-9.0	-8.7	-8.2	-6.9	-5.0	-3.2	-1.7	-1.3	-1.2	-1.5	-1.5	-2.3	-3.7	-4.5	-5.1	-5.6	-6.0	-6.4	-5.4	-0.2	-11.4
Max	5.8	6.1	5.8	4.5	4.7	4.3	5.1	5.5	5.9	6.4	7.6	7.8	8.5	9.4	9.5	9.2	9.0	7.3	6.9	6.3	6.3	6.6	6.6	6.8	5.8	9.5	2.2
Min	-28.1	-28.9	-29.8	-30.1	-30.5	-31.7	-31.3	-31.6	-32.5	-30.1	-28.2	-24.8	-20.3	-17.3	-16.5	-16.3	-16.5	-19.2	-22.6	-25.0	-26.0	-26.8	-27.5	-27.3	-25.8	-16.3	-32.5

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 9 Meters (degrees Celsius)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	-9.3	-8.9	-8.5	-9.0	-8.3	-7.6	-7.1	-6.8	-6.2	-5.6	-5.0	-4.1	-3.2	-2.7	-1.4	-1.4	-1.5	-1.5	-2.0	-2.2	-2.9	-3.1	-3.1	-3.7	-4.8	-1.4	-9.3
2	-4.2	-4.4	-4.8	-4.5	-3.9	-3.4	-3.2	-3.1	-2.9	-2.1	-1.3	-0.7	-0.5	-0.5	-2.1	-1.8	-1.5	-1.4	-1.7	-2.3	-2.8	-0.4	0.0	0.4	-2.2	0.4	-4.8
3	0.1	1.0	0.6	-0.2	-0.2	-0.5	-0.4	-0.1	0.8	1.9	2.6	3.3	3.9	4.6	5.6	6.2	5.9	6.1	5.4	4.4	2.3	3.4	3.4	3.8	2.7	6.2	-0.5
4	3.3	3.3	4.4	4.1	3.5	2.0	0.4	0.3	1.3	2.4	4.2	4.9	5.2	5.4	5.3	5.0	3.5	2.6	2.0	2.1	0.5	-0.6	-1.3	-2.8	2.5	5.4	-2.8
5	-4.1	-3.2	-3.6	-5.2	-5.0	-5.9	-5.5	-4.3	1.7	4.2	4.8	4.7	4.5	3.6	3.1	-0.6	-1.4	-1.5	-3.0	-3.1	-3.1	-3.6	-4.3	-4.7	-1.5	4.8	-5.9
6	-5.8	-6.2	-6.1	-6.2	-6.7	-8.1	-10.0	-10.7	-9.6	-6.6	-5.5	-4.8	-4.3	-4.2	-3.6	-4.3	-4.0	-4.7	-6.2	-7.3	-9.1	-9.7	-7.8	-7.5	-6.6	-3.6	-10.7
7	-6.9	-6.8	-7.0	-7.2	-7.6	-8.0	-8.3	-8.2	-7.5	-6.7	-5.7	-5.4	-4.6	-3.8	-4.0	-3.4	-3.0	-3.0	-3.2	-4.0	-5.2	-5.5	-5.5	-5.4	-5.7	-3.0	-8.3
8	-4.6	-4.2	-4.1	-3.8	-3.8	-3.5	-3.5	-2.4	-1.1	-0.6	-0.5	-0.2	0.4	1.0	1.3	0.9	1.2	0.4	-0.3	-0.7	-2.4	-3.0	-3.4	-3.5	-1.7	1.3	-4.6
9	-4.1	-5.8	-7.2	-7.2	-7.4	-7.6	-8.3	-9.6	-10.6	-11.2	-10.1	-9.0	-7.4	-6.7	-7.5	-9.0	-10.1	-11.0	-11.4	-11.4	-11.2	-11.3	-11.3	-10.6	-9.0	-4.1	-11.4
10	-10.0	-9.6	-9.0	-8.4	-7.6	-6.9	-6.0	-5.1	-3.5	-1.3	0.5	2.1	4.3	5.9	6.0	6.0	5.7	5.4	4.6	3.7	3.1	2.7	1.7	-0.6	-0.7	6.0	-10.0
11	-2.6	-5.1	-5.9	-6.9	-8.3	-8.7	-9.1	-8.1	-7.5	-5.6	-2.8	3.3	5.1	5.5	5.5	5.1	4.8	5.1	4.4	3.0	4.5	6.0	5.1	3.6	-0.4	6.0	-9.1
12	2.6	2.0	2.0	1.7	1.6	1.3	1.3	1.4	1.6	1.8	2.7	3.0	3.3	3.1	3.2	3.1	3.2	2.9	2.3	0.9	-0.6	-2.1	-3.4	-4.0	1.5	3.3	-4.0
13	-3.8	-3.6	-3.4	-2.5	0.1	1.3	1.5	1.9	2.6	3.6	4.6	4.8	5.5	6.2	6.7	7.1	7.3	6.3	5.9	5.6	5.0	4.8	5.4	4.9	3.2	7.3	-3.8
14	4.3	3.6	3.2	2.9	2.1	0.9	0.3	0.3	0.6	1.2	2.7	3.6	4.6	4.8	5.5	5.9	6.0	5.4	5.0	3.9	3.0	2.5	2.0	1.6	3.2	6.0	0.3
15	0.8	0.4	0.2	0.1	-0.4	-0.6	0.0	5.7	6.4	7.0	8.2	9.0	10.4	11.3	11.4	11.5	11.4	10.0	8.1	5.4	4.2	5.1	5.9	6.2	5.7	11.5	-0.6
16	7.7	7.4	8.2	6.4	4.3	3.0	2.2	2.6	3.5	3.9	4.9	5.2	5.4	5.8	5.6	5.2	4.9	4.1	3.1	2.3	1.4	0.7	-0.3	-1.0	4.0	8.2	-1.0
17	-0.8	-1.6	-3.6	-4.1	-4.7	-5.6	-6.3	-6.0	-3.1	0.6	2.6	4.6	6.2	7.4	8.4	8.5	7.6	6.6	5.7	5.1	4.7	4.1	3.9	3.3	1.8	8.5	-6.3
18	2.4	1.7	0.7	0.7	0.1	0.2	1.0	3.9	9.5	12.7	14.5	14.9	15.9	15.6	15.6	15.2	14.7	14.0	10.8	9.4	11.1	10.5	10.2	9.6	9.0	15.9	0.1
19	7.1	5.8	5.0	4.5	3.9	3.0	3.8	3.6	4.8	5.7	5.8	6.2	6.9	7.6	8.3	8.1	7.6	6.8	5.8	4.9	3.9	1.9	0.4	-1.6	5.0	8.3	-1.6
20	-2.8	-3.4	-5.1	-5.9	-5.8	-6.7	-7.5	-6.6	-3.5	-0.2	2.5	2.7	3.5	2.4	1.7	1.4	0.7	-0.4	-0.8	-1.3	-1.8	-2.1	-2.4	-2.6	-1.8	3.5	-7.5
21	-2.5	-2.5	-2.7	-3.0	-3.2	-3.6	-3.7	-3.4	-2.9	-2.1	-1.2	-0.2	0.8	1.3	2.2	2.4	0.7	0.0	-0.9	-1.3	-1.2	-1.6	-2.3	-2.2	-1.4	2.4	-3.7
22	-2.3	-1.7	-1.0	-0.6	-0.4	-1.1	-2.2	-1.8	2.1	5.6	6.7	7.6	8.7	9.5	9.7	9.9	9.8	9.0	7.9	3.4	1.0	0.2	-0.8	-0.8	3.3	9.9	-2.3
23	-1.0	-2.1	-2.1	-3.0	-3.4	-3.7	-4.2	-3.9	0.0	Au	Au	Au	5.5	6.2	6.7	6.8	6.7	6.3	4.7	2.0	-1.1	-2.9	-4.0	-5.3	0.4	6.8	-5.3
24	-5.6	-6.5	-7.0	-7.1	-7.4	-7.8	-7.2	-5.7	0.5	5.6	7.1	8.4	9.3	10.9	11.6	11.7	10.8	9.6	9.2	8.9	8.9	8.5	6.7	5.2	3.3	11.7	-7.8
25	4.0	1.7	1.1	0.9	1.1	0.6	0.2	0.1	0.8	1.7	2.7	3.5	4.3	5.3	5.2	5.2	5.3	5.2	4.2	0.6	-0.9	-1.8	-2.6	-3.1	1.9	5.3	-3.1
26	-3.8	-4.1	-5.0	-5.7	-5.8	-5.6	-5.4	-4.4	0.2	1.8	2.8	3.7	4.8	5.8	6.7	7.0	7.0	6.7	5.3	3.6	2.4	2.7	2.5	1.2	1.0	7.0	-5.8
27	0.6	0.3	-0.2	-1.2	-0.8	-1.0	-1.0	-1.4	-0.4	2.5	3.9	4.6	5.2	5.5	5.9	5.7	5.0	1.7	1.1	0.8	0.6	0.5	0.7	0.5	1.6	5.9	-1.4
28	-0.1	-1.1	-1.5	-3.1	-4.7	-6.0	-7.2	-5.4	-1.4	0.3	1.0	2.0	3.1	4.0	4.6	5.1	5.5	5.1	4.0	3.1	2.3	2.3	1.1	0.9	0.6	5.5	-7.2
29	1.1	1.0	1.8	2.0	1.7	1.2	0.3	1.5	2.6	3.6	4.3	4.8	4.2	3.9	4.6	5.6	7.3	7.0	6.3	6.1	6.0	5.5	4.8	4.1	3.8	7.3	0.3
30	3.1	2.3	2.0	1.9	1.8	1.5	1.2	1.5	2.5	3.5	4.6	6.4	7.2	5.9	5.3	6.5	5.4	3.7	3.8	3.6	3.6	2.4	2.5	1.9	3.5	7.2	1.2
31	1.8	2.1	1.9	1.3	1.0	0.9	1.1	1.3	1.9	2.3	3.3	6.2	5.9	6.3	6.9	6.6	6.0	3.9	3.1	1.2	0.3	-0.2	-0.3	-1.3	2.6	6.9	-1.3
Avg	-1.1	-1.6	-1.8	-2.2	-2.4	-2.8	-3.0	-2.4	-0.5	1.0	2.2	3.2	4.0	4.4	4.6	4.6	4.3	3.6	2.7	1.6	0.9	0.5	0.1	-0.4	0.8	5.4	-4.5
Max	7.7	7.4	8.2	6.4	4.3	3.0	3.8	5.7	9.5	12.7	14.5	14.9	15.9	15.6	15.6	15.2	14.7	14.0	10.8	9.4	11.1	10.5	10.2	9.6	9.0	15.9	1.2
Min	-10.0	-9.6	-9.0	-9.0	-8.3	-8.7	-10.0	-10.7	-10.6	-11.2	-10.1	-9.0	-7.4	-6.7	-7.5	-9.0	-10.1	-11.0	-11.4	-11.4	-11.2	-11.3	-11.3	-10.6	-9.0	-4.1	-11.4

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 2 Meters (degrees Celsius)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	-21.2	-21.5	-21.6	-21.9	-21.8	-20.2	-18.5	-16.1	-15.2	-13.9	-12.7	-11.1	-10.8	-12.2	-13.0	-13.4	-14.2	-15.2	-15.6	-15.9	-16.0	-16.9	-17.0	-17.8	-16.4	-10.8	-21.9
2	-18.2	-19.5	-21.4	-24.3	-27.7	-29.2	-30.2	-30.8	-31.6	-28.9	-27.2	-23.8	-20.7	-19.8	-19.9	-19.9	-20.6	-21.4	-21.8	-23.2	-24.3	-24.9	-25.5	-27.4	-24.3	-18.2	-31.6
3	-28.1	-29.6	-30.9	-31.8	-30.7	-29.3	-28.2	-27.1	-26.3	-25.2	-23.8	-22.0	-19.9	-18.0	-18.2	-18.6	-20.2	-20.6	-21.2	-22.0	-23.0	-22.8	-22.0	-22.2	-24.2	-18.0	-31.8
4	-22.1	-21.7	-21.6	-21.7	-22.6	-25.2	-24.5	-27.5	-29.1	-29.2	-26.3	-23.0	-19.5	-17.5	-16.8	-17.1	-17.1	-16.3	-16.2	-17.7	-20.4	-20.7	-22.3	-21.7	-21.6	-16.2	-29.2
5	-21.6	-23.7	-23.2	-22.8	-23.3	-23.9	-24.7	-25.8	-27.0	-28.1	-26.4	-23.1	-20.3	-16.5	-15.8	-16.7	-18.0	-21.6	-22.7	-23.8	-23.7	-23.8	-25.0	-26.8	-22.8	-15.8	-28.1
6	-27.1	-27.8	-28.3	-28.2	-27.3	-26.8	-25.9	-25.7	-25.7	-23.3	-20.4	-17.2	-14.6	-12.6	-10.8	-11.1	-14.5	-16.0	-17.2	-17.6	-17.0	-19.9	-19.7	-22.6	-20.7	-10.8	-28.3
7	-23.4	-22.6	-23.2	-24.5	-24.6	-24.8	-24.0	-24.0	-24.9	-23.5	-20.6	-17.4	-14.8	-8.1	-6.8	-6.8	-9.8	-11.4	-10.2	-10.8	-9.2	-8.6	-8.5	-8.3	-16.3	-6.8	-24.9
8	-8.4	-8.5	-8.7	-9.2	-9.2	-8.5	-8.2	-7.8	-7.3	-7.0	-6.2	-5.0	-3.1	-2.4	-2.5	-2.3	-2.8	-3.2	-2.8	-3.8	-4.3	-4.1	-4.1	-3.6	-5.5	-2.3	-9.2
9	-1.8	-0.8	-0.3	0.0	-0.7	0.0	-0.4	-0.8	-0.5	0.3	1.0	2.4	3.2	1.2	-0.1	-0.1	-2.4	-2.7	-2.9	-3.4	-3.9	-4.9	-5.4	-7.8	-1.3	3.2	-7.8
10	-7.1	-6.6	-9.9	-10.6	-12.6	-13.7	-14.2	-13.0	-12.2	-12.8	-11.3	-8.3	-4.6	-5.0	-5.3	-5.8	-14.3	-19.2	-18.4	-19.1	-20.1	-20.6	-21.3	-21.7	-12.8	-4.6	-21.7
11	-21.7	-21.3	-21.0	-20.7	-21.8	-23.3	-24.3	-25.1	-25.7	-26.4	-25.1	-22.0	-19.0	-17.1	-17.3	-17.6	-17.3	-16.9	-18.0	-19.4	-22.6	-24.5	-26.8	-28.0	-21.8	-16.9	-28.0
12	-28.7	-29.1	-29.7	-29.5	-30.1	-30.4	-30.2	-28.2	-25.1	-21.9	-20.5	-18.8	-16.2	-13.4	-9.7	-8.7	-10.5	-14.2	-17.7	-19.9	-20.3	-21.8	-22.7	-23.5	-21.7	-8.7	-30.4
13	-24.1	-24.9	-24.7	-24.7	-25.4	-25.1	-24.7	-25.2	-25.8	-23.6	-20.7	-17.5	-13.4	-7.5	-4.9	-5.2	-6.6	-12.2	-14.1	-16.6	-18.1	-20.1	-21.2	-21.8	-18.7	-4.9	-25.8
14	-23.0	-23.4	-24.5	-24.8	-25.3	-26.1	-25.9	-26.3	-24.8	-23.7	-20.7	-17.7	-14.1	-9.7	-4.2	-3.8	-5.3	-10.5	-13.6	-15.6	-17.6	-19.0	-19.2	-20.0	-18.3	-3.8	-26.3
15	-20.9	-21.2	-20.7	-20.6	-20.9	-21.6	-21.7	-21.9	-21.6	-18.8	-15.8	-13.5	-8.7	-3.3	-2.9	-3.8	-4.5	-9.8	-12.5	-12.9	-14.9	-16.6	-18.2	-18.9	-15.3	-2.9	-21.9
16	-18.9	-19.8	-20.7	-20.7	-21.0	-21.8	-22.3	-22.2	-22.6	-20.4	-18.3	-14.8	-9.2	-3.8	-3.1	-3.2	-3.6	-5.9	-9.4	-10.9	-12.1	-13.4	-14.2	-14.4	-14.4	-3.1	-22.6
17	-15.4	-15.9	-15.9	-15.8	-15.5	-15.3	-14.6	-15.2	-15.0	-14.8	-13.5	-10.4	-8.0	-5.7	-1.8	-1.0	-1.0	-3.2	-6.1	-7.4	-8.2	-7.8	-6.7	-4.8	-10.0	-1.0	-15.9
18	-1.0	-4.0	-5.2	-6.7	-6.7	-4.4	-1.0	1.8	1.6	2.0	3.5	4.8	5.0	5.0	4.1	4.0	2.0	-0.5	-0.7	-2.3	-4.2	-5.0	-5.5	-5.5	-0.8	5.0	-6.7
19	-6.2	-3.5	1.2	0.8	1.5	-0.3	-0.2	0.4	0.5	0.2	1.1	1.3	1.7	1.7	1.3	1.3	0.4	0.0	0.0	0.0	0.0	-0.5	-1.4	-2.0	-0.0	1.7	-6.2
20	-2.3	-3.0	-3.6	-3.6	-4.0	-5.1	-6.3	-7.0	-6.8	-5.6	-3.9	-3.0	-1.8	-0.9	-0.6	-1.1	-2.3	-6.5	-7.9	-11.2	-13.1	-14.6	-15.5	-15.7	-6.1	-0.6	-15.7
21	-17.0	-17.0	-17.6	-18.2	-18.1	-18.6	-18.2	-18.2	-17.9	-16.3	-13.9	-10.8	-9.1	-5.1	-2.2	-2.9	-3.8	-4.4	-5.7	-5.7	-7.9	-10.3	-9.8	-8.8	-11.6	-2.2	-18.6
22	-8.9	-10.0	-11.2	-10.5	-12.0	-12.7	-13.1	-15.5	-16.6	-15.7	-12.9	-10.2	-6.1	-1.4	-1.2	-1.7	-3.5	-4.7	-6.3	-6.6	-5.0	-3.4	-3.9	-4.8	-8.2	-1.2	-16.6
23	-5.3	-6.3	-7.7	-8.5	-9.5	-12.3	-13.6	-11.3	-10.9	-8.9	-7.9	-7.4	-7.2	-6.9	-6.7	-6.5	-8.2	-8.4	-8.0	-8.5	-12.2	-14.3	-16.9	-17.6	-9.6	-5.3	-17.6
24	-18.1	-19.3	-20.6	-21.2	-22.3	-23.4	-24.0	-24.8	-24.7	-22.4	-19.8	-15.6	-11.0	-8.7	-7.2	-7.6	-6.8	-7.6	-9.2	-9.3	-10.5	-11.3	-11.8	-12.1	-15.4	-6.8	-24.8
25	-12.4	-13.0	-13.1	-13.1	-13.1	-13.3	-13.5	-13.8	-13.5	-12.6	-11.7	-9.0	-7.6	-7.5	-6.9	-7.0	-7.2	-7.8	-7.6	-8.4	-9.1	-10.0	-10.5	-11.3	-10.5	-6.9	-13.8
26	-11.5	-12.2	-12.1	-12.0	-12.5	-12.3	-12.4	-13.9	-15.7	-15.4	-12.2	-8.7	-7.2	-6.5	-6.1	-6.1	-5.9	-6.2	-6.6	-7.4	-9.8	-13.0	-14.4	-16.1	-10.7	-5.9	-16.1
27	-17.3	-17.5	-18.1	-18.0	-19.8	-20.3	-21.0	-21.2	-21.5	-18.9	-14.5	-9.4	-6.8	-5.8	-5.3	-5.4	-5.7	-6.8	-10.1	-12.1	-13.4	-14.3	-15.6	-15.3	-13.9	-5.3	-21.5
28	-16.6	-16.7	-16.2	-16.7	-17.6	-18.0	-18.1	-18.3	-18.2	-16.2	-13.0	-10.0	-3.4	-0.3	-0.4	-0.4	-1.4	-3.4	-6.7	-8.3	-7.9	-8.1	-8.5	-9.4	-10.6	-0.3	-18.3
29	-10.5	-11.5	-12.8	-13.3	-13.7	-14.3	-14.0	-13.3	-12.8	-10.5	-8.1	-4.4	2.5	4.1	4.2	4.7	4.5	2.4	1.9	0.3	-1.2	-1.6	3.1	2.5	-4.7	4.7	-14.3
30	1.4	1.6	0.9	-0.5	-1.6	-1.6	-3.2	-5.9	-7.6	-6.1	-2.9	0.0	0.3	0.5	1.2	1.1	1.2	0.9	1.1	0.6	0.2	-0.4	-0.9	-1.4	-0.9	1.6	-7.6
31	-1.8	-2.1	-3.2	-4.9	-5.6	-6.2	-6.3	-7.4	-8.5	-9.1	-8.7	-8.7	-9.3	-9.3	-9.3	-9.8	-10.9	-11.6	-12.5	-13.1	-13.4	-13.5	-13.6	-13.8	-8.9	-1.8	-13.8
Avg	-14.8	-15.2	-15.7	-16.1	-16.6	-17.0	-17.0	-17.1	-17.2	-16.0	-14.0	-11.4	-8.8	-6.9	-6.1	-6.2	-7.4	-9.2	-10.3	-11.4	-12.4	-13.2	-13.7	-14.3	-12.8	-5.3	-19.9
Max	1.4	1.6	1.2	0.8	1.5	0.0	-0.2	1.8	1.6	2.0	3.5	4.8	5.0	5.0	4.2	4.7	4.5	2.4	1.9	0.6	0.2	-0.4	3.1	2.5	-0.0	5.0	-6.2
Min	-28.7	-29.6	-30.9	-31.8	-30.7	-30.4	-30.2	-30.8	-31.6	-29.2	-27.2	-23.8	-20.7	-19.8	-19.9	-19.9	-20.6	-21.6	-22.7	-23.8	-24.3	-24.9	-26.8	-28.0	-24.3	-18.2	-31.8

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 2 Meters (degrees Celsius)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	-14.3	-15.5	-16.4	-16.4	-17.9	-17.8	-19.5	-21.5	-21.5	-18.8	-17.1	-16.1	-15.3	-14.5	-14.1	-14.6	-16.1	-17.4	-19.8	-22.1	-25.5	-27.3	-28.5	-29.2	-19.1	-14.1	-29.2
2	-30.0	-30.9	-31.7	-32.2	-32.5	-33.1	-32.9	-33.7	-34.0	-31.4	-29.1	-25.8	-21.0	-17.5	-17.0	-17.0	-17.2	-21.0	-23.8	-27.2	-27.9	-28.4	-29.9	-29.8	-27.3	-17.0	-34.0
3	-29.6	-27.9	-27.7	-28.0	-28.4	-26.8	-26.3	-21.3	-15.9	-12.0	-8.6	-4.1	-2.4	-0.8	-0.8	-1.6	-0.1	0.1	-0.9	-0.9	-1.3	-0.8	-0.5	-0.6	-11.1	0.1	-29.6
4	-1.4	-3.1	-4.7	-5.5	-9.5	-12.0	-11.7	-12.9	-13.1	-12.3	-10.4	-8.4	-6.2	-3.1	-0.5	0.5	0.8	-0.3	-3.3	-3.1	-3.0	-1.2	-3.1	-4.6	-5.5	0.8	-13.1
5	-4.0	-4.2	-3.8	-3.5	-1.6	-0.4	-0.2	0.2	0.3	1.4	2.4	2.7	3.4	3.9	3.9	3.8	3.8	2.8	2.1	2.5	2.4	2.2	1.8	2.2	1.0	3.9	-4.2
6	2.5	2.2	2.7	2.9	-3.4	-5.9	-3.8	-5.2	-4.8	-3.4	-1.7	-0.6	0.5	0.2	-1.9	-8.5	-5.9	-7.2	-12.3	-10.7	-10.1	-9.8	-9.5	-11.4	-4.4	2.9	-12.3
7	-11.6	-12.3	-13.1	-14.7	-16.8	-19.3	-20.7	-21.0	-21.7	-20.2	-17.8	-15.1	-11.9	-10.8	-11.5	-14.5	-15.2	-15.1	-16.9	-16.8	-16.6	-16.7	-16.8	-17.0	-16.0	-10.8	-21.7
8	-16.8	-16.4	-16.0	-17.9	-17.4	-16.6	-15.5	-14.6	-13.8	-12.7	-10.4	-7.6	-5.1	-4.7	-4.9	-4.6	-4.3	-4.4	-4.5	-4.7	-4.3	-4.0	-3.7	-3.2	-9.5	-3.2	-17.9
9	-1.9	-1.7	-1.7	-1.6	-0.2	0.4	1.1	2.2	2.2	3.3	6.2	6.9	7.1	7.5	7.4	6.9	7.2	6.6	6.1	5.5	5.5	5.8	5.9	6.1	3.9	7.5	-1.9
10	4.7	2.6	2.0	2.0	1.8	1.1	0.7	1.3	1.2	1.3	1.3	1.1	1.0	0.6	0.9	0.9	0.8	-0.7	-1.6	-2.0	-3.3	-1.8	-0.9	-1.7	0.6	4.7	-3.3
11	-2.7	-3.4	-4.1	-4.3	-4.1	-3.9	-4.2	-4.9	-4.8	-4.7	-4.5	-3.9	-3.1	-2.9	-2.9	-3.3	-3.7	-4.4	-5.5	-6.3	-8.0	-6.9	-7.0	-7.5	-4.6	-2.7	-8.0
12	-8.6	-12.2	-12.7	-14.1	-15.2	-16.3	-17.6	-17.6	-16.0	-14.8	-10.7	-3.6	-1.1	-0.4	0.0	0.1	0.2	-1.1	-3.3	-5.7	-7.6	-8.8	-9.4	-10.7	-8.6	0.2	-17.6
13	-12.7	-13.5	-14.3	-14.5	-14.3	-14.9	-15.2	-15.0	-14.6	-11.9	-8.1	-3.2	1.7	2.5	2.9	2.9	2.3	1.0	-3.8	-4.9	-6.5	-8.3	-8.9	-9.6	-7.5	2.9	-15.2
14	-10.8	-11.1	-11.9	-12.2	-12.9	-12.6	-12.4	-12.7	-11.7	-8.8	-4.6	-1.0	3.2	5.9	5.5	6.3	5.8	2.8	-1.2	-3.1	-4.4	-6.7	-8.0	-8.7	-5.2	6.3	-12.9
15	-9.5	-9.3	-10.3	-10.5	-11.1	-11.4	-12.1	-11.8	-11.5	-8.9	-4.3	5.2	7.9	8.4	8.5	8.3	8.4	6.4	3.3	1.5	0.5	-0.3	0.0	3.8	-2.0	8.5	-12.1
16	5.0	5.5	5.0	4.2	4.4	3.5	4.2	4.6	5.2	5.9	7.1	7.1	7.9	7.5	7.2	7.0	6.2	5.7	5.2	4.5	4.1	3.2	2.2	2.0	5.2	7.9	2.0
17	1.7	0.6	1.2	0.7	1.0	-0.6	-1.2	0.5	1.0	1.3	1.8	2.1	2.3	2.6	3.5	3.1	2.6	1.4	1.0	0.3	-0.9	-2.4	-2.1	-2.5	0.8	3.5	-2.5
18	-0.7	0.7	1.9	1.3	1.1	1.1	0.8	0.6	0.9	1.5	3.8	5.3	5.8	6.5	6.8	6.2	6.2	5.1	4.9	3.8	3.9	2.4	2.5	1.4	3.1	6.8	-0.7
19	0.6	-0.8	-1.0	-2.4	-1.2	2.2	1.9	1.9	2.2	2.7	2.0	0.8	1.4	1.5	2.2	2.7	2.1	1.3	0.8	0.1	-1.0	-0.5	-0.7	-2.4	0.7	2.7	-2.4
20	-4.1	-5.4	-6.8	-7.3	-7.1	-8.9	-7.3	-7.3	-6.3	-3.2	1.3	2.9	4.4	2.7	2.2	2.7	4.6	4.1	3.7	3.3	2.8	2.0	-0.6	-1.3	-1.2	4.6	-8.9
21	-2.3	-2.7	-3.3	-2.0	-2.1	-1.7	-1.2	-0.3	1.1	4.6	4.6	3.9	3.9	1.4	2.4	3.8	4.0	3.5	3.2	2.7	2.6	1.3	0.3	-0.1	1.1	4.6	-3.3
22	-0.4	-1.0	-1.7	-2.0	-2.4	-2.6	-2.9	-3.1	-2.9	-2.6	-2.5	-2.2	-2.1	-2.4	-2.1	-1.9	-2.8	-2.9	-3.4	-3.6	-5.0	-5.6	-6.5	-9.1	-3.1	-0.4	-9.1
23	-11.0	-11.4	-9.7	-8.5	-7.7	-7.3	-7.0	-6.3	-5.7	-5.0	-4.3	-3.9	-3.9	-3.7	-4.5	-5.5	-6.8	-7.3	-7.7	-7.8	-8.1	-8.1	-8.1	-8.8	-7.0	-3.7	-11.4
24	-9.2	-10.7	-10.7	-10.7	-11.6	-12.4	-12.2	-11.6	-11.3	-9.9	-8.5	-6.8	-6.3	-5.9	-5.9	-5.7	-5.9	-7.1	-7.7	-9.0	-9.2	-9.5	-10.9	-12.7	-9.2	-5.7	-12.7
25	-12.6	-13.2	-14.2	-13.5	-15.1	-15.6	-15.7	-17.6	-17.0	-11.5	-8.9	-8.3	-7.2	-7.2	-6.7	-7.1	-7.1	-7.1	-8.0	-8.6	-8.6	-8.6	-8.2	-8.0	-10.6	-6.7	-17.6
26	-8.2	-8.4	-8.4	-8.4	-8.7	-8.6	-8.6	-8.6	-8.4	-7.7	-7.0	-6.5	-6.0	-5.4	-6.2	-7.3	-8.0	-8.8	-9.3	-10.2	-10.8	-11.2	-11.5	-11.5	-8.5	-5.4	-11.5
27	-11.9	-12.2	-12.7	-13.8	-15.9	-18.6	-20.1	-18.2	-17.5	-15.5	-11.7	-7.8	-5.2	-5.4	-4.9	-5.1	-5.4	-6.3	-7.5	-9.9	-12.5	-15.3	-15.7	-16.6	-11.9	-4.9	-20.1
28	-16.1	-15.6	-15.2	-14.4	-14.8	-14.8	-11.9	-9.8	-8.2	-6.8	-6.0	-5.4	-5.5	-5.9	-5.8	-5.0	-6.0	-6.9	-7.5	-8.1	-8.6	-8.7	-9.3	-9.7	-9.4	-5.0	-16.1
Avg	-7.7	-8.3	-8.5	-8.8	-9.4	-9.8	-9.7	-9.4	-8.8	-7.1	-5.2	-3.3	-1.9	-1.4	-1.3	-1.7	-1.8	-2.8	-4.2	-5.0	-5.8	-6.2	-6.7	-7.2	-5.9	-0.4	-12.4
Max	5.0	5.5	5.0	4.2	4.4	3.5	4.2	4.6	5.2	5.9	7.1	7.1	7.9	8.4	8.5	8.3	8.4	6.6	6.1	5.5	5.5	5.8	5.9	6.1	5.2	8.5	2.0
Min	-30.0	-30.9	-31.7	-32.2	-32.5	-33.1	-32.9	-33.7	-34.0	-31.4	-29.1	-25.8	-21.0	-17.5	-17.0	-17.0	-17.2	-21.0	-23.8	-27.2	-27.9	-28.4	-29.9	-29.8	-27.3	-17.0	-34.0

A-14

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 2 Meters (degrees Celsius)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	-9.6	-9.2	-8.8	-9.8	-8.7	-7.7	-7.3	-6.9	-6.2	-5.6	-4.9	-4.0	-3.2	-2.6	-1.4	-1.5	-1.6	-1.8	-2.2	-2.4	-3.0	-3.4	-3.3	-3.9	-5.0	-1.4	-9.8
2	-4.3	-4.7	-5.3	-4.8	-4.1	-3.7	-3.3	-3.1	-2.9	-2.1	-1.2	-0.6	-0.4	-0.4	-1.9	-1.7	-1.4	-1.3	-1.8	-2.6	-3.5	-1.4	-0.8	-0.2	-2.4	-0.2	-5.3
3	-0.3	0.6	0.2	-0.6	-0.9	-1.2	-1.3	-0.6	0.5	1.7	2.5	3.2	3.8	4.6	5.4	5.9	5.2	5.4	4.8	3.5	1.0	2.6	2.7	3.2	2.2	5.9	-1.3
4	2.9	2.7	3.8	3.7	3.2	1.8	0.4	0.2	1.4	2.6	4.3	4.9	5.1	5.2	5.0	4.6	3.4	2.5	1.9	1.9	0.4	-0.6	-1.5	-3.5	2.3	5.2	-3.5
5	-5.2	-4.4	-5.4	-6.5	-6.4	-6.8	-7.1	-6.0	0.5	3.9	4.6	4.6	4.4	3.5	3.0	-0.6	-1.2	-1.5	-3.1	-3.3	-3.2	-3.9	-4.4	-4.7	-2.1	4.6	-7.1
6	-5.8	-6.3	-6.2	-6.4	-6.9	-8.8	-11.3	-11.3	-9.9	-6.7	-5.4	-4.7	-4.0	-3.9	-3.3	-4.2	-4.0	-4.7	-6.7	-8.1	-10.0	-9.8	-8.0	-7.5	-6.8	-3.3	-11.3
7	-7.0	-6.9	-7.0	-7.3	-7.7	-8.1	-8.2	-8.3	-7.6	-6.6	-5.5	-5.1	-4.5	-3.6	-3.8	-3.4	-3.0	-3.0	-3.4	-3.9	-5.0	-5.3	-5.4	-5.6	-5.6	-3.0	-8.3
8	-5.0	-4.1	-4.0	-3.9	-3.9	-3.5	-3.7	-2.6	-1.1	-0.7	-0.6	-0.3	0.3	0.8	1.1	0.8	1.0	0.1	-0.5	-0.8	-2.4	-2.9	-3.3	-3.5	-1.8	1.1	-5.0
9	-4.1	-5.7	-7.2	-7.1	-7.3	-7.6	-8.3	-9.5	-10.5	-11.0	-9.8	-8.7	-7.2	-6.5	-7.3	-8.8	-10.0	-10.8	-11.3	-11.3	-11.1	-11.2	-11.2	-10.4	-8.9	-4.1	-11.3
10	-9.9	-9.5	-8.8	-8.2	-7.4	-6.8	-5.8	-5.0	-3.4	-1.3	0.4	2.1	4.4	5.5	5.7	5.6	5.2	4.9	4.1	3.1	2.4	2.0	0.8	-1.7	-0.9	5.7	-9.9
11	-3.6	-5.6	-6.6	-8.0	-9.3	-9.9	-10.1	-8.8	-7.8	-5.6	-2.6	3.1	5.1	5.6	5.4	4.7	4.5	4.8	4.0	2.5	3.8	5.4	4.6	3.3	-0.9	5.6	-10.1
12	2.4	1.8	1.8	1.5	1.4	1.1	1.2	1.2	1.5	1.8	2.6	2.9	3.2	2.9	3.0	3.0	3.0	2.6	1.9	0.1	-1.5	-2.8	-3.8	-4.1	1.2	3.2	-4.1
13	-3.9	-3.5	-3.3	-2.4	-0.1	1.1	1.3	1.6	2.4	3.4	4.4	4.6	5.3	5.8	6.3	6.7	6.8	5.8	5.4	5.0	4.3	4.2	4.9	4.4	2.9	6.8	-3.9
14	3.9	3.3	2.9	2.5	1.9	0.9	0.4	0.4	0.6	1.3	2.8	3.7	4.7	4.8	5.5	5.9	5.7	5.3	4.8	3.7	2.7	2.2	1.7	1.1	3.0	5.9	0.4
15	0.6	-0.1	-0.5	-0.4	-0.8	-1.1	-1.0	4.9	5.9	6.8	8.0	8.6	10.2	11.3	11.1	11.1	10.4	9.0	6.9	4.6	3.2	4.1	5.1	5.3	5.1	11.3	-1.1
16	7.0	6.7	7.5	5.8	4.0	2.8	1.8	2.6	3.5	4.1	5.1	5.3	5.6	6.0	5.7	5.1	4.8	4.0	2.7	1.9	0.9	0.0	-1.0	-1.7	3.8	7.5	-1.7
17	-1.9	-2.6	-4.3	-4.4	-4.8	-5.7	-6.2	-5.8	-2.8	1.1	3.1	5.0	6.7	7.9	8.8	8.5	7.2	6.2	5.5	4.8	4.4	3.8	3.4	2.7	1.7	8.8	-6.2
18	1.7	1.1	-0.1	-0.4	-1.1	-0.8	-0.6	2.1	9.2	12.9	14.8	15.1	16.4	15.8	15.4	14.9	14.3	13.3	10.5	9.0	10.6	10.0	9.7	8.5	8.4	16.4	-1.1
19	6.6	5.1	4.5	3.9	3.3	2.3	3.4	3.1	5.1	6.0	6.1	6.4	7.6	8.3	8.8	8.5	7.5	6.6	5.4	4.3	3.1	0.9	-0.6	-2.1	4.8	8.8	-2.1
20	-3.3	-4.1	-5.8	-6.8	-6.7	-7.5	-8.1	-6.4	-3.2	0.2	3.0	3.1	4.3	2.9	2.2	1.9	1.0	-0.2	-0.7	-1.2	-1.8	-2.1	-2.3	-2.4	-1.8	4.3	-8.1
21	-2.4	-2.4	-2.6	-2.8	-3.1	-3.4	-3.5	-3.2	-2.5	-1.3	-0.2	0.9	2.0	2.3	3.0	3.3	1.2	0.4	-0.8	-1.4	-1.4	-1.9	-2.8	-2.4	-1.0	3.3	-3.5
22	-2.3	-1.6	-0.9	-0.6	-0.7	-1.6	-3.3	-1.7	2.6	6.1	7.3	8.4	9.5	10.4	10.5	10.4	10.2	8.8	7.0	2.6	0.3	-0.6	-1.3	-1.4	3.3	10.5	-3.3
23	-1.7	-2.8	-3.3	-3.7	-3.9	-4.2	-5.0	-4.0	0.2	Au	Au	Au	6.4	7.1	7.7	7.6	7.3	6.6	3.5	0.8	-1.7	-3.7	-5.2	-6.5	0.1	7.7	-6.5
24	-6.8	-7.3	-7.9	-8.2	-8.5	-8.9	-8.3	-5.8	0.7	6.2	7.9	9.2	10.3	11.9	12.5	12.5	11.1	9.5	9.0	8.6	8.6	8.3	6.5	4.8	3.2	12.5	-8.9
25	3.7	1.6	1.0	0.7	0.7	-0.1	-0.2	-0.1	1.0	2.1	3.3	4.2	5.2	6.2	5.9	5.8	5.7	5.3	3.4	-0.1	-1.1	-2.2	-3.2	-4.0	1.9	6.2	-4.0
26	-4.5	-5.0	-6.0	-6.7	-6.6	-6.0	-5.6	-4.4	0.6	2.4	3.6	4.5	5.7	6.6	7.6	7.8	7.6	6.6	4.8	3.4	1.9	2.5	2.4	1.2	1.0	7.8	-6.7
27	0.7	0.3	-0.5	-1.6	-1.1	-1.1	-1.1	-1.9	-0.2	2.9	4.5	5.2	5.8	6.0	6.5	6.1	5.3	1.9	1.1	0.7	0.6	0.5	0.6	0.3	1.7	6.5	-1.9
28	-0.4	-1.4	-2.1	-4.3	-5.4	-7.1	-7.9	-5.2	-1.3	0.5	1.3	2.6	3.9	5.0	5.4	6.0	6.1	5.4	3.6	2.1	1.4	1.6	0.3	-0.1	0.4	6.1	-7.9
29	0.0	0.3	1.6	1.9	1.5	1.0	0.0	1.6	2.9	4.1	4.8	5.4	4.8	4.5	5.2	6.0	7.8	7.0	5.9	5.8	5.9	5.3	4.6	3.9	3.8	7.8	0.0
30	2.8	2.3	1.9	1.7	1.5	1.2	1.1	1.6	2.6	3.7	5.0	6.9	7.6	6.3	5.7	7.1	5.7	3.9	3.8	3.5	3.5	2.2	2.1	1.5	3.6	7.6	1.1
31	1.6	1.8	1.6	1.1	0.6	0.6	1.1	1.4	2.1	2.8	4.1	6.9	6.9	7.2	7.9	7.3	6.7	4.2	3.1	1.2	0.0	-1.2	-1.3	-2.9	2.7	7.9	-2.9
Avg	-1.6	-1.9	-2.3	-2.6	-2.8	-3.2	-3.4	-2.6	-0.5	1.2	2.4	3.4	4.4	4.8	4.9	4.7	4.3	3.4	2.3	1.2	0.4	0.1	-0.3	-0.9	0.6	5.6	-5.0
Max	7.0	6.7	7.5	5.8	4.0	2.8	3.4	4.9	9.2	12.9	14.8	15.1	16.4	15.8	15.4	14.9	14.3	13.3	10.5	9.0	10.6	10.0	9.7	8.5	8.4	16.4	1.1
Min	-9.9	-9.5	-8.8	-9.8	-9.3	-9.9	-11.3	-11.3	-10.5	-11.0	-9.8	-8.7	-7.2	-6.5	-7.3	-8.8	-10.0	-10.8	-11.3	-11.3	-11.1	-11.2	-11.2	-10.4	-8.9	-4.1	-11.3

A-15

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature Delta T (degrees Celsius)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	2.22	2.97	1.80	2.05	2.21	0.96	0.73	0.18	0.09	-0.12	-0.02	-0.11	-0.14	-0.11	-0.05	0.15	0.20	-0.07	-0.07	-0.06	-0.03	0.02	0.06	0.01	0.54	2.97	-0.14
2	0.04	0.28	0.72	1.26	2.26	2.54	1.03	1.48	1.48	0.35	0.28	0.69	0.11	0.00	0.04	-0.03	0.17	0.29	0.08	0.71	0.78	0.93	1.01	1.59	0.75	2.54	-0.03
3	0.93	1.31	1.71	1.50	0.88	0.23	0.26	0.12	0.09	-0.07	-0.14	0.01	-0.09	-0.15	0.08	0.42	0.67	0.55	0.48	0.62	0.33	0.29	0.02	0.06	0.42	1.71	-0.15
4	0.14	-0.04	-0.06	0.03	0.29	1.49	1.21	1.69	0.82	0.58	-0.07	0.16	-0.19	-0.08	-0.12	0.13	0.23	0.00	0.00	0.94	2.07	0.87	1.03	0.56	0.49	2.07	-0.19
5	1.09	1.74	0.68	0.08	0.09	-0.05	0.01	0.19	0.34	0.51	0.09	-0.29	0.67	0.13	0.00	0.94	0.92	0.99	0.73	1.02	1.02	0.88	1.47	1.62	0.62	1.74	-0.29
6	1.75	1.66	1.76	1.57	1.06	1.39	0.85	1.10	1.20	0.48	-0.02	-0.15	0.35	0.61	0.35	0.61	1.44	1.32	1.92	1.30	0.65	1.15	1.16	1.81	1.05	1.92	-0.15
7	2.45	1.37	2.41	2.95	2.00	1.82	1.97	1.43	2.67	1.51	0.84	0.30	2.11	1.08	0.53	0.59	1.09	1.30	0.31	0.41	0.15	0.30	-0.01	0.04	1.23	2.95	-0.01
8	0.17	0.08	0.31	0.34	0.31	-0.01	0.04	0.02	0.01	-0.02	-0.02	-0.12	-0.05	-0.02	0.28	0.50	0.58	0.94	0.18	-0.04	-0.07	-0.07	-0.07	0.05	0.14	0.94	-0.12
9	0.02	-0.07	-0.01	0.07	0.11	0.59	0.46	0.27	0.28	-0.02	0.07	0.18	0.22	0.06	0.12	0.15	-0.01	0.18	0.42	0.34	0.21	0.36	0.41	1.76	0.26	1.76	-0.07
10	0.77	0.24	1.36	1.05	1.74	0.87	0.92	0.77	0.52	1.15	0.52	0.59	0.21	0.08	0.19	0.37	0.08	-0.10	-0.10	-0.03	0.06	-0.07	-0.16	-0.16	0.45	1.74	-0.16
11	-0.13	-0.17	-0.14	-0.04	0.33	0.60	0.65	1.01	1.40	1.05	0.68	0.36	0.11	0.00	0.14	0.36	0.23	-0.02	0.53	0.53	0.87	0.96	1.75	1.42	0.52	1.75	-0.17
12	1.96	1.68	2.54	1.22	2.87	2.05	1.84	1.51	0.25	0.27	0.21	0.60	0.99	0.65	0.30	0.13	1.15	2.20	1.87	1.42	1.84	1.55	2.30	2.03	1.39	2.87	0.13
13	2.06	2.56	2.47	2.14	2.26	2.48	2.02	2.39	2.25	1.66	1.22	1.09	1.47	0.98	0.06	0.27	1.16	2.28	0.74	1.35	1.19	1.47	1.61	1.74	1.62	2.56	0.06
14	2.23	2.47	2.51	2.52	2.60	2.49	2.51	2.13	2.47	1.79	1.28	1.16	1.11	1.59	0.40	0.68	1.03	2.16	1.46	1.30	1.62	2.55	2.33	2.48	1.87	2.60	0.40
15	1.93	2.21	2.44	2.07	2.67	2.62	2.77	3.05	1.93	1.63	1.27	1.63	2.41	0.85	0.65	1.35	0.76	2.18	1.65	1.02	1.55	1.87	1.74	1.56	1.83	3.05	0.65
16	1.50	1.66	1.55	1.85	1.76	2.25	2.44	1.98	1.69	1.09	0.99	0.98	2.69	0.28	0.59	0.74	0.76	1.43	1.19	1.16	1.33	1.35	1.64	1.58	1.44	2.69	0.28
17	1.66	2.33	1.82	1.75	1.32	1.35	1.46	1.70	1.37	1.79	1.62	0.76	1.11	1.23	0.58	1.22	1.61	1.43	2.18	2.14	2.14	2.34	1.95	2.23	1.63	2.34	0.58
18	1.73	2.04	2.32	2.28	2.74	2.37	2.85	0.71	1.18	1.16	0.72	0.69	0.81	0.77	0.87	1.04	1.78	1.59	1.25	0.53	1.06	1.11	1.54	1.55	1.45	2.85	0.53
19	1.39	1.24	0.66	0.81	0.38	0.99	0.51	0.23	0.33	0.35	0.13	0.13	0.28	0.29	0.49	0.36	0.73	0.35	0.45	0.23	0.20	0.19	0.06	0.09	0.45	1.39	0.06
20	0.22	0.34	0.31	0.39	0.66	0.83	0.98	0.75	0.89	0.07	0.17	0.10	0.62	0.16	0.17	0.60	1.23	1.97	1.94	2.44	1.91	2.03	2.07	1.58	0.93	2.44	0.07
21	2.40	2.36	2.95	2.18	2.18	1.74	1.97	1.73	1.68	1.50	1.06	0.14	0.35	0.99	0.44	0.70	1.05	0.92	1.35	1.28	1.04	1.25	0.67	0.64	1.36	2.95	0.14
22	0.47	1.18	0.81	0.65	1.61	0.90	0.77	2.24	1.72	0.93	0.63	0.19	1.42	0.20	0.47	0.72	1.28	1.01	1.32	1.38	0.93	0.54	0.25	0.04	0.90	2.24	0.04
23	0.21	0.56	0.97	0.87	1.06	2.04	1.29	0.44	0.64	0.07	-0.09	-0.17	-0.18	-0.21	-0.14	-0.08	0.52	0.23	0.03	0.44	1.41	1.68	1.29	1.19	0.59	2.04	-0.21
24	1.28	2.23	2.44	2.02	2.20	1.58	1.61	2.12	1.41	1.18	0.33	0.23	0.22	-0.07	-0.10	0.38	0.27	0.86	0.66	0.54	0.49	0.04	0.03	0.01	0.91	2.44	-0.10
25	0.08	0.24	0.35	0.17	0.39	0.43	0.53	0.59	0.52	0.17	0.41	0.36	0.11	0.26	0.11	0.31	0.24	0.31	0.24	0.25	0.34	0.32	0.50	0.96	0.34	0.96	0.08
26	0.74	0.61	0.36	0.50	0.29	0.42	0.38	1.17	1.60	1.28	1.11	0.33	0.18	0.11	0.15	0.39	0.16	0.17	0.20	0.53	1.12	1.63	0.46	0.83	0.61	1.63	0.11
27	0.65	0.82	1.02	0.61	1.48	1.66	2.09	2.25	2.41	1.58	1.98	0.12	0.55	0.31	0.41	0.68	0.89	1.26	2.57	1.91	1.16	1.25	1.07	1.09	1.24	2.57	0.12
28	1.43	1.23	1.41	1.36	1.03	1.27	1.51	1.48	1.29	1.29	0.67	0.56	0.90	0.45	0.58	0.78	1.07	1.18	1.73	1.44	0.81	0.99	0.94	0.82	1.09	1.73	0.45
29	0.95	0.79	1.46	1.32	1.44	1.32	1.02	1.11	1.34	0.77	1.17	2.86	0.79	0.78	0.65	0.77	0.75	1.13	1.42	2.36	1.51	1.32	0.74	0.88	1.19	2.86	0.65
30	1.04	0.77	0.92	0.99	1.44	1.06	2.10	3.10	1.97	1.90	0.99	0.57	0.49	0.44	0.35	0.50	0.54	0.47	0.54	0.59	0.45	0.38	0.34	0.37	0.93	3.10	0.34
31	0.44	0.41	0.19	0.01	-0.01	0.06	0.00	-0.05	-0.05	-0.05	-0.02	-0.11	-0.17	-0.16	-0.05	-0.09	-0.11	0.06	0.13	0.32	0.32	0.22	0.29	0.33	0.08	0.44	-0.17
Avg	1.09	1.20	1.29	1.18	1.34	1.30	1.25	1.25	1.15	0.83	0.58	0.45	0.63	0.37	0.28	0.50	0.72	0.92	0.88	0.92	0.92	0.96	0.92	0.99	0.91	2.19	0.09
Max	2.45	2.97	2.95	2.95	2.87	2.62	2.85	3.10	2.67	1.90	1.98	2.86	2.69	1.59	0.87	1.35	1.78	2.28	2.57	2.44	2.14	2.55	2.33	2.48	1.87	3.10	0.65
Min	-0.13	-0.17	-0.14	-0.04	-0.01	-0.05	0.00	-0.05	-0.05	-0.12	-0.14	-0.29	-0.19	-0.21	-0.14	-0.09	-0.11	-0.10	-0.10	-0.06	-0.07	-0.07	-0.16	-0.16	0.08	0.44	-0.29

A-16

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature Delta T (degrees Celsius)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0.50	1.00	0.72	0.91	1.03	1.04	1.34	1.66	2.43	0.48	0.17	0.30	0.12	-0.03	-0.01	0.29	0.98	1.18	1.23	1.25	1.88	2.10	1.95	2.22	1.03	2.43	-0.03
2	1.91	2.03	1.89	2.13	2.03	1.36	1.58	2.06	1.46	1.36	0.89	0.99	0.69	0.19	0.56	0.70	0.75	1.84	1.22	2.19	1.89	1.64	2.44	2.54	1.51	2.54	0.19
3	2.66	1.57	1.64	2.42	3.18	2.23	2.80	1.09	0.29	0.48	1.04	0.05	0.03	0.01	0.01	-0.06	0.13	0.12	0.05	0.06	0.47	0.74	0.37	0.32	0.90	3.18	-0.06
4	0.23	0.54	0.42	0.59	-0.03	-0.19	-0.16	-0.16	-0.16	-0.07	0.12	-0.22	-0.17	-0.11	0.04	0.09	-0.05	0.43	1.19	0.63	0.96	0.44	1.01	0.83	0.26	1.19	-0.22
5	0.53	0.56	0.60	1.32	0.93	0.57	0.59	0.41	0.47	0.42	0.19	0.16	0.20	0.26	0.26	0.28	0.30	0.43	0.41	0.33	0.33	0.46	0.74	0.56	0.47	1.32	0.16
6	0.58	0.82	0.65	0.45	0.70	0.88	0.11	0.02	-0.05	-0.11	-0.18	-0.11	0.01	-0.01	0.02	-0.09	-0.03	0.00	0.00	0.08	0.21	0.23	0.59	1.05	0.24	1.05	-0.18
7	0.83	0.61	1.04	1.51	1.00	2.17	2.02	2.59	2.29	1.19	1.05	0.79	0.65	0.33	0.20	-0.08	-0.11	-0.10	-0.12	-0.05	-0.07	-0.11	-0.11	-0.07	0.73	2.59	-0.12
8	-0.11	-0.12	0.00	0.86	0.68	0.05	-0.10	-0.10	-0.07	-0.01	0.25	0.29	0.08	0.09	0.34	0.21	0.27	0.08	0.00	0.09	0.06	0.16	0.40	0.34	0.16	0.86	-0.12
9	0.02	0.03	0.20	0.15	0.32	0.38	0.31	0.22	0.44	0.52	0.62	0.74	0.87	0.88	0.83	0.80	0.76	0.74	0.84	0.85	0.82	0.78	0.70	0.74	0.56	0.88	0.02
10	0.65	0.20	0.15	0.20	0.21	0.26	0.18	0.13	0.07	0.07	0.12	0.05	0.06	0.02	0.10	0.09	0.10	0.80	1.00	0.75	0.70	0.49	0.55	0.26	0.30	1.00	0.02
11	0.01	0.11	0.46	0.40	0.35	0.30	0.05	0.32	0.33	0.14	0.14	0.03	-0.02	0.03	0.08	0.15	0.28	0.46	0.82	0.91	1.52	0.63	0.85	1.01	0.39	1.52	-0.02
12	1.62	2.33	1.93	0.30	0.61	0.93	1.36	0.97	0.52	0.34	0.93	0.27	0.29	0.26	0.24	0.30	0.15	0.56	1.41	1.37	1.40	0.62	0.40	0.72	0.83	2.33	0.15
13	1.23	1.58	1.32	1.31	1.07	1.24	1.43	1.35	0.98	0.51	0.01	0.25	0.22	0.35	0.36	0.46	0.88	0.80	0.97	0.82	1.23	1.57	1.00	1.13	0.92	1.58	0.01
14	1.28	1.41	1.41	1.11	1.80	0.93	1.45	1.13	1.38	0.32	-0.32	0.04	0.24	-0.89	0.16	0.09	-0.25	0.85	0.83	0.82	1.01	1.66	1.91	2.25	0.86	2.25	-0.89
15	1.91	1.79	2.05	2.27	1.76	1.41	2.19	1.77	1.72	0.93	1.60	0.70	0.66	0.95	0.98	0.95	0.56	0.94	0.99	0.89	1.21	1.40	1.91	0.96	1.35	2.27	0.56
16	0.79	0.62	0.77	0.28	0.34	0.80	0.88	0.89	0.72	0.54	0.49	0.70	0.56	0.57	0.75	0.68	0.68	0.62	0.51	0.57	0.40	0.25	0.14	0.21	0.57	0.89	0.14
17	0.07	0.01	0.00	0.26	0.41	1.34	0.67	0.36	0.23	0.23	0.12	0.03	-0.04	-0.01	-0.09	0.20	0.35	0.61	0.19	0.15	0.21	0.43	0.64	1.75	0.34	1.75	-0.09
18	1.69	0.77	0.03	0.15	0.38	0.35	0.25	0.26	0.19	0.14	0.03	0.09	0.07	0.08	0.24	0.69	0.69	0.98	0.75	0.49	0.29	0.97	0.70	0.89	0.47	1.69	0.03
19	0.71	0.82	0.32	0.72	1.07	0.27	0.31	0.39	0.28	0.05	0.20	-0.06	-0.01	-0.15	-0.23	-0.10	0.13	0.25	0.18	0.02	0.05	0.05	0.27	0.72	0.26	1.07	-0.23
20	0.99	1.14	0.92	0.77	0.63	1.21	0.46	0.60	1.20	1.05	0.08	0.17	0.08	0.09	-0.06	0.00	0.32	0.48	0.44	0.38	0.43	0.74	0.54	0.23	0.54	1.21	-0.06
21	0.45	0.62	0.71	0.39	0.76	0.19	0.32	0.90	0.52	0.42	0.37	0.25	0.15	-0.08	-0.05	0.33	0.36	0.56	0.67	0.52	0.33	0.11	0.03	-0.01	0.37	0.90	-0.08
22	0.01	0.00	-0.04	-0.03	-0.03	-0.05	0.00	-0.02	-0.09	-0.18	-0.21	-0.25	-0.14	-0.23	-0.07	-0.09	-0.04	0.01	0.15	0.01	0.41	0.36	0.54	1.09	0.05	1.09	-0.25
23	1.09	0.68	0.22	0.26	-0.04	0.13	0.27	0.08	-0.06	-0.11	-0.19	-0.19	-0.13	-0.14	-0.20	-0.17	-0.08	-0.09	-0.09	-0.03	0.02	-0.07	-0.11	0.21	0.05	1.09	-0.20
24	0.26	0.82	0.68	0.33	0.14	0.29	0.09	-0.03	-0.11	-0.37	-0.40	-0.38	-0.29	-0.26	-0.13	-0.04	0.03	0.63	0.48	0.39	0.03	-0.02	0.28	0.60	0.13	0.82	-0.40
25	0.24	0.34	0.36	0.14	0.79	0.85	0.54	1.63	0.80	0.36	-0.11	-0.13	-0.20	-0.15	-0.16	-0.02	0.03	0.03	0.18	0.23	-0.18	0.25	0.08	0.01	0.26	1.63	-0.20
26	-0.03	-0.04	-0.06	-0.08	-0.09	-0.08	-0.10	-0.12	-0.14	-0.20	-0.34	-0.29	-0.26	-0.10	-0.14	-0.23	-0.21	-0.11	-0.12	-0.10	-0.06	-0.07	-0.03	-0.12	-0.13	-0.03	-0.34
27	-0.13	-0.11	-0.03	0.32	0.92	1.45	1.34	0.31	0.39	-0.01	0.12	-0.13	-0.22	-0.19	-0.24	-0.02	0.12	0.00	0.28	0.53	1.29	1.95	1.15	1.30	0.43	1.95	-0.24
28	1.27	0.56	0.71	0.77	1.05	0.51	0.28	0.33	0.28	-0.09	-0.11	-0.12	-0.10	-0.07	-0.03	-0.02	-0.01	0.14	0.35	0.37	0.33	0.26	0.26	0.32	0.30	1.27	-0.12
Avg	0.76	0.74	0.68	0.72	0.78	0.74	0.73	0.68	0.58	0.30	0.24	0.14	0.12	0.06	0.13	0.19	0.25	0.47	0.53	0.52	0.63	0.64	0.69	0.79	0.51	1.51	-0.09
Max	2.66	2.33	2.05	2.42	3.18	2.23	2.80	2.59	2.43	1.36	1.60	0.99	0.87	0.95	0.98	0.95	0.98	1.84	1.41	2.19	1.89	2.10	2.44	2.54	1.51	3.18	0.56
Min	-0.13	-0.12	-0.06	-0.08	-0.09	-0.19	-0.16	-0.16	-0.16	-0.37	-0.40	-0.38	-0.29	-0.89	-0.24	-0.23	-0.25	-0.11	-0.12	-0.10	-0.07	-0.11	-0.11	-0.12	-0.13	-0.03	-0.89



**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature Delta T (degrees Celsius)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	0.31	0.30	0.29	0.85	0.44	0.10	0.22	0.08	-0.02	-0.06	-0.12	-0.06	-0.06	-0.08	-0.03	0.06	0.17	0.24	0.22	0.17	0.23	0.25	0.19	0.20	0.16	0.85	-0.12	
2	0.14	0.25	0.49	0.38	0.24	0.25	0.11	0.07	0.02	-0.07	-0.11	-0.10	-0.12	-0.08	-0.18	-0.07	-0.09	-0.05	0.02	0.33	0.68	1.00	0.82	0.65	0.19	1.00	-0.18	
3	0.45	0.35	0.48	0.40	0.70	0.80	0.98	0.58	0.34	0.20	0.04	0.10	0.10	0.05	0.14	0.33	0.69	0.72	0.62	0.85	1.26	0.74	0.69	0.57	0.51	1.26	0.04	
4	0.44	0.66	0.56	0.41	0.32	0.14	0.05	0.15	-0.10	-0.20	-0.10	0.01	0.11	0.18	0.31	0.37	0.18	0.13	0.15	0.16	0.10	0.04	0.19	0.68	0.21	0.68	-0.20	
5	1.09	1.13	1.75	1.22	1.36	0.94	1.63	1.67	1.26	0.27	0.19	0.16	0.11	0.12	0.13	0.07	-0.08	-0.13	-0.06	0.12	0.12	0.13	0.26	0.12	0.05	0.56	1.75	-0.13
6	0.07	0.10	0.11	0.13	0.21	0.72	1.30	0.57	0.33	0.07	-0.08	-0.15	-0.23	-0.20	-0.26	-0.04	-0.04	0.02	0.55	0.82	0.93	0.13	0.13	0.03	0.22	1.30	-0.26	
7	0.08	0.06	0.02	0.14	0.14	0.10	-0.01	0.13	0.05	-0.11	-0.20	-0.23	-0.13	-0.18	-0.12	-0.03	0.00	0.09	0.16	-0.05	-0.15	-0.12	-0.07	0.12	-0.01	0.16	-0.23	
8	0.35	-0.08	-0.09	0.01	0.08	0.01	0.20	0.22	-0.04	-0.01	0.03	0.07	0.09	0.20	0.20	0.19	0.22	0.32	0.21	0.12	-0.03	-0.06	-0.05	0.02	0.09	0.35	-0.09	
9	0.04	-0.08	-0.05	-0.07	-0.03	0.00	-0.07	-0.12	-0.16	-0.20	-0.24	-0.26	-0.16	-0.17	-0.19	-0.20	-0.18	-0.14	-0.10	-0.13	-0.12	-0.12	-0.13	-0.14	-0.13	0.04	-0.26	
10	-0.15	-0.17	-0.17	-0.19	-0.17	-0.17	-0.12	-0.11	-0.03	0.02	0.08	-0.01	-0.08	0.33	0.33	0.41	0.45	0.45	0.48	0.62	0.68	0.65	0.87	1.12	0.21	1.12	-0.19	
11	0.94	0.58	0.72	1.05	0.96	1.24	0.99	0.72	0.29	-0.01	-0.22	0.22	0.02	-0.06	0.09	0.37	0.31	0.31	0.38	0.48	0.69	0.51	0.50	0.36	0.48	1.24	-0.22	
12	0.17	0.23	0.22	0.19	0.20	0.15	0.14	0.17	0.12	0.08	0.06	0.09	0.08	0.15	0.14	0.16	0.21	0.32	0.43	0.81	0.86	0.68	0.38	0.17	0.26	0.86	0.06	
13	0.09	-0.07	-0.13	-0.04	0.29	0.19	0.23	0.25	0.20	0.18	0.15	0.21	0.22	0.35	0.48	0.40	0.46	0.52	0.53	0.56	0.77	0.54	0.44	0.44	0.30	0.77	-0.13	
14	0.41	0.35	0.31	0.42	0.27	0.07	-0.02	-0.03	0.01	-0.04	-0.10	-0.14	-0.07	0.01	-0.06	0.05	0.24	0.14	0.20	0.19	0.33	0.21	0.30	0.49	0.15	0.49	-0.14	
15	0.25	0.52	0.75	0.53	0.35	0.52	1.00	0.76	0.45	0.24	0.29	0.42	0.25	0.04	0.28	0.44	1.04	0.98	1.16	0.82	1.03	1.04	0.82	0.94	0.62	1.16	0.04	
16	0.67	0.73	0.73	0.65	0.37	0.24	0.42	-0.02	0.04	-0.16	-0.21	-0.17	-0.26	-0.21	-0.09	0.07	0.13	0.15	0.40	0.44	0.50	0.72	0.71	0.67	0.27	0.73	-0.26	
17	1.07	0.96	0.74	0.31	0.13	0.06	-0.10	-0.20	-0.29	-0.54	-0.54	-0.39	-0.52	-0.53	-0.37	-0.01	0.44	0.37	0.28	0.33	0.27	0.22	0.53	0.66	0.12	1.07	-0.54	
18	0.71	0.62	0.89	1.13	1.31	1.02	1.68	1.87	0.29	-0.20	-0.30	-0.19	-0.47	-0.18	0.17	0.34	0.39	0.65	0.38	0.45	0.49	0.52	0.51	1.03	0.55	1.87	-0.47	
19	0.45	0.62	0.55	0.53	0.54	0.64	0.47	0.49	-0.24	-0.29	-0.35	-0.27	-0.64	-0.72	-0.57	-0.36	0.11	0.27	0.45	0.58	0.78	0.94	1.02	0.53	0.23	1.02	-0.72	
20	0.53	0.66	0.67	0.90	0.85	0.78	0.66	-0.17	-0.34	-0.40	-0.44	-0.43	-0.80	-0.58	-0.50	-0.50	-0.35	-0.21	-0.12	-0.09	-0.06	-0.08	-0.12	-0.15	-0.01	0.90	-0.80	
21	-0.10	-0.10	-0.12	-0.14	-0.17	-0.18	-0.19	-0.25	-0.45	-0.81	-0.97	-1.15	-1.28	-1.00	-0.78	-0.88	-0.52	-0.48	-0.05	0.09	0.11	0.34	0.46	0.22	-0.35	0.46	-1.28	
22	0.00	-0.07	-0.11	0.06	0.28	0.54	1.09	-0.10	-0.43	-0.45	-0.64	-0.74	-0.82	-0.87	-0.74	-0.55	-0.39	0.25	0.90	0.79	0.74	0.88	0.44	0.62	0.03	1.09	-0.87	
23	0.75	0.77	1.19	0.76	0.55	0.46	0.80	0.09	-0.32	Au	Au	Au	-0.85	-0.87	-0.91	-0.76	-0.64	-0.29	1.29	1.14	0.67	0.77	1.18	1.19	0.33	1.29	-0.91	
24	1.26	0.78	0.99	1.09	1.09	1.09	1.07	0.11	-0.22	-0.60	-0.85	-0.82	-1.05	-1.01	-0.88	-0.81	-0.28	0.09	0.22	0.28	0.22	0.17	0.24	0.39	0.11	1.26	-1.05	
25	0.30	0.08	0.13	0.13	0.33	0.76	0.43	0.18	-0.13	-0.44	-0.60	-0.72	-0.90	-0.87	-0.63	-0.51	-0.36	-0.13	0.76	0.77	0.23	0.41	0.58	0.85	0.03	0.85	-0.90	
26	0.64	0.89	1.02	0.98	0.81	0.33	0.27	-0.08	-0.31	-0.61	-0.76	-0.85	-0.86	-0.83	-0.90	-0.82	-0.55	0.03	0.49	0.12	0.53	0.23	0.10	0.02	-0.00	1.02	-0.90	
27	-0.05	0.05	0.35	0.48	0.26	0.04	0.15	0.50	-0.21	-0.39	-0.58	-0.51	-0.53	-0.51	-0.57	-0.41	-0.30	-0.16	0.02	0.03	0.03	-0.01	0.12	0.16	-0.09	0.50	-0.58	
28	0.32	0.35	0.57	1.22	0.65	1.10	0.72	-0.13	-0.14	-0.16	-0.29	-0.56	-0.81	-1.02	-0.79	-0.87	-0.65	-0.22	0.42	0.94	0.91	0.67	0.80	1.12	0.17	1.22	-1.02	
29	1.09	0.70	0.21	0.17	0.18	0.21	0.27	-0.07	-0.26	-0.46	-0.53	-0.59	-0.62	-0.65	-0.59	-0.46	-0.44	-0.01	0.46	0.27	0.13	0.20	0.26	0.23	-0.01	1.09	-0.65	
30	0.37	0.08	0.07	0.15	0.33	0.32	0.17	-0.02	-0.18	-0.26	-0.37	-0.52	-0.43	-0.37	-0.44	-0.59	-0.32	-0.15	0.09	0.17	0.15	0.26	0.41	0.36	-0.03	0.41	-0.59	
31	0.22	0.24	0.36	0.23	0.44	0.25	-0.01	-0.14	-0.23	-0.50	-0.83	-0.71	-0.95	-0.95	-1.00	-0.71	-0.65	-0.25	0.01	0.04	0.29	1.03	1.07	1.59	-0.05	1.59	-1.00	
Avg	0.42	0.37	0.44	0.45	0.43	0.41	0.47	0.23	0.02	-0.20	-0.29	-0.28	-0.38	-0.34	-0.27	-0.18	-0.03	0.13	0.36	0.39	0.43	0.42	0.44	0.49	0.16	0.95	-0.47	
Max	1.26	1.13	1.75	1.22	1.36	1.24	1.68	1.87	1.26	0.27	0.29	0.42	0.25	0.35	0.48	0.44	1.04	0.98	1.29	1.14	1.26	1.04	1.18	1.59	0.62	1.87	0.06	
Min	-0.15	-0.17	-0.17	-0.19	-0.17	-0.18	-0.19	-0.25	-0.45	-0.81	-0.97	-1.15	-1.28	-1.02	-1.00	-0.88	-0.65	-0.48	-0.12	-0.13	-0.15	-0.12	-0.13	-0.15	-0.35	0.04	-1.28	

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Solar Radiation (watts m<sup>2</sup>)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0	0	0	0	0	0	0	0	17	64	56	81	174	148	106	59	11	0	0	0	0	0	0	0	30	174	0
2	0	0	0	0	0	0	0	0	45	261	286	357	395	256	131	70	18	0	0	0	0	0	0	0	76	395	0
3	0	0	0	0	0	0	0	0	17	80	147	188	214	239	178	106	17	0	0	0	0	0	0	0	49	239	0
4	0	0	0	0	0	0	0	0	31	129	130	145	178	274	236	127	18	0	0	0	0	0	0	0	53	274	0
5	0	0	0	0	0	0	0	0	19	169	300	374	396	364	282	150	25	0	0	0	0	0	0	0	87	396	0
6	0	0	0	0	0	0	0	0	31	95	154	159	200	205	175	66	20	0	0	0	0	0	0	0	46	205	0
7	0	0	0	0	0	0	0	0	34	203	312	371	393	284	177	87	18	0	0	0	0	0	0	0	78	393	0
8	0	0	0	0	0	0	0	0	9	40	75	82	104	137	110	61	12	0	0	0	0	0	0	0	26	137	0
9	0	0	0	0	0	0	0	0	27	231	174	209	157	88	82	45	5	0	0	0	0	0	0	0	42	231	0
10	0	0	0	0	0	0	0	0	19	126	218	346	293	293	185	100	14	0	0	0	0	0	0	0	66	346	0
11	0	0	0	0	0	0	0	0	11	58	190	348	336	204	201	168	30	0	0	0	0	0	0	0	64	348	0
12	0	0	0	0	0	0	0	0	36	84	205	227	424	377	306	189	46	1	0	0	0	0	0	0	79	424	0
13	0	0	0	0	0	0	0	0	38	200	319	386	419	397	288	190	60	1	0	0	0	0	0	0	96	419	0
14	0	0	0	0	0	0	0	1	25	135	262	385	415	390	312	195	51	0	0	0	0	0	0	0	90	415	0
15	0	0	0	0	0	0	0	0	49	199	298	396	424	381	314	167	49	1	0	0	0	0	0	0	95	424	0
16	0	0	0	0	0	0	0	0	44	208	318	388	422	407	289	178	41	1	0	0	0	0	0	0	96	422	0
17	0	0	0	0	0	0	0	0	27	72	165	325	237	269	338	132	62	1	0	0	0	0	0	0	68	338	0
18	0	0	0	0	0	0	0	4	56	191	267	413	442	392	248	241	62	1	0	0	0	0	0	0	97	442	0
19	0	0	0	0	0	0	0	0	17	60	138	165	166	164	138	111	29	0	0	0	0	0	0	0	41	166	0
20	0	0	0	0	0	0	0	0	19	97	139	367	444	436	308	220	71	1	0	0	0	0	0	0	88	444	0
21	0	0	0	0	0	0	0	1	26	97	281	308	365	464	352	177	70	2	0	0	0	0	0	0	89	464	0
22	0	0	0	0	0	0	0	1	24	81	271	414	444	420	342	214	20	1	0	0	0	0	0	0	93	444	0
23	0	0	0	0	0	0	0	0	16	52	98	141	167	164	157	216	65	1	0	0	0	0	0	0	45	216	0
24	0	0	0	0	0	0	0	1	43	154	370	299	269	281	341	125	72	4	0	0	0	0	0	0	82	370	0
25	0	0	0	0	0	0	0	0	29	84	326	448	440	264	230	147	46	2	0	0	0	0	0	0	84	448	0
26	0	0	0	0	0	0	0	0	34	120	171	266	334	392	400	248	45	2	0	0	0	0	0	0	84	400	0
27	0	0	0	0	0	0	0	1	27	229	340	427	466	447	368	245	99	3	0	0	0	0	0	0	111	466	0
28	0	0	0	0	0	0	0	1	43	186	348	435	418	335	239	191	52	3	0	0	0	0	0	0	94	435	0
29	0	0	0	0	0	0	0	2	72	195	226	281	323	285	176	61	91	13	0	0	0	0	0	0	72	323	0
30	0	0	0	0	0	0	0	1	43	168	328	406	195	239	340	141	51	3	0	0	0	0	0	0	80	406	0
31	0	0	0	0	0	0	0	0	26	103	165	183	223	199	156	98	38	3	0	0	0	0	0	0	50	223	0
Avg	0	0	0	0	0	0	0	0	31	135	228	301	319	297	242	146	42	1	0	0	0	0	0	0	73	349	0
Max	0	0	0	0	0	0	0	4	72	261	370	448	466	464	400	248	99	13	0	0	0	0	0	0	111	466	0
Min	0	0	0	0	0	0	0	0	9	40	56	81	104	88	82	45	5	0	0	0	0	0	0	0	26	137	0

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Solar Radiation (watts m<sup>2</sup>)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0	0	0	0	0	0	0	1	63	186	286	356	338	466	332	292	105	8	0	0	0	0	0	0	101	466	0
2	0	0	0	0	0	0	0	2	50	124	208	498	525	475	410	283	132	9	0	0	0	0	0	0	113	525	0
3	0	0	0	0	0	0	0	2	27	83	130	238	349	274	149	206	90	10	0	0	0	0	0	0	65	349	0
4	0	0	0	0	0	0	0	0	45	169	223	449	396	369	283	365	122	9	0	0	0	0	0	0	101	449	0
5	0	0	0	0	0	0	0	1	39	183	289	215	308	289	161	77	44	6	0	0	0	0	0	0	67	308	0
6	0	0	0	0	0	0	0	0	29	160	374	269	394	157	278	97	20	6	0	0	0	0	0	0	74	394	0
7	0	0	0	0	0	0	0	4	65	199	278	439	307	231	170	104	32	5	0	0	0	0	0	0	76	439	0
8	0	0	0	0	0	0	0	1	19	60	119	169	163	139	118	75	36	4	0	0	0	0	0	0	38	169	0
9	0	0	0	0	0	0	0	3	62	105	186	347	239	223	154	110	53	9	0	0	0	0	0	0	62	347	0
10	0	0	0	0	0	0	0	2	29	79	78	163	167	223	169	140	222	13	0	0	0	0	0	0	54	223	0
11	0	0	0	0	0	0	0	5	113	159	209	323	572	461	469	321	168	24	0	0	0	0	0	0	118	572	0
12	0	0	0	0	0	0	0	15	81	207	423	485	426	452	440	277	169	20	0	0	0	0	0	0	125	485	0
13	0	0	0	0	0	0	0	10	128	275	418	519	553	526	436	280	148	31	0	0	0	0	0	0	139	553	0
14	0	0	0	0	0	0	0	6	160	307	441	530	565	541	460	336	183	31	0	0	0	0	0	0	148	565	0
15	0	0	0	0	0	0	0	6	134	324	458	548	582	540	386	289	131	34	0	0	0	0	0	0	143	582	0
16	0	0	0	0	0	0	0	3	62	207	480	429	580	250	144	120	53	5	0	0	0	0	0	0	97	580	0
17	0	0	0	0	0	0	0	8	48	153	196	489	520	394	481	157	74	15	0	0	0	0	0	0	106	520	0
18	0	0	0	0	0	0	0	7	51	124	327	377	413	459	286	133	108	16	0	0	0	0	0	0	96	459	0
19	0	0	0	0	0	0	0	5	48	144	51	166	101	239	303	228	103	23	0	0	0	0	0	0	59	303	0
20	0	0	0	0	0	0	0	7	57	122	230	367	382	109	160	129	54	22	0	0	0	0	0	0	68	382	0
21	0	0	0	0	0	0	0	7	32	88	90	130	193	299	270	156	177	25	0	0	0	0	0	0	61	299	0
22	0	0	0	0	0	0	0	25	103	247	276	378	414	418	196	139	89	30	0	0	0	0	0	0	96	418	0
23	0	0	0	0	0	0	0	21	100	185	472	268	197	218	187	197	107	32	0	0	0	0	0	0	83	472	0
24	0	0	0	0	0	0	0	13	56	168	258	449	336	330	335	196	166	42	0	0	0	0	0	0	98	449	0
25	0	0	0	0	0	0	0	12	162	304	268	294	614	405	594	253	107	40	0	0	0	0	0	0	127	614	0
26	0	0	0	0	0	0	0	30	93	227	336	401	353	258	240	255	104	29	0	0	0	0	0	0	97	401	0
27	0	0	0	0	0	0	0	13	125	250	250	334	596	483	570	321	96	32	2	0	0	0	0	0	128	596	0
28	0	0	0	0	0	0	0	17	166	175	307	319	411	271	384	564	178	35	1	0	0	0	0	0	118	564	0
Avg	0	0	0	0	0	0	0	8	77	179	274	355	393	339	306	218	110	20	0	0	0	0	0	0	95	446	0
Max	0	0	0	0	0	0	0	30	166	324	480	548	614	541	594	564	222	42	2	0	0	0	0	0	148	614	0
Min	0	0	0	0	0	0	0	0	19	60	51	130	101	109	118	75	20	4	0	0	0	0	0	0	38	169	0

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Solar Radiation (watts m<sup>2</sup>)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0	0	0	0	0	0	0	35	96	155	220	279	363	361	503	223	101	28	0	0	0	0	0	0	99	503	0
2	0	0	0	0	0	0	0	24	111	253	425	452	337	205	136	88	69	29	1	0	0	0	0	0	89	452	0
3	0	0	0	0	0	0	1	58	153	244	295	505	520	379	385	271	107	45	1	0	0	0	0	0	124	520	0
4	0	0	0	0	0	0	0	28	218	375	390	548	316	219	114	51	64	43	1	0	0	0	0	0	99	548	0
5	0	0	0	0	0	0	0	37	101	335	338	318	277	197	142	76	37	27	1	0	0	0	0	0	79	338	0
6	0	0	0	0	0	0	0	41	193	372	567	759	533	370	559	222	171	44	5	0	0	0	0	0	160	759	0
7	0	0	0	0	0	0	1	21	203	321	508	490	332	451	237	214	156	68	1	0	0	0	0	0	125	508	0
8	0	0	0	0	0	0	1	14	69	138	136	182	142	238	177	107	105	57	2	0	0	0	0	0	57	238	0
9	0	0	0	0	0	0	0	21	71	166	260	325	324	330	360	245	115	41	2	0	0	0	0	0	94	360	0
10	0	0	0	0	0	0	1	33	97	217	305	463	496	650	540	327	83	117	6	0	0	0	0	0	139	650	0
11	0	0	0	0	0	0	6	49	115	226	571	696	641	491	291	162	88	48	2	0	0	0	0	0	141	696	0
12	0	0	0	0	0	0	1	39	126	267	404	515	652	309	341	259	152	61	5	0	0	0	0	0	130	652	0
13	0	0	0	0	0	0	2	62	175	301	499	382	391	347	262	303	148	36	2	0	0	0	0	0	121	499	0
14	0	0	0	0	0	0	1	18	88	147	194	247	200	163	156	157	76	36	4	0	0	0	0	0	62	247	0
15	0	0	0	0	0	0	3	76	107	198	435	553	747	615	297	217	102	63	3	0	0	0	0	0	142	747	0
16	0	0	0	0	0	0	9	141	214	330	592	533	665	762	582	330	289	146	11	0	0	0	0	0	192	762	0
17	0	0	0	0	0	0	11	136	305	492	645	730	675	577	368	136	59	20	5	0	0	0	0	0	173	730	0
18	0	0	0	0	0	0	16	162	319	527	494	453	633	414	189	99	73	16	1	0	0	0	0	0	142	633	0
19	0	0	0	0	0	0	2	68	284	348	372	244	511	618	457	341	93	40	6	0	0	0	0	0	141	618	0
20	0	0	0	0	0	0	25	139	324	511	425	353	580	262	219	203	126	43	5	0	0	0	0	0	134	580	0
21	0	0	0	0	0	0	7	56	205	504	553	657	713	455	339	418	185	171	15	0	0	0	0	0	178	713	0
22	0	0	0	0	0	0	21	177	363	528	666	752	776	744	593	383	261	64	15	0	0	0	0	0	223	776	0
23	0	0	0	0	0	0	13	140	309	Au	Au	Au	671	757	671	525	354	172	20	0	0	0	0	0	173	757	0
24	0	0	0	0	0	0	34	176	355	544	652	667	774	716	618	535	232	52	8	0	0	0	0	0	223	774	0
25	0	0	0	0	0	0	18	103	329	440	496	488	632	547	339	253	163	93	13	0	0	0	0	0	163	632	0
26	0	0	0	0	0	0	17	156	402	501	557	778	723	773	679	521	310	68	8	0	0	0	0	0	229	778	0
27	0	0	0	0	0	0	4	62	342	353	429	319	252	253	317	185	115	36	20	0	0	0	0	0	112	429	0
28	0	0	0	0	0	0	65	290	285	315	300	531	673	735	501	554	358	151	15	0	0	0	0	0	199	735	0
29	0	0	0	0	0	0	39	98	188	291	307	307	293	378	248	264	202	30	7	0	0	0	0	0	111	378	0
30	0	0	0	0	0	0	7	36	106	174	473	736	420	229	195	330	88	33	3	0	0	0	0	0	118	736	0
31	0	0	0	0	0	0	30	86	150	330	688	609	603	665	558	273	223	113	25	0	0	0	0	0	181	688	0
Avg	0	0	0	0	0	0	11	83	207	330	440	496	512	458	367	267	152	64	7	0	0	0	0	0	140	595	0
Max	0	0	0	0	0	0	65	290	402	544	688	778	776	773	679	554	358	172	25	0	0	0	0	0	229	778	0
Min	0	0	0	0	0	0	0	14	69	138	136	182	142	163	114	51	37	16	0	0	0	0	0	0	57	238	0

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Barometric Pressure (InHg)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	23.93	23.92	23.91	23.90	23.90	23.89	23.90	23.91	23.92	23.92	23.92	23.92	23.93	23.93	23.95	23.96	23.99	24.02	24.04	24.05	24.06	24.07	24.08	24.08	23.96	24.08	23.89	
2	24.08	24.09	24.11	24.11	24.11	24.12	24.12	24.14	24.15	24.20	24.22	24.22	24.20	24.21	24.23	24.25	24.27	24.29	24.30	24.30	24.30	24.31	24.31	24.30	24.21	24.31	24.08	
3	24.29	24.29	24.30	24.30	24.31	24.32	24.33	24.33	24.33	24.34	24.36	24.35	24.33	24.32	24.31	24.32	24.32	24.32	24.32	24.32	24.32	24.32	24.31	24.31	24.32	24.36	24.29	
4	24.31	24.31	24.32	24.32	24.29	24.28	24.28	24.28	24.27	24.30	24.30	24.31	24.29	24.27	24.26	24.26	24.26	24.26	24.25	24.25	24.25	24.27	24.27	24.28	24.28	24.32	24.25	
5	24.28	24.28	24.29	24.30	24.30	24.29	24.29	24.29	24.28	24.30	24.30	24.28	24.25	24.22	24.21	24.21	24.22	24.20	24.20	24.20	24.20	24.19	24.18	24.25	24.30	24.18		
6	24.18	24.18	24.18	24.18	24.18	24.18	24.19	24.19	24.20	24.23	24.24	24.25	24.23	24.21	24.21	24.23	24.25	24.27	24.28	24.29	24.30	24.31	24.32	24.33	24.23	24.33	24.18	
7	24.33	24.34	24.35	24.35	24.34	24.35	24.36	24.36	24.37	24.40	24.39	24.36	24.33	24.29	24.28	24.26	24.25	24.24	24.22	24.20	24.19	24.19	24.19	24.19	24.30	24.40	24.19	
8	24.19	24.20	24.22	24.23	24.23	24.25	24.26	24.27	24.28	24.30	24.31	24.31	24.27	24.23	24.21	24.20	24.17	24.14	24.09	24.05	24.00	23.97	23.94	23.92	24.18	24.31	23.92	
9	23.90	23.89	23.89	23.88	23.87	23.87	23.87	23.86	23.85	23.84	23.84	23.81	23.78	23.79	23.80	23.80	23.82	23.84	23.83	23.86	23.87	23.87	23.89	23.91	23.85	23.91	23.78	
10	23.91	23.89	23.89	23.89	23.88	23.87	23.87	23.86	23.85	23.84	23.82	23.81	23.78	23.77	23.76	23.75	23.78	23.82	23.85	23.86	23.89	23.90	23.91	23.92	23.85	23.92	23.75	
11	23.90	23.90	23.90	23.90	23.88	23.86	23.85	23.86	23.87	23.89	23.91	23.91	23.89	23.89	23.90	23.93	23.94	23.96	23.98	24.00	24.02	24.04	24.06	24.08	23.93	24.08	23.85	
12	24.09	24.11	24.13	24.16	24.16	24.16	24.17	24.20	24.22	24.25	24.26	24.25	24.24	24.23	24.23	24.24	24.25	24.28	24.29	24.30	24.31	24.32	24.33	24.34	24.23	24.34	24.09	
13	24.35	24.36	24.37	24.38	24.40	24.40	24.41	24.41	24.44	24.48	24.49	24.48	24.48	24.48	24.48	24.49	24.50	24.52	24.54	24.55	24.55	24.55	24.55	24.54	24.47	24.55	24.35	
14	24.53	24.53	24.54	24.53	24.53	24.52	24.52	24.53	24.54	24.56	24.56	24.54	24.51	24.50	24.50	24.49	24.48	24.49	24.49	24.48	24.48	24.47	24.46	24.46	24.46	24.51	24.56	24.46
15	24.44	24.42	24.42	24.42	24.41	24.40	24.39	24.39	24.38	24.39	24.38	24.35	24.34	24.32	24.31	24.31	24.32	24.34	24.35	24.37	24.38	24.39	24.40	24.41	24.38	24.44	24.31	
16	24.41	24.42	24.41	24.42	24.42	24.42	24.41	24.41	24.42	24.43	24.42	24.41	24.39	24.39	24.37	24.36	24.35	24.36	24.36	24.36	24.34	24.35	24.34	24.33	24.39	24.43	24.33	
17	24.32	24.32	24.31	24.30	24.29	24.29	24.29	24.29	24.29	24.30	24.30	24.29	24.26	24.25	24.24	24.24	24.22	24.20	24.21	24.22	24.20	24.19	24.18	24.17	24.26	24.32	24.17	
18	24.15	24.14	24.13	24.12	24.11	24.09	24.08	24.08	24.08	24.07	24.08	24.08	24.06	24.05	24.03	24.02	24.01	24.00	23.99	23.98	23.97	23.96	23.94	23.93	24.05	24.15	23.93	
19	23.93	23.90	23.91	23.91	23.91	23.89	23.90	23.92	23.91	23.91	23.91	23.90	23.88	23.87	23.86	23.87	23.87	23.88	23.88	23.88	23.88	23.88	23.87	23.87	23.89	23.93	23.86	
20	23.86	23.85	23.85	23.85	23.84	23.84	23.84	23.84	23.83	23.82	23.81	23.81	23.78	23.76	23.75	23.75	23.74	23.74	23.75	23.74	23.73	23.73	23.73	23.73	23.79	23.86	23.73	
21	23.72	23.71	23.71	23.71	23.70	23.71	23.72	23.72	23.74	23.76	23.77	23.78	23.78	23.81	23.82	23.85	23.88	23.90	23.93	23.96	23.98	24.01	24.03	24.04	23.82	24.04	23.70	
22	24.05	24.07	24.09	24.10	24.11	24.11	24.11	24.12	24.13	24.12	24.12	24.12	24.09	24.06	24.04	24.02	24.01	24.00	23.99	23.98	23.97	23.96	23.96	23.95	24.05	24.13	23.95	
23	23.94	23.93	23.93	23.94	23.95	23.94	23.95	23.96	23.97	23.98	23.99	23.98	23.97	23.96	23.96	23.96	23.97	23.99	24.01	24.02	24.02	24.03	24.04	24.05	23.98	24.05	23.93	
24	24.05	24.05	24.06	24.07	24.07	24.08	24.08	24.09	24.11	24.13	24.13	24.12	24.12	24.11	24.11	24.12	24.14	24.16	24.19	24.19	24.20	24.21	24.23	24.23	24.13	24.23	24.05	
25	24.23	24.24	24.24	24.24	24.25	24.25	24.26	24.27	24.28	24.29	24.29	24.30	24.28	24.26	24.26	24.26	24.28	24.29	24.30	24.31	24.32	24.32	24.33	24.34	24.35	24.28	24.35	24.23
26	24.36	24.36	24.37	24.37	24.37	24.38	24.39	24.40	24.42	24.43	24.44	24.45	24.45	24.44	24.46	24.47	24.48	24.50	24.51	24.51	24.52	24.53	24.55	24.56	24.45	24.56	24.36	
27	24.57	24.57	24.59	24.60	24.60	24.61	24.62	24.62	24.64	24.66	24.66	24.67	24.65	24.64	24.63	24.62	24.61	24.62	24.63	24.64	24.64	24.64	24.65	24.67	24.63	24.67	24.57	
28	24.68	24.67	24.68	24.67	24.66	24.66	24.66	24.66	24.67	24.68	24.67	24.67	24.66	24.64	24.64	24.64	24.63	24.64	24.65	24.66	24.65	24.64	24.65	24.65	24.66	24.68	24.63	
29	24.65	24.64	24.65	24.64	24.64	24.64	24.63	24.62	24.62	24.60	24.58	24.58	24.57	24.54	24.53	24.51	24.50	24.47	24.44	24.42	24.41	24.41	24.42	24.41	24.55	24.65	24.41	
30	24.40	24.38	24.39	24.37	24.37	24.37	24.37	24.38	24.39	24.38	24.40	24.38	24.34	24.32	24.29	24.28	24.28	24.28	24.28	24.27	24.25	24.23	24.23	24.22	24.33	24.40	24.22	
31	24.21	24.20	24.21	24.20	24.20	24.19	24.20	24.21	24.22	24.23	24.24	24.25	24.24	24.24	24.24	24.26	24.28	24.31	24.32	24.33	24.33	24.34	24.35	24.36	24.26	24.36	24.19	
Avg	24.20	24.20	24.20	24.21	24.20	24.20	24.20	24.21	24.22	24.23	24.23	24.22	24.21	24.19	24.19	24.19	24.20	24.20	24.21	24.21	24.21	24.21	24.22	24.22	24.21	24.29	24.12	
Max	24.68	24.67	24.68	24.67	24.66	24.66	24.66	24.66	24.67	24.68	24.67	24.67	24.66	24.64	24.64	24.64	24.63	24.64	24.65	24.66	24.65	24.64	24.65	24.67	24.66	24.68	24.63	
Min	23.72	23.71	23.71	23.71	23.70	23.71	23.72	23.72	23.74	23.76	23.77	23.78	23.78	23.76	23.75	23.75	23.74	23.74	23.75	23.74	23.73	23.73	23.73	23.73	23.79	23.86	23.70	

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Barometric Pressure (InHg)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	24.36	24.36	24.38	24.38	24.40	24.42	24.43	24.45	24.47	24.50	24.49	24.50	24.50	24.50	24.50	24.52	24.52	24.52	24.52	24.51	24.50	24.50	24.49	24.47	24.52	24.36	
2	24.46	24.45	24.45	24.43	24.42	24.41	24.40	24.40	24.40	24.42	24.45	24.45	24.43	24.42	24.42	24.43	24.44	24.44	24.43	24.43	24.42	24.41	24.39	24.38	24.42	24.46	24.38
3	24.36	24.34	24.32	24.29	24.26	24.24	24.22	24.21	24.20	24.18	24.15	24.12	24.09	24.06	24.04	24.02	23.99	23.98	23.97	23.95	23.95	23.95	23.95	23.95	24.12	24.36	23.95
4	23.94	23.94	23.94	23.94	23.96	23.98	23.99	24.02	24.05	24.04	24.05	24.05	24.04	24.02	24.02	24.02	24.03	24.03	24.03	24.04	24.04	24.05	24.05	24.05	24.01	24.05	23.94
5	24.04	24.03	24.03	24.02	24.01	24.00	23.99	24.00	24.00	24.00	24.00	23.99	23.97	23.95	23.94	23.92	23.91	23.91	23.91	23.90	23.90	23.89	23.88	23.88	23.96	24.04	23.88
6	23.85	23.82	23.79	23.77	23.75	23.73	23.72	23.72	23.72	23.73	23.74	23.74	23.71	23.70	23.69	23.73	23.74	23.77	23.85	23.86	23.86	23.88	23.91	23.92	23.78	23.92	23.69
7	23.93	23.93	23.95	23.96	23.97	23.98	23.98	23.98	23.97	23.97	23.97	23.96	23.91	23.88	23.87	23.88	23.91	23.93	23.94	23.96	23.99	24.02	24.04	24.07	23.96	24.07	23.87
8	24.08	24.09	24.12	24.12	24.15	24.16	24.16	24.17	24.18	24.20	24.21	24.21	24.21	24.20	24.20	24.20	24.20	24.18	24.18	24.17	24.16	24.14	24.12	24.13	24.16	24.21	24.08
9	24.13	24.12	24.11	24.09	24.08	24.06	24.04	24.04	24.03	24.02	24.01	24.00	23.97	23.95	23.94	23.94	23.93	23.92	23.91	23.91	23.89	23.88	23.88	23.90	23.99	24.13	23.88
10	23.93	23.96	23.98	23.98	23.99	24.00	24.00	24.01	24.03	24.04	24.06	24.07	24.07	24.07	24.07	24.08	24.09	24.07	24.08	24.08	24.07	24.07	24.08	24.08	24.04	24.09	23.93
11	24.11	24.12	24.11	24.12	24.12	24.12	24.19	24.21	24.24	24.27	24.31	24.35	24.37	24.38	24.41	24.43	24.44	24.47	24.51	24.53	24.55	24.56	24.57	24.58	24.34	24.58	24.11
12	24.59	24.60	24.60	24.60	24.59	24.59	24.58	24.58	24.59	24.59	24.57	24.58	24.56	24.55	24.55	24.54	24.54	24.53	24.52	24.52	24.52	24.52	24.52	24.53	24.56	24.60	24.52
13	24.53	24.53	24.53	24.53	24.54	24.55	24.56	24.56	24.57	24.57	24.58	24.58	24.56	24.55	24.54	24.54	24.53	24.53	24.53	24.53	24.54	24.54	24.54	24.54	24.55	24.58	24.53
14	24.54	24.54	24.55	24.54	24.54	24.55	24.55	24.55	24.54	24.54	24.55	24.54	24.52	24.51	24.49	24.48	24.47	24.45	24.44	24.42	24.41	24.41	24.40	24.39	24.50	24.55	24.39
15	24.38	24.37	24.37	24.36	24.35	24.35	24.34	24.33	24.32	24.31	24.30	24.29	24.28	24.26	24.25	24.25	24.24	24.23	24.22	24.21	24.19	24.18	24.16	24.15	24.28	24.38	24.15
16	24.15	24.14	24.11	24.09	24.09	24.07	24.04	24.03	24.02	23.99	23.97	23.95	23.94	23.91	23.89	23.89	23.88	23.89	23.89	23.88	23.90	23.92	23.91	23.91	23.98	24.15	23.88
17	23.93	23.93	23.95	23.97	23.98	23.97	23.99	24.00	24.02	24.04	24.06	24.06	24.05	24.02	24.01	24.00	23.98	23.98	23.98	23.97	23.96	23.95	23.94	23.93	23.99	24.06	23.93
18	23.93	23.93	23.92	23.91	23.90	23.90	23.91	23.90	23.91	23.91	23.90	23.90	23.89	23.88	23.87	23.85	23.85	23.85	23.85	23.85	23.84	23.83	23.83	23.83	23.88	23.93	23.83
19	23.82	23.81	23.80	23.80	23.80	23.81	23.81	23.82	23.83	23.84	23.85	23.87	23.89	23.89	23.90	23.91	23.91	23.93	23.95	23.97	23.97	23.98	24.01	24.02	23.88	24.02	23.80
20	24.03	24.04	24.05	24.07	24.08	24.09	24.08	24.08	24.06	24.04	24.03	24.02	24.01	24.00	23.98	23.97	23.97	23.99	23.99	24.02	24.03	24.04	24.04	24.04	24.03	24.09	23.97
21	24.04	24.04	24.04	24.03	24.03	24.01	24.00	24.00	24.00	24.01	24.00	24.00	23.99	24.00	23.99	24.00	23.99	23.99	24.00	24.02	24.03	24.04	24.05	24.06	24.01	24.06	23.99
22	24.07	24.08	24.09	24.10	24.12	24.13	24.13	24.14	24.15	24.16	24.17	24.17	24.17	24.16	24.15	24.15	24.15	24.15	24.15	24.16	24.16	24.16	24.16	24.16	24.14	24.17	24.07
23	24.16	24.16	24.15	24.14	24.14	24.15	24.15	24.15	24.15	24.15	24.14	24.14	24.14	24.13	24.14	24.15	24.16	24.17	24.19	24.19	24.18	24.19	24.19	24.18	24.16	24.19	24.13
24	24.18	24.18	24.18	24.18	24.18	24.19	24.19	24.20	24.21	24.21	24.22	24.22	24.21	24.21	24.21	24.21	24.21	24.23	24.24	24.25	24.25	24.25	24.25	24.25	24.21	24.25	24.18
25	24.24	24.22	24.22	24.20	24.18	24.17	24.15	24.14	24.13	24.09	24.08	24.06	24.02	24.00	23.98	23.98	23.98	23.97	23.98	23.98	23.98	23.98	23.99	23.99	24.07	24.24	23.97
26	23.99	24.00	24.01	23.99	23.99	23.99	23.98	23.98	23.99	23.98	23.98	23.97	23.96	23.94	23.93	23.92	23.93	23.93	23.92	23.91	23.91	23.91	23.90	23.89	23.95	24.01	23.89
27	23.88	23.89	23.88	23.88	23.88	23.87	23.87	23.87	23.88	23.87	23.86	23.86	23.86	23.84	23.84	23.85	23.85	23.87	23.89	23.90	23.91	23.92	23.93	23.93	23.88	23.93	23.84
28	23.92	23.92	23.91	23.91	23.90	23.91	23.91	23.91	23.91	23.91	23.93	23.94	23.95	23.96	23.97	23.99	24.02	24.06	24.09	24.12	24.15	24.17	24.20	24.21	23.99	24.21	23.90
Avg	24.13	24.13	24.13	24.12	24.12	24.12	24.12	24.12	24.13	24.13	24.13	24.13	24.12	24.11	24.10	24.10	24.10	24.11	24.11	24.12	24.12	24.12	24.12	24.12	24.12	24.21	24.04
Max	24.59	24.60	24.60	24.60	24.59	24.59	24.58	24.58	24.59	24.59	24.58	24.58	24.56	24.55	24.55	24.54	24.54	24.53	24.53	24.53	24.55	24.56	24.57	24.58	24.56	24.60	24.53
Min	23.82	23.81	23.79	23.77	23.75	23.73	23.72	23.72	23.72	23.73	23.74	23.74	23.71	23.70	23.69	23.73	23.74	23.77	23.85	23.84	23.83	23.83	23.83	23.83	23.78	23.92	23.69

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Barometric Pressure (InHg)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	24.22	24.24	24.24	24.25	24.26	24.26	24.27	24.27	24.28	24.28	24.30	24.30	24.29	24.28	24.29	24.29	24.30	24.32	24.35	24.37	24.39	24.42	24.44	24.44	24.31	24.44	24.22
2	24.45	24.46	24.47	24.47	24.47	24.48	24.48	24.49	24.50	24.51	24.51	24.50	24.49	24.47	24.46	24.42	24.40	24.38	24.36	24.34	24.33	24.32	24.31	24.30	24.43	24.51	24.30
3	24.29	24.29	24.28	24.27	24.27	24.27	24.28	24.28	24.30	24.31	24.31	24.29	24.27	24.25	24.23	24.21	24.20	24.18	24.16	24.15	24.13	24.11	24.09	24.08	24.23	24.31	24.08
4	24.06	24.05	24.03	24.03	24.04	24.05	24.03	24.02	24.02	24.02	24.01	23.99	23.99	23.97	23.96	23.96	23.97	23.97	23.96	23.95	23.95	23.94	23.92	23.90	23.99	24.06	23.90
5	23.89	23.88	23.87	23.85	23.84	23.82	23.81	23.80	23.79	23.78	23.77	23.76	23.74	23.72	23.71	23.74	23.74	23.75	23.74	23.75	23.75	23.75	23.75	23.77	23.78	23.89	23.71
6	23.77	23.80	23.81	23.82	23.84	23.86	23.89	23.91	23.92	23.93	23.94	23.95	23.96	23.96	23.96	23.98	23.98	23.99	24.00	24.01	24.02	24.02	24.02	24.02	23.93	24.02	23.77
7	24.02	24.04	24.05	24.06	24.09	24.12	24.14	24.15	24.16	24.17	24.18	24.20	24.21	24.21	24.23	24.23	24.23	24.23	24.22	24.21	24.21	24.19	24.17	24.15	24.16	24.23	24.02
8	24.14	24.13	24.12	24.11	24.10	24.11	24.11	24.12	24.14	24.15	24.17	24.19	24.18	24.17	24.18	24.19	24.20	24.20	24.20	24.20	24.21	24.22	24.24	24.24	24.17	24.24	24.10
9	24.26	24.27	24.28	24.29	24.29	24.31	24.33	24.35	24.38	24.40	24.40	24.42	24.42	24.42	24.41	24.43	24.44	24.44	24.43	24.42	24.41	24.40	24.38	24.36	24.37	24.44	24.26
10	24.34	24.33	24.31	24.29	24.28	24.28	24.27	24.27	24.28	24.29	24.29	24.30	24.31	24.30	24.30	24.30	24.30	24.31	24.32	24.35	24.36	24.37	24.39	24.40	24.31	24.40	24.27
11	24.41	24.43	24.45	24.46	24.47	24.48	24.47	24.47	24.47	24.46	24.46	24.44	24.42	24.39	24.36	24.34	24.32	24.28	24.25	24.22	24.21	24.20	24.20	24.21	24.37	24.48	24.20
12	24.21	24.22	24.23	24.23	24.25	24.26	24.27	24.29	24.31	24.33	24.35	24.37	24.39	24.40	24.40	24.42	24.43	24.43	24.44	24.44	24.45	24.44	24.43	24.42	24.35	24.45	24.21
13	24.41	24.40	24.38	24.37	24.36	24.35	24.35	24.34	24.36	24.36	24.35	24.35	24.34	24.32	24.32	24.31	24.29	24.29	24.30	24.30	24.30	24.31	24.32	24.32	24.34	24.41	24.29
14	24.33	24.33	24.33	24.34	24.35	24.36	24.36	24.37	24.37	24.38	24.38	24.37	24.37	24.36	24.35	24.35	24.34	24.35	24.35	24.35	24.35	24.34	24.34	24.33	24.35	24.38	24.33
15	24.33	24.32	24.31	24.30	24.30	24.30	24.30	24.30	24.31	24.31	24.30	24.29	24.27	24.26	24.24	24.23	24.22	24.20	24.19	24.19	24.18	24.18	24.17	24.17	24.26	24.33	24.17
16	24.18	24.17	24.17	24.17	24.18	24.20	24.21	24.23	24.24	24.26	24.27	24.28	24.28	24.29	24.30	24.31	24.31	24.31	24.34	24.37	24.40	24.41	24.42	24.43	24.28	24.43	24.17
17	24.43	24.44	24.44	24.45	24.47	24.49	24.49	24.49	24.50	24.50	24.49	24.47	24.45	24.43	24.40	24.39	24.38	24.36	24.35	24.35	24.34	24.35	24.35	24.34	24.42	24.50	24.34
18	24.34	24.33	24.31	24.28	24.27	24.26	24.26	24.27	24.26	24.25	24.24	24.22	24.19	24.16	24.15	24.14	24.13	24.14	24.18	24.17	24.16	24.19	24.20	24.19	24.22	24.34	24.13
19	24.21	24.22	24.24	24.24	24.26	24.27	24.28	24.29	24.31	24.32	24.33	24.33	24.33	24.32	24.30	24.31	24.31	24.32	24.34	24.36	24.36	24.38	24.37	24.37	24.31	24.38	24.21
20	24.38	24.39	24.40	24.41	24.41	24.43	24.44	24.44	24.46	24.46	24.46	24.46	24.46	24.45	24.44	24.44	24.43	24.44	24.44	24.44	24.45	24.45	24.44	24.44	24.44	24.46	24.38
21	24.42	24.41	24.40	24.39	24.38	24.38	24.37	24.36	24.36	24.35	24.33	24.31	24.29	24.27	24.25	24.24	24.23	24.22	24.20	24.19	24.18	24.17	24.15	24.14	24.29	24.42	24.14
22	24.14	24.14	24.16	24.13	24.14	24.15	24.16	24.18	24.18	24.18	24.18	24.17	24.17	24.15	24.14	24.13	24.13	24.14	24.14	24.13	24.15	24.14	24.15	24.15	24.15	24.18	24.13
23	24.15	24.15	24.14	24.14	24.14	24.15	24.17	24.18	24.20	Au	Au	Au	24.19	24.19	24.19	24.20	24.22	24.24	24.26	24.28	24.29	24.30	24.32	24.32	24.21	24.32	24.14
24	24.32	24.33	24.33	24.33	24.32	24.33	24.33	24.32	24.33	24.32	24.31	24.28	24.26	24.22	24.20	24.18	24.16	24.15	24.15	24.16	24.18	24.17	24.18	24.19	24.25	24.33	24.15
25	24.20	24.23	24.24	24.25	24.26	24.27	24.28	24.30	24.30	24.30	24.30	24.28	24.27	24.24	24.23	24.23	24.22	24.22	24.22	24.23	24.23	24.23	24.23	24.24	24.25	24.30	24.20
26	24.24	24.24	24.25	24.24	24.25	24.25	24.26	24.26	24.26	24.26	24.25	24.24	24.22	24.20	24.19	24.19	24.18	24.17	24.16	24.16	24.16	24.16	24.17	24.16	24.21	24.26	24.16
27	24.15	24.15	24.14	24.13	24.14	24.15	24.15	24.16	24.18	24.19	24.18	24.18	24.18	24.18	24.18	24.19	24.21	24.24	24.27	24.28	24.30	24.31	24.32	24.34	24.20	24.34	24.13
28	24.34	24.34	24.36	24.37	24.38	24.39	24.40	24.41	24.42	24.42	24.41	24.41	24.40	24.39	24.38	24.37	24.37	24.37	24.37	24.38	24.38	24.39	24.38	24.37	24.38	24.42	24.34
29	24.38	24.38	24.38	24.37	24.37	24.37	24.37	24.36	24.36	24.35	24.34	24.31	24.29	24.27	24.25	24.23	24.21	24.21	24.20	24.20	24.20	24.19	24.18	24.15	24.29	24.38	24.15
30	24.13	24.12	24.11	24.10	24.09	24.09	24.09	24.09	24.09	24.09	24.09	24.08	24.07	24.08	24.08	24.09	24.11	24.13	24.15	24.17	24.20	24.21	24.23	24.24	24.12	24.24	24.07
31	24.26	24.28	24.29	24.31	24.33	24.34	24.37	24.38	24.39	24.41	24.42	24.41	24.40	24.40	24.40	24.41	24.41	24.42	24.42	24.42	24.43	24.43	24.43	24.42	24.38	24.43	24.26
Avg	24.24	24.24	24.24	24.24	24.25	24.25	24.26	24.26	24.27	24.28	24.28	24.27	24.26	24.25	24.24	24.24	24.24	24.24	24.24	24.24	24.25	24.25	24.25	24.25	24.25	24.33	24.16
Max	24.45	24.46	24.47	24.47	24.47	24.49	24.49	24.49	24.50	24.51	24.51	24.50	24.49	24.47	24.46	24.44	24.44	24.44	24.44	24.44	24.45	24.45	24.44	24.44	24.44	24.51	24.38
Min	23.77	23.80	23.81	23.82	23.84	23.82	23.81	23.80	23.79	23.78	23.77	23.76	23.74	23.72	23.71	23.74	23.74	23.75	23.74	23.75	23.75	23.75	23.75	23.77	23.78	23.89	23.71

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Relative Humidity (% RH)**  
**January 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	78.9	78.8	78.0	77.1	77.2	77.6	78.5	80.6	81.2	82.0	82.6	83.7	83.8	82.1	80.3	76.9	73.8	74.5	72.2	74.0	71.7	74.2	74.9	73.6	77.8	83.8	71.7
2	73.7	73.4	75.9	75.3	74.8	72.7	70.6	70.0	68.6	69.1	63.9	59.7	61.7	68.6	73.3	74.5	74.3	74.3	75.0	74.5	74.3	73.5	72.7	72.8	71.5	75.9	59.7
3	71.9	71.1	69.6	69.0	69.2	69.5	70.0	70.7	71.0	71.0	69.1	67.1	63.6	60.6	68.0	68.2	73.3	75.4	75.9	76.3	75.7	75.5	74.9	74.8	70.9	76.3	60.6
4	75.4	75.4	74.8	74.1	73.5	74.0	69.5	70.3	68.7	64.3	67.8	66.7	68.3	70.1	70.9	72.5	73.0	71.9	72.5	71.1	72.7	76.1	75.9	75.0	71.9	76.1	64.3
5	74.5	72.6	72.4	71.0	69.3	68.8	68.3	69.3	69.2	63.4	55.1	48.3	49.3	47.0	47.2	56.1	61.8	73.9	74.4	74.3	74.6	74.1	75.6	75.2	66.1	75.6	47.0
6	73.8	72.6	71.7	71.6	71.5	71.5	72.2	72.2	72.5	73.6	74.8	74.6	69.5	63.3	55.1	54.0	66.7	76.8	79.8	80.3	75.1	77.0	77.4	78.4	71.9	80.3	54.0
7	76.9	76.8	76.2	75.3	74.8	74.6	74.7	74.6	73.8	74.5	76.4	74.7	62.9	38.2	34.8	37.4	52.2	69.3	70.5	72.6	69.3	73.0	84.4	85.0	68.9	85.0	34.8
8	85.4	86.3	86.4	86.4	86.4	86.0	86.8	87.2	86.6	84.2	80.5	78.7	75.7	74.0	73.3	74.1	78.1	80.1	77.4	85.0	87.9	86.6	88.4	90.8	83.0	90.8	73.3
9	92.0	92.8	92.3	89.9	90.1	88.0	89.0	90.1	90.8	86.1	83.8	78.3	69.0	76.3	81.4	71.8	82.9	74.5	62.4	58.8	60.4	57.4	57.6	63.4	78.3	92.8	57.4
10	64.3	69.8	78.4	79.8	82.1	83.8	82.9	82.3	81.6	79.3	72.2	63.5	54.7	65.7	69.1	72.6	76.1	75.4	72.2	69.2	66.0	66.4	70.5	72.8	72.9	83.8	54.7
11	72.9	72.6	73.6	73.8	74.3	74.2	74.3	74.6	74.4	72.4	68.1	59.0	53.4	56.5	67.1	62.8	65.7	69.7	71.7	75.7	76.5	77.1	75.2	72.1	70.3	77.1	53.4
12	72.2	70.7	71.1	70.0	70.4	69.1	69.4	71.3	73.1	75.2	77.3	76.6	68.8	56.3	58.9	59.1	64.6	75.8	81.3	80.2	79.2	77.2	76.5	75.6	71.7	81.3	56.3
13	74.5	74.1	74.3	74.2	73.4	73.4	73.7	73.5	73.1	75.0	77.3	79.2	77.4	45.4	35.0	35.0	41.3	67.8	75.3	76.0	80.2	79.6	78.6	77.9	69.4	80.2	35.0
14	76.4	75.9	75.0	74.6	73.7	73.4	73.2	72.5	73.8	74.8	78.0	79.0	77.4	55.0	27.5	29.7	34.9	61.6	70.6	74.1	77.8	80.9	80.5	79.7	68.7	80.9	27.5
15	78.8	78.0	78.0	77.8	77.6	77.2	77.0	76.7	76.9	78.7	81.3	77.7	52.7	34.2	31.1	33.7	37.1	58.1	69.8	71.6	72.8	76.9	78.8	80.2	68.0	81.3	31.1
16	79.2	78.9	79.2	78.4	78.1	77.5	77.5	76.8	76.6	77.0	77.2	68.0	53.6	43.5	48.5	49.2	51.2	60.0	72.3	74.6	77.1	80.1	81.3	82.4	70.8	82.4	43.5
17	81.5	82.5	82.9	82.2	81.9	81.3	82.0	81.3	82.0	80.4	76.0	60.5	62.0	59.0	53.6	52.0	52.9	66.6	75.6	76.9	78.5	78.2	74.8	70.8	73.1	82.9	52.0
18	54.2	64.6	68.6	73.4	74.8	68.7	55.3	43.9	42.6	40.9	35.5	34.2	36.9	37.1	38.6	42.3	48.5	57.7	60.2	67.4	72.4	74.9	76.0	74.7	56.0	76.0	34.2
19	78.6	69.2	57.8	62.4	59.0	61.6	64.6	62.9	64.1	65.0	62.0	62.9	61.8	66.1	68.2	66.0	69.0	72.0	72.7	71.8	71.4	77.9	87.5	90.8	68.6	90.8	57.8
20	92.3	92.5	92.4	92.3	91.9	91.3	90.6	89.6	89.6	89.7	86.7	72.4	66.5	59.1	51.8	54.0	58.6	69.5	76.3	82.5	86.4	84.8	82.9	82.4	80.3	92.5	51.8
21	80.9	80.6	80.0	79.7	80.1	79.4	80.1	79.5	79.6	81.2	82.8	69.2	65.1	48.6	50.2	56.0	60.1	63.8	69.2	69.6	74.8	79.7	79.8	79.8	72.9	82.8	48.6
22	79.6	82.0	83.8	84.0	85.7	85.8	85.3	83.4	81.6	78.4	69.8	58.5	56.5	49.1	48.9	50.9	56.0	61.1	69.3	71.0	67.7	66.9	77.5	87.9	71.7	87.9	48.9
23	88.7	89.1	88.4	87.8	87.4	85.4	83.6	85.3	85.5	86.7	86.4	85.3	83.5	82.2	75.2	74.8	80.6	81.4	80.8	81.3	83.8	84.7	81.0	80.2	83.7	89.1	74.8
24	80.4	79.4	78.3	77.5	76.6	75.4	75.0	74.2	75.2	75.9	74.1	67.9	70.7	67.0	63.9	64.8	60.1	54.0	62.7	64.6	69.3	69.2	70.4	71.0	70.7	80.4	54.0
25	73.0	75.5	75.8	77.3	77.1	77.7	78.3	78.8	77.6	72.2	57.6	52.0	62.2	65.6	65.6	65.4	65.9	71.1	73.2	77.5	83.2	84.4	85.4	84.6	73.2	85.4	52.0
26	84.6	83.9	83.8	84.1	83.6	83.8	83.4	82.8	81.2	72.8	66.3	66.1	65.3	63.3	60.4	59.5	62.6	65.8	67.1	68.6	74.3	79.6	80.1	81.7	74.4	84.6	59.5
27	81.4	80.8	80.2	80.0	78.8	78.3	78.4	77.5	77.7	78.8	80.7	69.5	58.3	57.7	57.3	56.8	57.8	61.9	69.5	75.5	78.1	80.7	81.7	83.3	73.4	83.3	56.8
28	82.7	83.4	82.6	82.1	81.2	80.5	80.7	80.1	79.8	79.4	75.1	56.9	54.7	53.3	53.8	52.4	56.0	63.1	71.3	76.2	77.1	77.9	78.2	79.0	72.4	83.4	52.4
29	80.4	80.6	84.6	84.8	84.4	84.2	83.2	82.9	79.8	71.1	67.0	59.5	40.1	40.2	39.6	38.6	40.3	48.1	45.1	47.5	55.4	55.6	37.4	34.3	61.0	84.8	34.3
30	37.6	38.0	39.6	43.4	45.6	42.9	45.8	54.5	58.3	56.5	46.6	47.9	51.0	49.9	48.8	48.5	48.7	48.0	39.9	40.3	43.1	48.2	53.0	55.4	47.1	58.3	37.6
31	57.0	58.7	65.3	81.8	86.4	85.8	85.0	83.2	77.5	76.4	68.5	71.6	79.1	76.9	70.8	76.7	79.9	72.0	73.1	76.6	79.7	78.7	76.4	78.7	75.7	86.4	57.0
Avg	75.9	76.1	76.5	77.1	77.1	76.6	76.1	75.9	75.6	74.4	71.6	66.7	63.1	58.4	57.0	57.6	61.4	67.6	70.3	72.1	73.8	75.1	75.7	76.3	71.2	82.3	51.5
Max	92.3	92.8	92.4	92.3	91.9	91.3	90.6	90.1	90.8	89.7	86.7	85.3	83.8	82.2	81.4	76.9	82.9	81.4	81.3	85.0	87.9	86.6	88.4	90.8	83.7	92.8	74.8
Min	37.6	38.0	39.6	43.4	45.6	42.9	45.8	43.9	42.6	40.9	35.5	34.2	36.9	34.2	27.5	29.7	34.9	48.0	39.9	40.3	43.1	48.2	37.4	34.3	47.1	58.3	27.5

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Relative Humidity (% RH)**  
**February 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	80.3	81.1	81.2	77.9	80.0	76.9	77.4	78.1	72.8	60.5	54.1	55.0	56.0	53.3	53.7	55.5	63.0	65.3	72.3	74.6	75.2	74.6	72.7	71.9	69.3	81.2	53.3
2	70.3	69.6	68.2	67.7	67.4	66.5	66.7	66.3	65.4	67.4	70.1	71.1	70.6	61.0	62.2	63.6	63.7	72.0	77.5	75.4	74.7	72.7	71.1	71.1	68.8	77.5	61.0
3	70.8	72.0	72.0	71.6	71.7	72.4	73.0	76.6	80.3	83.0	82.4	64.8	60.1	60.2	70.0	82.5	74.4	75.7	88.6	87.6	85.6	82.5	80.4	80.2	75.8	88.6	60.1
4	85.9	86.7	86.6	89.4	84.8	83.1	83.0	82.5	82.3	78.3	77.4	69.9	64.2	64.7	63.5	62.3	63.6	73.3	82.8	84.6	84.6	82.1	86.0	89.0	78.8	89.4	62.3
5	89.2	89.3	86.8	86.4	79.4	73.6	71.2	69.2	68.2	62.0	57.4	58.0	55.2	53.1	53.3	54.1	53.7	58.9	63.1	62.3	61.7	60.3	60.6	60.4	66.1	89.3	53.1
6	57.8	58.2	56.8	57.5	70.6	77.6	71.9	75.4	74.5	71.1	66.3	67.3	66.2	80.7	81.6	83.8	88.4	86.6	82.3	82.5	82.7	83.1	82.3	85.3	74.6	88.4	56.8
7	84.8	85.3	84.2	84.4	81.7	79.6	78.5	77.7	76.8	77.9	78.6	74.4	72.2	69.4	74.4	76.3	79.2	79.9	78.7	78.6	78.8	79.5	79.6	79.4	78.7	85.3	69.4
8	79.5	79.7	80.2	79.7	79.9	79.7	80.1	80.4	79.7	78.1	77.8	74.0	70.5	71.0	70.1	72.1	71.6	78.1	83.1	88.0	88.0	87.6	86.8	87.0	79.3	88.0	70.1
9	84.6	84.4	86.0	86.9	88.1	87.2	84.8	81.6	82.5	78.8	64.8	59.9	58.5	56.5	57.4	61.0	59.8	63.6	65.9	69.5	68.4	66.7	66.4	64.0	72.0	88.1	56.5
10	72.1	81.9	84.3	81.3	79.9	84.2	86.9	84.3	82.7	80.0	73.7	70.1	71.3	71.9	67.5	67.7	68.1	71.6	71.6	74.4	77.8	72.3	69.8	78.5	76.0	86.9	67.5
11	81.2	77.7	70.3	69.2	68.6	66.8	75.5	62.1	54.8	59.2	56.4	53.2	50.2	50.7	50.7	50.4	51.7	56.1	60.0	61.6	65.8	64.2	62.4	64.9	61.8	81.2	50.2
12	66.5	76.1	77.3	80.0	81.2	82.6	82.9	81.5	80.1	76.7	61.9	41.8	33.8	34.6	35.4	35.0	34.2	38.4	43.4	51.7	58.2	62.8	66.4	69.9	60.5	82.9	33.8
13	74.5	77.1	78.2	79.2	78.5	78.9	80.2	80.6	73.2	60.1	51.3	40.9	35.6	39.1	38.4	38.2	40.3	45.9	63.2	65.6	69.3	73.8	74.7	76.9	63.1	80.6	35.6
14	79.5	80.1	81.5	83.3	83.3	84.0	82.0	83.1	76.8	69.3	51.9	44.6	39.3	34.7	36.8	33.9	40.6	52.6	69.2	74.0	76.8	81.6	84.7	85.8	67.1	85.8	33.9
15	87.8	86.5	87.2	87.2	85.9	85.6	85.6	85.6	85.0	77.9	58.5	36.4	30.1	29.0	29.8	31.4	30.2	37.8	49.9	56.2	58.4	61.5	59.6	39.2	60.9	87.8	29.0
16	34.7	33.9	35.7	38.5	39.1	43.2	44.2	45.8	47.4	46.2	44.2	44.8	43.1	46.0	48.0	50.6	52.5	55.3	62.2	66.4	64.2	69.0	76.3	76.6	50.3	76.6	33.9
17	79.8	86.7	79.5	80.9	73.0	77.1	75.8	66.5	65.5	63.1	61.6	58.4	56.3	52.6	48.3	49.4	54.1	62.7	65.7	67.2	71.6	75.8	71.8	72.0	67.3	86.7	48.3
18	64.5	63.9	69.5	67.4	59.5	57.5	62.4	64.7	67.3	68.2	60.8	56.9	56.8	54.0	53.3	56.8	56.6	61.3	61.5	66.6	66.3	73.0	71.7	73.1	63.1	73.1	53.3
19	76.2	79.8	81.7	85.5	83.3	83.7	86.5	86.3	84.1	81.9	84.5	89.8	84.7	80.0	74.1	74.3	75.5	80.7	80.7	83.3	90.1	87.8	87.2	87.3	82.9	90.1	74.1
20	89.6	88.1	88.0	88.3	86.9	86.6	86.4	86.4	85.2	79.2	68.6	60.9	58.6	75.8	82.5	81.1	67.8	70.4	70.6	73.2	74.6	74.2	86.0	88.1	79.0	89.6	58.6
21	88.6	89.0	88.9	86.3	85.8	89.4	90.6	88.5	82.1	61.7	60.8	66.5	67.3	88.2	82.6	65.8	63.0	56.3	45.4	50.2	49.9	61.5	71.9	76.4	73.2	90.6	45.4
22	74.7	77.6	84.3	83.5	86.6	87.4	86.0	86.3	84.2	80.1	80.9	79.8	76.0	75.1	73.3	74.1	80.0	74.6	71.4	70.8	77.0	77.5	79.4	84.0	79.4	87.4	70.8
23	86.1	85.5	83.9	82.2	80.5	81.2	80.0	76.6	69.7	60.3	57.2	57.5	57.5	57.5	71.3	74.3	77.8	81.0	83.6	80.5	78.2	77.7	76.9	80.1	74.9	86.1	57.2
24	80.6	80.5	79.7	79.3	79.9	78.4	80.0	80.9	78.7	62.0	61.1	56.7	62.5	64.9	65.6	57.9	59.0	59.0	62.0	67.6	71.9	73.4	76.0	81.3	70.8	81.3	56.7
25	81.3	81.6	83.8	82.7	83.3	82.4	81.9	81.6	78.6	67.3	61.5	59.0	57.8	55.8	51.9	51.8	51.8	52.9	56.1	55.7	54.0	56.4	59.7	61.9	66.3	83.8	51.8
26	68.7	72.9	74.9	77.5	80.6	81.0	82.2	84.4	84.2	79.3	75.6	74.2	72.8	61.0	70.0	74.6	79.3	81.2	84.1	83.5	83.7	83.4	83.4	83.8	78.2	84.4	61.0
27	82.9	82.7	82.3	82.1	81.2	79.6	79.0	78.9	75.8	70.2	70.4	63.6	54.1	54.9	49.9	52.2	57.7	73.7	81.0	84.4	86.1	84.0	81.9	81.5	73.8	86.1	49.9
28	81.4	81.3	81.5	82.1	82.1	82.0	84.3	80.9	68.6	58.7	52.7	51.5	58.5	61.8	57.8	49.2	59.1	62.5	55.6	55.9	58.5	56.7	56.0	56.7	65.6	84.3	49.2
Avg	76.9	78.2	78.4	78.5	78.0	78.2	78.5	77.6	75.2	69.9	65.1	60.8	58.6	59.2	59.8	60.0	61.3	65.3	69.0	71.1	72.6	73.4	74.3	75.2	70.6	85.0	53.7
Max	89.6	89.3	88.9	89.4	88.1	89.4	90.6	88.5	85.2	83.0	84.5	89.8	84.7	88.2	82.6	83.8	88.4	86.6	88.6	88.0	90.1	87.8	87.2	89.0	82.9	90.6	74.1
Min	34.7	33.9	35.7	38.5	39.1	43.2	44.2	45.8	47.4	46.2	44.2	36.4	30.1	29.0	29.8	31.4	30.2	37.8	43.4	50.2	49.9	56.4	56.0	39.2	50.3	73.1	29.0

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Relative Humidity (% RH)**  
**March 2017**

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	57.1	55.8	55.8	59.5	60.5	58.7	58.6	60.2	62.6	66.0	65.1	61.4	61.2	62.8	57.7	57.1	54.2	52.6	55.6	56.4	59.4	62.1	64.9	70.2	59.8	70.2	52.6
2	74.5	75.7	75.3	73.6	70.9	69.8	70.0	68.5	65.7	62.1	60.1	57.9	57.0	56.8	77.5	77.5	75.8	75.2	76.9	77.0	79.7	59.5	49.5	45.7	68.0	79.7	45.7
3	45.2	41.9	43.2	46.9	48.2	50.8	51.3	51.1	49.7	45.0	42.9	43.5	42.8	38.9	36.3	36.0	39.7	38.4	39.5	43.6	50.6	42.2	41.1	38.4	43.6	51.3	36.0
4	40.6	42.1	37.2	39.7	46.9	65.0	81.5	83.9	74.9	67.6	53.4	49.3	45.9	45.8	47.9	51.8	65.2	70.8	73.7	70.8	82.0	88.0	86.7	89.6	62.5	89.6	37.2
5	88.3	84.0	82.2	85.4	84.5	86.2	85.7	81.9	55.0	40.3	34.5	35.4	38.3	46.9	54.0	79.6	86.1	82.7	85.8	85.0	85.0	86.7	87.9	82.2	72.6	88.3	34.5
6	82.7	81.8	74.6	65.5	64.7	71.9	75.8	78.1	71.5	59.7	55.0	49.4	49.4	49.8	49.0	50.3	49.1	55.9	73.5	75.6	77.2	77.2	74.6	78.3	66.3	82.7	49.0
7	72.9	65.8	64.6	58.2	60.7	65.9	73.0	62.0	56.0	55.4	53.7	53.0	45.8	44.6	48.8	48.1	48.1	49.3	54.5	65.5	82.5	85.8	86.4	86.3	62.0	86.4	44.6
8	84.1	83.1	86.9	84.3	80.0	77.4	81.1	89.6	89.4	81.8	75.8	69.5	61.9	58.0	57.0	58.5	55.8	57.7	60.3	63.9	84.6	90.0	91.0	86.0	75.3	91.0	55.8
9	79.9	84.8	86.7	87.4	87.6	87.2	86.3	84.3	82.1	78.8	75.2	72.7	76.6	77.0	77.0	76.9	78.2	78.2	76.6	78.0	77.4	79.0	78.7	77.8	80.2	87.6	72.7
10	77.7	78.7	80.4	82.5	83.8	83.6	83.7	82.6	84.6	81.3	76.4	67.7	58.9	58.0	56.1	57.3	57.8	55.9	54.2	56.6	59.1	61.1	64.7	72.9	69.8	84.6	54.2
11	78.5	83.6	86.0	88.0	88.5	88.4	87.3	87.4	86.4	79.3	63.4	49.9	42.5	40.9	42.7	48.3	50.2	48.3	52.8	62.9	55.8	47.5	52.9	63.8	65.6	88.5	40.9
12	71.5	71.5	64.9	63.0	62.0	64.3	64.1	63.9	62.1	61.2	58.2	56.6	54.3	53.6	52.4	52.1	52.3	52.5	54.9	63.0	69.1	75.0	78.0	79.9	62.5	79.9	52.1
13	81.3	82.4	84.1	82.3	73.2	68.1	67.4	64.1	60.2	55.6	51.5	49.3	47.7	46.2	45.2	46.9	48.0	55.7	59.6	60.6	64.9	64.5	58.1	63.7	61.7	84.1	45.2
14	70.4	75.0	79.8	81.3	87.2	91.3	93.2	93.7	93.1	90.7	87.9	86.6	84.5	85.9	84.8	83.5	85.4	88.5	89.3	90.3	91.7	91.7	91.4	92.4	87.1	93.7	70.4
15	92.0	92.7	93.5	93.9	92.8	93.2	92.8	75.1	70.3	67.2	62.8	59.3	51.9	47.3	48.1	49.6	51.1	54.9	63.2	70.6	76.9	71.0	61.9	63.8	70.7	93.9	47.3
16	62.9	64.1	59.3	72.1	82.7	86.8	90.2	84.0	77.4	70.9	64.4	58.4	55.2	48.3	42.8	40.4	37.2	39.2	42.5	40.5	40.9	45.3	49.6	51.5	58.6	90.2	37.2
17	49.7	54.4	64.2	66.8	68.0	71.1	74.1	73.1	60.2	49.5	40.5	33.7	32.6	31.1	30.5	34.3	43.0	46.6	49.3	51.3	53.1	54.6	57.6	62.1	52.1	74.1	30.5
18	66.6	71.3	77.8	78.9	81.4	81.0	81.1	71.4	50.2	38.9	34.3	32.4	29.9	31.3	31.6	32.2	33.2	35.6	55.7	62.6	46.8	48.8	48.2	52.6	53.1	81.4	29.9
19	63.9	68.7	70.9	72.6	75.6	78.9	73.3	75.0	67.2	62.5	64.4	65.2	62.4	56.7	51.4	47.7	45.2	44.9	47.5	46.5	47.8	56.4	64.9	72.0	61.7	78.9	44.9
20	76.0	76.9	82.7	84.1	82.2	81.1	82.9	77.0	60.4	46.7	37.1	41.6	43.7	52.4	61.0	63.9	69.8	79.3	80.9	81.0	82.3	80.2	81.7	84.8	70.4	84.8	37.1
21	83.5	82.1	83.0	83.4	85.8	88.8	88.8	87.2	84.9	82.0	78.6	75.6	73.1	73.0	71.5	72.0	78.9	81.3	85.3	87.0	86.3	87.0	87.7	87.9	82.3	88.8	71.5
22	89.6	89.2	89.0	88.5	88.6	90.0	91.7	85.6	76.1	61.1	50.1	42.8	38.7	37.2	35.9	34.1	33.4	35.6	39.2	55.4	64.9	69.2	73.2	74.8	63.9	91.7	33.4
23	77.8	81.8	82.5	83.6	84.7	84.6	85.4	82.3	73.9	Au	Au	Au	41.1	39.3	35.0	32.9	34.3	35.3	43.3	53.6	64.2	71.3	77.7	80.2	64.0	85.4	32.9
24	82.3	83.0	83.6	84.3	84.4	85.1	83.7	80.1	63.9	39.5	33.5	29.7	28.9	23.9	22.7	22.6	24.2	28.7	31.5	33.3	35.0	38.3	53.7	66.3	51.8	85.1	22.6
25	77.4	85.9	87.8	88.4	79.3	75.7	72.6	72.1	64.7	60.6	54.4	50.9	46.1	39.5	39.3	39.7	40.8	43.3	49.4	63.6	69.2	74.1	77.6	81.1	63.9	88.4	39.3
26	83.5	84.6	85.9	85.9	86.2	85.3	85.4	82.2	64.1	54.4	45.8	39.7	36.2	30.9	27.5	28.6	29.9	34.0	40.5	46.2	52.9	56.6	75.6	86.7	59.5	86.7	27.5
27	90.6	93.2	93.5	93.3	93.2	92.8	93.4	91.3	78.5	72.7	66.1	59.8	54.0	51.4	49.6	53.1	60.5	88.1	91.4	92.2	92.9	93.3	92.4	90.9	80.3	93.5	49.6
28	88.4	85.2	85.3	85.1	87.9	87.7	87.1	80.6	71.8	68.2	63.8	56.5	49.1	43.2	39.2	38.6	37.7	38.6	45.1	51.2	54.5	55.4	60.9	63.5	63.5	88.4	37.7
29	64.6	66.1	62.2	62.0	64.8	67.8	72.7	66.9	60.4	56.2	52.5	52.0	61.7	72.0	68.7	63.9	56.6	61.9	71.5	71.9	72.0	77.5	83.2	84.2	66.4	84.2	52.0
30	88.0	90.6	91.2	91.7	91.8	92.4	92.8	92.1	88.8	79.7	68.0	57.0	55.3	64.9	69.3	64.1	72.2	82.0	81.9	79.4	74.8	84.2	84.6	85.3	80.1	92.8	55.3
31	86.7	83.6	83.2	83.7	84.4	81.5	79.9	80.9	77.7	76.2	71.1	53.3	62.6	62.9	59.9	63.3	64.9	77.3	83.5	88.0	88.4	89.4	89.3	90.8	77.6	90.8	53.3
Avg	75.1	76.1	76.7	77.3	77.8	79.1	80.2	77.7	70.4	63.7	58.0	53.7	51.3	50.7	50.7	51.8	53.5	57.0	61.6	65.3	68.4	69.8	71.8	74.4	66.4	85.1	44.9
Max	92.0	93.2	93.5	93.9	93.2	93.2	93.4	93.7	93.1	90.7	87.9	86.6	84.5	85.9	84.8	83.5	86.1	88.5	91.4	92.2	92.9	93.3	92.4	92.4	87.1	93.9	72.7
Min	40.6	41.9	37.2	39.7	46.9	50.8	51.3	51.1	49.7	38.9	33.5	29.7	28.9	23.9	22.7	22.6	24.2	28.7	31.5	33.3	35.0	38.3	41.1	38.4	43.6	51.3	22.6

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**APPENDIX B: PERFORMANCE AUDIT REPORTS**  
**FIRST QUARTER 2017**

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# BISON ENGINEERING, INC.

## PRELIMINARY METEOROLOGICAL AUDIT REPORT

Client : Tintina Resources

SITE : Black Butte

DATE : 03/23/17

Audit Start Time : 9:00 MST

Audit End Time : 12:00 MST

### Temperature

Audit Device : Control Company Digital Thermometer

Model Number : 4000

Serial Number : 140251289

Last certified : 04/18/16

Sensor Make : Climatronics

Model Number : 100093

Serial Number Upper: P12535

Serial Number Lower: P12535

### Temperature bath results as is

	9m	9m	2m	2m	9m - 2m
Audit Value	DAS Value	DAS Diff.	DAS Value	DAS Diff.	DAS Diff.
oC	oC	oC	oC	oC	oC
-9.90	-9.70	0.20	-9.60	0.30	0.10
20.00	19.70	-0.30	19.70	-0.30	0.00
45.00	44.80	-0.20	44.70	-0.30	-0.10

### Wind Direction

Alignment Audit Device : Nextar

Model Number : X3-T

Linearity Audit Device : Climatronics

Model Number : 101966

Serial Number : 72

Sensor height : 10 Meter

Sensor Make : Climatronics

Model Number : 102083

Serial Number : 1849

Crossarm Orientation : N-S

Magnetic Declination : 12

Measured Degrees : 1.5

Sensor response aligned with crossarm (as found) : 0.4

Sensor response aligned with crossarm (as left) : 0.0

### Linearity Check from DAS (as found)

Setpoint	Clockwise	Counter-CW	Diff CW	Diff CCW
0	0.1	0.1	0.1	0.1
30	29.1	28.7	-0.9	-1.3
60	59.9	59.7	-0.1	-0.3
90	89.9	89.6	-0.1	-0.4
120	118.0	117.6	-2.0	-2.4
150	148.5	148.1	-1.5	-1.9
180	180.2	180.0	0.2	0.0
210	207.7	207.5	-2.3	-2.5
240	239.6	239.4	-0.4	-0.6
270	270.3	270.7	0.3	0.7
300	299.1	299.1	-0.9	-0.9
330	329.3	329.2	-0.7	-0.8
		Max Diff	0.1	0.1

### Linearity Check from DAS (as left)

Setpoint	Clockwise	Counter-CW	Diff CW	Diff CCW
0	0.1	0.1	0.1	0.1
90	89.9	89.6	-0.1	-0.4
180	180.2	180.0	0.2	0.0
270	270.3	270.7	0.3	0.7
		Max Diff	0.3	0.7

**Wind Speed**

Audit Device : RMYoung  
Model Number : 18811                      Serial Number : CA02929  
Last certified : NA  
Sensor height : 10 Meter  
Sensor Make : Climatronics  
Model Number : 102083                      Serial Number : 1849

Synchronous motor checks

DAS			
Known	Audit	Station	DAS
Value	Value	Value	Diff.
RPM	MPS	MPS	MPS
0	0.2	0.2	0.0
300	6.7	6.7	0.0
600	13.1	13.1	0.0
950	20.6	20.6	0.0

**Relative Humidity**

Audit Device : Control company Hygrometer  
Model Number : 4185                      Serial Number : 61644981  
Last certified : 4/14/16  
Sensor height : 10 Meter  
Sensor Make : Met One  
Model Number : 083E-0-35                      Serial Number : P18245

Audit	Audit	Audit
Audit RH	Station RH	Diff
%RH	%RH	%RH
30.0	36.7	6.7

**Barometric Pressure**

Audit Device : Delta Cal  
Model Number : Delta Cal                      Serial Number : 999  
Last certified : 04/26/16  
Sensor Make : Climatronics  
Model Number : 102663-G0                      Serial Number : 42017

Audit	Station	Audit
Value	Value	Diff.
In Hg	In Hg	In Hg
24.13	24.2	0.07

**Solar Radiation**

Audit Device : Li Cor  
Model Number : LI-200                      Serial Number : PY82228  
Last certified : 05/21/15                       $\mu\text{A}/\text{m}^2$  : 98.51  
Sensor Make : Met One  
Model Number : 096-1                      Serial Number : PY69829

DAS			
Audit	Station	DAS	DAS
Value	Value	Value	Diff.
w/m2	w/m2	w/m2	%
450	478	478	6.2



**Precipitation**

Audit Device : Fisher Scientific  
Model Number : S32814A                      Serial Number : 250 ml  
Last certified : NA  
Sensor Make : Climatronics  
Model Number : 100097-1-G0-H0              Serial Number : N3939  
Opening : 8                                      Inch  
Bucket Tip : 0.254                              MM  
Bucket Tip Volume : 8.24                      ML  
Level checked : OK  
Wind Screen in place : OK

Known Value	Known Value	Station Value	% Diff
ML	Bucket Tips	Bucket Tips	
250.0	26	28	7.7
250.0	26	28	7.7

Signature Site Operator : \_\_\_\_\_

Signature Auditor : \_\_\_\_\_

Note: These preliminary results are subject to appropriate changes following verification of audit equipment, procedures, and calculations.

**APPENDIX C: CALIBRATION REPORT**  
**FIRST QUARTER 2017**

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# BISON ENGINEERING, INC.

## PRELIMINARY METEOROLOGICAL AUDIT REPORT

Client : Tintina Resources

SITE : Black Butte

DATE : 03/23/17

Audit Start Time : 11:00 MST

Audit End Time : 12:00 MST

### Wind Direction

Alignment Audit Device : Nextar  
 Model Number : X3-T  
 Linearity Audit Device : Climatronics  
 Model Number : NA  
 Sensor height : 10 Meter  
 Sensor Make : Climatronics  
 Model Number : 102083

#### Linearity Check from DAS

Serial Number :	Setpoint	Clockwise	Counter-CW	Diff CW	Diff CCW
72	0	0.6	0.6	0.6	0.6
	30	31.5	31.5	1.5	1.5
	60	61.6	61.6	1.6	1.6
1849	90	91.7	91.7	1.7	1.7
	120	121.2	121.2	1.2	1.2
	150	151.3	151.3	1.3	1.3
	180	181.1	181.1	1.1	1.1
	210	210.6	210.6	0.6	0.6
	240	240.5	240.5	0.5	0.5
	270	270.9	270.9	0.9	0.9
	300	300.3	300.3	0.3	0.3
	330	330.3	330.3	0.3	0.3
			Max Diff	1.7	1.7

Crossarm Orientation : N-S  
 Magnetic Declination : 12

Measured Degrees :

Sensor response aligned with crossarm (as found) : 0.4

Sensor response aligned with crossarm (as left) : 0

#### Linearity Check from DAS (as left)

Setpoint	Clockwise	Counter-CW	Diff CW	Diff CCW
0	0.6	0.6	0.6	0.6
90	91.7	91.7	1.7	1.7
180	181.1	181.1	1.1	1.1
270	270.9	270.9	0.9	0.9
		Max Diff	1.7	1.7

### Wind Speed

Wind Speed  
 Audit Device : RYoung  
 Model Number : 18811 Serial Number : CA02929  
 Last certified : NA  
 Sensor height : 10 Meter  
 Sensor Make : Climatronics  
 Model Number : 102083 Serial Number : 1849

#### Synchronous motor checks

Known Value	Audit Value	DAS Station Value	DAS Diff.
RPM	MPS	MPS	MPS
0	0.2	0.2	0.0
300	6.7	6.7	0.0
600	13.1	13.1	0.0
950	20.6	20.6	0.0

Signature Site Operator : \_\_\_\_\_

Signature Auditor : \_\_\_\_\_

Note: These preliminary results are subject to appropriate changes following verification of audit equipment, procedures, and calculations.

**APPENDIX D: COMPARATIVE PRECIPITATION SUMMARY,  
FIRST QUARTER 2017**

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**COMPARATIVE PRECIPITATION SUMMARY FOR QTR 1, 2017**

<b>Period (2017)</b>	<b>Tintina – Black Butte Site</b>		<b>Millegan 14 SE Coop Site<sup>2</sup></b>
	<b>Automated Gauge</b>	<b>Manual Gauge<sup>1</sup></b>	
Jan 1 – Jan 31	0.36	0.25	0.32
Feb 1 – Feb 28	0.56	0.50	0.47
Mar 1 – Mar 23	0.60	0.49	0.60
<b>Jan 1 – Mar 23</b>	<b>1.52</b>	<b>1.24</b>	<b>1.39</b>

<sup>1</sup>Manual gauge values likely lower due to evaporation / sublimation of moisture between observations which generally occurred once or twice per week.

<sup>2</sup>Manual gauge located approximately 15 miles west-northwest of Black Butte Site. Gauge contents are generally melted and measured daily.