

**TINTINA RESOURCES, INC.
BLACK BUTTE COPPER PROJECT
AMBIENT AIR
MONITORING PROGRAM
Quarterly Data Report
Second Quarter 2013**

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CERTIFICATION OF DATA INTEGRITY

Bison Engineering, Inc., certifies the data in this report is an accurate summary of the air quality conditions measured at the Black Butte Copper Project air monitoring site. Every effort was made to obtain accurate and representative data and to comply with the procedures set forth in the *Quality Assurance Project Plan*, the *State of Montana Ambient Air Monitoring Program Quality Assurance Project Plan*, the Environmental Protection Agency's *Quality Assurance Handbook for Air Pollution Measurement Systems: Volume II, Ambient Air Specific Methods (April 1994)*, and EPA's *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, Part 1, Ambient Air Quality Monitoring Program Quality System Development (March 1998)*.

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TABLE OF CONTENTS

CERTIFICATION OF DATA INTEGRITY	ii
1.0 INTRODUCTION.....	1
2.0 MONITORING SYSTEM OPERATIONS.....	3
3.0 CALIBRATION DATA.....	4
4.0 PERFORMANCE AUDIT DATA	5
5.0 DATA COMPLETENESS	6
6.0 MONITORING DATA	11

LIST OF TABLES

Table 1. Monthly Data Completeness	7
Table 2. Quarterly Data Completeness	10
Table 3. Missing Data Codes	12
Table 4. Monthly Wind Rose Summary, Black Butte Copper Project Met Tower	13
Table 5. Monthly Wind Rose Summary, Black Butte Copper Project Met Tower	14
Table 6. Monthly Wind Rose Summary, Black Butte Copper Project Met Tower	15
Table 7. Quarterly Wind Rose Summary, Black Butte Copper Project Met Tower	16

LIST OF FIGURES

Figure 1. Monitoring Site Location	2
Figure 2. Monthly Wind Rose, Black Butte Copper Project Met Tower.....	17
Figure 3. Monthly Wind Rose, Black Butte Copper Project Met Tower.....	18
Figure 4. Monthly Wind Rose, Black Butte Copper Project Met Tower.....	19
Figure 5. Quarterly Wind Rose, Black Butte Copper Project Met Tower.....	20

APPENDICES

Appendix A: Meteorological Data

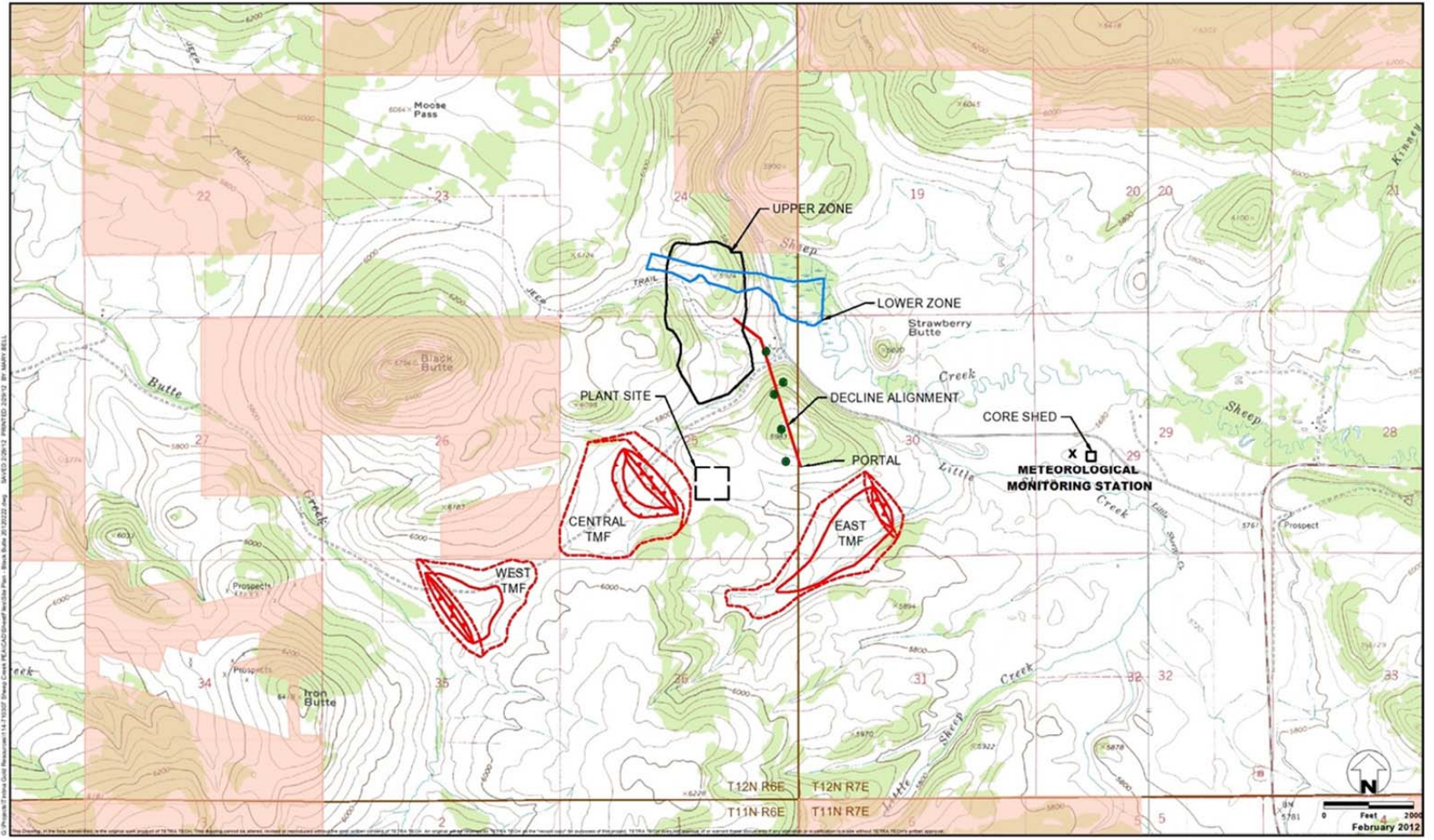
1.0 INTRODUCTION

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

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

This report presents the data collected during the second quarter (April through June) of 2013. 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.

Figure 1. Monitoring Site Location



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

2.0 MONITORING SYSTEM OPERATIONS

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

3.0 CALIBRATION DATA

No calibrations were performed during the second quarter.

A meteorological system calibration is performed:

- No later than 180 days after the most recent calibration that indicated the meteorological system response to be acceptable;
- After an interruption of more than a few days in meteorological system operation;
- Following any repairs which might affect meteorological system calibration;
- Following a physical relocation of the meteorological system; or
- After any other indication of significant inaccuracy of the meteorological system, such as system failure or an unacceptable audit result.

4.0 PERFORMANCE AUDIT DATA

No performance audit was performed during the second quarter.

5.0 DATA COMPLETENESS

The meteorological percentages of data recovery achieved during the second quarter of 2013 are given in Tables 1 and 2. In these tables, the number of possible data values during each month of the quarter is given, together with the number of valid readings and the number of hours spent on quality assurance activities (such as calibrations, performance audits, and maintenance on the sensors). The quality assurance hours are added to the number of hours of valid data to compute the net percentage data recovery.

- The data recovery for precipitation was 67.0%, because the tipping bucket rain gauge developed a mechanical problem at the start of June.
- The data recovery for wind direction and wind direction standard deviation was 99.8%. Minor data loss occurred due to a frozen vane.
- The data recovery for all other meteorological parameters was 100.0%.

Table 1. Monthly Data Completeness

April 2013					
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	715	99.3	0	99.3
Standard Deviation	720	715	99.3	0	99.3
Temperature 9 Meters	720	720	100.0	0	100.0
Temperature 2 Meters	720	720	100.0	0	100.0
Temperature Delta T	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	7,190	99.9	0	99.9

Table 1. Monthly Data Completeness (Continued)

May 2013					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
Black Butte Copper Project Met Tower					
Wind Speed	744	744	100.0	0	100.0
Wind Direction	744	744	100.0	0	100.0
Standard Deviation	744	744	100.0	0	100.0
Temperature 9 Meters	744	744	100.0	0	100.0
Temperature 2 Meters	744	744	100.0	0	100.0
Temperature Delta T	744	744	100.0	0	100.0
Solar Radiation	744	744	100.0	0	100.0
Barometric Pressure	744	744	100.0	0	100.0
Relative Humidity	744	744	100.0	0	100.0
Precipitation	744	744	100.0	0	100.0
Total	7,440	7,440	100.0	0	100.0

Table 1. Monthly Data Completeness (Continued)

June 2013					
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
Temperature 9 Meters	720	720	100.0	0	100.0
Temperature 2 Meters	720	720	100.0	0	100.0
Temperature Delta T	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	0	0.0	0	0.0
Total	7,200	7,200	100.0	0	100.0

Table 2. Quarterly Data Completeness

Second Quarter 2013					
Parameter	Readings Possible	Valid Readings	Percentage Recovery	Quality Assurance Hours	Net Percentage Recovery
Black Butte Copper Project Met Tower					
Wind Speed	2,184	2,184	100.0	0	100.0
Wind Direction	2,184	2,179	99.8	0	99.8
Standard Deviation	2,184	2,179	99.8	0	99.8
Temperature 9 Meters	2,184	2,184	100.0	0	100.0
Temperature 2 Meters	2,184	2,184	100.0	0	100.0
Temperature and Delta T	2,184	2,184	100.0	0	100.0
Solar Radiation	2,184	2,184	100.0	0	100.0
Barometric Pressure	2,184	2,184	100.0	0	100.0
Relative Humidity	2,184	2,184	100.0	0	100.0
Precipitation	2,184	1,464	67.0	0	67.0
Total	21,840	21,110	96.7	0	96.7

6.0 MONITORING DATA

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

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

Table 3. Missing Data Codes

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

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

April 2013																		
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	0.7	0.7	0.8	0.4	0.8	0.7	0.6	0.8	1.5	0.3	0.3	0.0	0.6	0.3	0.6	0.4	9.4
	1.1 - 2.0	0.1	0.8	1.0	1.3	3.3	1.9	1.7	1.5	0.7	0.7	0.8	0.7	0.7	1.1	1.3	0.7	18.3
	2.1 - 3.0	0.0	0.4	0.4	0.7	2.2	0.8	1.0	0.7	0.3	0.4	0.3	1.8	1.7	1.4	0.4	0.6	13.1
	3.1 - 4.0	0.6	0.0	0.3	0.8	0.8	0.0	0.1	1.3	0.3	0.0	0.4	1.8	3.3	2.5	1.9	1.1	15.3
	4.1 - 5.0	0.6	0.0	0.0	0.6	0.1	0.0	0.1	0.3	0.3	0.0	0.7	1.1	3.6	1.9	1.8	1.5	12.6
	5.1 - 6.0	0.7	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.3	0.0	1.3	2.2	1.7	1.1	0.1	8.1
	6.1 - 7.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8	2.8	1.0	1.8	0.1	7.5
	7.1 - 8.0	0.6	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	1.8	4.2	1.1	0.4	0.0	8.6
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.3	0.6	0.7	0.0	3.2
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.4	0.1	0.0	1.3
	10.1 - 11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.8
	11.1 - 12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.6
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.4
	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	0.1	0.0	0.0	0.1
	14.1 - 15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.3
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
	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	0.1	0.0	0.0	0.0	0.1
	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	3.5	2.2	2.5	3.8	7.4	3.5	3.9	5.7	3.2	1.7	2.5	10.1	22.8	12.6	10.1	4.6	100.0	
Average Speed	4.3	2.2	1.7	2.5	2.0	1.6	2.4	3.1	1.9	2.3	2.7	5.0	6.0	5.1	4.7	3.5	4.1	

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

May 2013																			
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	0.5	0.5	1.2	0.8	0.9	0.8	1.2	0.8	0.4	0.1	0.1	0.0	0.1	0.3	0.4	0.8	9.1	
	1.1 - 2.0	0.9	1.1	2.6	3.6	2.4	2.8	1.6	0.3	0.1	0.3	0.4	0.5	0.5	1.1	2.6	0.4	21.2	
	2.1 - 3.0	0.4	0.5	1.2	3.6	3.6	1.5	0.5	0.7	0.3	0.3	0.4	0.7	1.5	1.3	3.1	0.3	19.9	
	3.1 - 4.0	0.4	0.1	0.1	1.6	1.6	0.5	0.9	0.5	0.4	0.5	0.4	0.4	1.7	1.7	2.0	0.8	14.0	
	4.1 - 5.0	0.3	0.3	0.4	0.9	0.4	0.3	1.3	0.7	0.0	0.0	0.0	0.5	0.7	2.2	2.0	0.1	10.1	
	5.1 - 6.0	0.1	0.1	0.0	0.7	0.0	0.4	1.6	0.4	0.1	0.3	0.1	1.2	1.7	0.9	1.6	0.0	9.4	
	6.1 - 7.0	0.4	0.1	0.0	0.0	0.0	0.1	1.2	0.3	0.0	0.3	0.5	0.4	0.8	0.7	1.2	0.1	6.2	
	7.1 - 8.0	0.1	0.0	0.0	0.0	0.1	0.5	2.0	0.3	0.0	0.1	0.0	0.1	0.3	2.4	0.7	0.0	6.7	
	8.1 - 9.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.1	0.1	0.1	0.1	0.9	0.0	0.0	2.2	
	9.1 - 10.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	1.1	
	10.1 - 11.0	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	0.0	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	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	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	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	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	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	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	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	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	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	0.0	
Calm																		0.0	
Total	3.4	3.0	5.5	11.3	9.1	7.1	11.2	4.2	1.3	2.0	2.3	4.0	7.5	12.0	13.6	2.6	100.0		
Average Speed	3.3	2.7	1.9	2.6	2.5	2.9	4.7	3.9	2.4	4.1	4.3	4.5	4.3	5.0	3.7	2.5	3.6		

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

June 2013																		
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	0.7	0.7	0.3	1.5	0.7	1.4	0.4	0.1	0.0	0.1	0.3	0.4	0.3	0.3	0.7	8.5
	1.1 - 2.0	0.7	1.1	1.7	3.1	4.4	3.2	3.2	1.1	0.6	0.1	0.1	0.4	0.8	1.0	0.7	0.4	22.6
	2.1 - 3.0	0.1	0.3	1.5	3.5	2.9	2.1	1.1	1.1	0.0	0.3	0.6	0.8	1.0	2.5	1.7	0.6	20.0
	3.1 - 4.0	0.4	0.1	0.4	1.3	0.8	0.1	0.6	1.0	0.3	0.7	0.4	1.3	2.5	3.3	1.8	0.8	15.8
	4.1 - 5.0	0.1	0.0	0.6	0.8	0.4	0.4	1.1	0.7	0.6	0.3	0.1	0.3	1.8	1.4	1.1	0.0	9.7
	5.1 - 6.0	0.1	0.0	0.0	0.0	0.0	0.1	1.1	0.7	0.0	0.3	1.1	1.1	1.0	2.6	0.8	0.1	9.2
	6.1 - 7.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.6	0.0	0.3	0.0	0.4	2.1	1.9	0.7	0.0	7.2
	7.1 - 8.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.0	0.1	0.1	0.8	1.1	0.3	0.0	0.0	3.3
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.0	0.0	0.0	0.3	0.3	1.1	0.3	0.1	0.0	2.8
	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	0.6	0.1	0.0	0.0	0.8
	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	2.2	2.2	4.9	8.9	10.3	7.4	10.3	5.7	1.5	2.1	2.9	5.7	12.4	13.8	7.2	2.6	100.0	
Average Speed	2.5	1.5	2.3	2.4	2.1	2.5	3.4	3.5	3.0	4.4	4.7	4.6	5.1	4.3	3.7	2.3	3.5	

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

Second Quarter 2013																		
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	0.6	0.9	0.5	1.1	0.7	1.1	0.7	0.7	0.1	0.2	0.1	0.4	0.3	0.4	0.6	9.0
	1.1 - 2.0	0.6	1.0	1.7	2.7	3.4	2.7	2.2	1.0	0.5	0.4	0.5	0.5	0.7	1.1	1.5	0.5	20.7
	2.1 - 3.0	0.2	0.4	1.1	2.6	2.9	1.5	0.9	0.8	0.2	0.3	0.4	1.1	1.4	1.7	1.7	0.5	17.7
	3.1 - 4.0	0.5	0.1	0.3	1.2	1.1	0.2	0.5	0.9	0.3	0.4	0.4	1.1	2.5	2.5	1.9	0.9	15.0
	4.1 - 5.0	0.3	0.1	0.3	0.8	0.3	0.2	0.9	0.5	0.3	0.1	0.3	0.6	2.0	1.8	1.6	0.5	10.8
	5.1 - 6.0	0.3	0.0	0.0	0.2	0.0	0.2	1.0	0.5	0.1	0.3	0.4	1.2	1.6	1.7	1.2	0.1	8.9
	6.1 - 7.0	0.2	0.1	0.0	0.0	0.0	0.2	0.7	0.5	0.0	0.2	0.2	0.5	1.9	1.2	1.2	0.1	7.0
	7.1 - 8.0	0.3	0.0	0.0	0.0	0.0	0.2	0.9	0.2	0.0	0.1	0.0	0.9	1.8	1.3	0.4	0.0	6.2
	8.1 - 9.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.1	0.4	0.8	0.6	0.3	0.0	2.7
	9.1 - 10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	1.1
	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	0.1	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	0.2	0.0	0.0	0.0	0.2
	12.1 - 13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
	13.1 - 14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.1
	15.1 - 16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
	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	3.0	2.5	4.3	8.0	8.9	6.0	8.5	5.2	2.0	1.9	2.6	6.6	14.1	12.8	10.3	3.3	100.0	
Average Speed	3.5	2.2	2.0	2.5	2.2	2.5	3.8	3.5	2.3	3.7	3.9	4.8	5.4	4.8	4.0	2.9	3.7	

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

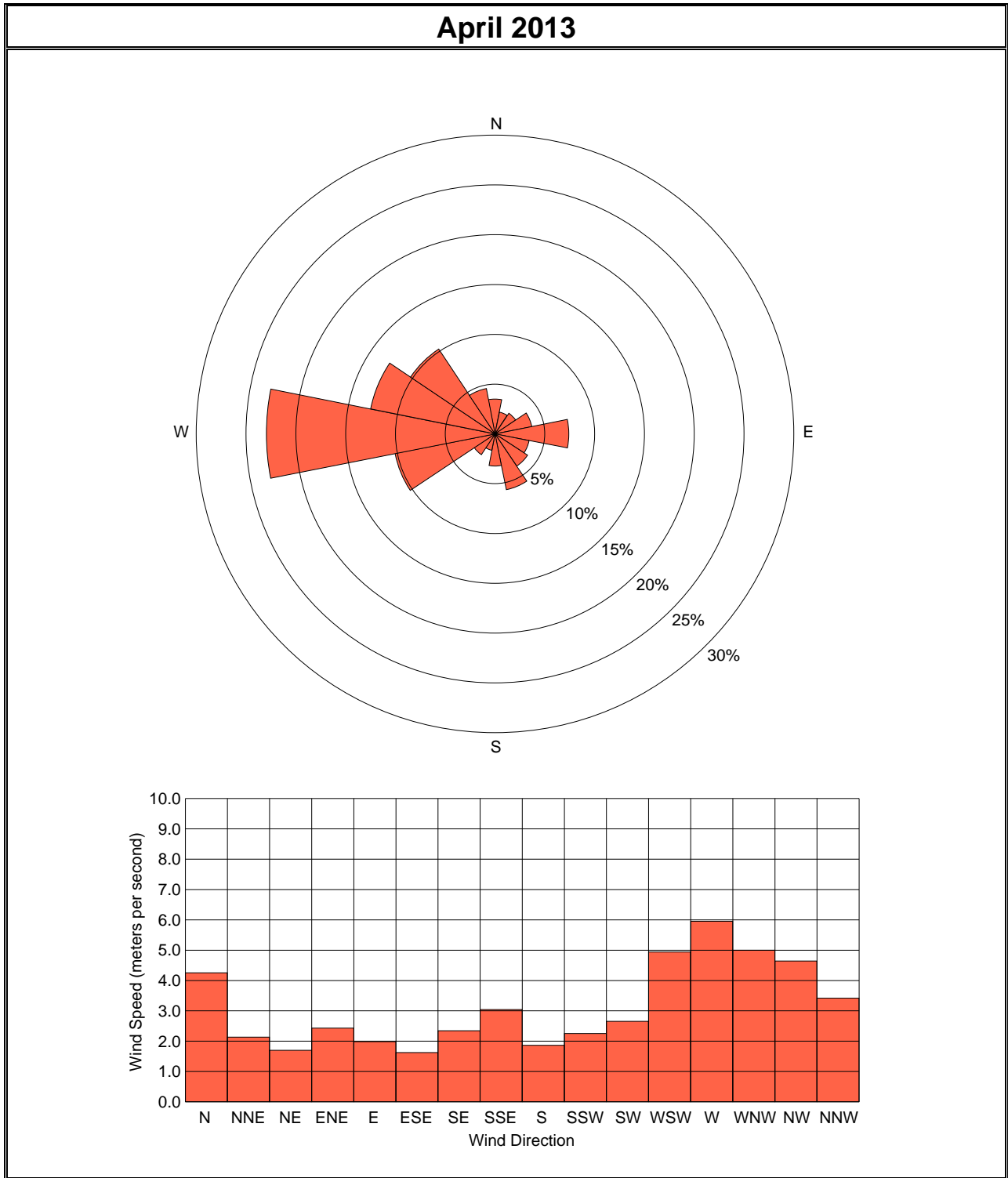


Figure 3. Monthly Wind Rose, Black Butte Copper Project Met Tower

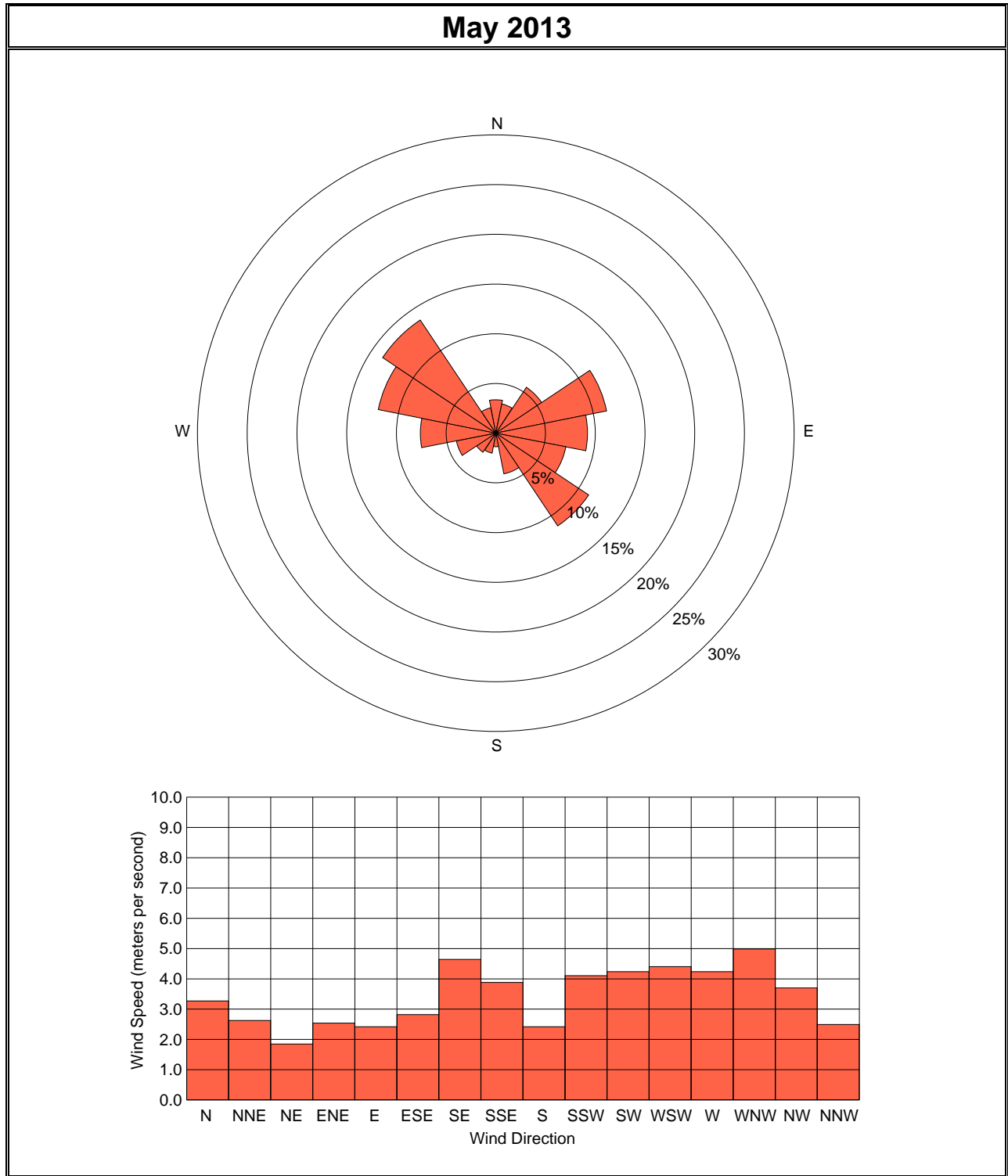


Figure 4. Monthly Wind Rose, Black Butte Copper Project Met Tower

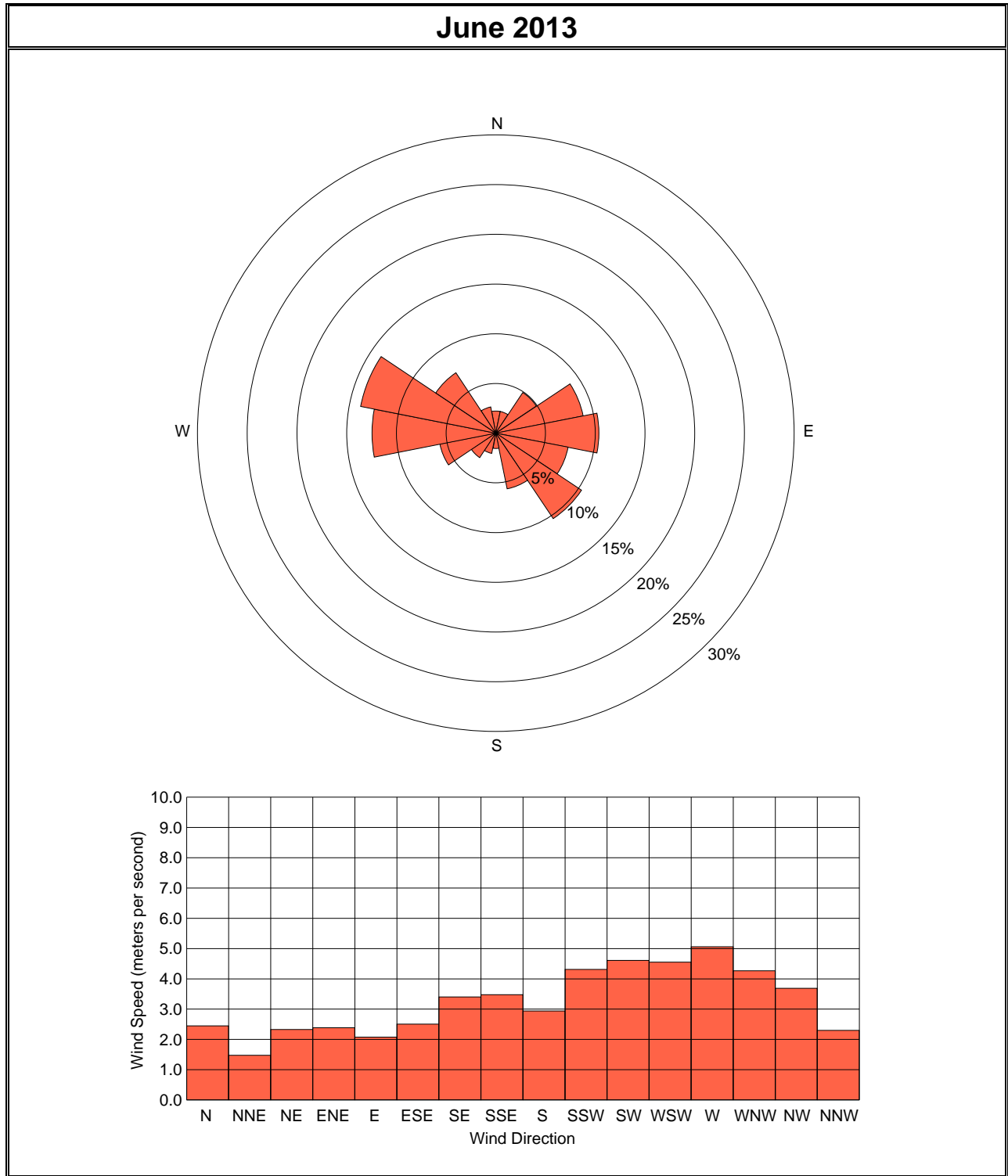


Figure 5. Quarterly Wind Rose, Black Butte Copper Project Met Tower

