



August 29, 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 July 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.

July 6th filters were not replaced because there was no access to the site. As a result, data recovery for TSP and PM2.5 was 80% during the monitoring period. All other parameters was 100% during the monitoring period.

There was no exceedance for the sound level.

There were 3 exceedances of the Alberta Air Quality Objective for TSP and 1 exceedance 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

July 2017

Monitoring Period

Continuous Ambient Monitoring				
Parameter	% Time Operational	Average	Maximum	Number of Hours above Industrial Standards
Sound dB A	100%	57	65	0
PM2.5 $\mu\text{g}/\text{m}^3$	80%	23.6	53.8	1
TSP $\mu\text{g}/\text{m}^3$	80%	134.7	206.5	3
Wind Speed km/h	100%	12	40	-
Precipitation mm	100%	-	7.3	-
Trailer Temperature	100%	20	35	-

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

COMMENTS:

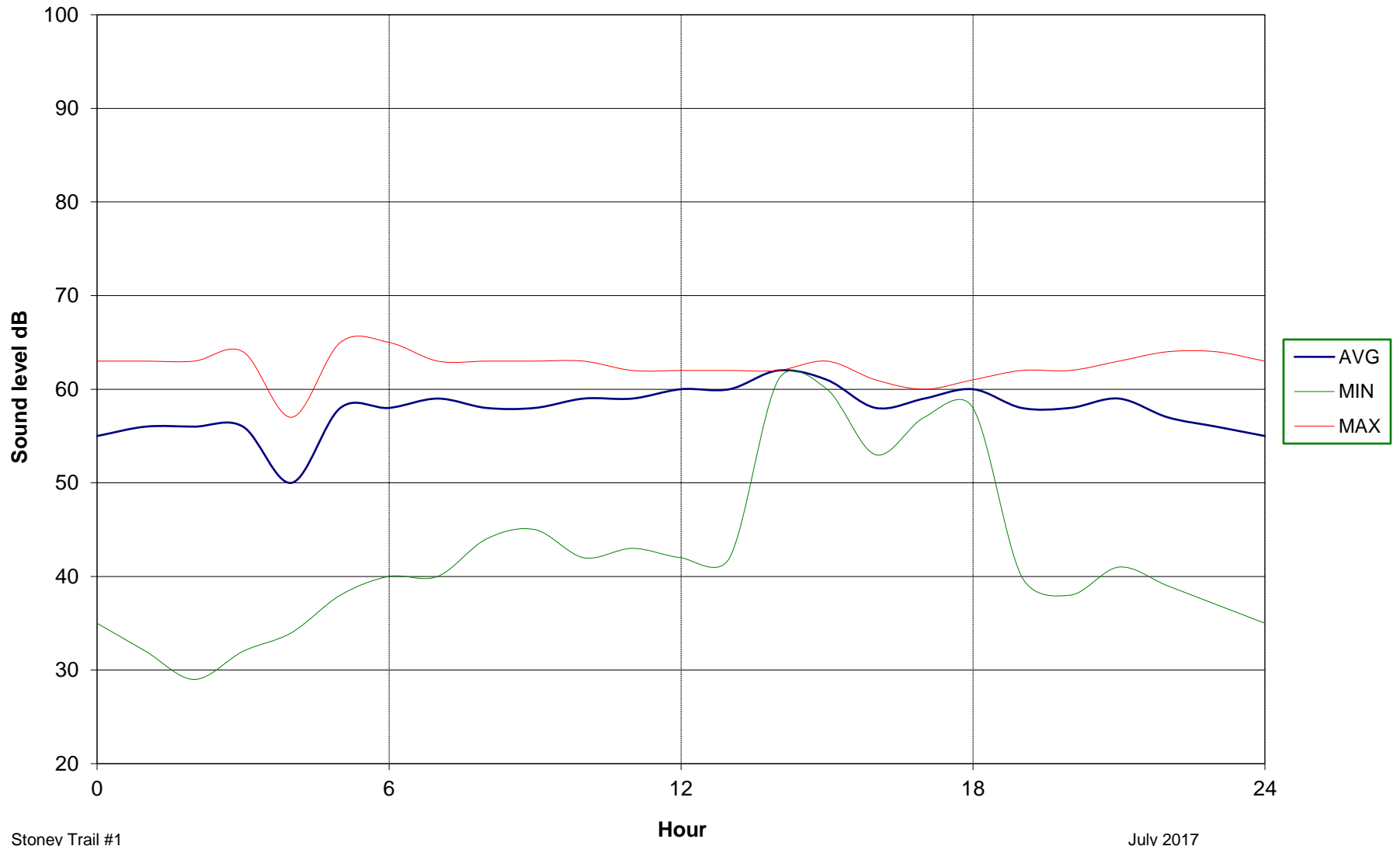
The regulation for industrial areas is 85 dB A any time.

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.

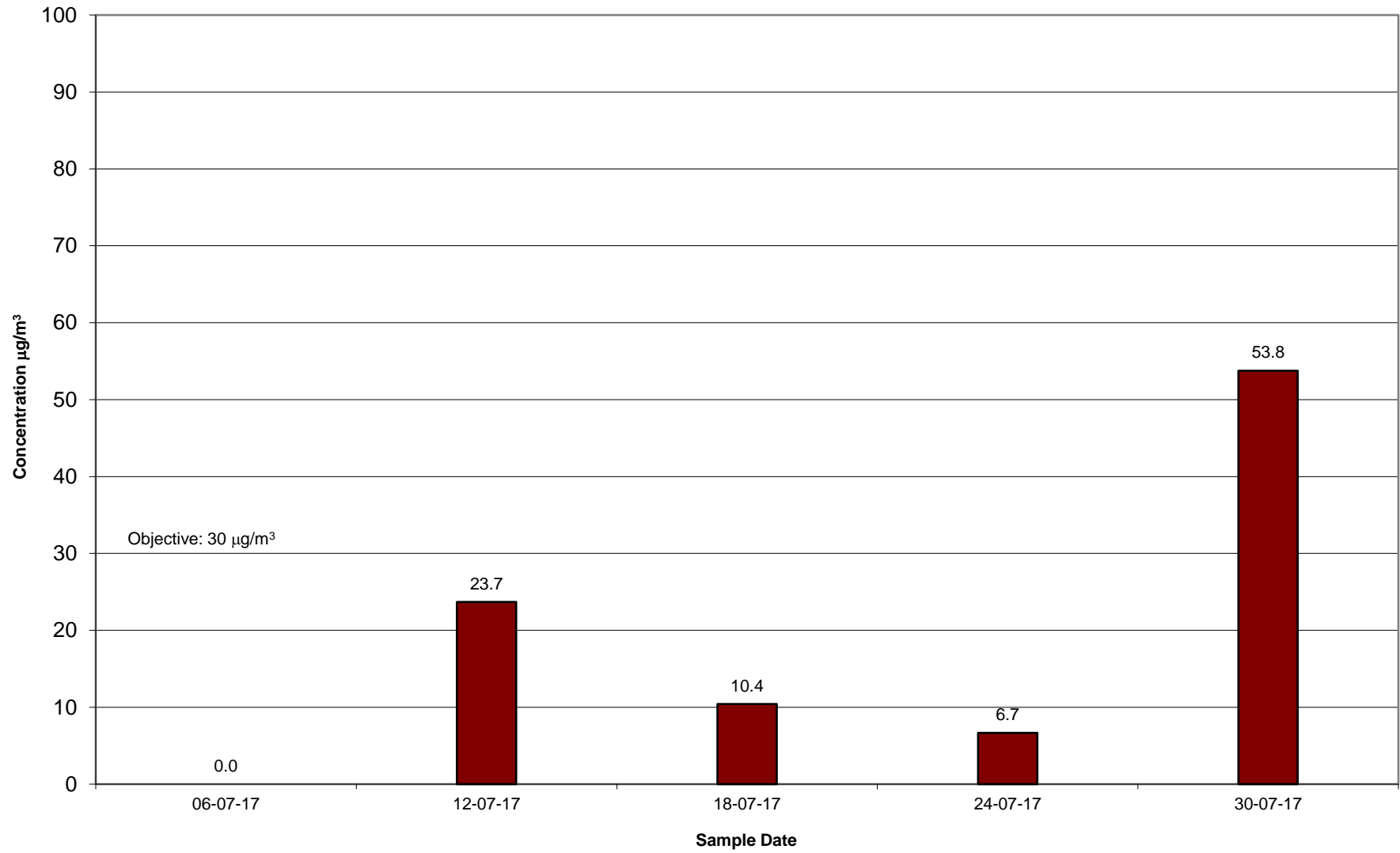
Sound Level by Hour of the Day



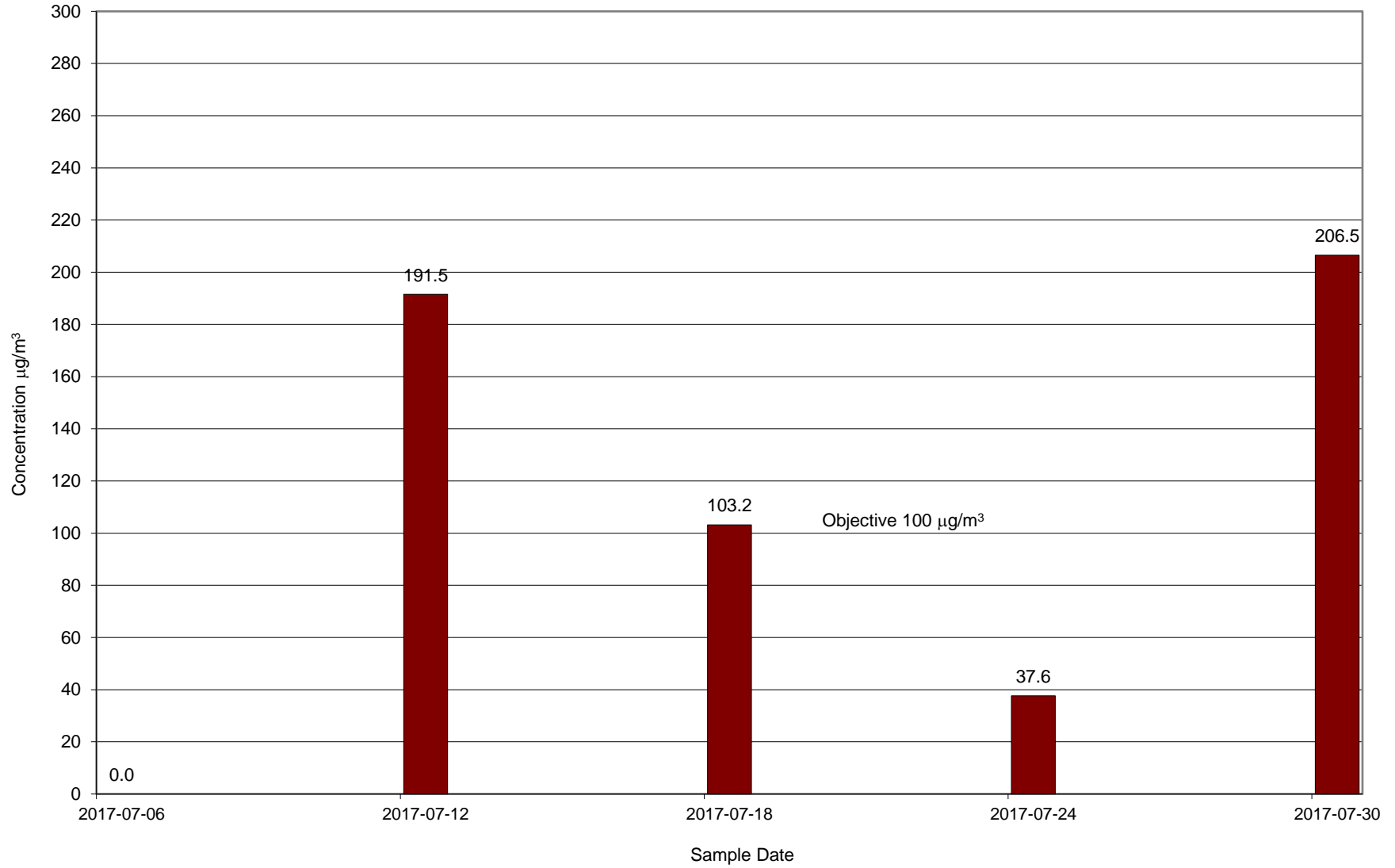
Stoney Trail #1

July 2017

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



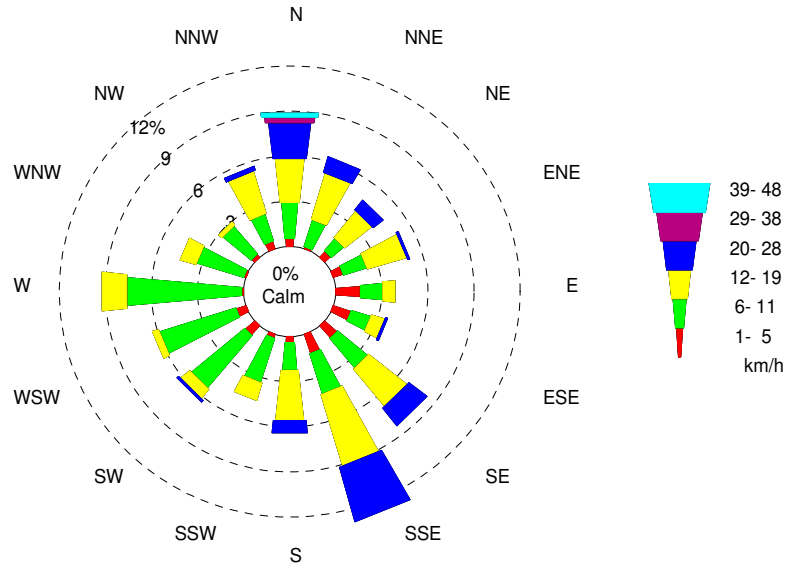
TSP at BLV Group Stoney Trail #1 July 2017



Wind rose for JUL 2017

Stoney Trail 1

Bar length is proportional to frequency of winds from its direction



PROMET

29/ 8/2017

SOUND LEVEL [dBA] Leq 1 hour
BLV Group
Stoney Trail 1
STATION 620
JUL 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	40	36	46	37	38	40	44															45		43	42								
2	37	42	35	36	37	39	42	41	44	45	42	53	42	42											37	42							
3	36	34	34	37	36																46				40	39							
4	35	35	33	39	41	50	54				C											60	61	51	38	50							
5										56	59	59	61											59	52	46	57						
6	39	37	37	38	43	57	57	59	59	58	56	58										60	59	56	51	55							
7	38	34	34	39	45	60	60	59	59														59	53	40	54							
8												43										42	38	41	39	37	40						
9	35	34	36	36	36	38	40	40													40	41	41	41	41	38							
10	36	35	37	36	39					51	47										61	60	61	59	54	54							
11	57	57	58	60	56																	57	60	61	60	57	59						
12	57	62	62	62	52	52																	60	60	57	59	59						
13	59	58	59	59	57	62	60	61	61	61	62	61	62	62	62	62	61	60	60	60	62	58	59	44	60	55							
14					45	54	57	58	54																	60							
15			38	37	39	45		47	48	47	46													41	41	42	44						
16	40		36	36	34	38	41																40	42	43	40	40						
17	35	32	29	32	38	55	59	60	60	59	60	59	60	60	60	60	61	60	61	59	59	59	59	62	60	61	52	57					
18	41	40	40									61	60	61	60	60							59	62	60	60	64	58					
19	62	63	62		54	63	61	60	61	60	61	60	61	59	61									61	61	62	60	61					
20	60	61	61	62	53	60	60	59	59	57	59	59	61														59	59					
21			59		52	61	61	59												53	57				59	59	59	61	59				
22	60	61	60	62	55	63	62	60	58	59	59	60											61	59	58	61	60						
23	61	63	63	64	56	63	60	58	47	56	61	59	59	59	61	60	60	54	60	58				61	62	57	56	59					
24					55	56	60	62	61	61	62	61															60	60					
25	60	61	60	60	54	62	61	61	61	61	62	63	62	60	61	61	60	61										61	62	57	56	59	
26	63													61	62	62	63							62	63	64	62	61	62	61	60	62	
27	62	61			53			60	60	59	61	61	60	62	62	62	57	60	61	61				61	60	62	60	62	61	60	60	60	
28			58	59	49	60	57	59	53	55																				60	58	57	57
29	59	60	61	61	53	61	62	62	62	61	60	62																	61	62	61	60	61
30		62	63	61	51																				59	59	58	59	60	60	60	60	60
31	61	61	63	62	55	65	65	63	63	63	62																		61	62	61	60	60
AVG	55	56	56	56	50	58	58	59	58	58	59	59	60	60	62	61	58	59	60	58	58	59	58	59	57	56	64	64	64	64	64	64	
MAX	63	63	63	64	57	65	65	63	63	63	63	62	62	62	62	63	61	60	61	62	62	63	64	64	64	64	64	64	64	64	64	64	64
MIN	35	32	29	32	34	38	40	40	44	45	42	43	42	42	61	60	53	57	58	40	38	41	39	37	37	37	37	37	37	37	37	37	

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

Percent of time operational: 100 M - missing data
 Monthly Average: 57 Monthly Maximum: 65 Monthly Minimum: 29 C - Calibration
 Median: 59.0
 *** No Exceedances of Guideline ***

SOUND METER CALIBRATIONS

DATE	TIME	STANDARD	RESPONSE	ERROR
JUL 4, 2017	9	94.0	93.9	-.1

ABSTRACT OF THE WIND
BLV Group
Stoney Trail 1
STATION 620
JUL 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	SSE	SE	SE	SSE	SSE	S	S	SSW	S	SSE	S	SSE	SSE	SSE	SSE	NNE	N	NNE	N	N	WSW	WSW	SSW	SSW	15	24	SSE	0	
2	ENE	N	N	WNW	W	WNW	W	W	W	SW	SE	ESE	E	E	ESE	SE	SE	SE	SE	SE	SE	SSE	SSE	SSE	SSW	11	23	SE	0
3	SW	WSW	WSW	SW	SW	W	NNW	N	N	NNE	NNE	NNE	NE	NE	ENE	ENE	NE	ENE	ENE	NE	NNE	N	N	NNW	14	22	SVL	0	
4	WNW	WNW	NNW	N	ESE	SSE	SSE	SSE	SSE	SSE	SSE	S	SSE	SSE	SSE	SE	SE	ESE	E	ENE	WNW	W		14	27	SSE	0		
5	NW	NNW	NW	NNW	N	N	N	NNE	ENE	E	SE	SSE	SSE	SSE	SSE	SE	SE	SE	SE	SE	SE	SE	SE	SE	15	24	SSE	0	
6	SSE	SSE	SE	NE	NNW	NNW	NNW	ENE	E	ESE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	8	16	ENE	0	
7	ESE	SSE	SSW	WSW	ESE	WSW	E	SE	SSE	SSE	SSE	SSE	SSE	SSE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SW	12	23	SSE	0	
8	NNW	NNW	NNW	NNW	NNW	N	N	NNW	N	N	NNE	NNE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	NNE	NNE	NNE	NNE	14	22	NNW	0	
9	NE	NE	NE	SE	SSW	SSW	SSE	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SE	SE	SSE	SSE	SSE	WSW	NNE	N	NW	11	19	SSE	0	
10	W	W	NW	N	N	NNW	N	N	NNW	NNW	N	NNE	NNE	NE	E	E	NE	NE	NW	W	SW	NW	NNW	N	12	21	N	0	
11	NNW	NW	NNW	SW	SE	NNE	N	N	N	N	N	N	N	NNE	N	N	N	N	N	N	N	NNW	NNW	NNW	11	18	N	0	
12	NNE	E	ESE	SE	SSE	SSE	S	S	SSE	S	S	SSE	S	S	SSE	SSE	SSE	SSE	SE	NE	ENE	E	ESE	ENE	13	25	SSE	0	
13	W	NNW	WSW	WSW	S	WSW	E	WSW	WSW	WSW	WSW	SW	SW	SW	SE	W	WSW	NW	NW	N	N	N	N	N	8	21	SVL	0	
14	N	N	N	NNW	NW	W	NNW	NNW	SE	SSE	SSE	SSE	SSE	SSE	SE	SE	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	16	25	SSE	0	
15	SSE	S	SSW	SW	SSW	SSW	W	SW	WSW	SW	SW	S	S	S	S	S	S	S	S	S	SSW	SSW	SW	SW	14	24	S	0	
16	SW	SW	SW	SW	WSW	SSW	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NNE	NNE	NE	NNE	NE	E	SW	SW	SW	WSW	13	31	NNE	0	
17	W	W	NNW	W	W	W	NNW	NNW	W	SW	SSW	S	ENE	E	ENE	ENE	NE	NE	NE	ENE	ESE	SSE	SSE	ENE	10	21	W	0	
18	S	SSW	SSW	SSW	SSW	SSW	S	S	S	S	S	S	S	S	SSE	ENE	NE	ENE	ENE	NE	NNE	NNE	N	WSW	11	18	SVL	0	
19	WSW	WSW	SW	WSW	WSW	W	WSW	WSW	WSW	WSW	W	E	ESE	E	SE	SSE	SSE	SSE	SE	SSE	SE	SE	E	E	10	20	WSW	0	
20	E	CLM	NNW	WSW	W	W	WSW	WSW	WSW	SSW	SW	SW	SW	WSW	SW	SW	WSW	WSW	WSW	NNW	NNW	NNW	NNW	NNW	11	23	SW	0	
21	W	W	WSW	W	W	W	WSW	W	W	NNW	N	NNE	N	N	NNW	NNW	NW	W	NNW	NNW	NNW	NNW	W	W	12	24	W	0	
22	W	W	NNW	WSW	WSW	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SSW	SSW	SW	W	W	W	NNW	NNW	NNW	W	W	W	11	18	W	0	
23	W	W	WSW	SW	WSW	WSW	W	W	SW	SSE	SE	SW	NNW	SW	W	NNW	NW	NNW	N	N	N	N	N	N	13	40	W	0	
24	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	NNE	NNE	N	NNW	W	W	14	23	NNW	0	
25	W	W	W	W	WSW	WSW	WSW	WSW	WSW	SSW	SSW	SSW	SSE	SE	E	E	ESE	ESE	ESE	ESE	SE	SSE	SE	SE	10	14	W	0	
26	S	S	S	SSW	SW	SW	SSW	S	S	S	S	S	S	S	SSE	SSE	SSE	SSE	SE	SE	SE	SE	SE	SE	11	18	SVL	0	
27	S	W	W	NNW	W	W	NNW	NNW	W	WSW	SW	S	S	SE	S	ESE	NW	NW	WSW	NNW	N	N	N	N	11	31	W	0	
28	N	NNW	NW	W	W	W	W	WSW	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	ESE	NE	NE	NNE	NW	NW	14	23	SE	0	
29	NNW	NNW	N	SSE	SSE	SSE	ESE	ESE	E	E	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	ESE	SE	SSE	S	S	10	18	SE	0	
30	S	S	SW	WSW	W	NNW	W	NNW	N	NNE	NNE	NNE	NE	NE	NE	NE	NE	NE	NNE	NNE	NNE	NNE	N	N	14	23	N	0	
31	NW	NNW	WSW	SSW	S	SW	SSW	ESE	E	ENE	ENE	E	ENE	ENE	ENE	NE	NE	NE	NNE	NNE	NNE	ENE	ENE	ENE	10	22	ENE	0	

MEAN
SPEED 10 9 9 9 9 10 11 11 11 12 12 13 14 15 16 17 16 15 12 11 10 10 10 12 40 SSE 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
JUL 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	4	1	4	5	12	9	8	10	3	2	6	5	1	1	2	4	4	77	10						
6- 11	18	14	8	12	11	10	19	21	14	23	34	39	56	24	18	14	335	45							
12- 19	22	24	17	20	6	7	24	37	25	9	6	3	12	8	2	22	244	33							
20- 28	18	8	6	1	0	1	11	28	6	0	1	0	0	0	0	2	82	11							
29- 38	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0							
39- 48	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0							
TOTAL	67	47	35	38	29	27	62	96	48	34	47	47	69	33	22	42	744	100							
PERCENT	9	6	5	5	4	4	8	13	6	5	6	6	9	4	3	6									
AVERAGE	16	14	13	11	8	9	13	15	14	10	9	8	10	10	9	12	12								

PRECIPITATION [mm]
 BLV Group
 Stoney Trail 1
 STATION 620
 JUL 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	.5	7.3	0	0	2.6	0	0	0	0	10.5
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
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
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
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
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
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
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
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
10	0	0	0	0	0	0	0	.4	.2	0	0	0	0	0	0	0	0	.5	.2	2.0	.4	.2	0	3.9	
11	0	0	0	0	.9	6.4	2.6	.8	.4	.3	0	0	0	0	0	0	0	0	0	0	0	0	0	11.5	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.9	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.9	
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	
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	
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	
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	
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	
31	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	0	0	0	0	.9	6.4	2.6	1.2	.6	.3	0	0	0	0	0	.5	7.8	.3	0	4.7	.4	.2	0	.9	
MAX	0	0	0	0	.9	6.4	2.6	.8	.4	.3	0	0	0	0	0	.5	7.3	.2	0	2.6	.4	.2	0	.9	

Percent of time operational: 100 M - missing data
 Monthly Total: 27 Maximum in an hour: 7.3
 Year to Date: 127

TRAILER TEMPERATURE
 BLV Group
 Stoney Trail 1
 STATION 620
 JUL 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	15	15	15	16	18	21	23	23	24	25	26	27	26	21	18	17	16	17	16	15	15	19	
2	15	13	13	13	13	13	15	18	21	24	26	27	28	28	28	29	29	29	28	27	25	23	21	20	22	
3	19	18	16	16	16	17	18	18	20	21	22	23	24	25	26	27	28	28	28	26	23	18	16	14	21	
4	13	12	11	10	10	11	12	14	17	19	20	21	21	22	23	25	27	28	28	27	25	21	18	17	19	
5	16	15	15	15	15	14	15	17	19	21	23	25	25	26	26	27	28	28	28	27	25	22	20	19	21	
6	18	17	16	15	14	13	16	20	23	26	28	29	30	30	30	32	32	32	31	29	26	22	19	18	24	
7	16	16	15	15	14	14	17	21	25	27	28	29	29	30	31	33	32	32	32	32	30	27	25	23	25	
8	22	20	19	19	18	18	19	21	23	25	25	26	28	29	30	31	31	30	27	24	22	20	19	24		
9	19	19	19	18	17	17	20	23	25	27	27	28	28	27	28	30	32	32	31	30	27	24	21	19	24	
10	17	17	16	17	17	17	16	16	16	16	19	22	24	24	25	24	22	20	19	18	16	15	14	13	18	
11	13	13	13	13	13	13	13	13	13	13	13	14	14	15	16	17	18	18	19	19	17	15	14	13	12	15
12	11	11	10	10	11	12	12	13	14	17	18	20	21	23	24	24	25	25	24	23	21	18	16	15	17	
13	14	14	13	14	13	13	15	18	22	24	26	28	29	29	30	32	32	31	31	30	26	22	20	18	23	
14	17	16	14	13	12	12	14	18	21	22	23	24	25	25	26	27	27	28	27	26	24	22	21	20	21	
15	19	19	18	17	15	15	18	21	21	22	23	24	25	26	27	27	28	30	30	29	27	24	22	21	23	
16	20	19	18	17	16	16	19	21	22	22	23	23	23	23	23	22	18	17	15	13	12	10	10	9	18	
17	9	8	8	8	8	8	10	12	15	18	20	21	22	22	22	22	21	20	18	16	14	12	11	10	15	
18	10	10	9	9	9	10	11	13	14	16	19	22	23	24	25	25	25	24	23	20	17	14	13	12	17	
19	11	11	10	10	10	9	11	14	16	18	21	24	26	26	27	27	27	26	26	24	22	20	17	15	19	
20	14	13	12	12	11	12	13	15	16	17	18	20	24	26	26	27	27	26	25	22	19	17	16	15	19	
21	15	15	14	14	13	13	13	16	18	20	21	21	21	19	19	21	24	25	24	22	19	17	15	14	18	
22	13	12	11	11	11	11	13	16	19	22	24	26	27	28	29	30	30	29	28	27	24	21	19	18	21	
23	17	17	16	16	16	16	18	22	26	28	30	31	32	31	33	33	33	32	31	28	23	17	14	11	24	
24	10	8	7	7	7	7	9	12	15	17	19	21	23	23	24	24	24	23	22	20	16	13	11	10	16	
25	10	10	9	9	9	9	12	16	18	20	22	24	25	25	26	28	28	29	28	25	22	19	18	16	19	
26	15	15	15	14	14	13	14	17	20	22	24	26	28	29	31	32	32	31	29	28	25	23	20	18	22	
27	17	15	16	16	16	16	17	21	25	28	31	32	33	33	34	33	34	35	34	31	27	24	22	20	25	
28	17	16	15	15	14	14	15	18	21	23	25	26	26	26	27	28	29	28	28	24	20	18	16	15	21	
29	14	14	13	12	12	12	15	18	21	22	24	26	27	28	28	29	30	30	29	27	25	23	21	20	22	
30	20	20	18	16	16	17	19	24	26	26	25	25	26	26	27	27	27	27	25	22	20	18	17	16	22	
31	15	14	14	13	13	13	14	16	19	21	23	24	25	25	26	26	26	25	23	21	18	17	16	15	19	
AVG	15	15	14	14	13	13	15	17	20	21	23	24	25	26	27	27	27	27	26	24	22	19	17	16		
MAX	22	20	19	19	18	18	20	24	26	28	31	32	33	33	34	33	34	35	34	32	30	27	25	23		
MIN	9	8	7	7	7	7	9	12	13	13	14	14	15	16	17	18	18	17	15	13	12	10	10	9		

Percent of time operational: 100
 Monthly Average: 20 Monthly Maximum: 35 M - missing data
 Monthly Minimum: 7