



**BISON**  
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May 23, 2016

Mr. Steven Zehntner  
Air, Energy & Pollution Prevention Bureau  
Montana Dept. of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620

Dear Mr. Zehntner:

Enclosed is a copy of the Tintina Resources Inc. (Tintina) quarterly meteorological data report for the first quarter of 2016. Tintina installed a 10 meter meteorological tower at their Black Butte Copper Project site, north of White Sulphur Springs, Montana. The tower started operations on April 30, 2012. The report contains the data from January 1 through March 31, 2016.

Please contact me with any comments or questions you may have on this report. I would be happy to assist you.

Sincerely,  
BISON ENGINEERING, INC.

Chris Hiltunen, P.E.  
Project Engineer

cc: Bob Jacko – Tintina  
Vince Scartozzi – Tintina  
Alan Kirk – Geomin Resources

Enclosure

**TINTINA RESOURCES, INC.  
BLACK BUTTE COPPER  
PROJECT AMBIENT AIR  
MONITORING PROGRAM  
Quarterly Data Report  
First Quarter 2016**

*Prepared for:*

**Tintina Resources, Inc.**  
17 East Main St.  
White Sulphur Springs, MT 59645

*Prepared by:*

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May 23, 2016

## 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)*.

Preparer: Jeffrey S. Bell

Signature: 

Title: Senior Field Technician

Date: 5/16/2016

Reviewer: Steven R. Heck

Signature: 

Title: Meteorologist

Date: 5-16-16

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## **APPENDICES**

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- Appendix A: Meteorological Data
- Appendix B: Performance Audit Reports

## 1.0 INTRODUCTION

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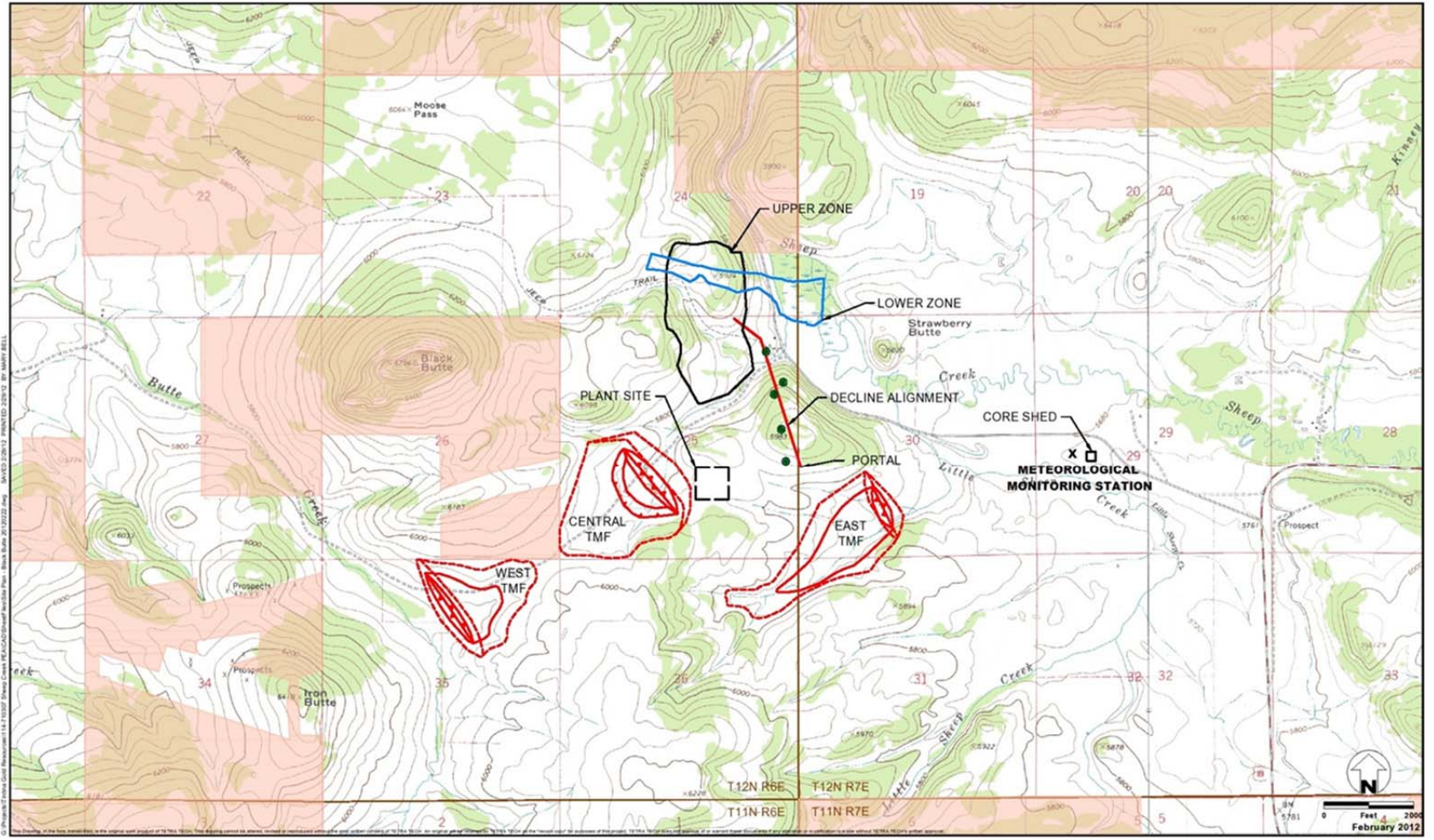
Tintina Resources, Inc. established an ambient air monitoring site to measure wind speed, wind direction, standard deviation of wind direction, temperature at 9 meters and 2 meters, delta temperature, solar radiation, barometric pressure, and precipitation. The station was established to accurately characterize 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 March) of 2016. 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. No evaporation monitoring was conducted during the first quarter of 2016 due to frequent subfreezing conditions.

**Figure 1. Monitoring Site Location**



**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 parameters were in full operation and producing valid data by April 30, 2012.

Steve Heck of Bison conducted performance audits of the meteorological system on February 17, 2016, and made any necessary calibration adjustments to the meteorological system following the audits. The Bison report of the audits is presented in Appendix B.

The evaporation pan was not operated during the first quarter of 2016 due to frequent sub-freezing temperatures.

### **3.0 CALIBRATION DATA**

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As discussed in Section 4.0, the system's as-found condition was audited on February 17, 2016, and found to be satisfactory. However, a slight calibration adjustment was made to the wind direction sensor's potentiometer orientation. The audit results (including the calibration adjustment) are presented in Appendix B.



## **4.0 PERFORMANCE AUDIT DATA**

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Steve Heck of Bison conducted performance audits of the meteorological system on February 17, 2016, and made any necessary calibration adjustments to the meteorological system following the audits. The Bison report of the audits is presented in Appendix B.

## 5.0 DATA COMPLETENESS

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The meteorological percentages of data recovery achieved during the first quarter of 2016 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.

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 2016</b>					
<b>Parameter</b>	<b>Readings Possible</b>	<b>Valid Readings</b>	<b>Percentage Recovery</b>	<b>Quality Assurance Hours</b>	<b>Net Percentage Recovery</b>
<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 2016</b>					
<b>Parameter</b>	<b>Readings Possible</b>	<b>Valid Readings</b>	<b>Percentage Recovery</b>	<b>Quality Assurance Hours</b>	<b>Net Percentage Recovery</b>
<b>Black Butte Copper Project Met Tower</b>					
Wind Speed	696	691	99.3	5	100.0
Wind Direction	696	691	99.3	5	100.0
Standard Deviation	696	691	99.3	5	100.0
Temperature 9 Meters	696	691	99.3	5	100.0
Temperature 2 Meters	696	691	99.3	5	100.0
Temperature Delta T	696	691	99.3	5	100.0
Solar Radiation	696	691	99.3	5	100.0
Barometric Pressure	696	691	99.3	5	100.0
Relative Humidity	696	691	99.3	5	100.0
Precipitation	696	691	99.3	5	100.0
<b>Total</b>	<b>6,960</b>	<b>6,910</b>	<b>99.3</b>	<b>50</b>	<b>100.0</b>

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

<b>March 2016</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	743	99.9	0	99.9
Wind Direction	744	743	99.9	0	99.9
Standard Deviation	744	743	99.9	0	99.9
Temperature 9 Meters	744	743	99.9	0	99.9
Temperature 2 Meters	744	743	99.9	0	99.9
Temperature Delta T	744	743	99.9	0	99.9
Solar Radiation	744	743	99.9	0	99.9
Barometric Pressure	744	743	99.9	0	99.9
Relative Humidity	744	743	99.9	0	99.9
Precipitation	744	743	99.9	0	99.9
<b>Total</b>	<b>7,440</b>	<b>7,430</b>	<b>99.9</b>	<b>0</b>	<b>99.9</b>

**Table 2. Quarterly Data Completeness**

<b>First Quarter 2016</b>					
<b>Parameter</b>	<b>Readings Possible</b>	<b>Valid Readings</b>	<b>Percentage Recovery</b>	<b>Quality Assurance Hours</b>	<b>Net Percentage Recovery</b>
<b>Black Butte Copper Project Met Tower</b>					
Wind Speed	2,184	2,178	99.7	5	100.0
Wind Direction	2,184	2,178	99.7	5	100.0
Standard Deviation	2,184	2,178	99.7	5	100.0
Temperature 9 Meters	2,184	2,178	99.7	5	100.0
Temperature 2 Meters	2,184	2,178	99.7	5	100.0
Temperature Delta T	2,184	2,178	99.7	5	100.0
Solar Radiation	2,184	2,178	99.7	5	100.0
Barometric Pressure	2,184	2,178	99.7	5	100.0
Relative Humidity	2,184	2,178	99.7	5	100.0
Precipitation	2,184	2,178	99.7	5	100.0
<b>Total</b>	<b>21,840</b>	<b>21,780</b>	<b>99.7</b>	<b>50</b>	<b>100.0</b>

## 6.0 MONITORING DATA

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The hourly data values collected at the monitoring sites 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.

There were several periods during the quarter when precipitation readings likely reflected drifting of snow into the tipping-bucket rain gauge, and not actual precipitation events. Those readings were set to zero. Affected periods included:

- January 20, hours 12-24
- January 22, hours 19-21
- January 29, hours 6-24
- January 30, hours 1-17
- February 14, hours 2, 6-12 and 14

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.

The evaporation pan was not operated during the first quarter of 2016 due to frequent subfreezing conditions. Evaporation monitoring is expected to resume in May 2016 when subfreezing nighttime temperatures become less frequent.

**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 2016																		
Direction>>>	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	
0.1 - 1.0	1.3	1.3	2.0	2.6	3.9	2.8	3.9	4.7	2.0	0.9	0.1	0.0	0.4	1.1	0.8	1.3	29.3	
1.1 - 2.0	0.5	0.8	0.5	2.3	3.2	5.4	4.4	4.2	0.8	0.5	0.5	1.2	1.2	1.1	0.8	0.9	28.5	
2.1 - 3.0	0.3	0.0	0.3	1.1	1.5	2.2	2.7	1.5	0.3	0.1	0.1	0.5	1.9	1.6	1.3	0.0	15.3	
3.1 - 4.0	0.0	0.0	0.0	0.4	0.5	0.7	0.7	0.5	0.4	0.3	0.3	0.3	2.2	1.7	0.7	0.1	8.7	
4.1 - 5.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.4	0.4	0.1	0.1	0.4	3.0	1.9	0.4	0.0	7.9	
5.1 - 6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	2.8	0.8	0.1	0.0	4.7	
6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.3	0.5	0.1	0.0	2.2	
7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.2	0.4	0.0	0.0	1.9	
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	0.7	0.0	0.0	0.0	0.7	
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	0.4	0.1	0.0	0.0	0.5	
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	0.3	0.0	0.0	0.3	
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	2.2	2.2	2.8	6.3	10.3	11.0	11.7	11.3	3.9	2.0	1.6	3.4	15.1	9.5	4.3	2.4	100.0	
Average Speed	1.0	0.9	1.1	1.5	1.8	1.6	1.6	1.4	1.7	1.6	3.3	3.4	4.7	3.9	2.5	1.1	2.4	

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

February 2016																		
Direction>>>	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	
0.1 - 1.0	0.6	1.9	1.6	1.2	1.7	2.6	2.6	1.9	1.4	0.6	0.3	0.1	0.3	0.6	0.9	0.4	18.7	
1.1 - 2.0	0.3	1.2	1.4	3.0	3.2	6.8	3.5	2.7	0.7	0.1	0.4	0.6	0.6	1.0	0.6	0.3	26.5	
2.1 - 3.0	0.0	0.0	0.3	1.2	2.7	1.0	0.6	0.0	0.0	0.1	0.3	0.9	1.2	1.2	0.3	0.1	9.8	
3.1 - 4.0	0.0	0.0	0.0	0.0	0.4	0.6	0.1	0.3	0.0	0.3	0.0	1.4	1.4	1.6	0.4	0.0	6.7	
4.1 - 5.0	0.0	0.0	0.0	0.0	0.7	0.1	0.0	0.0	0.0	0.0	0.3	1.2	4.8	0.6	0.9	0.0	8.5	
5.1 - 6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.3	3.8	1.9	0.0	0.0	6.9	
6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	3.8	1.4	0.6	0.0	6.5	
7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	5.2	1.3	0.1	0.0	6.9	
8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	3.9	0.4	0.0	0.0	4.9	
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	0.3	1.6	0.6	0.0	0.0	2.5	
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	0.4	0.4	0.0	0.0	0.9	
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	0.6	0.0	0.0	0.0	0.6	
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	0.1	0.0	0.0	0.0	0.1	
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	0.1	0.0	0.0	0.0	0.1	
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	0.3	0.0	0.0	0.0	0.3	
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	0.9	3.0	3.3	5.4	8.8	11.1	6.8	5.1	2.3	1.6	2.3	5.6	28.1	11.0	3.8	0.9	100.0	
Average Speed	0.9	1.0	1.2	1.6	2.0	1.5	1.3	1.5	1.2	2.9	4.2	4.4	6.6	5.2	3.4	1.1	3.6	

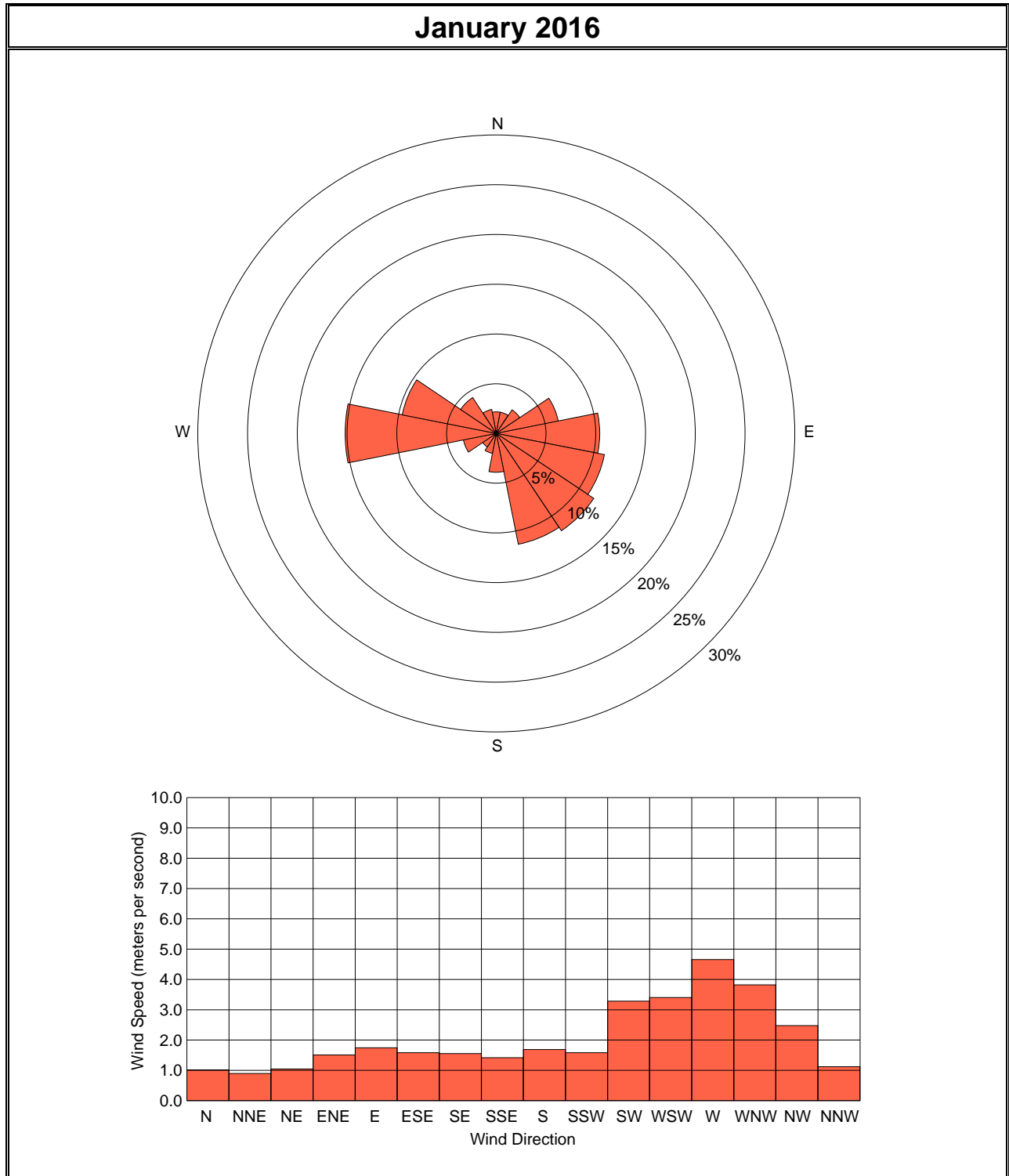
**Table 6. Monthly Wind Rose Summary, Black Butte Copper Project Met Tower**

March 2016																		
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	0.8	0.5	0.4	0.9	0.8	1.2	0.9	0.4	0.7	0.0	0.4	0.0	0.4	0.5	0.3	0.8	9.2
	1.1 - 2.0	0.5	0.8	0.7	1.9	2.6	4.0	4.2	2.2	0.8	0.5	0.7	0.7	0.5	1.2	1.5	1.2	24.0
	2.1 - 3.0	0.3	0.1	0.1	1.7	5.0	1.6	2.2	0.8	0.4	0.3	0.1	0.8	0.9	1.3	1.2	0.4	17.4
	3.1 - 4.0	0.7	0.4	0.0	1.1	1.9	0.4	0.3	0.3	0.0	0.5	0.4	0.7	2.6	3.2	1.5	0.7	14.5
	4.1 - 5.0	0.7	0.0	0.0	0.3	0.1	0.0	0.4	0.7	0.3	0.8	0.8	1.2	2.3	2.2	1.6	0.4	11.7
	5.1 - 6.0	0.4	0.3	0.0	0.0	0.1	0.0	0.1	0.1	0.5	0.8	0.5	0.1	2.8	2.0	0.7	0.7	9.3
	6.1 - 7.0	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.9	0.4	0.1	3.1	0.8	0.7	0.4	7.3
	7.1 - 8.0	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	2.2	0.4	0.4	0.1	4.0
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.7	0.1	0.0	0.0	1.2
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.7	0.1	0.0	0.0	1.2
	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	0.3	0.0	0.0	0.0	0.3
	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	4.2	2.2	1.2	5.9	10.5	7.5	8.3	4.4	3.0	4.0	3.9	3.9	16.4	12.0	7.8	4.7	100.0	
Average Speed	3.7	2.2	1.3	2.2	2.4	1.9	2.2	2.3	3.2	4.6	4.4	3.8	5.5	4.0	3.8	3.2	3.5	

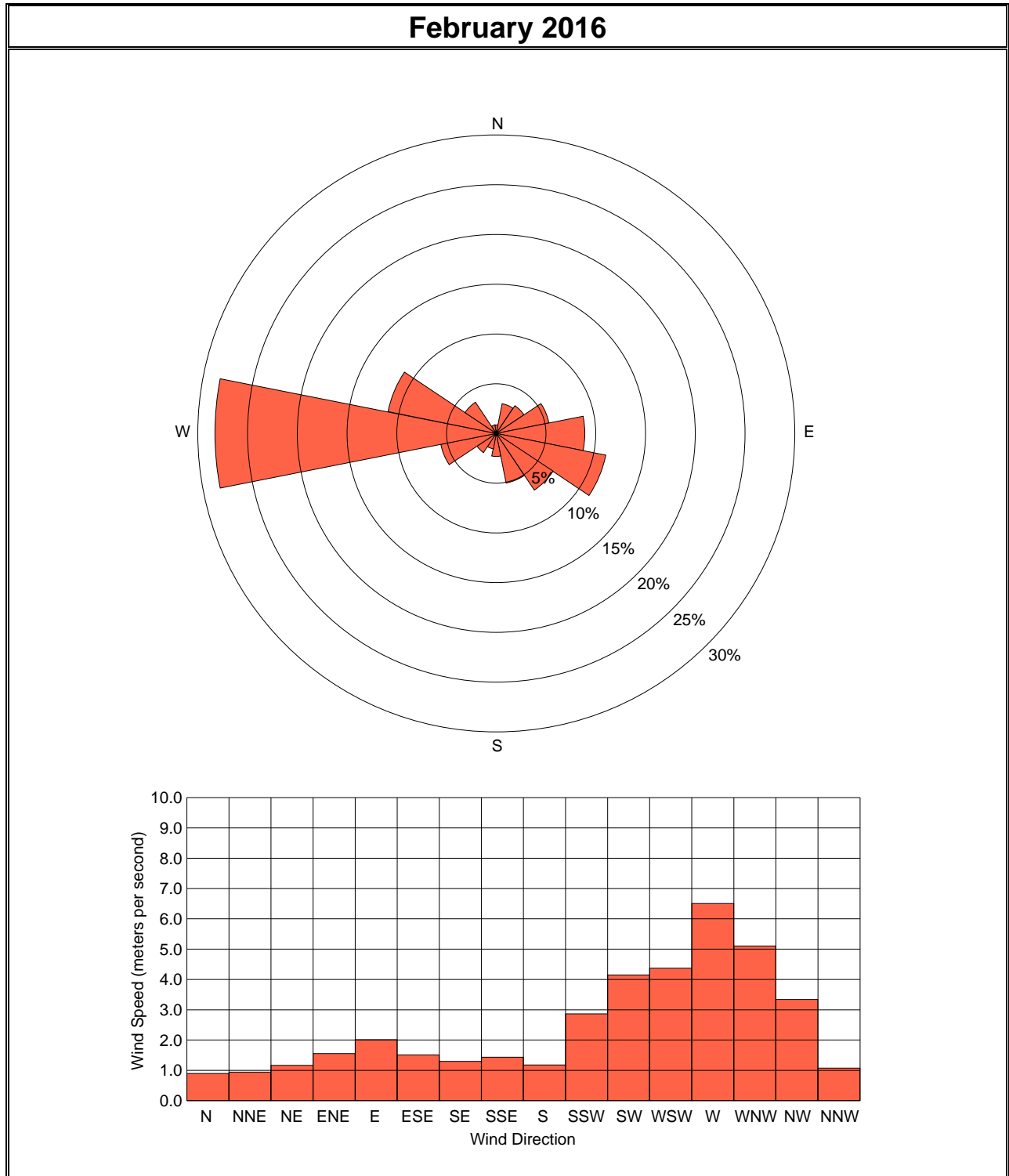
**Table 7. Quarterly Wind Rose Summary, Black Butte Copper Project Met Tower**

First Quarter 2016																		
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	0.9	1.2	1.3	1.6	2.2	2.2	2.5	2.3	1.4	0.5	0.3	0.0	0.4	0.7	0.6	0.9	19.1
	1.1 - 2.0	0.5	0.9	0.9	2.4	3.0	5.4	4.0	3.0	0.8	0.4	0.6	0.8	0.8	1.1	1.0	0.8	26.3
	2.1 - 3.0	0.2	0.0	0.2	1.3	3.1	1.6	1.8	0.8	0.2	0.2	0.2	0.7	1.3	1.4	1.0	0.2	14.3
	3.1 - 4.0	0.2	0.1	0.0	0.5	1.0	0.6	0.4	0.4	0.1	0.4	0.2	0.8	2.1	2.2	0.9	0.3	10.1
	4.1 - 5.0	0.2	0.0	0.0	0.1	0.7	0.0	0.1	0.4	0.2	0.3	0.4	0.9	3.3	1.6	1.0	0.1	9.4
	5.1 - 6.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.4	3.1	1.6	0.3	0.2	7.0
	6.1 - 7.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.2	2.7	0.9	0.5	0.1	5.3
	7.1 - 8.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	2.8	0.7	0.2	0.0	4.2
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	1.7	0.2	0.0	0.0	2.2
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.9	0.3	0.0	0.0	1.4
	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	0.2	0.2	0.0	0.0	0.5
	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	0.2	0.0	0.0	0.0	0.2
	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	0.1	0.0	0.0	0.0	0.1
	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	2.4	2.4	2.4	5.9	9.9	9.9	9.0	7.0	3.1	2.6	2.6	4.3	19.7	10.8	5.3	2.7	100.0	
Average Speed	2.6	1.3	1.1	1.8	2.1	1.7	1.7	1.6	2.1	3.5	4.1	4.0	5.8	4.3	3.4	2.3	3.1	

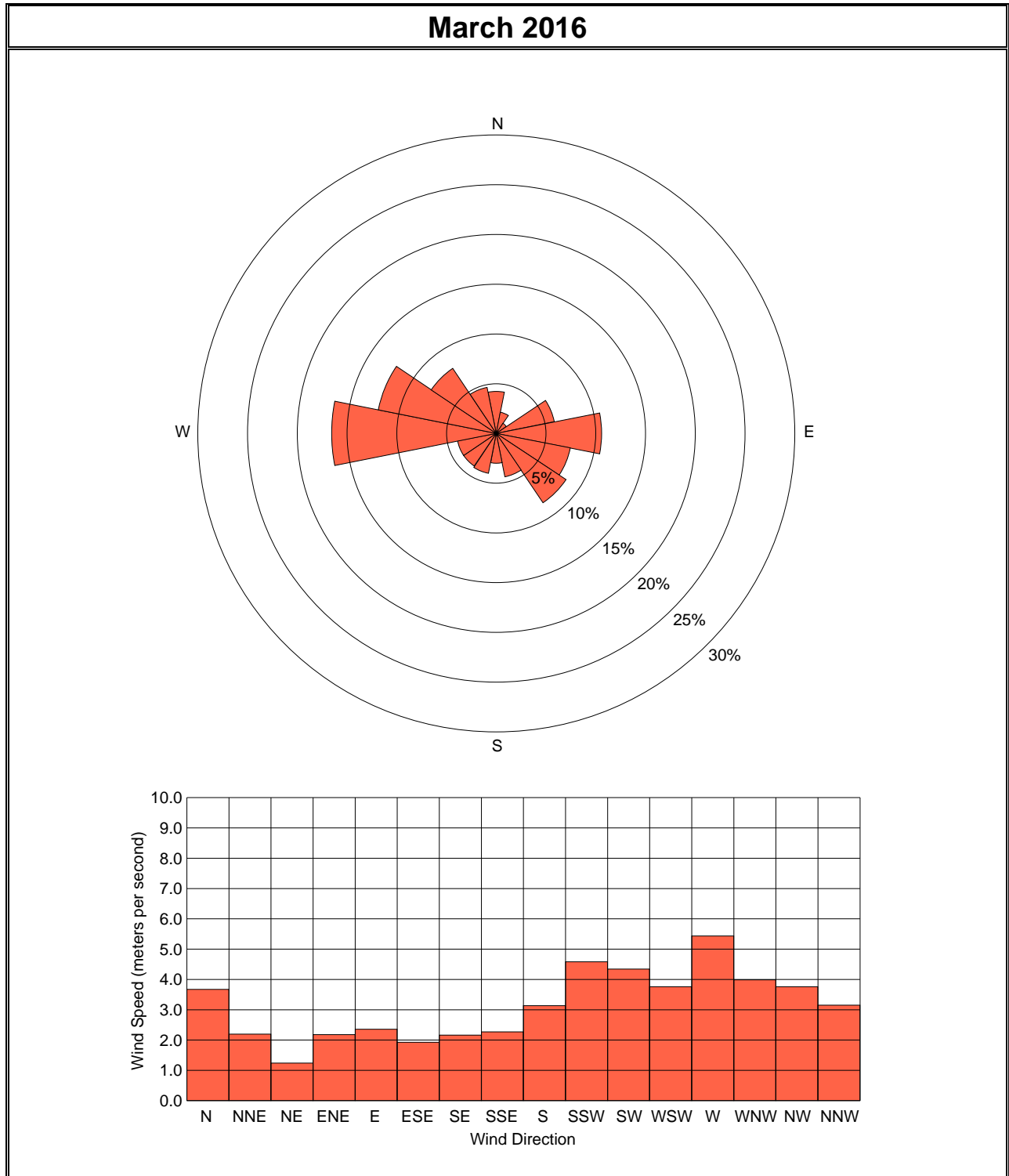
**Figure 2. Monthly Wind Rose, Black Butte Copper Project Met Tower**



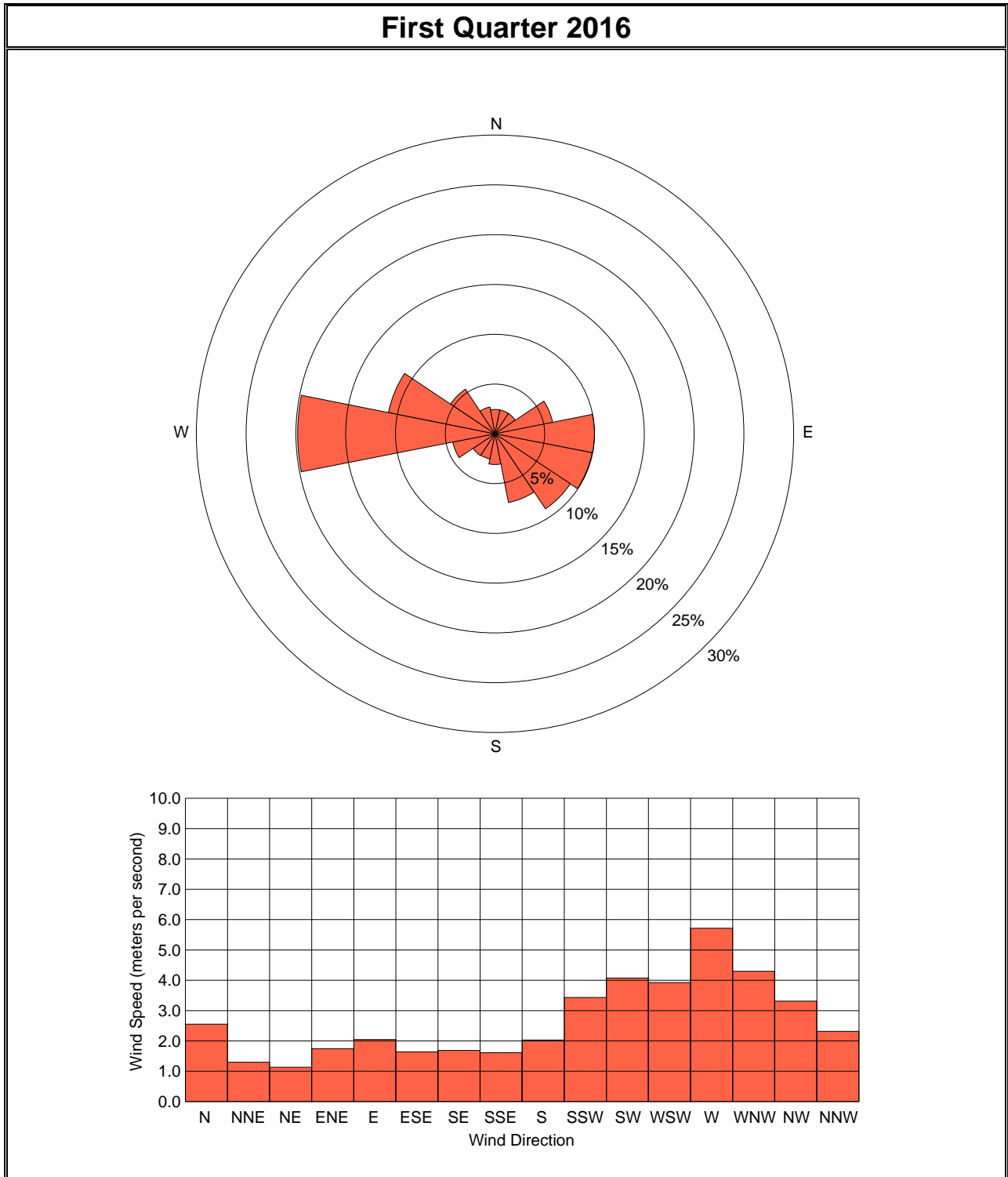
**Figure 3. Monthly Wind Rose, Black Butte Copper Project Met Tower**



**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 2016**

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Speed (meters per second)**  
**January 2016**

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	0.9	0.7	0.6	0.8	0.6	0.8	0.8	1.3	0.6	0.8	0.7	1.4	0.9	0.7	1.1	0.5	0.6	1.2	0.7	0.8	1.0	0.5	0.5	0.5	0.8	1.4	0.5
2	0.6	0.4	0.6	0.5	0.5	0.5	0.5	0.3	0.2	0.3	0.5	0.7	1.1	1.7	1.1	1.3	0.9	1.2	1.0	0.8	1.2	1.0	0.8	1.0	0.8	1.7	0.2
3	1.0	0.7	0.8	0.9	1.1	0.8	0.7	0.7	1.0	0.7	0.8	0.9	1.0	1.1	1.9	2.6	4.2	4.7	3.4	2.1	2.4	1.6	2.2	2.0	1.6	4.7	0.7
4	2.7	3.3	3.9	2.8	2.0	1.7	1.8	1.6	2.3	1.8	1.3	0.6	0.6	1.0	0.8	0.9	1.6	2.0	2.3	2.2	2.0	1.8	1.5	1.2	1.8	3.9	0.6
5	0.9	1.2	1.5	1.2	0.6	1.2	1.7	1.3	1.8	1.4	1.3	2.7	3.9	2.3	2.5	2.4	1.6	1.5	1.6	1.3	1.4	1.2	1.4	1.0	1.6	3.9	0.6
6	0.9	1.3	1.1	1.3	1.0	0.8	0.9	0.5	0.4	0.6	0.3	0.4	0.3	0.3	0.3	0.5	0.4	0.8	0.8	1.2	1.0	1.1	0.8	0.7	0.7	1.3	0.3
7	1.3	0.6	0.8	1.1	2.2	3.9	1.7	2.8	2.0	2.7	2.8	2.4	2.1	2.7	3.6	3.2	3.1	2.4	2.6	1.9	2.2	1.7	2.0	1.7	2.2	3.9	0.6
8	1.3	0.8	0.9	0.8	0.7	0.9	0.4	0.3	0.2	0.4	0.3	0.4	0.6	1.0	1.6	1.6	0.8	0.6	0.6	0.6	0.7	0.8	0.6	0.6	0.7	1.6	0.2
9	0.6	0.6	0.9	0.4	0.3	0.4	0.6	0.5	0.5	0.6	1.3	2.2	3.7	4.4	3.4	3.3	2.7	2.0	1.7	1.7	0.9	1.4	1.2	1.0	1.5	4.4	0.3
10	1.0	1.4	1.0	0.9	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.7	3.2	4.9	4.6	4.4	3.1	1.5	3.0	2.9	2.7	2.1	1.8	1.5	1.9	4.9	0.5
11	1.5	1.2	1.0	0.9	1.2	0.9	0.6	0.7	0.9	0.6	0.5	0.7	1.6	3.1	3.3	4.2	3.3	2.5	2.4	3.4	3.0	2.5	2.6	2.8	1.9	4.2	0.5
12	4.0	1.9	2.0	2.4	4.3	2.8	4.8	6.9	5.5	7.4	8.8	9.2	8.1	7.8	6.7	7.0	7.0	2.4	2.2	2.3	2.3	2.4	2.3	2.1	4.7	9.2	1.9
13	2.1	1.6	1.2	1.8	1.6	2.0	2.4	1.4	1.2	0.9	1.3	1.6	1.8	3.2	1.9	3.5	5.2	2.4	1.6	4.0	3.8	4.9	5.6	4.3	2.6	5.6	0.9
14	3.1	2.5	4.8	5.8	5.7	5.4	5.6	4.8	5.3	5.5	7.9	5.9	7.0	7.0	5.7	3.8	4.2	3.0	1.8	2.2	2.1	2.7	1.1	0.9	4.3	7.9	0.9
15	1.1	1.3	1.1	0.9	1.1	0.8	0.6	0.6	0.5	0.6	0.5	0.4	0.5	2.9	3.7	2.2	2.1	2.6	3.4	2.0	1.6	1.5	1.1	1.7	1.5	3.7	0.4
16	1.4	1.2	4.5	4.8	4.2	4.3	1.6	0.9	0.7	1.0	0.5	0.8	0.8	0.7	1.0	0.9	1.3	0.6	0.5	0.9	0.7	0.6	0.4	1.0	1.5	4.8	0.4
17	1.4	0.7	0.8	1.2	1.6	1.8	1.1	1.1	2.9	4.2	3.9	4.3	5.4	3.9	2.6	3.1	1.6	2.2	1.4	1.8	2.4	3.4	4.5	4.3	2.6	5.4	0.7
18	4.6	3.1	2.2	2.2	1.2	1.4	1.0	1.3	1.1	1.6	3.1	3.6	5.7	5.9	5.7	5.1	5.0	5.3	3.9	1.1	1.5	1.4	1.2	0.9	2.9	5.9	0.9
19	0.7	0.7	0.6	0.5	0.6	0.8	0.7	1.0	1.4	1.0	1.1	0.8	2.2	4.7	4.5	3.4	4.2	2.8	1.5	3.0	2.9	3.0	3.6	3.8	2.1	4.7	0.5
20	4.2	3.0	2.6	1.6	1.4	0.8	0.6	2.0	6.0	4.1	4.3	4.1	5.4	6.9	7.1	5.4	4.7	4.1	3.2	2.7	4.3	5.3	4.1	4.0	3.8	7.1	0.6
21	1.5	1.2	1.2	1.2	1.2	0.9	1.1	0.8	1.0	1.0	1.3	1.0	0.9	2.8	1.8	2.0	2.3	3.3	4.4	4.1	4.7	2.9	2.4	2.0	2.0	4.7	0.8
22	1.5	2.5	3.4	3.2	3.6	2.6	2.1	2.1	1.3	1.6	1.5	1.5	2.9	2.3	3.6	4.0	2.9	4.8	7.3	6.0	5.2	2.1	1.6	1.5	3.0	7.3	1.3
23	1.7	2.0	3.7	1.9	2.0	1.6	1.6	0.7	1.4	1.1	1.2	0.8	1.0	0.7	1.7	1.6	1.0	1.3	2.8	1.7	1.2	2.2	2.1	2.5	1.6	3.7	0.7
24	1.7	0.6	0.6	1.0	0.8	0.8	0.6	0.7	1.3	1.2	0.7	1.3	5.1	5.6	5.7	4.5	4.1	4.2	4.2	4.5	6.1	5.8	4.4	4.0	2.9	6.1	0.6
25	3.7	3.6	2.9	1.5	0.4	0.5	0.8	1.3	1.2	1.1	0.6	2.2	5.1	5.7	5.6	4.4	3.5	1.2	1.2	1.5	0.9	0.8	0.7	0.7	2.1	5.7	0.4
26	0.7	0.6	0.5	0.9	1.3	0.9	0.9	1.0	1.1	1.2	1.5	1.2	3.9	4.8	3.0	2.0	1.0	2.2	2.7	1.8	1.9	1.6	2.0	2.4	1.7	4.8	0.5
27	1.4	3.1	2.1	2.2	2.3	1.5	2.4	2.3	3.8	4.1	2.2	1.2	4.5	4.0	4.1	6.2	4.0	2.1	1.3	1.9	2.7	1.5	2.0	1.2	2.7	6.2	1.2
28	0.8	1.8	1.1	1.4	1.4	1.3	1.3	0.9	1.6	1.1	1.3	4.3	4.3	3.7	2.7	3.9	4.7	4.4	2.4	2.1	2.9	1.7	5.7	6.5	2.6	6.5	0.8
29	8.3	9.5	10.7	10.4	7.7	8.2	5.6	1.8	1.4	4.7	3.5	2.2	3.4	4.0	4.5	3.4	2.8	2.2	2.5	1.6	3.0	7.0	8.5	10.0	5.3	10.7	1.4
30	7.4	3.7	6.7	7.7	9.8	7.8	4.9	2.8	4.1	5.2	5.1	6.9	7.9	7.9	7.6	7.5	6.2	3.9	1.9	2.3	2.7	3.2	2.0	2.1	5.3	9.8	1.9
31	1.1	0.7	0.8	1.4	2.2	1.7	1.4	1.9	1.0	1.1	0.9	3.4	6.5	7.3	6.5	5.1	4.5	1.4	0.9	1.2	1.6	1.5	1.1	0.7	2.3	7.3	0.7
Avg	2.1	1.9	2.1	2.1	2.1	2.0	1.7	1.5	1.8	1.9	2.0	2.3	3.3	3.7	3.5	3.4	3.1	2.5	2.3	2.2	2.4	2.3	2.3	2.3	2.4	5.3	0.7
Max	8.3	9.5	10.7	10.4	9.8	8.2	5.6	6.9	6.0	7.4	8.8	9.2	8.1	7.9	7.6	7.5	7.0	5.3	7.3	6.0	6.1	7.0	8.5	10.0	5.3	10.7	1.9
Min	0.6	0.4	0.5	0.4	0.3	0.4	0.4	0.3	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.4	0.6	0.5	0.6	0.7	0.5	0.4	0.5	0.7	1.3	0.2

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Speed (meters per second)**  
**February 2016**

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	0.6	0.4	1.2	1.6	0.9	0.5	0.6	0.6	0.4	0.6	0.8	0.4	1.1	4.5	1.8	1.8	2.8	2.8	1.5	1.2	1.0	0.7	0.5	0.6	1.2	4.5	0.4
2	1.0	1.0	0.7	0.8	0.8	0.9	0.7	0.9	0.6	0.7	0.6	1.1	1.6	4.4	4.5	1.5	4.8	3.8	1.9	1.6	2.1	0.9	1.5	0.8	1.6	4.8	0.6
3	0.8	0.6	0.4	0.7	0.5	0.6	0.5	0.4	0.6	0.5	0.5	0.9	5.2	5.6	7.3	4.8	4.8	4.7	4.9	2.8	1.4	2.6	1.8	1.2	2.3	7.3	0.4
4	0.6	0.8	1.0	1.0	0.9	1.0	0.9	1.2	2.3	5.7	7.3	7.1	6.8	8.3	9.9	9.3	8.1	7.8	6.4	5.6	3.9	4.1	3.3	2.0	4.4	9.9	0.6
5	0.9	0.8	1.5	1.8	1.4	1.2	1.2	0.9	2.0	1.1	1.8	5.2	6.6	6.2	5.8	5.6	5.0	1.8	1.7	2.3	1.9	2.5	1.9	1.9	2.6	6.6	0.8
6	1.8	4.1	1.9	2.1	2.8	2.7	4.5	8.9	10.1	9.2	14.7	14.3	13.4	10.9	9.7	7.7	8.9	8.0	12.5	11.3	9.2	8.9	7.8	6.8	8.0	14.7	1.8
7	7.3	5.6	3.1	3.5	2.9	2.2	1.6	2.1	1.1	0.5	4.4	7.1	6.1	6.9	6.0	4.5	4.5	6.0	6.0	3.7	1.5	1.4	1.0	1.7	3.8	7.3	0.5
8	1.1	1.7	1.0	0.6	0.6	0.5	0.5	0.7	0.5	0.8	0.6	0.9	0.8	3.0	4.9	5.7	3.9	2.9	1.7	3.0	2.4	1.5	0.8	0.8	1.7	5.7	0.5
9	0.5	0.6	0.6	0.5	0.4	0.5	0.5	0.4	0.7	0.7	0.3	0.4	1.1	1.2	1.0	1.4	0.7	1.6	2.8	2.8	1.9	1.7	1.7	1.7	1.1	2.8	0.3
10	1.1	1.2	0.8	0.7	1.0	0.9	0.7	1.3	1.0	1.4	1.5	1.6	4.3	4.4	4.5	3.8	1.3	1.5	2.0	4.2	1.7	1.3	2.5	4.8	2.1	4.8	0.7
11	3.3	4.5	4.7	5.4	7.1	7.6	6.4	6.8	4.8	6.2	5.2	5.9	6.5	6.0	6.2	4.5	3.7	1.7	1.4	3.0	2.8	2.2	1.3	0.8	4.5	7.6	0.8
12	1.2	0.9	1.1	0.9	0.3	0.4	0.8	1.1	0.6	0.4	0.4	0.7	0.7	0.9	0.8	1.3	1.2	1.0	1.1	2.0	1.6	1.4	1.5	1.3	1.0	2.0	0.3
13	1.4	1.3	1.3	1.1	1.3	3.8	4.5	5.8	10.5	8.0	7.6	7.7	9.7	8.3	8.3	8.4	7.8	7.1	8.3	2.6	1.7	1.8	4.2	4.7	5.3	10.5	1.1
14	4.0	4.3	2.5	3.7	4.3	6.1	6.4	7.7	6.3	6.7	8.3	9.2	10.5	9.4	9.5	9.1	8.8	5.9	6.1	7.4	4.5	4.4	5.2	5.1	6.5	10.5	2.5
15	4.8	4.3	2.9	5.8	6.5	5.0	4.7	5.0	4.9	5.9	6.9	7.0	9.0	11.7	11.2	10.2	7.0	4.5	3.1	1.1	3.0	3.8	0.8	0.2	5.4	11.7	0.2
16	0.2	0.2	0.2	0.7	1.6	1.9	5.4	7.7	5.9	7.1	6.1	7.6	8.1	9.0	6.9	5.0	5.0	3.6	3.2	1.8	2.2	3.1	2.8	4.0	4.1	9.0	0.2
17	2.7	1.2	1.2	1.5	1.5	2.0	1.4	2.4	3.9	3.8	4.8	Au	Au	Au	Au	Au	2.5	2.5	1.8	1.6	2.1	1.4	1.2	2.9	2.2	4.8	1.2
18	1.9	1.9	2.8	3.0	3.3	6.0	4.5	2.5	3.2	5.5	3.4	5.9	6.4	9.5	7.4	8.0	8.4	7.9	6.8	5.9	2.7	5.6	7.2	8.5	5.3	9.5	1.9
19	6.5	6.9	8.0	8.9	9.6	8.6	9.8	8.0	8.3	5.8	4.9	4.6	3.1	2.7	5.3	4.9	5.8	5.6	3.2	1.2	2.3	4.0	2.3	1.5	5.5	9.8	1.2
20	2.0	3.8	7.4	6.1	6.5	5.3	5.3	6.7	6.3	8.8	9.0	7.8	8.9	8.9	8.9	6.9	6.8	7.0	6.5	5.3	4.9	2.7	2.2	1.4	6.1	9.0	1.4
21	2.5	2.8	4.6	4.3	2.9	1.7	1.9	1.4	1.1	0.6	0.5	1.3	2.8	3.2	3.7	5.4	4.8	3.1	1.1	1.3	1.3	2.8	1.5	1.5	2.4	5.4	0.5
22	4.4	7.2	6.9	6.0	8.2	8.4	6.6	6.3	6.4	7.6	7.4	6.4	7.7	6.7	8.0	6.9	6.4	5.1	4.2	1.7	1.3	1.8	2.5	2.2	5.7	8.4	1.3
23	1.8	1.3	1.2	1.7	1.3	1.2	1.5	1.8	0.8	0.7	0.5	1.3	1.2	1.6	2.7	4.0	4.5	5.6	3.7	1.7	2.4	2.8	2.7	2.3	2.1	5.6	0.5
24	2.0	1.7	1.2	0.9	0.8	0.7	0.7	0.8	0.8	0.7	0.6	0.5	1.9	3.6	3.4	3.8	2.6	2.4	1.5	1.5	1.8	1.6	1.0	1.6	1.6	3.8	0.5
25	1.9	1.3	1.3	1.3	1.3	1.1	1.2	1.0	1.3	0.6	0.6	1.0	2.4	3.5	5.1	5.7	5.9	4.7	2.2	3.6	2.7	1.1	1.8	1.7	2.3	5.9	0.6
26	1.4	1.1	0.9	1.2	1.2	1.1	1.3	1.2	1.1	0.8	0.8	0.8	1.3	2.4	2.0	1.2	0.8	1.8	3.6	3.7	4.6	2.1	1.7	1.6	1.7	4.6	0.8
27	1.8	1.9	1.8	2.0	1.1	1.3	1.2	1.2	1.3	0.9	1.4	7.1	8.5	7.7	6.0	7.1	7.8	8.7	8.7	9.3	7.6	5.9	5.4	3.8	4.6	9.3	0.9
28	2.2	1.1	1.5	1.9	1.4	1.1	1.8	1.6	1.2	2.0	5.5	4.6	5.2	4.4	3.0	4.4	3.8	3.9	3.0	2.8	4.5	3.4	3.6	8.9	3.2	8.9	1.1
29	6.7	9.6	7.5	8.9	8.5	8.1	7.7	7.7	7.0	7.9	7.8	10.0	11.0	11.3	9.7	7.7	8.6	7.5	7.3	7.1	3.9	1.7	1.9	1.7	7.4	11.3	1.7
Avg	2.4	2.6	2.5	2.7	2.8	2.8	2.9	3.2	3.3	3.5	3.9	4.6	5.4	5.9	5.8	5.4	5.1	4.5	4.1	3.6	2.9	2.7	2.5	2.7	3.6	7.4	0.9
Max	7.3	9.6	8.0	8.9	9.6	8.6	9.8	8.9	10.5	9.2	14.7	14.3	13.4	11.7	11.2	10.2	8.9	8.7	12.5	11.3	9.2	8.9	7.8	8.9	8.0	14.7	2.5
Min	0.2	0.2	0.2	0.5	0.3	0.4	0.5	0.4	0.4	0.4	0.3	0.4	0.7	0.9	0.8	1.2	0.7	1.0	1.1	1.1	1.0	0.7	0.5	0.2	1.0	2.0	0.2

A-2

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Speed (meters per second)**  
**March 2016**

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	1.9	2.0	1.5	0.9	0.8	0.8	0.9	0.7	0.6	1.2	3.1	5.2	2.7	2.8	2.8	2.1	3.2	2.5	2.6	1.6	2.0	3.6	2.1	5.2	0.6
2	5.1	3.4	5.1	10.6	6.4	6.2	6.3	5.4	4.7	5.5	9.8	10.2	9.8	9.7	9.8	7.5	7.0	7.4	4.8	2.3	1.4	1.5	1.6	2.4	6.0	10.6	1.4
3	2.4	1.8	1.6	1.7	1.7	2.0	1.5	1.9	1.5	1.0	1.1	1.1	3.2	5.9	7.5	6.8	9.2	7.2	5.8	7.5	7.7	6.0	3.5	1.8	3.8	9.2	1.0
4	1.3	2.8	2.5	2.4	2.8	2.8	2.0	1.4	1.2	0.8	0.5	1.4	2.0	3.4	1.5	3.8	4.0	2.7	1.8	1.7	2.1	1.5	1.0	1.8	2.0	4.0	0.5
5	2.0	1.4	1.8	2.2	2.2	2.1	2.0	1.5	0.9	2.3	4.2	6.8	5.4	6.8	6.8	4.9	5.1	1.7	0.9	1.8	2.3	1.0	2.9	3.0	3.0	6.8	0.9
6	2.2	2.2	2.2	3.7	3.7	2.5	3.9	2.7	2.5	1.3	1.2	4.5	5.2	8.2	5.8	2.9	2.9	5.0	3.1	4.0	3.5	1.6	0.2	0.2	3.1	8.2	0.2
7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	2.7	3.7	2.8	1.8	2.5	4.1	4.1	4.3	2.3	4.0	3.8	3.2	2.5	2.1	1.9	4.3	0.2
8	3.0	3.0	2.5	1.6	1.4	0.5	1.1	0.9	0.4	0.4	3.8	3.4	3.5	5.4	5.3	1.8	1.8	3.2	3.7	1.7	1.4	2.4	3.1	2.5	2.4	5.4	0.4
9	3.4	2.4	2.3	1.2	1.0	0.9	1.1	0.8	0.7	0.6	1.2	2.4	4.8	4.7	4.9	5.4	3.2	2.6	1.8	1.6	1.4	1.0	1.3	2.2	2.2	5.4	0.6
10	2.8	4.1	4.8	5.8	4.7	4.0	2.4	4.7	3.4	5.5	8.9	9.9	9.2	6.5	8.4	6.8	7.3	7.2	6.8	5.9	5.8	6.4	8.0	7.1	6.1	9.9	2.4
11	4.9	1.7	1.9	1.8	3.5	2.9	2.1	1.6	1.2	1.1	1.1	1.1	5.0	6.1	7.2	7.5	6.7	5.8	4.6	2.7	3.3	2.9	1.3	2.4	3.4	7.5	1.1
12	2.8	1.9	1.7	1.7	2.0	1.6	1.4	1.5	1.3	0.9	1.7	6.3	3.5	1.6	5.1	1.4	6.1	5.7	2.9	1.4	1.9	2.6	1.2	2.6	2.5	6.3	0.9
13	4.2	5.0	5.4	4.3	2.1	1.5	1.1	0.6	0.9	1.1	1.7	2.0	3.8	4.2	6.5	4.9	4.1	5.5	4.0	4.7	5.1	5.2	4.3	5.0	3.6	6.5	0.6
14	4.2	4.8	3.0	2.8	6.3	3.6	1.6	Pw	2.9	2.6	3.7	6.2	7.7	5.6	6.8	5.6	4.0	6.5	6.0	5.1	6.0	4.2	2.5	4.2	4.6	7.7	1.6
15	4.4	5.9	5.8	5.3	7.0	5.6	4.8	5.6	5.6	6.4	7.0	7.9	7.8	8.2	9.7	6.9	8.8	8.2	8.6	8.1	6.4	6.1	3.5	3.2	6.5	9.7	3.2
16	3.0	2.6	3.4	2.6	1.0	1.0	1.1	2.0	1.2	4.9	8.8	7.8	8.0	6.9	7.6	7.7	7.7	3.7	2.3	1.9	2.1	1.2	1.1	1.7	3.8	8.8	1.0
17	2.9	2.2	2.6	3.2	2.7	1.6	1.5	1.0	0.9	1.3	3.4	5.4	3.9	3.3	5.4	6.3	6.2	5.5	5.8	4.5	2.4	1.3	1.2	1.4	3.2	6.3	0.9
18	1.0	0.9	4.0	3.8	2.9	3.3	3.7	4.3	4.2	3.5	4.9	4.8	4.7	4.3	4.3	5.1	5.1	5.2	4.5	3.0	2.2	3.9	4.3	4.5	3.9	5.2	0.9
19	3.5	3.7	3.4	3.0	2.5	2.6	2.0	1.9	1.3	0.8	1.0	2.5	2.7	1.6	1.6	1.3	1.4	1.4	2.0	2.1	4.8	3.0	3.0	2.6	2.3	4.8	0.8
20	3.0	3.5	3.6	2.9	2.3	1.8	1.9	1.8	1.2	0.9	0.7	1.0	1.1	1.6	2.2	2.2	3.3	4.3	3.2	2.3	3.2	2.1	1.1	1.4	2.2	4.3	0.7
21	1.5	2.4	2.0	1.5	2.0	1.7	1.5	1.1	4.0	3.4	6.6	7.3	5.3	4.7	6.1	2.3	3.3	4.2	4.5	1.4	2.6	1.4	3.2	1.9	3.2	7.3	1.1
22	2.2	1.7	1.6	1.2	0.9	1.8	1.2	1.5	1.8	2.2	2.5	1.1	3.8	3.6	3.9	3.9	5.5	4.0	4.1	4.3	3.7	3.8	2.5	1.2	2.7	5.5	0.9
23	1.1	0.7	0.6	0.8	0.7	0.7	0.6	0.6	0.7	0.7	1.1	3.6	4.8	4.0	4.4	4.2	6.5	7.3	6.0	6.9	5.3	2.2	1.8	1.6	2.8	7.3	0.6
24	1.5	1.3	1.8	2.3	1.6	3.6	2.8	2.9	2.3	1.5	5.4	3.4	3.6	5.1	4.1	7.0	7.0	6.6	9.3	7.0	6.9	7.6	4.1	4.8	4.3	9.3	1.3
25	4.4	3.6	4.0	3.6	1.9	1.8	2.0	1.3	3.7	5.9	4.8	6.6	5.7	5.8	4.8	5.8	5.6	6.0	5.2	3.3	3.5	3.6	1.9	1.3	4.0	6.6	1.3
26	1.4	1.5	2.5	2.6	3.9	1.8	0.7	0.6	0.6	1.3	4.7	5.3	5.0	6.3	7.2	6.6	7.9	6.9	4.8	2.2	1.7	2.2	3.1	3.4	3.5	7.9	0.6
27	2.8	2.2	1.8	1.9	1.4	2.2	1.2	1.0	1.3	1.1	3.5	4.0	4.3	3.1	3.6	5.0	4.7	4.3	4.7	4.3	1.7	2.2	0.9	1.7	2.7	5.0	0.9
28	4.0	4.2	3.5	2.5	2.1	1.1	1.9	2.0	2.8	3.9	3.3	3.8	4.0	4.2	5.3	4.0	3.1	3.4	3.9	1.5	1.0	1.6	1.7	2.1	3.0	5.3	1.0
29	2.2	4.7	3.7	3.1	3.6	5.9	4.9	4.9	4.2	5.8	7.3	6.9	7.5	7.0	6.1	6.3	4.7	3.2	3.6	2.9	2.0	1.6	1.6	2.3	4.4	7.5	1.6
30	1.9	1.5	2.5	1.2	1.1	0.9	0.8	0.9	2.4	3.3	4.3	4.0	5.7	5.8	6.7	6.1	6.2	6.5	5.2	5.4	4.8	4.2	4.1	4.7	3.8	6.7	0.8
31	2.5	4.3	3.0	2.4	2.0	2.8	1.1	2.2	3.5	4.8	8.0	6.6	5.5	6.7	7.1	5.6	7.2	6.2	4.8	5.1	5.1	4.7	3.2	1.9	4.4	8.0	1.1
Avg	2.7	2.7	2.8	2.8	2.6	2.3	2.0	2.0	2.1	2.4	3.9	4.6	4.9	5.1	5.5	4.9	5.2	5.0	4.3	3.6	3.5	3.0	2.5	2.7	3.5	6.9	1.0
Max	5.1	5.9	5.8	10.6	7.0	6.2	6.3	5.6	5.6	6.4	9.8	10.2	9.8	9.7	9.8	7.7	9.2	8.2	9.3	8.1	7.7	7.6	8.0	7.1	6.5	10.6	3.2
Min	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	1.0	1.1	1.6	1.5	1.3	1.4	1.4	0.9	1.4	1.0	1.0	0.2	0.2	1.9	4.0	0.2

A-3

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Direction (degrees)**  
**January 2016**

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	329	17	69	69	143	68	347	83	17	173	9	121	360	74	24	329	44	107	42	79	147	137	133	148	68
2	140	156	81	168	205	168	145	160	150	164	99	186	316	314	156	106	67	139	183	133	139	137	76	112	141
3	167	145	154	136	157	178	102	167	155	146	148	171	162	144	173	116	87	94	108	150	145	147	151	147	144
4	112	127	118	103	131	132	126	105	123	125	153	21	4	163	36	320	96	125	103	121	80	148	158	158	115
5	92	102	109	170	272	162	112	157	95	45	131	182	155	136	169	139	150	155	120	147	145	144	154	157	140
6	141	147	103	103	91	126	92	199	286	144	202	186	69	101	7	151	128	124	46	97	112	120	341	87	116
7	132	300	346	274	315	294	306	298	300	285	294	280	287	265	268	266	260	250	268	272	246	276	249	268	279
8	257	282	210	159	120	132	200	150	304	98	74	151	147	168	270	334	20	32	342	355	116	79	36	164	124
9	8	142	116	183	90	306	117	293	99	150	233	272	267	272	260	259	267	280	290	280	221	161	163	110	228
10	89	69	70	71	68	114	23	24	90	304	35	300	297	268	268	274	298	330	326	72	101	77	75	56	31
11	63	97	54	38	32	85	359	73	334	87	82	55	355	306	305	311	304	323	45	88	89	82	102	75	43
12	77	85	72	308	282	317	270	271	280	275	272	271	269	270	264	272	267	285	132	125	103	113	95	132	270
13	127	103	112	163	149	123	139	58	100	337	154	112	173	128	128	174	231	205	61	215	257	278	244	251	154
14	257	254	274	276	276	281	281	281	281	283	286	284	287	286	284	274	287	302	300	273	260	287	241	58	280
15	106	325	106	124	126	137	105	145	82	114	139	93	17	277	279	265	310	304	296	312	300	324	72	89	68
16	76	334	302	285	266	268	269	97	336	146	9	120	91	348	325	34	67	100	132	111	115	148	200	166	76
17	156	164	1	33	20	346	2	345	313	281	289	278	268	275	288	285	219	91	73	94	124	114	96	96	355
18	87	97	105	91	119	97	82	103	302	23	310	286	263	265	271	270	266	270	264	72	187	141	118	96	119
19	91	55	161	260	153	156	142	140	125	165	155	113	157	191	172	149	153	163	155	143	162	98	93	148	145
20	151	142	134	97	87	294	179	244	294	299	304	304	288	280	281	283	276	288	289	301	284	276	266	273	275
21	192	192	143	159	84	102	139	211	146	171	113	129	294	141	104	120	104	93	90	92	89	128	108	145	129
22	172	142	120	129	132	148	150	136	150	142	164	128	167	158	176	122	98	197	222	247	235	302	70	95	152
23	120	74	127	141	114	70	103	153	129	126	181	188	76	78	102	109	60	99	228	196	138	143	146	158	126
24	243	269	183	174	84	140	175	155	103	117	18	337	276	265	270	269	285	296	289	299	309	312	302	294	269
25	307	302	320	288	25	51	299	209	248	165	314	275	266	266	257	266	268	239	127	110	105	93	71	79	280
26	167	176	8	120	136	81	44	72	79	105	48	333	285	285	290	296	47	89	75	125	117	132	73	151	87
27	225	341	359	72	38	2	58	75	75	89	85	116	277	274	274	277	286	3	58	7	110	118	89	104	45
28	184	142	125	111	150	160	113	161	143	147	94	163	173	152	255	231	256	241	265	259	266	231	237	244	187
29	271	278	283	282	277	275	272	241	270	271	263	260	203	197	222	190	144	120	128	29	299	296	279	272	256
30	286	274	283	281	285	286	295	307	278	278	273	275	266	256	259	267	266	286	291	66	104	75	82	90	284
31	85	104	120	81	111	111	116	54	120	96	63	276	267	267	268	253	259	238	139	140	79	64	155	56	114
Prev	137	125	101	131	113	122	112	143	103	143	106	216	268	241	261	256	274	207	92	111	141	127	119	126	146

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Direction (degrees)**  
**February 2016**

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	55	348	90	68	93	99	115	141	298	138	132	109	176	263	326	346	78	82	121	135	118	65	133	116	99
2	145	164	197	177	184	177	177	168	117	103	125	84	299	264	258	276	260	270	292	295	298	326	141	193	206
3	169	176	143	149	136	131	156	119	195	112	154	320	270	273	266	272	289	283	272	250	141	105	105	117	179
4	176	123	187	125	207	163	131	112	53	267	276	267	268	273	267	257	265	278	284	294	305	304	299	283	253
5	156	263	106	108	108	95	86	53	70	72	291	276	272	263	269	274	265	244	168	131	148	132	129	122	149
6	60	85	159	110	107	93	228	230	275	278	276	279	277	277	275	271	274	275	279	279	280	277	280	279	268
7	284	292	301	296	312	332	33	63	55	338	306	289	282	295	276	270	276	282	288	305	39	129	55	114	315
8	41	100	92	40	23	25	30	41	66	162	68	114	350	285	273	290	275	279	102	90	72	70	7	15	42
9	3	117	92	161	104	247	282	356	126	163	84	332	30	17	37	83	71	93	91	68	66	86	97	122	78
10	126	156	134	100	138	45	123	119	15	63	25	301	261	277	257	272	98	91	126	311	40	165	303	283	95
11	262	263	268	292	276	274	276	283	305	293	283	270	265	271	258	261	265	264	138	88	86	96	49	38	278
12	145	149	189	143	311	32	122	236	215	215	319	287	21	316	288	108	308	135	75	117	103	160	134	117	147
13	124	145	143	168	156	272	263	278	283	289	281	279	282	286	273	270	271	282	286	261	235	160	273	259	255
14	268	277	291	261	274	271	268	273	271	271	277	282	286	281	270	266	270	275	279	279	276	275	278	273	275
15	266	276	294	276	280	278	270	270	258	271	265	262	260	277	276	297	316	315	320	263	285	294	21	83	284
16	90	95	56	186	271	248	262	284	281	274	269	260	269	264	278	268	281	288	248	80	97	87	83	87	267
17	84	67	111	78	109	62	103	123	106	103	84	Au	Au	Au	Au	124	114	108	98	97	99	339	80	94	
18	110	153	100	89	157	164	103	142	166	169	134	196	206	265	291	258	256	264	257	239	255	235	220	228	197
19	230	254	264	277	268	264	256	267	263	252	238	245	265	252	214	227	221	210	195	107	208	210	236	181	237
20	160	239	267	261	276	286	275	266	262	266	257	266	268	266	262	273	264	274	274	268	269	270	266	290	266
21	263	86	87	79	98	118	130	158	144	71	31	358	253	261	285	287	272	284	165	111	91	63	88	200	112
22	282	278	286	293	285	281	286	290	286	272	276	280	290	320	314	320	314	292	316	315	37	103	98	64	301
23	90	69	41	67	60	18	26	66	93	125	152	116	40	1	313	296	281	269	257	308	58	79	82	76	50
24	63	62	75	53	26	18	24	79	124	154	183	99	258	257	250	255	269	251	152	144	107	107	123	116	110
25	96	85	116	118	153	136	150	78	119	323	72	64	301	293	260	261	259	263	119	87	52	28	59	71	90
26	104	104	112	121	191	119	151	171	144	268	102	31	252	298	25	37	103	129	106	114	97	112	134	111	116
27	111	80	116	129	124	123	102	73	102	39	89	287	268	264	268	269	272	273	278	271	272	287	287	299	265
28	231	104	105	124	116	102	100	137	110	54	264	265	259	241	240	255	252	251	259	262	251	257	248	272	223
29	283	288	286	278	277	262	266	270	270	270	280	282	276	276	268	273	277	277	277	278	296	224	159	156	270
Prev	134	128	127	127	161	119	158	152	162	240	263	285	276	280	276	276	272	267	235	258	70	122	99	126	250

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Wind Direction (degrees)**  
**March 2016**

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	111	101	93	63	99	48	97	119	131	171	14	47	272	215	133	92	79	72	88	84	96	120	130	228	101
2	221	118	91	275	295	268	263	289	287	263	263	262	267	276	283	293	283	277	267	233	143	128	112	85	260
3	79	82	127	151	142	141	154	109	79	119	163	313	271	266	277	248	273	294	278	259	268	281	286	336	232
4	131	95	101	96	49	90	80	84	103	328	110	49	321	316	51	127	143	154	135	119	110	97	161	139	100
5	140	143	91	132	136	144	118	151	236	117	165	208	205	215	223	249	269	259	234	215	93	169	137	151	173
6	155	98	88	96	104	143	108	132	146	132	123	161	167	177	203	247	205	262	278	275	278	283	287	268	175
7	215	275	290	306	343	287	67	88	69	56	306	303	295	333	290	257	248	249	244	85	88	71	91	107	320
8	78	80	72	93	95	184	157	189	336	102	260	278	273	270	265	233	75	245	242	160	121	92	86	86	143
9	72	64	94	76	63	111	165	130	164	337	15	300	261	259	267	261	272	238	242	124	144	146	307	139	160
10	181	165	171	185	192	213	197	217	213	209	221	225	224	204	214	202	191	197	194	191	187	200	262	266	204
11	287	102	189	210	78	65	81	107	334	236	111	201	128	129	125	122	123	131	151	168	165	188	160	153	142
12	134	159	170	157	118	120	123	142	116	1	116	198	259	347	231	152	197	201	125	116	109	88	131	179	145
13	215	246	271	298	320	125	145	288	49	142	148	188	196	195	222	202	199	190	204	204	193	204	183	157	199
14	141	143	139	145	276	312	189	Pw	274	302	285	278	263	269	274	264	272	271	266	302	279	290	261	260	263
15	275	276	275	266	266	263	267	269	271	262	259	258	269	262	258	280	284	273	273	278	276	291	306	309	273
16	335	74	81	84	60	75	55	78	96	288	265	262	260	274	265	274	320	339	302	14	98	160	129	78	21
17	78	101	65	86	75	65	114	126	1	17	24	17	360	6	341	339	339	350	341	11	318	281	135	121	32
18	100	10	300	311	305	290	330	331	318	299	318	318	300	300	290	298	286	288	306	320	71	69	68	67	323
19	81	76	65	82	60	81	95	112	86	67	20	141	141	67	345	12	12	352	158	147	95	112	113	105	82
20	93	91	84	100	115	99	102	128	129	13	334	351	351	17	259	270	247	229	224	88	101	117	123	130	98
21	122	119	109	105	125	74	83	82	260	267	267	267	266	248	261	330	284	271	248	190	138	98	70	92	171
22	92	63	61	146	109	80	76	137	137	31	75	293	313	295	294	294	315	296	271	273	302	297	307	273	334
23	203	307	123	138	189	156	329	121	128	97	43	283	261	245	262	320	278	278	281	275	289	247	251	228	249
24	192	257	247	265	109	91	108	91	91	150	235	273	283	296	294	282	271	275	276	271	272	282	292	291	263
25	293	299	300	313	330	321	306	358	276	284	280	289	291	306	303	322	329	354	12	357	345	304	296	301	313
26	178	126	85	65	79	76	356	101	267	298	265	248	263	276	263	267	277	264	288	271	136	87	78	87	267
27	91	100	111	105	123	113	154	134	126	60	152	232	245	266	246	221	210	229	223	253	309	91	94	231	166
28	273	276	271	257	260	255	306	325	291	283	289	272	293	290	287	306	303	302	25	68	117	296	291	325	293
29	257	321	343	349	347	337	351	360	10	6	5	4	1	8	7	11	11	21	360	327	2	288	315	358	350
30	347	284	297	335	278	29	65	349	296	310	317	312	318	307	320	308	307	316	289	303	322	335	327	306	318
31	315	308	305	296	307	10	335	300	291	305	336	325	299	303	326	332	313	328	308	300	298	302	298	305	312
Prev	143	97	96	107	80	90	97	108	87	332	300	276	274	280	274	278	278	275	262	252	123	180	158	168	266

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Standard Deviation of Wind Direction (degrees)**  
**January 2016**

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	42	78	64	91	77	94	88	93	94	67	94	51	79	53	36	43	99	31	43	79	57	59	60	83	69	99	31
2	59	58	70	94	70	51	57	78	62	85	97	92	47	35	41	88	91	62	66	57	49	67	74	64	67	97	35
3	41	68	64	80	16	31	74	60	29	76	41	43	96	65	39	27	12	16	18	52	36	41	26	38	45	96	12
4	41	21	17	39	48	57	49	61	32	44	35	99	99	47	59	62	80	37	29	20	38	17	26	70	47	99	17
5	50	46	58	48	100	35	43	41	26	49	26	37	7	19	19	9	20	14	34	24	29	27	33	58	36	100	7
6	66	19	49	32	48	63	71	56	97	71	88	96	45	68	65	73	73	50	52	41	51	46	76	87	62	97	19
7	63	47	36	56	49	19	42	20	13	19	19	27	28	18	18	17	20	13	22	22	10	26	11	20	26	63	10
8	27	98	76	47	58	43	85	62	67	69	94	60	81	32	89	25	29	52	47	23	91	59	55	97	61	98	23
9	67	55	92	61	71	80	65	73	55	54	47	19	15	11	10	9	11	14	14	26	67	43	70	63	46	92	9
10	49	69	65	83	86	96	68	72	56	91	89	83	20	11	12	14	17	68	65	20	31	33	32	33	53	96	11
11	52	52	64	79	78	81	51	72	82	58	95	67	31	16	17	13	23	36	34	27	35	45	51	39	50	95	13
12	19	53	47	70	16	18	23	17	15	11	10	9	11	12	9	10	9	47	37	28	40	30	34	24	25	70	9
13	32	67	75	25	27	60	42	72	64	87	73	62	54	15	44	27	9	38	78	29	16	22	20	21	44	87	9
14	16	20	10	9	10	9	9	8	9	9	6	9	7	7	8	11	12	12	22	16	14	22	63	26	14	63	6
15	35	62	94	56	51	63	96	72	58	88	40	42	71	36	8	17	14	17	19	25	24	50	27	10	45	96	8
16	48	58	17	17	6	7	27	73	77	59	85	33	55	84	28	94	14	76	18	29	39	30	51	31	44	94	6
17	16	27	66	31	24	34	49	40	14	18	10	19	11	15	23	14	61	53	63	44	32	30	14	17	30	66	10
18	7	12	25	25	65	77	74	67	90	65	14	16	10	13	9	8	6	8	51	62	29	33	45	68	37	90	6
19	74	91	101	94	62	57	46	26	21	39	54	81	62	9	11	10	5	13	53	39	14	17	19	17	42	101	5
20	9	13	10	20	10	62	88	90	10	10	8	9	11	8	7	8	9	14	12	12	12	9	8	11	19	90	7
21	69	45	53	48	56	59	61	86	42	52	75	57	98	10	22	20	13	11	8	9	11	30	43	40	42	98	8
22	60	36	30	24	29	19	21	36	55	85	82	83	22	41	39	20	26	37	7	17	9	82	63	47	40	85	7
23	23	68	75	57	27	47	46	77	31	61	53	47	74	58	19	21	51	42	44	63	32	43	9	7	45	77	7
24	80	45	33	28	87	60	77	81	65	60	80	90	11	8	8	8	11	9	12	12	10	9	12	11	38	90	8
25	10	9	11	30	48	70	43	48	56	32	73	38	9	9	8	9	8	79	31	27	59	82	64	56	38	82	8
26	86	70	93	75	67	90	76	71	52	58	49	44	24	10	19	34	29	30	57	55	51	73	78	96	58	96	10
27	93	59	68	50	50	91	68	54	13	14	55	92	20	14	18	12	13	66	70	41	47	51	46	79	49	93	12
28	82	68	91	41	70	55	83	78	55	58	81	20	22	19	33	16	7	19	14	40	40	50	20	18	45	91	7
29	13	9	8	8	10	11	14	41	91	18	11	39	41	20	38	39	18	28	74	69	21	16	10	10	27	91	8
30	16	18	13	10	7	7	24	26	25	11	11	13	9	7	9	7	9	18	49	50	34	36	52	51	21	52	7
31	47	79	91	72	55	59	43	64	81	81	76	54	9	9	12	7	9	51	70	32	49	60	45	68	51	91	7
Avg	45	49	54	48	48	52	55	59	50	52	54	49	38	25	25	25	26	34	39	35	35	40	40	44	42	88	11
Max	93	98	101	94	100	96	96	93	97	91	97	99	99	84	89	94	99	79	78	79	91	82	78	97	69	101	35
Min	7	9	8	8	6	7	9	8	9	9	6	9	7	7	7	7	5	8	7	9	9	9	8	7	14	52	5

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Standard Deviation of Wind Direction (degrees)**  
**February 2016**

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	75	51	68	29	34	80	67	50	93	48	74	76	62	8	70	48	19	16	37	50	81	76	74	59	56	93	8
2	24	30	64	32	56	43	51	41	67	75	67	62	73	12	8	51	8	10	62	71	20	96	20	52	46	96	8
3	74	72	79	62	57	101	80	89	82	73	87	66	12	13	11	14	12	15	8	46	37	38	32	53	51	101	8
4	98	52	73	53	93	93	82	67	84	10	10	10	10	12	10	8	10	9	8	8	11	12	12	68	38	98	8
5	99	81	34	34	34	42	58	50	39	67	28	15	13	10	12	14	15	46	36	36	38	36	39	40	38	99	10
6	71	18	54	50	19	32	95	11	14	10	10	10	10	10	11	10	11	10	9	8	8	8	8	7	21	95	7
7	8	10	8	6	22	12	37	19	29	68	19	7	11	11	15	11	9	9	13	7	84	73	85	36	25	85	6
8	62	33	55	62	71	83	80	79	75	86	60	79	52	42	12	12	13	53	28	25	32	49	42	62	52	86	12
9	62	69	71	79	74	95	75	95	49	82	65	92	62	26	45	20	55	58	28	32	65	46	64	42	60	95	20
10	72	61	62	99	63	98	91	78	78	69	57	47	8	17	8	29	73	78	79	43	62	74	104	10	61	104	8
11	15	8	12	23	11	9	9	8	10	11	16	12	8	11	8	5	7	61	36	13	20	21	35	44	17	61	5
12	19	59	79	87	46	84	38	95	82	69	42	64	87	83	51	53	79	56	81	26	35	75	36	40	61	95	19
13	44	56	45	36	77	64	14	15	7	9	13	11	9	12	10	12	11	8	9	42	56	68	36	14	28	77	7
14	9	11	33	16	18	9	9	10	12	11	11	9	10	11	11	8	10	9	9	10	10	10	11	11	12	33	8
15	10	11	16	18	13	11	10	9	7	10	9	8	8	12	10	21	11	13	12	58	18	8	32	14	15	58	7
16	19	22	41	78	42	25	11	17	17	13	10	10	8	9	11	10	13	15	66	28	56	35	31	6	25	78	6
17	21	84	85	61	70	54	33	23	22	18	13	Au	Au	Au	Au	Au	19	20	27	52	28	64	90	33	43	90	13
18	54	22	22	50	46	30	18	24	29	10	37	16	14	41	15	14	10	11	11	8	22	7	9	9	22	54	7
19	25	19	13	10	10	10	9	13	12	14	14	10	22	37	15	13	12	15	10	65	42	9	19	47	19	65	9
20	54	12	12	12	11	18	15	12	14	11	10	11	11	10	10	11	8	9	9	8	10	31	27	37	16	54	8
21	34	77	7	14	25	24	25	28	53	86	92	45	52	14	16	10	13	20	79	48	49	34	38	77	40	92	7
22	19	9	9	10	8	7	12	17	19	11	11	12	15	13	15	9	16	9	8	38	43	36	18	38	17	43	7
23	39	41	48	44	43	40	36	42	90	46	65	28	15	28	24	14	13	12	9	45	57	45	17	14	36	90	9
24	24	17	56	45	22	34	51	30	52	53	46	58	47	14	11	7	18	22	37	23	25	31	40	19	33	58	7
25	22	17	31	45	40	63	77	70	47	98	61	82	39	38	10	9	7	6	77	34	24	42	33	42	42	98	6
26	33	29	42	70	66	70	45	52	55	94	86	81	98	38	13	41	60	67	15	16	18	25	49	66	51	98	13
27	67	66	46	48	75	74	59	59	73	43	76	13	11	9	10	11	10	10	8	10	12	9	11	21	35	76	8
28	45	82	56	28	23	51	50	65	92	90	16	16	24	26	16	14	8	9	14	13	17	11	17	10	33	92	8
29	12	14	9	10	9	12	11	11	10	12	9	10	9	10	10	10	9	10	8	8	15	82	16	22	14	82	8
Avg	42	39	42	42	41	47	43	41	45	45	38	34	29	21	17	17	19	24	29	30	34	40	36	34	35	81	9
Max	99	84	85	99	93	101	95	95	93	98	92	92	98	83	70	53	79	78	81	71	84	96	104	77	61	104	20
Min	8	8	7	6	8	7	9	8	7	9	9	7	8	8	8	5	7	6	8	7	8	7	8	6	12	33	5

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Standard Deviation of Wind Direction (degrees)**  
**March 2016**

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	35	32	30	23	45	66	50	73	70	95	84	43	34	24	50	24	12	40	11	31	15	65	47	14	42	95	11
2	9	36	52	15	10	20	15	15	32	12	8	9	11	10	10	12	9	10	14	44	36	52	68	40	23	68	8
3	36	55	41	22	34	37	55	39	62	98	88	34	44	15	12	11	12	8	19	8	10	14	19	81	36	98	8
4	73	50	51	22	63	34	34	37	68	82	78	31	30	9	33	49	7	27	29	24	31	45	34	31	41	82	7
5	33	32	58	28	23	41	34	44	72	43	30	9	8	14	10	10	10	25	101	65	32	77	17	19	35	101	8
6	14	28	25	16	19	26	22	22	16	30	42	14	9	8	22	23	32	36	18	16	14	14	12	35	21	42	8
7	43	19	38	31	43	31	58	61	87	37	25	27	27	51	31	27	12	8	55	18	11	14	28	21	33	87	8
8	19	23	36	48	45	46	41	52	86	75	23	14	21	17	15	38	44	62	7	70	32	25	10	16	36	86	7
9	10	32	23	52	47	56	55	49	47	35	32	42	19	22	21	12	24	20	47	24	21	71	85	30	37	85	10
10	52	14	14	11	13	13	49	12	24	15	11	11	13	16	10	10	10	11	9	12	8	14	21	9	16	52	8
11	12	56	51	33	12	20	21	44	32	96	54	102	16	14	13	12	14	13	15	23	14	23	44	16	31	102	12
12	14	25	47	25	40	32	60	27	68	70	55	36	18	86	19	39	22	68	46	25	20	11	57	53	40	86	11
13	8	15	14	12	80	35	54	93	92	53	16	54	21	18	12	9	9	13	15	10	12	19	27	25	30	93	8
14	21	17	19	21	56	71	98	Pw	22	12	18	12	11	12	15	17	19	9	10	9	12	18	20	10	23	98	9
15	17	12	11	12	10	10	11	10	10	10	11	12	13	11	11	13	12	13	10	8	8	12	14	17	12	17	8
16	33	15	8	27	67	36	42	19	59	33	10	13	12	19	20	20	24	16	49	74	78	68	50	34	34	78	8
17	20	20	12	13	12	34	35	46	70	61	31	17	29	48	27	18	21	31	22	18	43	24	87	40	32	87	12
18	60	87	15	19	24	17	17	14	17	17	11	18	19	24	23	16	11	11	11	36	41	11	10	10	22	87	10
19	13	16	16	22	30	24	31	23	36	74	47	21	19	79	19	23	25	30	66	22	12	17	19	20	29	79	12
20	14	12	13	18	32	28	19	22	38	49	29	16	20	30	43	30	21	17	5	21	10	33	34	34	25	49	5
21	22	18	34	47	33	61	56	57	68	18	14	14	16	12	23	73	82	18	37	49	76	63	15	28	39	82	12
22	25	39	85	25	58	41	64	96	78	55	15	96	11	14	14	7	9	10	15	14	6	19	66	52	38	96	6
23	49	35	59	52	81	22	66	73	70	50	65	23	14	12	14	21	16	10	12	9	11	21	58	25	36	81	9
24	56	56	42	62	55	32	23	14	41	87	21	14	34	25	37	10	11	10	10	10	10	10	14	15	29	87	10
25	10	12	12	15	21	21	19	97	54	7	10	9	13	14	18	9	17	26	15	24	21	8	18	41	21	97	7
26	57	24	34	12	11	33	88	88	98	86	19	19	27	15	13	16	14	18	12	17	40	17	12	14	33	98	11
27	19	15	25	31	26	24	44	52	37	93	44	21	29	30	34	28	34	26	30	38	50	23	47	51	35	93	15
28	11	10	12	9	11	25	22	9	16	10	23	17	18	18	13	22	21	19	15	37	72	31	72	64	24	72	9
29	95	20	25	49	31	15	23	23	30	18	13	15	13	13	15	13	20	29	41	16	72	69	51	21	30	95	13
30	11	74	23	72	71	82	54	79	64	16	13	18	14	16	9	12	9	12	7	16	11	16	26	19	31	82	7
31	20	17	15	21	18	12	44	25	10	13	11	17	14	12	16	11	13	17	13	11	8	9	11	23	16	44	8
Avg	29	30	30	28	36	34	42	44	51	47	31	26	19	23	20	20	19	21	25	26	27	29	35	29	30	81	9
Max	95	87	85	72	81	82	98	97	98	98	88	102	44	86	50	73	82	68	101	74	78	77	87	81	42	102	15
Min	8	10	8	9	10	10	11	9	10	7	8	9	8	8	9	7	7	8	5	8	6	8	10	9	12	17	5

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 9 Meters (degrees Celsius)**  
**January 2016**

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	-19.2	-20.1	-21.2	-21.8	-20.6	-21.2	-20.7	-21.1	-20.9	-19.3	-17.7	-14.3	-11.7	-8.8	-6.6	-6.2	-7.7	-10.5	-12.8	-13.6	-14.5	-15.3	-16.2	-16.6	-15.8	-6.2	-21.8
2	-17.2	-17.2	-17.4	-17.3	-17.5	-16.8	-16.5	-16.4	-16.9	-14.9	-13.3	-10.0	-7.7	-5.4	-3.7	-3.3	-5.2	-8.5	-12.0	-13.3	-15.1	-16.0	-16.0	-17.6	-13.1	-3.3	-17.6
3	-16.9	-17.6	-17.7	-16.8	-16.1	-15.8	-16.2	-16.3	-14.0	-12.3	-10.9	-9.1	-6.0	-3.0	1.0	1.5	-0.9	-2.8	-4.9	-5.4	-6.4	-6.7	-7.5	-8.1	-9.5	1.5	-17.7
4	-8.7	-9.2	-8.9	-8.8	-9.6	-9.8	-11.0	-11.6	-11.5	-10.3	-7.5	-6.1	-3.8	-2.5	-1.1	0.1	-0.4	-1.8	-4.1	-5.4	-4.6	-4.1	-3.3	-3.2	-6.1	0.1	-11.6
5	-3.3	-3.7	-4.1	-4.0	-3.8	-3.0	-2.2	-2.3	-1.2	-1.1	0.1	1.1	1.3	1.7	2.1	1.7	0.3	-1.7	-4.1	-4.6	-6.3	-7.3	-7.9	-7.6	-2.5	2.1	-7.9
6	-8.5	-8.6	-9.7	-9.2	-10.1	-8.7	-7.3	-7.2	-7.3	-6.8	-5.8	-4.7	-3.7	-2.4	-0.8	0.0	0.0	-0.1	-1.2	-1.1	-1.8	-2.1	-2.3	-2.3	-4.7	0.0	-10.1
7	-3.1	-3.8	-3.2	-3.2	-3.9	-7.0	-8.3	-8.8	-9.0	-9.2	-10.0	-10.5	-10.3	-10.5	-10.6	-10.8	-11.1	-11.4	-11.4	-12.0	-12.6	-12.7	-13.1	-13.5	-9.2	-3.1	-13.5
8	-14.0	-14.5	-15.9	-17.6	-19.9	-20.5	-19.8	-18.8	-17.8	-16.7	-14.8	-13.5	-11.9	-10.0	-8.3	-8.0	-8.2	-8.6	-9.5	-9.3	-9.3	-9.2	-9.5	-9.5	-13.1	-8.0	-20.5
9	-9.3	-9.3	-9.6	-10.1	-10.3	-10.1	-9.8	-9.8	-9.5	-9.2	-7.1	-5.5	-4.5	-4.5	-4.7	-4.7	-5.0	-5.3	-5.6	-5.6	-8.3	-11.0	-13.4	-15.6	-8.2	-4.5	-15.6
10	-16.5	-17.2	-17.8	-19.1	-19.4	-19.3	-19.8	-19.4	-19.5	-18.0	-16.5	-12.2	-7.7	-5.8	-5.0	-5.2	-5.8	-6.9	-7.1	-9.3	-11.5	-13.7	-15.2	-16.1	-13.5	-5.0	-19.8
11	-16.7	-17.6	-18.5	-18.3	-18.2	-18.7	-19.7	-19.5	-20.5	-19.1	-16.4	-13.0	-7.4	-3.8	-3.6	-2.6	-2.6	-4.8	-6.8	-9.9	-14.1	-14.8	-14.2	-10.7	-13.0	-2.6	-20.5
12	-8.0	-9.3	-7.1	-4.5	-3.4	-3.3	-2.1	-1.9	-1.4	-1.4	-0.8	-0.3	-0.1	0.0	0.0	0.1	0.0	-1.3	-2.5	-4.9	-7.1	-8.0	-8.0	-7.9	-3.5	0.1	-9.3
13	-5.9	-5.0	-5.2	-5.5	-5.4	-6.3	-6.6	-6.8	-6.4	-6.4	-4.0	-0.4	2.4	2.6	2.9	3.3	3.1	2.5	2.1	1.6	1.1	0.5	0.4	0.0	-1.7	3.3	-6.8
14	-1.0	-1.9	-1.5	-1.1	-0.9	-1.2	-1.7	-2.3	-3.2	-3.6	-3.8	-4.1	-4.2	-4.0	-4.1	-4.2	-4.2	-4.7	-5.2	-5.2	-5.1	-4.9	-5.2	-5.8	-3.5	-0.9	-5.8
15	-5.9	-6.1	-6.4	-8.6	-11.9	-13.2	-12.6	-12.2	-11.4	-10.9	-9.6	-8.5	-7.3	-5.9	-5.6	-5.7	-5.8	-5.7	-5.8	-6.3	-6.5	-6.8	-6.9	-7.0	-8.0	-5.6	-13.2
16	-7.4	-6.8	-6.1	-6.2	-6.5	-6.9	-7.8	-8.2	-10.5	-11.2	-10.5	-9.3	-8.2	-5.9	-5.4	-5.0	-5.1	-5.7	-6.0	-6.1	-6.1	-6.4	-6.4	-6.7	-7.1	-5.0	-11.2
17	-6.6	-6.7	-6.4	-5.6	-4.9	-4.1	-3.9	-3.8	-2.9	-2.0	-1.4	-0.5	-0.1	-0.2	-0.2	-0.1	-1.9	-4.7	-6.4	-6.3	-5.3	-4.0	-2.8	-2.7	-3.5	-0.1	-6.7
18	-2.4	-1.6	0.0	0.2	0.3	-0.4	-0.5	-0.7	-1.0	-0.3	0.0	0.4	0.5	0.6	0.5	0.5	0.3	-0.3	-1.2	-2.6	-5.7	-6.8	-9.8	-12.3	-1.8	0.6	-12.3
19	-13.3	-14.3	-15.0	-16.3	-16.4	-16.9	-14.9	-13.7	-12.9	-11.0	-9.7	-6.9	-3.9	0.0	-0.1	-1.1	-1.6	-3.5	-3.2	-2.8	-2.5	-2.8	-3.2	-2.0	-7.8	0.0	-16.9
20	-2.2	-2.8	-2.7	-2.8	-3.1	-3.2	-3.3	-2.7	-1.9	-2.0	-1.9	-1.4	-0.7	-0.4	-0.3	-0.5	-0.8	-1.1	-1.4	-1.8	-1.7	-2.0	-2.4	-2.9	-1.9	-0.3	-3.3
21	-3.7	-4.5	-6.1	-8.8	-10.6	-11.4	-11.0	-11.1	-11.6	-11.0	-7.9	-4.4	-3.0	-1.8	-0.9	-0.3	-0.2	-0.4	-0.5	-0.4	-0.4	-1.4	-2.4	-3.9	-4.9	-0.2	-11.6
22	-5.5	-5.9	-5.1	-4.5	-4.7	-5.3	-4.9	-4.9	-4.0	-3.8	-1.1	1.1	3.4	4.9	5.4	4.8	3.0	4.3	4.9	4.5	3.9	1.8	-0.9	-2.5	-0.5	5.4	-5.9
23	-1.9	-2.5	-1.0	-4.4	-7.4	-9.4	-9.6	-10.1	-9.2	-9.1	-8.2	-6.3	-3.9	-1.9	1.8	3.3	1.7	1.4	1.2	-0.2	-0.6	-0.6	-0.8	-0.8	-3.3	3.3	-10.1
24	-0.9	-1.0	-1.5	-1.7	-2.6	-3.9	-6.6	-8.2	-7.6	-6.7	-5.6	-3.4	-1.7	-1.2	-1.9	-2.2	-2.3	-2.5	-2.6	-2.6	-2.9	-3.6	-4.5	-4.8	-3.4	-0.9	-8.2
25	-5.0	-5.0	-4.9	-5.1	-5.4	-5.8	-6.0	-5.9	-7.4	-8.1	-5.3	-4.1	-3.6	-3.2	-3.5	-3.9	-6.0	-9.0	-12.3	-14.4	-15.5	-16.4	-17.1	-7.5	-3.2	-17.1	
26	-17.7	-18.4	-18.8	-18.4	-17.6	-17.2	-16.9	-15.9	-11.8	-10.3	-8.1	-5.7	-2.3	-0.8	-0.5	-0.4	-1.0	-3.6	-5.0	-5.8	-6.7	-6.8	-6.5	-3.9	-9.2	-0.4	-18.8
27	-4.0	-2.9	-1.3	-3.8	-2.4	-2.6	-3.2	-2.9	-3.4	-3.9	-3.3	-1.4	3.0	3.7	4.0	4.1	3.7	2.3	1.6	0.5	-1.3	-2.2	-1.3	-1.8	-0.8	4.1	-4.0
28	-1.8	-2.2	-1.5	-2.8	-5.0	-6.3	-6.3	-6.7	-5.3	-4.1	-2.8	3.7	6.3	6.1	7.3	7.7	7.3	5.8	3.9	2.9	4.1	3.6	3.5	2.3	0.8	7.7	-6.7
29	2.0	2.0	1.0	0.8	0.2	-0.1	-0.6	-1.4	-1.6	-0.9	-1.0	-0.6	0.0	0.3	0.0	-1.1	-1.7	-1.5	-1.0	-0.5	-0.3	-0.7	-1.4	-2.4	-0.4	2.0	-2.4
30	-2.8	-3.2	-3.4	-3.8	-3.7	-3.7	-4.2	-4.7	-4.6	-4.3	-3.8	-3.0	-2.6	-2.3	-2.4	-2.7	-3.5	-4.4	-5.4	-7.4	-11.1	-12.8	-14.0	-14.2	-5.3	-2.3	-14.2
31	-15.1	-14.7	-13.7	-10.8	-10.0	-12.1	-12.3	-13.0	-13.1	-12.4	-8.6	-6.4	-5.5	-5.3	-5.2	-5.6	-6.0	-7.1	-8.3	-11.0	-13.5	-15.3	-15.3	-14.5	-10.6	-5.2	-15.3
Avg	-7.8	-8.1	-8.1	-8.4	-8.7	-9.2	-9.2	-9.3	-9.0	-8.4	-7.1	-5.2	-3.4	-2.3	-1.6	-1.5	-2.1	-3.2	-4.2	-5.0	-6.0	-6.7	-7.2	-7.5	-6.2	-0.9	-12.1
Max	2.0	2.0	1.0	0.8	0.3	-0.1	-0.5	-0.7	-1.0	-0.3	0.1	3.7	6.3	6.1	7.3	7.7	7.3	5.8	4.9	4.5	4.1	3.6	3.5	2.3	0.8	7.7	-2.4
Min	-19.2	-20.1	-21.2	-21.8	-20.6	-21.2	-20.7	-21.1	-20.9	-19.3	-17.7	-14.3	-11.9	-10.5	-10.6	-10.8	-11.1	-11.4	-12.8	-13.6	-15.1	-16.0	-16.4	-17.6	-15.8	-8.0	-21.8

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 9 Meters (degrees Celsius)**  
**February 2016**

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	-14.1	-13.8	-14.0	-14.6	-15.8	-15.8	-15.4	-15.3	-15.7	-15.0	-14.0	-12.5	-9.2	-6.4	-6.2	-6.5	-6.6	-7.1	-9.0	-12.2	-13.7	-14.4	-14.0	-13.8	-12.3	-6.2	-15.8
2	-13.6	-14.6	-15.0	-14.6	-15.1	-16.1	-16.6	-17.7	-18.6	-18.2	-15.5	-11.2	-8.8	-7.4	-7.1	-7.4	-7.3	-7.7	-9.1	-9.4	-9.5	-11.3	-12.7	-15.4	-12.5	-7.1	-18.6
3	-18.2	-20.0	-21.2	-22.1	-22.2	-22.3	-22.5	-22.8	-23.8	-22.1	-19.8	-12.5	-8.6	-6.4	-6.3	-6.3	-5.6	-5.5	-5.7	-6.8	-10.1	-13.3	-15.0	-16.2	-14.8	-5.5	-23.8
4	-17.0	-17.6	-18.6	-18.1	-16.3	-14.8	-13.7	-11.8	-7.9	-4.5	-3.6	-2.9	-2.2	-1.6	-1.6	-1.6	-1.7	-1.8	-2.0	-2.4	-2.7	-2.9	-3.3	-4.0	-7.3	-1.6	-18.6
5	-4.8	-7.8	-10.8	-13.1	-14.1	-14.8	-14.1	-9.0	-8.9	-6.9	-3.7	-1.6	-0.8	-0.3	0.1	0.4	0.8	0.1	-1.4	-2.9	-2.6	-3.0	-3.9	-5.8	-5.4	0.8	-14.8
6	-7.1	-3.6	-3.2	-1.6	-1.4	-3.5	-2.5	1.1	-0.8	-1.2	-0.8	-0.6	-0.9	-1.0	-1.1	-1.2	-1.4	-1.5	-1.6	-1.9	-2.0	-2.3	-2.7	-3.1	-1.9	1.1	-7.1
7	-3.3	-3.7	-4.2	-4.8	-6.2	-7.6	-9.9	-12.0	-12.3	-13.0	-6.7	-3.1	-2.1	-1.3	-0.7	-0.4	-0.4	-0.3	-0.1	-0.2	-1.4	-3.0	-5.2	-6.7	-4.5	-0.1	-13.0
8	-8.3	-10.2	-11.3	-11.9	-11.8	-11.9	-12.1	-12.9	-11.5	-10.5	-8.8	-5.2	1.4	4.3	5.2	5.3	5.0	4.0	2.1	-1.9	-3.3	-4.9	-5.7	-6.4	-5.1	5.3	-12.9
9	-7.7	-8.4	-9.6	-10.3	-10.6	-11.6	-12.0	-11.7	-11.0	-9.3	-7.3	-4.5	-0.7	5.8	7.4	8.0	6.7	2.9	-0.7	-1.9	-3.9	-5.1	-6.6	-7.1	-4.5	8.0	-12.0
10	-7.5	-8.2	-8.9	-10.1	-10.4	-11.0	-10.5	-11.3	-9.5	-7.6	0.0	4.3	6.3	7.1	7.6	6.4	5.9	3.8	2.6	6.2	5.4	3.3	4.4	5.9	-1.1	7.6	-11.3
11	5.3	5.3	5.3	4.8	4.6	4.4	3.5	3.4	2.5	3.7	4.3	5.1	5.5	6.0	5.4	5.1	5.1	4.3	3.4	0.9	-0.4	-2.2	-3.2	-3.7	3.3	6.0	-3.7
12	-4.0	-3.6	-3.1	-3.2	-3.0	-2.6	-2.0	-1.6	-1.0	-0.6	0.1	1.1	2.0	2.7	3.4	4.3	4.7	3.8	2.8	1.5	0.5	0.0	-0.6	-1.4	0.0	4.7	-4.0
13	-2.2	-2.0	-2.9	-3.4	-4.8	-1.4	0.9	1.1	1.1	0.8	0.7	0.7	0.9	0.2	1.3	1.2	1.3	0.3	-0.3	-1.2	-2.5	-2.7	-0.9	-0.4	-0.6	1.3	-4.8
14	-0.7	-1.7	-1.9	-1.7	-1.3	-0.7	-0.5	-0.1	0.0	0.4	1.2	2.2	2.8	3.3	3.0	2.7	2.1	1.7	1.8	1.9	1.6	1.7	1.9	1.8	0.9	3.3	-1.9
15	1.8	1.9	2.0	2.8	2.3	1.6	1.5	1.7	2.1	2.5	3.0	3.1	3.6	4.1	4.3	3.5	0.9	0.7	0.9	0.7	0.7	0.9	-1.2	-1.6	1.8	4.3	-1.6
16	-1.6	-1.2	-1.0	0.3	2.2	2.7	3.7	4.3	4.3	4.4	4.5	4.3	4.7	4.8	4.8	4.5	4.2	4.0	3.1	1.8	0.6	-0.1	0.3	-0.7	2.5	4.8	-1.6
17	-0.6	-0.9	-0.8	-0.4	-0.3	0.6	0.0	-1.3	-0.5	0.7	2.4	Au	Au	Au	Au	Au	6.4	5.8	5.3	3.8	3.1	2.8	3.3	4.1	1.8	6.4	-1.3
18	3.1	2.1	3.4	4.0	5.3	5.7	4.9	3.6	4.7	5.1	5.5	6.8	6.8	3.0	2.3	2.4	1.7	1.3	1.1	0.6	0.0	0.5	0.5	0.9	3.1	6.8	0.0
19	0.4	0.9	0.9	0.8	0.3	0.2	0.0	-0.3	0.0	0.6	1.0	1.5	1.8	2.8	3.9	4.4	4.6	4.2	3.4	2.3	2.0	3.1	2.3	0.0	1.7	4.6	-0.3
20	-0.4	1.7	-1.4	-1.4	-1.5	-1.8	-2.0	-2.1	-2.5	-2.1	-1.7	-1.5	-1.2	-1.5	-2.0	-1.7	-1.8	-1.3	-1.5	-2.1	-2.6	-3.0	-3.2	-3.6	-1.8	1.7	-3.6
21	-4.3	-6.1	-8.3	-9.6	-11.1	-12.1	-12.9	-13.1	-13.1	-11.8	-9.1	-5.3	-1.6	-0.5	0.1	0.8	0.7	0.2	-1.8	-3.7	-4.6	-4.3	-4.4	-2.1	-5.7	0.8	-13.1
22	-0.7	-0.6	-0.8	-1.0	-1.0	-1.2	-1.7	-2.3	-2.7	-2.5	-1.6	-1.1	-0.8	-0.9	-0.6	-1.2	-1.4	-1.9	-2.4	-3.5	-4.9	-7.5	-10.2	-11.3	-2.7	-0.6	-11.3
23	-12.4	-13.8	-14.5	-14.8	-15.9	-15.6	-15.7	-16.1	-15.8	-13.8	-10.7	-5.8	-2.8	-1.7	-0.4	0.3	0.5	-0.1	-1.4	-2.6	-5.0	-7.6	-10.5	-11.8	-8.7	0.5	-16.1
24	-13.1	-13.9	-15.3	-16.0	-16.5	-17.0	-16.9	-16.9	-15.9	-13.8	-11.2	-6.9	-2.3	-0.7	-0.1	0.6	1.0	0.7	-2.2	-4.3	-5.2	-7.0	-8.4	-9.2	-8.8	1.0	-17.0
25	-9.7	-10.5	-11.4	-12.0	-12.5	-13.7	-13.8	-13.9	-12.3	-10.1	-7.2	-0.6	3.1	4.8	5.7	6.1	5.9	5.1	3.3	-0.6	-2.6	-4.2	-4.7	-6.4	-4.7	6.1	-13.9
26	-7.7	-8.4	-9.3	-10.1	-10.5	-10.6	-11.1	-11.1	-11.0	-9.0	-4.5	1.0	5.4	7.8	8.5	9.1	8.8	6.7	3.9	1.5	0.4	-0.4	-0.4	-0.2	-2.1	9.1	-11.1
27	-1.1	-1.4	-2.6	-2.4	-3.3	-4.0	-5.3	-6.3	-5.6	-3.3	-0.6	5.0	4.2	2.8	3.5	4.0	4.3	4.3	3.8	3.1	2.3	1.8	1.4	0.6	0.2	5.0	-6.3
28	-1.0	-2.7	-3.4	-4.3	-5.4	-7.1	-7.8	-8.4	-7.6	-1.5	2.7	3.6	4.2	3.9	4.8	6.1	6.2	6.0	5.6	5.2	4.8	3.8	3.4	1.1	0.5	6.2	-8.4
29	0.8	0.9	0.1	-0.5	-1.2	-2.1	-2.5	-2.6	-2.4	-2.1	-1.8	-0.9	-0.2	-0.1	0.0	0.0	0.0	-0.3	-0.8	-1.3	-2.2	-3.3	-5.8	-5.8	-1.4	0.9	-5.8
Avg	-5.2	-5.6	-6.3	-6.5	-6.8	-7.0	-7.1	-7.1	-6.7	-5.5	-3.6	-1.3	0.4	1.2	1.6	1.7	1.7	1.1	0.1	-1.0	-2.0	-2.9	-3.6	-4.2	-3.1	2.6	-9.4
Max	5.3	5.3	5.3	4.8	5.3	5.7	4.9	4.3	4.7	5.1	5.5	6.8	6.8	7.8	8.5	9.1	8.8	6.7	5.6	6.2	5.4	3.8	4.4	5.9	3.3	9.1	0.0
Min	-18.2	-20.0	-21.2	-22.1	-22.2	-22.3	-22.5	-22.8	-23.8	-22.1	-19.8	-12.5	-9.2	-7.4	-7.1	-7.4	-7.3	-7.7	-9.1	-12.2	-13.7	-14.4	-15.0	-16.2	-14.8	-7.1	-23.8

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 9 Meters (degrees Celsius)**  
**March 2016**

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	-7.9	-9.4	-10.9	-11.7	-12.5	-13.1	-13.0	-12.8	-12.5	-10.7	-7.2	-1.6	1.2	1.2	0.5	1.3	2.0	2.8	1.9	1.4	1.8	2.2	3.0	4.7	-4.1	4.7	-13.1
2	4.4	1.3	0.6	0.7	-0.2	-1.0	-2.0	-2.3	-2.1	-1.5	-0.6	0.2	0.5	1.0	1.5	2.0	2.3	2.2	1.1	-0.4	-1.3	-3.0	-5.2	-6.2	-0.3	4.4	-6.2
3	-6.7	-7.8	-6.7	-6.1	-5.3	-4.8	-4.6	-4.8	-4.2	-2.8	-1.0	1.7	6.9	8.2	8.6	8.5	6.6	4.3	4.0	3.1	2.4	1.6	0.8	-0.1	0.1	8.6	-7.8
4	-1.3	-2.3	-3.8	-5.3	-6.4	-6.8	-7.9	-8.8	-8.1	-5.1	-1.1	2.9	4.7	6.0	7.0	6.8	6.8	5.5	3.4	0.8	-1.7	-2.8	-3.8	-4.0	-1.1	7.0	-8.8
5	-4.1	-4.3	-3.3	-3.3	-3.4	-3.5	-2.8	-3.2	-2.8	3.1	9.0	10.5	10.3	11.1	11.0	11.0	10.8	10.3	6.5	5.6	5.7	4.0	5.0	4.3	3.6	11.1	-4.3
6	2.0	5.6	5.3	1.5	0.3	-0.5	1.5	1.9	1.5	6.2	7.2	8.0	9.2	9.6	8.4	6.5	5.1	3.4	1.3	0.8	0.5	0.0	-0.3	-0.6	3.5	9.6	-0.6
7	-1.2	-1.4	-2.3	-2.6	-3.0	-3.7	-4.0	-5.4	-5.1	-2.6	-0.7	0.7	1.9	2.9	4.0	4.6	4.5	3.7	2.3	-0.4	-1.8	-2.6	-3.8	-5.3	-0.9	4.6	-5.4
8	-5.3	-5.8	-6.8	-8.0	-8.4	-7.6	-7.2	-7.1	-5.7	-3.4	-1.1	-1.4	-0.8	-0.5	-0.9	-1.4	-0.7	0.1	-0.5	-2.4	-4.3	-5.7	-6.8	-7.9	-4.2	0.1	-8.4
9	-8.4	-9.2	-9.7	-10.3	-10.5	-10.8	-10.7	-10.6	-9.9	-7.4	-3.1	-0.3	0.8	1.2	1.7	2.1	2.3	2.6	0.9	-1.6	-2.9	-4.1	-4.1	-0.6	-4.3	2.6	-10.8
10	-0.1	1.3	1.9	2.5	2.6	3.2	4.0	4.7	5.6	6.7	8.1	8.8	9.6	10.3	10.4	10.0	9.7	9.1	8.4	7.9	7.4	7.4	5.3	2.0	6.1	10.4	-0.1
11	0.9	0.7	0.9	1.3	0.6	0.0	-0.4	-0.8	-0.9	0.5	2.1	4.1	6.3	5.7	5.5	5.2	5.0	4.9	4.6	4.4	4.5	4.3	4.4	3.8	2.8	6.3	-0.9
12	3.7	3.2	0.3	-1.5	-1.9	-2.2	-2.8	-2.7	-0.2	2.4	7.4	9.1	7.7	6.9	6.7	6.3	6.3	2.6	1.8	1.2	1.5	1.4	0.9	1.8	2.5	9.1	-2.8
13	3.0	3.0	1.2	-0.9	-1.9	-2.3	-3.5	-5.4	-4.8	-2.6	0.1	1.9	2.9	3.6	5.3	5.3	5.5	6.5	5.9	5.3	5.0	4.4	2.4	1.7	1.7	6.5	-5.4
14	1.3	1.5	1.7	1.8	0.1	-1.2	-1.6	Pw	-1.4	-1.7	-1.2	-0.5	0.8	0.4	-0.6	-1.3	-0.6	-0.3	-0.5	-2.1	-2.2	-3.0	-3.4	-3.6	-0.8	1.8	-3.6
15	-3.5	-3.2	-3.2	-3.3	-3.4	-3.5	-3.5	-3.4	-3.5	-3.3	-2.9	-2.7	-2.4	-2.1	-1.4	-2.0	-0.8	-1.1	-1.1	-2.0	-2.9	-3.7	-4.6	-5.2	-2.9	-0.8	-5.2
16	-6.2	-7.9	-9.1	-9.6	-10.0	-9.3	-9.6	-10.3	-10.0	-5.3	-3.7	-2.8	-2.4	-1.7	-1.3	-0.8	-2.7	-3.3	-2.2	-2.1	-3.2	-4.4	-5.0	-5.4	-5.3	-0.8	-10.3
17	-6.8	-8.9	-10.2	-11.2	-12.0	-12.3	-12.7	-12.3	-12.0	-9.9	-5.4	-5.2	-4.8	-4.5	-4.7	-4.3	-4.2	-4.6	-5.4	-6.1	-7.5	-9.8	-11.3	-12.3	-8.3	-4.2	-12.7
18	-11.4	-9.6	-7.8	-8.0	-8.5	-8.7	-8.6	-8.8	-9.0	-9.0	-8.4	-7.8	-6.9	-6.1	-5.2	-4.6	-4.0	-3.6	-3.7	-4.9	-6.6	-9.0	-10.7	-12.3	-7.6	-3.6	-12.3
19	-13.4	-13.9	-14.1	-14.8	-15.5	-15.7	-16.6	-16.8	-15.6	-12.7	-7.1	-1.8	-0.1	1.1	2.1	3.7	4.9	5.6	5.7	2.3	-1.4	-3.1	-4.3	-5.3	-6.1	5.7	-16.8
20	-5.5	-6.0	-6.1	-7.2	-8.0	-8.2	-8.1	-8.5	-7.8	-4.7	-0.4	5.3	8.4	9.8	11.2	11.8	12.4	12.2	11.3	8.3	4.7	3.6	2.1	1.2	1.3	12.4	-8.5
21	0.8	0.4	0.2	-0.8	-0.9	-1.0	-1.7	-2.4	2.3	5.4	6.0	6.7	6.8	7.4	5.9	6.1	7.4	7.8	6.6	4.5	2.2	0.7	-0.6	-1.8	2.8	7.8	-2.4
22	-2.4	-3.5	-3.6	-3.7	-4.4	-3.6	-3.3	-2.4	-1.5	-1.0	-0.4	0.0	-0.9	-2.4	-3.5	-2.8	-2.3	-2.7	-3.2	-3.3	-3.4	-3.6	-4.4	-4.8	-2.8	0.0	-4.8
23	-5.2	-5.4	-6.0	-7.2	-7.9	-7.3	-7.0	-7.0	-8.1	-6.5	-2.8	-1.3	-0.6	-0.3	0.5	0.7	2.5	2.5	2.5	2.4	1.3	-1.0	-1.6	-1.9	-2.7	2.5	-8.1
24	-2.6	-1.7	-1.7	-1.2	-2.2	-3.8	-3.7	-2.9	-1.5	-0.4	0.5	0.4	1.7	1.3	2.3	1.7	1.7	1.7	1.3	-0.1	-0.4	-1.1	-1.5	-1.8	-0.6	2.3	-3.8
25	-2.0	-2.3	-2.8	-3.2	-3.5	-3.7	-3.9	-4.1	-3.5	-3.0	-2.4	-1.8	-1.4	-0.9	-0.5	-0.1	0.2	-0.3	-0.8	-1.1	-1.3	-1.7	-2.1	-2.9	-2.0	0.2	-4.1
26	-4.3	-6.3	-8.5	-9.5	-9.9	-10.5	-10.4	-9.1	-7.9	-5.2	-2.0	-0.8	-0.2	0.8	1.6	2.4	3.1	3.6	3.3	2.1	-1.6	-3.6	-4.3	-5.6	-3.5	3.6	-10.5
27	-7.0	-7.7	-8.6	-9.0	-9.3	-9.6	-10.1	-10.6	-8.6	-4.0	1.8	3.8	4.4	5.0	6.1	6.8	7.4	7.0	5.2	2.7	0.4	0.2	0.1	-0.1	-1.4	7.4	-10.6
28	-0.6	-1.0	-1.5	-2.1	-2.6	-2.8	-3.3	-3.7	-2.9	-2.3	-1.4	-0.5	0.5	1.2	1.9	2.5	2.8	2.4	1.6	-0.3	-1.8	-2.5	-1.5	-0.7	-0.8	2.8	-3.7
29	-0.7	-0.9	-0.9	-1.1	-1.2	-1.2	-1.4	-1.1	-1.0	-1.0	-0.8	-0.1	0.3	0.2	0.6	0.7	0.9	1.6	1.6	1.4	1.9	1.0	0.2	0.3	-0.0	1.9	-1.4
30	0.5	0.1	-0.5	-0.9	-2.2	-3.6	-4.9	-4.2	-1.5	0.6	2.0	3.7	4.1	4.4	4.2	4.5	4.7	3.5	2.1	2.1	1.9	1.5	1.0	0.5	1.0	4.7	-4.9
31	0.0	-0.3	-0.8	-1.2	-1.1	-1.7	-2.3	-2.1	-1.4	-0.6	0.3	-0.1	0.1	0.4	0.6	0.4	0.9	0.3	-0.1	-0.4	-0.5	-0.8	-1.4	-1.4	-0.5	0.9	-2.3
Avg	-2.9	-3.3	-3.8	-4.4	-4.9	-5.2	-5.4	-5.6	-4.6	-2.6	-0.3	1.3	2.2	2.6	2.9	3.0	3.2	2.9	2.1	0.9	-0.1	-1.1	-1.8	-2.2	-1.1	4.2	-6.5
Max	4.4	5.6	5.3	2.5	2.6	3.2	4.0	4.7	5.6	6.7	9.0	10.5	10.3	11.1	11.2	11.8	12.4	12.2	11.3	8.3	7.4	7.4	5.3	4.7	6.1	12.4	-0.1
Min	-13.4	-13.9	-14.1	-14.8	-15.5	-15.7	-16.6	-16.8	-15.6	-12.7	-8.4	-7.8	-6.9	-6.1	-5.2	-4.6	-4.2	-4.6	-5.4	-6.1	-7.5	-9.8	-11.3	-12.3	-8.3	-4.2	-16.8

A-12

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 2 Meters (degrees Celsius)**  
**January 2016**

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	-20.9	-21.6	-22.7	-23.4	-22.8	-23.5	-23.6	-23.7	-22.9	-21.2	-19.2	-15.0	-12.4	-10.3	-8.2	-6.5	-8.7	-13.0	-14.3	-16.3	-17.1	-17.7	-18.1	-18.4	-17.6	-6.5	-23.7
2	-19.3	-19.4	-19.2	-19.4	-19.9	-19.7	-19.1	-18.8	-18.9	-16.6	-14.8	-11.7	-8.6	-6.0	-4.4	-4.2	-6.6	-11.5	-14.2	-15.8	-17.6	-19.1	-17.9	-19.8	-15.1	-4.2	-19.9
3	-19.8	-19.9	-20.2	-18.7	-18.7	-18.3	-19.0	-18.9	-16.3	-13.8	-12.2	-10.3	-7.6	-5.2	-2.3	-0.6	-2.6	-3.4	-5.8	-7.1	-8.5	-9.1	-10.3	-10.4	-11.6	-0.6	-20.2
4	-10.8	-11.3	-10.3	-10.1	-12.0	-12.4	-13.5	-13.4	-13.6	-12.2	-9.6	-6.8	-4.9	-3.7	-2.6	-1.3	-1.7	-3.0	-5.6	-7.4	-5.7	-5.3	-4.2	-4.3	-7.7	-1.3	-13.6
5	-3.9	-4.7	-5.2	-5.1	-4.4	-3.7	-3.1	-3.1	-1.4	-1.1	0.0	1.0	1.3	1.7	1.7	1.4	-0.7	-3.1	-5.5	-6.5	-8.7	-9.8	-10.0	-9.7	-3.4	1.7	-10.0
6	-10.3	-11.0	-11.8	-11.5	-11.8	-10.1	-8.2	-8.0	-8.2	-7.7	-6.0	-4.9	-3.7	-2.5	-1.8	-1.2	-1.0	-0.9	-1.7	-1.8	-2.3	-2.9	-2.9	-3.0	-5.6	-0.9	-11.8
7	-4.0	-4.5	-3.6	-3.6	-4.1	-7.1	-8.5	-8.9	-8.9	-9.1	-9.8	-10.3	-10.1	-10.2	-10.4	-10.6	-11.0	-11.3	-11.3	-11.9	-12.5	-12.6	-13.0	-13.5	-9.2	-3.6	-13.5
8	-14.2	-14.8	-16.8	-19.8	-21.2	-21.5	-19.9	-18.7	-17.8	-16.6	-14.7	-13.1	-12.0	-10.2	-8.3	-8.1	-8.3	-9.1	-10.0	-9.6	-9.4	-9.5	-9.8	-9.7	-13.5	-8.1	-21.5
9	-9.6	-9.6	-10.1	-10.8	-10.6	-10.3	-10.0	-10.1	-9.7	-9.3	-7.6	-5.8	-4.6	-4.8	-5.1	-5.1	-5.6	-5.8	-6.0	-6.1	-9.7	-13.6	-15.5	-17.5	-8.9	-4.6	-17.5
10	-18.5	-18.9	-20.0	-21.2	-21.6	-21.3	-21.7	-21.6	-21.6	-19.7	-18.3	-13.7	-8.0	-6.5	-5.5	-5.8	-7.0	-7.6	-7.9	-10.8	-12.3	-14.4	-16.2	-17.3	-14.9	-5.5	-21.7
11	-18.3	-19.3	-19.7	-19.9	-20.0	-20.5	-21.1	-21.8	-22.4	-20.4	-17.5	-14.7	-8.5	-4.7	-4.9	-3.7	-3.8	-6.3	-8.7	-12.6	-15.3	-15.7	-14.9	-11.4	-14.4	-3.7	-22.4
12	-9.3	-10.0	-8.1	-5.0	-3.9	-3.6	-2.2	-2.1	-1.6	-1.6	-1.0	-0.6	-0.3	-0.2	-0.2	-0.2	-0.5	-2.3	-4.1	-6.1	-8.3	-9.0	-8.6	-9.1	-4.1	-0.2	-10.0
13	-6.4	-5.4	-5.8	-6.8	-7.7	-7.8	-7.5	-7.9	-7.6	-7.7	-4.5	-1.1	2.1	2.5	2.7	2.7	2.6	2.0	1.5	1.3	0.9	0.4	0.3	-0.1	-2.4	2.7	-7.9
14	-1.0	-1.9	-1.4	-1.0	-0.9	-1.2	-1.7	-2.3	-3.1	-3.6	-3.8	-4.1	-4.1	-4.0	-4.1	-4.1	-4.2	-4.8	-5.5	-5.2	-5.1	-4.9	-5.4	-5.9	-3.5	-0.9	-5.9
15	-6.0	-6.1	-7.0	-10.2	-14.1	-14.5	-13.5	-12.5	-11.8	-11.3	-10.2	-9.3	-7.7	-5.9	-5.6	-5.8	-6.1	-6.0	-6.0	-6.6	-6.8	-7.0	-7.5	-8.3	-8.6	-5.6	-14.5
16	-8.0	-7.1	-6.4	-6.4	-6.9	-7.3	-8.3	-9.2	-11.6	-12.3	-10.9	-10.1	-8.9	-5.9	-5.5	-5.2	-5.2	-5.7	-6.1	-6.2	-6.2	-6.4	-6.5	-6.7	-7.5	-5.2	-12.3
17	-6.7	-6.7	-6.4	-5.8	-5.2	-4.5	-4.1	-4.0	-3.3	-2.2	-1.8	-0.7	-0.2	-0.6	-0.6	-1.1	-3.6	-5.8	-7.4	-7.0	-5.7	-4.1	-2.8	-2.6	-3.9	-0.2	-7.4
18	-2.4	-1.8	-0.3	-0.1	0.1	-0.8	-0.8	-1.0	-1.2	-0.4	0.0	0.3	0.3	0.4	0.3	0.2	0.1	-0.9	-2.0	-4.0	-7.9	-8.9	-12.2	-14.4	-2.4	0.4	-14.4
19	-15.4	-16.2	-17.3	-18.5	-18.7	-19.2	-17.3	-16.5	-15.5	-13.0	-11.1	-8.5	-4.8	-1.1	-1.4	-2.1	-3.3	-5.2	-4.1	-3.8	-3.9	-3.8	-3.9	-2.4	-9.5	-1.1	-19.2
20	-2.3	-2.8	-2.7	-2.9	-3.1	-3.3	-3.3	-2.7	-1.9	-2.0	-1.9	-1.4	-0.7	-0.5	-0.5	-0.6	-1.0	-1.2	-1.6	-2.0	-1.8	-2.1	-2.8	-3.5	-2.0	-0.5	-3.5
21	-4.3	-4.9	-7.8	-10.9	-11.7	-12.3	-12.0	-12.3	-12.9	-12.2	-9.0	-6.1	-3.3	-1.7	-0.8	-0.3	-0.5	-0.6	-0.6	-0.4	-0.5	-2.1	-2.9	-5.3	-5.6	-0.3	-12.9
22	-7.0	-7.2	-5.9	-5.4	-5.8	-6.5	-6.7	-6.2	-5.1	-5.6	-3.3	-0.6	2.3	4.4	4.9	4.6	2.2	2.8	4.1	3.9	2.9	0.4	-3.2	-5.0	-1.7	4.9	-7.2
23	-4.1	-5.2	-3.1	-6.0	-9.0	-10.7	-11.3	-11.9	-11.0	-10.4	-9.6	-7.9	-6.3	-4.5	-0.8	2.1	0.6	0.4	0.8	-0.3	-0.6	-0.6	-0.8	-1.0	-4.6	2.1	-11.9
24	-1.0	-1.1	-1.9	-2.1	-3.8	-6.5	-8.6	-9.5	-9.5	-7.8	-6.4	-3.8	-2.3	-1.4	-1.9	-2.2	-2.3	-2.5	-2.6	-2.6	-2.9	-3.6	-4.6	-4.9	-4.0	-1.0	-9.5
25	-5.1	-5.0	-5.1	-5.2	-5.5	-6.4	-6.3	-6.6	-8.7	-11.0	-9.9	-5.7	-4.4	-3.9	-3.3	-4.0	-5.0	-7.9	-11.2	-14.0	-16.2	-17.5	-18.5	-19.1	-8.6	-3.3	-19.1
26	-20.0	-20.6	-21.0	-20.9	-20.5	-19.0	-18.7	-17.5	-14.3	-12.1	-9.9	-6.1	-3.2	-1.2	-0.8	-1.0	-1.8	-5.1	-6.0	-6.7	-7.9	-7.9	-7.5	-4.6	-10.6	-0.8	-21.0
27	-5.1	-4.5	-2.5	-5.1	-3.8	-3.9	-5.0	-6.0	-6.8	-6.1	-4.2	-2.6	2.7	3.4	3.7	3.7	2.9	0.8	-0.1	-0.7	-2.4	-3.1	-1.9	-2.6	-2.1	3.7	-6.8
28	-2.8	-3.5	-2.6	-4.3	-6.5	-8.2	-8.5	-8.1	-6.9	-6.1	-4.6	1.1	5.2	5.1	6.6	6.6	6.0	4.0	2.8	1.7	3.4	3.2	3.1	2.2	-0.5	6.6	-8.5
29	1.9	1.8	0.5	0.4	0.0	-0.3	-1.1	-2.2	-1.9	-1.1	-1.3	-0.9	-0.1	-0.1	-0.1	-1.2	-1.7	-1.5	-1.0	-0.8	-0.4	-0.8	-1.7	-2.9	-0.7	1.9	-2.9
30	-3.1	-3.6	-3.9	-4.4	-4.1	-4.0	-4.4	-4.9	-5.0	-4.7	-4.2	-3.2	-2.8	-2.5	-2.8	-3.0	-4.0	-4.8	-6.4	-9.0	-12.3	-13.6	-14.8	-15.2	-5.9	-2.5	-15.2
31	-16.3	-15.4	-14.3	-12.9	-11.8	-13.3	-13.4	-14.1	-14.0	-13.3	-9.6	-6.4	-5.6	-5.4	-5.3	-6.1	-6.8	-7.8	-9.6	-12.9	-14.6	-16.2	-16.2	-15.0	-11.5	-5.3	-16.3
Avg	-8.8	-9.1	-9.1	-9.6	-10.0	-10.4	-10.4	-10.5	-10.2	-9.4	-8.0	-5.9	-3.9	-2.8	-2.2	-2.0	-2.9	-4.1	-5.0	-6.0	-6.9	-7.7	-8.1	-8.4	-7.1	-1.4	-13.6
Max	1.9	1.8	0.5	0.4	0.1	-0.3	-0.8	-1.0	-1.2	-0.4	0.0	1.1	5.2	5.1	6.6	6.6	6.0	4.0	4.1	3.9	3.4	3.2	3.1	2.2	-0.5	6.6	-2.9
Min	-20.9	-21.6	-22.7	-23.4	-22.8	-23.5	-23.6	-23.7	-22.9	-21.2	-19.2	-15.0	-12.4	-10.3	-10.4	-10.6	-11.0	-13.0	-14.3	-16.3	-17.6	-19.1	-18.5	-19.8	-17.6	-8.1	-23.7

A-13

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 2 Meters (degrees Celsius)**  
**February 2016**

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	-14.1	-14.7	-15.4	-17.3	-17.0	-16.6	-15.8	-16.8	-15.9	-14.7	-13.1	-10.7	-6.6	-6.1	-6.4	-6.5	-7.2	-10.9	-14.2	-15.5	-15.7	-14.8	-14.4	-13.1	-6.1	-17.3
2	-14.5	-15.8	-15.8	-15.9	-15.8	-18.2	-18.5	-20.1	-20.5	-20.1	-17.4	-12.2	-8.9	-7.5	-7.2	-7.7	-8.1	-8.2	-9.8	-9.5	-9.8	-12.3	-15.0	-17.8	-13.6	-7.2	-20.5
3	-20.4	-21.9	-23.6	-24.5	-24.5	-24.2	-24.8	-24.9	-26.4	-24.2	-22.0	-13.7	-8.8	-6.7	-6.5	-6.4	-5.9	-5.8	-6.0	-8.2	-11.7	-14.5	-16.7	-17.7	-16.2	-5.8	-26.4
4	-18.3	-19.4	-20.4	-19.7	-16.6	-15.2	-13.9	-12.3	-8.2	-5.1	-3.8	-3.2	-2.4	-1.8	-1.9	-1.9	-1.9	-1.9	-2.3	-2.6	-2.9	-3.1	-4.0	-4.7	-7.8	-1.8	-20.4
5	-5.5	-9.6	-12.3	-14.5	-15.6	-16.3	-16.6	-12.2	-11.5	-9.4	-4.4	-1.8	-1.1	-0.6	-0.1	0.1	0.3	-0.4	-2.9	-4.9	-4.4	-5.2	-5.2	-7.3	-6.7	0.3	-16.6
6	-8.6	-5.4	-4.4	-2.1	-2.4	-5.4	-3.3	0.7	-0.9	-1.5	-1.5	-1.3	-1.6	-1.5	-1.5	-1.5	-1.9	-1.8	-2.1	-2.4	-2.4	-2.6	-3.0	-3.3	-2.6	0.7	-8.6
7	-3.5	-3.9	-4.5	-5.6	-7.3	-9.6	-10.7	-12.8	-13.8	-13.5	-7.6	-3.5	-2.5	-1.6	-1.2	-0.9	-1.0	-0.8	-0.5	-1.0	-2.0	-4.3	-7.0	-8.6	-5.3	-0.5	-13.8
8	-9.5	-11.6	-12.5	-13.0	-13.0	-13.3	-14.1	-14.1	-13.2	-12.0	-10.4	-6.9	0.6	3.9	4.7	4.7	4.3	3.1	0.1	-2.7	-4.2	-6.2	-7.0	-7.9	-6.3	4.7	-14.1
9	-9.3	-10.5	-11.5	-12.3	-12.6	-13.6	-13.5	-14.0	-13.4	-11.8	-9.0	-6.0	-2.5	3.0	7.2	7.4	5.7	1.7	-2.2	-2.8	-5.3	-7.0	-8.5	-9.6	-6.3	7.4	-14.0
10	-9.7	-10.6	-11.3	-12.0	-12.9	-13.0	-12.5	-13.7	-11.8	-9.5	-4.1	3.8	5.0	6.1	6.4	5.2	4.8	2.7	1.5	5.1	3.7	1.8	2.8	5.1	-2.8	6.4	-13.7
11	4.5	4.6	4.4	4.1	4.2	3.9	2.9	2.7	1.6	3.1	3.8	4.4	4.8	5.3	4.6	4.2	4.0	3.5	2.5	0.5	-1.0	-3.0	-3.9	-4.4	2.6	5.3	-4.4
12	-5.0	-4.3	-3.5	-3.3	-3.0	-2.6	-2.1	-1.7	-1.1	-0.6	0.3	1.0	1.7	2.2	2.7	3.5	3.8	3.0	2.1	1.1	0.3	-0.3	-1.1	-2.2	-0.4	3.8	-5.0
13	-3.1	-3.0	-3.9	-5.1	-6.4	-2.2	0.6	0.7	0.7	0.7	0.5	0.5	0.7	0.1	1.1	0.9	1.1	-0.1	-0.8	-2.1	-4.0	-3.6	-1.4	-0.9	-1.2	1.1	-6.4
14	-1.1	-1.8	-2.1	-1.9	-1.5	-0.8	-0.7	-0.3	-0.2	0.3	1.1	2.0	2.6	3.1	2.7	2.5	1.8	1.3	1.4	1.7	1.4	1.5	1.7	1.7	0.7	3.1	-2.1
15	1.6	1.8	1.8	2.6	2.2	1.6	1.4	1.7	1.9	2.3	2.8	2.8	3.2	3.8	3.9	3.2	0.9	0.7	0.8	0.5	0.3	0.3	-1.6	-1.7	1.6	3.9	-1.7
16	-1.7	-1.2	-1.1	-0.3	1.9	2.3	3.2	3.8	3.9	4.1	4.2	3.8	4.3	4.2	4.3	3.9	3.8	3.4	2.4	1.0	-0.2	-0.8	-0.3	-0.8	2.0	4.3	-1.7
17	-0.6	-1.3	-1.0	-0.6	-0.7	0.2	-0.2	-2.4	-0.7	0.6	2.3	Au	Au	Au	Au	Au	5.9	5.3	5.0	3.1	2.5	2.2	2.1	2.7	1.3	5.9	-2.4
18	1.9	0.4	2.3	2.2	4.0	4.9	4.3	2.8	3.5	4.2	5.0	5.9	5.9	2.6	2.1	2.2	1.5	1.1	0.8	0.1	-1.1	-0.3	0.0	0.5	2.4	5.9	-1.1
19	0.2	0.7	0.7	0.5	0.1	0.0	-0.2	-0.5	-0.3	0.2	0.6	1.1	1.5	2.6	3.6	4.0	4.2	3.7	2.4	1.6	1.1	2.5	1.5	-0.8	1.3	4.2	-0.8
20	-1.1	1.2	-1.4	-1.5	-1.7	-2.2	-2.2	-2.4	-2.7	-2.3	-1.8	-1.5	-1.3	-1.6	-2.0	-1.7	-1.8	-1.4	-1.7	-2.3	-2.7	-3.2	-3.5	-3.9	-1.9	1.2	-3.9
21	-5.0	-7.0	-8.6	-9.8	-11.6	-13.4	-14.1	-14.5	-14.1	-12.5	-9.7	-5.7	-1.6	-0.5	0.0	0.4	0.1	-0.5	-2.9	-4.7	-5.4	-4.8	-4.8	-2.8	-6.4	0.4	-14.5
22	-1.0	-0.8	-1.1	-1.4	-1.4	-1.5	-2.0	-2.7	-3.1	-2.7	-1.8	-1.2	-0.9	-1.0	-0.6	-1.2	-1.6	-2.4	-3.3	-4.4	-5.8	-9.0	-11.0	-12.0	-3.1	-0.6	-12.0
23	-13.3	-14.8	-15.5	-15.9	-17.0	-16.5	-16.7	-16.9	-16.9	-14.5	-11.3	-6.6	-2.0	-1.5	-0.4	0.0	0.0	-0.7	-2.3	-3.2	-6.5	-8.6	-10.9	-12.3	-9.3	0.0	-17.0
24	-13.9	-14.7	-16.4	-16.8	-17.2	-17.7	-18.0	-18.0	-17.1	-14.7	-11.3	-7.8	-2.5	-0.8	-0.3	0.3	0.7	-0.4	-3.1	-5.9	-6.3	-8.5	-9.8	-11.2	-9.6	0.7	-18.0
25	-11.1	-11.6	-13.0	-13.4	-14.3	-14.9	-15.3	-15.3	-13.5	-11.0	-7.7	-2.1	3.0	4.4	5.1	5.4	5.0	3.8	1.8	-1.5	-3.3	-5.0	-5.6	-7.6	-5.7	5.4	-15.3
26	-9.1	-10.1	-10.7	-11.5	-12.4	-11.8	-12.9	-13.2	-12.5	-9.7	-5.7	-0.4	4.8	7.2	8.0	8.9	8.3	5.5	2.9	0.9	-0.1	-1.6	-1.9	-1.1	-3.3	8.9	-13.2
27	-2.2	-2.3	-3.6	-3.7	-4.8	-5.4	-6.9	-7.6	-6.4	-3.4	-1.1	4.2	3.8	2.6	3.3	3.7	3.9	3.9	3.5	2.8	2.1	1.4	1.1	0.2	-0.5	4.2	-7.6
28	-2.0	-3.8	-4.8	-5.8	-6.1	-7.8	-8.6	-9.4	-8.6	-3.2	2.2	3.3	3.8	3.4	4.3	5.3	5.2	5.1	4.4	4.2	3.9	3.1	2.5	1.2	-0.3	5.3	-9.4
29	0.7	0.7	-0.1	-0.9	-1.5	-2.4	-2.8	-2.7	-2.5	-2.2	-1.8	-1.0	-0.3	-0.2	-0.1	-0.2	-0.2	-0.5	-1.1	-1.7	-2.9	-4.2	-7.0	-7.4	-1.8	0.7	-7.4
Avg	-6.0	-6.6	-7.2	-7.5	-7.8	-8.0	-8.1	-8.1	-7.7	-6.4	-4.3	-2.0	-0.0	0.8	1.3	1.4	1.3	0.5	-0.7	-1.8	-2.8	-3.8	-4.6	-5.1	-3.9	2.1	-10.7
Max	4.5	4.6	4.4	4.1	4.2	4.9	4.3	3.8	3.9	4.2	5.0	5.9	5.9	7.2	8.0	8.9	8.3	5.5	5.0	5.1	3.9	3.1	2.8	5.1	2.6	8.9	-0.8
Min	-20.4	-21.9	-23.6	-24.5	-24.5	-24.2	-24.8	-24.9	-26.4	-24.2	-22.0	-13.7	-10.7	-7.5	-7.2	-7.7	-8.1	-8.2	-10.9	-14.2	-15.5	-15.7	-16.7	-17.8	-16.2	-7.2	-26.4

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature 2 Meters (degrees Celsius)**  
**March 2016**

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	-8.8	-10.0	-11.5	-12.5	-13.4	-13.7	-13.9	-13.9	-13.2	-10.8	-6.9	-1.6	1.1	1.0	0.6	1.4	1.9	2.4	1.5	1.2	0.9	1.3	2.5	3.9	-4.6	3.9	-13.9
2	3.4	0.4	-0.1	0.6	-0.4	-1.1	-2.3	-2.7	-2.3	-1.6	-0.7	0.2	0.4	0.8	1.3	1.8	2.0	1.8	0.3	-1.3	-2.3	-4.9	-6.7	-7.1	-0.9	3.4	-7.1
3	-7.3	-8.6	-7.4	-6.5	-6.0	-5.5	-5.3	-5.2	-4.6	-3.4	-1.4	1.4	6.2	7.2	7.6	7.4	5.8	3.8	3.5	2.5	2.0	1.2	0.3	-0.9	-0.5	7.6	-8.6
4	-2.4	-3.1	-4.2	-6.0	-7.3	-7.3	-8.4	-9.7	-8.4	-5.0	-1.3	3.4	4.6	5.2	7.1	5.9	5.6	4.2	2.3	-0.2	-2.5	-3.6	-5.5	-5.6	-1.8	7.1	-9.7
5	-5.6	-6.2	-4.6	-4.7	-5.1	-5.1	-4.2	-4.8	-3.7	1.9	8.2	8.9	8.3	9.2	9.5	9.4	9.2	9.5	5.1	4.3	3.5	2.4	4.2	2.9	2.2	9.5	-6.2
6	1.0	5.0	3.7	0.4	-0.4	-1.8	0.5	-0.3	0.0	4.3	5.8	6.1	7.5	8.2	7.2	5.7	4.4	2.9	1.3	0.8	0.6	0.1	-0.5	-1.0	2.6	8.2	-1.8
7	-1.7	-1.7	-2.8	-3.4	-3.4	-4.2	-4.8	-6.2	-5.5	-2.7	-0.7	0.9	2.0	3.2	4.0	4.3	4.0	3.0	1.3	-0.6	-1.9	-2.9	-4.5	-6.1	-1.3	4.3	-6.2
8	-5.8	-6.1	-7.4	-9.2	-9.3	-8.1	-7.7	-7.5	-5.5	-3.1	-0.9	-1.1	-0.6	-0.3	-0.8	-1.3	-0.4	0.0	-1.5	-3.4	-5.2	-6.2	-7.0	-8.3	-4.4	0.0	-9.3
9	-8.5	-9.6	-10.1	-10.8	-11.0	-11.7	-11.6	-11.2	-10.1	-7.2	-3.0	-0.2	1.0	1.2	1.7	2.1	2.3	2.3	-0.2	-2.2	-3.9	-5.7	-5.4	-1.6	-4.7	2.3	-11.7
10	-1.4	0.3	1.4	2.1	2.2	2.7	3.6	4.1	5.2	6.1	7.3	7.9	8.6	9.6	9.4	8.8	8.6	8.1	7.4	7.0	6.4	6.6	4.8	1.8	5.4	9.6	-1.4
11	0.9	0.7	0.7	0.6	0.5	-0.1	-0.5	-0.9	-0.9	0.7	2.2	4.2	6.0	5.5	5.4	5.2	5.0	4.7	4.1	3.8	3.8	3.7	4.0	3.0	2.6	6.0	-0.9
12	3.1	2.1	-1.2	-2.5	-3.2	-3.6	-4.1	-3.7	-0.6	2.5	7.3	8.5	7.1	6.4	6.1	6.3	5.9	2.5	1.6	1.1	1.2	0.7	-0.2	0.8	1.8	8.5	-4.1
13	2.1	2.6	1.0	-0.8	-1.8	-2.5	-4.8	-6.4	-5.3	-2.5	0.2	2.1	3.2	4.0	5.3	5.1	5.0	6.0	5.1	4.6	4.4	4.0	2.2	1.6	1.4	6.0	-6.4
14	1.3	1.4	1.6	1.7	0.1	-1.3	-1.8	Pw	-2.0	-2.1	-1.3	-0.5	0.8	0.4	-0.6	-1.2	-0.5	-0.4	-0.7	-2.5	-2.4	-3.4	-4.0	-4.0	-0.9	1.7	-4.0
15	-3.8	-3.3	-3.3	-3.3	-3.5	-3.6	-3.5	-3.5	-3.6	-3.3	-2.9	-2.6	-2.3	-1.9	-1.2	-1.8	-0.7	-1.1	-1.1	-2.3	-3.3	-4.2	-5.4	-5.9	-3.0	-0.7	-5.9
16	-7.0	-10.3	-11.3	-11.4	-11.1	-10.9	-11.3	-11.9	-10.8	-5.5	-3.5	-2.6	-2.2	-1.6	-1.2	-0.8	-2.6	-3.3	-2.2	-2.2	-3.7	-5.1	-5.4	-5.4	-6.0	-0.8	-11.9
17	-7.1	-9.3	-10.3	-11.2	-12.0	-12.3	-12.7	-12.3	-12.0	-9.9	-5.3	-5.0	-4.5	-4.2	-4.3	-4.1	-4.1	-4.5	-5.4	-6.5	-8.1	-10.6	-12.0	-13.0	-8.4	-4.1	-13.0
18	-11.5	-9.6	-7.8	-8.0	-8.5	-8.8	-8.7	-8.9	-8.8	-8.7	-8.1	-7.5	-6.3	-5.6	-4.7	-4.2	-3.6	-3.4	-3.9	-6.0	-7.5	-9.1	-10.8	-12.3	-7.6	-3.4	-12.3
19	-13.4	-14.0	-14.2	-15.0	-15.8	-16.1	-17.4	-17.9	-16.0	-12.6	-7.2	-1.6	0.1	1.3	2.4	4.1	5.3	5.8	5.4	1.1	-1.6	-4.4	-5.3	-6.3	-6.4	5.8	-17.9
20	-6.2	-6.6	-6.4	-8.2	-9.0	-9.4	-9.7	-10.0	-8.2	-4.6	-0.4	5.4	8.6	10.1	11.3	11.9	12.3	11.7	9.7	7.1	4.3	2.9	1.2	0.4	0.8	12.3	-10.0
21	-0.2	-0.2	-0.3	-1.7	-1.7	-1.5	-2.5	-3.0	1.5	5.3	5.9	6.5	6.7	7.4	5.9	6.2	7.5	7.6	6.1	3.9	1.4	0.1	-0.8	-2.2	2.4	7.6	-3.0
22	-3.0	-4.3	-3.8	-4.3	-5.1	-4.0	-3.5	-2.6	-1.4	-0.9	-0.3	0.1	-0.7	-2.2	-3.2	-2.6	-2.2	-2.6	-3.1	-3.3	-3.5	-3.9	-4.5	-5.1	-2.9	0.1	-5.1
23	-5.2	-5.4	-7.1	-8.4	-8.3	-7.5	-7.2	-7.6	-9.2	-7.1	-2.7	-1.0	-0.4	-0.1	0.7	0.9	2.5	2.4	2.2	2.0	0.4	-2.0	-2.6	-3.8	-3.1	2.5	-9.2
24	-4.1	-2.2	-2.4	-1.7	-3.0	-4.4	-3.7	-3.0	-1.6	-0.4	0.6	0.6	1.9	1.5	2.6	1.7	1.6	1.6	1.2	-0.3	-0.5	-1.1	-1.5	-1.9	-0.8	2.6	-4.4
25	-2.0	-2.4	-2.8	-3.3	-3.5	-3.7	-3.9	-4.1	-3.4	-2.7	-2.0	-1.4	-1.1	-0.6	-0.2	0.0	0.4	-0.2	-0.8	-1.2	-1.4	-1.8	-2.3	-3.5	-2.0	0.4	-4.1
26	-5.1	-7.0	-8.6	-9.8	-10.0	-10.7	-10.3	-8.9	-7.8	-5.1	-1.8	-0.3	0.2	1.4	1.9	2.7	3.2	3.7	3.2	1.3	-2.2	-3.8	-4.4	-5.8	-3.5	3.7	-10.7
27	-7.1	-7.9	-8.8	-9.1	-10.0	-10.0	-10.8	-11.5	-8.6	-3.7	2.1	4.2	4.8	5.4	6.4	7.3	7.7	6.8	5.0	2.5	0.4	0.2	0.1	-0.1	-1.4	7.7	-11.5
28	-0.6	-0.9	-1.5	-2.1	-2.6	-3.1	-3.4	-3.9	-3.0	-2.2	-1.2	-0.2	0.8	1.7	2.3	2.8	3.1	2.3	1.0	-0.8	-2.1	-2.9	-1.7	-0.9	-0.8	3.1	-3.9
29	-0.8	-1.0	-0.9	-1.1	-1.2	-1.2	-1.3	-1.0	-0.9	-0.7	-0.4	0.3	0.8	0.8	1.0	0.9	1.0	1.7	1.6	1.2	1.7	0.6	-0.5	-0.3	0.0	1.7	-1.3
30	0.0	-0.2	-0.9	-1.3	-2.8	-4.1	-5.4	-4.1	-1.3	0.9	2.4	4.2	4.4	4.6	4.3	4.6	4.6	3.3	1.9	2.0	1.7	1.5	1.0	0.5	0.9	4.6	-5.4
31	0.0	-0.4	-0.8	-1.2	-1.1	-1.7	-2.4	-2.0	-1.2	-0.5	0.3	0.0	0.5	0.9	0.9	0.7	1.2	0.4	-0.1	-0.5	-0.6	-0.7	-1.0	-1.4	-0.4	1.2	-2.4
Avg	-3.4	-3.8	-4.3	-4.9	-5.4	-5.7	-5.9	-6.2	-4.9	-2.7	-0.3	1.3	2.2	2.6	2.9	2.9	3.1	2.7	1.7	0.4	-0.6	-1.6	-2.3	-2.8	-1.5	3.9	-7.2
Max	3.4	5.0	3.7	2.1	2.2	2.7	3.6	4.1	5.2	6.1	8.2	8.9	8.6	10.1	11.3	11.9	12.3	11.7	9.7	7.1	6.4	6.6	4.8	3.9	5.4	12.3	-0.9
Min	-13.4	-14.0	-14.2	-15.0	-15.8	-16.1	-17.4	-17.9	-16.0	-12.6	-8.1	-7.5	-6.3	-5.6	-4.7	-4.2	-4.1	-4.5	-5.4	-6.5	-8.1	-10.6	-12.0	-13.0	-8.4	-4.1	-17.9

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature Delta T (degrees Celsius)**  
**January 2016**

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	1.69	1.54	1.50	1.64	2.16	2.28	2.98	2.57	2.04	1.85	1.50	0.65	0.67	1.50	1.59	0.31	1.04	2.51	1.40	2.70	2.55	2.42	1.86	1.79	1.78	2.98	0.31
2	2.11	2.25	1.73	2.11	2.33	2.90	2.53	2.38	2.01	1.68	1.58	1.77	0.89	0.60	0.72	0.89	1.44	2.98	2.19	2.51	2.48	3.14	1.89	2.35	1.98	3.14	0.60
3	2.95	2.43	2.54	1.91	2.61	2.48	2.88	2.61	2.43	1.39	1.32	1.20	1.53	2.17	3.32	2.16	1.70	0.64	0.97	1.67	2.05	2.45	2.81	2.28	2.10	3.32	0.64
4	2.15	2.12	1.42	1.27	2.39	2.53	2.53	1.83	2.23	1.90	2.04	0.73	1.07	1.22	1.50	1.42	1.28	1.23	1.44	2.00	1.05	1.17	0.96	1.07	1.61	2.53	0.73
5	0.66	1.06	1.06	1.11	0.66	0.76	0.92	0.78	0.28	0.09	0.14	0.13	0.03	0.06	0.34	0.32	1.05	1.38	1.33	1.97	2.42	2.48	2.07	2.04	0.96	2.48	0.03
6	1.83	2.38	2.23	2.32	1.78	1.42	0.87	0.82	0.86	0.86	0.28	0.21	-0.02	0.08	0.98	1.14	0.99	0.81	0.60	0.73	0.55	0.74	0.59	0.70	0.99	2.38	-0.02
7	0.98	0.69	0.37	0.40	0.22	0.11	0.21	0.08	-0.06	-0.07	-0.20	-0.18	-0.22	-0.21	-0.18	-0.18	-0.12	-0.11	-0.10	-0.12	-0.09	-0.12	-0.09	-0.04	0.04	0.98	-0.22
8	0.17	0.30	0.91	2.12	1.32	0.99	0.10	-0.04	0.00	-0.15	-0.17	-0.24	0.11	0.23	-0.01	0.12	0.08	0.52	0.54	0.28	0.18	0.27	0.26	0.20	0.34	2.12	-0.24
9	0.28	0.22	0.45	0.64	0.30	0.23	0.23	0.29	0.22	0.15	0.50	0.34	0.10	0.35	0.45	0.41	0.56	0.48	0.40	0.49	1.43	2.63	2.13	1.90	0.63	2.63	0.10
10	2.00	1.69	2.17	2.16	2.16	2.01	1.92	2.18	2.11	1.69	1.80	1.55	0.28	0.65	0.44	0.64	1.25	0.61	0.87	1.49	0.73	0.68	1.02	1.16	1.39	2.18	0.28
11	1.63	1.77	1.21	1.57	1.79	1.83	1.45	2.25	1.85	1.40	1.04	1.65	1.08	0.87	1.30	1.09	1.16	1.54	1.93	2.72	1.17	0.91	0.64	0.73	1.44	2.72	0.64
12	1.26	0.68	1.04	0.50	0.47	0.29	0.18	0.23	0.16	0.19	0.25	0.28	0.19	0.23	0.27	0.35	0.50	1.07	1.61	1.14	1.11	1.02	0.64	1.16	0.62	1.61	0.16
13	0.45	0.35	0.55	1.33	2.27	1.54	0.99	1.04	1.26	1.33	0.52	0.65	0.36	0.18	0.26	0.57	0.51	0.51	0.54	0.28	0.15	0.12	0.11	0.11	0.67	2.27	0.11
14	0.05	-0.04	-0.06	-0.03	0.01	0.01	0.01	0.02	-0.03	-0.04	-0.01	-0.03	-0.02	-0.02	-0.04	-0.05	-0.02	0.13	0.33	0.00	0.02	0.07	0.17	0.06	0.02	0.33	-0.06
15	0.06	0.01	0.53	1.54	2.18	1.44	0.81	0.27	0.41	0.34	0.59	0.85	0.40	-0.02	0.02	0.14	0.33	0.27	0.19	0.24	0.29	0.28	0.57	1.37	0.55	2.18	-0.02
16	0.68	0.29	0.29	0.20	0.43	0.46	0.47	0.97	1.10	1.05	0.48	0.87	0.67	0.09	0.15	0.20	0.07	0.01	0.05	0.08	0.10	0.04	0.07	0.00	0.37	1.10	0.00
17	0.05	0.02	-0.01	0.17	0.26	0.33	0.15	0.17	0.33	0.20	0.38	0.12	0.11	0.37	0.43	0.99	1.69	1.18	0.96	0.67	0.40	0.13	0.00	-0.03	0.38	1.69	-0.03
18	0.03	0.20	0.24	0.38	0.27	0.36	0.26	0.30	0.17	0.04	0.05	0.07	0.19	0.21	0.24	0.29	0.23	0.57	0.75	1.39	2.21	2.04	2.35	2.06	0.62	2.35	0.03
19	2.07	1.88	2.32	2.27	2.36	2.18	2.37	2.72	2.55	2.01	1.55	1.61	0.96	1.14	1.25	0.95	1.77	1.67	0.95	0.93	1.36	0.97	0.72	0.32	1.62	2.72	0.32
20	0.15	0.02	-0.03	0.02	0.01	0.06	0.03	0.04	0.00	-0.01	0.00	-0.02	0.04	0.14	0.18	0.14	0.13	0.17	0.24	0.27	0.11	0.16	0.36	0.58	0.12	0.58	-0.03
21	0.60	0.46	1.67	2.13	1.06	0.92	0.97	1.14	1.29	1.21	1.06	1.74	0.29	-0.09	-0.07	0.02	0.33	0.14	0.07	0.05	0.06	0.68	0.52	1.41	0.74	2.13	-0.09
22	1.50	1.30	0.82	0.94	1.16	1.18	1.76	1.28	1.09	1.84	2.14	1.76	1.15	0.52	0.58	0.26	0.84	1.51	0.81	0.63	0.91	1.47	2.31	2.46	1.26	2.46	0.26
23	2.19	2.79	2.04	1.67	1.54	1.29	1.71	1.75	1.80	1.26	1.40	1.56	2.44	2.60	2.70	1.16	1.02	1.05	0.48	0.04	-0.06	0.01	0.03	0.25	1.36	2.79	-0.06
24	0.05	0.15	0.40	0.39	1.14	2.58	1.97	1.30	1.85	1.11	0.81	0.42	0.61	0.22	0.04	0.00	0.02	0.01	0.00	0.06	0.01	0.02	0.10	0.07	0.56	2.58	0.00
25	0.11	0.03	0.14	0.10	0.14	0.65	0.33	0.70	1.22	2.99	1.86	0.33	0.26	0.22	0.10	0.50	1.13	1.93	2.20	1.78	1.84	2.03	2.19	1.97	1.03	2.99	0.03
26	2.21	2.13	2.15	2.45	2.83	1.80	1.82	1.64	2.51	1.83	1.79	0.44	0.89	0.32	0.32	0.60	0.81	1.56	1.01	0.96	1.16	1.14	0.98	0.65	1.42	2.83	0.32
27	1.15	1.58	1.20	1.31	1.43	1.33	1.77	3.09	3.35	2.18	0.93	1.26	0.33	0.30	0.30	0.47	0.79	1.55	1.77	1.26	1.18	0.90	0.61	0.79	1.28	3.35	0.30
28	1.02	1.21	1.19	1.57	1.45	1.88	2.18	1.45	1.57	2.06	1.73	2.56	1.10	0.91	0.73	1.12	1.29	1.73	1.02	1.23	0.66	0.39	0.33	0.15	1.27	2.56	0.15
29	0.14	0.27	0.50	0.43	0.30	0.27	0.48	0.77	0.35	0.28	0.36	0.31	0.23	0.41	0.15	0.05	0.02	0.00	0.05	0.25	0.12	0.03	0.26	0.43	0.27	0.77	0.00
30	0.37	0.48	0.51	0.58	0.45	0.24	0.15	0.22	0.41	0.36	0.34	0.23	0.23	0.28	0.40	0.36	0.45	0.42	0.98	1.59	1.23	0.77	0.80	0.98	0.53	1.59	0.15
31	1.13	0.68	0.67	2.11	1.86	1.16	1.09	1.10	0.84	0.89	0.96	0.00	0.11	0.10	0.15	0.53	0.78	0.64	1.32	1.90	1.12	0.98	0.95	0.50	0.90	2.11	0.00
Avg	1.02	1.00	1.02	1.20	1.27	1.21	1.17	1.16	1.17	1.03	0.87	0.74	0.52	0.50	0.60	0.55	0.75	0.93	0.87	1.01	0.92	0.97	0.91	0.95	0.93	2.21	0.14
Max	2.95	2.79	2.54	2.45	2.83	2.90	2.98	3.09	3.35	2.99	2.14	2.56	2.44	2.60	3.32	2.16	1.77	2.98	2.20	2.72	2.55	3.14	2.81	2.46	2.10	3.35	0.73
Min	0.03	-0.04	-0.06	-0.03	0.01	0.01	0.01	-0.04	-0.06	-0.15	-0.20	-0.24	-0.22	-0.21	-0.18	-0.18	-0.12	-0.11	-0.10	-0.12	-0.09	-0.12	-0.09	-0.04	0.02	0.33	-0.24

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature Delta T (degrees Celsius)**  
**February 2016**

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	0.17	0.27	0.68	0.74	1.48	1.15	1.13	0.47	1.16	0.97	0.68	0.58	1.59	0.22	-0.15	-0.09	-0.15	0.08	1.96	1.99	1.80	1.31	0.82	0.59	0.81	1.99	-0.15
2	0.85	1.18	0.90	1.29	0.70	2.16	1.85	2.41	1.83	1.85	1.82	0.94	0.08	0.13	0.15	0.27	0.77	0.51	0.68	0.06	0.34	0.95	2.26	2.41	1.10	2.41	0.06
3	2.29	1.84	2.27	2.47	2.37	1.89	2.34	2.08	2.59	2.11	2.25	1.24	0.23	0.24	0.20	0.06	0.25	0.31	0.28	1.33	1.60	1.15	1.61	1.50	1.44	2.59	0.06
4	1.30	1.82	1.76	1.53	0.25	0.29	0.19	0.42	0.33	0.62	0.20	0.28	0.24	0.23	0.32	0.31	0.19	0.15	0.22	0.23	0.15	0.23	0.65	0.69	0.53	1.82	0.15
5	0.68	1.81	1.54	1.40	1.43	1.52	2.53	3.31	2.56	2.47	0.70	0.20	0.29	0.31	0.30	0.30	0.47	0.58	1.45	2.00	1.78	2.27	1.25	1.47	1.36	3.31	0.20
6	1.48	1.74	1.19	0.52	0.94	1.94	0.82	0.37	0.18	0.29	0.76	0.73	0.73	0.46	0.41	0.32	0.42	0.31	0.49	0.45	0.33	0.26	0.24	0.24	0.65	1.94	0.18
7	0.19	0.17	0.30	0.86	1.03	1.93	0.88	0.80	1.44	0.50	0.90	0.38	0.33	0.34	0.45	0.45	0.61	0.49	0.41	0.73	0.62	1.31	1.83	1.98	0.79	1.98	0.17
8	1.17	1.45	1.20	1.06	1.22	1.40	1.96	1.28	1.71	1.58	1.62	1.71	0.80	0.35	0.50	0.57	0.73	0.89	2.00	0.76	0.81	1.25	1.29	1.53	1.20	2.00	0.35
9	1.62	2.10	1.89	2.00	1.97	1.92	1.51	2.23	2.42	2.40	1.67	1.52	1.81	2.76	0.18	0.58	0.95	1.25	1.43	0.94	1.39	1.98	1.94	2.52	1.71	2.76	0.18
10	2.14	2.39	2.46	1.96	2.54	2.02	1.98	2.39	2.28	1.87	4.06	0.56	1.26	0.95	1.25	1.19	1.10	1.06	1.13	1.04	1.65	1.55	1.64	0.79	1.72	4.06	0.56
11	0.83	0.76	0.86	0.61	0.46	0.50	0.62	0.68	0.85	0.60	0.53	0.74	0.71	0.66	0.79	0.89	1.02	0.77	0.88	0.40	0.68	0.78	0.72	0.70	0.71	1.02	0.40
12	1.00	0.75	0.39	0.11	-0.01	-0.03	0.06	0.12	0.06	-0.06	-0.19	0.13	0.28	0.51	0.73	0.79	0.92	0.81	0.67	0.45	0.28	0.34	0.55	0.73	0.39	1.00	-0.19
13	0.88	1.02	1.05	1.67	1.60	0.81	0.32	0.50	0.44	0.18	0.22	0.15	0.18	0.13	0.17	0.22	0.23	0.40	0.51	0.90	1.51	0.95	0.60	0.43	0.63	1.67	0.13
14	0.35	0.14	0.21	0.19	0.18	0.13	0.22	0.20	0.20	0.15	0.16	0.18	0.20	0.25	0.28	0.28	0.31	0.39	0.37	0.22	0.25	0.18	0.13	0.16	0.22	0.39	0.13
15	0.19	0.15	0.18	0.22	0.11	0.05	0.03	0.06	0.19	0.13	0.26	0.33	0.41	0.32	0.39	0.26	0.00	0.02	0.13	0.17	0.47	0.57	0.41	0.14	0.22	0.57	0.00
16	0.04	0.00	0.16	0.67	0.30	0.35	0.43	0.46	0.32	0.38	0.33	0.52	0.48	0.55	0.46	0.58	0.43	0.54	0.73	0.79	0.83	0.68	0.73	0.15	0.45	0.83	0.00
17	0.06	0.35	0.15	0.17	0.33	0.38	0.33	1.07	0.20	0.10	0.08	Au	Au	Au	Au	Au	0.52	0.49	0.28	0.64	0.63	0.64	1.19	1.38	0.47	1.38	0.06
18	1.17	1.70	1.13	1.74	1.27	0.85	0.63	0.85	1.19	0.92	0.53	0.94	0.93	0.41	0.18	0.21	0.15	0.16	0.31	0.50	1.09	0.87	0.59	0.36	0.78	1.74	0.15
19	0.19	0.21	0.21	0.22	0.18	0.15	0.18	0.19	0.31	0.33	0.33	0.36	0.34	0.16	0.36	0.42	0.45	0.53	1.04	0.69	0.84	0.69	0.82	0.92	0.42	1.04	0.15
20	0.59	0.49	0.07	0.13	0.21	0.33	0.23	0.19	0.20	0.19	0.11	0.08	0.13	0.07	0.05	0.02	0.04	0.16	0.20	0.26	0.15	0.21	0.29	0.29	0.20	0.59	0.02
21	0.70	0.90	0.32	0.18	0.58	1.34	1.21	1.44	0.96	0.65	0.63	0.42	0.00	0.04	0.15	0.35	0.56	0.74	1.09	0.97	0.81	0.44	0.44	0.66	0.65	1.44	0.00
22	0.30	0.21	0.29	0.37	0.34	0.31	0.33	0.35	0.36	0.28	0.16	0.03	0.11	0.07	0.00	0.02	0.14	0.44	0.90	0.91	0.92	1.53	0.86	0.71	0.41	1.53	0.00
23	0.84	1.04	0.91	1.16	1.13	0.89	0.99	0.86	1.09	0.67	0.70	0.83	-0.73	-0.20	0.04	0.27	0.49	0.67	0.94	0.63	1.55	0.99	0.43	0.47	0.69	1.55	-0.73
24	0.82	0.78	1.13	0.87	0.69	0.70	1.06	1.06	1.06	0.95	0.14	0.92	0.23	0.05	0.22	0.27	0.38	1.06	0.87	1.61	1.05	1.37	1.41	2.02	0.86	2.02	0.05
25	1.39	1.06	1.59	1.35	1.76	1.25	1.46	1.41	1.15	0.91	0.57	1.53	0.15	0.36	0.59	0.72	0.86	1.28	1.50	0.95	0.78	0.78	0.84	1.20	1.06	1.76	0.15
26	1.38	1.73	1.36	1.41	1.90	1.13	1.75	2.13	1.49	0.83	1.19	1.38	0.59	0.54	0.51	0.16	0.57	1.19	1.00	0.59	0.51	1.14	1.50	0.94	1.12	2.13	0.16
27	1.12	0.87	1.02	1.25	1.51	1.35	1.65	1.25	0.76	0.17	0.57	0.81	0.37	0.21	0.22	0.33	0.37	0.41	0.38	0.31	0.25	0.36	0.31	0.44	0.68	1.65	0.17
28	1.09	1.13	1.40	1.46	0.66	0.77	0.84	1.00	0.99	1.78	0.48	0.28	0.44	0.52	0.49	0.76	0.97	0.90	1.13	1.02	0.89	0.71	0.93	-0.03	0.86	1.78	-0.03
29	0.05	0.20	0.28	0.34	0.33	0.33	0.24	0.17	0.14	0.08	0.08	0.06	0.09	0.11	0.10	0.17	0.20	0.23	0.27	0.35	0.72	0.90	1.14	1.68	0.34	1.68	0.05
Avg	0.86	0.97	0.93	0.96	0.95	0.96	0.96	1.03	0.98	0.82	0.74	0.64	0.44	0.38	0.33	0.38	0.48	0.58	0.80	0.75	0.85	0.91	0.95	0.93	0.78	1.75	0.08
Max	2.29	2.39	2.46	2.47	2.54	2.16	2.53	3.31	2.59	2.47	4.06	1.71	1.81	2.76	1.25	1.19	1.10	1.28	2.00	2.00	1.80	2.27	2.26	2.52	1.72	4.06	0.56
Min	0.04	0.00	0.07	0.11	-0.01	-0.03	0.03	0.06	0.06	-0.06	-0.19	0.03	-0.73	-0.20	-0.15	-0.09	-0.15	0.02	0.13	0.06	0.15	0.18	0.13	-0.03	0.20	0.39	-0.73

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Temperature Delta T (degrees Celsius)**  
**March 2016**

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	0.94	0.59	0.59	0.66	0.85	0.66	0.92	1.05	0.72	0.02	-0.27	-0.04	0.09	0.19	-0.05	-0.05	0.01	0.44	0.42	0.27	0.91	0.90	0.55	0.85	0.47	1.05	-0.27
2	0.93	0.83	0.70	0.15	0.18	0.16	0.29	0.32	0.12	0.08	0.12	0.07	0.13	0.19	0.19	0.21	0.25	0.35	0.80	0.87	1.04	1.81	1.44	0.87	0.50	1.81	0.07
3	0.62	0.84	0.66	0.49	0.73	0.71	0.71	0.43	0.38	0.56	0.40	0.29	0.70	0.98	1.04	1.07	0.78	0.49	0.52	0.56	0.35	0.36	0.53	0.81	0.63	1.07	0.29
4	1.15	0.78	0.46	0.71	0.86	0.53	0.48	0.79	0.26	-0.04	0.21	-0.45	0.08	0.73	-0.15	0.97	1.24	1.27	1.12	1.08	0.85	0.81	1.72	1.64	0.71	1.72	-0.45
5	1.56	1.92	1.33	1.42	1.70	1.60	1.38	1.53	0.90	1.27	0.84	1.55	2.02	1.82	1.56	1.64	1.56	0.89	1.42	1.29	2.14	1.66	0.82	1.47	1.47	2.14	0.82
6	0.98	0.66	1.63	1.13	0.79	1.33	0.94	2.23	1.50	1.87	1.41	1.91	1.71	1.38	1.20	0.83	0.65	0.45	0.10	-0.02	-0.03	-0.04	0.12	0.38	0.96	2.23	-0.04
7	0.47	0.33	0.50	0.80	0.46	0.50	0.86	0.82	0.35	0.06	-0.02	-0.17	-0.19	-0.24	-0.06	0.30	0.54	0.71	0.93	0.24	0.10	0.26	0.76	0.77	0.38	0.93	-0.24
8	0.44	0.33	0.62	1.26	0.90	0.51	0.49	0.45	-0.15	-0.27	-0.19	-0.28	-0.21	-0.20	-0.15	-0.16	-0.28	0.13	0.97	0.94	0.83	0.51	0.17	0.38	0.29	1.26	-0.28
9	0.11	0.38	0.44	0.53	0.52	0.87	0.86	0.56	0.20	-0.14	-0.11	-0.18	-0.19	-0.01	-0.01	0.03	0.00	0.25	1.14	0.62	1.05	1.59	1.29	0.91	0.45	1.59	-0.19
10	1.34	0.94	0.53	0.43	0.37	0.52	0.36	0.69	0.44	0.63	0.82	0.88	0.99	0.68	0.96	1.15	1.12	1.04	0.98	0.85	0.97	0.86	0.55	0.17	0.76	1.34	0.17
11	0.02	0.00	0.16	0.68	0.08	0.14	0.08	0.12	0.01	-0.11	-0.10	0.00	0.24	0.24	0.11	0.02	0.03	0.17	0.45	0.55	0.61	0.57	0.37	0.76	0.22	0.76	-0.11
12	0.63	1.05	1.49	1.03	1.30	1.44	1.31	0.95	0.42	-0.09	0.06	0.52	0.66	0.50	0.57	-0.05	0.37	0.11	0.18	0.09	0.23	0.77	1.12	0.98	0.65	1.49	-0.09
13	0.91	0.42	0.13	-0.07	-0.07	0.21	1.33	0.98	0.44	-0.05	-0.13	-0.20	-0.33	-0.35	-0.02	0.24	0.49	0.46	0.80	0.62	0.52	0.44	0.26	0.14	0.30	1.33	-0.35
14	0.10	0.10	0.10	0.13	0.01	0.09	0.27	Pw	0.51	0.44	0.09	-0.01	0.02	-0.02	-0.06	-0.09	-0.08	0.13	0.17	0.36	0.22	0.35	0.58	0.44	0.17	0.58	-0.09
15	0.27	0.13	0.06	0.04	0.04	0.06	0.06	0.09	0.09	0.02	-0.05	-0.09	-0.13	-0.18	-0.19	-0.12	-0.09	0.05	0.07	0.29	0.40	0.49	0.72	0.74	0.12	0.74	-0.19
16	0.79	2.39	2.16	1.84	1.04	1.57	1.70	1.57	0.85	0.21	-0.12	-0.27	-0.16	-0.12	-0.05	0.04	-0.01	-0.04	0.05	0.19	0.52	0.70	0.42	0.09	0.64	2.39	-0.27
17	0.33	0.38	0.14	0.04	0.02	0.03	0.02	-0.04	-0.07	0.06	-0.04	-0.21	-0.35	-0.33	-0.35	-0.16	-0.13	-0.11	0.09	0.36	0.62	0.74	0.68	0.69	0.10	0.74	-0.35
18	0.05	0.05	0.02	-0.04	0.05	0.07	-0.01	0.07	-0.06	-0.20	-0.23	-0.31	-0.57	-0.49	-0.49	-0.40	-0.39	-0.21	0.20	1.12	0.87	0.13	0.13	0.08	-0.02	1.12	-0.57
19	0.00	0.03	0.08	0.17	0.22	0.32	0.84	1.03	0.37	-0.10	0.08	-0.21	-0.17	-0.27	-0.28	-0.35	-0.36	-0.17	0.30	1.21	0.23	1.23	1.07	0.99	0.26	1.23	-0.36
20	0.72	0.63	0.31	1.05	0.99	1.24	1.55	1.37	0.35	-0.04	-0.07	-0.09	-0.22	-0.28	-0.10	-0.05	0.05	0.54	1.61	1.20	0.39	0.67	0.90	0.75	0.56	1.61	-0.28
21	1.02	0.61	0.54	0.90	0.84	0.49	0.75	0.56	0.71	0.05	0.12	0.18	0.15	0.07	0.09	-0.13	-0.13	0.28	0.56	0.62	0.79	0.59	0.21	0.39	0.43	1.02	-0.13
22	0.57	0.74	0.24	0.64	0.68	0.36	0.16	0.23	-0.08	-0.10	-0.11	-0.12	-0.15	-0.25	-0.28	-0.22	-0.08	-0.12	-0.04	0.00	0.06	0.30	0.10	0.31	0.12	0.74	-0.28
23	0.01	0.15	1.05	1.20	0.43	0.21	0.18	0.58	1.11	0.60	-0.15	-0.31	-0.25	-0.14	-0.13	-0.17	-0.01	0.12	0.32	0.40	0.85	1.05	0.96	1.88	0.41	1.88	-0.31
24	1.47	0.56	0.62	0.51	0.78	0.58	0.04	0.08	0.12	-0.05	-0.06	-0.24	-0.24	-0.23	-0.23	-0.06	0.01	0.08	0.12	0.21	0.12	0.06	0.04	0.05	0.18	1.47	-0.24
25	0.03	0.09	0.04	0.05	0.05	0.02	0.04	0.03	-0.11	-0.23	-0.38	-0.37	-0.35	-0.31	-0.34	-0.24	-0.20	-0.12	-0.05	0.04	0.08	0.08	0.16	0.59	-0.06	0.59	-0.38
26	0.78	0.62	0.25	0.42	0.10	0.19	-0.11	-0.17	-0.13	-0.17	-0.28	-0.48	-0.48	-0.57	-0.37	-0.30	-0.13	-0.10	0.08	0.83	0.66	0.29	0.18	0.17	0.05	0.83	-0.57
27	0.17	0.13	0.18	0.16	0.72	0.43	0.64	0.81	-0.05	-0.23	-0.35	-0.37	-0.38	-0.39	-0.37	-0.42	-0.26	0.22	0.22	0.19	0.00	-0.02	0.04	-0.02	0.04	0.81	-0.42
28	-0.03	0.00	-0.01	-0.03	0.06	0.32	0.05	0.22	0.05	-0.08	-0.18	-0.26	-0.32	-0.42	-0.37	-0.33	-0.31	0.08	0.52	0.45	0.32	0.41	0.25	0.18	0.02	0.52	-0.42
29	0.10	0.18	0.05	-0.01	-0.02	-0.04	-0.07	-0.14	-0.15	-0.29	-0.35	-0.42	-0.49	-0.64	-0.36	-0.18	-0.10	-0.03	0.02	0.20	0.15	0.36	0.68	0.63	-0.04	0.68	-0.64
30	0.44	0.38	0.38	0.36	0.59	0.52	0.48	-0.07	-0.18	-0.28	-0.42	-0.49	-0.27	-0.15	-0.05	-0.05	0.14	0.17	0.12	0.16	0.17	0.08	0.05	0.06	0.09	0.59	-0.49
31	0.02	0.01	0.01	0.06	0.02	-0.02	0.07	-0.12	-0.24	-0.17	-0.07	-0.20	-0.39	-0.45	-0.28	-0.24	-0.26	-0.10	0.01	0.09	0.12	0.22	0.23	0.05	-0.07	0.23	-0.45
Avg	0.55	0.52	0.50	0.54	0.49	0.50	0.54	0.57	0.28	0.10	0.02	-0.01	0.03	0.02	0.03	0.09	0.14	0.24	0.46	0.51	0.52	0.59	0.55	0.59	0.35	1.18	-0.23
Max	1.56	2.39	2.16	1.84	1.70	1.60	1.70	2.23	1.50	1.87	1.41	1.91	2.02	1.82	1.56	1.64	1.56	1.27	1.61	1.29	2.14	1.81	1.72	1.88	1.47	2.39	0.82
Min	-0.03	0.00	-0.01	-0.07	-0.07	-0.04	-0.11	-0.17	-0.24	-0.29	-0.42	-0.49	-0.57	-0.64	-0.49	-0.42	-0.39	-0.21	-0.05	-0.02	-0.03	-0.04	0.04	-0.02	-0.07	0.23	-0.64

**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Solar Radiation (watts m<sup>2</sup>)**  
**January 2016**

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	27	154	276	334	365	340	262	147	22	0	0	0	0	0	0	0	80	365	0
2	0	0	0	0	0	0	0	0	18	141	279	347	373	344	265	153	25	0	0	0	0	0	0	0	81	373	0
3	0	0	0	0	0	0	0	0	16	105	151	247	340	261	149	98	20	0	0	0	0	0	0	0	58	340	0
4	0	0	0	0	0	0	0	0	21	183	124	176	197	202	139	66	19	0	0	0	0	0	0	0	47	202	0
5	0	0	0	0	0	0	0	0	19	147	182	232	274	249	183	69	26	0	0	0	0	0	0	0	58	274	0
6	0	0	0	0	0	0	0	0	16	58	116	130	168	156	131	72	12	0	0	0	0	0	0	0	36	168	0
7	0	0	0	0	0	0	0	0	13	58	108	140	230	235	141	88	13	0	0	0	0	0	0	0	43	235	0
8	0	0	0	0	0	0	0	0	16	63	123	172	311	365	210	77	19	0	0	0	0	0	0	0	57	365	0
9	0	0	0	0	0	0	0	0	10	53	262	361	446	239	236	102	33	0	0	0	0	0	0	0	73	446	0
10	0	0	0	0	0	0	0	0	25	58	182	328	368	346	290	167	32	1	0	0	0	0	0	0	75	368	0
11	0	0	0	0	0	0	0	0	25	152	283	368	409	385	244	215	44	0	0	0	0	0	0	0	89	409	0
12	0	0	0	0	0	0	0	0	13	52	287	388	410	330	250	130	28	0	0	0	0	0	0	0	79	410	0
13	0	0	0	0	0	0	0	0	23	99	202	186	162	136	131	48	5	0	0	0	0	0	0	0	41	202	0
14	0	0	0	0	0	0	0	0	13	70	107	147	151	136	137	86	24	0	0	0	0	0	0	0	36	151	0
15	0	0	0	0	0	0	0	0	9	36	50	79	154	293	119	56	18	0	0	0	0	0	0	0	34	293	0
16	0	0	0	0	0	0	0	1	39	71	107	166	249	185	166	76	23	0	0	0	0	0	0	0	45	249	0
17	0	0	0	0	0	0	0	0	14	44	158	259	399	362	303	196	53	1	0	0	0	0	0	0	75	399	0
18	0	0	0	0	0	0	0	0	19	69	114	153	182	189	197	214	67	1	0	0	0	0	0	0	50	214	0
19	0	0	0	0	0	0	0	0	28	99	214	348	285	411	285	189	77	0	0	0	0	0	0	0	81	411	0
20	0	0	0	0	0	0	0	0	13	67	160	297	263	197	121	73	20	0	0	0	0	0	0	0	50	297	0
21	0	0	0	0	0	0	0	0	52	172	128	261	274	225	147	100	37	1	0	0	0	0	0	0	58	274	0
22	0	0	0	0	0	0	0	0	26	88	218	293	333	200	225	145	33	1	0	0	0	0	0	0	65	333	0
23	0	0	0	0	0	0	0	0	26	96	170	217	224	167	135	89	33	1	0	0	0	0	0	0	48	224	0
24	0	0	0	0	0	0	0	0	12	35	45	68	98	176	136	60	22	1	0	0	0	0	0	0	27	176	0
25	0	0	0	0	0	0	0	3	34	110	257	377	329	458	501	266	96	3	0	0	0	0	0	0	101	501	0
26	0	0	0	0	0	0	0	0	45	184	283	359	425	425	318	199	95	3	0	0	0	0	0	0	97	425	0
27	0	0	0	0	0	0	0	1	61	218	343	415	434	418	357	213	71	4	0	0	0	0	0	0	106	434	0
28	0	0	0	0	0	0	0	0	27	114	352	427	460	419	306	250	91	4	0	0	0	0	0	0	102	460	0
29	0	0	0	0	0	0	0	4	81	80	108	134	266	195	75	48	25	2	0	0	0	0	0	0	42	266	0
30	0	0	0	0	0	0	0	1	87	219	223	366	474	438	223	124	52	3	0	0	0	0	0	0	92	474	0
31	0	0	0	0	0	0	0	2	52	112	164	217	302	362	205	178	103	12	0	0	0	0	0	0	71	362	0
Avg	0	0	0	0	0	0	0	0	28	103	186	258	302	285	212	129	40	1	0	0	0	0	0	0	64	326	0
Max	0	0	0	0	0	0	0	4	87	219	352	427	474	458	501	266	103	12	0	0	0	0	0	0	106	501	0
Min	0	0	0	0	0	0	0	0	9	35	45	68	98	136	75	48	5	0	0	0	0	0	0	0	27	151	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 2016**

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	30	85	129	189	283	260	365	182	328	17	0	0	0	0	0	0	78	365	0
2	0	0	0	0	0	0	0	2	63	204	347	415	373	539	322	202	66	9	0	0	0	0	0	0	106	539	0
3	0	0	0	0	0	0	0	2	37	132	216	299	386	421	231	121	55	8	0	0	0	0	0	0	80	421	0
4	0	0	0	0	0	0	0	0	14	87	213	362	245	194	161	63	34	5	0	0	0	0	0	0	57	362	0
5	0	0	0	0	0	0	0	5	66	227	245	428	510	460	351	255	131	4	0	0	0	0	0	0	112	510	0
6	0	0	0	0	0	0	0	1	27	91	251	343	138	141	88	62	31	3	0	0	0	0	0	0	49	343	0
7	0	0	0	0	0	0	0	7	109	262	397	482	519	493	412	266	70	8	0	0	0	0	0	0	126	519	0
8	0	0	0	0	0	0	0	6	137	237	316	426	493	504	420	287	141	16	0	0	0	0	0	0	124	504	0
9	0	0	0	0	0	0	0	3	89	321	441	504	502	469	352	296	166	16	0	0	0	0	0	0	132	504	0
10	0	0	0	0	0	0	0	4	54	126	273	490	422	418	455	118	58	5	0	0	0	0	0	0	101	490	0
11	0	0	0	0	0	0	0	8	103	282	421	500	520	489	284	146	70	9	0	0	0	0	0	0	118	520	0
12	0	0	0	0	0	0	0	2	19	66	227	228	198	221	243	208	80	7	0	0	0	0	0	0	62	243	0
13	0	0	0	0	0	0	0	3	62	83	155	158	186	212	360	209	193	22	0	0	0	0	0	0	68	360	0
14	0	0	0	0	0	0	0	5	66	73	208	392	636	675	385	365	107	15	0	0	0	0	0	0	122	675	0
15	0	0	0	0	0	0	0	3	28	59	69	144	346	201	401	101	41	14	0	0	0	0	0	0	59	401	0
16	0	0	0	0	0	0	0	6	59	119	113	175	324	249	169	91	63	19	0	0	0	0	0	0	58	324	0
17	0	0	0	0	0	0	0	14	86	86	152	Au	Au	Au	Au	Au	56	36	0	0	0	0	0	0	23	152	0
18	0	0	0	0	0	0	0	11	47	130	472	244	164	177	192	107	46	26	0	0	0	0	0	0	67	472	0
19	0	0	0	0	0	0	0	8	75	228	194	282	229	262	294	192	82	23	0	0	0	0	0	0	78	294	0
20	0	0	0	0	0	0	0	9	67	159	352	269	340	381	277	191	107	22	0	0	0	0	0	0	91	381	0
21	0	0	0	0	0	0	0	12	123	329	446	576	607	582	502	377	212	35	0	0	0	0	0	0	158	607	0
22	0	0	0	0	0	0	0	18	129	257	550	407	294	304	526	253	108	40	0	0	0	0	0	0	120	550	0
23	0	0	0	0	0	0	0	9	186	334	492	591	627	601	517	389	223	57	1	0	0	0	0	0	168	627	0
24	0	0	0	0	0	0	0	11	203	366	469	602	601	567	384	393	237	58	1	0	0	0	0	0	162	602	0
25	0	0	0	0	0	0	0	16	195	365	503	592	630	600	518	392	233	64	1	0	0	0	0	0	171	630	0
26	0	0	0	0	0	0	0	18	182	370	467	594	608	557	500	383	198	32	0	0	0	0	0	0	163	608	0
27	0	0	0	0	0	0	0	26	97	212	250	201	223	197	370	162	96	19	2	0	0	0	0	0	77	370	0
28	0	0	0	0	0	0	0	27	206	378	469	651	361	136	268	208	144	18	0	0	0	0	0	0	119	651	0
29	0	0	0	0	0	0	0	31	96	184	198	556	654	548	436	313	195	51	1	0	0	0	0	0	136	654	0
Avg	0	0	0	0	0	0	0	9	92	202	312	396	408	388	349	226	123	23	0	0	0	0	0	0	104	472	0
Max	0	0	0	0	0	0	0	31	206	378	550	651	654	675	526	393	328	64	2	0	0	0	0	0	171	675	0
Min	0	0	0	0	0	0	0	0	14	59	69	144	138	136	88	62	31	3	0	0	0	0	0	0	23	152	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 2016**

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	36	115	339	457	491	301	228	202	149	66	16	0	0	0	0	0	0	100	491	0
2	0	0	0	0	0	0	0	36	82	177	278	545	209	147	278	179	133	78	1	0	0	0	0	0	89	545	0
3	0	0	0	0	0	0	0	17	85	92	193	440	694	663	458	464	85	37	1	0	0	0	0	0	135	694	0
4	0	0	0	0	0	0	1	61	257	433	574	645	688	677	521	349	231	78	2	0	0	0	0	0	188	688	0
5	0	0	0	0	0	0	0	56	226	415	567	512	285	325	277	306	248	87	2	0	0	0	0	0	138	567	0
6	0	0	0	0	0	0	1	30	90	136	167	228	290	180	136	108	35	9	1	0	0	0	0	0	59	290	0
7	0	0	0	0	0	0	1	39	106	288	451	670	702	658	570	436	262	122	6	0	0	0	0	0	180	702	0
8	0	0	0	0	0	0	2	99	247	237	335	295	281	347	232	175	307	129	4	0	0	0	0	0	112	347	0
9	0	0	0	0	0	0	1	46	214	363	337	484	659	304	384	422	281	121	4	0	0	0	0	0	151	659	0
10	0	0	0	0	0	0	0	19	114	226	593	690	659	703	469	116	59	23	2	0	0	0	0	0	153	703	0
11	0	0	0	0	0	0	0	27	88	209	207	332	221	153	183	222	133	40	4	0	0	0	0	0	76	332	0
12	0	0	0	0	0	0	2	72	230	310	358	239	133	94	93	370	77	17	9	0	0	0	0	0	84	370	0
13	0	0	0	0	0	0	2	36	158	276	460	569	571	485	524	138	65	102	2	0	0	0	0	0	141	571	0
14	0	0	0	0	0	0	1	Pw	44	112	291	497	607	282	262	208	269	123	47	9	0	0	0	0	120	607	0
15	0	0	0	0	0	0	0	3	54	138	222	255	323	417	630	321	423	190	176	10	0	0	0	0	132	630	0
16	0	0	0	0	0	0	0	4	37	175	327	508	340	312	271	192	107	99	97	20	0	0	0	0	104	508	0
17	0	0	0	0	0	0	0	3	46	154	302	383	543	417	504	366	309	217	100	9	0	0	0	0	140	543	0
18	0	0	0	0	0	0	0	7	72	133	253	409	755	663	670	564	530	354	167	15	0	0	0	0	191	755	0
19	0	0	0	0	0	0	0	16	170	359	525	665	738	779	745	654	521	351	164	13	0	0	0	0	238	779	0
20	0	0	0	0	0	0	0	15	161	342	504	656	744	754	705	625	507	273	93	12	0	0	0	0	225	754	0
21	0	0	0	0	0	0	0	6	52	249	407	402	332	349	297	308	452	232	64	14	0	0	0	0	132	452	0
22	0	0	0	0	0	0	0	4	11	25	108	194	154	174	244	191	170	107	71	9	0	0	0	0	61	244	0
23	0	0	0	0	0	0	0	6	61	264	379	411	397	243	257	358	428	300	139	32	0	0	0	0	136	428	0
24	0	0	0	0	0	0	0	6	65	92	144	210	387	437	551	234	151	85	116	21	0	0	0	0	104	551	0
25	0	0	0	0	0	0	0	16	99	225	304	403	341	414	383	458	401	217	62	8	0	0	0	0	139	458	0
26	0	0	0	0	0	0	0	12	94	225	316	810	761	871	783	621	520	401	198	21	0	0	0	0	235	871	0
27	0	0	0	0	0	0	0	38	213	379	565	716	718	773	627	550	370	102	52	6	0	0	0	0	213	773	0
28	0	0	0	0	0	0	4	37	117	218	667	628	753	798	713	542	395	165	28	0	0	0	0	0	211	798	0
29	0	0	0	0	0	0	11	106	104	275	329	487	621	694	296	124	58	47	6	0	0	0	0	0	132	694	0
30	0	0	0	0	0	0	40	184	234	261	586	640	458	324	282	243	139	42	12	0	0	0	0	0	144	640	0
31	0	0	0	0	0	0	28	99	215	328	526	434	500	516	349	255	310	82	14	0	0	0	0	0	152	526	0
Avg	0	0	0	0	0	0	3	38	125	240	378	479	489	457	416	331	259	137	53	6	0	0	0	0	142	580	0
Max	0	0	0	0	0	0	40	184	257	433	667	810	761	871	783	654	530	401	198	32	0	0	0	0	238	871	0
Min	0	0	0	0	0	0	0	3	11	25	108	194	133	94	93	108	35	9	0	0	0	0	0	0	59	244	0

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Relative Humidity (% RH)**  
**January 2016**

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	79.8	78.8	78.0	76.8	77.7	76.6	76.4	76.6	77.7	77.9	77.4	78.3	73.3	61.5	54.1	49.8	67.0	78.6	83.4	83.9	83.7	82.4	82.1	81.2	75.5	83.9	49.8
2	80.6	80.4	80.4	80.2	79.6	79.7	80.5	80.7	80.6	81.8	80.4	80.3	71.9	60.0	59.1	60.1	71.4	81.2	85.9	85.0	83.5	80.7	82.0	79.4	77.7	85.9	59.1
3	79.3	79.3	79.3	80.2	80.4	80.3	79.8	79.8	82.5	84.9	84.1	77.8	72.3	64.2	60.3	66.5	80.1	79.6	79.8	80.9	82.2	84.7	85.5	85.0	78.7	85.5	60.3
4	84.5	85.1	83.7	83.0	83.7	85.8	85.4	85.3	85.5	81.1	77.6	70.9	67.7	66.0	66.4	64.7	71.7	78.9	81.2	85.2	82.0	83.9	83.2	84.1	79.4	85.8	64.7
5	83.9	86.5	86.3	87.5	87.0	86.9	86.8	86.6	86.2	84.9	82.5	80.4	81.4	75.9	73.0	77.6	82.3	90.4	92.2	91.8	89.6	88.6	88.2	88.2	85.2	92.2	73.0
6	87.3	87.2	86.4	86.6	86.1	87.4	88.9	88.9	88.9	89.8	91.4	92.8	92.7	93.5	91.7	92.1	91.4	92.2	90.8	91.2	90.4	91.1	90.6	90.9	90.0	93.5	86.1
7	91.4	91.0	90.7	89.5	89.1	90.5	90.0	89.3	88.0	85.7	83.8	82.8	80.7	79.2	81.5	81.9	82.4	82.0	81.3	81.7	82.0	82.1	82.1	82.6	85.1	91.4	79.2
8	82.6	83.1	83.4	82.3	80.4	79.6	79.5	79.8	80.0	79.6	78.5	72.9	63.0	62.4	68.7	79.4	83.3	85.1	85.9	86.5	86.3	86.6	86.9	86.6	80.1	86.9	62.4
9	87.0	86.9	87.4	86.8	86.6	86.3	86.7	86.4	86.4	83.8	70.5	66.1	68.3	69.8	69.5	70.3	70.9	71.4	73.1	73.1	81.1	87.5	85.5	81.9	79.3	87.5	66.1
10	81.5	81.6	79.6	78.6	78.3	78.4	78.2	77.7	78.0	79.4	80.6	83.8	71.6	65.6	63.9	65.2	68.5	71.0	72.0	79.6	82.1	83.5	84.8	83.2	76.9	84.8	63.9
11	83.2	81.2	81.0	79.7	80.3	79.2	78.7	78.5	77.7	78.7	79.0	76.2	52.4	39.5	39.4	37.3	35.4	39.9	49.3	65.8	70.7	72.1	73.5	69.7	66.6	83.2	35.4
12	68.0	70.9	70.7	69.0	69.6	73.4	71.7	70.4	69.4	69.9	68.7	67.3	65.6	64.7	64.4	63.1	64.0	69.1	75.2	79.5	83.5	84.9	83.4	84.9	71.7	84.9	63.1
13	81.3	80.7	81.4	82.8	83.9	84.1	81.6	82.6	80.9	77.9	70.6	59.6	46.4	46.2	46.4	51.0	50.8	55.0	57.0	61.9	73.6	82.1	75.1	68.5	69.2	84.1	46.2
14	78.6	92.6	93.7	91.8	85.7	83.6	81.1	81.9	85.6	86.6	84.1	83.7	83.7	84.8	84.7	85.2	84.6	86.3	87.6	86.9	84.0	76.2	76.4	83.0	84.7	93.7	76.2
15	85.5	86.7	87.9	88.9	85.2	84.0	84.6	85.0	85.5	85.6	86.4	84.6	77.4	74.8	80.0	80.3	81.8	80.5	76.3	77.8	78.3	78.8	81.7	85.4	82.6	88.9	74.8
16	84.2	80.0	76.1	74.0	75.2	75.2	76.3	81.2	84.5	82.6	76.4	76.1	71.5	63.5	64.9	71.2	79.0	86.7	89.2	89.6	89.1	89.3	89.5	89.1	79.8	89.6	63.5
17	88.4	88.2	88.3	87.8	87.3	86.9	86.8	86.3	85.1	81.4	77.3	73.4	71.7	67.0	62.2	62.9	72.4	86.5	87.9	88.8	85.9	84.6	84.3	87.3	81.6	88.8	62.2
18	86.7	85.3	79.5	78.5	77.8	85.8	86.6	87.6	89.7	86.5	85.4	81.8	78.0	75.2	73.4	70.8	70.4	69.0	69.9	76.3	86.1	89.1	86.8	84.3	80.9	89.7	69.0
19	83.4	82.2	81.5	80.5	79.9	79.8	81.3	82.1	83.1	86.0	86.9	87.2	75.5	59.2	60.4	63.0	67.5	72.9	71.4	70.6	70.1	74.0	76.3	73.1	76.2	87.2	59.2
20	79.7	86.3	88.0	89.5	92.3	92.6	92.9	92.2	87.5	88.2	86.2	82.9	74.1	68.3	67.2	68.5	70.6	71.5	73.2	75.4	73.3	73.3	73.1	71.9	79.9	92.9	67.2
21	74.2	75.0	80.8	88.0	87.9	86.5	86.9	86.4	85.7	81.8	80.2	66.8	64.8	79.1	72.4	68.4	69.6	76.0	78.2	79.8	81.6	82.9	85.3	87.8	79.4	88.0	64.8
22	91.3	91.7	90.8	91.3	90.1	91.6	91.6	91.4	91.8	90.5	81.5	66.3	59.9	52.0	51.5	52.8	69.3	57.9	49.5	50.0	51.9	59.5	74.8	80.2	73.7	91.8	49.5
23	77.6	78.7	73.8	81.5	87.9	88.4	87.1	86.7	87.3	87.4	87.4	87.4	82.3	72.1	68.0	61.6	68.7	70.7	76.0	90.5	94.2	94.7	94.8	94.6	82.5	94.8	61.6
24	94.4	95.1	94.8	94.5	92.7	89.7	88.3	87.7	87.3	88.5	88.8	86.4	77.2	75.6	82.8	86.6	87.2	87.7	89.3	85.3	84.1	82.7	83.9	85.7	87.3	95.1	75.6
25	87.8	88.6	87.1	88.1	89.0	90.8	88.3	84.8	83.4	82.2	66.8	62.4	68.9	67.7	65.9	66.2	68.3	75.6	85.6	86.4	83.0	81.6	80.7	79.9	79.5	90.8	62.4
26	78.8	78.4	77.9	78.3	78.9	79.9	80.0	81.4	84.5	85.6	83.6	71.8	66.8	66.2	63.0	61.8	64.1	80.7	83.8	84.7	86.9	87.7	86.6	82.5	78.1	87.7	61.8
27	82.3	82.8	78.5	85.6	84.4	85.8	87.1	88.1	88.2	84.3	76.3	66.5	68.1	66.4	64.9	66.8	68.3	76.3	80.1	79.8	86.1	89.4	89.3	89.2	79.8	89.4	64.9
28	90.9	92.6	92.2	92.8	92.1	89.9	89.5	89.6	90.6	91.5	91.6	66.5	52.5	52.7	41.7	41.6	45.4	53.1	58.7	63.7	59.3	63.1	66.6	76.6	72.7	92.8	41.6
29	77.3	65.6	57.2	55.5	60.6	62.8	63.0	68.4	66.0	62.4	64.9	59.8	52.9	55.9	62.9	79.6	87.9	86.6	84.0	80.5	77.8	75.9	65.2	63.7	68.2	87.9	52.9
30	59.4	60.0	57.7	59.2	60.2	62.5	68.8	73.3	65.2	60.8	58.4	57.2	57.3	57.6	58.4	61.0	66.9	72.1	76.3	80.7	83.2	84.5	84.9	84.7	67.1	84.9	57.2
31	83.3	83.4	83.4	85.2	83.7	84.1	84.8	83.2	82.8	80.7	74.8	70.8	67.3	66.1	63.5	66.8	67.3	75.8	82.9	86.0	85.3	83.2	83.3	82.9	78.8	86.0	63.5
Avg	82.4	82.8	81.9	82.4	82.4	82.8	82.9	83.2	83.1	82.2	79.4	74.9	69.6	66.2	65.4	66.9	71.2	75.5	77.6	80.0	81.0	82.0	82.1	82.2	78.3	88.7	62.5
Max	94.4	95.1	94.8	94.5	92.7	92.6	92.9	92.2	91.8	91.5	91.6	92.8	92.7	93.5	91.7	92.1	91.4	92.2	92.2	91.8	94.2	94.7	94.8	94.6	90.0	95.1	86.1
Min	59.4	60.0	57.2	55.5	60.2	62.5	63.0	68.4	65.2	60.8	58.4	57.2	46.4	39.5	39.4	37.3	35.4	39.9	49.3	50.0	51.9	59.5	65.2	63.7	66.6	83.2	35.4

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Relative Humidity (% RH)**  
**February 2016**

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	83.2	83.4	82.9	82.6	80.7	81.4	81.6	81.9	80.6	80.6	79.0	74.0	72.1	73.5	67.1	74.3	77.2	85.1	85.5	86.0	83.8	83.3	83.1	83.2	80.3	86.0	67.1
2	83.0	82.2	82.0	82.1	81.9	80.1	80.0	78.7	79.8	74.6	71.8	64.9	57.7	66.0	65.7	59.5	66.5	71.0	75.1	82.9	84.6	86.6	84.0	81.1	75.9	86.6	57.7
3	78.9	77.8	76.0	75.5	75.1	75.3	74.5	74.8	75.1	78.2	74.7	71.9	60.8	57.7	62.5	67.5	62.0	60.9	61.9	64.5	73.3	80.7	83.2	83.2	71.9	83.2	57.7
4	82.4	81.8	81.0	80.9	81.7	82.7	83.5	85.1	85.2	71.3	68.4	65.9	63.5	62.2	65.0	68.5	70.4	67.5	67.1	67.9	68.7	69.0	69.4	72.0	73.4	85.2	62.2
5	73.9	81.9	85.6	85.0	83.9	82.9	82.6	86.6	84.6	74.9	63.0	64.2	63.6	62.7	61.0	59.9	58.4	59.6	64.6	70.7	67.8	71.7	72.9	79.4	72.6	86.6	58.4
6	81.4	75.4	71.1	65.0	65.1	73.2	66.0	54.1	79.1	71.0	57.0	51.3	51.6	52.5	53.0	53.8	55.5	55.6	55.8	58.5	59.2	60.8	61.4	62.7	62.1	81.4	51.3
7	65.6	67.5	68.5	70.3	72.0	76.8	80.9	81.7	78.9	63.9	62.0	56.9	48.4	43.0	43.6	47.4	47.9	48.5	48.1	51.3	55.0	59.3	67.8	71.0	61.5	81.7	43.0
8	73.6	77.9	79.4	82.2	82.8	84.5	85.0	85.7	82.9	75.8	70.0	66.4	50.8	52.9	59.2	62.5	64.7	70.6	78.3	85.0	87.3	91.2	91.6	90.7	76.3	91.6	50.8
9	88.4	87.8	87.0	85.8	85.6	84.7	84.5	84.0	85.8	87.4	90.2	84.9	74.0	50.8	38.2	39.7	43.3	63.4	76.1	77.0	82.5	84.8	86.9	88.9	76.7	90.2	38.2
10	88.9	88.5	88.5	87.2	86.4	85.9	85.5	84.5	85.8	86.7	73.7	42.2	49.3	46.2	45.1	52.4	51.2	61.0	67.1	50.3	54.7	65.0	60.2	49.7	68.2	88.9	42.2
11	54.5	57.7	59.4	59.4	60.5	60.5	63.2	62.9	66.3	59.6	55.7	53.4	51.8	47.0	53.7	57.9	56.9	59.6	61.3	70.6	75.2	79.4	83.1	83.3	62.2	83.3	47.0
12	85.4	84.6	84.2	89.8	92.0	92.8	93.3	93.6	93.2	88.5	75.7	75.8	78.6	81.0	75.2	81.1	80.7	86.4	89.6	91.7	91.3	92.9	94.3	94.8	86.9	94.8	75.2
13	94.4	94.3	93.8	92.6	91.9	92.8	90.5	85.7	74.4	69.3	62.4	61.6	60.6	68.0	59.3	57.9	56.0	59.0	59.4	63.5	67.6	67.2	58.9	56.5	72.4	94.4	56.0
14	58.9	72.5	75.4	76.4	75.6	74.2	71.6	67.9	67.7	67.3	63.7	56.9	52.0	48.8	51.5	55.1	55.6	57.3	57.5	59.9	63.9	67.7	72.3	73.2	64.3	76.4	48.8
15	75.8	76.9	78.0	74.3	81.4	86.8	89.3	89.0	87.9	85.7	81.0	80.8	78.7	70.7	69.9	72.3	91.5	91.8	89.7	90.6	84.9	79.4	89.2	89.4	82.7	91.8	69.9
16	90.2	89.5	90.8	87.3	75.6	72.3	66.1	62.0	64.0	64.2	63.9	66.8	64.6	64.6	64.1	66.7	69.4	70.5	75.1	79.7	81.6	84.6	83.2	88.0	74.4	90.8	62.0
17	88.1	89.5	89.3	88.7	88.9	86.8	86.8	89.6	84.5	81.0	76.2	Au	Au	Au	Au	Au	51.6	55.6	57.3	66.8	71.4	73.8	72.1	62.9	76.9	89.6	51.6
18	64.9	70.9	62.4	60.7	52.5	53.0	57.2	63.9	65.0	63.4	61.7	61.4	61.7	80.4	77.7	69.8	69.5	58.3	56.5	58.7	62.5	54.0	54.3	57.4	62.4	80.4	52.5
19	67.6	63.0	61.8	58.3	62.6	65.4	67.6	68.4	58.2	53.4	49.9	49.2	46.1	41.8	44.1	45.3	45.3	50.0	56.0	60.2	63.4	50.1	52.5	63.1	56.0	68.4	41.8
20	68.8	64.1	85.9	75.8	66.7	65.1	63.8	64.0	65.6	60.8	57.9	56.2	55.7	59.6	66.0	62.4	64.0	57.4	57.9	61.0	63.3	65.6	65.7	66.4	64.2	85.9	55.7
21	68.1	73.8	78.5	79.7	81.7	85.7	86.0	85.5	82.2	63.4	56.0	52.1	42.4	39.6	38.4	36.5	38.4	41.5	49.3	59.6	66.1	62.4	66.8	60.3	62.2	86.0	36.5
22	58.6	62.2	63.1	61.8	59.9	59.9	59.7	58.7	59.8	57.1	52.1	47.2	44.5	47.1	48.6	55.5	56.4	58.2	58.2	61.9	67.0	75.3	78.7	80.1	59.7	80.1	44.5
23	82.4	84.1	83.6	82.8	83.3	83.8	82.3	82.3	78.4	65.9	59.8	55.7	42.6	43.9	44.1	43.4	40.7	38.7	42.3	44.0	55.3	60.4	66.2	69.3	63.1	84.1	38.7
24	71.7	72.7	77.7	78.7	80.6	80.4	80.5	80.3	72.4	60.5	46.3	46.0	41.0	43.0	41.8	41.4	39.5	44.2	56.5	65.4	66.5	71.7	76.2	79.3	63.1	80.6	39.5
25	78.5	80.0	82.0	82.6	83.8	84.4	84.8	83.8	79.3	63.0	53.6	47.2	37.0	34.8	36.0	36.5	38.3	42.1	48.4	60.1	65.9	72.6	73.4	77.6	63.6	84.8	34.8
26	81.1	84.0	86.4	87.3	87.0	87.1	87.5	86.8	82.8	71.1	62.5	45.8	37.4	30.4	29.0	25.2	28.5	41.9	50.8	57.5	61.4	65.5	67.1	65.8	62.9	87.5	25.2
27	70.2	69.9	74.5	75.1	77.4	79.2	82.6	85.1	80.0	70.3	70.4	56.7	70.2	81.8	76.4	70.7	67.5	66.3	67.0	68.7	68.9	68.8	68.1	68.2	72.3	85.1	56.7
28	74.7	81.3	83.5	84.1	86.4	87.2	89.2	88.5	80.5	68.5	54.5	50.8	51.4	55.4	49.9	46.6	48.4	49.8	53.5	55.9	61.8	71.6	73.5	84.2	68.0	89.2	46.6
29	73.9	58.7	55.4	54.9	56.4	60.6	64.0	60.9	59.1	60.0	59.4	55.8	52.2	52.0	51.5	50.4	49.5	51.3	53.6	55.3	58.6	62.1	70.6	69.2	58.1	73.9	49.5
Avg	76.1	77.0	78.2	77.5	77.2	78.1	78.3	77.8	76.5	70.3	64.6	59.4	55.7	55.6	54.9	55.7	56.7	59.4	62.7	66.4	69.4	71.6	73.3	74.2	68.7	85.1	50.4
Max	94.4	94.3	93.8	92.6	92.0	92.8	93.3	93.6	93.2	88.5	90.2	84.9	78.7	81.8	77.7	81.1	91.5	91.8	89.7	91.7	91.3	92.9	94.3	94.8	86.9	94.8	75.2
Min	54.5	57.7	55.4	54.9	52.5	53.0	57.2	54.1	58.2	53.4	46.3	42.2	37.0	30.4	29.0	25.2	28.5	38.7	42.3	44.0	54.7	50.1	52.5	49.7	56.0	68.4	25.2

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**Tintina Resources, Inc.**  
**Black Butte Copper Project Met Tower Air Monitoring Summary**  
**Relative Humidity (% RH)**  
**March 2016**

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	74.0	77.4	80.3	80.9	82.5	84.3	84.3	83.7	79.9	66.0	54.6	47.4	44.8	55.8	65.7	64.0	61.2	57.7	63.1	64.5	67.6	67.9	62.6	56.1	67.8	84.3	44.8
2	56.8	67.5	70.3	79.2	70.2	71.0	65.5	58.7	61.4	62.3	61.9	62.1	60.5	56.7	55.5	54.6	54.2	53.3	58.4	64.3	66.5	74.0	79.9	80.0	64.4	80.0	53.3
3	80.1	84.0	82.6	82.0	80.1	77.6	77.2	76.6	73.6	69.5	64.8	51.7	35.6	39.8	41.3	42.5	54.7	65.5	57.4	53.7	57.1	61.5	63.4	67.2	64.1	84.0	35.6
4	72.2	74.0	77.4	82.1	83.3	82.9	84.9	83.4	74.2	63.9	44.9	35.9	30.1	35.3	26.1	34.2	35.5	38.8	42.4	49.7	60.7	65.1	71.2	72.2	59.2	84.9	26.1
5	71.5	75.5	74.0	76.3	76.8	79.1	77.7	79.7	70.9	58.1	40.6	39.1	42.3	39.3	38.9	40.1	41.3	40.4	58.3	65.2	66.5	71.6	68.3	71.1	60.9	79.7	38.9
6	76.7	62.3	64.6	77.0	79.6	83.6	76.2	77.0	78.4	62.6	53.9	55.2	50.8	49.6	58.8	75.7	83.3	88.2	91.5	88.9	86.6	85.4	86.6	84.5	74.0	91.5	49.6
7	79.4	75.2	78.9	80.3	80.2	82.8	83.3	86.7	84.4	72.4	65.5	57.5	51.1	43.2	39.5	39.6	43.5	50.8	57.4	69.6	77.2	78.8	81.2	85.6	68.5	86.7	39.5
8	82.9	82.1	85.5	87.1	88.2	88.2	86.9	83.3	68.0	67.7	67.6	75.7	67.8	65.3	66.4	67.1	59.7	53.4	59.5	67.4	74.9	77.1	79.3	81.9	74.3	88.2	53.4
9	81.8	83.1	84.8	85.9	87.0	86.4	86.6	85.0	74.7	66.4	66.9	58.7	53.8	52.7	53.3	49.7	48.3	48.3	59.2	68.3	73.3	79.4	79.0	65.9	69.9	87.0	48.3
10	67.0	64.8	64.9	65.1	65.4	64.5	61.2	61.0	56.2	53.5	50.2	49.3	47.1	44.4	45.8	47.9	48.3	49.9	52.1	54.6	58.6	58.3	66.0	77.4	57.2	77.4	44.4
11	78.0	77.3	73.8	66.8	68.1	71.6	74.1	76.7	80.4	67.3	61.8	51.7	51.2	54.3	58.6	70.5	73.3	74.7	73.8	71.1	69.6	67.2	60.1	55.4	67.8	80.4	51.2
12	52.9	55.2	70.5	77.2	80.7	83.0	84.6	82.8	71.6	64.2	46.9	43.8	52.2	60.7	63.9	63.5	65.6	85.0	88.0	92.2	91.1	89.9	89.9	80.8	72.3	92.2	43.8
13	73.1	69.8	82.0	92.6	92.7	92.9	92.3	91.5	85.4	82.2	72.3	62.8	65.3	65.1	55.4	55.2	55.0	50.1	52.8	56.6	58.3	63.5	82.1	87.4	72.3	92.9	50.1
14	88.7	87.9	85.5	82.5	90.1	91.6	91.0	Pw	83.4	80.1	76.2	68.7	60.6	62.7	71.4	70.3	60.9	55.1	55.9	68.5	63.4	71.2	70.6	67.5	74.1	91.6	55.1
15	66.1	64.4	65.5	66.5	67.2	65.4	63.1	61.3	60.7	60.3	57.8	59.0	61.2	63.4	59.4	61.6	48.5	48.2	48.6	52.5	55.8	58.4	63.6	66.3	60.2	67.2	48.2
16	68.9	77.3	80.7	81.5	81.9	82.8	84.0	84.4	82.4	69.3	61.7	57.6	54.8	51.0	47.0	43.5	62.5	71.6	54.6	53.6	57.8	67.5	69.9	78.8	67.7	84.4	43.5
17	82.5	84.8	82.8	81.9	81.5	83.1	83.6	83.8	82.9	76.5	62.8	62.8	56.6	55.9	60.3	57.7	52.0	59.4	62.7	62.6	67.9	77.0	81.0	81.7	71.8	84.8	52.0
18	82.7	81.1	76.0	79.8	76.6	76.7	75.5	69.9	68.1	72.2	64.2	58.5	53.8	50.0	48.5	47.7	46.0	45.8	46.8	54.6	59.5	66.2	69.4	70.4	64.2	82.7	45.8
19	72.6	71.6	71.9	73.6	76.0	76.1	78.9	79.5	69.0	59.2	50.7	31.3	30.1	26.9	26.9	23.2	22.5	20.5	25.8	38.1	47.5	57.5	60.6	64.5	52.3	79.5	20.5
20	65.1	65.2	64.5	69.5	72.8	74.4	75.5	76.3	66.8	56.7	47.0	36.3	21.8	23.7	23.4	25.5	28.6	29.4	35.4	45.2	56.8	61.2	70.3	73.3	52.7	76.3	21.8
21	73.7	70.6	69.8	76.5	74.6	75.0	78.9	81.7	70.0	58.7	57.0	52.1	50.5	48.1	51.4	51.4	43.7	43.7	47.5	56.4	69.3	73.6	77.1	80.5	63.8	81.7	43.7
22	82.6	85.3	85.7	85.8	87.1	83.7	84.6	83.4	90.3	94.5	93.8	88.3	89.8	88.1	86.7	87.2	83.3	86.3	86.8	87.7	88.7	87.9	90.6	91.3	87.5	94.5	82.6
23	92.4	91.3	90.8	89.6	89.0	89.2	89.1	88.8	87.4	82.9	69.6	74.6	74.7	76.3	76.5	79.0	58.9	50.1	47.5	46.8	54.3	64.8	66.7	69.7	75.0	92.4	46.8
24	72.3	66.8	68.1	67.7	73.6	80.1	82.0	85.7	79.7	74.1	74.4	76.5	68.5	78.8	69.9	74.9	66.8	59.2	48.1	55.1	60.5	67.8	71.3	74.0	70.7	85.7	48.1
25	75.1	77.0	80.1	83.7	85.5	86.3	88.0	88.6	84.0	82.6	80.3	77.8	79.1	73.6	71.4	64.0	59.4	63.2	66.7	65.5	66.4	70.6	71.4	74.7	75.6	88.6	59.4
26	80.5	82.6	83.2	83.0	82.2	83.7	85.7	84.0	80.9	74.5	67.7	61.0	59.3	55.2	48.2	46.2	40.0	37.7	39.6	45.8	63.0	71.5	73.2	76.2	66.9	85.7	37.7
27	79.1	81.1	83.2	83.7	85.0	83.8	85.0	84.1	75.9	64.5	46.6	36.1	36.4	35.5	35.2	35.1	35.6	39.5	53.2	74.7	93.4	94.0	91.8	94.0	66.9	94.0	35.1
28	94.4	92.8	90.8	91.2	91.5	91.1	91.0	90.2	81.3	73.9	66.8	65.4	58.9	50.6	45.4	38.8	37.2	45.0	55.7	64.6	72.6	76.5	72.3	70.0	71.2	94.4	37.2
29	69.6	71.7	72.4	75.4	77.0	79.7	81.5	79.6	77.5	78.8	79.8	77.1	77.6	79.9	78.1	78.9	78.4	74.1	75.2	79.4	74.2	77.3	80.5	81.3	77.3	81.5	69.6
30	80.8	82.0	83.5	81.8	85.5	88.0	88.6	80.0	76.1	67.3	61.0	49.1	47.6	48.3	54.7	54.4	56.6	71.1	88.1	88.2	87.5	86.9	85.3	85.8	74.1	88.6	47.6
31	85.8	85.5	88.7	92.4	91.8	86.7	89.8	88.2	86.1	84.7	70.0	76.4	77.4	78.1	69.3	68.1	66.1	68.9	73.6	75.9	77.4	76.2	79.3	85.3	80.1	92.4	66.1
Avg	76.1	76.4	77.8	80.0	80.8	81.5	81.6	80.5	76.2	69.9	62.6	58.0	55.2	55.1	54.6	55.2	53.9	55.6	58.9	63.9	68.5	72.4	74.7	75.8	68.5	85.7	46.4
Max	94.4	92.8	90.8	92.6	92.7	92.9	92.3	91.5	90.3	94.5	93.8	88.3	89.8	88.1	86.7	87.2	83.3	88.2	91.5	92.2	93.4	94.0	91.8	94.0	87.5	94.5	82.6
Min	52.9	55.2	64.5	65.1	65.4	64.5	61.2	58.7	56.2	53.5	40.6	31.3	21.8	23.7	23.4	23.2	22.5	20.5	25.8	38.1	47.5	57.5	60.1	55.4	52.3	67.2	20.5







**APPENDIX B: PERFORMANCE AUDIT REPORTS**  
**FIRST QUARTER 2016**

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# BISON ENGINEERING, INC.

## Bison Engineering

### Preliminary Meteorological Parameters Audit Form

Audit Dates: 02/17/2016      Audit Start Time : 11:10 MST      Audit End Time : 15:40 MST  
 Client: Tintina Resources  
 Site: Black Butte  
 AUDITOR: Steve Heck      STATION OPERATOR: Jeff Bell

#### Temperature

Audit Device: Control Company - digital thermometer Model 4000  
 Meter S/N: 91255639      Temperature Sensor: Climatronics 100093  
 Last certified: 4/21/2015      S/N P12535 (Upper), S/N P12535 (Lower) - Matched Set

#### Temperature bath results

	9m	9m	2m	2m	9m - 2m
Audit	DAS	DAS	DAS	DAS	DAS
Value	Value	Diff.	Value	Diff.	Diff.
°C	°C	°C	°C	°C	°C
0.02	0.13	0.11	0.16	0.14	-0.03
14.02	13.99	-0.03	14.01	-0.01	-0.02
35.26	35.42	0.16	35.40	0.14	0.02

#### Wind Direction (Before potentiometer orientation adjustment)

Sensor height: 9 Meter	Sensor (Make/model number): Climatronics/ WMIII	Serial Number : 1849	Crossarm orientation (from Garmin GPS): 179.7 / 359.7	GPS location at sensor: N 46 deg 46.373 min, W 110 deg 52.8855 min	GPS location at sighting point: N 46 deg 46.317 min, W 110 deg 52.885 min	Sensor response aligned with crossarm (as found): 1.4	Linearity Audit Device: Climatronics 101966, SN 70	Linearity Check from DAS (as found)			
								Setpoint	Clockwise	Counter-CW	Diff CW
							0	1.4	1.4	1.4	1.4
							30	33.7	33.6	3.7	3.6
							60	62.7	62.7	2.7	2.7
							90	92.5	92.5	2.5	2.5
							120	123.6	123.4	3.6	3.4
							150	152.9	152.8	2.9	2.8
							180	182.7	182.4	2.7	2.4
							210	212.3	212.0	2.3	2.0
							240	242.3	241.9	2.3	1.9
							270	271.7	271.5	1.7	1.5
							300	302.2	302.0	2.2	2.0
							330	331.9	331.8	1.9	1.8
									<b>Max Diff</b>	<b>3.7</b>	<b>3.6</b>

Threshold Torque: 0.04 oz.-in.  
 (Waters Model 366-1 torque watch)

### Wind Speed

Sensor height:: 9 Meter  
 Sensor (Make/model number): Climatronics/ WMIII  
 Serial Number : K2336C  
 Calibration device: Weathertronics 300 rpm synchronous motor  
 Weathertronics 600 rpm synchronous motor

#### Synchronous motor checks

Threshold Torque: <0.003 oz.-in.  
 (Waters Model 366-3 torque watch)

Known Value	Known Value	DAS Value	DAS Diff.
RPM	m/s	m/s	m/s
0	0.22	0.22	0.00
300	6.66	6.66	0.00
600	13.09	13.09	0.00

**Wind direction sensor potentiometer alignment adjusted.**

### Wind Direction (After potentiometer orientation adjustment)

Sensor response aligned with crossarm (as left): 0.1		<u>Linearity Check from DAS (as left)</u>				
		Setpoint	Clockwise	Counter-CW	Diff CW	Diff CCW
		0	0.1	0.1	0.1	0.1
		30	32.0	31.8	2.0	1.8
		60	60.9	60.8	0.9	0.8
		90	90.5	90.3	0.5	0.3
		120	121.7	121.6	1.7	1.6
		150	151.0	150.8	1.0	0.8
		180	180.8	180.7	0.8	0.7
		210	210.4	210.0	0.4	0.0
		240	240.2	239.9	0.2	-0.1
		270	269.7	269.5	-0.3	-0.5
		300	300.1	299.9	0.1	-0.1
		330	330.0	329.7	0.0	-0.3
				<b>Max Diff</b>	<b>2.0</b>	<b>1.8</b>

### Solar Radiation

Audit Device: Eppley Pyranometer, SN 16166F3 (certified by Eppley September 2015)

Time (MST)	CTS Value (W/m2)	Site Value (W/m2)	Diff. (%)	Diff. (% FS)
1229	291	295	1.4	0.3
1231	285	288	1.1	0.2
1234	288	291	1.0	0.2

**Relative Humidity**

Site Sensor: Met One 083E-0-35  
Sensor Height: 2 meters  
Reference Std: Assmann Psychrometer, thermometer calibrations checked December 2015

Ref Dry-Bulb:	6.0	deg C	BP = 26.61 in. Hg
Ref Wet-Bulb	1.8	deg C	
Ref RH:	50.6	%RH	
Station RH:	50.6	%RH	
Diff:	0.0	%RH	

**Barometric Pressure**

Audit Device: Wallace & Tiernan Model FA185260, S/N LL03297.  
Checked against Bison Mercury barometer (Butte) on 02/16/2016

Audit Value:	24.13	in Hg
Station Value:	24.13	in Hg
Diff:	0.00	in Hg

**Precipitation**

Rain Gauge = Met One Model 375  
Level checked OK  
Wind Screen in place  
8" opening

559 ml water added  
Calibration is 8.24 ml per tip  
Known audit value is  $559 / 8.24 = 67.8$  tips (so 67 full tips expected)

Unit registered 67 tips  
% difference from expected = 0.0%

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

Signature Auditor: Steven R. Arch