

**SANDFIRE RESOURCES AMERICA, INC.
BLACK BUTTE COPPER PROJECT
METEOROLOGICAL
MONITORING PROGRAM
Quarterly Data Report
Third Quarter 2023**

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CERTIFICATION OF DATA INTEGRITY

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

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APPENDICES

- Appendix A: Meteorological Data
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1.0 INTRODUCTION

Sandfire Resources America, 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 current location of the monitoring site, depicted by a red star. It is located to the west-southwest of the core shed buildings. On February 6, 2018, the tower was shut down and moved to a new location approximately 300 feet southwest of the original location, where monitoring resumed on March 7, 2018. Relocation activities were documented in the monitoring report for the first quarter of 2018.

This report presents the meteorological data collected during the third quarter (July through September) of 2023. 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 was used for hydrological / water balance studies. The manual rain gauge was installed to provide a backup data source for the automatic rain gauge, which experienced occasional mechanical problems around that time. Neither the evaporation pan nor manual rain gauge were operated during the third quarter of 2023. While the automatic rain gauge includes an AC-powered heater for accurate measurement of frozen precipitation, the AC power to the station became unreliable starting in 2022. Therefore, precipitation data collected from 2022 forward is unreliable during periods of frozen precipitation. It appears there was no frozen precipitation during the third quarter of 2023.

Figure 1. Monitoring Site Location

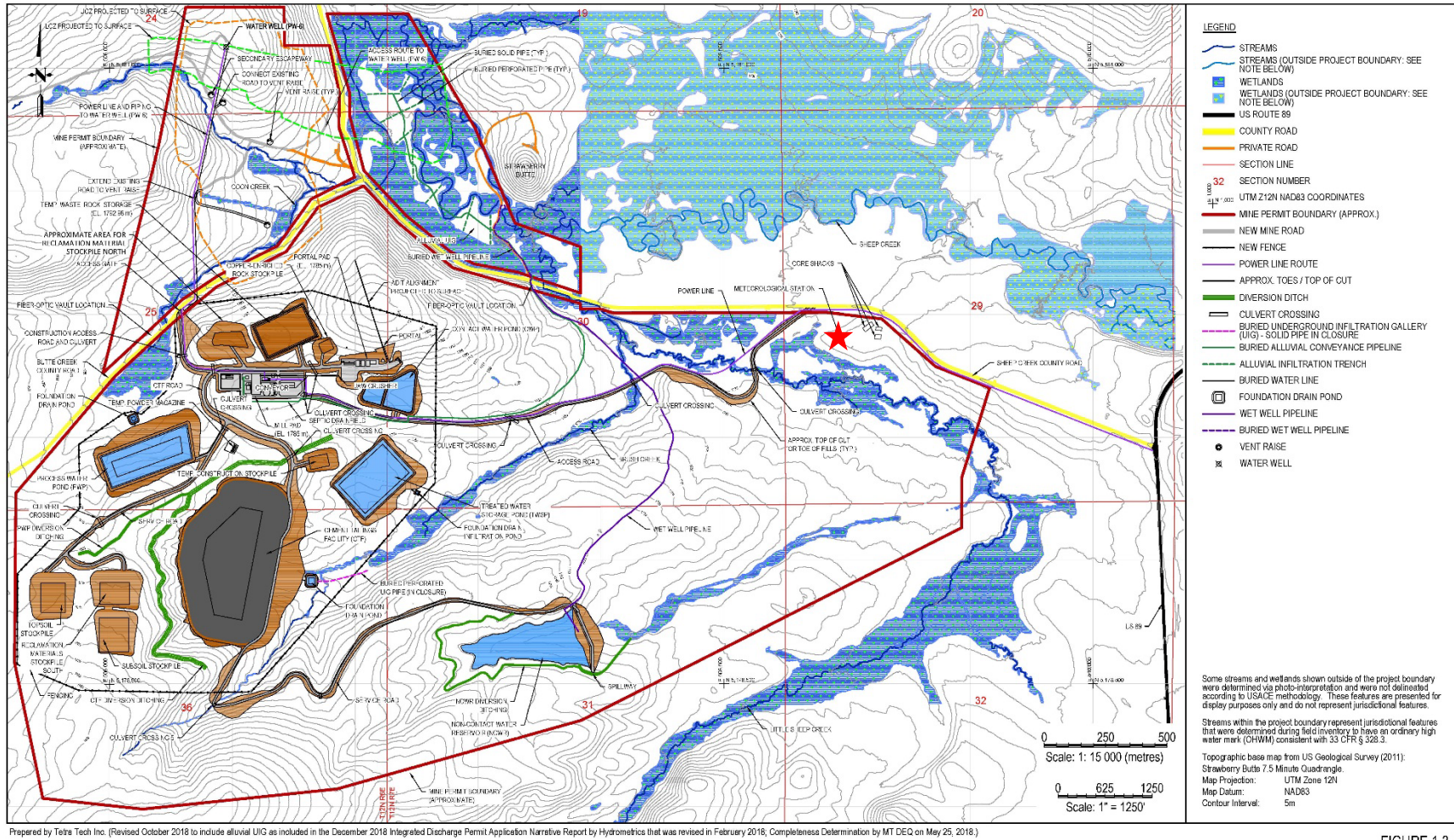


FIGURE 1.3
Facilities Site Plan
Black Butte Copper Project
Mine Operating Permit Application
Meagher County, Montana



2.0 MONITORING SYSTEM OPERATIONS

Monitoring activities continued in the normal manner during the third quarter of 2023. All instruments were operational throughout the quarter. Data would typically be downloaded and inspected by Bison once per week, but the station lost radio capabilities and the ability to remotely download data during the summer of 2022. Therefore, Bison did not download meteorological data for the third quarter of 2023 until a performance audit and calibration was performed on August 10, 2023. That problem has since been corrected.

Daniel Bitz and Steve Heck of Bison conducted performance audits of the meteorological system on August 10, 2023. The wind speed and wind direction sensors crossarm was replaced and reoriented; as-found and as-left wind direction and speed responses, as well as bearing torque data, are provided in Appendix B. No other calibration adjustments were made to any of the instrumentation.

3.0 PERFORMANCE AUDIT DATA

Daniel Bitz and Steve Heck of Bison conducted performance audits of the meteorological system on August 10, 2023. The wind speed and wind direction sensors crossarm was replaced and reoriented; as-found and as-left wind direction and speed responses, as well as bearing torque data, are provided in Appendix B. No other calibration adjustments were made to any of the instrumentation.

4.0 CALIBRATION DATA

Daniel Bitz and Steve Heck of Bison conducted performance audits of the meteorological system on August 10, 2023, as discussed in Section 3.0. The wind speed and direction sensors crossarm was replaced and reoriented; as-found and as-left wind direction and speed responses, as well as bearing torque data, are provided in Appendix B. All other as-found audit results were satisfactory, and no other calibration adjustments were needed.

During the August 10 calibration, the as-found wind speed responses from the synchronous motor tests were found to be slightly lower than expected. At a known rotation rate of 300-rpm the sensor response was 6.41 m/s, versus an expected response of 6.66 m/s. At a 600-rpm rotation rate, the response was 12.41 m/s versus an expected response of 13.09 m/s. The wind sensor crossarm was replaced immediately following the audit, and a calibration was performed. Those results are presented in Appendix B.

5.0 DATA COMPLETENESS

The meteorological percentages of data recovery achieved during the third quarter of 2023 are given in Tables 1 through 4. In these tables, the number of possible data values during each month 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, which was 99.7 percent overall among all parameters. All instruments were operational throughout the quarter.

A total of 66 hours of wind speed data were invalidated between July 1 and August 10 due to suspected bearing deterioration that caused false calm readings during light winds. This problem did not recur after the sensor crossarm was replaced on August 10.

Table 1. Monthly Data Completeness

July 2023					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
Black Butte Copper Project Met Tower					
Wind Speed	744	686	92.2	0	92.2
Wind Direction	744	744	100.0	0	100.0
Standard Deviation	744	744	100.0	0	100.0
9-Meter Temperature	744	744	100.0	0	100.0
2-Meter Temperature	744	744	100.0	0	100.0
9-2 M Delta Temperature	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
Total	7,440	7,382	99.2	0	99.2

Table 2. Monthly Data Completeness

August 2023					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
Black Butte Copper Project Met Tower					
Wind Speed	744	729	98.0	7	98.9
Wind Direction	744	737	99.1	7	100.0
Standard Deviation	744	737	99.1	7	100.0
9-Meter Temperature	744	737	99.1	7	100.0
2-Meter Temperature	744	737	99.1	7	100.0
9-2 M Delta Temperature	744	737	99.1	7	100.0
Solar Radiation	744	737	99.1	7	100.0
Barometric Pressure	744	744	100.0	0	100.0
Relative Humidity	744	744	100.0	0	100.0
Precipitation	744	742	99.7	2	100.0
Total	7,440	7,381	99.2	51	99.9

Table 3. Monthly Data Completeness

September 2023					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
Black Butte Copper Project Met Tower					
Wind Speed	720	720	100.0	0	100.0
Wind Direction	720	720	100.0	0	100.0
Standard Deviation	720	720	100.0	0	100.0
9-Meter Temperature	720	720	100.0	0	100.0
2-Meter Temperature	720	720	100.0	0	100.0
9-2 M Delta Temperature	720	720	100.0	0	100.0
Solar Radiation	720	720	100.0	0	100.0
Barometric Pressure	720	720	100.0	0	100.0
Relative Humidity	720	720	100.0	0	100.0
Precipitation	720	720	100.0	0	100.0
Total	7,200	7,200	100.0	0	100.0

Table 4. Third Quarter Data Completeness

Third Quarter 2023					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
Black Butte Copper Project Met Tower					
Wind Speed	2,208	2,135	96.7	7	97.0
Wind Direction	2,208	2,201	99.7	7	100.0
Standard Deviation	2,208	2,201	99.7	7	100.0
9-Meter Temperature	2,208	2,201	99.7	7	100.0
2-Meter Temperature	2,208	2,201	99.7	7	100.0
9-2 M Delta Temperature	2,208	2,201	99.7	7	100.0
Solar Radiation	2,208	2,201	99.7	7	100.0
Barometric Pressure	2,208	2,208	100.0	0	100.0
Relative Humidity	2,208	2,208	100.0	0	100.0
Precipitation	2,208	2,206	99.9	2	100.0
Total	22,080	21,963	99.5	51	99.7

6.0 MONITORING DATA

The hourly data values collected at the monitoring site are given in the data tables in Appendix A. Each of these tables presents one month's data for one parameter in the monitoring system. In addition, the average, maximum, and minimum values for each parameter for each day are listed (for wind direction, the prevailing wind direction for the day is given). For those hours with missing data, a code is given that explains the reason the data was missing. These codes are given in Table 5.

Monthly and quarterly wind rose distributions from the monitoring site are presented in Tables 6 through 9. 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 and 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.

Table 5. Missing Data Codes

Mnemonic Code	Description	Equivalent AIRS Null Value Reason Code
Sc	Scheduled but not collected	9972
Ti	Sample time out of limits	9973
Fi	Filter damage	9976
Vo	Voided by operator	9978
Mi	Miscellaneous void	9979
ND	Machine malfunction	9980
Wx	Bad weather	9981
Co	Collection error	9983
Lb	Lab error	9984
QA	Poor quality assurance results	9985
ZS	Manual zero/span check	9986
Wa	Monitoring waived	9987
Pw	Power failure	9988
Wi	Wildlife damage	9989
AZ	Automatic zero/span check	9991
Au	Performance audit	9992
Ma	Routine maintenance/repairs	9993
Ca	Multipoint calibration	9995
PZ	Precision/zero/span	9998

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

July 2023																		
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	1.3	1.0	2.0	2.0	1.6	0.7	0.6	0.3	0.7	1.0	1.2	1.2	1.7	18.8
	1.1 - 2.0	1.0	1.2	1.7	4.4	5.2	7.7	5.8	1.9	0.9	0.3	0.1	0.4	0.6	1.3	1.0	0.7	34.4
	2.1 - 3.0	0.3	0.0	0.6	1.7	3.8	2.8	1.3	0.4	0.7	0.4	0.0	0.6	0.9	0.7	0.9	0.6	15.7
	3.1 - 4.0	0.1	0.0	0.0	0.9	1.2	0.4	0.7	1.3	0.4	0.0	0.0	0.4	1.6	1.0	1.6	0.6	10.3
	4.1 - 5.0	0.3	0.3	0.1	0.1	0.3	0.3	1.3	0.7	0.0	0.1	0.0	0.6	1.6	1.7	0.7	0.4	8.7
	5.1 - 6.0	0.7	0.1	0.1	0.4	0.1	0.0	0.4	0.3	0.0	0.1	0.0	0.1	1.3	0.9	0.9	0.4	6.1
	6.1 - 7.0	0.0	0.0	0.0	0.1	0.3	0.0	0.4	0.0	0.0	0.1	0.0	0.3	1.2	0.1	0.4	0.3	3.4
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.1	0.0	0.0	0.0	0.0	0.6	0.4	0.1	0.0	2.0
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	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	0.1	0.0	0.0	0.0	0.0	0.1
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	13.1 - 14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	14.1 - 15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16.1 - 17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17.1 - 18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18.1 - 19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19.1 - 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	> 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm																		0.0
Total		3.4	2.8	3.9	9.0	12.0	13.3	13.0	6.4	2.8	1.9	0.4	3.4	8.7	7.4	6.9	4.8	100.0
Average Speed		2.7	1.7	1.6	2.1	2.2	1.8	2.6	2.3	1.9	3.2	0.8	3.2	4.1	3.4	3.2	2.5	2.6

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

August 2023																		
Direction>>>		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
Wind Speed (meters per second)	0.1 - 1.0	1.2	1.0	0.8	0.5	0.8	0.8	2.6	1.5	0.8	0.1	0.1	0.1	0.3	0.5	0.8	1.0	13.2
	1.1 - 2.0	0.5	1.2	1.9	4.4	4.8	5.5	4.7	2.5	1.2	0.4	0.4	0.4	0.4	0.8	1.1	1.4	31.7
	2.1 - 3.0	0.4	0.5	0.5	2.1	2.1	1.1	1.2	1.4	0.3	0.8	0.0	0.4	1.0	1.0	0.7	0.8	14.3
	3.1 - 4.0	0.5	0.1	0.1	0.4	0.5	0.7	1.1	1.0	0.5	0.4	0.3	0.4	1.8	1.0	0.5	0.7	10.2
	4.1 - 5.0	0.0	0.4	0.1	0.1	0.4	0.3	0.8	0.7	0.4	0.3	0.1	1.2	1.5	1.4	0.8	0.1	8.8
	5.1 - 6.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	1.8	0.3	0.5	0.8	1.5	2.3	0.7	0.3	0.0	8.8
	6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	1.6	0.1	0.0	0.5	1.0	2.7	0.3	0.1	0.3	7.5
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.1	0.3	0.0	0.7	0.4	0.0	0.0	0.0	3.2
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	0.4	0.4	0.1	0.0	0.0	1.6
	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	0.1	0.4	0.0	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	0.1	0.0	0.0	0.1	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		2.7	3.4	3.6	7.7	8.6	8.8	12.3	11.5	3.8	2.9	2.5	6.3	11.2	5.9	4.4	4.3	100.0
Average Speed		1.8	2.1	1.7	2.0	1.9	2.0	2.8	3.8	2.7	3.7	4.8	5.3	5.1	3.8	2.7	2.3	3.1

Table 8. September Wind Rose Summary, Black Butte Copper Project Met Tower

September 2023																		
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	0.6	0.3	0.8	0.7	1.0	1.4	2.4	1.7	0.8	0.7	0.4	0.4	0.4	0.4	0.6	0.6	13.1
	1.1 - 2.0	0.3	1.0	1.7	2.6	5.7	6.7	6.9	2.8	0.7	0.7	0.6	0.4	1.0	1.9	1.5	1.1	35.6
	2.1 - 3.0	0.1	0.3	0.6	1.1	3.2	1.8	1.1	1.3	1.3	0.7	0.7	2.2	1.9	1.4	1.1	0.4	19.2
	3.1 - 4.0	0.1	0.0	0.3	0.8	1.3	0.0	0.3	1.0	0.7	0.4	0.1	1.4	2.6	1.1	1.5	0.4	12.1
	4.1 - 5.0	0.0	0.0	0.1	0.6	0.1	0.1	0.3	0.7	0.4	0.7	1.0	1.5	1.9	1.1	0.4	0.1	9.2
	5.1 - 6.0	0.0	0.0	0.1	0.4	0.1	0.1	0.1	0.4	0.3	0.1	0.8	1.9	1.1	0.1	0.1	0.0	6.0
	6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.3	0.0	1.0	0.6	0.6	0.0	0.0	2.9
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.3	0.0	0.1	0.1	0.3	0.0	0.0	0.0	1.7
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	13.1 - 14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	14.1 - 15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16.1 - 17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17.1 - 18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18.1 - 19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19.1 - 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	> 20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calm																		0.0
Total		1.1	1.5	3.6	6.3	11.4	10.1	11.7	8.9	4.4	3.6	3.8	9.0	10.0	6.7	5.3	2.6	100.0
Average Speed		1.6	1.5	1.9	2.5	2.1	1.7	1.9	2.8	2.9	2.9	3.7	4.1	3.8	3.1	2.6	2.0	2.7

Table 9. Q3 Wind Rose Summary, Black Butte Copper Project Met Tower

Third Quarter 2023																		
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	0.8	1.0	0.8	0.9	1.4	2.3	1.6	0.8	0.5	0.3	0.4	0.6	0.7	0.8	1.1	14.9
	1.1 - 2.0	0.6	1.1	1.8	3.8	5.2	6.6	5.8	2.4	0.9	0.5	0.4	0.4	0.7	1.4	1.2	1.1	33.9
	2.1 - 3.0	0.3	0.3	0.6	1.6	3.0	1.9	1.2	1.0	0.7	0.7	0.2	1.1	1.3	1.0	0.9	0.6	16.4
	3.1 - 4.0	0.3	0.0	0.1	0.7	1.0	0.4	0.7	1.1	0.6	0.3	0.1	0.7	2.0	1.0	1.2	0.6	10.9
	4.1 - 5.0	0.1	0.2	0.1	0.3	0.3	0.2	0.8	0.7	0.3	0.4	0.4	1.1	1.7	1.4	0.7	0.2	8.9
	5.1 - 6.0	0.2	0.1	0.1	0.3	0.1	0.1	0.2	0.8	0.2	0.3	0.6	1.2	1.6	0.6	0.4	0.1	7.0
	6.1 - 7.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.7	0.0	0.1	0.2	0.7	1.5	0.3	0.2	0.2	4.6
	7.1 - 8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.1	0.1	0.0	0.3	0.4	0.1	0.0	0.0	2.3
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.2	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	0.1	0.1	0.0	0.0	0.0	0.3
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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		2.4	2.6	3.7	7.6	10.6	10.7	12.3	9.0	3.7	2.8	2.2	6.3	10.0	6.7	5.5	3.9	100.0
Average Speed		2.2	1.8	1.7	2.2	2.1	1.8	2.4	3.1	2.6	3.2	3.9	4.3	4.4	3.4	2.9	2.3	2.8

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

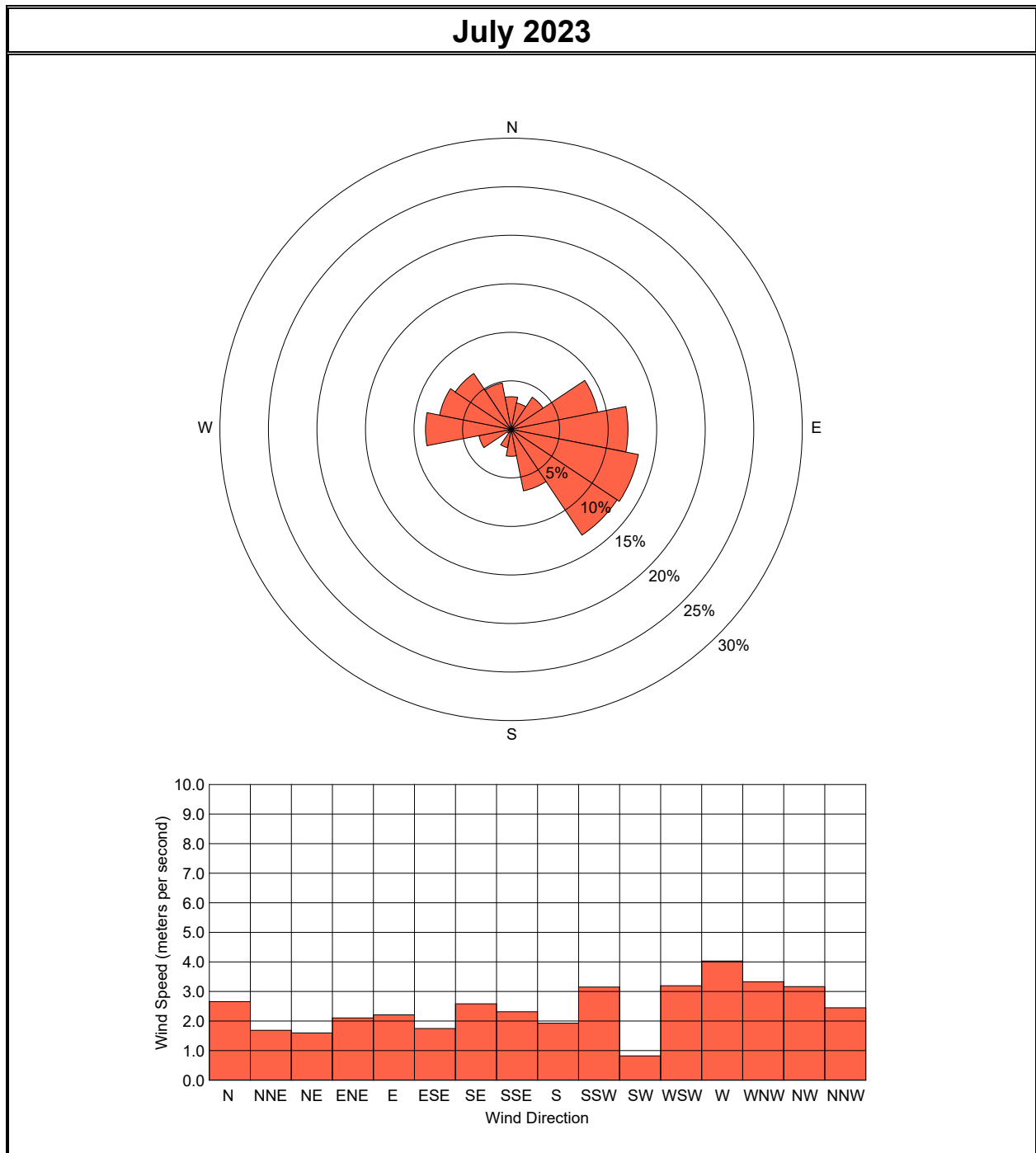


Figure 3. August Wind Rose, Black Butte Copper Project Met Tower

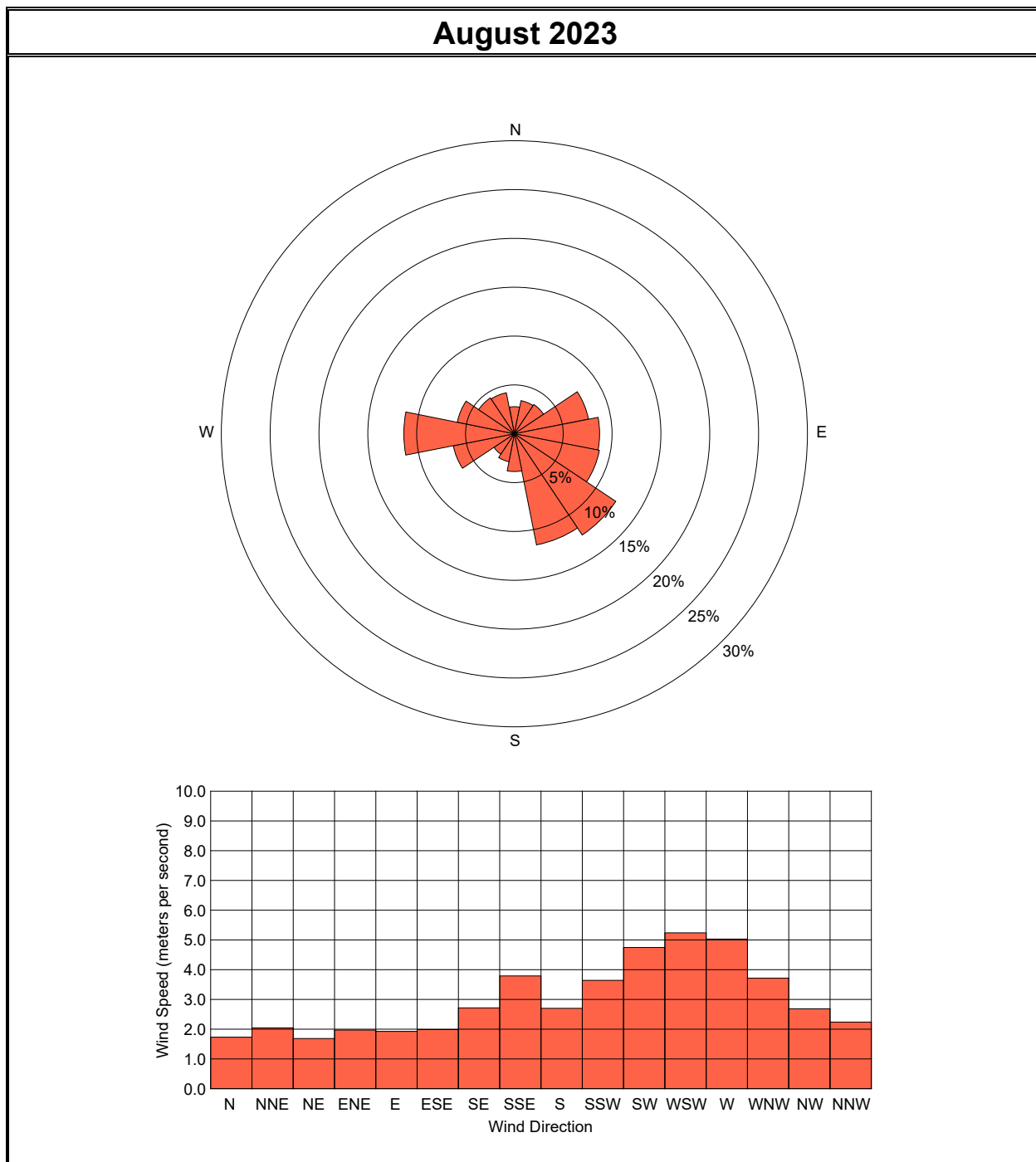


Figure 4. September Wind Rose, Black Butte Copper Project Met Tower

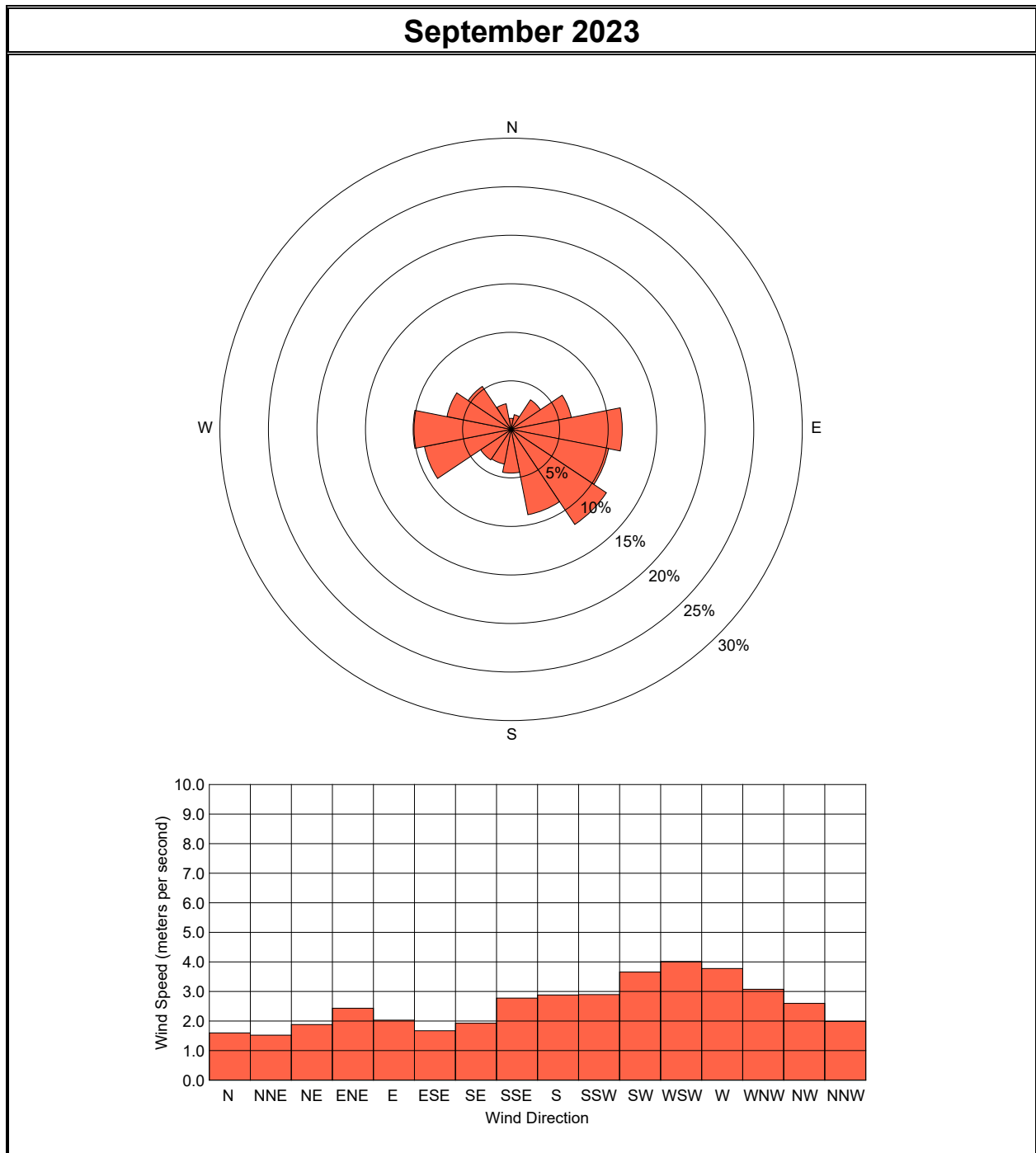
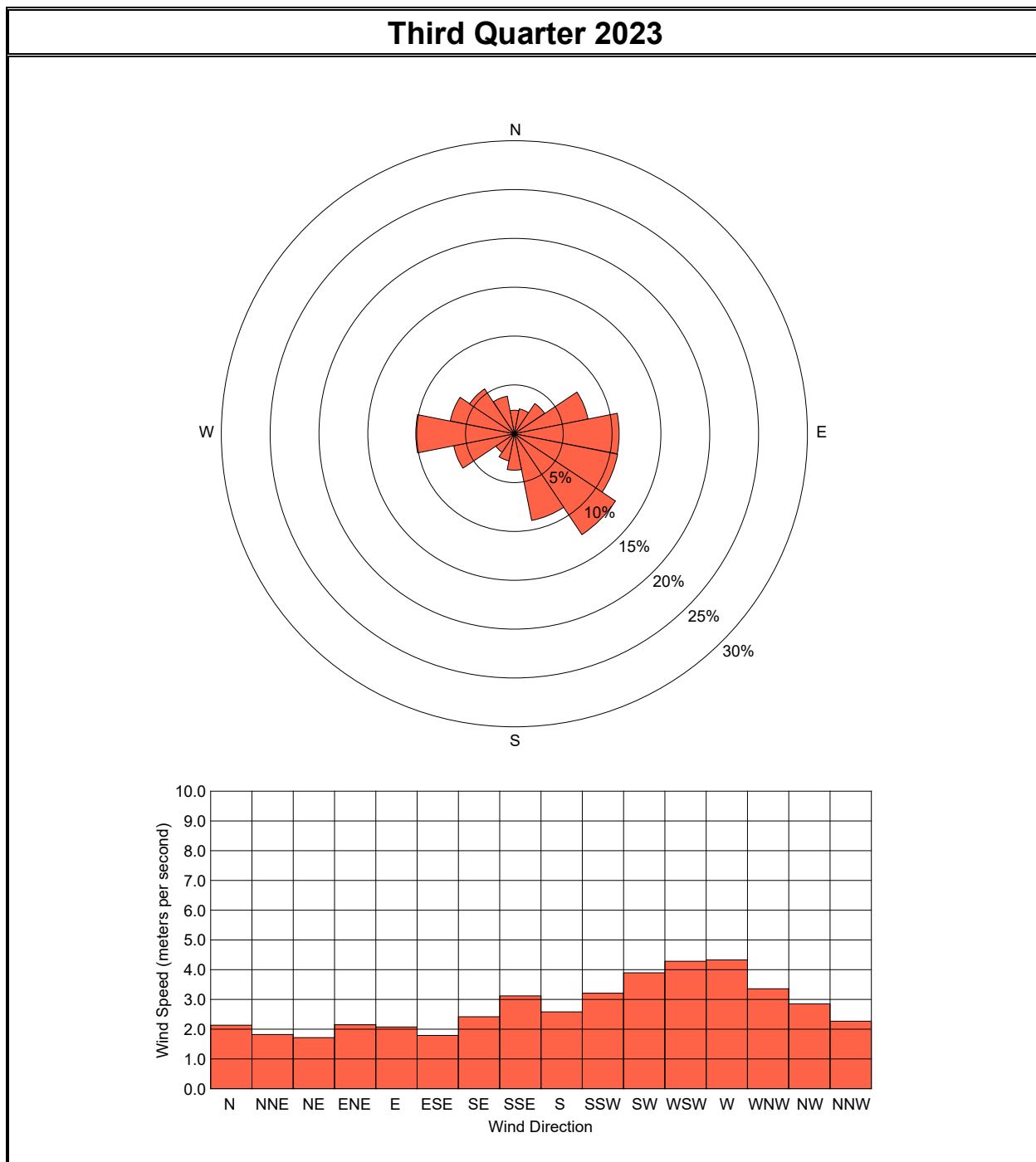


Figure 5. Q3 Wind Rose, Black Butte Copper Project Met Tower



APPENDIX A: HOURLY AIR QUALITY AND METEOROLOGICAL DATA, THIRD QUARTER 2023

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Wind Speed (meters per second)
July 2023

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	2.2	1.8	1.6	1.5	1.7	0.9	1.0	0.7	0.3	1.1	1.8	0.6	9.2	10.1	2.3	3.4	2.8	3.0	4.5	4.1	1.8	2.5	2.5	1.9	2.6	10.1	0.3
2	1.4	1.7	1.4	1.3	1.4	1.2	0.7	1.0	4.4	6.4	6.3	6.5	6.7	5.7	5.2	1.1	0.9	1.8	5.2	4.4	1.2	2.3	1.8	1.9	3.0	6.7	0.7
3	1.5	1.0	1.6	1.3	1.1	0.6	0.7	1.1	4.6	4.4	4.1	3.6	2.1	2.4	3.5	5.2	4.1	5.1	4.8	4.2	1.4	1.4	3.3	3.0	2.8	5.2	0.6
4	1.5	5.3	5.8	5.5	4.3	3.0	2.7	3.2	3.5	3.9	4.9	5.6	4.2	3.8	3.9	4.7	3.8	2.2	3.3	4.4	2.8	1.5	1.5	1.7	3.6	5.8	1.5
5	1.2	1.7	2.1	1.1	1.3	1.0	0.6	0.6	1.5	2.0	2.4	3.1	3.0	4.2	3.6	2.1	2.5	2.9	5.9	3.6	2.1	2.8	2.2	1.0	2.3	5.9	0.6
6	1.4	1.5	1.3	2.0	1.7	1.2	0.8	0.9	1.0	0.7	1.5	3.4	4.4	6.2	5.2	3.4	1.7	1.0	1.8	2.0	2.1	3.4	2.7	2.4	2.2	6.2	0.7
7	2.3	1.9	1.9	1.4	1.9	1.5	1.2	0.9	1.6	6.6	6.6	6.6	5.6	7.6	7.6	7.4	7.4	8.6	7.7	4.4	3.0	1.5	1.3	1.4	4.1	8.6	0.9
8	2.4	2.4	1.6	1.6	0.7	0.6	0.6	0.9	2.7	4.0	2.8	2.2	2.7	5.5	6.6	5.6	3.7	2.2	1.6	3.6	3.3	5.5	3.4	2.4	2.9	6.6	0.6
9	2.9	2.4	2.0	1.8	1.6	1.5	0.7	0.6	0.5	0.5	0.7	0.8	1.0	1.2	4.0	0.6	2.1	2.0	1.9	1.2	1.6	4.3	3.0	2.7	1.7	4.3	0.5
10	2.1	2.2	1.7	1.4	1.4	1.0	0.9	1.2	1.7	3.0	1.6	0.9	1.0	Vo	Vo	1.9	6.4	7.8	3.4	1.9	1.2	1.6	3.2	3.0	2.3	7.8	0.9
11	1.5	2.3	1.3	1.5	1.6	1.2	1.0	0.9	2.8	5.8	6.2	6.9	7.2	7.4	7.2	7.8	7.2	6.2	6.0	4.1	3.1	1.2	2.0	1.7	3.9	7.8	0.9
12	1.0	1.4	0.8	0.8	0.7	1.0	0.7	0.7	2.3	3.4	3.2	3.9	4.1	5.1	4.3	3.8	3.8	5.6	3.3	0.8	1.5	2.4	2.3	0.9	2.4	5.6	0.7
13	1.2	0.7	0.9	0.9	1.1	1.0	1.8	1.3	2.1	4.8	5.1	4.1	5.3	6.1	5.1	4.8	4.8	4.5	6.6	5.6	2.1	3.1	1.3	1.0	3.1	6.6	0.7
14	1.6	1.8	1.0	0.9	0.8	0.7	0.7	0.8	0.9	3.7	4.7	5.1	4.7	4.9	5.1	5.3	5.3	4.4	3.4	1.2	1.2	1.7	1.7	1.5	2.6	5.3	0.7
15	1.3	1.5	1.0	1.1	1.2	1.3	0.5	0.6	1.0	3.7	4.7	5.0	4.8	4.6	3.7	2.3	1.3	1.6	2.9	1.5	1.5	2.3	1.7	2.0	2.2	5.0	0.5
16	1.7	1.2	1.3	0.7	1.6	0.7	0.7	0.7	1.3	3.6	3.3	3.2	3.3	0.4	Vo	Vo	0.4	0.9	1.4	1.8	2.6	1.3	1.7	1.3	1.6	3.6	0.4
17	1.0	2.4	2.1	1.4	1.2	0.8	0.6	1.3	3.8	4.1	4.6	3.1	3.7	4.2	6.7	1.2	Vo	0.3	3.5	5.0	4.5	6.8	5.3	2.9	3.1	6.8	0.3
18	2.3	2.0	1.5	1.9	1.6	1.4	3.1	5.7	7.6	7.1	5.2	5.4	6.3	5.4	5.6	5.4	4.8	4.6	5.2	3.8	1.6	2.6	1.6	1.1	3.9	7.6	1.1
19	1.4	1.6	0.9	1.3	1.1	1.2	0.7	0.6	1.6	2.3	2.2	2.8	2.6	2.3	1.0	Vo	Vo	2.4	4.1	3.4	3.3	2.9	2.6	3.2	2.1	4.1	0.6
20	2.9	2.2	4.3	2.1	1.5	1.4	1.2	2.5	7.2	5.4	3.6	3.3	3.4	1.0	Vo	Vo	Vo	0.9	5.3	4.1	2.1	1.6	1.9	2.4	2.9	7.2	0.9
21	2.5	2.6	2.4	2.4	1.7	1.4	0.8	0.6	0.5	0.4	Vo	Vo	Vo	Vo	Vo	0.3	Vo	Vo	Vo	0.7	2.0	2.8	2.4	1.0	1.5	2.8	0.3
22	1.1	1.2	0.8	1.3	0.8	1.5	0.6	0.5	0.4	Vo	Vo	Vo	Vo	Vo	Vo	Vo	Vo	Vo	Vo	0.6	2.5	1.3	1.5	1.6	1.1	2.5	0.4
23	1.2	1.1	1.7	1.2	1.0	1.0	0.7	1.0	0.7	0.3	Vo	Vo	Vo	Vo	Vo	Vo	Vo	Vo	0.3	3.7	4.9	3.4	2.2	2.5	1.7	4.9	0.3
24	1.3	1.3	1.1	0.9	1.8	2.0	1.4	1.9	Vo	Vo	Vo	Vo	Vo	Vo	0.7	4.5	5.7	1.6	1.5	1.3	1.8	1.6	1.1	1.2	1.8	5.7	0.7
25	1.5	2.3	2.0	2.0	1.7	1.5	0.9	0.8	1.7	3.5	4.9	4.2	4.7	2.2	0.6	0.4	0.5	1.3	3.6	3.1	1.2	1.4	2.8	2.4	2.1	4.9	0.4
26	1.1	1.8	1.0	1.0	0.9	1.0	0.6	0.7	1.8	3.9	3.5	4.8	5.0	6.7	6.3	5.0	5.3	6.2	5.3	4.4	1.9	1.5	1.9	2.6	3.1	6.7	0.6
27	1.9	1.8	1.7	1.5	1.6	1.6	1.1	0.9	1.0	1.4	2.4	2.8	6.8	5.0	2.6	2.0	3.2	1.5	1.6	4.1	3.2	2.9	2.4	2.9	2.4	6.8	0.9
28	1.7	1.4	1.3	1.3	1.7	1.3	1.1	1.8	1.1	1.7	1.7	2.6	1.8	1.7	4.3	3.1	3.4	2.2	2.7	1.7	1.4	3.2	1.5	2.0	2.0	4.3	1.1
29	1.0	1.7	0.9	0.8	1.0	1.1	0.9	0.7	3.1	4.7	4.1	4.2	3.9	1.4	Vo	Vo	1.1	0.9	5.4	1.8	2.0	3.1	2.0	2.8	2.2	5.4	0.7
30	2.1	2.4	1.9	2.0	1.2	1.3	0.9	0.9	1.3	2.2	0.5	Vo	Vo	Vo	Vo	Vo	2.8	0.4	Vo	3.8	2.4	3.8	2.7	2.8	2.0	3.8	0.4
31	1.6	1.6	1.7	1.1	0.8	1.6	1.3	1.0	2.2	2.0	Vo	Vo	Vo	Vo	Vo	Vo	Vo	Vo	4.0	6.3	6.0	2.3	1.2	1.5	2.3	6.3	0.8
Avg	1.7	1.9	1.7	1.5	1.4	1.2	1.0	1.2	2.2	3.3	3.6	3.8	4.3	4.4	4.3	3.5	3.5	3.0	3.8	3.1	2.4	2.6	2.2	2.0	2.6	5.8	0.7
Max	2.9	5.3	5.8	5.5	4.3	3.0	3.1	5.7	7.6	7.1	6.6	6.9	9.2	10.1	7.6	7.8	7.4	8.6	7.7	6.3	6.0	6.8	5.3	3.2	4.1	10.1	1.5
Min	1.0	0.7	0.8	0.7	0.7	0.6	0.5	0.5	0.3	0.3	0.5	0.6	1.0	0.4	0.6	0.3	0.4	0.3	0.3	0.6	1.2	1.2	1.1	0.9	1.1	2.5	0.3

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Wind Speed (meters per second)
August 2023

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	1.1	1.5	1.3	1.2	0.9	1.3	0.9	0.7	0.6	3.3	2.7	0.8	0.5	Vo	Vo	Vo	Vo	Vo	0.3	1.6	2.4	2.8	1.8	1.7	1.4	3.3	0.3
2	1.0	1.2	0.8	0.7	0.8	0.9	0.8	0.7	0.6	0.4	0.5	Vo	Vo	Vo	0.3	4.9	6.1	5.3	2.4	5.9	4.9	3.3	3.3	1.8	2.2	6.1	0.3
3	2.0	2.0	1.8	1.3	1.2	1.0	1.2	0.8	1.0	1.8	1.8	3.0	3.0	4.4	4.7	3.7	5.8	4.9	3.0	1.9	2.6	2.2	2.4	3.1	2.5	5.8	0.8
4	3.3	2.0	2.4	1.3	1.0	1.6	1.4	2.4	5.3	5.2	5.9	6.2	4.8	6.1	5.1	4.7	3.9	3.1	2.5	7.9	5.5	3.6	1.9	1.4	3.7	7.9	1.0
5	1.0	1.2	1.6	0.6	1.1	1.0	1.5	1.9	1.8	1.1	1.4	1.5	1.4	1.8	2.3	3.1	2.3	1.2	2.2	3.3	0.9	1.2	1.4	1.1	1.6	3.3	0.6
6	1.8	2.9	2.6	1.9	1.2	1.1	2.2	1.7	3.7	4.8	5.7	3.9	3.1	3.3	4.6	4.6	3.6	3.1	1.8	4.9	1.8	1.8	1.5	2.0	2.9	5.7	1.1
7	2.5	1.8	1.3	1.3	1.2	1.6	0.7	0.8	1.6	2.5	1.5	2.6	3.2	2.3	1.9	1.9	2.4	2.0	2.6	3.6	1.7	1.5	1.5	1.2	1.9	3.6	0.7
8	1.8	1.4	1.4	1.2	0.6	0.8	1.6	0.8	0.9	2.9	3.3	3.3	3.2	2.0	3.2	4.0	3.6	4.2	2.9	1.9	1.3	2.5	2.8	2.4	2.2	4.2	0.6
9	1.8	1.4	1.6	1.5	1.6	2.2	1.0	0.7	2.4	3.9	5.4	5.4	5.3	5.4	6.2	4.8	3.7	1.5	1.1	5.3	4.5	2.3	1.8	1.2	3.0	6.2	0.7
10	1.4	1.3	1.1	2.0	1.5	1.3	1.1	3.4	5.9	6.2	Au	Au	Au	Au	Au	Au	Au	7.0	5.7	4.5	2.8	4.5	1.9	1.7	3.1	7.0	1.1
11	2.7	2.7	1.6	1.3	0.7	0.6	0.6	0.4	1.2	4.1	4.2	4.1	5.2	5.5	5.8	5.9	4.5	5.1	4.4	2.7	3.0	3.1	1.9	2.2	3.1	5.9	0.4
12	1.2	1.5	1.0	1.1	0.6	1.1	0.4	0.4	0.6	2.5	6.1	6.8	5.2	5.2	5.8	6.2	6.5	5.5	2.7	4.1	3.8	2.2	1.8	2.7	3.1	6.8	0.4
13	1.5	0.4	1.1	2.0	1.6	2.6	1.0	0.9	1.5	3.8	3.7	3.9	4.5	4.1	3.8	3.3	2.7	3.7	3.0	1.5	1.6	1.3	1.5	1.4	2.3	4.5	0.4
14	1.7	1.6	1.8	1.6	1.6	1.1	1.8	0.6	0.8	1.2	2.4	2.5	2.9	2.4	2.0	2.8	2.7	1.9	1.6	1.1	3.3	3.4	2.9	2.2	2.0	3.4	0.6
15	1.7	1.3	1.2	1.4	1.0	1.0	0.6	0.5	0.7	1.6	3.6	4.6	4.7	6.0	5.3	6.1	6.7	4.9	4.1	2.1	2.1	2.1	2.0	1.8	2.8	6.7	0.5
16	1.7	1.5	1.9	1.5	0.8	0.8	1.0	2.8	1.6	2.0	2.1	4.4	5.1	5.8	6.4	6.3	5.3	4.7	3.1	1.6	2.9	1.6	1.8	1.1	2.8	6.4	0.8
17	1.0	1.4	1.4	1.4	1.6	1.8	0.8	0.6	0.8	2.0	4.6	5.4	5.9	7.1	7.2	6.6	5.3	4.0	2.8	1.6	1.9	2.6	1.6	1.8	3.0	7.2	0.6
18	0.7	1.0	1.3	1.4	1.6	1.4	0.9	0.8	1.4	6.0	6.2	8.3	8.2	8.9	8.0	10.4	5.4	7.0	6.9	6.1	3.5	3.8	4.6	3.7	4.5	10.4	0.7
19	1.9	4.8	3.0	2.2	1.2	1.0	1.4	0.5	0.7	1.0	3.6	6.1	7.0	7.5	8.0	8.4	8.5	8.8	8.9	4.0	3.8	5.1	5.7	5.1	4.5	8.9	0.5
20	5.2	6.2	5.4	3.8	1.7	1.3	0.9	2.6	3.9	5.2	7.1	6.0	4.5	2.8	2.6	4.1	4.7	4.3	4.2	3.5	2.3	1.3	1.3	1.0	3.6	7.1	0.9
21	0.9	0.7	0.7	1.3	2.2	1.2	1.7	1.2	1.4	1.3	3.0	6.2	8.1	6.5	5.9	7.0	3.6	5.5	6.1	4.4	1.5	2.0	2.1	5.2	3.3	8.1	0.7
22	4.5	5.4	3.8	3.3	4.3	2.6	2.7	3.3	4.3	4.9	5.9	7.9	7.5	7.5	6.3	4.8	5.5	6.0	3.8	3.1	2.1	1.9	1.2	1.8	4.3	7.9	1.2
23	1.7	1.8	2.2	2.1	2.5	2.1	1.7	2.0	4.6	6.8	6.8	5.6	6.4	5.3	5.2	3.4	2.4	3.8	2.7	1.6	2.0	2.0	2.2	1.7	3.3	6.8	1.6
24	1.2	1.1	1.4	1.5	1.6	1.5	0.9	0.7	0.9	3.4	6.7	8.7	8.6	7.5	7.5	6.5	5.6	4.9	3.7	2.0	2.4	1.4	1.3	1.1	3.4	8.7	0.7
25	1.6	1.5	1.4	1.3	1.0	1.0	0.6	1.1	6.9	6.9	7.9	7.5	7.2	7.7	7.8	7.0	4.3	3.4	3.7	1.7	2.6	3.3	2.9	1.3	3.8	7.9	0.6
26	1.6	1.8	2.3	1.6	1.1	1.5	1.5	0.9	0.9	2.1	3.2	4.7	4.5	6.1	5.2	4.2	4.4	3.1	1.3	1.6	2.2	2.7	2.4	1.7	2.6	6.1	0.9
27	1.2	1.0	0.9	1.2	0.5	0.9	0.7	0.8	0.7	0.7	3.0	3.5	4.0	5.1	5.9	5.0	4.5	4.7	2.5	1.3	1.6	1.7	1.2	1.6	2.3	5.9	0.5
28	1.2	1.3	1.7	1.0	1.1	0.8	1.5	0.6	0.7	1.5	2.6	3.5	4.2	5.5	5.1	4.7	4.7	3.8	2.7	2.5	3.0	2.2	2.3	2.4	2.5	5.5	0.6
29	1.9	1.8	1.6	1.7	1.2	1.4	0.7	0.6	2.1	5.1	6.1	6.9	6.7	7.1	6.5	6.1	7.8	7.7	6.9	6.1	6.7	5.1	4.1	3.6	4.4	7.8	0.6
30	1.4	2.2	1.9	1.5	1.1	1.0	2.5	3.8	5.3	9.3	9.4	9.3	10.7	5.0	7.8	9.3	8.2	7.3	6.9	7.1	6.6	6.8	7.0	6.2	5.7	10.7	1.0
31	6.8	6.2	8.6	6.7	5.8	5.8	4.8	4.4	3.1	5.0	6.2	6.1	6.4	5.9	4.8	4.6	3.8	1.9	1.1	3.4	2.9	2.9	2.5	1.1	4.6	8.6	1.1
Avg	2.0	2.1	2.0	1.7	1.5	1.5	1.3	1.4	2.2	3.5	4.4	5.1	5.2	5.4	5.2	5.3	4.8	4.5	3.5	3.4	2.9	2.7	2.4	2.2	3.1	6.6	0.7
Max	6.8	6.2	8.6	6.7	5.8	5.8	4.8	4.4	6.9	9.3	9.4	9.3	10.7	8.9	8.0	10.4	8.5	8.8	8.9	7.9	6.7	6.8	7.0	6.2	5.7	10.7	1.6
Min	0.7	0.4	0.7	0.6	0.5	0.6	0.4	0.4	0.6	0.4	0.5	0.8	0.5	1.8	0.3	1.9	2.3	1.2	0.3	1.1	0.9	1.2	1.2	1.0	1.4	3.3	0.3

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Wind Speed (meters per second)
September 2023

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	1.3	2.4	1.6	1.5	1.7	1.4	1.1	3.0	7.5	7.1	7.7	7.2	5.6	3.5	3.9	6.5	5.2	1.9	1.6	1.6	1.9	2.6	2.4	3.4	7.7	0.9
2	1.7	1.3	0.9	1.6	1.5	1.6	1.5	0.6	2.9	5.1	6.5	7.2	6.6	6.0	7.3	6.6	6.8	4.6	2.5	1.2	1.4	1.6	1.2	1.7	3.3	7.3	0.6
3	1.2	1.0	1.2	0.8	1.4	1.0	0.9	0.6	1.5	4.6	2.7	4.1	5.5	4.6	6.0	4.8	2.0	2.1	1.5	0.9	0.7	1.0	1.2	1.0	2.2	6.0	0.6
4	1.0	0.9	0.5	1.2	1.6	1.7	1.8	1.9	2.5	3.1	4.5	3.0	3.3	3.2	3.8	4.6	4.8	3.8	1.7	1.5	1.6	0.7	0.7	0.7	2.3	4.8	0.5
5	1.1	0.8	1.7	1.0	2.1	0.7	1.1	0.8	1.8	3.5	4.0	4.4	5.1	5.1	4.1	4.2	4.6	3.0	2.6	1.9	2.1	2.2	3.1	1.0	2.6	5.1	0.7
6	1.6	1.5	1.8	2.1	1.7	1.4	1.3	0.7	0.8	2.9	4.7	5.4	5.5	4.9	3.1	3.9	4.7	4.8	3.0	2.0	2.8	2.8	2.9	3.3	2.9	5.5	0.7
7	2.7	3.3	2.0	2.1	3.9	1.3	2.6	1.5	0.8	0.9	1.9	4.6	4.5	2.9	3.7	3.9	4.1	3.5	1.4	2.0	3.3	1.8	1.8	2.6	2.6	4.6	0.8
8	4.1	2.5	1.4	2.7	3.7	4.1	3.8	2.1	2.5	2.7	1.2	2.7	3.0	2.8	4.6	5.2	4.9	3.5	3.7	3.6	1.6	1.1	1.6	1.6	2.9	5.2	1.1
9	1.6	1.7	1.5	1.5	1.3	0.7	1.0	0.9	0.7	0.8	1.6	1.9	2.5	2.9	3.4	4.0	3.5	2.4	2.7	4.4	3.0	1.8	1.9	1.1	2.0	4.4	0.7
10	1.5	1.3	1.7	1.7	1.5	1.1	0.8	1.2	0.6	1.0	2.4	2.0	2.5	2.0	2.2	2.0	2.3	1.7	1.9	2.5	3.6	3.8	1.3	1.0	1.8	3.8	0.6
11	1.2	1.5	1.7	1.3	1.7	1.4	1.8	1.0	0.6	1.8	2.8	3.3	2.3	3.0	3.6	3.7	3.7	2.4	1.8	2.6	2.0	1.3	1.2	1.0	2.0	3.7	0.6
12	1.3	1.6	1.6	1.6	1.4	0.9	0.8	0.5	0.7	0.9	2.5	3.5	3.1	3.5	4.8	5.6	4.9	3.1	1.6	2.5	1.8	1.9	2.6	2.1	2.3	5.6	0.5
13	3.0	2.7	2.5	1.9	1.5	2.2	1.4	0.7	1.1	5.4	5.1	4.0	4.3	4.5	6.1	7.0	6.0	4.5	3.2	1.4	1.8	2.0	2.1	0.9	3.1	7.0	0.7
14	1.1	1.4	0.8	0.7	1.2	0.7	0.4	0.6	0.6	0.7	2.1	3.3	3.0	3.4	3.4	2.8	3.8	3.2	1.6	2.8	2.4	2.8	2.0	1.4	1.9	3.8	0.4
15	1.8	1.9	1.7	1.4	1.5	1.2	1.4	1.2	0.9	1.3	3.3	3.5	3.2	3.3	3.0	3.1	2.6	2.3	2.0	3.7	3.3	2.7	2.5	1.9	2.3	3.7	0.9
16	1.9	0.9	1.1	1.4	1.4	1.0	1.1	1.0	0.8	0.9	3.9	4.9	5.3	4.6	5.3	5.2	4.1	3.0	1.9	3.1	2.4	3.0	1.9	1.8	2.6	5.3	0.8
17	1.6	1.7	1.6	1.5	1.0	1.2	1.3	0.9	0.7	0.9	1.9	4.4	6.1	5.4	7.1	5.8	5.4	5.3	2.6	0.9	1.4	1.8	2.5	1.9	2.7	7.1	0.7
18	1.2	1.4	1.6	2.1	1.5	1.3	1.2	1.0	1.1	7.1	8.5	6.3	4.7	5.0	4.0	6.8	7.0	4.9	3.9	3.8	4.4	2.3	2.4	2.0	3.6	8.5	1.0
19	1.8	1.6	1.1	1.5	1.3	1.6	1.3	1.3	2.8	4.7	5.2	6.6	5.6	4.7	4.1	3.9	2.5	4.7	3.9	3.1	1.5	1.5	1.3	2.3	2.9	6.6	1.1
20	1.9	1.4	1.3	1.1	1.2	0.8	0.9	0.6	0.8	1.2	1.7	2.7	3.7	4.0	3.3	4.5	5.3	5.6	5.8	4.8	4.4	6.0	5.6	4.9	3.1	6.0	0.6
21	4.8	4.5	5.3	1.9	2.7	3.5	3.0	2.7	3.1	2.2	2.3	1.9	2.0	1.9	2.4	3.0	3.3	2.0	0.9	1.4	1.3	2.7	2.4	1.9	2.6	5.3	0.9
22	2.1	1.9	1.7	1.3	0.8	1.7	0.7	0.4	0.6	0.7	1.5	1.6	1.0	2.5	2.8	1.7	1.5	2.7	2.7	2.7	2.2	1.6	1.2	2.8	1.7	2.8	0.4
23	2.7	3.3	3.6	4.0	3.7	3.1	2.2	2.6	4.2	3.0	2.8	3.0	4.9	5.4	4.8	4.7	3.9	1.8	1.2	2.3	2.5	2.0	1.4	1.6	3.1	5.4	1.2
24	1.0	1.0	1.0	0.9	1.2	1.0	1.3	0.7	0.7	1.5	2.8	3.0	3.7	4.1	4.5	5.8	4.2	1.6	3.9	2.3	2.1	1.9	1.9	1.5	2.2	5.8	0.7
25	1.6	1.3	0.8	0.4	1.1	1.7	1.9	1.3	1.2	2.4	3.9	6.1	5.2	6.1	5.7	5.0	3.9	2.3	2.1	2.3	1.3	1.9	1.6	1.7	2.6	6.1	0.4
26	1.3	1.3	1.4	1.4	1.5	1.2	1.1	0.8	2.1	6.7	7.6	7.4	6.6	6.4	5.4	4.2	6.1	3.9	2.1	1.7	1.8	1.3	1.5	1.6	3.2	7.6	0.8
27	1.8	1.2	1.6	1.4	1.3	1.4	1.5	0.9	0.7	7.3	9.1	8.1	7.1	4.9	4.5	5.1	6.9	6.9	5.4	2.2	1.9	3.0	3.5	2.6	3.8	9.1	0.7
28	3.9	2.5	2.8	2.3	1.5	1.5	2.4	2.6	3.0	6.0	5.5	6.1	6.0	5.1	5.5	4.3	3.6	2.5	1.2	2.3	2.4	1.5	1.4	0.9	3.2	6.1	0.9
29	2.0	0.8	0.7	1.1	1.4	0.9	1.0	1.2	0.7	1.2	1.9	3.2	3.3	3.9	2.9	2.9	2.6	1.9	2.4	3.1	3.0	2.3	4.2	3.5	2.2	4.2	0.7
30	2.7	1.6	2.1	4.1	1.9	1.4	1.3	1.9	2.0	1.2	2.9	3.8	4.2	4.4	4.7	5.1	4.9	4.3	3.7	3.9	1.2	2.0	1.6	2.9	2.9	5.1	1.2
Avg	1.9	1.7	1.7	1.7	1.7	1.5	1.5	1.2	1.5	3.0	3.8	4.3	4.4	4.2	4.3	4.4	4.3	3.5	2.6	2.5	2.2	2.1	2.1	1.9	2.7	5.6	0.7
Max	4.8	4.5	5.3	4.1	3.9	4.1	3.8	2.7	4.2	7.5	9.1	8.1	7.2	6.4	7.3	7.0	7.0	6.9	5.8	4.8	4.4	6.0	5.6	4.9	3.8	9.1	1.2
Min	0.9	0.8	0.5	0.4	0.8	0.7	0.4	0.4	0.6	0.7	1.2	1.6	1.0	1.9	2.2	1.7	1.5	1.6	0.9	0.9	0.7	0.7	0.7	0.7	1.7	2.8	0.4

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Wind Direction (degrees)
July 2023

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	91	101	101	102	132	113	111	358	39	291	259	262	257	205	139	141	241	201	195	158	110	92	88	63	132
2	63	122	79	103	96	54	36	39	263	258	259	267	257	259	249	257	272	285	301	300	159	90	120	108	268
3	85	26	14	85	214	277	165	328	139	131	145	158	187	176	286	356	344	23	29	20	127	39	62	352	63
4	307	349	359	2	357	337	348	328	313	320	342	338	328	342	320	136	107	99	125	143	143	130	120	125	10
5	108	66	71	80	128	128	27	108	121	177	271	275	261	254	253	273	289	276	150	152	118	93	92	58	127
6	53	41	26	73	94	88	237	322	318	274	319	327	89	74	67	58	80	20	207	175	121	80	98	73	59
7	77	65	56	77	73	129	164	309	287	145	142	95	75	137	145	143	139	138	137	120	85	76	27	61	104
8	86	100	145	134	354	346	341	203	141	159	175	156	253	52	81	79	74	88	92	154	101	76	86	70	102
9	45	60	74	71	71	113	159	336	302	327	299	278	252	269	356	342	341	344	76	297	137	140	88	105	22
10	95	54	88	61	104	155	175	70	178	108	179	93	174	255	285	317	266	279	238	131	208	145	75	133	141
11	141	98	49	104	88	117	346	345	285	273	280	265	289	268	282	289	308	312	318	309	318	117	80	116	321
12	118	118	96	42	343	115	143	326	323	275	282	243	274	268	266	265	290	293	317	221	126	82	105	16	296
13	289	52	59	333	84	78	123	109	271	276	284	306	317	298	275	293	285	304	329	354	322	314	300	106	322
14	103	75	84	92	102	118	112	141	302	279	282	272	284	283	334	325	317	322	319	343	85	9	90	135	13
15	70	68	107	85	92	138	32	319	348	264	282	277	272	295	286	294	281	288	291	243	131	99	91	101	332
16	105	87	150	31	122	73	136	324	289	286	285	283	274	303	234	303	332	71	83	112	114	105	120	127	82
17	130	147	144	157	137	141	143	144	144	166	272	58	87	149	213	244	255	271	279	295	300	330	329	317	188
18	115	86	87	121	100	75	323	285	272	263	261	270	259	268	278	289	281	291	312	311	354	108	179	125	283
19	51	118	32	79	49	122	107	166	348	207	334	286	247	316	315	290	318	78	75	79	81	76	86	73	55
20	99	116	153	142	150	152	122	162	157	159	165	162	182	154	140	257	308	44	139	112	55	101	113	121	137
21	116	114	102	68	57	126	147	310	327	350	338	279	274	300	316	298	270	258	319	132	102	87	62	13	9
22	30	70	41	127	52	124	161	177	301	360	306	280	276	266	269	273	290	285	261	98	85	27	37	67	351
23	123	68	35	94	87	73	131	88	11	276	266	276	287	305	2	332	141	217	161	185	87	110	109	78	88
24	113	111	153	124	137	144	120	82	113	134	271	244	259	205	244	262	201	147	131	135	139	135	134	142	152
25	128	110	104	91	110	122	154	356	320	275	241	245	247	240	231	250	285	285	317	311	327	4	89	106	262
26	108	110	130	8	134	120	171	58	355	279	267	262	293	280	269	262	287	305	310	317	80	112	68	85	333
27	33	101	122	121	126	109	148	156	299	324	126	307	325	358	38	352	343	68	66	51	116	99	130	122	77
28	108	109	115	139	86	146	154	135	148	268	320	358	138	44	152	159	264	278	172	72	5	137	85	102	122
29	71	24	138	103	202	132	65	109	162	142	138	145	153	171	213	219	159	153	141	114	110	85	102	105	132
30	112	97	99	74	57	50	143	243	358	180	185	183	193	190	202	239	212	203	195	186	136	85	64	81	149
31	25	107	75	155	55	107	119	205	321	317	156	160	171	160	186	167	245	205	133	126	127	58	129	145	139
Prev	88	86	89	91	94	111	127	32	308	257	262	264	253	259	263	277	282	291	193	130	103	87	91	93	102

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Wind Direction (degrees)
August 2023

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	318	129	14	79	71	70	81	356	12	322	303	266	287	284	285	309	298	261	209	131	75	68	84	31	360
2	37	114	53	332	306	355	27	337	357	126	155	148	152	157	143	140	137	156	129	159	133	82	79	89	105
3	50	65	112	81	55	88	132	170	32	168	171	351	32	23	97	120	147	140	128	80	36	48	95	37	87
4	306	97	78	310	142	145	176	259	253	279	308	330	322	276	273	314	329	340	342	125	161	139	335	302	298
5	181	122	40	341	180	149	304	262	146	205	340	247	265	5	317	267	310	307	96	140	22	60	83	146	283
6	141	180	172	183	159	223	127	115	137	149	148	140	145	342	52	96	78	110	172	162	149	169	99	93	139
7	77	94	90	104	89	120	147	164	154	161	146	150	285	279	32	42	332	294	194	157	161	152	112	51	124
8	41	81	91	134	34	344	127	157	13	269	275	278	354	339	251	258	266	257	261	189	68	85	81	81	11
9	86	63	103	138	94	87	148	287	152	213	248	230	232	226	220	255	269	242	147	241	318	79	148	71	182
10	123	130	103	155	110	104	92	180	252	248	Au	Au	Au	Au	Au	Au	Au	293	300	302	291	303	56	15	137
11	63	73	99	51	40	72	124	326	346	273	261	271	241	268	244	232	239	272	303	317	106	104	71	90	342
12	30	108	128	132	88	126	118	175	135	315	278	265	284	276	296	309	336	15	8	20	72	145	162	13	51
13	292	359	87	63	63	66	70	143	358	3	351	10	26	339	334	345	37	16	25	62	105	64	88	63	35
14	73	48	74	75	103	77	121	284	5	342	300	275	296	194	243	302	260	236	265	109	99	78	75	105	49
15	91	99	105	128	129	112	129	144	315	323	275	255	274	252	268	262	255	247	285	258	128	109	69	88	189
16	76	79	83	48	57	35	47	337	292	329	331	290	263	269	268	272	272	280	283	156	106	122	98	132	354
17	143	143	116	109	66	81	130	5	318	288	268	271	262	253	251	270	289	274	257	147	68	99	58	134	199
18	31	144	130	17	90	69	105	128	22	235	251	258	246	249	256	295	279	286	265	260	294	301	293	314	279
19	285	279	340	143	181	134	125	275	287	6	162	153	151	146	149	146	148	141	139	139	134	158	147	147	155
20	154	155	170	160	132	119	173	157	173	162	157	162	156	155	148	143	157	140	142	157	153	160	159	140	154
21	157	93	241	96	152	140	138	174	151	144	151	159	152	150	147	140	110	143	152	159	117	139	205	200	149
22	214	197	199	189	187	196	138	149	184	173	200	208	198	189	235	79	184	201	194	190	107	65	317	115	181
23	104	332	95	335	70	116	125	137	212	228	235	255	237	250	236	223	210	268	293	105	90	48	57	58	179
24	84	78	64	47	110	137	163	324	349	289	252	267	277	256	272	278	305	325	322	333	78	4	313	99	331
25	116	153	330	132	165	140	356	74	149	141	152	153	150	143	136	151	105	107	154	148	134	155	268	197	141
26	100	93	119	71	21	71	140	154	334	304	254	290	269	243	275	288	282	272	210	131	87	86	73	67	82
27	74	176	87	118	18	108	96	167	138	329	253	263	294	264	263	275	311	315	357	119	32	111	109	70	72
28	50	110	131	114	137	138	123	234	311	220	204	214	253	77	104	105	197	142	151	91	104	95	16	63	128
29	108	122	115	152	111	144	339	173	134	152	157	162	179	168	153	156	144	130	119	112	130	240	60	285	142
30	41	55	117	99	105	119	297	267	253	246	264	260	224	246	241	264	266	270	269	272	273	273	269	261	259
31	257	266	284	275	276	282	285	260	260	257	260	278	259	275	256	268	278	319	347	95	59	66	96	358	283
Prev	83	107	99	100	100	108	119	195	295	249	239	244	249	249	242	254	260	260	227	142	99	100	83	80	141

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Wind Direction (degrees)
September 2023

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	50	127	130	198	160	310	168	178	184	157	158	156	148	148	150	150	149	144	138	120	140	127	101	123	146
2	138	154	157	139	141	110	124	226	220	231	258	264	253	253	244	254	239	237	245	163	123	61	78	84	190
3	92	93	142	86	129	139	133	104	344	216	179	169	211	212	224	333	29	83	123	158	91	51	134	158	130
4	140	353	252	166	244	224	333	290	319	313	319	326	330	329	298	296	313	316	307	303	311	279	233	89	299
5	68	167	91	133	88	128	157	148	143	171	153	165	172	182	200	188	198	235	171	161	118	101	101	139	150
6	124	105	94	81	111	124	131	142	93	207	252	245	256	242	257	242	220	220	206	124	165	94	66	334	163
7	70	87	83	109	81	144	94	102	169	338	232	236	257	269	258	268	244	309	337	334	69	117	28	100	86
8	161	113	130	241	52	104	262	334	80	111	259	210	235	282	274	257	224	76	79	63	332	53	95	59	112
9	83	85	77	103	130	122	141	144	140	269	279	301	328	342	301	315	39	89	128	76	82	45	111	97	83
10	44	11	36	51	54	88	68	152	299	160	170	203	233	340	257	228	285	289	61	65	78	81	175	179	87
11	141	86	105	133	106	127	128	160	225	133	165	164	243	257	271	260	250	237	141	102	72	60	48	52	143
12	93	90	99	106	115	102	123	158	252	259	138	174	198	228	260	253	248	247	125	106	118	70	125	43	144
13	55	29	98	96	122	83	96	197	133	255	269	263	267	299	282	289	296	297	317	93	126	96	79	67	62
14	32	135	57	23	119	133	142	137	336	307	252	284	275	276	319	264	268	272	283	90	35	72	76	110	1
15	86	91	80	73	114	85	123	141	175	32	202	208	261	270	266	283	241	241	136	90	79	81	97	77	122
16	110	107	110	124	133	88	130	175	309	155	251	261	261	261	257	255	259	245	129	99	71	66	77	111	149
17	114	131	126	116	72	128	107	181	350	345	299	247	245	247	230	223	223	238	243	203	93	90	80	108	166
18	80	73	121	71	123	94	46	354	338	267	266	274	277	288	285	279	284	286	280	266	290	174	103	85	307
19	100	140	100	8	62	124	104	102	261	271	266	266	274	249	278	304	294	290	349	76	43	141	90	99	36
20	100	70	72	48	119	113	110	209	196	100	246	164	157	143	162	152	110	74	86	85	72	68	68	70	110
21	67	52	51	97	294	323	49	354	310	306	280	224	263	247	253	268	263	202	54	291	283	294	278	275	297
22	245	181	272	296	291	165	192	250	171	336	332	323	316	162	223	307	306	324	315	310	316	288	304	276	281
23	282	281	290	284	265	272	262	264	273	272	270	296	251	259	265	272	259	300	151	100	94	89	62	100	271
24	86	125	142	137	152	112	144	148	126	147	138	190	184	173	207	221	200	160	90	103	118	118	117	107	142
25	121	132	102	41	84	115	106	121	50	140	174	157	165	162	164	164	157	142	160	150	110	159	176	145	136
26	106	83	152	135	151	199	168	286	33	150	169	180	195	242	215	228	201	187	127	116	16	213	48	86	161
27	88	114	109	128	120	145	149	148	54	142	145	133	133	141	226	243	269	296	304	292	180	251	259	282	167
28	256	244	210	165	120	132	152	121	243	248	259	250	247	266	244	259	251	286	268	97	78	105	30	353	227
29	122	24	155	93	91	107	78	165	307	13	163	242	283	311	202	188	176	134	105	70	81	113	135	146	125
30	170	139	166	149	293	318	259	282	313	322	281	311	304	293	264	268	256	258	267	253	288	313	63	304	278
Prev	100	102	113	107	114	121	127	166	265	234	230	229	244	251	247	254	247	250	144	104	82	91	90	93	157

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Standard Deviation of Wind Direction (degrees)
July 2023

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	21	14	41	40	16	54	65	96	93	23	16	19	14	52	44	41	44	30	12	17	45	44	20	42	38	96	12
2	56	54	73	73	39	61	95	54	48	14	15	22	20	22	19	16	21	14	11	30	47	29	19	47	37	95	11
3	39	57	73	65	58	86	74	40	42	24	24	26	49	59	55	46	45	17	9	13	81	68	18	62	47	86	9
4	60	29	13	12	17	18	19	17	13	19	30	23	24	22	23	55	31	43	48	9	11	24	21	14	25	60	9
5	41	21	21	40	32	48	67	90	73	95	57	38	40	23	26	56	41	47	9	12	37	17	40	75	44	95	9
6	32	20	46	33	29	41	75	44	66	63	67	60	22	16	16	26	91	86	32	24	52	16	18	22	42	91	16
7	24	39	42	38	36	24	47	52	99	12	10	33	40	14	10	10	12	11	9	18	16	84	65	53	33	99	9
8	16	25	22	19	100	71	52	54	42	14	36	79	35	45	16	12	15	25	42	6	29	9	19	24	34	100	6
9	19	25	30	32	34	38	57	51	66	74	37	31	37	47	89	58	12	31	18	36	87	66	38	21	43	89	12
10	25	33	55	41	47	73	79	81	72	43	82	80	50	35	50	30	26	26	92	40	58	24	30	96	53	96	24
11	100	24	57	67	47	42	80	67	35	18	17	21	13	17	14	14	18	15	13	12	37	49	32	56	36	100	12
12	95	23	49	41	74	43	82	81	54	28	32	35	32	26	25	25	22	12	12	93	25	27	46	90	45	95	12
13	100	104	51	46	54	78	93	72	71	22	20	18	24	12	21	18	12	18	15	22	46	25	73	64	45	104	12
14	40	25	28	63	58	86	65	64	80	13	22	20	18	27	13	14	16	10	10	39	53	38	30	15	35	86	10
15	46	58	71	36	51	20	66	65	45	25	25	24	23	19	19	24	32	17	20	92	28	17	25	25	36	92	17
16	34	41	33	59	28	50	52	75	80	16	29	32	30	26	46	33	36	29	12	47	29	70	38	66	41	80	12
17	57	14	16	23	43	62	76	19	15	31	43	47	19	31	16	20	19	16	12	8	12	6	7	81	29	81	6
18	20	28	46	30	47	48	39	15	15	18	19	21	19	23	18	19	16	18	11	10	71	20	52	91	30	91	10
19	76	28	48	73	42	44	52	76	86	50	37	44	72	37	36	66	44	25	34	14	14	13	27	12	44	86	12
20	24	33	14	16	17	28	95	48	8	13	20	18	30	39	50	83	49	27	14	16	18	61	29	23	32	95	8
21	15	14	21	21	48	25	78	74	74	56	62	33	33	26	24	28	21	24	34	82	28	16	21	27	37	82	14
22	59	40	55	31	47	33	81	62	44	40	51	25	34	28	30	18	21	16	55	70	29	42	40	52	42	81	16
23	38	53	63	72	53	65	90	63	28	51	41	36	46	63	24	49	56	33	25	67	25	21	30	18	46	90	18
24	32	41	46	92	22	16	35	32	26	47	49	58	28	19	31	14	25	68	49	26	13	20	81	43	38	92	13
25	60	22	28	23	52	45	68	78	68	24	21	21	20	20	21	31	16	16	14	13	44	41	20	26	33	78	13
26	69	28	46	42	101	60	67	83	38	22	44	32	29	17	21	19	19	19	15	8	76	44	41	27	40	101	8
27	50	29	32	35	30	33	18	25	35	39	87	87	12	17	44	42	44	72	70	46	36	26	55	45	42	87	12
28	28	33	40	37	51	58	79	42	52	80	37	68	71	89	14	18	92	97	63	84	70	37	42	61	56	97	14
29	94	81	74	66	86	77	93	76	65	14	18	19	22	45	40	16	52	16	10	27	51	16	65	26	48	94	10
30	33	32	33	28	32	43	61	78	61	56	18	16	21	22	25	30	45	16	18	7	67	41	25	23	35	78	7
31	21	40	50	53	62	48	62	77	17	27	39	17	29	27	25	31	38	29	10	7	10	95	53	82	40	95	7
Avg	46	36	42	43	47	49	67	60	52	35	36	36	31	31	29	31	33	30	26	32	40	36	36	45	39	90	12
Max	100	104	74	92	101	86	95	96	99	95	87	87	72	89	89	83	92	97	92	93	87	95	81	96	56	104	24
Min	15	14	13	12	16	16	18	15	8	12	10	16	12	12	10	10	12	10	9	6	10	6	7	12	25	60	6

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Standard Deviation of Wind Direction (degrees)
August 2023

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	81	38	57	44	36	65	66	68	70	18	24	33	29	24	28	27	40	34	24	30	18	19	43	32	40	81	18
2	73	59	72	88	79	88	43	38	41	49	8	10	9	19	14	8	8	13	16	39	23	12	17	31	36	88	8
3	36	24	21	39	48	57	47	43	76	56	57	33	69	33	29	79	11	12	18	38	41	45	81	99	46	99	11
4	52	63	34	78	39	54	49	20	11	14	13	12	30	24	24	10	9	14	40	27	22	42	81	51	34	81	9
5	92	79	43	101	91	83	76	60	76	79	59	87	26	82	24	21	35	63	49	15	54	38	85	70	62	101	15
6	50	32	33	68	64	103	23	33	11	10	8	17	36	19	57	23	17	35	11	37	23	91	44	16	36	103	8
7	12	26	26	44	41	34	18	52	25	39	44	24	48	29	76	36	33	25	44	8	27	23	24	34	33	76	8
8	31	48	43	36	80	62	20	31	59	30	37	49	32	52	35	19	18	8	24	65	66	24	20	22	38	80	8
9	26	40	30	13	43	29	32	94	41	33	22	19	19	20	17	18	16	32	67	56	62	39	51	58	37	94	13
10	29	66	62	84	55	88	88	93	14	16	Au	Au	Au	Au	Au	Au	Au	16	11	8	15	15	70	91	48	93	8
11	65	30	46	55	42	33	78	75	45	27	25	35	24	24	19	20	27	26	10	25	26	38	53	56	38	78	10
12	27	40	68	44	76	28	64	57	72	50	17	20	30	22	20	23	19	11	22	19	36	96	66	29	40	96	11
13	84	58	30	26	36	27	59	35	101	19	40	24	22	36	39	45	56	19	10	56	41	31	26	33	40	101	10
14	30	28	27	30	23	49	13	80	76	69	55	44	33	55	66	37	36	33	19	49	19	9	13	18	38	80	9
15	26	29	52	18	30	33	62	45	37	37	35	24	31	19	23	17	17	19	11	64	20	28	30	35	31	64	11
16	50	62	36	26	51	59	72	71	93	42	29	25	17	23	17	18	17	14	9	90	16	44	27	78	41	93	9
17	60	52	54	55	23	22	57	68	81	66	19	18	20	16	19	20	15	21	12	32	33	25	32	24	35	81	12
18	98	62	80	49	64	64	96	71	74	12	19	14	14	18	16	22	20	15	11	13	28	7	6	27	38	98	6
19	56	12	61	35	51	30	63	53	87	76	28	11	12	10	8	8	9	9	13	32	74	19	11	10	32	87	8
20	9	11	13	22	25	82	55	19	10	9	6	7	8	12	15	10	10	12	11	7	10	13	18	26	18	82	6
21	30	54	76	66	42	69	11	76	31	31	20	8	8	14	19	26	24	14	8	10	96	16	53	8	34	96	8
22	11	7	13	15	11	18	50	27	13	11	23	17	16	14	72	10	35	13	12	45	28	68	103	39	28	103	7
23	73	52	43	86	22	27	42	28	33	16	19	26	18	27	16	13	25	27	18	67	37	34	17	36	33	86	13
24	34	54	45	49	31	13	36	82	49	45	18	16	17	19	20	25	14	14	17	39	82	60	62	79	38	82	13
25	40	44	78	46	70	61	79	87	10	12	8	9	10	12	12	9	25	20	32	64	32	43	51	43	37	87	8
26	89	42	19	39	45	50	19	38	44	49	30	28	34	23	36	29	27	23	43	27	25	13	18	39	35	89	13
27	52	57	54	68	63	33	50	79	67	97	52	31	37	17	14	14	26	9	28	51	46	41	67	42	46	97	9
28	47	30	22	26	28	36	16	88	62	90	48	42	57	12	57	28	38	9	41	50	32	51	44	43	42	90	9
29	51	57	42	28	81	36	97	72	55	11	13	15	18	19	15	16	15	9	9	9	43	70	50	45	37	97	9
30	55	35	60	73	59	68	32	20	16	13	14	17	28	49	24	13	14	13	12	11	11	12	12	13	28	73	11
31	12	13	10	12	11	22	14	14	22	17	18	19	18	20	26	26	24	43	42	29	16	27	33	94	24	94	10
Avg	48	42	44	47	47	49	49	55	48	37	27	24	26	25	29	22	23	20	22	36	36	35	42	43	37	89	10
Max	98	79	80	101	91	103	97	94	101	97	59	87	69	82	76	79	56	63	67	90	96	96	103	99	62	103	18
Min	9	7	10	12	11	13	11	14	10	9	6	7	8	10	8	8	8	8	8	7	10	7	6	8	18	64	6

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Standard Deviation of Wind Direction (degrees)
September 2023

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

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
9-Meter Temperature (Degrees Celsius)
July 2023

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	9.8	8.5	7.8	6.9	6.5	6.6	9.7	14.0	19.0	21.5	22.1	22.9	19.9	14.1	15.5	18.0	19.9	20.3	20.2	18.3	15.9	13.1	11.0	9.3	14.6	22.9	6.5
2	8.0	6.0	5.7	4.2	4.0	4.2	7.2	13.7	17.1	18.0	19.0	20.0	20.7	21.6	22.3	23.1	23.3	23.1	22.3	20.7	17.3	13.8	12.0	10.5	14.9	23.3	4.0
3	8.6	7.2	7.6	7.3	5.5	4.9	6.8	8.7	11.9	13.0	14.6	15.0	15.5	16.0	17.2	17.5	18.1	16.5	15.3	14.9	13.0	10.2	10.1	9.8	11.9	18.1	4.9
4	7.5	8.0	7.8	7.6	7.5	7.7	7.9	8.7	9.8	10.8	11.2	11.6	12.6	13.1	13.7	12.9	12.6	12.6	12.3	10.9	9.4	8.2	6.9	5.3	9.9	13.7	5.3
5	4.0	3.4	2.8	1.3	0.4	0.6	3.0	7.0	11.0	13.0	14.3	15.5	16.3	17.0	17.5	18.3	18.9	18.9	17.0	14.8	13.5	11.9	9.5	7.9	10.7	18.9	0.4
6	7.4	7.1	6.6	5.5	4.8	4.1	6.6	10.1	13.6	17.3	18.5	18.6	15.3	12.5	13.5	15.1	17.0	17.5	16.8	15.5	12.6	9.7	7.6	7.0	11.7	18.6	4.1
7	6.0	5.5	4.7	3.6	3.4	2.7	4.7	9.1	14.1	17.5	18.0	17.5	18.1	19.2	19.2	18.9	19.1	18.8	18.2	17.2	15.5	14.2	13.7	14.1	13.0	19.2	2.7
8	13.7	12.2	10.9	8.6	6.6	6.3	8.9	13.7	17.1	18.2	18.9	19.8	20.4	19.2	18.0	19.0	20.0	20.6	20.6	18.0	15.9	12.3	10.6	9.6	15.0	20.6	6.3
9	9.3	8.4	7.3	6.9	6.2	5.9	8.5	12.9	17.6	20.2	21.7	22.5	23.1	23.4	20.0	22.1	22.7	22.4	22.2	20.1	16.2	16.2	17.0	12.9	16.1	23.4	5.9
10	10.5	9.9	8.7	7.7	7.2	8.3	9.7	12.6	14.0	15.1	17.7	20.1	22.6	23.4	24.1	23.4	19.4	14.8	15.0	15.4	14.1	11.8	12.7	13.0	14.6	24.1	7.2
11	12.1	10.9	10.2	8.8	7.9	7.8	9.5	12.1	15.7	17.0	17.9	19.1	18.8	20.0	20.4	20.6	20.2	19.7	18.8	17.0	15.0	11.9	9.7	6.9	14.5	20.6	6.9
12	6.2	5.0	4.1	3.4	3.6	3.1	5.7	10.4	14.6	16.3	17.4	18.8	19.9	20.8	21.4	22.0	22.5	22.6	20.7	19.6	15.3	11.0	9.3	8.1	13.4	22.6	3.1
13	7.4	7.1	6.7	6.8	7.5	7.0	8.8	12.4	16.7	18.3	18.7	19.2	19.2	19.5	20.2	20.5	21.3	19.7	19.5	15.9	14.4	13.8	12.2	9.3	14.3	21.3	6.7
14	6.8	6.0	4.5	3.6	3.2	2.7	5.0	9.3	14.0	16.0	17.0	17.8	18.7	19.4	19.5	19.8	20.1	19.9	19.2	17.7	13.4	11.4	9.4	7.6	12.6	20.1	2.7
15	6.4	6.3	5.0	4.7	4.1	3.9	5.8	10.1	15.4	18.7	19.6	20.3	21.2	21.9	22.4	22.8	22.9	23.2	22.7	20.5	16.2	13.3	10.7	9.3	14.5	23.2	3.9
16	7.9	7.7	6.6	6.2	5.2	4.7	7.8	12.6	18.4	21.0	21.8	22.5	23.2	23.9	24.7	25.2	24.8	24.5	24.0	21.8	18.7	15.3	15.9	17.1	16.7	25.2	4.7
17	17.1	16.3	14.9	14.8	13.3	10.1	12.1	16.9	21.8	22.1	19.1	17.1	17.2	20.9	21.7	22.9	24.1	24.9	24.2	22.2	19.9	16.7	15.2	14.0	18.3	24.9	10.1
18	10.3	6.7	5.1	4.1	4.1	8.5	12.4	14.7	15.7	16.4	17.2	18.3	19.1	20.0	21.0	21.7	22.1	22.1	21.2	19.4	15.3	10.5	7.7	6.8	14.2	22.1	4.1
19	6.5	4.6	3.6	3.1	1.9	2.0	4.7	10.9	16.4	18.5	19.6	20.3	20.9	21.7	22.4	22.8	23.3	22.8	21.2	18.8	16.5	15.1	13.8	15.6	14.5	23.3	1.9
20	15.6	14.1	13.2	11.9	11.4	12.0	13.1	15.5	16.9	18.1	19.8	21.5	22.6	23.5	24.1	25.0	25.4	24.7	22.9	21.4	19.9	18.6	18.3	16.2	18.6	25.4	11.4
21	12.1	10.5	8.7	8.5	7.0	6.3	8.4	13.3	18.8	21.5	23.1	24.2	25.2	25.7	26.1	26.4	26.9	26.7	26.4	23.2	18.1	14.6	13.3	10.6	17.7	26.9	6.3
22	10.4	8.6	7.8	7.2	6.7	6.1	9.0	14.2	19.9	24.3	26.3	27.3	27.5	28.2	28.4	29.1	29.0	28.1	27.0	23.2	18.3	15.7	13.5	11.3	18.6	29.1	6.1
23	9.5	7.6	7.6	6.4	5.7	5.3	7.8	13.5	19.3	23.4	24.4	25.7	26.8	27.6	28.1	28.7	28.9	29.0	27.0	24.1	23.0	19.8	15.8	14.8	18.7	29.0	5.3
24	12.2	11.4	10.5	10.6	10.4	11.3	13.5	20.1	24.9	26.6	27.6	29.0	29.7	29.9	27.5	24.3	23.3	18.8	19.5	19.4	16.7	15.6	14.9	13.5	19.2	29.9	10.4
25	12.4	10.7	9.7	9.3	8.1	7.2	9.2	14.1	19.0	20.4	22.5	23.5	24.2	25.1	25.4	25.8	25.6	25.4	23.9	21.8	19.9	16.8	13.4	11.3	17.7	25.8	7.2
26	10.4	9.2	8.3	7.1	6.9	5.7	7.4	12.7	16.5	18.0	19.0	20.6	21.4	22.5	23.1	23.6	23.9	23.6	22.8	21.1	18.0	14.1	12.3	12.1	15.8	23.9	5.7
27	10.9	9.9	9.8	9.5	8.5	6.6	7.8	11.8	16.7	19.2	20.8	21.7	19.9	19.7	20.8	21.1	19.1	17.7	17.2	15.9	13.0	12.7	12.2	12.7	14.8	21.7	6.6
28	11.5	11.0	9.5	7.6	6.3	6.2	7.9	11.0	14.3	15.4	15.7	16.5	19.0	20.4	20.4	19.9	19.0	18.3	17.4	16.2	13.3	12.7	10.9	9.2	13.7	20.4	6.2
29	8.9	9.1	8.0	6.8	6.2	6.0	8.5	12.4	17.7	19.6	20.8	22.3	23.3	24.4	26.0	26.5	25.4	25.4	23.2	22.6	19.8	18.3	17.3	16.4	17.3	26.5	6.0
30	14.0	13.5	12.5	11.0	9.8	9.1	10.5	15.9	20.0	23.6	25.7	27.2	27.7	28.2	28.4	28.0	26.0	26.8	26.5	24.5	21.1	17.7	14.8	12.8	19.8	28.4	9.1
31	11.3	8.7	8.0	7.4	5.5	4.2	6.2	11.6	17.2	21.7	25.2	26.3	27.3	28.0	28.2	28.0	28.7	28.2	26.0	25.2	24.4	22.6	21.6	17.2	19.1	28.7	4.2
Avg	9.8	8.7	7.9	7.0	6.3	6.0	8.2	12.5	16.6	18.7	19.8	20.7	21.2	21.6	22.0	22.4	22.4	21.9	21.0	19.3	16.6	14.2	12.7	11.4	15.4	23.3	5.7
Max	17.1	16.3	14.9	14.8	13.3	12.0	13.5	20.1	24.9	26.6	27.6	29.0	29.7	29.9	28.4	29.1	29.0	29.0	27.0	25.2	24.4	22.6	21.6	17.2	19.8	29.9	11.4
Min	4.0	3.4	2.8	1.3	0.4	0.6	3.0	7.0	9.8	10.8	11.2	11.6	12.6	12.5	13.5	12.9	12.6	12.6	12.3	10.9	9.4	8.2	6.9	5.3	9.9	13.7	0.4

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
9-Meter Temperature (Degrees Celsius)
August 2023

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	12.8	11.2	10.5	9.0	8.1	8.7	12.6	18.8	22.5	23.5	24.0	25.1	25.8	26.4	26.8	26.8	26.5	26.3	23.1	17.1	15.3	11.9	11.2	18.3	26.8	8.1
2	10.3	9.7	8.9	8.2	7.9	8.4	10.3	14.5	19.5	24.3	25.2	25.7	25.8	26.2	26.0	24.9	23.7	23.0	22.1	19.9	17.9	17.6	15.8	13.3	17.9	26.2	7.9
3	13.1	12.2	9.5	7.3	7.3	6.5	8.4	12.4	16.2	20.0	23.1	22.7	19.9	21.2	20.7	20.4	18.5	17.9	17.4	16.8	15.7	15.4	15.3	15.2	15.5	23.1	6.5
4	16.0	14.3	12.8	12.6	11.6	11.8	12.6	15.6	15.3	16.4	16.9	18.0	18.8	18.2	18.7	19.5	19.5	19.4	19.0	15.6	13.2	11.9	11.3	11.0	15.4	19.5	11.0
5	10.1	8.7	8.1	8.3	8.7	9.1	9.8	11.3	11.5	12.0	12.7	13.4	14.4	14.2	14.4	14.0	13.5	13.9	14.3	12.9	12.0	12.2	11.8	12.4	11.8	14.4	8.1
6	12.6	12.7	12.4	12.3	12.0	12.3	12.7	12.6	12.8	12.9	13.0	14.7	16.2	16.2	16.0	14.9	15.5	15.6	14.6	13.0	11.9	11.5	11.1	10.7	13.3	16.2	10.7
7	9.8	9.2	8.4	8.2	8.1	8.3	8.6	10.2	12.5	13.2	13.9	14.9	15.8	15.8	17.2	18.1	19.0	19.1	17.5	16.8	14.5	12.7	10.6	8.9	13.0	19.1	8.1
8	8.5	7.1	6.2	4.9	3.8	4.1	5.2	9.2	13.6	16.5	17.6	18.7	18.8	20.4	21.5	21.8	21.9	21.2	21.1	18.4	14.8	12.8	12.0	11.3	13.8	21.9	3.8
9	9.3	8.3	7.5	7.0	6.5	6.5	7.5	11.5	16.5	18.2	19.2	20.3	20.8	21.2	22.1	22.3	21.8	21.1	19.5	16.7	12.8	12.2	11.4	11.0	14.6	22.3	6.5
10	9.9	9.2	8.3	7.5	8.2	6.3	6.9	11.9	14.7	15.7	Au	Au	Au	Au	Au	Au	Au	19.8	19.1	17.6	15.2	14.9	13.3	11.9	12.4	19.8	6.3
11	8.5	6.6	4.5	3.6	3.3	2.3	3.3	7.9	13.3	15.5	16.7	18.0	19.1	20.3	21.0	21.8	22.5	23.0	22.2	19.2	14.8	10.9	9.2	7.6	13.1	23.0	2.3
12	6.8	5.2	3.8	3.4	2.6	2.3	3.2	8.5	14.0	17.4	18.8	19.6	20.3	20.8	21.2	21.1	20.2	18.2	17.5	16.7	15.1	14.1	12.9	12.6	13.2	21.2	2.3
13	11.5	10.3	7.5	6.1	4.7	4.3	4.2	8.2	12.7	15.2	16.2	17.3	18.2	19.0	19.4	19.7	19.9	19.8	18.6	16.5	11.8	10.0	7.7	6.4	12.7	19.9	4.2
14	5.6	5.1	4.5	3.4	2.4	1.9	2.9	8.3	14.3	18.5	20.6	21.9	23.5	25.1	26.0	26.6	26.9	27.0	26.0	21.0	15.7	14.0	12.6	9.4	15.1	27.0	1.9
15	8.5	7.0	6.1	5.7	5.3	5.1	6.8	11.7	18.1	24.0	25.9	26.8	27.8	28.7	29.3	29.9	30.2	30.0	29.1	25.9	20.9	15.7	13.5	11.7	18.5	30.2	5.1
16	10.5	9.7	9.6	8.8	8.8	7.6	9.1	14.5	16.8	17.8	20.5	22.7	24.0	26.2	27.2	27.6	28.0	27.9	26.8	22.5	17.6	15.4	13.9	13.1	17.8	28.0	7.6
17	12.5	12.2	12.7	10.9	9.4	8.9	8.3	11.7	17.7	23.4	25.5	26.6	27.9	29.0	29.4	29.7	29.7	29.7	28.6	23.5	18.6	16.5	15.4	13.9	19.7	29.7	8.3
18	13.9	12.9	13.0	12.6	11.5	11.1	11.4	13.3	17.9	22.8	24.3	25.1	25.8	26.7	26.7	17.9	18.6	19.8	19.8	19.2	17.7	17.2	17.4	16.3	18.0	26.7	11.1
19	12.5	9.8	8.9	6.5	5.3	4.6	4.8	6.8	9.0	11.8	15.8	17.1	17.8	18.1	18.4	18.7	16.9	15.3	13.3	11.9	11.5	11.5	10.9	10.6	12.0	18.7	4.6
20	10.6	10.8	10.7	10.4	10.1	10.0	10.4	11.9	12.9	12.9	12.8	13.0	12.9	13.0	13.5	14.2	13.9	13.6	12.8	12.1	11.8	11.8	11.7	11.7	12.1	14.2	10.0
21	11.8	11.9	11.8	11.7	11.7	11.9	12.0	12.4	13.0	14.9	17.2	19.1	20.3	21.9	22.7	21.5	20.1	20.7	20.0	19.2	17.7	15.7	16.7	19.4	16.5	22.7	11.7
22	19.2	19.1	18.7	18.5	18.3	16.8	15.0	17.9	18.9	19.6	20.6	22.3	23.0	23.4	18.9	18.8	23.1	22.9	21.7	19.5	17.0	15.2	13.8	14.5	19.0	23.4	13.8
23	13.2	13.6	11.4	10.5	10.9	10.1	9.5	12.1	15.4	17.1	17.9	18.2	19.1	19.8	20.0	20.0	20.1	20.9	19.8	15.7	12.5	10.8	10.2	9.1	14.9	20.9	9.1
24	8.2	7.8	7.7	7.6	5.6	4.6	5.0	7.9	13.1	16.7	17.8	19.1	19.9	21.0	21.6	22.2	22.2	21.4	19.9	17.3	15.2	13.3	11.4	9.6	14.0	22.2	4.6
25	6.2	4.6	3.9	4.0	2.1	2.1	2.8	7.4	14.2	15.2	15.4	16.7	18.1	19.5	20.2	19.2	19.4	19.8	18.8	17.0	15.6	15.5	15.0	13.8	12.8	20.2	2.1
26	13.1	11.3	9.3	8.5	7.9	6.6	5.8	9.7	14.8	18.4	19.9	21.2	22.2	23.3	23.7	23.9	23.9	23.5	21.7	17.0	13.9	11.2	10.0	7.1	15.3	23.9	5.8
27	6.4	5.2	3.9	3.2	3.4	3.0	3.8	7.6	13.9	19.6	21.7	22.2	23.2	23.6	23.8	23.6	24.3	23.2	22.1	18.3	14.1	11.4	9.2	7.9	14.1	24.3	3.0
28	6.8	6.2	5.0	4.4	3.9	3.8	4.1	8.6	15.0	20.1	21.9	22.7	22.8	19.6	19.1	20.8	20.2	20.1	17.7	14.1	11.5	9.8	9.4	8.7	13.2	22.8	3.8
29	6.9	5.9	5.0	4.9	5.0	4.6	5.3	9.7	17.8	21.2	23.0	24.7	25.8	26.8	27.2	27.4	27.2	26.6	25.1	24.0	22.3	15.7	13.3	12.8	17.0	27.4	4.6
30	12.1	12.2	10.6	8.7	7.4	7.5	8.8	11.8	13.1	14.4	14.5	14.4	12.7	14.1	14.1	14.6	13.9	13.3	12.3	11.5	10.7	10.2	10.2	9.6	11.8	14.6	7.4
31	9.4	9.7	10.1	10.4	10.4	10.7	10.8	11.0	11.3	12.4	14.1	15.2	16.1	17.2	18.1	19.0	19.3	19.3	18.0	12.9	11.3	9.8	7.1	5.8	12.9	19.3	5.8
Avg	10.6	9.7	8.8	8.1	7.5	7.1	7.7	11.0	14.8	17.4	18.9	19.9	20.5	21.2	21.5	21.4	21.4	21.1	20.1	17.6	14.9	13.3	12.1	11.2	14.9	22.2	6.6
Max	19.2	19.1	18.7	18.5	18.3	16.8	15.0	17.9	19.5	24.3	25.9	26.8	27.9	29.0	29.4	29.9	30.2	30.0	29.1	25.9	22.3	17.6	17.4	19.4	19.7	30.2	13.8
Min	5.6	4.6	3.8	3.2	2.1	1.9	2.8	6.8	9.0	11.8	12.7	13.0	12.7	13.0	13.5	14.0	13.5	13.3	12.3	11.5	10.7	9.8	7.1	5.8	11.8	14.2	1.9

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
9-Meter Temperature (Degrees Celsius)
September 2023

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	5.4	5.3	9.9	11.3	12.4	9.6	10.0	14.4	17.0	19.0	20.2	21.4	22.5	23.1	23.6	24.0	23.0	21.5	21.0	19.1	15.4	13.2	11.6	9.5	16.0	24.0	5.3
2	8.6	7.1	6.8	6.9	6.4	6.7	7.1	10.8	18.6	20.4	21.6	22.7	23.6	24.6	25.4	25.0	25.0	23.7	23.2	18.8	15.6	13.0	11.2	9.8	15.9	25.4	6.4
3	8.4	7.6	6.8	5.9	5.6	5.2	5.4	9.5	16.5	20.2	17.4	20.2	21.6	22.1	21.1	14.9	14.0	13.8	13.4	12.6	11.8	11.8	11.7	11.7	12.9	22.1	5.2
4	11.7	11.5	11.4	11.3	11.4	11.2	11.0	10.4	10.4	10.6	10.7	10.5	10.4	10.4	10.4	10.5	10.5	10.5	10.3	9.7	9.3	9.1	8.8	8.1	10.4	11.7	8.1
5	7.8	7.3	6.7	6.6	6.8	6.8	6.7	7.0	10.6	12.0	13.3	14.5	15.5	16.0	16.3	17.3	17.4	17.0	15.6	13.9	13.2	12.4	11.7	10.0	11.8	17.4	6.6
6	8.7	7.1	6.4	6.3	4.8	3.9	3.7	6.1	11.2	15.4	16.4	17.2	17.7	18.1	18.3	18.8	19.4	19.6	17.6	13.5	13.8	11.5	10.7	11.5	12.4	19.6	3.7
7	11.2	9.3	8.2	8.7	9.1	7.7	8.0	9.0	10.9	13.2	14.8	15.9	15.7	16.4	17.2	18.5	18.2	15.3	12.8	11.2	11.0	9.3	9.3	9.7	12.1	18.5	7.7
8	10.9	10.7	9.1	9.2	10.0	9.8	10.1	10.3	10.5	11.7	13.2	14.8	14.6	16.2	17.3	18.3	15.1	9.5	9.5	9.8	8.7	7.2	5.8	5.2	11.1	18.3	5.2
9	4.1	3.8	3.0	2.4	1.7	1.7	1.3	3.8	8.3	12.6	14.8	15.6	16.2	16.9	17.6	17.4	16.2	15.4	13.9	11.7	10.0	8.2	7.3	6.9	9.6	17.6	1.3
10	6.0	5.3	4.9	4.2	3.5	2.4	1.8	4.2	9.2	13.0	14.9	15.8	16.7	17.3	18.0	18.1	18.4	18.2	15.9	13.4	10.8	10.5	9.2	8.9	10.9	18.4	1.8
11	7.3	5.7	4.3	3.1	2.9	2.0	2.2	5.0	10.5	15.2	17.3	18.3	19.3	20.0	20.6	20.7	20.9	20.4	16.4	12.6	10.4	9.3	8.1	7.7	11.7	20.9	2.0
12	6.4	6.1	5.8	5.4	4.7	4.6	4.7	6.5	10.3	16.1	19.8	21.0	21.7	22.0	22.1	22.1	21.5	21.2	17.4	13.2	10.8	12.6	13.4	11.7	13.4	22.1	4.6
13	10.6	10.4	10.0	9.4	8.8	8.0	7.2	7.1	9.1	13.8	14.3	15.0	15.9	16.2	17.1	16.8	16.3	15.4	14.0	12.6	10.0	8.6	6.7	5.5	11.6	17.1	5.5
14	4.1	3.3	2.0	1.5	1.6	0.9	0.6	2.4	5.5	10.0	13.6	14.6	15.2	16.0	16.2	16.8	16.8	16.2	13.5	9.5	8.0	6.9	4.9	2.9	8.5	16.8	0.6
15	2.5	2.1	1.5	0.5	-0.3	-0.5	-0.5	2.1	8.3	13.9	16.2	16.8	17.4	18.1	18.8	19.2	19.4	19.1	14.0	10.0	7.9	6.2	4.1	3.5	9.2	19.4	-0.5
16	2.0	1.1	0.8	0.2	0.1	-0.3	-0.6	2.1	8.0	15.2	18.0	19.0	20.0	21.0	21.6	22.0	22.0	21.3	16.0	11.7	10.0	9.1	6.6	5.1	10.5	22.0	-0.6
17	3.8	2.9	2.2	1.4	1.5	0.7	0.4	3.3	8.4	15.1	19.3	21.1	21.8	22.3	22.8	22.7	23.0	22.5	19.6	16.8	13.6	10.6	8.8	7.0	12.2	23.0	0.4
18	5.6	4.5	3.9	2.9	2.2	1.3	1.1	2.9	11.1	16.4	16.9	16.8	17.6	18.6	18.6	19.3	19.1	18.3	17.3	16.2	15.7	13.3	8.4	5.9	11.4	19.3	1.1
19	3.9	2.4	1.8	4.7	7.3	5.6	3.1	4.3	10.0	11.6	12.8	13.9	15.0	16.0	16.3	15.8	16.1	15.4	13.2	12.1	10.7	8.4	5.8	3.8	9.6	16.3	1.8
20	1.6	0.1	-1.0	-1.5	-2.8	-3.2	-3.5	-0.8	3.7	7.9	10.5	11.8	12.8	13.2	13.5	13.7	13.3	12.0	10.7	10.2	10.0	9.7	9.3	9.1	6.7	13.7	-3.5
21	8.6	7.9	7.3	5.3	3.7	3.2	4.1	4.0	4.0	4.6	5.0	6.3	7.0	7.5	7.9	7.2	6.5	6.2	5.7	5.4	5.5	5.3	4.7	4.7	5.7	8.6	3.2
22	4.9	5.1	5.1	5.0	5.2	5.3	5.4	5.7	6.2	7.0	7.4	8.1	9.1	9.6	9.5	8.5	8.3	7.8	7.6	7.5	7.3	7.3	7.4	7.4	7.0	9.6	4.9
23	7.2	7.3	7.4	7.5	7.1	7.1	6.7	6.9	6.8	7.3	8.1	9.6	11.4	12.0	12.8	13.3	13.5	12.5	8.9	6.2	4.4	3.5	2.7	1.6	8.0	13.5	1.6
24	0.7	-0.1	-0.7	-1.3	-1.6	-2.3	-1.9	-0.3	3.9	9.5	12.2	14.0	15.2	16.0	16.6	17.5	16.6	15.7	11.5	9.3	6.6	4.5	3.8	2.8	7.0	17.5	-2.3
25	2.0	1.8	1.5	1.6	1.9	1.4	1.4	3.3	9.4	15.1	17.4	18.7	19.6	20.3	20.9	21.2	20.2	18.4	15.7	15.5	14.5	13.2	13.1	10.4	11.6	21.2	1.4
26	7.3	5.7	4.0	4.4	3.0	1.9	1.1	3.1	12.0	19.2	20.8	21.8	22.5	22.6	22.9	22.9	22.5	20.3	16.0	11.7	8.9	7.5	9.5	10.9	12.6	22.9	1.1
27	7.7	5.6	4.9	3.6	2.6	1.0	0.6	1.3	5.8	13.6	13.4	13.5	14.4	15.5	16.5	16.2	13.9	10.6	9.0	7.4	6.9	6.9	6.8	6.6	8.5	16.5	0.6
28	5.2	2.9	2.4	0.5	0.0	-0.4	0.5	2.4	5.3	6.6	7.6	8.6	9.1	9.8	10.4	10.7	10.7	10.3	6.9	4.0	3.0	1.6	0.6	0.5	5.0	10.7	-0.4
29	0.8	0.5	0.6	-0.6	-1.9	-2.7	-3.1	-2.5	1.1	6.6	9.2	10.2	10.8	11.6	12.5	13.2	13.6	12.4	9.3	8.7	9.0	9.6	9.7	9.8	6.2	13.6	-3.1
30	8.7	7.7	8.2	7.8	6.4	5.9	5.6	5.5	5.2	5.8	6.9	7.9	9.1	9.0	8.2	8.3	7.7	6.4	4.7	4.3	3.1	3.3	3.4	4.2	6.4	9.1	3.1
Avg	6.1	5.3	4.8	4.5	4.1	3.5	3.3	5.0	8.9	12.6	14.1	15.2	16.0	16.6	17.0	17.0	16.6	15.6	13.4	11.3	9.9	8.8	7.8	7.1	10.2	17.6	2.4
Max	11.7	11.5	11.4	11.3	12.4	11.2	11.0	14.4	18.6	20.4	21.6	22.7	23.6	24.6	25.4	25.0	25.0	23.7	23.2	19.1	15.7	13.3	13.4	11.7	16.0	25.4	8.1
Min	0.7	-0.1	-1.0	-1.5	-2.8	-3.2	-3.5	-2.5	1.1	4.6	5.0	6.3	7.0	7.5	7.9	7.2	6.5	6.2	4.7	4.0	3.0	1.6	0.6	0.5	5.0	8.6	-3.5

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
2-Meter Temperature (Degrees Celsius)
July 2023

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	8.2	6.7	6.6	5.5	5.1	6.1	10.1	14.7	19.6	22.1	22.6	23.4	19.8	13.8	15.8	18.5	20.1	20.4	20.1	17.5	14.8	12.5	10.4	8.4	14.3	23.4	5.1
2	6.8	4.7	4.5	3.2	2.8	3.7	7.6	14.3	17.4	18.4	19.5	20.6	21.3	22.2	22.8	23.5	23.6	23.2	22.2	20.0	15.4	12.7	11.1	9.3	14.6	23.6	2.8
3	7.0	6.0	6.2	6.3	4.6	4.7	6.9	9.3	12.6	13.6	15.4	15.4	15.9	16.4	18.1	18.3	18.8	16.8	15.2	14.8	12.0	9.3	9.5	9.3	11.8	18.8	4.6
4	6.7	7.2	7.6	7.4	7.4	7.7	8.1	9.4	10.8	11.6	12.1	12.7	13.9	13.7	14.6	13.5	13.1	12.9	12.6	10.8	8.8	7.5	6.0	4.1	10.0	14.6	4.1
5	2.9	2.7	2.0	0.0	-0.6	0.1	3.5	7.6	11.6	13.7	15.1	16.4	17.2	17.9	18.4	19.1	19.8	19.4	17.1	14.2	12.6	10.9	8.8	7.5	10.7	19.8	-0.6
6	7.1	6.6	5.8	4.0	3.1	3.4	7.0	10.8	14.3	18.0	19.2	19.3	15.3	12.8	13.8	15.5	17.4	17.7	16.5	15.2	12.0	9.5	6.6	6.5	11.6	19.3	3.1
7	4.9	3.9	3.5	2.0	1.7	1.4	4.6	9.8	14.8	17.9	18.7	18.1	18.7	20.1	19.8	19.1	19.6	19.1	18.1	16.7	14.9	13.1	11.6	12.9	12.7	20.1	1.4
8	12.4	10.9	8.7	6.6	5.0	5.3	9.2	14.1	17.5	18.7	19.5	20.6	21.5	19.8	18.7	19.6	20.5	20.9	20.7	17.0	15.2	12.1	10.4	9.2	14.8	21.5	5.0
9	8.9	7.8	6.0	5.1	4.4	4.5	8.8	13.8	18.4	21.1	22.5	23.4	23.9	23.9	19.5	23.0	22.6	22.6	22.1	19.5	14.8	15.5	16.3	11.9	15.8	23.9	4.4
10	9.3	9.2	7.1	6.6	6.4	7.8	9.7	12.9	13.9	15.0	18.2	20.6	23.2	24.3	25.0	23.4	18.9	14.7	15.2	15.2	13.2	11.3	12.4	12.6	14.4	25.0	6.4
11	11.4	10.5	9.7	8.3	7.1	7.4	9.8	12.6	16.4	17.6	18.7	20.0	19.5	20.7	20.9	21.2	20.8	20.2	19.0	16.6	13.9	9.8	8.2	5.8	14.4	21.2	5.8
12	5.0	3.9	3.0	2.3	2.4	2.1	6.1	11.2	15.5	17.2	18.5	19.7	20.9	21.7	22.4	22.8	23.2	22.6	19.8	18.7	12.7	9.9	7.9	6.7	13.2	23.2	2.1
13	6.3	6.0	5.4	5.8	6.2	6.4	8.8	12.6	17.4	19.0	19.4	19.9	19.7	20.4	21.2	20.8	21.9	19.4	19.2	15.6	13.7	13.0	11.2	7.6	14.0	21.9	5.4
14	5.5	5.1	3.4	2.4	1.8	2.0	5.3	9.8	14.8	16.8	17.8	18.8	19.8	20.6	20.5	20.3	20.4	20.1	18.8	17.0	12.5	9.9	7.5	6.2	12.4	20.6	1.8
15	5.2	4.6	3.6	3.0	2.7	2.8	6.3	10.9	16.4	19.4	20.4	21.1	22.4	23.1	23.5	23.8	23.6	23.6	22.4	19.3	14.6	11.8	8.9	7.4	14.2	23.8	2.7
16	6.0	6.2	5.3	4.8	3.8	4.1	7.9	13.4	19.2	21.9	22.7	23.5	24.2	25.2	25.6	26.1	24.7	24.3	23.6	21.2	17.2	14.2	14.1	15.2	16.4	26.1	3.8
17	15.5	13.8	13.4	12.6	10.5	8.7	12.2	17.2	22.0	21.6	18.9	16.9	17.5	21.6	22.2	23.8	24.7	25.0	24.0	21.3	18.0	15.4	13.4	11.3	17.6	25.0	8.7
18	8.7	5.5	3.5	2.5	2.0	5.7	12.2	15.0	16.2	17.1	18.2	19.5	20.2	21.1	22.2	22.7	22.9	22.6	21.2	18.4	13.4	8.8	6.2	4.7	13.8	22.9	2.0
19	3.9	2.4	1.9	1.2	0.3	0.6	4.8	11.4	17.3	19.2	20.8	21.4	22.0	23.0	23.7	23.9	24.4	23.4	21.5	18.6	16.0	14.6	13.2	14.6	14.3	24.4	0.3
20	14.7	13.0	11.8	11.1	9.3	10.5	12.9	15.9	17.3	18.7	20.6	22.3	23.5	24.4	25.0	26.0	26.5	24.9	22.9	21.0	19.1	17.4	16.8	14.7	18.3	26.5	9.3
21	10.2	8.7	7.3	7.3	5.9	4.9	8.6	14.1	19.7	22.4	24.1	25.4	26.4	26.7	27.0	26.7	27.4	26.9	26.3	22.2	16.8	12.4	12.1	9.4	17.5	27.4	4.9
22	8.2	6.6	6.3	5.4	5.1	5.0	9.3	14.7	20.9	25.4	27.3	28.4	28.2	28.9	28.8	29.7	29.3	27.2	26.3	21.8	16.4	14.2	11.7	9.3	18.1	29.7	5.0
23	7.2	5.9	5.8	4.4	3.8	3.5	7.8	14.1	20.4	24.3	25.3	26.8	28.0	28.8	29.0	29.6	29.6	29.3	26.0	22.8	22.3	18.8	14.4	13.3	18.4	29.6	3.5
24	10.5	9.7	9.2	9.3	8.9	9.5	12.9	20.6	25.5	27.3	28.4	29.9	30.7	29.9	27.4	24.2	22.8	18.3	19.2	18.1	15.1	13.8	13.3	11.6	18.6	30.7	8.9
25	10.6	9.3	8.1	7.8	6.6	5.8	9.2	14.9	19.9	21.4	23.3	24.6	25.1	25.9	26.1	26.6	26.3	25.7	23.8	20.7	18.9	15.3	12.4	10.2	17.4	26.6	5.8
26	9.4	7.8	6.3	6.2	5.5	4.4	7.4	13.4	17.6	19.1	20.2	21.9	22.7	23.7	24.3	24.5	24.7	24.0	22.8	20.1	16.1	12.3	11.4	11.5	15.7	24.7	4.4
27	10.4	9.5	9.4	9.2	7.8	5.9	7.8	12.2	17.6	20.2	21.8	22.7	20.6	20.6	21.3	21.4	18.2	17.5	17.0	15.5	12.7	12.4	11.9	12.2	14.8	22.7	5.9
28	10.8	10.0	8.0	6.4	5.3	5.2	7.8	11.2	14.8	15.9	16.1	17.2	19.9	21.5	20.8	19.8	19.2	18.3	17.2	15.6	12.4	12.0	10.3	8.7	13.5	21.5	5.2
29	8.0	8.5	7.1	5.8	4.9	5.4	8.9	12.9	18.3	20.3	21.7	23.2	24.3	25.1	26.8	26.8	25.8	25.5	23.1	22.2	19.0	17.9	16.9	15.7	17.3	26.8	4.9
30	13.0	12.9	11.7	10.2	8.4	8.2	10.4	16.3	20.5	23.6	25.8	27.8	28.1	29.0	29.1	28.1	26.0	26.5	25.9	23.0	19.7	17.0	14.2	11.5	19.5	29.1	8.2
31	10.2	7.0	6.2	5.9	4.3	2.3	5.6	12.0	18.1	22.7	25.8	26.9	28.1	28.8	28.5	28.0	29.2	27.6	25.3	24.6	23.9	21.7	19.6	14.9	18.6	29.2	2.3
Avg	8.5	7.5	6.6	5.8	4.9	5.0	8.3	13.0	17.3	19.4	20.6	21.6	22.0	22.4	22.7	22.9	22.8	22.0	20.8	18.6	15.4	13.1	11.6	10.1	15.1	24.0	4.4
Max	15.5	13.8	13.4	12.6	10.5	10.5	12.9	20.6	25.5	27.3	28.4	29.9	30.7	29.9	29.1	29.7	29.6	29.3	26.3	24.6	23.9	21.7	19.6	15.7	19.5	30.7	9.3
Min	2.9	2.4	1.9	0.0	-0.6	0.1	3.5	7.6	10.8	11.6	12.1	12.7	13.9	12.8	13.8	13.5	13.1	12.9	12.6	10.8	8.8	7.5	6.0	4.1	10.0	14.6	-0.6

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
2-Meter Temperature (Degrees Celsius)
August 2023

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	12.3	10.9	10.0	8.7	7.5	6.4	8.3	13.4	19.9	23.4	24.6	25.2	26.4	27.0	27.6	28.0	27.7	26.4	25.4	21.5	15.6	13.8	10.2	9.6	17.9	28.0	6.4
2	8.5	7.9	6.8	6.1	5.8	6.7	9.9	15.3	20.6	24.9	25.7	26.2	26.2	26.7	26.3	24.8	23.6	22.7	21.4	19.3	17.6	17.0	15.4	12.8	17.4	26.7	5.8
3	12.1	11.3	7.0	5.4	5.4	5.2	7.7	12.7	16.9	20.5	23.6	22.8	19.6	21.2	20.9	20.3	18.4	17.7	17.1	16.4	15.3	15.2	14.9	14.6	15.1	23.6	5.2
4	15.3	13.7	12.5	12.2	11.2	11.5	12.2	15.4	15.5	17.2	17.8	18.6	19.4	18.7	19.3	20.1	19.9	19.6	18.9	15.6	13.1	11.7	11.0	10.7	15.5	20.1	10.7
5	9.4	7.8	7.6	8.2	8.7	9.0	9.8	11.3	11.6	12.1	13.0	13.7	14.8	14.2	14.5	14.0	13.4	14.0	14.1	12.7	11.9	11.8	11.6	12.1	11.7	14.8	7.6
6	12.3	12.2	11.9	11.7	11.7	12.0	12.3	12.6	12.9	13.1	13.4	15.6	16.9	17.1	16.5	15.3	16.1	15.9	14.7	13.0	11.8	11.3	11.0	10.6	13.4	17.1	10.6
7	9.8	9.1	8.1	8.0	8.1	8.3	8.8	10.5	12.8	13.6	14.4	15.6	16.4	16.3	18.1	19.0	19.9	19.3	17.1	16.3	14.1	11.9	9.6	8.2	13.1	19.9	8.0
8	7.9	5.8	4.7	3.6	2.7	3.1	5.1	9.6	14.5	17.4	18.6	19.6	19.6	21.3	22.6	22.7	22.6	21.1	20.8	17.2	13.9	12.0	11.7	10.9	13.7	22.7	2.7
9	8.2	7.1	6.6	5.9	5.6	5.9	7.4	12.1	17.0	18.7	19.7	21.4	21.8	21.6	22.7	22.8	21.8	20.7	19.1	16.0	12.6	12.0	11.3	10.7	14.5	22.8	5.6
10	9.5	8.5	7.5	6.2	7.4	5.5	7.0	12.1	15.0	16.3	Au	Au	Au	Au	Au	Au	Au	20.1	19.1	16.3	13.0	13.3	11.1	9.6	11.6	20.1	5.5
11	7.0	5.7	3.6	2.7	2.3	0.9	3.2	8.9	14.4	16.3	17.6	19.0	20.1	21.3	21.9	22.5	23.1	23.2	21.9	17.6	13.1	10.3	8.0	6.4	13.0	23.2	0.9
12	5.4	3.8	2.1	1.6	1.2	1.0	2.9	9.1	14.6	18.0	19.5	20.5	21.4	21.8	22.1	21.7	20.3	18.1	17.3	16.5	14.9	13.7	11.9	12.4	13.0	22.1	1.0
13	11.1	9.7	6.3	5.4	3.8	3.9	4.1	8.7	13.4	16.0	17.2	18.2	19.2	20.2	20.6	20.7	20.7	20.3	18.6	15.4	10.9	9.5	6.6	5.2	12.7	20.7	3.8
14	4.4	3.7	2.5	1.6	0.6	0.4	2.4	9.1	15.3	19.6	21.7	22.9	24.7	26.0	27.1	27.8	27.8	27.4	25.6	19.1	14.6	13.3	11.9	7.2	14.9	27.8	0.4
15	5.9	5.1	4.3	4.0	3.7	3.3	6.1	12.2	19.0	25.1	26.9	27.7	28.9	29.6	30.3	30.6	30.5	29.9	28.6	24.2	18.4	14.3	12.3	10.0	18.0	30.6	3.3
16	8.6	8.1	7.5	6.8	6.8	6.2	8.0	14.7	17.1	18.4	21.5	23.7	25.0	27.2	28.0	28.1	28.4	27.9	25.6	20.9	16.3	13.5	12.1	10.6	17.1	28.4	6.2
17	10.2	9.9	10.6	9.5	8.1	7.2	7.7	12.6	18.6	24.2	26.5	27.6	29.0	29.8	30.0	30.3	30.2	29.7	27.4	21.7	17.9	14.5	14.0	12.7	19.2	30.3	7.2
18	12.8	11.1	10.8	11.1	10.0	9.6	10.9	13.5	18.2	23.0	25.1	25.5	26.1	27.5	27.1	17.5	18.7	19.7	19.5	18.8	16.3	15.0	15.7	14.6	17.4	27.5	9.6
19	11.5	9.2	8.3	5.8	4.6	3.3	4.5	7.2	9.5	12.7	16.5	18.1	18.8	19.1	19.1	19.2	16.9	15.3	13.3	11.7	11.3	11.3	10.8	10.5	12.0	19.2	3.3
20	10.5	10.7	10.6	10.3	9.9	9.6	10.1	12.0	13.1	13.2	13.3	13.4	13.1	13.2	13.9	14.5	14.1	13.8	12.8	12.0	11.8	11.8	11.7	11.7	12.1	14.5	9.6
21	11.8	11.9	11.9	11.6	11.5	11.8	11.9	12.4	13.1	15.0	17.5	19.5	20.8	22.7	23.3	21.7	20.1	20.4	19.6	18.6	16.2	14.8	15.3	16.8	16.3	23.3	11.5
22	17.9	18.1	17.9	17.8	17.8	15.0	14.1	18.0	18.8	19.8	21.0	22.9	23.5	23.6	18.6	19.2	23.4	22.7	20.8	18.3	16.1	14.2	12.7	12.7	18.5	23.6	12.7
23	11.8	12.0	10.6	10.1	10.6	9.5	9.3	12.4	15.7	17.7	18.6	19.1	19.9	20.6	20.5	20.0	20.0	21.3	19.6	14.6	11.9	9.6	9.6	8.7	14.7	21.3	8.7
24	7.4	7.2	7.1	6.6	4.3	3.3	4.2	8.7	14.1	17.5	18.6	19.9	20.8	21.9	22.3	22.9	22.7	21.6	19.1	15.6	14.0	11.8	9.9	8.1	13.7	22.9	3.3
25	4.3	3.0	2.5	2.0	0.6	0.5	2.3	8.0	14.6	15.7	15.6	17.4	19.0	20.4	21.0	19.3	19.6	20.0	17.7	16.0	14.9	15.1	14.5	13.3	12.4	21.0	0.5
26	12.5	10.4	7.9	7.6	7.1	5.6	5.3	10.0	15.9	19.4	20.8	22.3	23.2	24.2	24.7	24.9	24.5	23.5	21.0	15.5	13.0	9.3	8.3	5.1	15.1	24.9	5.1
27	4.8	3.4	2.0	1.4	1.5	1.2	3.0	8.0	14.6	20.5	22.6	23.2	24.4	24.6	24.4	23.9	25.0	23.2	21.0	16.2	12.6	9.3	7.5	6.0	13.5	25.0	1.2
28	5.1	3.8	3.2	2.5	2.4	2.4	3.2	9.3	15.9	20.8	22.6	23.7	23.7	19.7	19.8	21.3	20.3	20.0	16.6	13.3	10.9	8.9	8.4	8.0	12.7	23.7	2.4
29	5.5	4.4	3.7	3.3	3.8	3.4	4.7	10.1	18.4	21.7	23.6	25.4	26.5	27.5	28.0	28.0	27.5	26.6	24.6	23.4	21.5	15.2	13.1	12.5	16.8	28.0	3.3
30	11.9	12.0	10.1	7.8	6.0	6.0	8.1	11.8	13.4	14.8	15.3	15.1	12.9	15.0	14.1	15.2	14.1	13.3	12.2	11.4	10.7	10.1	10.2	9.6	11.7	15.3	6.0
31	9.3	9.7	10.1	10.3	10.2	10.5	10.7	11.1	11.4	12.8	15.1	16.4	17.2	18.4	19.2	20.1	20.1	19.9	17.6	12.2	10.8	8.9	5.9	4.1	13.0	20.1	4.1
Avg	9.5	8.6	7.6	7.0	6.5	6.1	7.3	11.4	15.3	18.0	19.6	20.7	21.3	21.9	22.2	21.9	21.7	21.1	19.6	16.7	14.1	12.4	11.2	10.2	14.6	22.9	5.6
Max	17.9	18.1	17.9	17.8	17.8	15.0	14.1	18.0	20.6	25.1	26.9	27.7	29.0	29.8	30.3	30.6	30.5	29.9	28.6	24.2	21.5	17.0	15.7	16.8	19.2	30.6	12.7
Min	4.3	3.0	2.0	1.4	0.6	0.4	2.3	7.2	9.5	12.1	13.0	13.4	12.9	13.2	13.9	14.0	13.4	13.3	12.2	11.4	10.7	8.9	5.9	4.1	11.6	14.5	0.4

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
2-Meter Temperature (Degrees Celsius)
September 2023

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	3.8	4.3	8.5	9.4	10.1	7.4	8.1	13.7	17.0	19.5	20.9	22.1	23.4	24.0	24.3	24.4	23.0	21.3	20.5	18.0	13.4	11.9	10.3	8.2	15.3	24.4	3.8
2	7.1	5.7	5.1	5.2	4.5	4.5	5.8	11.5	19.1	20.8	22.5	23.7	24.7	25.8	26.4	25.5	25.4	23.2	22.2	16.9	14.2	11.9	9.6	8.2	15.4	26.4	4.5
3	6.9	6.1	5.2	4.8	4.0	3.8	4.8	10.2	17.4	20.4	17.4	20.8	22.4	22.6	21.2	14.7	13.8	13.8	13.1	12.3	11.5	11.8	11.7	11.6	12.6	22.6	3.8
4	11.6	11.5	11.3	11.3	11.4	11.1	10.9	10.4	10.5	10.8	10.8	10.7	10.6	10.8	10.6	10.9	10.7	10.7	10.2	9.5	9.2	9.0	8.3	7.8	10.4	11.6	7.8
5	7.7	7.2	6.6	6.7	6.8	6.8	6.8	7.3	10.9	12.3	14.1	15.2	16.2	16.6	16.6	17.9	17.7	17.0	15.1	13.4	12.7	12.2	11.6	9.3	11.9	17.9	6.6
6	7.7	6.5	5.7	5.6	3.7	2.8	3.2	6.3	11.9	16.0	17.1	18.1	18.6	18.6	18.6	19.0	19.4	19.6	15.9	12.9	12.8	11.1	10.6	10.9	12.2	19.6	2.8
7	10.7	8.9	7.9	8.3	8.9	7.2	8.0	9.1	11.5	13.8	15.6	16.5	16.2	17.4	17.9	19.3	18.3	15.3	12.4	10.7	10.7	8.7	9.0	9.5	12.2	19.3	7.2
8	10.6	10.2	8.4	8.6	9.8	9.7	9.8	10.2	10.6	11.9	13.8	15.3	14.9	17.2	18.1	19.2	15.0	9.6	9.5	9.5	8.0	6.4	4.8	4.0	11.0	19.2	4.0
9	3.2	3.2	2.1	1.1	0.7	0.9	0.9	4.1	8.9	13.2	15.7	16.4	17.1	17.7	18.8	18.3	16.3	15.5	13.8	11.5	9.8	7.8	6.9	6.2	9.6	18.8	0.7
10	5.1	4.6	4.3	3.3	2.2	1.1	0.9	4.4	9.9	13.7	15.6	16.5	17.7	18.2	18.9	18.7	19.2	18.7	15.4	12.8	10.4	9.8	8.1	7.0	10.7	19.2	0.9
11	5.3	4.2	2.8	1.6	1.3	0.8	0.8	5.1	11.3	15.9	17.8	19.0	20.1	20.8	21.4	21.3	21.1	20.0	15.2	11.8	9.2	8.4	7.0	6.5	11.2	21.4	0.8
12	4.9	4.6	4.4	3.8	3.6	3.4	3.8	6.7	11.0	16.8	20.3	21.5	22.4	22.5	22.8	22.7	21.5	20.8	16.1	12.1	9.4	11.6	12.5	11.1	12.9	22.8	3.4
13	10.5	10.0	9.9	9.1	8.3	7.5	6.7	7.1	9.4	14.3	15.0	15.9	16.7	16.7	17.8	17.2	16.4	15.0	13.2	11.5	9.0	8.0	5.9	4.3	11.5	17.8	4.3
14	2.9	2.2	0.9	0.4	0.2	-0.5	-0.3	2.6	5.9	10.8	14.2	15.5	16.1	17.2	17.4	17.7	17.5	16.3	12.5	8.6	7.2	6.1	3.2	1.1	8.2	17.7	-0.5
15	0.7	0.1	-0.1	-1.1	-1.7	-1.9	-1.7	2.3	8.9	14.7	16.8	17.6	18.3	19.1	19.7	20.1	19.9	19.0	13.2	9.4	7.1	4.8	2.1	1.8	8.7	20.1	-1.9
16	0.2	-0.1	-0.8	-1.3	-1.4	-1.9	-2.0	2.4	8.9	16.0	18.8	19.9	20.9	21.9	22.3	22.5	22.3	20.7	14.8	11.0	9.1	8.3	4.8	3.4	10.0	22.5	-2.0
17	2.1	1.2	0.2	-0.2	0.0	-0.6	-1.0	3.2	9.4	15.9	20.1	21.8	22.5	23.0	23.4	22.9	23.1	21.9	17.3	14.3	10.4	8.3	7.8	5.5	11.4	23.4	-1.0
18	4.1	2.7	1.9	1.3	0.3	-0.4	-0.4	3.0	11.8	16.9	17.4	17.1	18.2	19.1	18.7	19.2	18.8	17.8	16.5	15.1	14.7	11.5	7.7	4.4	10.7	19.2	-0.4
19	2.0	0.6	0.1	2.4	5.0	3.6	1.7	4.5	10.5	12.4	13.7	14.8	16.0	16.9	17.2	16.2	16.5	15.0	12.6	11.9	10.1	7.0	4.3	2.8	9.1	17.2	0.1
20	0.2	-1.2	-2.1	-3.1	-4.0	-4.5	-4.7	-0.4	4.4	8.6	11.1	12.5	13.5	14.0	14.0	14.0	13.3	11.9	10.5	10.0	9.9	9.6	9.2	9.1	6.5	14.0	-4.7
21	8.5	7.6	7.1	5.2	3.6	3.1	4.0	3.9	4.0	4.6	5.1	6.5	7.2	7.9	8.2	7.4	6.7	6.3	5.8	5.2	5.4	5.2	4.8	4.8	5.8	8.5	3.1
22	5.0	5.1	5.2	5.1	5.3	5.4	5.5	5.8	6.3	7.3	7.6	8.4	9.5	9.9	9.6	8.6	8.4	7.9	7.6	7.4	7.3	7.2	7.3	7.4	7.1	9.9	5.0
23	7.2	7.3	7.4	7.5	7.2	7.1	6.7	6.9	6.8	7.6	8.6	10.2	12.3	13.0	13.7	14.1	14.0	12.7	8.2	5.6	3.3	2.5	1.4	0.0	8.0	14.1	0.0
24	-0.3	-0.9	-1.6	-2.2	-2.4	-3.0	-2.8	-0.4	4.4	9.8	12.7	14.6	15.8	16.5	17.0	17.8	16.4	15.2	11.1	8.6	5.6	3.6	2.5	1.5	6.6	17.8	-3.0
25	0.6	0.6	0.5	0.6	0.7	0.3	0.1	3.2	10.0	15.6	17.8	19.3	20.1	20.8	21.3	21.1	19.2	17.1	14.6	14.1	13.3	12.0	12.1	8.4	11.0	21.3	0.1
26	5.2	3.1	1.8	1.9	0.6	-0.1	-0.6	3.1	12.6	19.4	21.1	22.2	23.0	23.2	23.4	23.3	22.4	19.1	14.4	10.0	7.6	5.9	7.5	8.7	11.6	23.4	-0.6
27	7.0	4.1	3.7	2.3	0.8	-0.5	-0.6	1.1	6.3	14.0	13.7	13.8	14.8	16.2	17.0	16.0	13.8	10.6	8.7	6.9	6.1	6.0	6.2	6.0	8.1	17.0	-0.6
28	3.6	1.7	1.5	-0.7	-1.1	-1.9	-0.7	1.9	5.8	7.3	8.6	9.8	10.2	11.0	11.4	11.4	11.2	10.1	5.8	3.2	2.3	0.2	-0.5	-0.1	4.7	11.4	-1.9
29	0.4	0.2	-0.1	-2.1	-3.7	-3.8	-4.5	-2.9	1.9	7.5	9.9	11.1	11.9	12.7	13.2	13.8	13.9	12.0	8.8	8.4	8.5	8.9	9.3	9.6	6.0	13.9	-4.5
30	8.0	7.2	7.5	7.4	6.1	5.5	5.3	5.6	5.5	6.2	7.7	9.2	10.7	10.1	9.0	8.9	8.3	6.4	4.4	3.9	2.5	2.9	3.3	4.1	6.5	10.7	2.5
Avg	5.1	4.3	3.8	3.4	3.0	2.4	2.5	5.1	9.4	13.1	14.7	15.9	16.7	17.4	17.7	17.5	16.8	15.4	12.6	10.6	9.0	8.0	7.0	6.1	9.9	18.1	1.3
Max	11.6	11.5	11.3	11.3	11.4	11.1	10.9	13.7	19.1	20.8	22.5	23.7	24.7	25.8	26.4	25.5	25.4	23.2	22.2	18.0	14.7	12.2	12.5	11.6	15.4	26.4	7.8
Min	-0.3	-1.2	-2.1	-3.1	-4.0	-4.5	-4.7	-2.9	1.9	4.6	5.1	6.5	7.2	7.9	8.2	7.4	6.7	6.3	4.4	3.2	2.3	0.2	-0.5	-0.1	4.7	8.5	-4.7

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
9-2 M Delta Temperature (Degrees Celsius)
July 2023

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	1.58	1.79	1.23	1.31	1.45	0.43	-0.35	-0.70	-0.65	-0.59	-0.50	-0.52	0.09	0.30	-0.30	-0.52	-0.23	-0.15	0.09	0.74	1.08	0.58	0.60	0.94	0.32	1.79	-0.70
2	1.21	1.27	1.23	1.08	1.22	0.54	-0.44	-0.64	-0.33	-0.38	-0.50	-0.58	-0.62	-0.65	-0.51	-0.41	-0.27	-0.11	0.16	0.66	1.85	1.06	0.90	1.15	0.29	1.85	-0.65
3	1.56	1.13	1.40	0.99	0.84	0.29	-0.09	-0.64	-0.67	-0.51	-0.79	-0.44	-0.40	-0.42	-0.88	-0.72	-0.77	-0.23	0.07	0.10	0.95	0.90	0.54	0.48	0.11	1.56	-0.88
4	0.78	0.83	0.23	0.23	0.08	0.01	-0.18	-0.72	-0.99	-0.81	-0.90	-1.11	-1.30	-0.65	-0.88	-0.54	-0.51	-0.38	-0.31	0.12	0.62	0.68	0.92	1.24	-0.15	1.24	-1.30
5	1.08	0.69	0.81	1.24	1.04	0.58	-0.44	-0.62	-0.62	-0.72	-0.77	-0.88	-0.92	-0.83	-0.83	-0.78	-0.89	-0.50	-0.11	0.65	0.95	1.01	0.62	0.46	0.01	1.24	-0.92
6	0.29	0.55	0.77	1.45	1.76	0.69	-0.36	-0.74	-0.70	-0.63	-0.73	-0.73	-0.01	-0.25	-0.27	-0.44	-0.43	-0.26	0.29	0.26	0.65	0.24	0.95	0.55	0.12	1.76	-0.74
7	1.12	1.61	1.26	1.64	1.71	1.23	0.04	-0.73	-0.63	-0.46	-0.69	-0.61	-0.60	-0.90	-0.64	-0.23	-0.48	-0.24	0.12	0.49	0.63	1.07	2.10	1.18	0.33	2.10	-0.90
8	1.26	1.27	2.26	2.09	1.60	0.92	-0.24	-0.39	-0.43	-0.48	-0.56	-0.78	-1.04	-0.67	-0.69	-0.61	-0.51	-0.33	-0.10	0.99	0.73	0.22	0.17	0.34	0.21	2.26	-1.04
9	0.42	0.60	1.27	1.74	1.76	1.42	-0.31	-0.85	-0.87	-0.87	-0.81	-0.88	-0.81	-0.52	0.56	-0.82	0.16	-0.24	0.05	0.58	1.37	0.64	0.69	0.99	0.22	1.76	-0.88
10	1.18	0.69	1.55	1.07	0.80	0.51	-0.08	-0.33	0.07	0.03	-0.44	-0.47	-0.62	-0.83	-0.81	0.04	0.50	0.09	-0.16	0.14	0.84	0.55	0.23	0.38	0.21	1.55	-0.83
11	0.67	0.32	0.44	0.51	0.77	0.39	-0.25	-0.53	-0.69	-0.67	-0.80	-0.91	-0.68	-0.74	-0.58	-0.53	-0.63	-0.48	-0.17	0.39	1.07	2.11	1.50	1.12	0.07	2.11	-0.91
12	1.17	1.12	1.14	1.08	1.22	0.99	-0.33	-0.78	-0.84	-0.84	-1.09	-0.89	-1.00	-0.97	-0.96	-0.86	-0.66	-0.07	0.93	0.91	2.56	1.07	1.48	1.40	0.24	2.56	-1.09
13	1.09	1.09	1.36	0.93	1.28	0.53	0.03	-0.20	-0.72	-0.66	-0.68	-0.71	-0.54	-0.94	-0.99	-0.26	-0.62	0.26	0.26	0.26	0.71	0.86	0.95	1.78	0.21	1.78	-0.99
14	1.35	0.92	1.13	1.21	1.36	0.78	-0.29	-0.46	-0.78	-0.72	-0.83	-0.93	-1.10	-1.21	-0.92	-0.48	-0.34	-0.19	0.36	0.68	0.99	1.45	1.89	1.38	0.22	1.89	-1.21
15	1.22	1.79	1.42	1.62	1.37	1.09	-0.53	-0.73	-0.95	-0.71	-0.77	-0.86	-1.14	-1.26	-1.06	-0.99	-0.71	-0.42	0.26	1.23	1.60	1.45	1.79	1.86	0.27	1.86	-1.26
16	1.88	1.47	1.34	1.40	1.45	0.66	-0.11	-0.82	-0.75	-0.86	-0.93	-0.99	-1.08	-1.27	-0.91	-0.89	0.06	0.22	0.38	0.59	1.51	1.16	1.80	1.96	0.30	1.96	-1.27
17	1.60	2.51	1.47	2.17	2.77	1.41	-0.09	-0.29	-0.15	0.49	0.13	0.16	-0.27	-0.71	-0.48	-0.85	-0.58	-0.18	0.18	0.92	1.95	1.30	1.88	2.67	0.75	2.77	-0.85
18	1.55	1.23	1.56	1.59	2.05	2.72	0.17	-0.27	-0.41	-0.69	-0.94	-1.12	-1.09	-1.16	-1.18	-1.02	-0.81	-0.48	0.02	0.97	1.90	1.72	1.49	2.15	0.41	2.72	-1.18
19	2.56	2.16	1.71	1.89	1.57	1.33	-0.12	-0.52	-0.85	-0.65	-1.22	-1.15	-1.05	-1.30	-1.27	-1.13	-1.07	-0.58	-0.28	0.25	0.50	0.49	0.61	1.06	0.12	2.56	-1.30
20	0.86	1.06	1.39	0.85	2.13	1.45	0.20	-0.33	-0.36	-0.62	-0.76	-0.83	-0.83	-0.87	-0.86	-1.05	-1.12	-0.26	0.06	0.41	0.74	1.25	1.53	1.42	0.23	2.13	-1.12
21	1.92	1.83	1.39	1.27	1.11	1.36	-0.23	-0.82	-0.91	-0.94	-1.03	-1.13	-1.16	-1.05	-0.86	-0.29	-0.55	-0.20	0.15	1.04	1.33	2.14	1.22	1.27	0.29	2.14	-1.16
22	2.15	1.96	1.47	1.77	1.66	1.09	-0.27	-0.48	-0.92	-1.11	-1.02	-1.09	-0.68	-0.73	-0.43	-0.60	-0.28	0.85	0.70	1.34	1.97	1.48	1.82	1.98	0.53	2.15	-1.11
23	2.24	1.66	1.79	2.07	1.97	1.77	0.00	-0.64	-1.06	-0.84	-0.88	-1.02	-1.18	-1.17	-0.93	-0.98	-0.66	-0.35	1.05	1.31	0.62	0.97	1.38	1.49	0.36	2.24	-1.18
24	1.67	1.69	1.25	1.30	1.50	1.78	0.64	-0.48	-0.63	-0.72	-0.82	-0.92	-1.01	-0.02	0.09	0.10	0.50	0.44	0.30	1.33	1.65	1.80	1.58	1.91	0.62	1.91	-1.01
25	1.83	1.39	1.60	1.54	1.51	1.41	-0.02	-0.79	-0.85	-0.95	-0.87	-1.03	-0.93	-0.82	-0.69	-0.83	-0.67	-0.28	0.07	1.14	1.02	1.43	1.01	1.13	0.26	1.83	-1.03
26	0.97	1.40	1.90	0.95	1.42	1.30	0.00	-0.71	-1.03	-1.10	-1.14	-1.32	-1.31	-1.18	-1.16	-0.91	-0.75	-0.39	0.00	1.08	1.90	1.79	0.92	0.66	0.14	1.90	-1.32
27	0.42	0.45	0.36	0.35	0.67	0.73	0.01	-0.38	-0.86	-1.06	-0.95	-0.98	-0.64	-0.94	-0.50	-0.30	0.92	0.22	0.26	0.45	0.31	0.30	0.36	0.49	-0.01	0.92	-1.06
28	0.71	0.96	1.52	1.19	1.02	0.99	0.13	-0.17	-0.51	-0.49	-0.36	-0.74	-0.84	-1.04	-0.46	0.08	-0.11	-0.07	0.26	0.52	0.95	0.73	0.64	0.56	0.23	1.52	-1.04
29	0.96	0.58	0.94	1.06	1.26	0.60	-0.35	-0.57	-0.60	-0.77	-0.90	-0.98	-0.99	-0.64	-0.81	-0.28	-0.42	-0.11	0.12	0.46	0.83	0.34	0.37	0.66	0.03	1.26	-0.99
30	1.05	0.63	0.78	0.85	1.43	0.90	0.04	-0.43	-0.52	-0.03	-0.15	-0.51	-0.36	-0.78	-0.75	-0.11	-0.03	0.30	0.62	1.49	1.42	0.75	0.54	1.29	0.35	1.49	-0.78
31	1.02	1.75	1.82	1.51	1.21	1.87	0.55	-0.39	-0.86	-0.91	-0.64	-0.60	-0.78	-0.78	-0.35	-0.02	-0.43	0.60	0.75	0.63	0.54	0.91	2.05	2.31	0.49	2.31	-0.91
Avg	1.27	1.24	1.28	1.29	1.39	1.02	-0.11	-0.55	-0.68	-0.65	-0.75	-0.82	-0.80	-0.81	-0.69	-0.56	-0.40	-0.11	0.21	0.71	1.15	1.05	1.11	1.23	0.25	1.91	-1.02
Max	2.56	2.51	2.26	2.17	2.77	2.72	0.64	-0.17	0.07	0.49	0.13	0.16	0.09	0.30	0.56	0.10	0.92	0.85	1.05	1.49	2.56	2.14	2.10	2.67	0.75	2.77	-0.65
Min	0.29	0.32	0.23	0.23	0.08	0.01	-0.53	-0.85	-1.06	-1.11	-1.22	-1.32	-1.31	-1.30	-1.27	-1.13	-1.12	-0.58	-0.31	0.10	0.31	0.22	0.17	0.34	-0.15	0.92	-1.32

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
9-2 M Delta Temperature (Degrees Celsius)
August 2023

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	2.06	1.96	1.25	1.74	1.58	1.70	0.33	-0.82	-1.00	-0.86	-1.12	-1.16	-1.26	-1.21	-1.19	-1.25	-0.86	0.10	0.95	1.51	1.45	1.51	1.65	1.60	0.36	2.06	-1.26
2	1.83	1.80	2.07	2.14	2.07	1.65	0.46	-0.74	-1.02	-0.61	-0.44	-0.50	-0.43	-0.55	-0.36	0.08	0.11	0.33	0.65	0.54	0.29	0.58	0.45	0.50	0.45	2.14	-1.02
3	0.98	0.86	2.50	1.93	1.90	1.30	0.67	-0.35	-0.61	-0.46	-0.44	-0.13	0.21	0.01	-0.15	0.05	0.15	0.20	0.27	0.38	0.40	0.28	0.36	0.61	0.46	2.50	-0.61
4	0.65	0.57	0.25	0.40	0.41	0.38	0.39	0.20	-0.23	-0.84	-0.82	-0.55	-0.56	-0.51	-0.55	-0.60	-0.36	-0.15	0.12	0.05	0.09	0.21	0.29	0.38	-0.03	0.65	-0.84
5	0.67	0.86	0.46	0.05	0.05	0.08	0.00	0.00	-0.12	-0.18	-0.25	-0.26	-0.39	0.01	-0.18	0.03	0.05	-0.10	0.24	0.18	0.13	0.39	0.22	0.26	0.09	0.86	-0.39
6	0.31	0.49	0.57	0.64	0.27	0.33	0.38	0.06	-0.06	-0.20	-0.41	-0.89	-0.74	-0.88	-0.49	-0.39	-0.62	-0.26	-0.17	0.00	0.11	0.20	0.11	0.10	-0.06	0.64	-0.89
7	0.03	0.15	0.33	0.22	-0.04	-0.02	-0.13	-0.31	-0.29	-0.32	-0.45	-0.67	-0.61	-0.50	-0.93	-0.84	-0.95	-0.24	0.36	0.53	0.46	0.79	1.04	0.71	-0.07	1.04	-0.95
8	0.52	1.26	1.44	1.31	1.06	1.04	0.04	-0.35	-0.95	-0.90	-0.96	-0.90	-0.81	-0.96	-1.03	-0.85	-0.66	0.08	0.21	1.17	0.91	0.86	0.27	0.40	0.09	1.44	-1.03
9	1.10	1.15	0.94	1.15	0.86	0.61	0.10	-0.64	-0.52	-0.52	-0.58	-1.00	-1.07	-0.36	-0.55	-0.50	-0.01	0.40	0.42	0.61	0.20	0.12	0.11	0.31	0.10	1.15	-1.07
10	0.42	0.68	0.79	1.29	0.82	0.83	-0.09	-0.23	-0.32	-0.61	Au	Au	Au	Au	Au	Au	Au	-0.32	0.07	1.29	2.16	1.63	2.25	2.24	0.76	2.25	-0.61
11	1.50	0.88	0.97	0.84	1.01	1.41	0.15	-0.93	-1.02	-0.86	-0.91	-0.98	-0.93	-1.04	-0.87	-0.73	-0.60	-0.23	0.30	1.54	1.68	0.63	1.24	1.18	0.18	1.68	-1.04
12	1.43	1.45	1.66	1.79	1.44	1.34	0.26	-0.56	-0.52	-0.66	-0.73	-0.87	-1.10	-1.00	-0.91	-0.63	-0.11	0.13	0.21	0.23	0.22	0.38	0.97	0.20	0.19	1.79	-1.10
13	0.36	0.62	1.13	0.64	0.86	0.43	0.07	-0.43	-0.72	-0.83	-1.01	-0.93	-0.96	-1.19	-1.21	-0.95	-0.75	-0.52	0.00	1.04	0.89	0.49	1.09	1.20	-0.03	1.20	-1.21
14	1.19	1.43	1.99	1.74	1.77	1.52	0.51	-0.77	-0.98	-1.04	-1.04	-1.07	-1.17	-0.89	-1.02	-1.18	-0.87	-0.37	0.41	1.88	1.05	0.69	0.72	2.12	0.28	2.12	-1.18
15	2.63	1.94	1.84	1.76	1.66	1.84	0.71	-0.49	-0.93	-1.08	-0.98	-0.95	-1.03	-0.96	-1.03	-0.72	-0.33	0.07	0.58	1.72	2.47	1.46	1.29	1.64	0.55	2.63	-1.08
16	1.97	1.52	2.14	2.01	1.94	1.40	1.07	-0.15	-0.34	-0.60	-1.00	-0.98	-0.96	-1.01	-0.80	-0.54	-0.38	0.06	1.16	1.55	1.28	1.86	1.80	2.49	0.65	2.49	-1.01
17	2.33	2.26	2.18	1.41	1.28	1.64	0.58	-0.80	-0.93	-0.84	-1.06	-1.05	-1.07	-0.81	-0.61	-0.65	-0.54	0.00	1.24	1.78	0.77	2.03	1.41	1.29	0.49	2.33	-1.07
18	1.18	1.86	2.21	1.58	1.59	1.48	0.48	-0.18	-0.32	-0.25	-0.80	-0.43	-0.37	-0.79	-0.38	0.34	-0.08	0.15	0.28	0.41	1.42	2.24	1.72	1.70	0.63	2.24	-0.80
19	0.99	0.59	0.60	0.68	0.68	1.29	0.35	-0.41	-0.51	-0.84	-0.78	-0.94	-0.98	-1.01	-0.67	-0.54	-0.03	-0.07	-0.01	0.15	0.12	0.18	0.10	0.07	-0.04	1.29	-1.01
20	0.04	0.06	0.15	0.12	0.19	0.39	0.22	-0.13	-0.17	-0.30	-0.44	-0.32	-0.21	-0.21	-0.33	-0.32	-0.29	-0.20	0.00	0.04	0.03	-0.01	0.00	-0.04	-0.07	0.39	-0.44
21	-0.04	-0.04	-0.02	0.07	0.18	0.15	0.08	-0.04	-0.02	-0.11	-0.27	-0.40	-0.54	-0.73	-0.60	-0.18	-0.06	0.37	0.37	0.56	1.50	0.92	1.34	2.59	0.21	2.59	-0.73
22	1.27	0.96	0.84	0.70	0.51	1.85	0.94	-0.14	0.03	-0.18	-0.39	-0.56	-0.45	-0.20	0.26	-0.39	-0.29	0.18	0.83	1.17	0.98	1.07	1.14	1.82	0.50	1.85	-0.56
23	1.31	1.54	0.77	0.40	0.24	0.59	0.20	-0.29	-0.35	-0.55	-0.73	-0.84	-0.70	-0.72	-0.47	0.00	0.14	-0.40	0.16	1.14	0.58	1.15	0.58	0.46	0.18	1.54	-0.84
24	0.77	0.55	0.61	1.00	1.39	1.31	0.79	-0.76	-1.03	-0.79	-0.73	-0.73	-0.81	-0.87	-0.67	-0.68	-0.51	-0.14	0.82	1.68	1.20	1.48	1.53	1.56	0.29	1.68	-1.03
25	1.93	1.63	1.46	1.95	1.43	1.56	0.51	-0.57	-0.40	-0.44	-0.20	-0.73	-0.89	-0.97	-0.74	-0.13	-0.24	-0.17	1.02	0.98	0.67	0.44	0.47	0.51	0.38	1.95	-0.97
26	0.53	0.90	1.49	0.91	0.79	1.05	0.47	-0.34	-1.06	-0.96	-0.88	-1.11	-1.08	-0.95	-0.97	-1.03	-0.58	0.04	0.75	1.54	0.88	1.81	1.68	2.01	0.25	2.01	-1.11
27	1.68	1.81	1.87	1.79	1.90	1.84	0.83	-0.39	-0.70	-0.93	-0.91	-0.97	-1.17	-1.02	-0.62	-0.31	-0.75	0.03	1.15	2.09	1.50	2.01	1.74	1.94	0.60	2.09	-1.17
28	1.68	2.39	1.82	1.91	1.57	1.40	0.93	-0.64	-0.90	-0.74	-0.77	-0.97	-0.91	-0.12	-0.77	-0.49	-0.10	0.05	1.13	0.79	0.68	0.91	0.98	0.70	0.44	2.39	-0.97
29	1.33	1.49	1.33	1.52	1.18	1.16	0.60	-0.43	-0.59	-0.51	-0.66	-0.68	-0.67	-0.70	-0.80	-0.60	-0.31	0.02	0.56	0.64	0.80	0.54	0.20	0.32	0.24	1.52	-0.80
30	0.28	0.22	0.52	0.89	1.46	1.51	0.72	0.02	-0.33	-0.47	-0.72	-0.77	-0.18	-0.87	0.00	-0.59	-0.14	0.04	0.09	0.09	0.06	0.07	0.04	0.02	0.08	1.51	-0.87
31	0.00	0.00	0.09	0.07	0.20	0.17	0.10	0.00	-0.07	-0.40	-1.02	-1.19	-1.09	-1.13	-1.09	-1.07	-0.71	-0.64	0.48	0.70	0.47	0.95	1.21	1.73	-0.09	1.73	-1.19
Avg	1.06	1.09	1.17	1.12	1.04	1.07	0.41	-0.37	-0.55	-0.61	-0.72	-0.78	-0.76	-0.74	-0.66	-0.52	-0.36	-0.05	0.47	0.90	0.82	0.90	0.90	1.05	0.25	1.73	-0.93
Max	2.63	2.39	2.50	2.14	2.07	1.85	1.07	0.20	0.03	-0.11	-0.20	-0.13	0.21	0.01	0.26	0.34	0.15	0.40	1.24	2.09	2.47	2.24	2.25	2.59	0.76	2.63	-0.39
Min	-0.04	-0.04	-0.02	0.05	-0.04	-0.02	-0.13	-0.93	-1.06	-1.08	-1.12	-1.19	-1.26	-1.21	-1.21	-1.25	-0.95	-0.64	-0.17	0.00	0.03	-0.01	0.00	-0.04	-0.09	0.39	-1.26

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
9-2 M Delta Temperature (Degrees Celsius)
September 2023

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	1.54	1.05	1.39	1.91	2.28	2.18	1.84	0.75	-0.07	-0.45	-0.66	-0.76	-0.92	-0.86	-0.66	-0.40	-0.01	0.21	0.45	1.13	2.00	1.32	1.36	1.29	0.66	2.28	-0.92
2	1.55	1.40	1.74	1.66	1.85	2.18	1.28	-0.65	-0.47	-0.45	-0.85	-1.00	-1.06	-1.13	-1.00	-0.54	-0.40	0.51	0.94	1.91	1.38	1.10	1.54	1.66	0.55	2.18	-1.13
3	1.46	1.55	1.65	1.09	1.56	1.41	0.61	-0.71	-0.97	-0.14	-0.02	-0.66	-0.73	-0.55	-0.12	0.21	0.27	0.06	0.26	0.33	0.24	0.02	0.05	0.09	0.29	1.65	-0.97
4	0.07	0.08	0.08	0.00	0.04	0.07	0.14	0.04	-0.08	-0.14	-0.08	-0.17	-0.17	-0.31	-0.26	-0.37	-0.17	-0.11	0.08	0.21	0.11	0.12	0.42	0.34	-0.00	0.42	-0.37
5	0.17	0.11	0.06	-0.07	-0.02	-0.07	-0.09	-0.24	-0.27	-0.34	-0.76	-0.72	-0.71	-0.61	-0.35	-0.59	-0.24	0.03	0.47	0.50	0.55	0.18	0.09	0.71	-0.09	0.71	-0.76
6	0.99	0.64	0.71	0.66	1.14	1.08	0.51	-0.24	-0.66	-0.64	-0.70	-0.85	-0.88	-0.50	-0.31	-0.13	-0.04	0.00	1.65	0.57	1.07	0.43	0.12	0.59	0.22	1.65	-0.88
7	0.50	0.40	0.33	0.34	0.19	0.46	0.00	-0.13	-0.53	-0.57	-0.74	-0.65	-0.50	-0.94	-0.70	-0.86	-0.03	-0.02	0.41	0.54	0.28	0.59	0.33	0.21	-0.05	0.59	-0.94
8	0.34	0.48	0.69	0.62	0.19	0.09	0.25	0.09	-0.02	-0.26	-0.51	-0.52	-0.28	-1.04	-0.80	-0.82	0.05	-0.01	0.08	0.32	0.72	0.79	1.01	1.14	0.11	1.14	-1.04
9	0.95	0.65	0.91	1.26	0.99	0.84	0.41	-0.28	-0.57	-0.64	-0.80	-0.81	-0.89	-0.84	-1.18	-0.87	-0.10	-0.08	0.10	0.13	0.25	0.39	0.38	0.67	0.04	1.26	-1.18
10	0.85	0.63	0.60	0.89	1.24	1.32	0.88	-0.21	-0.69	-0.69	-0.72	-0.69	-0.97	-0.91	-0.91	-0.57	-0.79	-0.42	0.46	0.66	0.38	0.63	1.16	1.94	0.17	1.94	-0.97
11	1.95	1.48	1.50	1.43	1.57	1.22	1.39	-0.12	-0.74	-0.77	-0.53	-0.64	-0.74	-0.84	-0.82	-0.56	-0.25	0.36	1.23	0.74	1.18	0.92	1.06	1.17	0.47	1.95	-0.84
12	1.51	1.50	1.41	1.60	1.15	1.26	0.86	-0.16	-0.67	-0.75	-0.53	-0.49	-0.62	-0.54	-0.62	-0.54	0.05	0.45	1.25	1.12	1.46	1.05	0.92	0.54	0.47	1.60	-0.75
13	0.16	0.36	0.10	0.29	0.47	0.51	0.53	-0.03	-0.33	-0.54	-0.72	-0.83	-0.79	-0.49	-0.63	-0.41	-0.05	0.40	0.89	1.06	1.09	0.68	0.76	1.14	0.15	1.14	-0.83
14	1.21	1.09	1.07	1.16	1.42	1.43	0.98	-0.17	-0.44	-0.76	-0.53	-0.87	-0.87	-1.20	-1.15	-0.91	-0.68	-0.15	0.99	0.87	0.79	0.78	1.76	1.80	0.32	1.80	-1.20
15	1.82	1.98	1.68	1.59	1.42	1.43	1.22	-0.15	-0.52	-0.76	-0.65	-0.73	-0.91	-1.01	-0.89	-0.85	-0.47	0.16	0.80	0.59	0.71	1.38	2.06	1.70	0.48	2.06	-1.01
16	1.73	1.25	1.60	1.57	1.50	1.59	1.37	-0.25	-0.94	-0.80	-0.79	-0.87	-0.82	-0.85	-0.70	-0.48	-0.23	0.61	1.14	0.69	0.90	0.85	1.82	1.73	0.48	1.82	-0.94
17	1.67	1.78	1.95	1.67	1.51	1.42	1.44	0.05	-0.97	-0.85	-0.79	-0.69	-0.75	-0.73	-0.59	-0.23	-0.13	0.57	2.26	2.51	3.11	2.31	0.94	1.48	0.79	3.11	-0.97
18	1.51	1.83	2.01	1.57	1.91	1.72	1.59	-0.09	-0.73	-0.43	-0.54	-0.25	-0.65	-0.48	-0.18	0.07	0.26	0.52	0.83	1.14	0.94	1.74	0.69	1.47	0.69	2.01	-0.73
19	1.87	1.81	1.69	2.28	2.28	1.99	1.38	-0.27	-0.52	-0.76	-0.92	-0.86	-1.04	-0.91	-0.89	-0.33	-0.42	0.40	0.60	0.27	0.61	1.39	1.47	0.92	0.50	2.28	-1.04
20	1.35	1.29	1.03	1.60	1.19	1.32	1.21	-0.39	-0.61	-0.65	-0.61	-0.66	-0.68	-0.71	-0.50	-0.32	0.00	0.07	0.19	0.20	0.10	0.07	0.09	0.05	0.19	1.60	-0.71
21	0.07	0.27	0.21	0.13	0.11	0.13	0.13	0.08	0.03	0.03	-0.10	-0.12	-0.18	-0.34	-0.27	-0.21	-0.11	-0.08	-0.07	0.23	0.11	0.03	-0.05	-0.05	-0.00	0.27	-0.34
22	-0.05	-0.03	-0.08	-0.07	-0.05	-0.05	-0.09	-0.13	-0.15	-0.28	-0.25	-0.37	-0.35	-0.21	-0.09	-0.07	-0.09	-0.04	0.00	0.02	0.04	0.06	0.06	-0.01	-0.09	0.06	-0.37
23	-0.03	-0.04	-0.03	-0.03	-0.03	-0.02	-0.05	-0.03	-0.07	-0.27	-0.51	-0.65	-0.93	-0.96	-0.96	-0.79	-0.49	-0.18	0.75	0.58	1.18	1.02	1.26	1.58	0.01	1.58	-0.96
24	1.04	0.79	0.82	0.87	0.88	0.70	0.91	0.18	-0.51	-0.34	-0.57	-0.61	-0.64	-0.49	-0.36	-0.36	0.20	0.45	0.42	0.70	1.04	0.95	1.37	1.28	0.36	1.37	-0.64
25	1.37	1.17	1.01	1.00	1.20	1.07	1.31	0.10	-0.66	-0.50	-0.48	-0.56	-0.51	-0.51	-0.41	0.03	0.97	1.34	1.06	1.45	1.18	1.13	0.94	2.00	0.61	2.00	-0.66
26	2.09	2.54	2.22	2.52	2.38	2.06	1.69	0.05	-0.56	-0.26	-0.33	-0.40	-0.49	-0.60	-0.49	-0.41	0.10	1.20	1.60	1.71	1.30	1.64	2.00	2.28	0.99	2.54	-0.60
27	0.64	1.46	1.20	1.22	1.74	1.52	1.29	0.16	-0.53	-0.43	-0.32	-0.27	-0.43	-0.70	-0.51	0.20	0.08	0.06	0.29	0.48	0.73	0.91	0.54	0.57	0.41	1.74	-0.70
28	1.58	1.18	0.95	1.18	1.08	1.47	1.32	0.45	-0.56	-0.76	-0.93	-1.12	-1.08	-1.14	-0.99	-0.68	-0.44	0.20	1.07	0.77	0.68	1.38	1.15	0.66	0.31	1.58	-1.14
29	0.41	0.27	0.71	1.53	1.78	1.14	1.36	0.41	-0.74	-0.90	-0.73	-0.84	-1.04	-1.10	-0.71	-0.57	-0.34	0.47	0.54	0.32	0.56	0.69	0.42	0.24	0.16	1.78	-1.10
30	0.67	0.56	0.72	0.44	0.34	0.42	0.26	-0.09	-0.35	-0.40	-0.80	-1.34	-1.54	-1.12	-0.74	-0.60	-0.58	-0.01	0.29	0.39	0.62	0.42	0.07	0.09	-0.09	0.72	-1.54
Avg	1.03	0.98	1.00	1.06	1.11	1.06	0.86	-0.07	-0.50	-0.52	-0.58	-0.67	-0.74	-0.75	-0.63	-0.43	-0.14	0.23	0.70	0.74	0.84	0.83	0.86	0.98	0.30	1.56	-0.87
Max	2.09	2.54	2.22	2.52	2.38	2.18	1.84	0.75	0.03	0.03	-0.02	-0.12	-0.17	-0.21	-0.09	0.21	0.97	1.34	2.26	2.51	3.11	2.31	2.06	2.28	0.99	3.11	-0.34
Min	-0.05	-0.04	-0.08	-0.07	-0.05	-0.07	-0.09	-0.71	-0.97	-0.90	-0.93	-1.34	-1.54	-1.20	-1.18	-0.91	-0.79	-0.42	-0.07	0.02	0.04	0.02	-0.05	-0.05	-0.09	0.06	-1.54

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Solar Radiation (Watts per Square Meter)
July 2023

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	4	76	222	383	553	696	816	851	215	48	492	757	449	418	262	92	4	0	0	0	264	851	0
2	0	0	0	0	4	77	227	390	559	707	827	903	937	915	812	771	610	441	264	96	5	0	0	0	356	937	0
3	0	0	0	0	5	46	135	307	541	470	836	443	475	470	820	717	650	290	155	124	3	0	0	0	270	836	0
4	0	0	0	0	2	14	107	344	519	518	711	981	989	481	604	340	413	294	191	53	3	0	0	0	274	989	0
5	0	0	0	0	9	80	184	355	535	696	739	892	943	842	822	741	667	445	252	62	3	0	0	0	344	943	0
6	0	0	0	0	5	68	172	282	454	698	650	650	151	372	335	486	477	241	113	108	4	0	0	0	219	698	0
7	0	0	0	0	2	40	191	361	525	684	830	792	767	981	734	419	589	429	221	87	7	0	0	0	319	981	0
8	0	0	0	0	3	58	200	366	537	688	822	934	1039	750	906	751	589	425	241	78	3	0	0	0	350	1039	0
9	0	0	0	0	3	62	204	363	535	687	812	893	939	690	153	743	234	375	251	82	3	0	0	0	293	939	0
10	0	0	0	0	6	36	78	196	62	178	464	566	934	912	808	224	28	117	165	39	3	0	0	0	201	934	0
11	0	0	0	0	3	63	128	269	494	622	759	898	690	808	676	624	603	433	257	86	2	0	0	0	309	898	0
12	0	0	0	0	3	59	199	355	529	679	802	899	903	917	854	736	569	348	107	91	3	0	0	0	336	917	0
13	0	0	0	0	4	38	48	325	541	626	649	535	527	743	832	339	540	280	239	74	2	0	0	0	264	832	0
14	0	0	0	0	2	45	180	319	473	588	711	797	864	889	726	443	403	306	141	38	1	0	0	0	289	889	0
15	0	0	0	0	2	43	168	327	506	661	627	834	953	888	823	696	525	378	197	58	2	0	0	0	320	953	0
16	0	0	0	0	3	63	180	359	534	685	812	893	937	901	846	615	243	204	178	75	2	0	0	0	314	937	0
17	0	0	0	0	2	51	165	349	461	172	130	94	368	800	621	736	583	417	246	83	2	0	0	0	220	800	0
18	0	0	0	0	2	46	199	367	545	698	823	908	946	932	872	758	614	441	258	85	2	0	0	0	354	946	0
19	0	0	0	0	2	43	191	357	532	684	813	902	933	921	863	752	618	447	267	71	2	0	0	0	350	933	0
20	0	0	0	0	2	42	178	344	515	668	794	881	923	918	800	805	632	323	228	66	3	0	0	0	338	923	0
21	0	0	0	0	2	39	175	345	521	671	794	885	929	761	655	412	516	373	211	64	1	0	0	0	306	929	0
22	0	0	0	0	1	37	171	335	511	667	793	869	740	732	626	638	441	171	162	65	1	0	0	0	290	869	0
23	0	0	0	0	1	38	194	342	515	637	775	886	924	856	755	639	577	408	108	12	1	0	0	0	320	924	0
24	0	0	0	0	0	19	176	377	534	621	733	751	832	451	344	187	104	73	95	17	1	0	0	0	221	832	0
25	0	0	0	0	0	36	164	324	496	653	781	861	822	728	665	696	467	324	203	49	1	0	0	0	303	861	0
26	0	0	0	0	1	35	166	332	505	657	793	910	829	857	854	701	560	388	210	56	1	0	0	0	327	910	0
27	0	0	0	0	1	32	158	324	499	652	785	696	495	660	290	211	25	103	39	4	0	0	0	0	207	785	0
28	0	0	0	0	1	33	92	245	436	315	157	744	950	904	451	140	225	143	47	25	1	0	0	0	205	950	0
29	0	0	0	0	0	40	150	319	494	651	780	866	897	603	832	458	437	333	157	60	0	0	0	0	295	897	0
30	0	0	0	0	1	26	160	278	292	453	576	854	711	997	800	362	354	260	202	43	0	0	0	0	265	997	0
31	0	0	0	0	0	23	142	304	475	633	765	864	915	869	622	404	561	226	76	17	0	0	0	0	287	915	0
Avg	0	0	0	0	2	45	165	330	491	604	715	798	790	761	687	558	461	318	185	63	2	0	0	0	291	905	0
Max	0	0	0	0	9	80	227	390	559	707	836	981	1039	997	906	805	667	447	267	124	7	0	0	0	356	1039	0
Min	0	0	0	0	0	14	48	196	62	172	130	94	151	48	153	140	25	73	39	4	0	0	0	0	201	698	0

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Solar Radiation (Watts per Square Meter)
August 2023

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	21	137	291	463	630	771	853	901	829	844	716	488	272	169	16	0	0	0	0	308	901	0
2	0	0	0	0	0	28	137	277	427	618	681	631	633	667	445	218	177	94	40	19	0	0	0	0	212	681	0
3	0	0	0	0	0	24	100	254	299	403	501	215	115	226	202	171	87	49	33	6	0	0	0	0	112	501	0
4	0	0	0	0	0	5	41	145	219	442	400	336	323	333	334	320	224	153	69	3	0	0	0	0	139	442	0
5	0	0	0	0	0	7	19	63	59	112	144	171	263	113	187	58	70	90	44	19	0	0	0	0	59	263	0
6	0	0	0	0	0	1	17	49	106	170	288	727	594	610	267	262	475	153	99	10	0	0	0	0	160	727	0
7	0	0	0	0	0	10	55	220	274	220	314	648	409	278	761	623	498	238	117	49	0	0	0	0	196	761	0
8	0	0	0	0	0	17	139	300	470	619	669	695	640	806	872	683	514	264	173	15	0	0	0	0	287	872	0
9	0	0	0	0	0	18	129	290	466	527	583	909	892	415	614	503	186	44	29	3	0	0	0	0	234	909	0
10	0	0	0	0	0	19	155	320	476	572	Au	Au	Au	Au	Au	Au	Au	353	175	27	0	0	0	0	123	572	0
11	0	0	0	0	0	19	148	307	483	638	764	849	883	857	792	672	526	353	172	22	0	0	0	0	312	883	0
12	0	0	0	0	0	12	122	299	359	480	700	843	850	736	641	481	222	41	20	4	0	0	0	0	242	850	0
13	0	0	0	0	0	14	133	299	474	628	760	837	907	866	824	633	516	340	165	20	0	0	0	0	309	907	0
14	0	0	0	0	0	16	143	302	480	635	760	842	877	860	793	671	521	345	164	19	0	0	0	0	310	877	0
15	0	0	0	0	0	12	129	295	470	625	749	830	862	840	775	660	503	326	149	16	0	0	0	0	302	862	0
16	0	0	0	0	0	10	102	233	272	384	572	679	753	771	689	552	432	257	91	8	0	0	0	0	242	771	0
17	0	0	0	0	0	9	97	262	444	610	740	827	859	787	696	610	437	290	103	11	0	0	0	0	283	859	0
18	0	0	0	0	0	3	38	118	231	426	680	508	533	740	452	197	225	155	105	12	0	0	0	0	184	740	0
19	0	0	0	0	0	11	79	163	217	511	683	745	746	713	495	406	74	71	13	0	0	0	0	0	205	746	0
20	0	0	0	0	0	4	51	120	183	240	313	225	166	176	287	239	202	95	22	1	0	0	0	0	97	313	0
21	0	0	0	0	0	2	14	26	41	173	369	520	690	823	620	285	135	56	45	4	0	0	0	0	158	823	0
22	0	0	0	0	0	4	81	248	231	383	574	787	731	540	196	459	455	231	66	3	0	0	0	0	208	787	0
23	0	0	0	0	0	4	95	267	439	587	725	731	687	584	467	168	173	303	113	4	0	0	0	0	223	731	0
24	0	0	0	0	0	6	105	261	433	588	716	792	819	821	649	601	429	271	96	3	0	0	0	0	275	821	0
25	0	0	0	0	0	6	95	219	369	377	230	600	683	667	492	191	223	212	27	0	0	0	0	0	183	683	0
26	0	0	0	0	0	3	75	212	350	476	584	658	702	677	611	506	343	184	66	2	0	0	0	0	227	702	0
27	0	0	0	0	0	4	48	201	346	474	586	662	688	605	446	307	386	177	61	1	0	0	0	0	208	688	0
28	0	0	0	0	0	4	73	208	347	398	341	407	283	64	301	164	104	81	12	0	0	0	0	0	116	407	0
29	0	0	0	0	0	2	52	146	187	268	321	349	352	229	298	244	171	94	5	0	0	0	0	0	113	352	0
30	0	0	0	0	0	4	76	233	375	538	660	686	202	662	340	558	216	50	13	0	0	0	0	0	192	686	0
31	0	0	0	0	0	3	30	51	68	297	683	757	740	736	655	569	281	246	68	1	0	0	0	0	216	757	0
Avg	0	0	0	0	0	10	88	215	324	453	562	644	626	601	535	424	310	190	81	10	0	0	0	0	208	706	0
Max	0	0	0	0	0	28	155	320	483	638	771	909	907	866	872	716	526	353	175	49	0	0	0	0	312	909	0
Min	0	0	0	0	0	1	14	26	41	112	144	171	115	64	187	58	70	41	5	0	0	0	0	0	59	263	0

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Solar Radiation (Watts per Square Meter)
September 2023

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	3	80	120	303	545	663	731	777	673	556	420	253	114	55	1	0	0	0	0	221	777	0
2	0	0	0	0	0	3	73	236	366	453	663	742	780	707	696	433	379	105	66	1	0	0	0	0	238	780	0
3	0	0	0	0	0	2	77	232	416	256	266	579	543	378	186	29	81	45	13	0	0	0	0	0	129	579	0
4	0	0	0	0	0	0	2	16	55	131	147	123	91	145	84	145	64	43	24	0	0	0	0	0	45	147	0
5	0	0	0	0	0	1	18	192	311	393	629	648	727	589	317	530	290	116	13	0	0	0	0	0	199	727	0
6	0	0	0	0	0	2	40	175	396	547	558	729	725	488	315	233	245	231	34	0	0	0	0	0	197	729	0
7	0	0	0	0	0	1	32	116	332	304	602	493	373	597	498	549	188	105	12	0	0	0	0	0	175	602	0
8	0	0	0	0	0	0	27	39	69	310	420	500	269	801	606	578	210	38	12	0	0	0	0	0	162	801	0
9	0	0	0	0	0	1	56	226	388	542	700	624	750	639	697	504	115	83	42	0	0	0	0	0	224	750	0
10	0	0	0	0	0	1	50	210	379	533	679	645	776	753	643	445	379	200	33	0	0	0	0	0	239	776	0
11	0	0	0	0	0	1	56	220	379	533	655	732	758	709	645	489	334	159	13	0	0	0	0	0	237	758	0
12	0	0	0	0	0	1	41	151	316	520	600	651	715	612	609	551	270	169	15	0	0	0	0	0	218	715	0
13	0	0	0	0	0	0	22	72	238	543	583	659	584	334	496	381	198	57	7	0	0	0	0	0	174	659	0
14	0	0	0	0	0	0	37	75	194	456	381	566	596	829	650	548	366	177	20	0	0	0	0	0	204	829	0
15	0	0	0	0	0	1	56	208	367	525	644	726	748	716	640	510	346	178	18	0	0	0	0	0	237	748	0
16	0	0	0	0	0	0	54	207	371	531	652	735	759	725	649	523	349	166	15	0	0	0	0	0	239	759	0
17	0	0	0	0	0	0	41	189	351	501	624	702	723	694	613	407	344	151	9	0	0	0	0	0	223	723	0
18	0	0	0	0	0	0	24	173	363	525	578	327	507	409	243	215	86	24	3	0	0	0	0	0	145	578	0
19	0	0	0	0	0	0	34	183	351	521	644	678	733	679	527	244	252	54	7	0	0	0	0	0	204	733	0
20	0	0	0	0	0	0	41	200	264	369	408	456	563	553	414	279	140	47	5	0	0	0	0	0	156	563	0
21	0	0	0	0	0	0	14	27	37	35	81	102	110	168	99	58	21	8	0	0	0	0	0	0	32	168	0
22	0	0	0	0	0	0	8	37	49	126	84	204	189	202	79	35	29	9	1	0	0	0	0	0	44	204	0
23	0	0	0	0	0	0	6	16	81	156	260	355	643	648	578	428	267	114	3	0	0	0	0	0	148	648	0
24	0	0	0	0	0	0	49	118	300	401	480	552	642	491	393	394	106	55	2	0	0	0	0	0	166	642	0
25	0	0	0	0	0	0	28	170	325	473	535	639	619	621	536	311	115	60	2	0	0	0	0	0	185	639	0
26	0	0	0	0	0	0	23	175	342	482	594	661	682	648	559	432	234	39	1	0	0	0	0	0	203	682	0
27	0	0	0	0	0	0	19	124	262	439	337	276	367	537	427	105	143	57	0	0	0	0	0	0	129	537	0
28	0	0	0	0	0	0	17	152	319	479	566	724	638	711	558	382	247	89	1	0	0	0	0	0	203	724	0
29	0	0	0	0	0	0	17	115	272	462	589	589	614	511	523	411	261	56	0	0	0	0	0	0	184	614	0
30	0	0	0	0	0	0	17	67	84	122	326	563	662	447	317	239	221	49	1	0	0	0	0	0	130	662	0
Avg	0	0	0	0	0	1	35	141	276	407	498	557	589	567	472	360	218	93	14	0	0	0	0	0	176	642	0
Max	0	0	0	0	0	3	80	236	416	547	700	742	780	829	697	578	379	231	66	1	0	0	0	0	239	829	0
Min	0	0	0	0	0	0	2	16	37	35	81	102	91	145	79	29	21	8	0	0	0	0	0	0	32	147	0

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Barometric Pressure (inches of mercury)
July 2023

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	24.53	24.53	24.52	24.52	24.52	24.53	24.54	24.53	24.53	24.52	24.51	24.50	24.52	24.56	24.53	24.50	24.48	24.47	24.47	24.48	24.48	24.48	24.48	24.48	24.51	24.56	24.47
2	24.47	24.47	24.47	24.47	24.47	24.47	24.48	24.48	24.48	24.47	24.46	24.46	24.45	24.44	24.43	24.43	24.42	24.41	24.41	24.41	24.43	24.44	24.45	24.45	24.45	24.48	24.41
3	24.45	24.45	24.46	24.47	24.48	24.49	24.50	24.51	24.49	24.49	24.48	24.46	24.46	24.45	24.44	24.43	24.43	24.45	24.46	24.48	24.50	24.53	24.54	24.56	24.48	24.56	24.43
4	24.56	24.57	24.58	24.59	24.61	24.63	24.64	24.63	24.63	24.62	24.62	24.62	24.62	24.61	24.61	24.61	24.61	24.61	24.60	24.61	24.61	24.62	24.62	24.62	24.61	24.64	24.56
5	24.60	24.60	24.60	24.59	24.59	24.59	24.59	24.59	24.58	24.57	24.57	24.56	24.55	24.54	24.54	24.52	24.51	24.50	24.50	24.52	24.52	24.53	24.53	24.53	24.55	24.60	24.50
6	24.52	24.51	24.50	24.49	24.49	24.49	24.49	24.49	24.48	24.47	24.46	24.45	24.48	24.48	24.48	24.48	24.47	24.47	24.48	24.48	24.48	24.50	24.50	24.51	24.49	24.52	24.45
7	24.50	24.50	24.50	24.50	24.50	24.51	24.52	24.53	24.52	24.51	24.51	24.52	24.51	24.50	24.48	24.48	24.48	24.47	24.47	24.48	24.49	24.50	24.50	24.51	24.50	24.53	24.47
8	24.50	24.49	24.48	24.48	24.48	24.48	24.48	24.48	24.48	24.47	24.47	24.46	24.44	24.45	24.45	24.45	24.44	24.43	24.43	24.45	24.46	24.47	24.47	24.47	24.47	24.50	24.43
9	24.46	24.46	24.46	24.46	24.46	24.46	24.47	24.47	24.47	24.46	24.45	24.45	24.44	24.43	24.44	24.43	24.42	24.42	24.41	24.41	24.43	24.44	24.44	24.44	24.45	24.47	24.41
10	24.44	24.43	24.42	24.42	24.42	24.42	24.43	24.45	24.45	24.43	24.42	24.41	24.41	24.40	24.39	24.38	24.42	24.47	24.44	24.42	24.43	24.45	24.45	24.44	24.43	24.47	24.38
11	24.44	24.45	24.45	24.44	24.45	24.45	24.46	24.46	24.45	24.45	24.44	24.43	24.43	24.43	24.42	24.42	24.42	24.42	24.43	24.45	24.47	24.48	24.48	24.49	24.45	24.49	24.42
12	24.49	24.49	24.49	24.49	24.49	24.50	24.51	24.51	24.51	24.50	24.50	24.49	24.49	24.48	24.47	24.46	24.45	24.45	24.46	24.46	24.47	24.47	24.48	24.49	24.48	24.51	24.45
13	24.49	24.48	24.48	24.49	24.50	24.51	24.52	24.52	24.51	24.50	24.50	24.50	24.50	24.50	24.49	24.48	24.47	24.48	24.48	24.51	24.53	24.55	24.56	24.57	24.50	24.57	24.47
14	24.56	24.56	24.56	24.56	24.57	24.58	24.59	24.60	24.60	24.60	24.60	24.59	24.59	24.59	24.59	24.59	24.59	24.58	24.59	24.59	24.60	24.62	24.62	24.62	24.59	24.62	24.56
15	24.61	24.61	24.61	24.61	24.60	24.61	24.62	24.62	24.61	24.60	24.60	24.59	24.58	24.58	24.57	24.57	24.56	24.55	24.55	24.55	24.56	24.57	24.57	24.58	24.59	24.62	24.55
16	24.57	24.56	24.56	24.56	24.56	24.56	24.58	24.57	24.58	24.57	24.57	24.57	24.56	24.55	24.54	24.53	24.52	24.51	24.51	24.51	24.52	24.53	24.52	24.52	24.55	24.58	24.51
17	24.51	24.50	24.48	24.47	24.46	24.46	24.45	24.43	24.40	24.39	24.47	24.48	24.44	24.40	24.40	24.39	24.37	24.37	24.37	24.39	24.41	24.42	24.43	24.44	24.43	24.51	24.37
18	24.45	24.46	24.47	24.47	24.48	24.49	24.51	24.52	24.52	24.52	24.52	24.52	24.52	24.52	24.51	24.50	24.50	24.50	24.51	24.53	24.54	24.57	24.58	24.59	24.51	24.59	24.45
19	24.60	24.60	24.61	24.62	24.63	24.64	24.66	24.67	24.67	24.67	24.67	24.67	24.67	24.66	24.66	24.65	24.65	24.65	24.65	24.66	24.68	24.69	24.69	24.69	24.65	24.69	24.60
20	24.68	24.68	24.69	24.69	24.69	24.68	24.68	24.68	24.67	24.67	24.66	24.65	24.64	24.63	24.62	24.61	24.60	24.59	24.59	24.61	24.62	24.63	24.64	24.64	24.65	24.69	24.59
21	24.64	24.64	24.63	24.64	24.64	24.65	24.66	24.66	24.65	24.64	24.63	24.62	24.61	24.59	24.58	24.57	24.56	24.55	24.54	24.55	24.56	24.57	24.56	24.56	24.60	24.66	24.54
22	24.56	24.55	24.55	24.56	24.56	24.57	24.58	24.58	24.57	24.56	24.55	24.54	24.53	24.52	24.51	24.50	24.49	24.48	24.48	24.48	24.50	24.51	24.52	24.52	24.53	24.58	24.48
23	24.52	24.52	24.52	24.52	24.53	24.54	24.55	24.56	24.55	24.55	24.54	24.53	24.53	24.52	24.51	24.49	24.48	24.48	24.48	24.50	24.51	24.51	24.51	24.51	24.52	24.56	24.48
24	24.51	24.50	24.50	24.50	24.50	24.51	24.52	24.52	24.51	24.51	24.51	24.49	24.48	24.48	24.50	24.53	24.53	24.53	24.50	24.49	24.49	24.50	24.48	24.48	24.50	24.53	24.48
25	24.49	24.50	24.50	24.50	24.51	24.52	24.54	24.53	24.53	24.52	24.51	24.50	24.49	24.48	24.47	24.47	24.46	24.46	24.46	24.47	24.50	24.52	24.52	24.53	24.50	24.54	24.46
26	24.54	24.53	24.53	24.53	24.53	24.54	24.55	24.54	24.53	24.52	24.51	24.50	24.49	24.48	24.48	24.46	24.45	24.43	24.43	24.45	24.47	24.49	24.49	24.49	24.50	24.55	24.43
27	24.49	24.48	24.49	24.49	24.49	24.49	24.51	24.50	24.50	24.49	24.48	24.47	24.48	24.49	24.48	24.47	24.48	24.48	24.49	24.51	24.54	24.54	24.54	24.56	24.50	24.56	24.47
28	24.56	24.57	24.56	24.57	24.58	24.59	24.61	24.61	24.61	24.62	24.62	24.63	24.61	24.60	24.60	24.60	24.61	24.61	24.61	24.62	24.62	24.64	24.65	24.65	24.61	24.65	24.56
29	24.65	24.64	24.64	24.63	24.63	24.64	24.66	24.66	24.64	24.63	24.62	24.61	24.61	24.60	24.59	24.58	24.57	24.56	24.56	24.58	24.59	24.59	24.59	24.59	24.61	24.66	24.56
30	24.58	24.57	24.57	24.56	24.58	24.58	24.59	24.57	24.57	24.57	24.56	24.55	24.54	24.53	24.51	24.50	24.51	24.50	24.49	24.49	24.52	24.54	24.55	24.56	24.55	24.59	24.49
31	24.56	24.56	24.56	24.57	24.59	24.59	24.60	24.60	24.60	24.59	24.58	24.56	24.55	24.53	24.52	24.51	24.49	24.48	24.48	24.48	24.48	24.49	24.49	24.49	24.54	24.60	24.48
Avg	24.53	24.53	24.53	24.53	24.54	24.54	24.55	24.55	24.54	24.54	24.54	24.53	24.52	24.52	24.51	24.50	24.50	24.50	24.49	24.50	24.52	24.53	24.53	24.53	24.53	24.57	24.48
Max	24.68	24.68	24.69	24.69	24.69	24.68	24.68	24.68	24.67	24.67	24.67	24.67	24.67	24.66	24.66	24.65	24.65	24.65	24.65	24.66	24.68	24.69	24.69	24.69	24.65	24.69	24.60
Min	24.44	24.43	24.42	24.42	24.42	24.42	24.43	24.43	24.40	24.39	24.42	24.41	24.41	24.40	24.39	24.38	24.37	24.37	24.37	24.39	24.41	24.42	24.43	24.44	24.43	24.47	24.37

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Barometric Pressure (inches of mercury)
August 2023

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	24.50	24.51	24.52	24.53	24.55	24.56	24.57	24.58	24.58	24.59	24.58	24.57	24.57	24.56	24.55	24.55	24.54	24.53	24.53	24.54	24.56	24.57	24.58	24.57	24.55	24.59	24.50
2	24.57	24.56	24.56	24.56	24.56	24.57	24.58	24.58	24.58	24.56	24.55	24.54	24.54	24.54	24.54	24.55	24.54	24.55	24.55	24.56	24.58	24.59	24.57	24.55	24.56	24.59	24.54
3	24.55	24.54	24.54	24.54	24.54	24.55	24.55	24.55	24.55	24.55	24.55	24.54	24.56	24.56	24.56	24.56	24.56	24.56	24.55	24.55	24.56	24.57	24.58	24.59	24.55	24.59	24.54
4	24.55	24.55	24.55	24.55	24.54	24.55	24.57	24.57	24.58	24.58	24.58	24.58	24.58	24.58	24.58	24.57	24.58	24.58	24.59	24.63	24.66	24.66	24.66	24.65	24.59	24.66	24.54
5	24.65	24.64	24.64	24.64	24.65	24.65	24.67	24.68	24.69	24.70	24.69	24.69	24.70	24.70	24.69	24.69	24.68	24.68	24.67	24.68	24.68	24.69	24.69	24.69	24.68	24.70	24.64
6	24.68	24.67	24.65	24.64	24.64	24.64	24.64	24.64	24.63	24.64	24.64	24.63	24.61	24.60	24.59	24.59	24.58	24.58	24.58	24.59	24.60	24.60	24.60	24.59	24.62	24.68	24.58
7	24.58	24.58	24.57	24.57	24.57	24.57	24.57	24.57	24.56	24.56	24.55	24.55	24.54	24.54	24.52	24.50	24.49	24.47	24.48	24.49	24.49	24.49	24.49	24.49	24.53	24.58	24.47
8	24.49	24.49	24.48	24.47	24.47	24.47	24.49	24.49	24.49	24.48	24.48	24.46	24.45	24.44	24.43	24.42	24.42	24.42	24.42	24.43	24.44	24.44	24.44	24.44	24.46	24.49	24.42
9	24.44	24.44	24.43	24.44	24.43	24.43	24.44	24.43	24.42	24.40	24.39	24.37	24.36	24.35	24.34	24.33	24.32	24.32	24.32	24.34	24.39	24.36	24.35	24.35	24.38	24.44	24.32
10	24.36	24.36	24.35	24.35	24.35	24.36	24.36	24.36	24.35	24.35	24.35	24.35	24.36	24.35	24.35	24.34	24.34	24.33	24.33	24.36	24.38	24.39	24.41	24.42	24.36	24.42	24.33
11	24.42	24.43	24.44	24.44	24.45	24.46	24.48	24.49	24.48	24.48	24.47	24.47	24.46	24.46	24.45	24.44	24.44	24.43	24.44	24.45	24.48	24.49	24.49	24.51	24.46	24.51	24.42
12	24.51	24.51	24.51	24.51	24.51	24.52	24.53	24.54	24.54	24.53	24.52	24.52	24.51	24.52	24.52	24.52	24.53	24.55	24.57	24.59	24.62	24.65	24.67	24.68	24.55	24.68	24.51
13	24.68	24.68	24.69	24.69	24.69	24.71	24.72	24.73	24.73	24.73	24.73	24.73	24.72	24.71	24.71	24.71	24.71	24.70	24.70	24.71	24.72	24.73	24.73	24.73	24.71	24.73	24.68
14	24.72	24.71	24.70	24.70	24.70	24.70	24.71	24.72	24.71	24.70	24.68	24.67	24.66	24.64	24.63	24.61	24.60	24.60	24.59	24.59	24.61	24.62	24.62	24.62	24.66	24.72	24.59
15	24.62	24.62	24.62	24.62	24.62	24.63	24.64	24.65	24.63	24.62	24.62	24.61	24.59	24.57	24.55	24.54	24.52	24.50	24.49	24.50	24.51	24.52	24.52	24.51	24.58	24.65	24.49
16	24.51	24.51	24.51	24.52	24.53	24.54	24.55	24.57	24.57	24.58	24.57	24.56	24.54	24.53	24.52	24.51	24.50	24.50	24.50	24.51	24.53	24.54	24.55	24.55	24.53	24.58	24.50
17	24.55	24.54	24.53	24.53	24.52	24.51	24.51	24.50	24.49	24.47	24.46	24.44	24.42	24.39	24.38	24.36	24.34	24.32	24.31	24.31	24.31	24.32	24.32	24.33	24.42	24.55	24.31
18	24.33	24.32	24.32	24.31	24.30	24.30	24.31	24.31	24.30	24.29	24.29	24.28	24.27	24.24	24.23	24.30	24.30	24.32	24.34	24.36	24.39	24.41	24.41	24.41	24.32	24.41	24.23
19	24.44	24.47	24.48	24.50	24.51	24.53	24.55	24.56	24.57	24.57	24.54	24.53	24.53	24.53	24.52	24.51	24.52	24.54	24.56	24.61	24.58	24.59	24.60	24.60	24.54	24.61	24.44
20	24.60	24.59	24.58	24.58	24.58	24.57	24.58	24.58	24.58	24.58	24.56	24.56	24.56	24.55	24.54	24.52	24.51	24.52	24.52	24.53	24.54	24.54	24.54	24.53	24.56	24.60	24.51
21	24.53	24.51	24.51	24.51	24.51	24.51	24.50	24.51	24.50	24.49	24.47	24.46	24.44	24.44	24.43	24.41	24.42	24.41	24.41	24.43	24.45	24.46	24.46	24.45	24.47	24.53	24.41
22	24.46	24.47	24.47	24.49	24.49	24.51	24.52	24.53	24.54	24.54	24.53	24.51	24.50	24.49	24.50	24.49	24.47	24.46	24.46	24.47	24.48	24.50	24.50	24.51	24.50	24.54	24.46
23	24.51	24.52	24.51	24.53	24.53	24.53	24.53	24.54	24.53	24.53	24.53	24.53	24.52	24.51	24.50	24.50	24.50	24.49	24.49	24.50	24.52	24.53	24.54	24.55	24.52	24.55	24.49
24	24.55	24.55	24.55	24.55	24.54	24.55	24.56	24.57	24.57	24.57	24.57	24.57	24.56	24.56	24.56	24.56	24.57	24.58	24.60	24.62	24.63	24.65	24.66	24.67	24.58	24.67	24.54
25	24.68	24.69	24.69	24.69	24.69	24.69	24.71	24.71	24.70	24.69	24.68	24.67	24.67	24.65	24.63	24.63	24.63	24.62	24.63	24.66	24.67	24.66	24.65	24.65	24.67	24.71	24.62
26	24.64	24.63	24.63	24.63	24.63	24.64	24.65	24.65	24.65	24.63	24.63	24.62	24.61	24.60	24.59	24.58	24.57	24.57	24.57	24.58	24.60	24.61	24.61	24.61	24.61	24.65	24.57
27	24.62	24.62	24.61	24.62	24.63	24.63	24.65	24.66	24.65	24.64	24.64	24.63	24.61	24.60	24.60	24.60	24.59	24.60	24.60	24.62	24.63	24.64	24.65	24.65	24.62	24.66	24.59
28	24.64	24.64	24.64	24.64	24.64	24.65	24.66	24.67	24.66	24.66	24.65	24.64	24.64	24.66	24.67	24.66	24.67	24.65	24.66	24.66	24.66	24.67	24.66	24.66	24.65	24.67	24.64
29	24.65	24.64	24.63	24.62	24.60	24.60	24.60	24.60	24.58	24.57	24.55	24.53	24.51	24.49	24.46	24.43	24.40	24.39	24.38	24.36	24.36	24.46	24.41	24.39	24.51	24.65	24.36
30	24.38	24.38	24.38	24.39	24.38	24.39	24.39	24.39	24.38	24.37	24.36	24.37	24.37	24.36	24.36	24.36	24.36	24.36	24.35	24.35	24.36	24.34	24.33	24.33	24.37	24.39	24.33
31	24.33	24.32	24.32	24.32	24.33	24.34	24.35	24.36	24.37	24.37	24.37	24.36	24.35	24.34	24.34	24.33	24.33	24.34	24.34	24.34	24.36	24.37	24.37	24.35	24.35	24.37	24.32
Avg	24.54	24.54	24.54	24.54	24.54	24.54	24.55	24.56	24.55	24.55	24.54	24.53	24.53	24.52	24.51	24.51	24.50	24.50	24.50	24.51	24.53	24.54	24.54	24.54	24.53	24.59	24.48
Max	24.72	24.71	24.70	24.70	24.70	24.71	24.72	24.73	24.73	24.73	24.73	24.73	24.72	24.71	24.71	24.71	24.71	24.70	24.70	24.71	24.72	24.73	24.73	24.73	24.71	24.73	24.68
Min	24.33	24.32	24.32	24.31	24.30	24.30	24.31	24.31	24.30	24.29	24.29	24.28	24.27	24.24	24.23	24.30	24.30	24.32	24.31	24.31	24.31	24.32	24.32	24.33	24.32	24.37	24.23

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Barometric Pressure (inches of mercury)
September 2023

Day	<< Hour >>																								Avg	Max	Min
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	24.36	24.38	24.36	24.35	24.36	24.36	24.37	24.38	24.38	24.38	24.38	24.39	24.39	24.39	24.40	24.39	24.40	24.41	24.42	24.42	24.44	24.44	24.46	24.46	24.39	24.46	24.35
2	24.46	24.45	24.45	24.46	24.46	24.47	24.48	24.49	24.48	24.48	24.48	24.47	24.46	24.45	24.44	24.44	24.43	24.43	24.43	24.44	24.46	24.47	24.47	24.47	24.46	24.49	24.43
3	24.47	24.47	24.47	24.46	24.45	24.44	24.44	24.43	24.42	24.40	24.40	24.37	24.34	24.31	24.29	24.33	24.34	24.31	24.31	24.31	24.32	24.32	24.30	24.30	24.38	24.47	24.29
4	24.29	24.26	24.25	24.25	24.24	24.24	24.25	24.26	24.27	24.27	24.28	24.30	24.31	24.32	24.34	24.35	24.37	24.39	24.41	24.42	24.44	24.45	24.45	24.46	24.33	24.46	24.24
5	24.47	24.47	24.48	24.49	24.49	24.49	24.50	24.51	24.51	24.51	24.50	24.48	24.47	24.46	24.45	24.44	24.43	24.43	24.44	24.44	24.45	24.45	24.45	24.46	24.47	24.51	24.43
6	24.46	24.46	24.46	24.46	24.47	24.46	24.47	24.48	24.48	24.47	24.47	24.46	24.45	24.44	24.43	24.42	24.41	24.40	24.40	24.41	24.42	24.42	24.43	24.45	24.44	24.48	24.40
7	24.45	24.44	24.45	24.48	24.46	24.47	24.49	24.50	24.50	24.51	24.51	24.51	24.52	24.51	24.51	24.49	24.49	24.52	24.51	24.52	24.54	24.54	24.53	24.54	24.50	24.54	24.44
8	24.54	24.53	24.52	24.53	24.56	24.56	24.52	24.57	24.57	24.57	24.57	24.56	24.57	24.56	24.56	24.56	24.57	24.59	24.60	24.62	24.63	24.64	24.66	24.66	24.58	24.66	24.52
9	24.66	24.65	24.65	24.65	24.67	24.67	24.68	24.69	24.69	24.69	24.69	24.68	24.68	24.67	24.66	24.66	24.67	24.67	24.69	24.70	24.71	24.71	24.70	24.70	24.68	24.71	24.65
10	24.69	24.69	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.68	24.67	24.66	24.65	24.64	24.63	24.62	24.61	24.61	24.62	24.64	24.64	24.64	24.64	24.63	24.66	24.69	24.61
11	24.63	24.62	24.62	24.61	24.61	24.61	24.61	24.61	24.61	24.60	24.58	24.57	24.56	24.55	24.53	24.52	24.52	24.51	24.51	24.51	24.52	24.52	24.51	24.51	24.56	24.63	24.51
12	24.51	24.50	24.50	24.49	24.49	24.48	24.48	24.48	24.48	24.47	24.46	24.45	24.43	24.42	24.41	24.40	24.40	24.39	24.40	24.41	24.43	24.45	24.46	24.47	24.45	24.51	24.39
13	24.46	24.46	24.45	24.45	24.44	24.44	24.45	24.46	24.46	24.47	24.46	24.47	24.45	24.44	24.43	24.43	24.44	24.44	24.46	24.48	24.50	24.51	24.52	24.52	24.46	24.52	24.43
14	24.53	24.54	24.55	24.55	24.56	24.57	24.59	24.60	24.61	24.62	24.62	24.61	24.61	24.60	24.60	24.59	24.59	24.59	24.60	24.61	24.63	24.63	24.63	24.62	24.59	24.63	24.53
15	24.63	24.62	24.62	24.62	24.62	24.62	24.63	24.64	24.64	24.63	24.63	24.62	24.61	24.60	24.58	24.57	24.56	24.56	24.56	24.57	24.58	24.57	24.57	24.56	24.60	24.64	24.56
16	24.56	24.55	24.55	24.55	24.56	24.56	24.56	24.58	24.58	24.58	24.59	24.58	24.58	24.57	24.56	24.55	24.54	24.53	24.53	24.53	24.54	24.53	24.53	24.52	24.55	24.59	24.52
17	24.52	24.51	24.51	24.50	24.50	24.50	24.50	24.51	24.51	24.50	24.49	24.48	24.46	24.44	24.42	24.41	24.39	24.38	24.39	24.40	24.40	24.40	24.39	24.39	24.45	24.52	24.38
18	24.39	24.38	24.38	24.38	24.37	24.37	24.37	24.37	24.38	24.38	24.38	24.37	24.35	24.34	24.32	24.31	24.31	24.32	24.32	24.32	24.33	24.34	24.34	24.34	24.35	24.39	24.31
19	24.34	24.35	24.35	24.36	24.37	24.37	24.37	24.38	24.39	24.38	24.38	24.37	24.36	24.33	24.32	24.32	24.31	24.31	24.33	24.33	24.35	24.35	24.35	24.36	24.35	24.39	24.31
20	24.36	24.36	24.35	24.35	24.35	24.36	24.36	24.37	24.37	24.37	24.37	24.36	24.35	24.35	24.35	24.35	24.35	24.36	24.38	24.39	24.40	24.41	24.42	24.42	24.37	24.42	24.35
21	24.42	24.43	24.43	24.44	24.45	24.45	24.46	24.46	24.47	24.48	24.47	24.47	24.47	24.46	24.46	24.47	24.48	24.50	24.50	24.49	24.49	24.48	24.47	24.45	24.46	24.50	24.42
22	24.45	24.44	24.43	24.42	24.40	24.39	24.39	24.39	24.40	24.39	24.39	24.39	24.38	24.37	24.36	24.37	24.37	24.37	24.37	24.38	24.39	24.39	24.39	24.39	24.39	24.45	24.36
23	24.39	24.40	24.40	24.41	24.42	24.43	24.44	24.45	24.46	24.47	24.48	24.47	24.46	24.45	24.44	24.44	24.44	24.44	24.44	24.45	24.45	24.45	24.45	24.45	24.44	24.48	24.39
24	24.45	24.45	24.45	24.46	24.46	24.46	24.47	24.48	24.49	24.50	24.49	24.49	24.49	24.47	24.47	24.47	24.47	24.48	24.48	24.49	24.50	24.50	24.50	24.51	24.52	24.48	24.52
25	24.52	24.52	24.53	24.54	24.55	24.55	24.55	24.56	24.57	24.57	24.56	24.55	24.54	24.53	24.52	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.53	24.57	24.50
26	24.49	24.48	24.47	24.47	24.47	24.46	24.46	24.46	24.46	24.45	24.44	24.42	24.42	24.41	24.40	24.39	24.38	24.39	24.41	24.41	24.42	24.43	24.45	24.46	24.44	24.49	24.38
27	24.46	24.46	24.45	24.44	24.44	24.43	24.43	24.42	24.41	24.38	24.37	24.35	24.34	24.32	24.31	24.30	24.33	24.38	24.40	24.42	24.42	24.43	24.43	24.43	24.40	24.46	24.30
28	24.43	24.43	24.43	24.41	24.41	24.41	24.41	24.42	24.42	24.41	24.41	24.39	24.38	24.37	24.35	24.35	24.35	24.35	24.35	24.36	24.36	24.35	24.35	24.35	24.39	24.43	24.35
29	24.35	24.35	24.34	24.34	24.34	24.34	24.34	24.35	24.36	24.37	24.36	24.35	24.34	24.33	24.32	24.32	24.31	24.31	24.32	24.33	24.32	24.32	24.32	24.31	24.33	24.37	24.31
30	24.31	24.30	24.30	24.32	24.31	24.31	24.30	24.31	24.31	24.31	24.30	24.30	24.29	24.28	24.29	24.30	24.31	24.32	24.32	24.34	24.35	24.36	24.38	24.38	24.32	24.38	24.28
Avg	24.47	24.47	24.46	24.46	24.47	24.46	24.47	24.48	24.48	24.48	24.47	24.46	24.46	24.45	24.44	24.44	24.44	24.44	24.45	24.46	24.46	24.47	24.47	24.47	24.46	24.51	24.41
Max	24.69	24.69	24.68	24.68	24.68	24.68	24.68	24.69	24.69	24.69	24.69	24.68	24.68	24.67	24.66	24.66	24.67	24.67	24.69	24.70	24.71	24.71	24.70	24.70	24.68	24.71	24.65
Min	24.29	24.26	24.25	24.25	24.24	24.24	24.25	24.26	24.27	24.27	24.28	24.30	24.29	24.28	24.29	24.30	24.31	24.31	24.31	24.31	24.32	24.32	24.30	24.30	24.32	24.37	24.24

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Relative Humidity (Percent)
July 2023

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	86.0	89.6	90.1	90.9	91.3	88.8	80.0	65.8	46.0	39.8	39.1	37.8	44.3	68.6	64.0	52.7	42.4	44.2	45.8	58.4	67.8	75.5	81.5	86.0	65.7	91.3	37.8
2	87.8	90.8	91.4	90.8	90.4	87.8	75.8	58.3	35.2	33.2	30.9	31.2	31.5	30.3	29.3	27.6	26.5	26.8	29.0	33.8	51.0	63.9	70.6	74.1	54.1	91.4	26.5
3	80.0	83.6	84.4	82.9	87.6	85.9	83.9	74.0	63.7	62.2	55.6	56.8	53.8	53.0	46.5	45.8	38.5	45.5	46.5	47.7	61.2	73.3	69.4	67.9	64.6	87.6	38.5
4	78.0	72.8	72.9	74.7	76.0	74.7	74.6	69.3	62.2	58.0	57.4	58.1	52.5	49.5	48.1	57.7	60.5	57.2	60.5	69.4	75.7	78.3	82.8	87.2	67.0	87.2	48.1
5	88.3	89.3	88.0	89.8	90.8	91.5	84.3	71.5	62.0	56.8	49.8	41.5	38.7	35.0	35.2	33.5	31.2	33.2	50.3	59.1	64.3	69.0	77.0	81.6	63.0	91.5	31.2
6	81.8	83.7	84.6	89.1	88.0	89.4	81.1	71.3	61.3	38.8	36.1	41.3	50.1	65.4	64.5	62.3	44.4	39.7	54.4	59.5	72.0	82.5	86.0	87.6	67.3	89.4	36.1
7	88.6	88.8	90.8	90.2	90.8	91.5	86.7	71.5	54.4	37.0	35.4	38.6	39.0	33.3	33.7	35.5	36.0	37.8	40.6	46.4	53.0	58.7	61.7	57.2	58.2	91.5	33.3
8	59.4	64.2	72.8	79.6	84.9	82.4	73.4	55.2	41.9	38.9	37.7	36.4	36.9	42.9	49.0	46.9	43.6	39.2	39.2	52.3	56.9	75.3	79.6	81.3	57.1	84.9	36.4
9	82.1	84.1	88.2	89.5	90.9	90.3	78.5	66.1	47.8	40.1	36.0	30.8	27.3	29.6	45.5	39.9	40.9	38.2	37.2	49.8	68.4	62.6	54.0	71.1	57.9	90.9	27.3
10	81.3	80.5	83.9	87.5	88.1	87.5	84.4	73.9	77.4	78.9	64.3	54.3	38.5	35.6	34.4	42.2	49.0	77.6	77.1	76.4	82.2	87.8	84.4	82.1	71.2	88.1	34.4
11	85.8	86.4	88.3	89.2	90.2	90.5	85.2	79.0	64.1	58.5	53.1	46.4	44.5	36.3	30.8	28.4	30.9	35.4	39.1	45.6	53.4	68.5	74.7	81.6	61.9	90.5	28.4
12	86.0	87.7	88.8	89.6	90.6	89.7	79.6	66.5	56.2	51.3	47.5	41.1	35.8	30.5	26.1	25.6	25.1	23.4	33.1	38.6	59.7	66.6	73.5	77.7	57.9	90.6	23.4
13	81.7	81.8	84.4	84.7	82.5	82.7	80.1	63.9	46.5	40.7	39.0	40.5	39.5	36.6	36.7	34.0	30.1	41.7	38.4	54.9	59.9	59.9	66.9	78.6	57.7	84.7	30.1
14	85.8	85.3	88.9	89.7	90.7	91.1	83.3	70.1	52.8	49.9	45.8	42.4	38.5	37.7	39.8	38.2	37.5	39.9	44.3	51.2	68.6	75.8	82.6	86.0	63.2	91.1	37.5
15	88.1	88.2	90.1	90.3	90.8	91.3	84.5	69.6	55.5	46.0	41.9	37.6	33.9	31.3	29.8	29.7	29.8	29.4	33.5	44.9	61.8	69.0	78.4	82.4	59.5	91.3	29.4
16	84.5	86.6	85.9	88.4	88.8	86.9	77.7	60.0	42.2	33.7	31.1	28.7	27.8	26.1	23.9	20.6	25.8	30.6	33.5	40.2	50.5	59.3	61.3	59.9	52.3	88.8	20.6
17	61.9	66.3	68.1	70.3	76.6	80.6	74.8	60.0	41.0	42.0	57.5	72.8	74.0	51.2	44.6	38.7	35.4	28.5	24.1	29.4	32.6	41.0	46.6	49.8	52.8	80.6	24.1
18	59.4	71.2	77.4	81.0	82.0	64.4	42.4	34.6	30.8	29.1	29.1	28.1	27.4	23.6	20.3	18.4	16.1	16.4	18.6	24.6	38.6	54.3	63.6	71.0	42.6	82.0	16.1
19	74.7	78.0	80.6	81.9	84.2	81.9	69.3	51.7	37.5	29.7	28.0	30.1	27.2	24.7	22.5	22.2	20.5	28.1	35.1	41.6	48.6	52.4	56.6	50.3	48.2	84.2	20.5
20	47.2	52.3	61.5	67.0	71.9	66.2	58.7	45.8	46.6	44.7	38.4	35.1	30.1	27.4	27.6	25.1	20.5	29.1	38.7	40.3	44.7	50.4	51.4	57.9	44.9	71.9	20.5
21	75.2	77.7	83.5	80.7	85.3	86.9	76.7	58.3	42.9	35.2	31.4	26.5	21.3	22.9	22.1	21.7	20.6	22.9	26.3	42.0	55.2	65.3	62.6	74.6	50.7	86.9	20.6
22	76.8	81.1	83.1	83.8	84.6	84.7	72.2	53.5	38.2	27.0	23.9	19.9	17.3	16.5	16.3	15.8	15.7	21.9	27.8	42.6	55.6	61.1	65.5	71.1	48.2	84.7	15.7
23	76.1	78.5	78.2	79.9	81.1	79.3	67.4	51.7	34.5	21.8	18.3	15.4	15.1	13.2	13.6	12.7	11.9	12.5	27.7	35.1	28.9	37.9	52.5	55.7	41.6	81.1	11.9
24	66.3	70.6	73.9	73.4	76.1	75.3	65.3	46.8	30.9	27.3	24.2	18.5	16.8	16.6	22.9	33.1	39.1	65.3	61.4	65.6	79.6	80.9	76.8	81.3	53.7	81.3	16.6
25	81.6	84.3	87.3	86.3	89.0	88.9	81.0	65.0	42.8	39.1	36.0	34.1	30.8	28.4	27.1	26.2	26.0	26.1	32.3	40.0	42.2	55.5	67.1	73.6	53.8	89.0	26.0
26	75.5	81.0	84.2	86.4	85.9	86.4	77.2	58.3	48.0	45.8	42.8	39.1	36.4	32.0	30.1	28.9	26.8	27.0	28.5	31.9	42.2	55.0	62.8	67.3	53.3	86.4	26.8
27	75.3	80.3	82.8	86.1	85.5	87.7	82.8	66.5	43.9	31.9	29.0	28.9	38.2	41.1	36.3	37.7	52.2	56.9	58.0	62.0	81.1	81.5	83.4	81.2	62.1	87.7	28.9
28	83.0	85.3	87.0	90.6	91.1	92.1	91.6	84.0	65.8	66.6	67.4	65.1	41.2	35.3	41.5	46.9	54.8	53.2	62.2	69.6	82.0	81.1	83.3	87.6	71.2	92.1	35.3
29	88.7	87.6	88.9	90.7	91.2	92.1	86.1	71.4	57.4	49.9	45.2	42.4	40.7	35.5	26.4	22.7	34.5	36.2	51.3	51.9	56.1	64.4	66.7	71.5	60.4	92.1	22.7
30	79.6	78.9	78.1	81.5	83.4	83.7	75.7	60.6	57.8	38.4	26.1	19.8	19.4	20.8	18.8	17.1	22.8	22.2	25.0	31.3	39.0	50.1	60.6	69.3	48.3	83.7	17.1
31	74.3	82.8	85.5	85.3	87.6	88.8	82.3	62.2	44.9	30.5	20.1	14.6	14.0	14.3	13.7	15.8	12.8	16.0	24.9	27.0	32.6	37.9	43.3	60.2	44.6	88.8	12.8
Avg	78.1	80.6	83.0	84.6	86.1	85.2	77.3	63.1	49.4	42.7	39.3	37.2	34.9	33.7	32.9	32.4	32.3	35.6	40.1	47.2	56.9	64.3	68.6	73.1	56.6	87.2	26.9
Max	88.7	90.8	91.4	90.9	91.3	92.1	91.6	84.0	77.4	78.9	67.4	72.8	74.0	68.6	64.5	62.3	60.5	77.6	77.1	76.4	82.2	87.8	86.0	87.6	71.2	92.1	48.1
Min	47.2	52.3	61.5	67.0	71.9	64.4	42.4	34.6	30.8	21.8	18.3	14.6	14.0	13.2	13.6	12.7	11.9	12.5	18.6	24.6	28.9	37.9	43.3	49.8	41.6	71.9	11.9

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Relative Humidity (Percent)
August 2023

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	71.1	75.5	78.9	81.5	84.4	86.2	79.7	64.5	40.7	25.4	23.1	22.9	19.4	16.3	14.4	13.2	13.5	15.8	20.9	30.5	45.1	46.5	59.5	60.8	45.4	86.2	13.2
2	65.5	65.0	69.4	71.8	73.1	70.1	63.3	47.9	33.5	22.3	26.8	28.0	27.7	25.9	28.4	32.9	36.8	35.8	37.2	43.6	48.7	48.6	52.9	61.8	46.5	73.1	22.3
3	65.0	67.0	78.1	83.4	82.3	82.3	77.6	59.5	51.2	43.9	28.6	30.6	44.7	34.4	40.4	40.6	53.7	55.0	57.2	60.0	67.9	69.1	68.8	68.8	58.8	83.4	28.6
4	61.6	67.4	75.8	75.8	79.6	78.7	76.3	62.0	59.6	56.8	56.7	53.3	52.5	59.3	58.7	56.5	57.8	58.5	58.9	56.2	73.7	84.9	87.7	88.6	66.5	88.6	52.5
5	88.8	91.3	91.6	90.6	90.5	90.1	90.2	89.7	88.1	86.7	86.0	81.9	78.3	80.1	80.6	82.4	86.0	85.1	77.2	84.5	86.6	86.3	84.4	84.0	85.9	91.6	77.2
6	81.3	82.9	82.5	83.7	84.0	83.2	80.5	81.5	79.9	79.9	79.0	69.6	61.5	62.4	63.8	68.5	64.0	65.0	76.4	81.7	85.5	87.6	89.2	89.8	77.6	89.8	61.5
7	89.7	90.0	90.6	91.3	91.7	91.8	91.6	84.5	77.3	73.3	67.5	64.1	59.2	57.8	49.7	47.7	42.3	41.8	57.7	63.8	73.3	80.2	84.8	87.8	72.9	91.8	41.8
8	88.7	89.6	91.5	91.6	92.1	92.4	92.4	79.0	62.2	56.8	53.4	48.2	47.8	37.1	29.5	29.1	29.1	36.2	36.8	48.2	64.1	72.6	74.5	76.5	63.3	92.4	29.1
9	84.2	86.8	89.1	89.4	90.3	88.9	82.8	68.4	55.6	49.2	47.0	42.2	41.7	40.4	36.5	35.6	38.3	45.5	59.4	69.5	85.4	88.0	89.6	90.0	66.4	90.3	35.6
10	90.4	91.1	91.6	91.9	89.6	90.8	87.1	74.2	61.1	53.7	47.5	41.1	34.0	30.4	27.3	26.0	27.4	30.2	31.7	38.0	47.3	45.8	54.9	60.4	56.8	91.9	26.0
11	72.1	77.4	82.4	85.6	87.4	88.4	81.8	66.9	50.6	43.2	38.9	34.1	30.7	28.9	28.5	25.7	23.5	21.8	24.2	32.8	49.0	59.9	67.8	73.4	53.1	88.4	21.8
12	76.2	79.9	84.3	86.5	86.6	87.9	81.9	63.9	50.2	38.6	30.6	27.6	22.1	24.1	24.3	28.7	32.9	38.1	39.9	42.9	48.2	50.3	56.5	57.7	52.5	87.9	22.1
13	67.3	73.3	82.0	81.7	84.9	80.3	78.2	63.8	46.1	39.6	36.3	32.0	31.2	30.1	27.2	28.6	28.5	30.7	35.5	42.9	58.4	64.4	73.3	79.9	54.0	84.9	27.2
14	81.4	82.8	86.8	87.1	88.3	89.5	85.0	66.2	49.9	33.6	30.0	26.9	22.7	14.4	15.0	17.3	16.5	16.0	24.3	39.3	51.2	54.0	58.0	73.9	50.4	89.5	14.4
15	78.7	81.7	81.1	82.6	82.2	82.6	71.3	52.2	39.2	24.5	23.8	23.0	21.5	20.0	17.8	16.3	16.3	18.0	18.9	25.8	39.7	53.6	60.8	69.4	45.9	82.6	16.3
16	73.9	75.3	78.2	79.3	80.3	82.7	79.3	60.3	52.2	52.8	40.2	35.5	33.1	27.2	23.6	23.3	22.9	22.6	26.9	40.3	55.5	64.3	69.0	74.7	53.1	82.7	22.6
17	76.7	78.5	75.9	79.8	83.0	84.0	82.5	68.2	51.6	30.7	26.4	21.9	17.4	14.3	15.9	16.7	17.4	18.5	20.6	32.4	43.8	53.3	57.0	62.7	47.1	84.0	14.3
18	63.8	68.0	67.9	69.3	74.3	78.5	78.3	71.4	63.7	37.9	31.8	27.9	27.6	25.4	25.6	68.6	59.1	45.1	41.1	44.7	54.2	59.9	54.8	56.8	54.0	78.5	25.4
19	68.3	79.5	81.0	87.0	89.0	91.2	90.9	85.2	74.9	64.5	53.5	51.9	48.9	47.6	48.7	48.4	53.4	60.9	70.3	81.1	85.3	85.0	86.7	87.4	71.7	91.2	47.6
20	88.1	87.8	83.7	83.6	84.8	87.9	87.7	83.3	78.7	79.1	80.4	79.8	84.0	85.2	81.1	79.8	81.4	81.3	86.0	88.2	88.9	89.1	89.7	90.3	84.6	90.3	78.7
21	90.6	90.2	90.2	91.0	91.4	91.1	91.0	90.9	90.6	86.3	76.7	69.1	62.5	56.7	55.2	58.2	64.8	63.2	69.2	74.3	79.9	82.5	78.4	66.9	77.5	91.4	55.2
22	58.6	57.9	59.7	60.7	60.8	68.9	75.9	61.7	57.5	53.6	49.0	40.6	36.1	33.7	54.7	58.0	37.9	34.6	41.5	53.1	64.8	71.8	77.5	78.3	56.1	78.3	33.7
23	80.2	79.2	83.2	87.9	89.0	89.9	89.5	77.7	63.2	52.7	47.1	45.6	42.5	42.3	39.9	40.2	41.7	36.1	39.7	60.6	72.8	78.6	79.9	83.1	64.3	89.9	36.1
24	87.0	88.0	88.5	87.5	89.4	91.4	90.0	76.4	59.4	46.1	39.8	34.3	33.4	31.4	27.7	25.2	26.0	28.9	32.4	38.4	41.1	45.2	52.0	58.5	54.9	91.4	25.2
25	73.7	78.8	81.6	82.9	84.9	87.0	83.0	69.7	45.8	43.6	46.2	43.8	41.8	40.4	39.1	42.4	40.5	39.3	43.1	50.5	57.7	58.6	64.3	69.8	58.7	87.0	39.1
26	75.7	82.8	88.0	88.7	89.8	89.3	88.7	75.3	57.5	49.2	42.8	37.1	33.9	26.0	23.9	23.1	23.7	27.2	34.8	48.2	58.7	67.2	68.0	80.7	57.5	89.8	23.1
27	79.4	83.1	84.8	86.5	86.4	85.9	83.1	67.1	44.5	29.1	24.9	25.3	22.6	20.0	19.2	20.2	17.1	20.5	25.8	36.0	48.2	58.3	66.9	71.7	50.3	86.5	17.1
28	75.5	79.4	81.9	83.6	84.9	84.7	82.3	62.6	45.1	33.8	28.0	26.1	26.4	31.6	34.7	27.4	29.6	32.9	47.9	58.7	67.6	72.0	72.7	72.2	55.9	84.9	26.1
29	79.3	83.3	84.3	85.3	85.3	86.0	81.7	60.5	42.2	35.9	32.3	27.4	24.0	20.4	18.9	18.1	19.7	21.0	24.7	27.3	33.5	70.6	84.3	85.7	51.3	86.0	18.1
30	87.3	85.7	88.2	90.4	91.4	91.8	87.3	73.3	63.9	54.2	51.9	48.4	50.9	44.6	48.5	39.3	42.7	47.0	51.5	54.4	59.2	62.3	63.6	69.1	64.5	91.8	39.3
31	73.3	72.1	70.2	68.7	67.3	65.5	64.9	64.4	62.5	56.8	49.5	45.3	42.3	38.9	36.4	32.9	31.4	30.8	39.2	59.9	64.5	69.2	76.8	84.7	57.0	84.7	30.8
Avg	77.2	79.7	82.0	83.4	84.5	85.1	82.4	70.1	58.0	49.5	45.0	41.5	39.4	37.0	36.6	37.8	37.9	38.8	43.6	51.9	61.3	67.1	71.1	74.7	59.8	87.1	33.0
Max	90.6	91.3	91.6	91.9	92.1	92.4	92.4	90.9	90.6	86.7	86.0	81.9	84.0	85.2	81.1	82.4	86.0	85.1	86.0	88.2	88.9	89.1	89.7	90.3	85.9	92.4	78.7
Min	58.6	57.9	59.7	60.7	60.8	65.5	63.3	47.9	33.5	22.3	23.1	21.9	17.4	14.3	14.4	13.2	13.5	15.8	18.9	25.8	33.5	45.2	52.0	56.8	45.4	73.1	13.2

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Relative Humidity (Percent)
September 2023

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	84.0	84.7	73.3	69.1	65.8	74.3	72.9	58.3	46.4	40.3	38.2	36.0	30.7	29.8	29.7	30.0	35.5	38.6	40.7	47.2	63.5	68.1	73.5	78.4	54.5	84.7	29.7
2	82.7	85.3	88.0	87.5	88.2	89.6	88.1	70.7	49.0	43.3	38.2	35.4	31.9	28.1	26.3	30.4	29.9	33.9	35.3	51.1	60.7	69.9	76.7	80.8	58.4	89.6	26.3
3	85.3	86.0	87.9	88.7	89.5	89.6	86.2	67.5	53.0	44.5	65.7	49.4	42.4	41.6	45.7	76.1	85.0	87.1	89.2	90.2	91.1	91.4	91.4	91.7	75.7	91.7	41.6
4	91.8	91.7	91.9	92.1	91.6	90.8	89.7	90.6	90.8	88.6	82.9	83.7	83.2	82.4	83.8	82.5	80.4	79.0	80.4	84.6	86.1	87.5	89.0	90.5	86.9	92.1	79.0
5	91.0	91.0	91.0	90.6	89.3	90.0	91.2	91.5	77.7	68.5	62.1	57.0	54.1	52.5	51.5	47.0	46.6	49.3	62.1	71.5	74.0	77.4	78.6	84.3	72.5	91.5	46.6
6	87.9	89.0	90.6	90.8	90.4	91.9	92.4	91.1	70.3	54.2	48.4	43.4	39.3	34.9	36.7	35.9	34.0	31.8	43.5	60.8	64.9	75.8	79.8	76.6	64.8	92.4	31.8
7	76.9	84.3	86.6	87.8	86.6	89.7	88.9	85.7	73.2	60.7	53.8	49.8	53.4	48.6	43.8	37.5	41.6	58.1	70.1	83.0	82.2	87.6	88.9	86.5	71.1	89.7	37.5
8	82.1	84.7	88.8	88.6	88.1	89.5	87.6	86.9	86.4	82.0	68.8	63.5	66.6	55.4	50.6	42.9	57.2	82.1	85.7	83.4	86.7	89.5	90.8	91.5	78.3	91.5	42.9
9	91.7	92.5	92.0	92.3	92.4	92.5	92.8	91.4	82.2	62.5	50.3	49.7	47.9	42.7	37.4	41.0	53.3	58.4	66.1	74.5	80.9	86.5	87.8	88.9	72.8	92.8	37.4
10	89.5	90.0	90.8	90.8	91.2	91.6	91.7	88.1	70.8	56.1	47.2	42.7	39.6	37.9	32.2	30.3	29.2	31.0	51.7	65.0	74.5	73.9	76.2	80.2	65.1	91.7	29.2
11	84.7	87.7	88.5	90.8	91.5	91.5	91.5	83.3	59.8	46.3	39.2	37.7	33.8	31.6	27.7	28.1	27.4	30.8	50.5	65.4	74.5	76.5	80.3	81.8	62.5	91.5	27.4
12	84.6	85.5	87.1	87.4	88.6	88.5	87.5	77.7	66.1	44.1	35.9	31.6	28.8	29.4	28.1	27.9	28.9	30.5	46.0	63.9	74.0	68.1	71.2	80.6	60.1	88.6	27.9
13	86.0	87.4	88.4	88.8	90.1	90.5	90.5	91.3	87.2	51.4	48.1	45.4	43.0	42.1	38.5	38.2	39.3	42.3	51.8	62.2	73.6	79.1	83.0	86.4	67.7	91.3	38.2
14	87.7	88.4	89.8	90.6	90.8	91.0	90.3	90.0	85.0	66.5	47.3	41.0	38.9	35.3	36.8	33.9	35.1	39.5	53.8	72.4	77.9	78.6	82.5	89.6	68.0	91.0	33.9
15	90.3	89.7	88.9	89.2	89.6	89.1	87.9	77.8	61.0	46.8	34.8	30.4	30.5	29.6	27.0	24.4	23.8	24.4	45.3	61.9	66.8	75.3	81.5	83.9	60.4	90.3	23.8
16	85.2	87.2	87.8	88.7	88.6	89.0	87.6	78.2	62.7	39.2	30.0	26.1	21.6	18.1	13.6	11.9	15.1	22.3	40.2	54.1	59.0	59.7	72.5	79.1	54.9	89.0	11.9
17	81.9	85.1	86.7	87.4	87.9	87.3	86.6	76.4	60.9	43.9	28.2	22.1	22.0	20.4	18.8	19.6	20.0	20.4	29.3	37.1	54.8	63.0	64.3	71.2	53.1	87.9	18.8
18	75.1	79.4	81.1	79.1	82.2	84.1	83.4	73.7	49.8	29.2	27.7	26.4	25.5	25.6	25.9	24.4	25.6	29.0	33.4	37.8	37.2	45.8	63.1	73.0	50.7	84.1	24.4
19	79.7	85.2	85.6	79.1	67.0	72.0	77.5	69.0	47.0	40.0	32.9	26.6	26.4	29.0	31.2	35.2	35.0	34.2	36.9	38.7	46.9	59.4	69.8	73.1	53.2	85.6	26.4
20	78.6	81.2	83.3	85.0	85.1	86.8	85.1	70.9	63.2	48.9	40.2	37.6	35.1	34.9	34.3	35.4	38.7	43.0	45.6	48.1	50.8	51.1	52.5	52.7	57.0	86.8	34.3
21	55.2	62.0	64.8	75.9	83.6	86.0	82.2	82.5	85.7	85.4	85.2	81.3	80.0	77.8	77.7	80.9	84.0	85.6	89.6	90.0	89.5	88.7	90.9	91.4	81.5	91.4	55.2
22	91.7	91.7	91.7	91.8	91.9	91.9	91.9	91.6	91.1	89.1	89.5	89.4	84.7	82.8	83.7	89.6	89.1	90.9	91.5	91.9	92.0	92.0	91.4	91.1	90.2	92.0	82.8
23	91.5	91.8	91.9	92.0	91.8	91.4	91.0	89.5	85.4	82.8	78.6	68.8	56.0	50.0	46.8	44.2	47.4	53.6	75.2	86.9	89.3	90.4	90.8	91.3	77.9	92.0	44.2
24	91.7	91.9	92.0	91.4	91.3	90.7	90.8	91.2	89.5	71.3	51.0	42.8	39.4	37.6	32.3	25.6	30.1	36.2	62.3	71.0	79.7	85.5	87.0	88.6	69.2	92.0	25.6
25	89.8	89.9	90.1	90.1	90.0	90.1	89.3	81.6	64.3	42.4	33.2	31.5	28.9	27.9	25.1	24.7	29.1	38.8	45.9	47.4	49.6	52.9	50.8	62.9	56.9	90.1	24.7
26	74.1	81.8	83.1	83.2	83.8	85.1	84.4	74.4	51.9	26.9	23.3	21.9	21.2	19.7	20.2	21.3	19.7	23.3	34.1	50.5	60.0	65.9	62.5	57.2	51.2	85.1	19.7
27	65.2	74.7	77.6	81.2	83.7	86.8	87.2	82.5	72.9	43.1	45.9	48.3	45.8	42.8	35.3	34.3	45.7	57.0	62.1	72.5	76.9	72.9	62.9	57.1	63.1	87.2	34.3
28	65.0	72.8	73.6	81.7	81.5	83.8	80.4	72.7	56.5	52.1	48.6	44.2	41.5	40.8	39.6	37.9	37.9	40.9	58.6	72.5	74.7	81.8	82.3	83.5	62.7	83.8	37.9
29	82.2	84.5	84.8	87.0	87.7	88.4	88.2	85.9	75.0	52.5	42.6	38.6	38.1	36.2	30.5	28.2	27.1	36.5	53.3	55.7	52.9	48.2	49.5	49.4	58.5	88.4	27.1
30	54.3	58.5	60.5	67.2	78.3	84.9	86.8	84.8	82.8	81.1	74.3	69.0	64.8	65.3	69.5	69.0	71.3	78.0	85.0	87.4	89.3	90.8	90.6	88.1	76.3	90.8	54.3
Avg	81.9	84.5	85.3	86.2	86.6	87.9	87.4	81.6	69.9	56.1	49.7	45.7	43.2	41.0	39.3	39.6	42.1	46.9	57.2	66.0	71.1	74.4	77.1	79.4	65.8	89.6	35.8
Max	91.8	92.5	92.0	92.3	92.4	92.5	92.8	91.6	91.1	89.1	89.5	89.4	84.7	82.8	83.8	89.6	89.1	90.9	91.5	91.9	92.0	92.0	91.4	91.7	90.2	92.8	82.8
Min	54.3	58.5	60.5	67.2	65.8	72.0	72.9	58.3	46.4	26.9	23.3	21.9	21.2	18.1	13.6	11.9	15.1	20.4	29.3	37.1	37.2	45.8	49.5	49.4	50.7	83.8	11.9

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Precipitation (Inches)
July 2023

Day	<< Hour >>																								Tot Max	
	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.02
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.02
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.01	0.00	0.00	0.18	0.10
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.04	0.04	0.00	0.00	0.04	0.00	0.05	0.10	0.01	0.00	0.00	0.33	0.00
Max	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.04	0.04	0.00	0.00	0.02	0.00	0.05	0.10	0.01	0.00	0.00	0.18	0.10

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Precipitation (Inches)
August 2023

	<< Hour >>																									
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Tot	Max
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.02
5	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00	0.03	0.03	0.00	0.00	0.33	0.00	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.33
6	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.08	0.01	0.00	0.17	0.08
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.17	0.00	0.00	0.00	0.27	0.17
10	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Au	Au	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.03	0.00	0.00	0.00	0.29	0.26
20	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.04	0.03	0.20	0.05
21	0.01	0.00	0.11	0.04	0.01	0.05	0.01	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.11	
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	
23	0.00	0.00	0.00	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.07	
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.03	0.01	0.16	0.12	
30	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.05	
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot	0.06	0.05	0.11	0.11	0.02	0.08	0.05	0.07	0.01	0.04	0.03	0.00	0.02	0.38	0.03	0.14	0.05	0.00	0.01	0.38	0.29	0.22	0.08	0.04	2.27	0.00
Max	0.05	0.03	0.11	0.07	0.01	0.05	0.03	0.04	0.01	0.03	0.03	0.00	0.02	0.33	0.02	0.10	0.05	0.00	0.01	0.26	0.17	0.12	0.04	0.03	0.57	0.33

Sandfire Resources America Inc.
Black Butte Copper Project Met Tower Air Monitoring Summary
Precipitation (Inches)
September 2023

	<< Hour >>																									
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Tot	Max
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.03	0.00	0.00	0.01	0.00	0.02	0.02	0.01	1.02	0.93
4	0.04	0.06	0.03	0.02	0.20	0.36	0.20	0.06	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	1.07	0.36
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01
7	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.06	0.02
8	0.01	0.02	0.00	0.00	0.07	0.25	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.14	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.54	0.25
9	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.01	0.07	0.06
13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.03	0.09	0.04	0.05	0.00	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.09
22	0.07	0.01	0.00	0.05	0.01	0.01	0.00	0.01	0.00	0.01	0.03	0.01	0.05	0.02	0.05	0.14	0.08	0.09	0.05	0.10	0.05	0.02	0.01	0.01	0.88	0.14
23	0.00	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.03
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.01
Tot	0.13	0.10	0.03	0.17	0.38	0.66	0.26	0.07	0.07	0.09	0.04	0.02	0.06	0.02	0.05	1.07	0.25	0.10	0.06	0.14	0.06	0.11	0.04	0.03	4.01	0.00
Max	0.07	0.06	0.03	0.05	0.20	0.36	0.20	0.06	0.04	0.05	0.03	0.01	0.05	0.02	0.05	0.93	0.14	0.09	0.05	0.10	0.05	0.06	0.02	0.01	1.07	0.93

APPENDIX B: PERFORMANCE AUDIT REPORT, THIRD QUARTER 2023



BISON ENGINEERING, INC.

Bison Engineering

Preliminary Meteorological Parameters Audit Form

Audit Dates: 08/10/2023 Tower Lowered : 1030 MST Tower Back Up : 1710 MST
 Client: Tintina Resources
 Site: Black Butte
 AUDITOR: Steve Heck PRECEDING CALIBRATION BY: Don Milmine
 Daniel Bitz

Temperature

Audit Device: Control Company - digital thermometer Model 4000
 Meter S/N: 130236679 Temperature Sensor: Climatronics 100093
 Last certified: 07/14/2023 S/N X17929 (Upper), S/N X17927 (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
0.08	0.22	0.14	0.22	0.14	0.00
16.93	16.89	-0.04	16.85	-0.08	0.04
39.69	39.90	0.21	39.87	0.18	0.03

Wind Direction

Sensor height: 9 Meter
 Sensor (Make/model number): Climatronics/ 102083
 Serial Number : P1336C

As-found Crossarm Orientation:

GPS location at sensor:

N 46 deg 46.352 min, W 110 deg 52.949 min

GPS location at sighting point south of sensor:

N 46 deg 46.304 min, W 110 deg 52.949 min

Calculated as-found crossarm orientation:

180.0 deg

As-left Crossarm Orientation:

**No adjustment made to orientation
 w/alignment notch**

Existing Crossarm

As-found Linearity Check from DAS

Setpoint	Clockwise	Counter-CW	Diff CW	Diff CCW
0	0.0	0.1	0.0	0.1
30	28.3	28.2	-1.7	-1.8
60	58.1	58.1	-1.9	-1.9
90	88.0	88.0	-2.0	-2.0
120	118.1	118.1	-1.9	-1.9
150	147.7	147.7	-2.3	-2.3
180	177.7	177.7	-2.3	-2.3
210	207.4	207.3	-2.6	-2.7
240	237.9	237.9	-2.1	-2.1
270	268.1	268.2	-1.9	-1.8
300	298.4	298.4	-1.6	-1.6
330	328.6	328.7	-1.4	-1.3
		Max Diff	-2.6	-2.7

Replacement Crossarm

As-left Linearity Check from DAS

Setpoint	Clockwise	Counter-CW	Diff CW	Diff CCW
0	0.2	0.6	0.2	0.6
30	29.3	30.0	-0.7	0.0
60	59.0	58.9	-1.0	-1.1
90	89.7	89.6	-0.3	-0.4
120	119.5	119.2	-0.5	-0.8
150	149.5	148.6	-0.5	-1.4
180	179.0	179.0	-1.0	-1.0
210	209.5	208.9	-0.5	-1.1
240	238.1	238.3	-1.9	-1.7
270	268.4	268.0	-1.6	-2.0
300	298.5	299.0	-1.5	-1.0
330	329.7	330.1	-0.3	0.1
		Max Diff	-1.9	-2.0

Wind direction read 181.3 degrees with vane parallel to crossarm Data from
 this point forward won't require correction.

Wind direction read 90.1 degrees with vane parallel with crossarm
 Should read 180 degrees since crossarm oriented N/S ***Wind direction
 data must be corrected by +90 degrees***

Wind Direction continued:

Sensor response aligned with crossarm (as found): 90.1 deg (Crossarm was oriented North-South)
Sensor response aligned with crossarm (as left): 181.3 deg (Crossarm was changed and WD shaft position oriented to reflect N/S crossarm orientation)
Linearity Audit Device: Climatronics 101966, SN 72
As-found Threshold Torque: 0.07 oz-in
As-left Threshold Torque: 0.12 oz-in.
(Waters torque watch)

Wind Speed

Sensor height:: 9 Meter
Sensor (Make/model number): Climatronics/ 102083
Serial Number : No S/N
Calibration device: RM Young Model 18811 S/N CA02929

As-found Threshold Torque: 0.004 oz-in
As-left Threshold Torque: 0.004 oz-in
(Waters torque watch)

Existing Crossarm

As-found Synchronous motor checks

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	6.41	-0.25
600	13.09	12.41	-0.68

Replacement Crossarm

As-left Synchronous motor checks

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	6.72	0.06
600	13.09	13.22	0.13

There was clearly a problem with the WS
Checked internal mechanics and shims
WS card seemed to fail completely
during this process

Solar Radiation

Audit Device: Eppley PSP Pyranometer / SN 16166F3

Time (MST)	CTS Value (W/m ²)	Site Value (W/m ²)	Diff. (%)	Diff. (% FS)
1425	837	792	-5.4	-3.5
1427	834	793	-4.9	-3.2
1429	851	812	-4.6	-3.0

Relative Humidity

Site Sensor: Met One 083E-0-35
Sensor Height: 2 meters
Reference Std: Assmann Psychrometer

Ref Dry-Bulb: 17.8 deg C
Ref Wet-Bulb: 11.1 deg C
Ref RH: 47.3 %RH
Station RH: 46.4 %RH
Diff: -0.9 %RH

BP = 24.30 in. Hg

Barometric Pressure

Audit Device: BGI/Mesa Labs Delta Cal, S/N 999.

NIST-Traceable Certification 9/2/2021

Audit Value:	24.30	in Hg
Station Value:	24.35	in Hg
Diff:	0.05	in Hg

Precipitation

Rain Gauge = Met One Model 375D, Serial No. X15682

Level checked OK

Wind Screen in place

8" opening

250 ml water added

Calibration is 8.24 ml per tip

Known audit value is $520 / 8.24 = 63$ tips

Unit registered 68 tips

% difference from expected = +7.9%

Precip audit conducted during hours ending at 1200 & 1300 MST. No natural precipitation during audit.

Signature Site Operator : _____

Signature Auditor : _____