



February 19, 2008

Mr. Travis Coates  
Lafarge Canada Inc.  
10511, 15<sup>th</sup> St. S.E.  
Calgary, Alberta  
T2H 2H5

Re: **Noise Monitoring for Lafarge – Stoney Trail**

Dear Coates;

Attached are results of the monitoring for the period January 1 – 31, 2008 for noise and 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 collection was 100% for all parameters during the monitoring period; except for sound which was 89%.

There were two exceedances of the city of Calgary noise bylaw.

There were no exceedances of the Alberta Air Quality Objectives for TSP. There were no Exceedances of the Canada Wide Standard for PM2.5 particulate.

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/kt  
Enc.

# PROMET

## MONTHLY REPORT SUMMARY

Stoney Trail

Lafarge Canada Inc.

**Name/Location**

**Company**

January 2008

**Monitoring Period**

Continuous Ambient Monitoring				
Parameter	% Time Operational	Average	Maximum	Number of Hours above Bylaw Limit for Industrial Area
Sound	89%	45	57 dB A	2
PM2.5	100%	12	19	0
TSP	100%	40	56	0
Wind	100%	15 km/h	45 km/h	-
Precipitation	100%	0	0	-
Trailer Temperature	100%	-7	10	-

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

### COMMENTS:

The regulation for residential areas is 65 dB A for day time or 50 dB A for night-time. Sound Level must exceed 5 dB A Leq over the Ambient Sound Level before it becomes an offence.

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 [dBA] Leq 1 hour

Lafarge Canada Inc.

Stoney Trail

STATION 620

JAN 2008

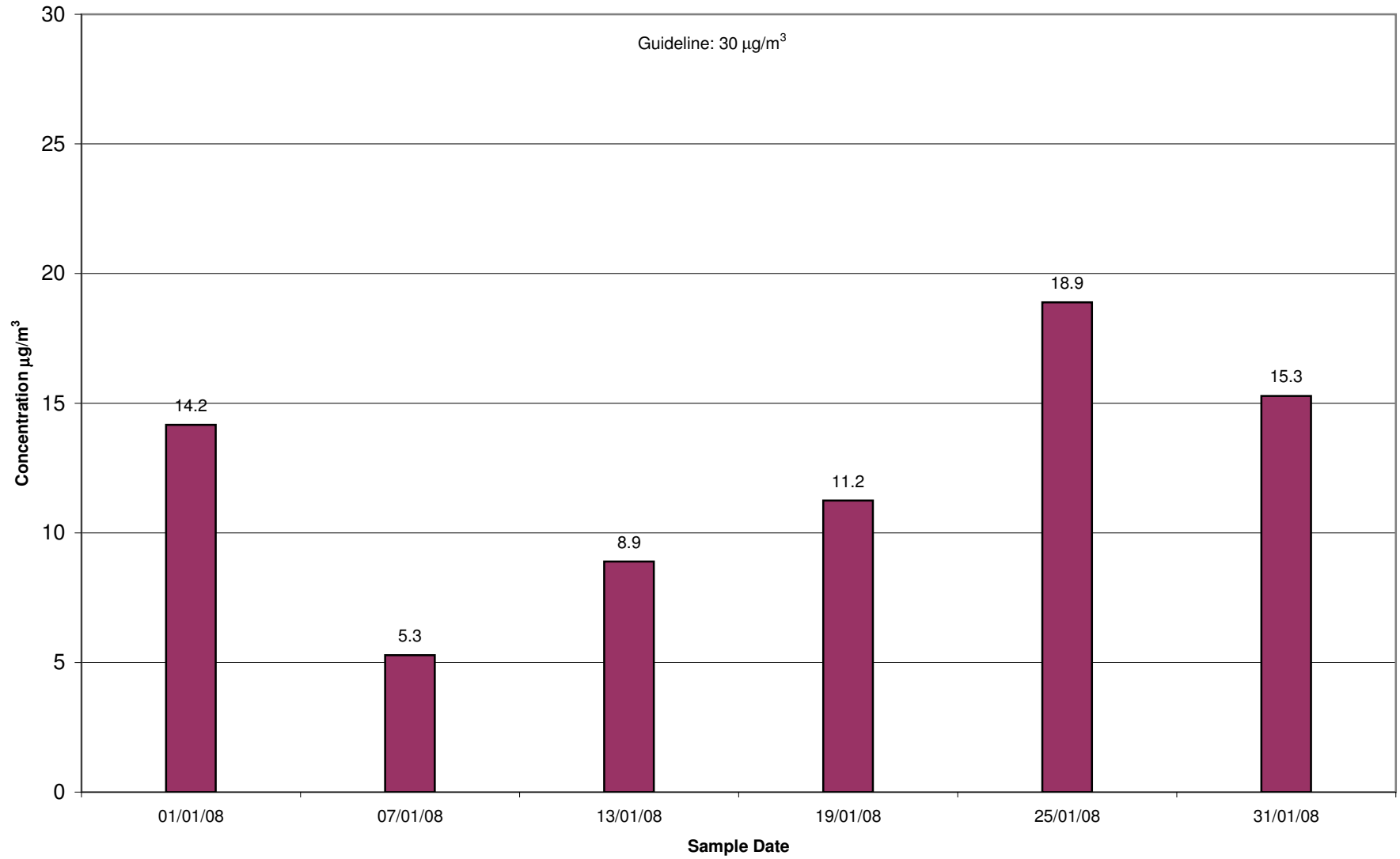
Day	Hour																								Avg		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1											40	45	43												M		
2							37	40	46	45								C							27		
3	36			32	30	45	36	54	47	47				48	49	48	47							37	40		
4	33		33	29	32						45											42		39	27		
5				31																		37	41	36	36	M	
6		35																								M	
7														45	42	44	42	41	46	45	40	41	42	33	36	M	
8	26	29	32	29	46	42	38	49	50	47	44	46	47	46	43	44	45	46	46						42	M	
9							42	52	48	48	45		45	48	46	45	48	43	42						40	M	
10		39		32	32	49	42	51		51	48							46	44	46	47	48	48	40	44	42	M
11	39	39	44	42	42	36								48	46	47	46	46								37	M
12													42	38	38		42	42	41							29	M
13													40									39		35		M	
14			37				43						44	46	45	46	47									34	M
15																			48	46	45	43	42	38	32		M
16																											M
17																											M
18					49	33	39	45	44	46	43						46	45	45	44	41	42	40	42	40	40	M
19	40	39	38	39	40	39	43	41	41	54															36	36	M
20	34	36	28	29		43	41	41	41	39	42	45	42	45		41	44	36	38	36					35	38	M
21																				45	47					18	M
22																		52	53	50	49	46	43			37	M
23					36	39	43	46	47														48	52	44	36	M
24	39	38	43	46	49	57	57	54	57	57	56	50	47	48	50	49		56	50	47	42	41	39		50	M	
25		36				44	49																			27	M
26																							43	43	39		M
27	36	36	38																								M
28																											M
29	M	M	M	M																							M
30	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
31	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
AVG	36	37	38	36	42	46	45	49	48	50	47	47	44	46	45	46	46	47	46	45	44	44	43	39			M
MAX	40	39	44	46	49	57	57	54	57	57	56	50	47	48	50	49	48	56	53	50	49	48	52	44			M
MIN	26	29	28	29	30	33	36	40	41	39	40	45	40	38	38	41	42	36	38	36	37	41	36	33			M

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

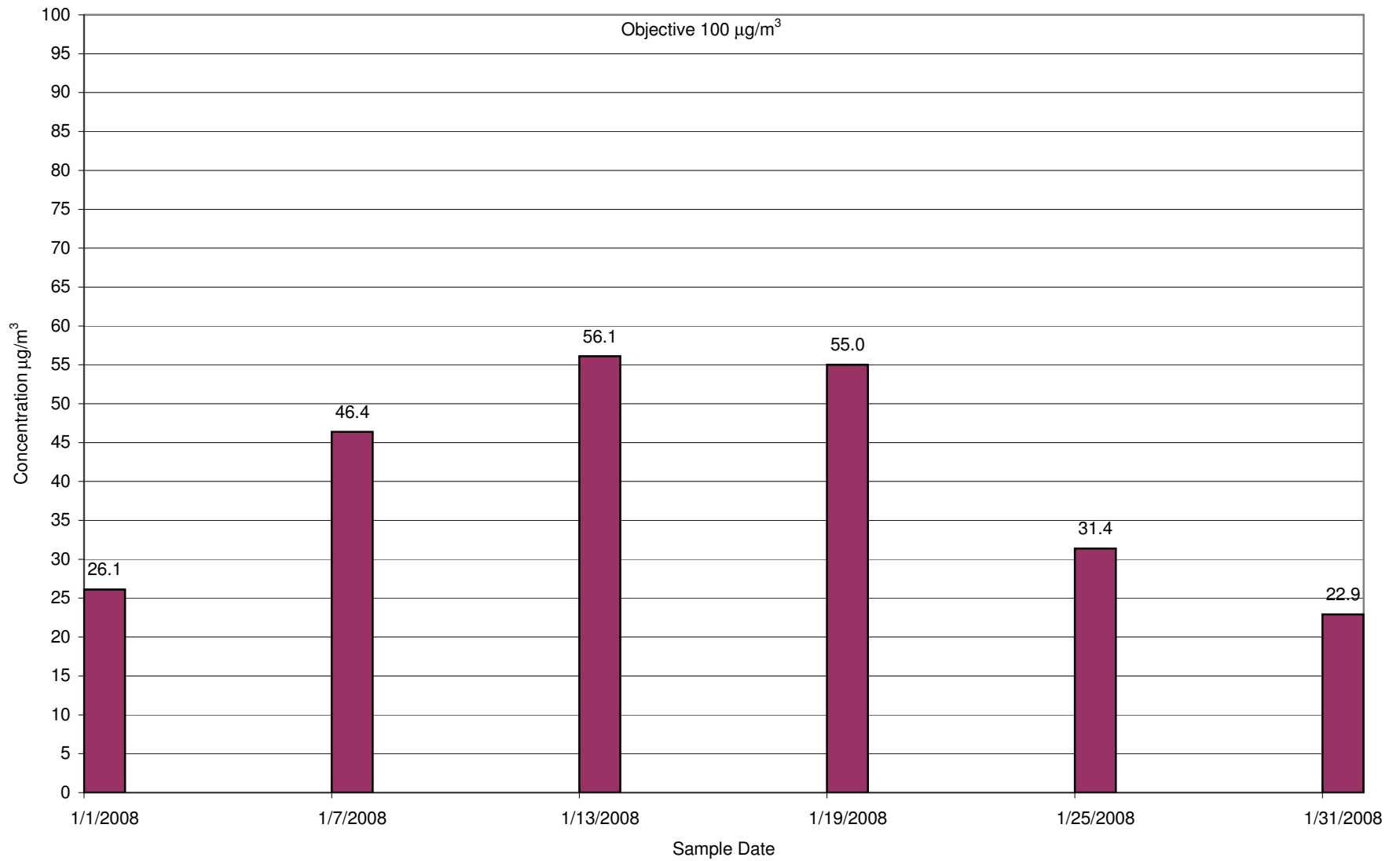
Percent of time operational: 89  
 Monthly Average: 45 Monthly Maximum: 57 Monthly Minimum: 26  
 M - missing data C - Calibration  
 Averages are computed only when time operational > 75%

\*\*\* 2 Exceedances of Guideline\*\*\*

PM2.5 at Lafarge Stoney Trail January 2008



TSP at Lafarge Stoney Trail, January 2008



ABSTRACT OF THE WIND  
 Lafarge Canada Inc.  
 Stoney Trail  
 STATION 620  
 JAN 2008

ALL TIMES ARE L.S.T.						SPEED [km/h]											ANEMOMETER HEIGHT 10 m													
HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX	PREV	MISS		
DAY																									SPD	VEL	DIR	OBS		
1	WSW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	W	SSE	SSE	SSE	SSE	SSE	SSE	SSE	S	S	S	SSW	SSW	S	SSW				SSE	0	
	12	15	16	17	19	18	17	13	13	12	9	9	10	20	21	24	22	20	18	15	14	16	20	15	16	24				0
2	SW	SSW	SW	SW	SSW	S	SSE	NE	NNE	NNE	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	0
	16	15	13	14	14	16	6	8	7	8	16	27	33	30	28	27	26	32	32	29	25	20	21	16	20	33				0
3	NW	W	SSE	SE	ESE	E	SSE	S	S	S	S	SSW	SSW	SSW	SSW	S	SSE	SSE	S	S	SSE	S	SSW	S				S	0	
	9	12	12	4	2	4	7	8	7	11	14	13	14	11	11	9	10	14	15	16	17	12	12	11	11	17				0
4	S	SSE	SSW	SW	SW	SSW	SSW	WSW	NNE	W	SE	SSE	SE	SE	SE	SE	SE	SSE	SSE	SSE	S	SSW	SSW	SW				SE	0	
	11	13	10	10	10	12	12	14	13	12	11	14	13	16	14	14	19	18	15	19	M	6	M	10	13	19				2
5	S	WSW	SW	WSW	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	W	W	W	WSW	WSW	WSW	WSW	WSW				WSW	0	
	M	13	M	11	13	12	17	20	19	19	24	30	28	24	21	22	16	18	15	14	10	10	8	9	17	30				2
6	W	W	WNW	W	W	W	W	W	W	W	W	W	WNW	WNW	W	WSW	W	W	W	W	W	WNW	WNW	W				W	0	
	14	11	14	13	12	14	13	15	15	14	12	15	16	15	17	20	17	16	14	14	16	19	19	21	15	21				0
7	W	W	W	W	W	W	W	WNW	WNW	W	W	W	WNW	WNW	WNW	NW	WSW	WSW	SW	SW	WSW	SW	WSW	WSW				W	0	
	20	19	18	18	18	19	18	15	15	12	12	14	13	11	8	6	6	7	6	10	8	9	10	8	13	20				0
8	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	SW	SSE	NW	WSW	W	W	W	W	WNW				WSW	0	
	7	9	8	7	8	7	5	8	10	9	10	9	9	8	6	6	3	3	6	12	14	14	15	16	9	16				0
9	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	NW	W	WSW	SSW	S	S	S	S	S	S	S	SW	W	W	W				S	0	
	17	15	13	13	12	12	9	9	8	8	10	12	7	9	11	11	9	10	9	12	16	14	17	14	12	17				0
10	W	WSW	SW	SW	SW	SW	SW	S	S	S	SSW	W	W	WNW	W	W	WNW	W	W	NW	NNW	NW	NW	E				W	0	
	12	11	12	10	9	9	11	9	13	10	9	15	18	14	13	14	11	9	8	8	4	6	6	4	10	18				0
11	SSE	SSE	SE	S	SSW	WSW	W	W	W	WNW	WNW	WNW	WNW	WNW	WSW	SW	SSW	WSW	W	W	WNW	WNW	WNW	WNW				WNW	0	
	9	7	5	9	8	11	14	15	14	15	16	14	14	11	7	6	8	9	13	17	16	16	17	16	12	17				0
12	WNW	W	W	W	W	W	W	W	W	W	W	W	W	WSW	S	SSE	SSE	S	SSW	WSW	W	W	W	WNW				W	0	
	15	15	14	14	14	13	13	12	13	13	13	14	11	8	11	13	11	11	10	17	20	18	18	22	14	22				0
13	WNW	W	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW	W				W	0	
	21	22	20	23	20	18	18	16	14	15	13	13	10	19	22	15	14	15	17	14	11	15	16	11	16	23				0
14	SW	SSW	SSW	W	WSW	SW	SSE	SSE	SSW	SSW	SW	SSW	SSW	SSE	ENE	NE	N	SW	SW	SW	WSW	W	WSW	NNW				SVL	0	
	12	15	11	18	19	14	7	12	12	18	17	14	9	5	7	7	15	21	31	22	26	28	33	16	33				0	
15	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	NNW	W	WSW	WSW	WSW				NNW	0	
	37	36	35	40	45	42	37	29	29	27	24	20	26	23	24	23	18	12	9	8	6	8	9	9	24	45				0
16	WSW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	WSW	W	WNW	WNW	WNW	W	W	W	W	W	WNW	WNW	WNW					W	0	
	12	15	13	13	16	16	15	16	20	16	15	18	19	15	15	19	19	17	19	19	21	21	17	14	16	21				0
17	WNW	W	W	W	WNW	WNW	NNW	NNW	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NNW				NNW	0	
	13	15	16	18	21	18	16	19	23	24	21	23	24	25	22	22	24	18	20	18	17	16	16	18	19	25				0
18	N	NNE	NNE	NNE	N	NNW	W	WSW	SW	SW	SW	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SW	SSW	SSW	SSW	SSW				SSW	0	
	26	30	22	15	11	7	3	4	5	5	10	12	15	15	14	12	10	10	10	8	8	9	7	8	12	30				0
19	SSW	SSW	SSW	SW	WSW	NNE	NW	NNE	NE	E	ENE	NE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	N	NNW				NNE	0	
	10	11	8	5	3	3	1	7	9	10	13	13	20	25	24	24	20	15	15	10	12	13	13	10	12	25				0
20	N	N	N	NNW	N	N	N	N	NNW	NW	W	WSW	WSW	WSW	WSW	SW	SW	SW	SW	WSW	W	W	W					N	0	
	6	6	3	6	12	10	11	11	10	7	4	3	8	11	12	10	8	8	10	11	12	13	12	11	9	13				0
21	W	W	W	W	WNW	W	W	WNW	W	W	W	WNW	WNW	WNW	WNW	NW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW				WNW	0	
	17	18	18	17	17	17	20	19	19	19	17	19	18	16	14	16	18	11	11	14	14	18	17	18	17	20				0
22	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	NNE	SSE	SSE	SSE	SSW					WNW	0	
	17	17	15	15	18	14	14	14	21	25	27	25	28	26	21	21	18	10	9	4	9	10	10	16	17	28				0
23	SSW	SSW	SSW	SW	SW	WSW	WSW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW					WNW	0
	21	19	17	14	10	6	8	8	11	18	22	20	17	16	14	12	12	12	15	17	12	11	9	11	14	22				0
24	WNW	W	WNW	WNW	NW	NW	WNW	NW	NW	NW	W	SW	ESE	E	ENE	E	E	ESE	E	ENE	E	SSE	S	SSW				SVL	0	
	10	9	8	9	7	10	6	7	7	6	3	2	5	5	7	9	12	6	7	6	3	11	11	12	7	12				0
25	SSW	SSW	SSW	SW	SW	WSW	WSW	W	WNW	WNW	WNW	WNW	W	W	W	W	W	W	W	W	WSW	W	WSW					W	0	
	12	11	12	13	13	8	9	14	18	17	17	16	17	24	25	24	16	18	21	20	21	29	30	30	18	30				0
26	W	W	W	W	W	W	W	W	W	W	W	WSW	WSW	SW	SSW	WSW	WSW	WSW	WSW	WSW	WSW	NW	N	WNW				W	0	
	30	32	32	30	31	31	31	29	26	39	27	25	31	19	13	22	23	25	19	21	17	5	3	6	24	39				0
27	SW	SSW	SW	WSW	WSW	W	NNW	NNW	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N					N	0
	7	7	10	13	13	12	14	18	26	25	28	26	26	27	25	30	26	27	31	31	30	31	28	27	22	31				0
28	N	N	N	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NNE	NNE	W	NE	ESE	ESE					NNW	0	
	24	23	23	21	25	21	19	19	19	22	23	22	22	18	14	12	12	8	5	3	1	3	3	3	15	25				0
29	SSE	S	S	S	S	S	S	S	S	S	S	S	S	S	SSE	S	S	S	SSE	SSE	S	S	SSE	S				S	0	
	7	9	10	11	13	14	15	17	17	17	19	23	25	22	21	20	19	17	16	14	11	12	10	9	15	25				0
30	S	SSW	SSW	S	SSW	SSW	SW	SW	SSW	SW	SW	SSE	ENE	SSE	SSW	SW	SW	WSW	SSW	SSW	SSW	SSW	SSW	SSW				SSW	0	
	10	10	11	11	8	10	7	5	6	10	9	3	4	5	10	11	11	9	10	10	10	11	9	8	9	11				0
31	SSW	SSW	SSW	SSW	S	SSE	WNW	NNW	NNW	NW	N	NNE	N	N	N	N	NNW	N	N	N	NW	N	NW	WSW				N	0	
	10	9	11	9	8	6	4	5	7	6	5	7	13	15	14	12	10	10	8	8	5	6	3	4	8					

FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION

Lafarge Canada Inc.

Stoney Trail

STATION 620

JAN 2008

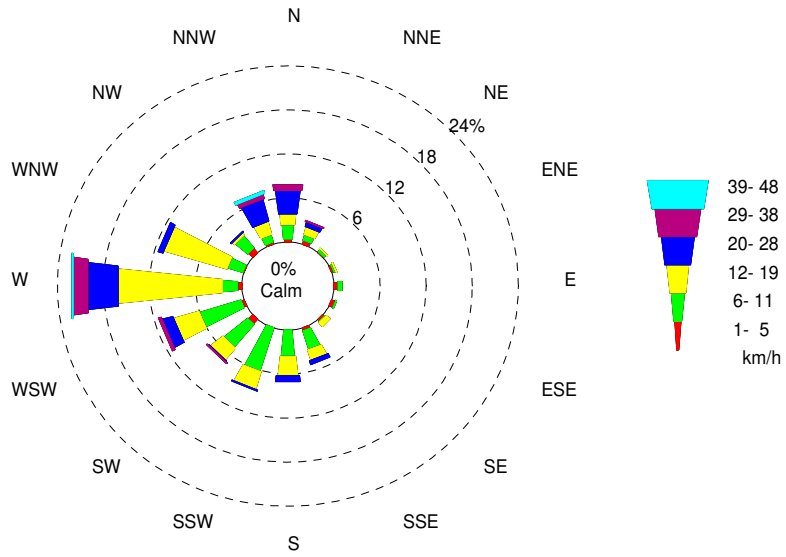
SPEED [km/h]	WIND DIRECTION																TOTAL	PCT	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW			
< .5																		0	0
1- 5	3	4	1	2	4	4	2	3	0	0	6	3	4	1	6	2	45	6	
6- 11	15	6	3	2	4	1	1	20	27	46	30	42	15	16	16	8	252	34	
12- 19	11	8	1	1	0	0	5	11	20	19	16	26	102	64	3	14	301	40	
20- 28	24	5	0	0	0	0	0	4	6	1	1	11	30	5	1	23	111	15	
29- 38	6	1	0	0	0	0	0	0	0	0	1	3	15	0	0	5	31	4	
39- 48	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	4	1	
TOTAL	59	24	5	5	8	5	8	38	53	66	54	85	167	86	26	55	744	100	
PERCENT	8	3	1	1	1	1	1	5	7	9	7	11	22	12	3	7			
AVERAGE	18	13	8	7	7	4	12	12	-63	-19	-27	13	18	15	8	21	15		

15 FEB 2008 1523



Wind rose for JAN 2008  
Stoney Trail

Bar length is proportional to frequency of winds from its direction



PRECIPITATION [mm]  
 Lafarge Canada Inc.  
 Stoney Trail  
 STATION 620  
 JAN 2008

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	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
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	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
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
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
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	0	0
TOTL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0

Percent of time operational: 100  
 Monthly Total: 0 Maximum in an hour: 0  
 Year to Date: 0

