



July 28, 2017

Wes Markus
BLV Group
10511, 15th St. S.E.
Calgary, Alberta
T2H 2H5

Re: Noise Monitoring for BLV Group – Stoney Trail #1

Dear Wes Markus;

Attached are results of the monitoring for the period June 2017 for noise, TSP and PM2.5 particulate. A B&K model 2236 meter was used for noise, and the Aerometrics Minivol model for particulate. Winds were measured with a R.M. Young Model 5103 anemometer. Precipitation was recorded with a Texas Instruments model TE25M rain gauge.

Data recovery for all parameters was 100% during the monitoring period.

There was no exceedance for the sound level.

There was 1 exceedance of the Alberta Air Quality Objective for TSP and none for PM2.5.

Please call if there are any questions regarding the results.

Yours truly,

PROMET ENVIRONMENTAL GROUP LTD.

A handwritten signature in black ink, appearing to read "Bill Murray". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dr. William (Bill) Murray
President

WM/NO
Cc: Travis Coates
Enc.



MONTHLY REPORT SUMMARY

Stoney Trail #1

BLV Group

Name/Location

Company

June 2017

Monitoring Period

Continuous Ambient Monitoring				
Parameter	% Time Operational	Average	Maximum	Number of Hours above Industrial Standards
Sound dB A	100%	50	61	0
PM2.5 $\mu\text{g}/\text{m}^3$	100%	15.3	27.6	0
TSP $\mu\text{g}/\text{m}^3$	100%	71.0	156.1	1
Wind Speed km/h	100%	13	33	-
Precipitation mm	100%	-	4.4	-
Trailer Temperature	100%	17	32	-

Sound level is analyzed only for wind speed less than 11 km/h and precipitation less than 3 mm/hour

COMMENTS:

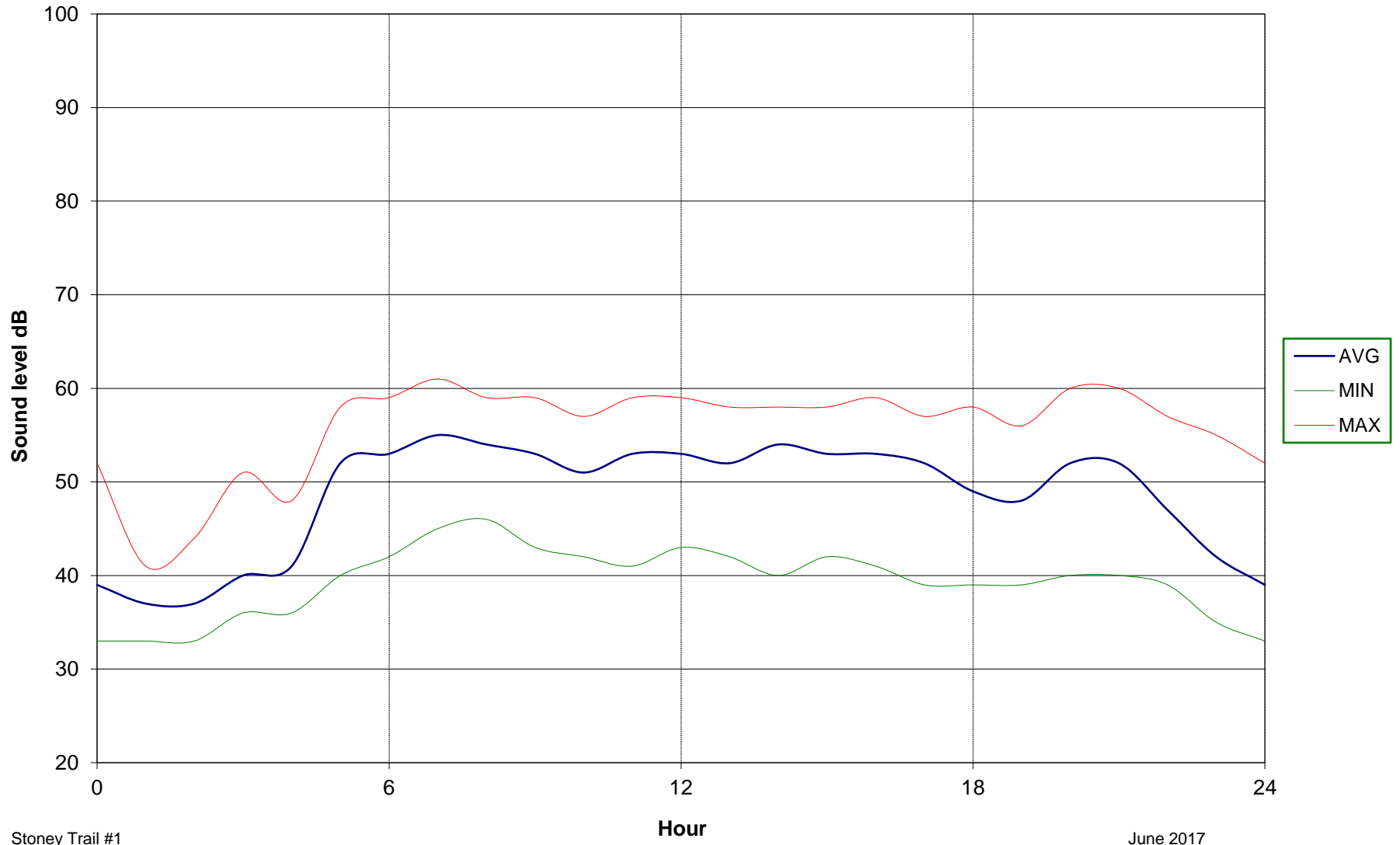
The regulation for industrial areas is 85 dB A any time.

The PM2.5 Standard is 30 $\mu\text{g}/\text{m}^3$ for the day.

The TSP Objective is 100 $\mu\text{g}/\text{m}^3$ for the day.

One 24 hour sample of PM2.5 and TSP is taken every 6th day following the federal NAPS schedule.

Sound Level by Hour of the Day

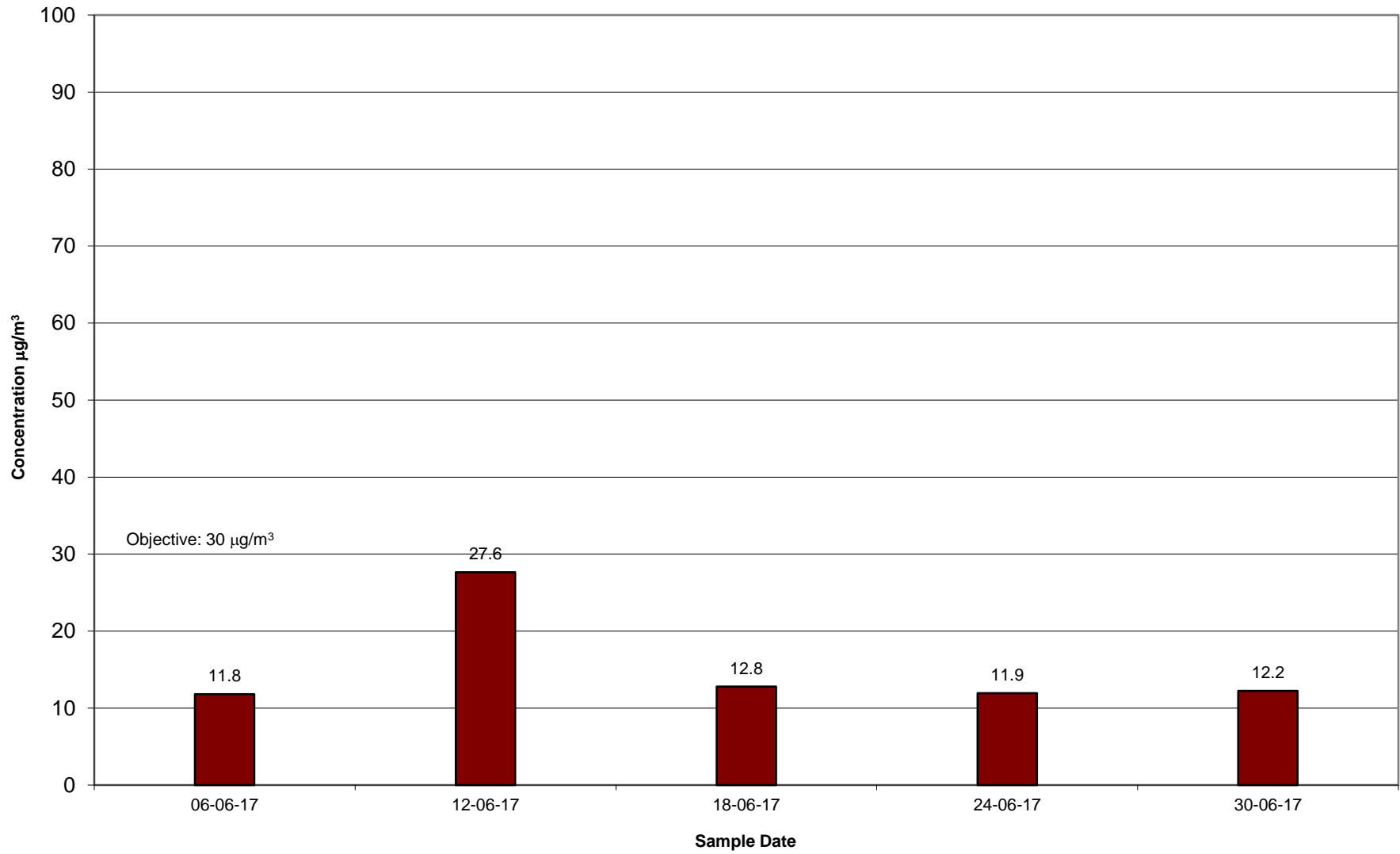


Stoney Trail #1

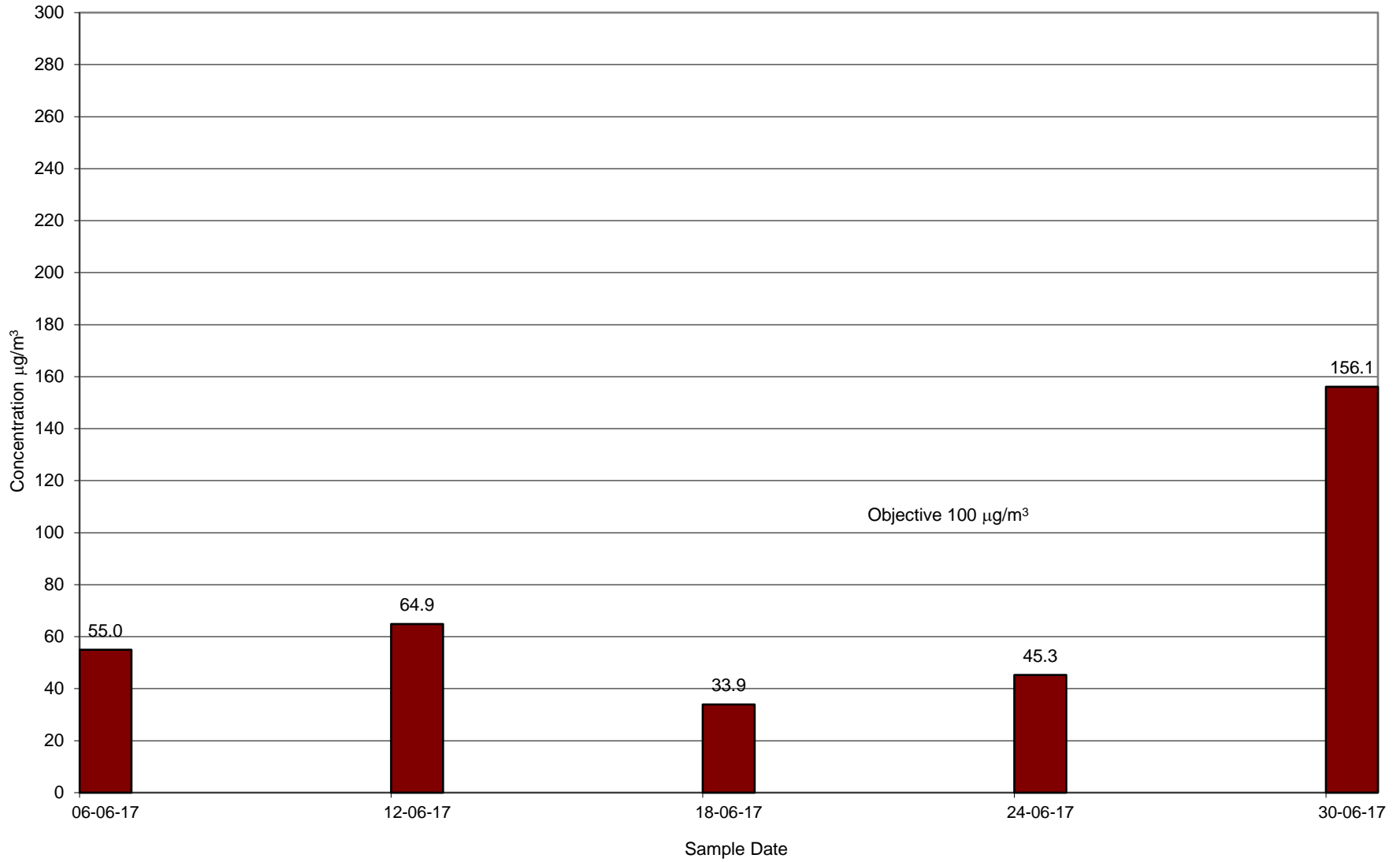
Hour

June 2017

PM2.5 at BLV Group Stoney Trail #1 June 2017

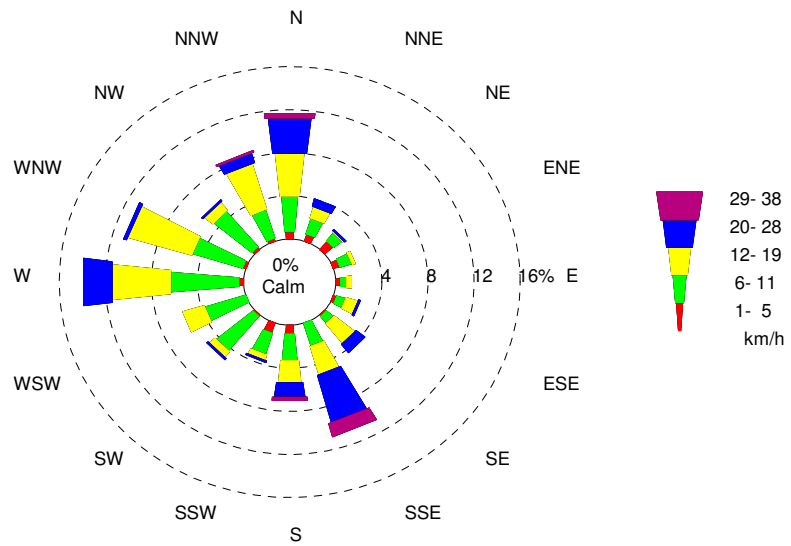


TSP at BLV Group Stoney Trail #1 June 2017



Wind rose for JUN 2017
Stoney Trail 1

Bar length is proportional to frequency of winds from its direction



SOUND LEVEL [dBA] Leq 1 hour
 BLV Group
 Stoney Trail 1
 STATION 620
 JUN 2017

Day	Hour																								Avg	
	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	45	35	35	38					54	55	55	54	56	56	57						53	51	50	52		
2							55	54		C											48	42	41	39	49	
3	35	35	36	37		44	45							42			43	43		40	42	41	41	40	41	
4	38	37	37	48						43	47	41	43	43											42	
5		33	33													45	44	43	43	43	42	41	41	38	41	
6	36	36	38	51	43	58	59	58																	52	
7		38	36	39	41		56	56	55	56	56														51	
8				43																	54	53			52	
9	34	33	35	37	42	56	57	56	55	53											57	57	53	37	52	
10	35	36	33	36	36	40	43	45													44				40	
11											43	43	43	42	40	42	41	39	39		42	40	40	39	41	
12	37	38	40	38	41	54	55	56	57	59													56	56	52	
13	52	35	35	42																					44	
14	35			36	48		55																		49	
15			33	37	41	54	57	60	59	55	46	54	59	54	54	55	57	54	54	55	51	44	41	38	53	
16																53	53	52	51	46	43	44	41		53	
17	36	36					44	46	46	47	44	47	48	45		44									44	
18	37	39	37	36			42				42	42	48		43										40	
19					41	54	56	57	55																51	
20	35	34	33	36	37	44	46	46	51		44	46													43	
21	33	38	40	40	44	52	52	50	52																48	
22																					56		54	44	35	48
23	36	35		36	37	53	57	57	55			54	56	55	55	55	55	56			59	60	53	39	55	
24	37	36	35	37	38	45	43	52	46	44	45	53	45	47	43	43	42	41	39	39	56	55	43	41	53	
25	38	37	36	39	38	42	43																43	40	39	44
26				36	41	58	59	61	55	51	57	59			58	56	56	56							40	
27	37						54	53	55	57	56														55	
28	42	41	44				57	57	57	56											60	60			48	
29																					43	44			48	
30		38	37				55	48	48	49			56	57	58	58	57	57	57	58		60	57	55	56	
							55	57	55	55	57	57	56	57	55	58	59				42	40	42	54	54	
AVG	39	37	37	40	41	52	53	55	54	53	51	53	53	52	54	53	53	52	49	48	52	52	47	42		
MAX	52	41	44	51	48	58	59	61	59	59	57	59	59	58	58	58	59	57	58	56	60	60	57	55		
MIN	33	33	33	36	36	40	42	45	46	43	42	41	43	42	40	42	41	39	39	39	40	40	39	35		

*** SOUND DATA REPORTED ONLY FOR WIND SPEED < 11.5 KM/H ***

Percent of time operational: 100 M - missing data
 Monthly Average: 50 Monthly Maximum: 61 C - Calibration
 Median: 43.8 Monthly Minimum: 33
 *** No Exceedances of Guideline ***

SOUND METER CALIBRATIONS

DATE	TIME	STANDARD	RESPONSE	ERROR
JUN 2, 2017	9	94.0	93.9	-.1

ABSTRACT OF THE WIND
BLV Group
Stoney Trail 1
STATION 620
JUN 2017

HOUR DAY	ALL TIMES ARE L.S.T.						SPEED [km/h]						ANEMOMETER HEIGHT 10 m						MEAN SPD	MAX VEL	PREV DIR	MISS OBS							
	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	W	SSE	SSW	WNW	WNW	WNW	NNW	NNW	NNW	NNW	W	WNW	NE	ENE	SE	SE	ESE	SSE	SE	SSE	NW	WNW	WNW	WNW			WNW	0	
2	WNW	WNW	NW	WNW	WNW	WNW	NW	NW	W	W	W	W	W	W	W	W	W	W	W	W	W	WNW	W	W	W	10	15	W	0
3	W	WNW	W	SW	SW	SW	SSW	S	SSE	S	S	S	SW	WSW	WSW	WSW	W	W	W	WSW	WSW	W	WSW	WSW	W	WSW	WSW	WSW	0
4	WSW	W	W	WNW	NNW	N	N	N	N	N	N	N	NE	ENE	E	SE	SE	SSE	SE	SSE	N	N	NNW	N	N	12	28	N	0
5	N	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	NNE	NNE	N	NNW	ENE	E	SW	SW	S	S	S	S	S	14	30	N	0
6	S	SSE	SSW	SW	SW	SW	SSW	SSW	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	13	24	SSE	0
7	S	S	SSW	SW	SW	WSW	WSW	W	S	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	20	33	SE	0
8	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	14	23	SSE	0
9	NNW	NW	SSW	S	SSW	SSW	SW	WNW	NW	WNW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	17	27	WSW	0
10	NW	WNW	SW	SW	W	WNW	N	NNE	NNW	WNW	WNW	WNW	W	W	WNW	W	W	W	W	W	W	WNW	WNW	WNW	WNW	11	19	WNW	0
11	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	15	24	WNW	0
12	NE	NNE	NNW	N	NNW	NW	WNW	WNW	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	15	31	SSE	0
13	SSE	S	ESE	NW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	N	N	N	N	N	N	NNW	NNW	NNW	NNW	19	30	N	0
14	NNW	NNW	NNW	NW	WNW	WNW	WNW	NW	NW	NNW	NNW	NNW	N	N	NNE	NNE	NW	NW	NW	NW	NW	NW	NW	NW	NW	11	19	NW	0
15	WNW	NW	NW	NW	NW	NW	NNW	NNE	W	NW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	9	12	NW	0
16	WSW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	9	12	W	0
17	NNW	NW	NW	WNW	WNW	WNW	WNW	NNW	NNE	NE	ENE	E	SSE	SSE	S	SSE	SW	WSW	W	ENE	SE	SSE			10	16	SVL	0	
18	SSW	SW	WSW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WSW	W	W	W	W	W	W	W	12	17	WNW	0
19	WNW	NW	N	NNW	N	NW	SSW	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	12	17	SSE	0
20	SW	WSW	WSW	W	WSW	W	W	W	W	WSW	WSW	W	WSW	WSW	W	WSW	W	W	WNW	NNW	N	NW	NNW	N	NW	14	29	W	0
21	N	NNW	NW	WSW	ENE	NNE	ESE	E	E	S	S	S	W	W	W	W	W	W	W	W	NNW	NNW	N	N	NW	13	24	W	0
22	WNW	WNW	W	WNW	NNW	N	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NNE	NNE	NE	NE	CLM	W		17	27	N	0	
23	WSW	W	W	W	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NNE	N	N	NNE	N	N	N	N	N	N	N	N	9	14	N	0
24	WSW	W	W	W	W	W	WNW	NNW	NNE	NE	ENE	NNE	NNW	SSW	E	ENE	NE	ENE	ESE	ESE	ESE	SSE	SSE		8	13	W	0	
25	SSE	S	S	SSW	SSW	SW	SSW	S	S	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	19	31	SSE	0
26	SSE	S	S	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	12	27	SW	0
27	WSW	NNW	N	N	N	N	N	NW	ESE	ENE	E	E	ESE	E	E	ESE	SE	ESE	ESE	ESE	NNE	N	NNE		14	27	N	0	
28	NE	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	NNE	NNE	N	NNW	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	15	27	NNW	0
29	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	ENE	ENE	NNE	NE	SE	SSE	S	S	S	S	S	S	S	10	15	0	0
30	SW	SW	WSW	W	WNW	WNW	WNW	WNW	NNW	NNE	N	NNW	NNW	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	10	16	ESE	0

MEAN
SPEED 11 11 11 11 11 11 11 11 13 14 16 16 16 16 16 16 16 16 16 14 13 12 12 12 13 33 W 0
NOTE: Missing data represented by M; no clear prevailing direction represented by SVL; calm winds represented by CALM
WS UPTIME 100 % WD UPTIME 100 %

Date of Last Calibration 060221 Make and Model of Instrument: RM Young5103

FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION
BLV Group
Stoney Trail 1
STATION 620
JUN 2017

SPEED [km/h]	WIND DIRECTION														TOTAL	PCT																					
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW			NW	NNW																			
< .5																										1	0										
1- 5	5	5	7	4	3	2	1	0	6	7	1	0	3	2	2	2	5	7	10	11	11	11	11	11	11	50	7										
6- 11	24	11	7	8	4	6	6	16	18	15	30	27	43	33	31	20	299	42	12	19	29	8	1	2	3	8	17	20	244	34							
12- 19	29	8	1	2	3	8	17	20	15	4	5	14	37	42	7	32	244	34	20- 28	24	5	1	0	0	1	7	111	15									
20- 28	24	5	1	0	0	1	7	33	10	1	1	0	18	2	1	7	111	15	29- 38	3	0	0	0	0	0	0	1	15	2								
TOTAL	85	29	16	14	10	17	31	78	51	27	37	41	101	79	41	62	720	100	PERCENT	12	4	2	2	1	2	4	11	7	4	5	6	14	11	6	9		
AVERAGE	16	12	7	8	9	12	15	19	14	8	9	11	14	13	10	14	13																				

TRAILER TEMPERATURE
 BLV Group
 Stoney Trail 1
 STATION 620
 JUN 2017

Day	Hour																								Avg
	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	17	16	15	14	13	14	15	17	19	20	22	24	25	26	26	26	27	25	23	22	20	17	16	15	20
2	15	14	13	13	13	13	13	17	19	20	21	20	21	21	22	22	22	23	22	21	19	15	13	11	18
3	11	10	9	8	8	9	12	15	17	18	20	22	23	25	25	26	26	25	24	22	20	18	16	14	18
4	14	13	13	13	13	13	13	13	14	17	20	21	23	25	25	24	23	24	24	23	18	15	13	12	18
5	11	11	11	11	10	10	10	11	12	13	15	17	18	19	20	21	22	22	23	22	19	15	13	11	15
6	11	10	10	9	9	9	13	16	17	18	20	21	22	22	23	23	23	22	21	20	18	17	16	17	
7	15	14	12	11	10	11	13	17	19	22	25	26	26	27	27	27	27	27	27	26	23	21	20	19	21
8	18	17	16	16	15	15	16	17	18	21	24	25	26	26	25	26	26	25	24	19	17	16	15	15	20
9	14	14	14	14	14	14	13	14	15	18	18	19	19	20	20	20	21	21	20	18	16	12	10	8	16
10	7	5	5	5	5	6	7	9	10	11	10	9	8	7	7	6	6	6	7	7	7	7	7	7	7
11	7	7	7	7	7	7	8	10	13	15	17	19	21	22	23	25	26	26	26	24	20	17	14	12	16
12	11	10	9	10	10	10	12	14	18	19	20	20	21	21	22	23	24	24	24	23	21	18	16	15	17
13	14	14	12	11	10	11	14	16	17	18	18	18	17	18	17	17	16	14	13	12	11	11	11	15	
14	10	10	10	10	10	10	10	10	11	11	11	12	14	15	17	19	21	19	19	19	17	13	11	10	13
15	9	9	8	8	7	8	11	14	17	19	20	20	21	21	22	23	22	22	21	21	19	15	13	12	16
16	12	12	12	12	12	12	12	14	16	18	20	21	22	23	23	24	25	23	22	19	16	14	12	11	17
17	10	10	10	10	10	10	10	11	13	16	19	20	21	21	21	21	21	22	21	19	16	13	11	11	15
18	11	11	10	10	11	11	11	13	14	15	17	19	21	22	22	22	23	23	23	22	19	16	14	12	16
19	12	12	11	10	9	8	9	11	14	17	19	19	20	21	21	22	22	22	21	19	18	17	16	15	16
20	15	15	14	13	12	13	13	16	20	22	24	26	26	27	28	28	28	28	27	24	18	14	13	13	20
21	12	10	9	8	7	7	10	12	15	17	18	18	19	20	20	21	21	21	20	17	14	12	11	9	14
22	8	7	7	7	7	7	8	8	9	10	12	14	16	16	17	18	19	19	18	17	14	13	12	11	12
23	10	10	9	9	8	8	10	13	16	18	19	20	20	21	22	23	22	23	21	18	16	14	12	12	16
24	11	11	11	11	10	9	12	16	18	20	21	22	23	24	22	24	26	27	26	24	21	18	16	14	18
25	13	13	12	11	11	12	15	17	19	20	22	23	24	25	25	27	26	26	25	25	23	21	20	19	20
26	18	17	16	16	15	14	14	14	16	19	22	25	27	28	30	31	31	31	28	26	24	22	20	18	22
27	17	16	15	14	13	12	12	12	14	19	21	22	23	23	24	24	25	25	24	21	18	15	14	12	18
28	10	9	9	9	9	10	12	15	18	20	19	19	19	20	19	18	18	17	16	17	15	13	12	12	15
29	11	11	11	11	11	11	11	13	15	18	18	19	21	24	24	26	27	27	26	24	21	18	17	15	18
30	15	14	13	13	13	13	17	20	23	25	27	28	29	30	31	32	31	28	28	27	25	22	20	18	23
AVG	12	12	11	11	10	11	12	14	16	18	19	20	21	22	22	23	23	23	22	21	18	16	14	13	
MAX	18	17	16	16	15	15	17	20	23	25	27	28	29	30	31	32	31	31	31	28	27	25	22	20	19
MIN	7	5	5	5	5	6	7	8	9	10	10	9	8	7	7	6	6	6	7	7	7	7	7	7	7

Percent of time operational: 100
 Monthly Average: 17 Monthly Maximum: 32 M - missing data
 Monthly Minimum: 5

PRECIPITATION [mm]
 BLV Group
 Stoney Trail 1
 STATION 620
 JUN 2017

Day	Hour																								Tot			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.5	0	0	.6
2	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	1.0	.8	.7	.6	.6	.4	.2	.6	.2	.5	0	0	0	0	0	0	0
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
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
14	.4	.2	0	0	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	0	0	0	0	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	0	0	0	0	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	0	0	0	0	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	0	0	0	0	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	0	0	0	0	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
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTL	.5	.2	0	0	0	0	0	0	0	0	0	1.0	.8	.7	.6	.6	.8	.3	5.0	1.3	1.5	1.6	4.1	1.4				
MAX	.4	.2	0	0	0	0	0	0	0	0	0	1.0	.8	.7	.6	.6	.4	.2	4.4	1.1	.7	.5	1.9	1.2				

Percent of time operational: 100 M - missing data
 Monthly Total: 21 Maximum in an hour: 4.4
 Year to Date: 100