



## MONTHLY REPORT SUMMARY

Stoney Trail #1

Lafarge Canada Inc.

Name/Location

Company

February 2016

Monitoring Period

Continuous Ambient Monitoring				
Parameter	% Time Operational	Average	Maximum	Number of Hours above Industrial Standards
Sound dB A	100%	44	60	0
PM2.5 $\mu\text{g}/\text{m}^3$	100%	13.3	37.4	0
TSP $\mu\text{g}/\text{m}^3$	100%	34.9	55.8	0
Wind Speed km/h	100%	12	29	-
Precipitation mm	100%	-	0.8	-
Trailer Temperature	100%	2	17	-

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

### COMMENTS:

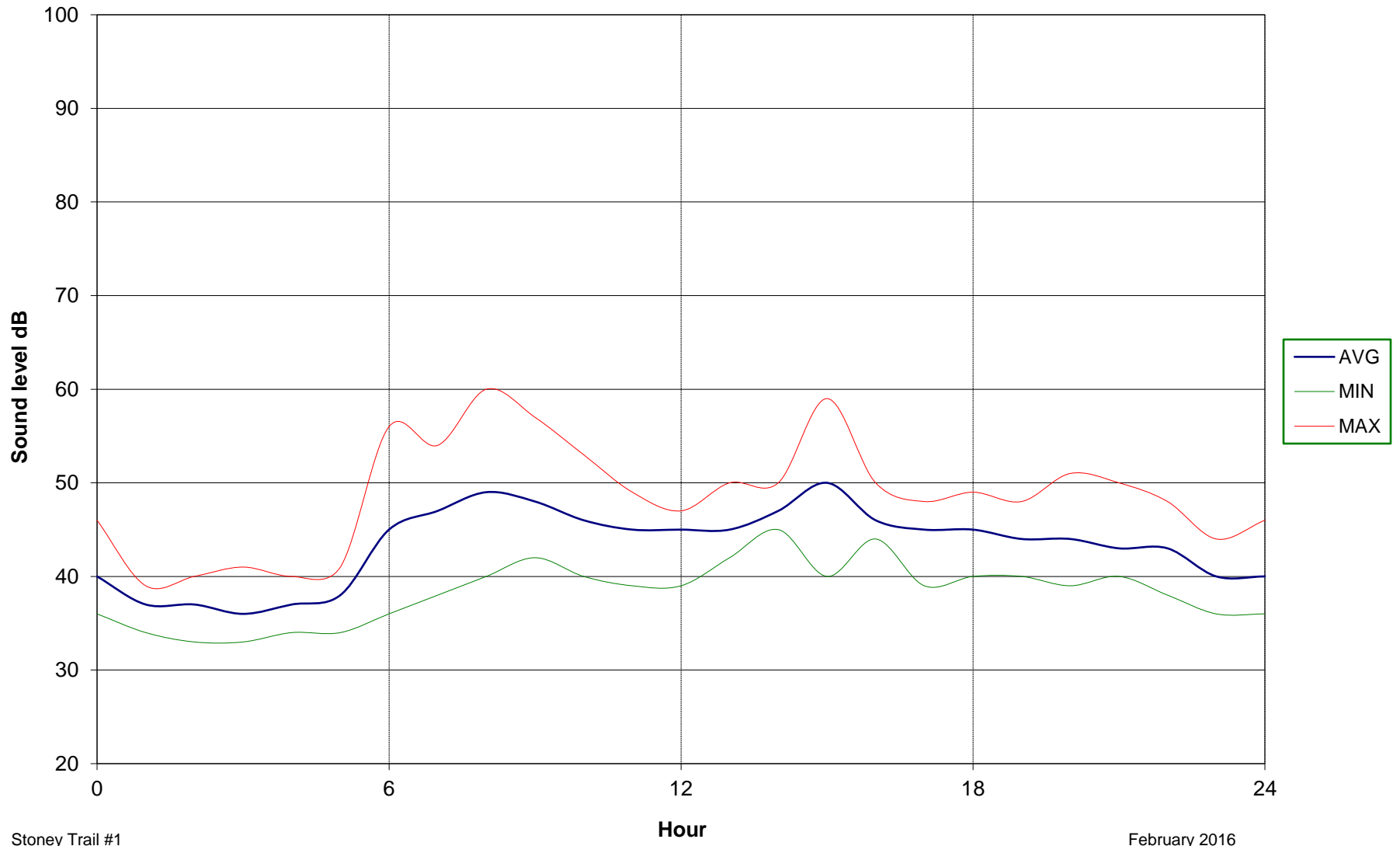
The regulation for industrial areas is 85 dB A any time.

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 6<sup>th</sup> day following the federal NAPS schedule.

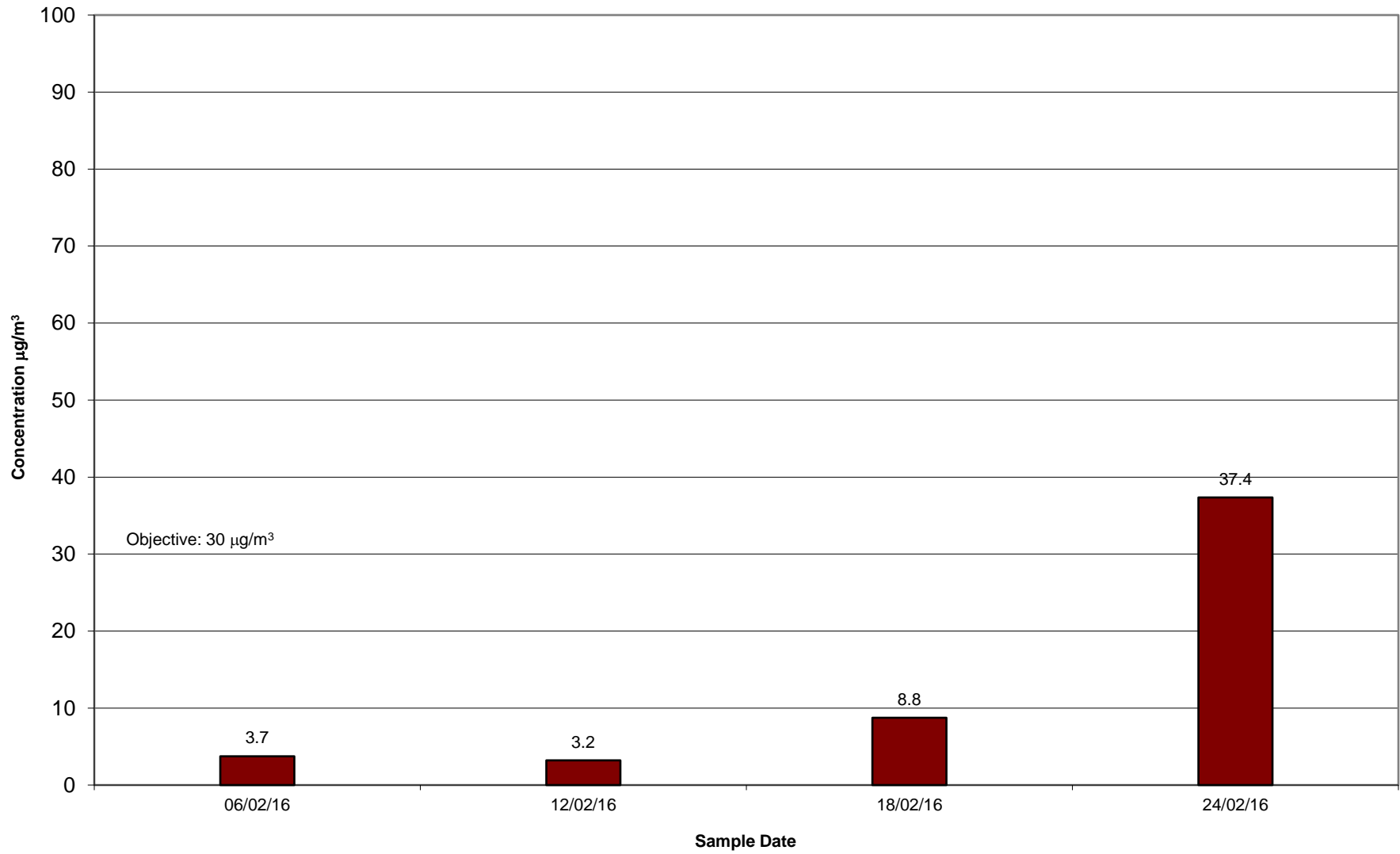
# Sound Level by Hour of the Day



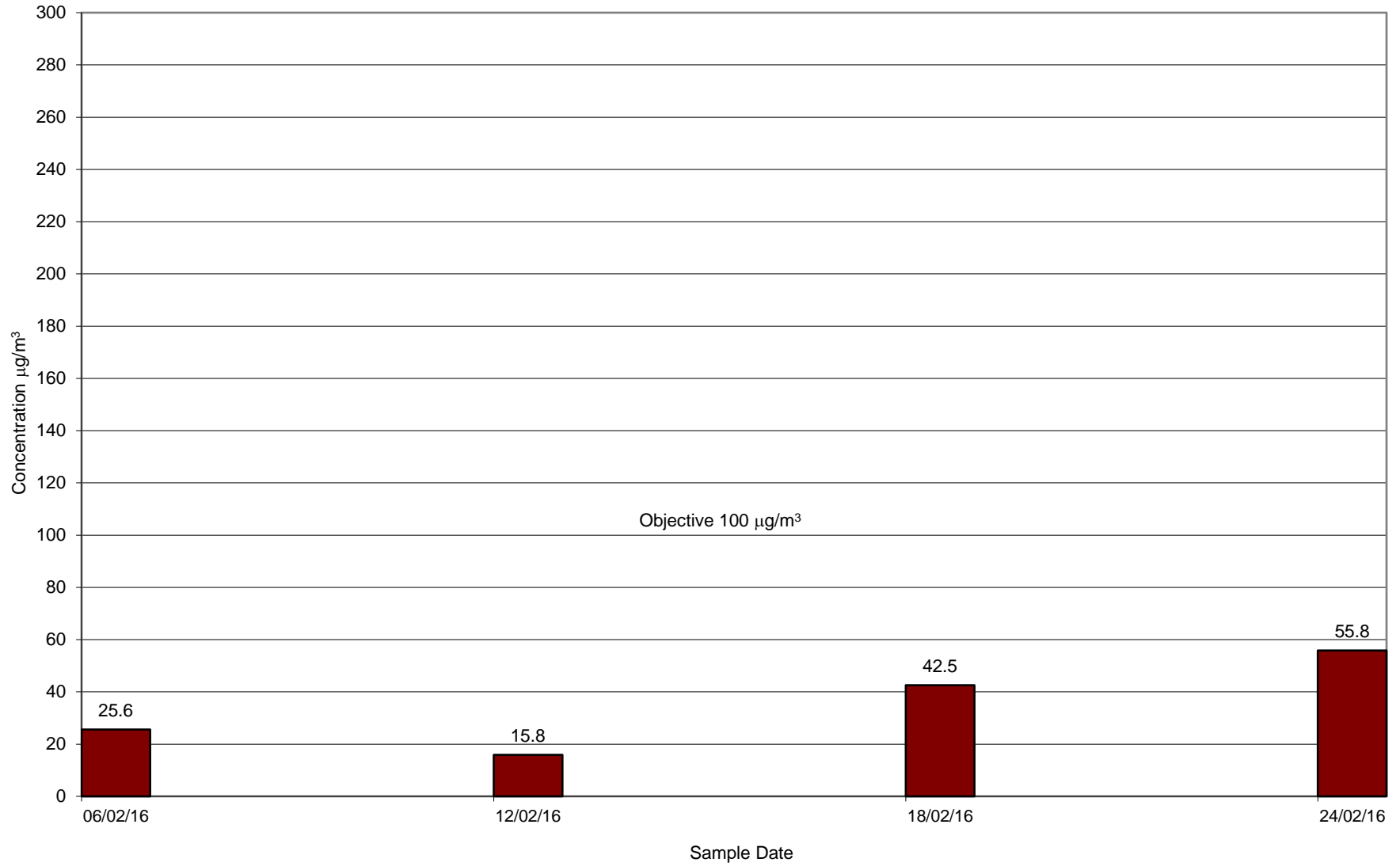
Stoney Trail #1

February 2016

PM2.5 at Lafarge Stoney Trail #1 February 2016

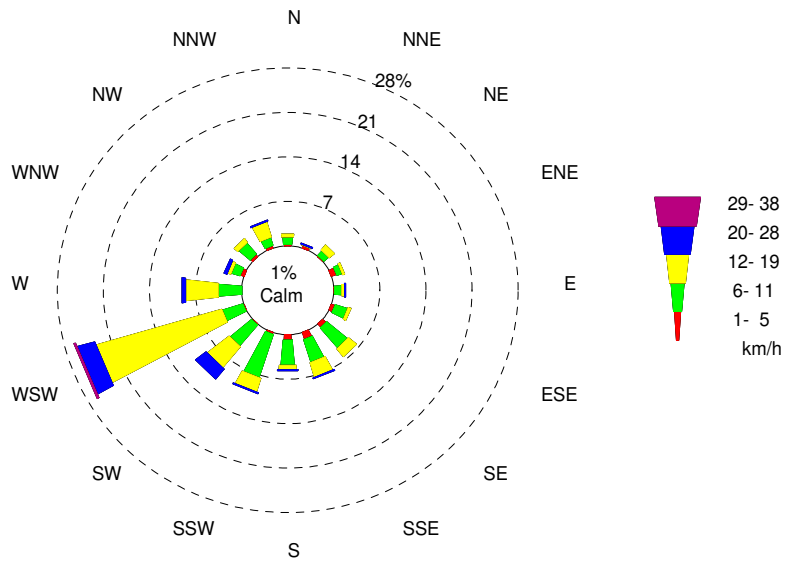


TSP at Lafarge Stoney Trail #1 February 2016



Wind rose for FEB 2016  
Stoney Trail 1

Bar length is proportional to frequency of winds from its direction



SOUND LEVEL [dBA] Leg 1 hour  
Lafarge Canada Inc.  
Stoney Trail 1  
STATION 620  
FEB 2016

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

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

Percent of time operational: 100 M - missing data  
 Monthly Average: 44 Monthly Maximum: 60 Monthly Minimum: 33 C - Calibration  
 Averages are computed only when time operational > 75%  
 Median: 42.9  
 \*\*\* No Exceedances of Guideline \*\*\*

SOUND METER CALIBRATIONS

DATE	TIME	STANDARD	RESPONSE	ERROR
FEB 2, 2016	10	94.0	93.6	-.4

ABSTRACT OF THE WIND  
Lafarge Canada Inc.  
Stoney Trail 1  
STATION 620  
FEB 2016

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	NNW	NNW	WNW	WNW	NW	NNW	ENE	SSE	SSE	SE	SE	SSE	SSE	SE	SE	SE	SSE	SSE	SSE	S	S	SSW	SW	WSW				SSE	0	
2	WSW	W	W	W	WNW	W	WNW	NW	NW	NNW	NNW	NNW	N	NNE	NE	ENE	ESE	SSE	SSE	S	S	SSW	SW	WSW	9	15		W	0	
3	W	W	W	W	WNW	NW	NW	WNW	SW	SSW	S	SSE	S	S	S	S	SSE	S	SSW	SSW	SW	SW	SSW	SSW	10	14		S	0	
4	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	9	13		W	0	
5	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	15	20		SW	0	
6	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	19	24		WSW	0	
7	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	20	29		WSW	0	
8	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	10	17		WSW	0	
9	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	16	19		WSW	0	
10	W	W	NW	NNW	N	SSW	S	ESE	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	15	18		ESE	0	
11	S	WSW	NNW	NW	NNW	NW	NNW	NNW	NW	NNW	NNW	NW	NNW	NNW	N	NE	ENE	ENE	E	E	ESE	ENE	E	ESE	9	20		NNW	0	
12	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	9	15		SE	0	
13	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	11	16		WSW	0	
14	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	12	21		WSW	0	
15	SW	WSW	WSW	WSW	N	NNW	NW	NNW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	13	21		WSW	0	
16	SSE	SE	SSE	SSE	S	SSE	WSW	W	W	NNW	W	W	NNW	W	W	NNW	W	W	NNW	W	W	NNW	W	W	13	21		SSW	0	
17	WSW	WSW	WSW	WNW	WSW	SW	SSW	SW	SSW	SE	SE	SSE	SE	SE	ESE	ESE	SE	ESE	ESE	ENE	NNE	ENE	SSE	SSW	11	19		SE	0	
18	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	8	13		SSW	0	
19	WNW	W	W	NW	NNW	NNW	NW	NNW	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSE	SSE	SSW	SSW	14	24		SE	0	
20	SW	WSW	NW	NNW	NNW	N	N	N	N	N	NNE	E	SSE	SSE	SSE	SSE	ESE	SE	S	SSW	WSW	WSW	WSW	12	25		N	0		
21	WSW	WSW	W	W	W	WSW	W	WSW	W	WSW	W	WSW	W	WSW	W	WSW	W	WSW	W	WSW	W	WSW	W	WSW	9	15		W	0	
22	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	10	15		W	0	
23	W	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	12	17		W	0	
24	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	13	28		SE	0	
25	S	SW	W	W	W	WSW	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	10	15		W	0	
26	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	12	17		WSW	0	
27	SW	SW	WSW	WSW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	19	23		NNW	0	
28	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	14	21		WSW	0	
29	E	E	E	E	CLM	CLM	CLM	CLM	CLM	CLM	CLM	CLM	CLM	CLM	NW	NNW	NNW	N	SE	SSE	S	S	SSE	S	14	20		E	0	
MEAN	17	13	10	9											8	16	15	16	8	2	4	8	7	7	12	6	17		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  
Lafarge Canada Inc.  
Stoney Trail 1  
STATION 620  
FEB 2016

SPEED [km/h]	WIND DIRECTION													TOTAL	PCT																				
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W			WNW	NW	NNW																	
< .5																								9	1										
1- 5	2	3	1	6	1	4	5	8	6	2	1	1	0	4	3	3	5	0	7	3	3	3	5	50	7										
6- 11	8	0	7	6	8	14	29	26	28	50	30	23	25	10	16	9	289	42	12	19	3	1	7	289	43										
12- 19	3	1	7	2	3	3	11	17	5	16	30	139	35	4	5	18	299	43	20- 28	0	1	0	0	1	47	7									
29- 38	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	2	0										
TOTAL	13	5	15	14	13	21	45	52	40	69	75	185	64	21	24	31	696	100	AVERAGE	9	11	12	7	10	8	10	9	10	14	16	13	11	10	13	12

PRECIPITATION [mm]  
 Lafarge Canada Inc.  
 Stoney Trail 1  
 STATION 620  
 FEB 2016

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	0	0
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
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
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
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
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
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
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
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
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
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
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
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
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	.2
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
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
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
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
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
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
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
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
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
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
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
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
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.8	.6	0	0	0	0	0	0	0	1.4
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
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
TOTL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.9	.6	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.8	.6	0	0	0	0	0	0	0	0	0

Percent of time operational: 100  
 Monthly Total: 2 Maximum in an hour: .8  
 Year to Date: 4



TRAILER TEMPERATURE  
Lafarge Canada Inc.  
Stoney Trail 1  
STATION 620  
FEB 2016

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	-4	-4	-4	-5	-5	-5	-5	-5	-5	-5	-3	-2	-1	1	2	2	1	0	-2	-3	-4	-4	-5	-5	-3
2	-5	-5	-5	-5	-6	-6	-6	-5	-5	-5	-3	-2	0	2	3	2	1	-1	-3	-5	-6	-7	-8	-8	-4
3	-7	-7	-7	-8	-8	-9	-9	-10	-10	-9	-4	-2	0	1	2	2	1	-1	-3	-4	-5	-5	-5	-5	-5
4	-4	-4	-4	-3	-3	-2	-1	-1	-1	-1	0	1	2	4	6	7	6	4	1	0	-1	-1	-1	-1	0
5	-1	-1	0	0	0	0	1	2	2	3	5	6	6	6	6	7	7	7	6	6	7	7	7	7	4
6	5	4	3	2	2	1	1	3	3	3	4	5	5	5	5	5	5	3	1	-1	-2	-2	-2	-3	2
7	-3	-4	-4	-4	-4	-4	-4	-4	-4	-3	1	3	4	4	6	8	8	5	2	-1	-2	-3	-3	-3	0
8	-3	-2	-1	1	2	3	4	4	4	6	9	11	13	14	14	14	13	11	9	8	8	8	8	8	7
9	7	7	7	7	7	6	6	6	6	8	12	15	16	17	16	14	13	12	11	10	9	8	8	7	10
10	6	5	4	3	2	1	0	0	-1	0	1	4	6	6	5	5	5	6	4	3	2	1	1	0	3
11	0	0	-1	-2	-2	-1	-1	-1	1	2	4	5	7	9	10	10	9	7	5	4	5	5	5	4	4
12	2	1	1	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-3	-2	-1
13	-1	0	1	1	1	1	1	1	1	0	1	3	6	9	9	9	8	6	4	3	3	2	1	0	3
14	0	0	0	0	0	0	0	0	0	2	5	8	9	10	10	10	9	7	6	5	4	4	3	3	4
15	2	2	3	3	3	1	0	-1	-1	1	4	7	8	9	9	9	9	8	4	3	2	0	-1	-1	3
16	0	0	-1	-2	-3	-3	-4	-3	-1	3	8	10	11	11	11	11	10	8	6	3	1	1	1	1	3
17	1	1	0	-1	-2	-2	-2	-1	-1	0	1	2	4	6	7	7	6	5	3	2	3	2	2	3	2
18	1	1	0	1	2	3	3	3	3	4	5	6	7	8	9	9	9	9	8	7	6	6	6	5	5
19	5	5	4	4	3	2	2	1	0	3	7	9	10	9	9	9	7	6	5	3	3	2	2	2	5
20	1	1	1	-1	-2	-3	-4	-4	-5	-5	-4	-3	-2	0	1	3	4	4	2	0	-1	-2	-3	-1	-1
21	0	0	0	0	0	-1	-2	-3	-2	1	3	6	8	9	9	9	9	8	3	0	-2	-4	-4	-3	2
22	-2	-2	-2	-3	-3	-4	-4	-4	-3	1	5	8	9	10	11	11	10	8	5	2	1	0	-1	-1	2
23	-1	-1	-2	-2	-2	-2	-2	-2	-1	0	0	1	4	7	7	7	5	2	-1	-4	-3	-4	-4	-4	0
24	-6	-6	-6	-6	-7	-7	-7	-7	-6	-2	1	4	4	5	5	6	6	5	2	1	-1	-2	-3	-3	-1
25	-3	-3	-2	-1	0	0	0	0	1	4	7	10	12	14	15	16	15	12	9	6	4	3	3	3	5
26	4	4	5	5	4	5	4	5	5	8	11	14	15	16	15	14	13	15	13	12	10	10	9	9	9
27	9	8	8	8	8	7	6	6	6	8	12	15	16	17	16	16	15	15	13	12	10	10	9	9	9
28	-1	-1	-2	-2	-2	-2	-2	-1	1	3	4	4	5	5	5	5	5	4	2	0	0	-1	-2	-3	1
29	-4	-5	-6	-7	-7	-8	-8	-9	-8	-8	-6	-4	-2	2	4	4	5	4	2	-1	0	-1	-2	-2	-3
AVG	0	0	0	-1	-1	-1	-1	-1	-1	1	3	5	6	7	7	7	6	4	2	1	1	0	0	0	0
MAX	9	8	8	8	8	7	6	6	6	8	12	15	16	17	16	16	15	15	13	12	10	10	9	9	9
MIN	-7	-7	-7	-8	-8	-9	-9	-10	-10	-9	-6	-4	-2	-1	-1	-1	-1	-1	-3	-5	-6	-7	-8	-8	-8

Percent of time operational: 100  
Monthly Average: 2 Monthly Maximum: 17 Monthly Minimum: -10 M - missing data