



January 16, 2008

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

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

Dear Sir;

Attached are results of the monitoring for the period December 1 - 31, 2007 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.

There were no 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**

December 2007

**Monitoring Period**

Continuous Ambient Monitoring				
Parameter	% Time Operational	Average	Maximum	Number of Hours above Bylaw Limit for Industrial Area
Sound dB A	100%	38	54	0
PM2.5	100%	12	26	0
TSP	100%	27	38	0
Wind km/h	100%	15 km/h	38	-
Precipitation	100%	0	0	-
Trailer Temperature	100%	-5	13	-

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

### COMMENTS:

The noise regulation is 85 dB A . However, the reading is not an exceedance if it is less than 5 dB above the ambient noise level.

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.

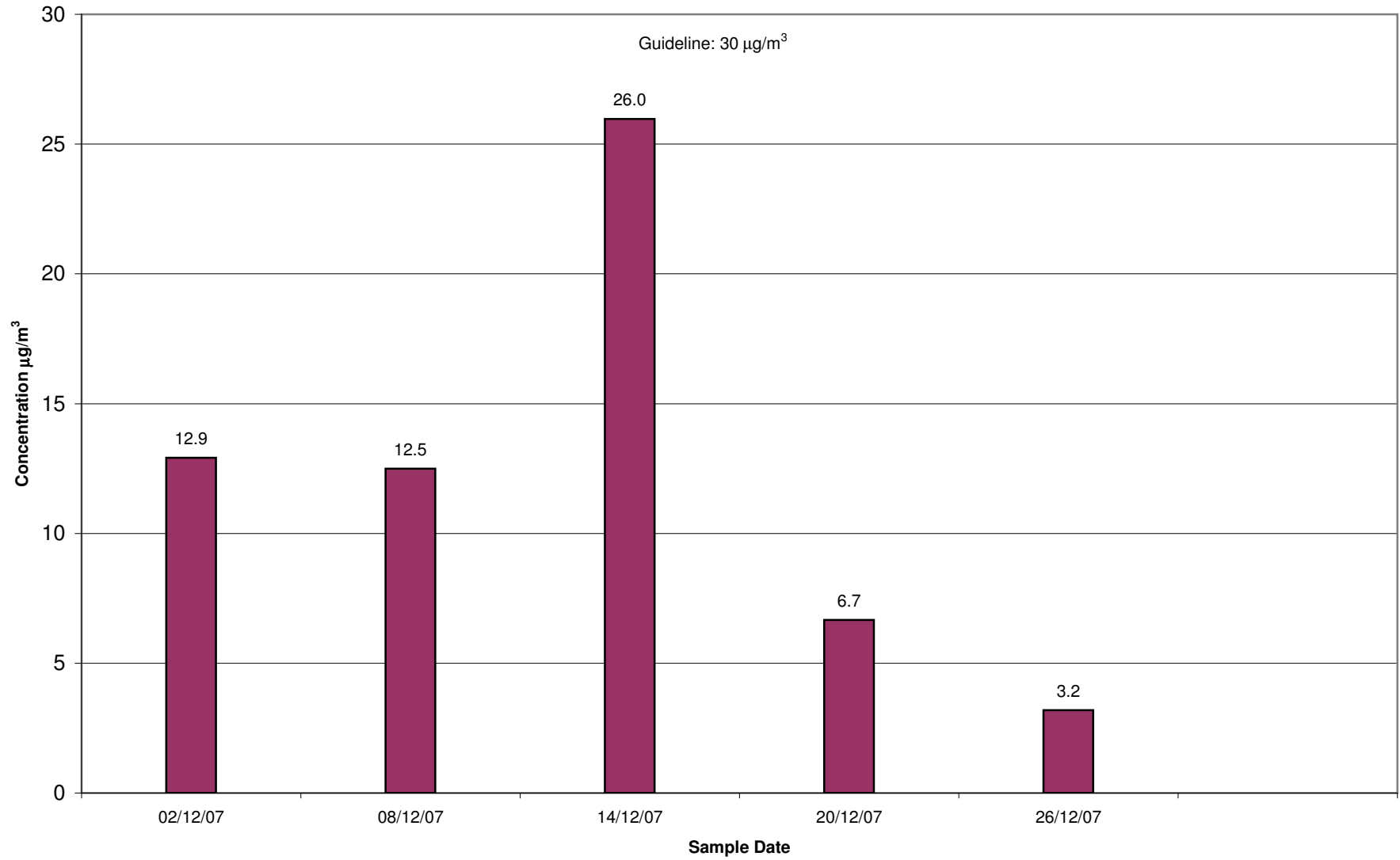
SOUND LEVEL [dBA] Leq 1 hour  
Lafarge Canada Inc.  
Stoney Trail  
STATION 620  
DEC 2007

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

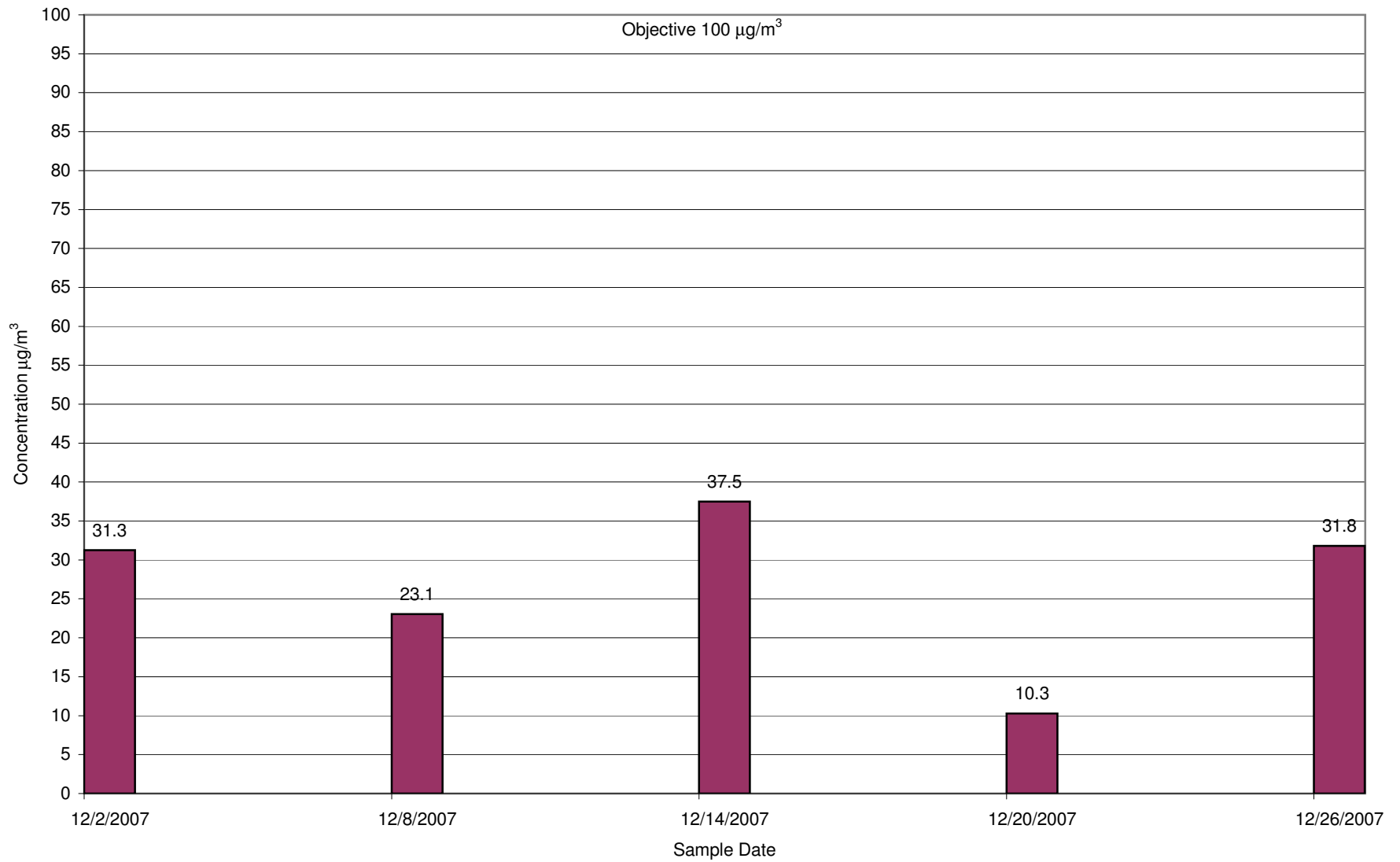
\*\*\* SOUND DATA REPORTED ONLY FOR WIND SPEED < 11.5 KM/H \*\*\*

Percent of time operational: 100  
Monthly Average: 38      Monthly Maximum: 54      Monthly Minimum: 21  
M - missing data      C - Calibration  
\*\*\* 0 Exceedances of Guideline\*\*\*

PM2.5 at Lafarge Stoney Trail December 2007



TSP at Lafarge Stoney Trail, December 2007



ABSTRACT OF THE WIND  
Lafarge Canada Inc.  
Stoney Trail  
STATION 620  
DEC 2007

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	SSW	SW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	SW	SSW	S	S	SE	E	SW	W	W	W	WSW	W	18	33	WSW	0		
2	WNW	WNW	WNW	WNW	NW	ENE	ENE	SW	W	WSW	SW	SSW	SW	SW	W	WNW	W	W	W	SW	SW	WSW	SW	SSW	17	33	SW	0		
3	SSW	SW	WSW	WSW	W	WNW	WNW	WNW	SE	SE	SSE	SSE	SE	SSE	SSE	SSE	E	NNE	NNE	NNE	NNE	NNE	NNE	NNE	17	24	NNE	0		
4	NNE	NE	NE	NNE	NE	NE	ENE	E	E	E	SE	S	S	SSW	S	S	S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	12	19	SSW	0		
5	SE	SSE	SSE	ESE	ESE	SSE	SSW	SSW	SSW	W	WNW	NE	NE	NE	NE	NE	NE	NE	NNE	NNE	NE	NNW	NNE	N	9	14	NE	0		
6	N	NNE	NNE	NNE	N	N	N	NNE	N	NNE	NNE	N	N	NNE	NNE	N	ENE	NE	NNE	NNE	NNE	NNE	NNE	NNE	11	16	NNE	0		
7	NE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	E	E	ENE	ENE	ENE	NE	NNE	NNE	10	12	ESE	0		
8	N	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	NE	NE	NNE	NE	NE	9	13	NNE	0		
9	NNE	NNE	NNE	N	N	NNE	NNE	N	N	N	N	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	N	N	N	N	16	21	NNE	0		
10	N	N	N	N	N	N	N	N	N	N	N	N	N	NNW	NNW	N	N	NNW	NNW	N	N	N	N	NNW	14	21	N	0		
11	NNW	NW	NW	NW	WNW	WNW	WNW	W	W	W	WNW	WNW	WNW	W	W	W	W	W	W	WSW	WSW	W	WNW	WNW	14	29	W	0		
12	WNW	NW	W	W	NW	NW	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	24	32	WNW	0		
13	NNW	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	N	N	NNE	N	N	N	N	NNW	N	20	27	NNE	0		
14	NNW	N	N	N	WNW	NW	WNW	WNW	WNW	W	WSW	SW	SSW	SSW	SW	SW	SSW	SW	SSW	SW	SSW	W	NW	NW	14	24	SW	0		
15	NW	NW	NW	NW	NW	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	ENE	E	E	SE	SSE	S	S	SSW	SSW	SSW	24	25	NW	0			
16	SW	SW	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	W	W	WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	NW	NW	NW	18	24	WNW	0		
17	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	18	23	WNW	0		
18	NNW	NNW	NE	E	SSW	WSW	SW	SW	SW	SSE	S	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	WSW	W	WNW	WNW	15	27	SW	0		
19	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	NW	NW	WNW	NW	WNW	WNW	WNW	WNW	16	24	WNW	0		
20	W	W	W	W	W	W	WNW	WNW	NW	WNW	WSW	W	SW	SW	SSW	WNW	NW	NNW	NNW	NW	NNW	NW	N	N	15	35	W	0		
21	NNE	NNE	N	WNW	WNW	W	W	SSW	SSW	SSW	SSW	SW	SW	S	S	S	SSW	SSE	S	S	SSW	SW	WSW	WSW	10	17	SSW	0		
22	SW	W	W	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	W	WSW	W	WSW	WNW	W	W	WNW	WNW	NW	W	WNW	WNW	11	17	WNW	0		
23	W	WNW	WNW	WNW	WSW	W	W	WSW	SW	WSW	W	SSW	WSW	SW	WNW	S	S	S	SSW	S	S	SSW	S	SW	WSW	10	17	SVL	0	
24	W	W	W	W	W	W	WNW	WSW	W	W	W	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	16	35	WNW	0	
25	WSW	WSW	WSW	WSW	WSW	WSW	SSW	SW	NNE	ENE	ENE	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	16	38	WNW	0		
26	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	NNW	SW	S	S	S	S	16	25	WNW	0		
27	SSW	SSW	SSW	SW	W	WNW	N	NW	NW	NW	NW	NW	WNW	WNW	WNW	N	N	N	N	N	N	N	N	N	19	32	N	0		
28	N	N	N	N	N	N	NNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	WNW	NW	WNW	W	WSW	WSW	13	23	SVL	0			
29	W	WNW	NW	NNW	NW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	W	WSW	W	W	WNW	13	21	NW	0		
30	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	W	W	W	WNW	NNW	27	35	WNW	0	
31	NNW	WNW	W	W	NW	W	WNW	WNW	WNW	NW	WNW	NW	NW	WNW	NW	WNW	SW	SW	SW	WNW	NW	NW	NW	NW	15	21	NW	0		
MEAN																									15	21		0		
SPEED	15	14	14	14	15	15	14	14	15	15	16	16	18	18	17	16	14	13	14	14	16	15	16	15	15	38	NNW	0		
NOTE:	Missing data represented by M; no clear prevailing direction represented by SVL; calm winds represented by CALM																													
Date of Last Calibration	060221										Make and Model of Instrument: RM Young5103										WS UPTIME 100 %								WD UPTIME 100 %	

FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION

Lafarge Canada Inc.

Stoney Trail

STATION 620

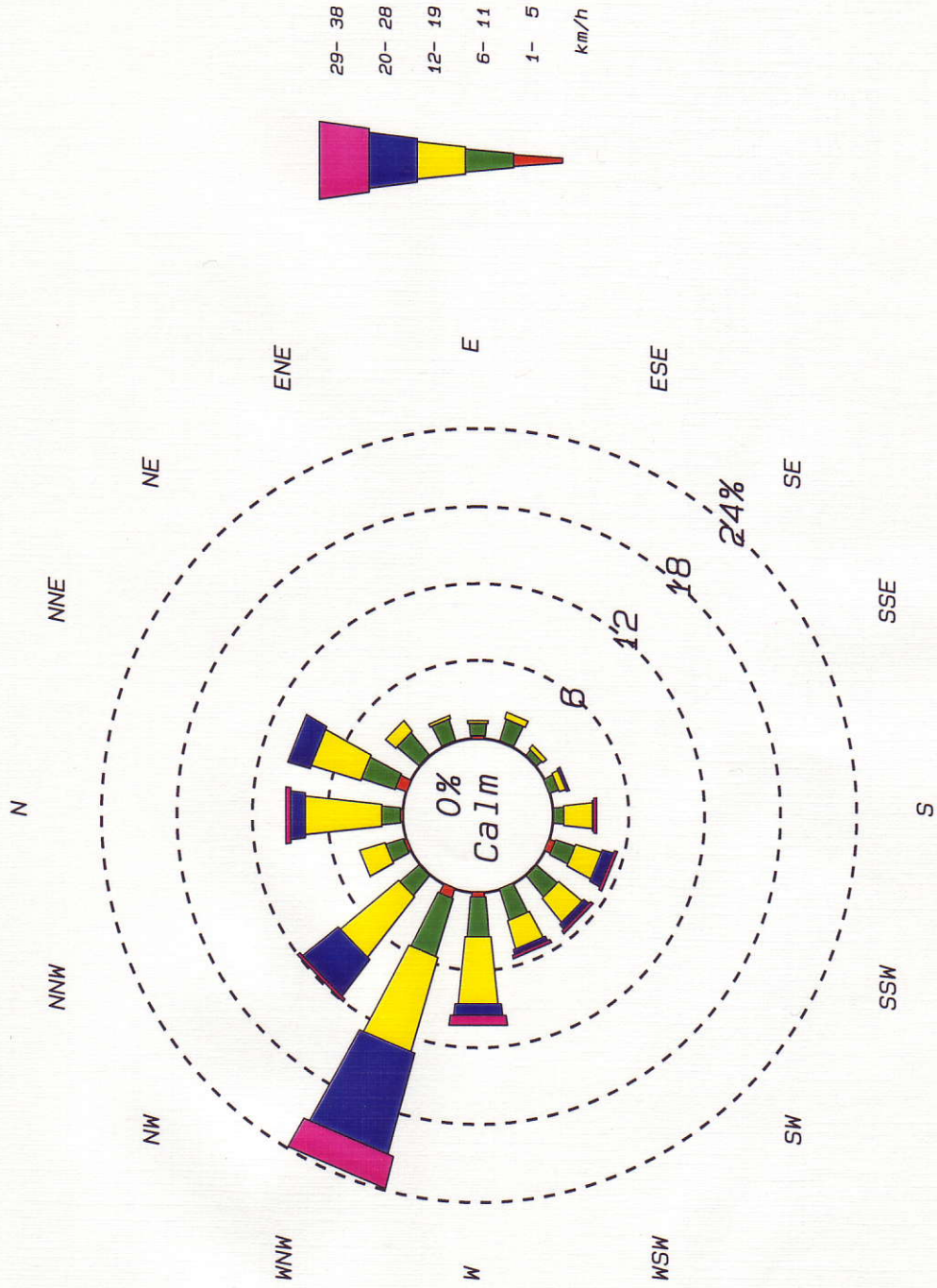
DEC 2007

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	2	7	1	1	2	1	1	0	1	4	1	0	3	6	1	2	33	4
6- 11	11	21	17	13	7	13	4	6	6	12	16	19	23	35	15	11	229	31
12- 19	46	31	7	1	1	3	2	4	17	16	18	17	39	57	45	15	319	43
20- 28	9	13	0	0	0	0	0	1	1	7	4	3	7	61	27	0	133	18
29- 38	2	0	0	0	0	0	0	0	1	1	1	1	5	18	1	0	30	4
TOTAL	70	72	25	15	10	17	7	11	26	40	40	40	77	177	89	28	744	100
PERCENT	9	10	3	2	1	2	1	1	3	5	5	5	10	24	12	4		
AVERAGE	15	14	10	10	8	11	10	13	15	15	13	13	15	19	17	12	15	

16 JAN 2008 1122

# Wind rose for DEC 2007 Stoney Trail

Bar length is proportional to frequency of winds from its direction





PRECIPITATION [mm]  
 Lafarge Canada Inc.  
 Stoney Trail  
 STATION 620  
 DEC 2007

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
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	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

Percent of time operational: 100  
 Monthly Total: 0              Maximum in an hour: 0  
 Year to Date: 248              M - missing data

TRAILER TEMPERATURE  
Lafarge Canada Inc.  
Stoney Trail  
STATION 620  
DEC 2007

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	3	-3	-2	-2	-1	0	0	0	1	2	4	6	9	11	12	12	10	7	6	6	8	9	9	9	5
2	9	8	7	6	4	2	0	-1	0	1	3	5	6	8	8	8	6	3	1	0	-1	-1	-1	-1	3
3	-1	-2	-2	-2	-1	-1	0	-1	-2	-2	2	5	6	7	7	7	5	2	-1	-3	-4	-6	-7	-9	0
4	-9	-10	-10	-11	-11	-11	-11	-11	-12	-11	-10	-9	-9	-8	-8	-8	-9	-9	-9	-9	-9	-9	-9	-9	10
5	-9	-10	-10	-11	-11	-12	-12	-12	-11	-11	-10	-9	-8	-7	-8	-9	-10	-12	-13	-13	-13	-13	-14	-15	-11
6	-16	-17	-17	-17	-17	-17	-17	-17	-16	-16	-15	-14	-13	-12	-12	-12	-13	-17	-19	-18	-18	-18	-17	-17	16
7	-17	-17	-17	-17	-17	-18	-18	-19	-19	-19	-18	-17	-17	-16	-15	-15	-18	-20	-21	-21	-21	-21	-22	-23	-18
8	-25	-26	27	-27	-26	-26	-26	-25	-24	-23	-22	-21	-20	-20	-21	-21	-22	-23	-23	-23	-23	-23	-24	-24	-24
9	-24	-24	-24	-25	-25	-26	-25	-25	-25	-25	-24	-23	-22	-21	-20	-22	-23	-24	-25	-26	-27	-27	-28	-28	-24
10	-28	-28	-28	-29	-29	-29	-29	-29	-28	-27	-24	-21	-20	-17	-17	-17	-19	-22	-23	-23	-23	-23	-22	-23	-24
11	-22	-22	-22	-22	-22	-21	-21	-20	-19	-17	-14	-10	-7	-5	-5	-5	-7	-9	-11	-11	-10	-8	-6	-4	13
12	-3	-2	-2	-3	-2	-2	-2	-3	-4	-4	-3	-2	0	0	0	-1	-2	-4	-5	-6	-6	-5	-5	-4	3
13	-5	-6	-8	-9	-9	-9	-10	-10	-10	-9	-9	-8	-8	8	-7	-7	-8	-8	-8	-9	-9	-9	-10	-10	-8
14	-11	-12	-12	-13	-15	-15	-15	-15	-16	-14	-11	-8	-6	-5	-5	-5	-8	-10	-11	-11	-11	-8	-5	-4	10
15	-2	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-2	-3	-3	-4	-4	-5	-5	2	
16	-5	-5	-5	-5	-4	-2	0	1	2	3	3	4	6	9	10	9	7	4	3	2	2	2	1	1	2
17	1	0	0	0	0	-1	-1	-1	-2	-1	1	3	5	6	6	4	1	0	-2	-2	-2	-2	-2	-2	0
18	-2	-1	-2	-2	-3	-3	-3	-3	-4	-4	-3	-2	-1	0	0	-2	-4	-5	-5	-5	-6	-6	-5	-3	-3
19	0	2	4	5	5	6	6	6	5	5	5	8	11	12	10	9	9	7	6	6	5	5	4	4	6
20	4	5	5	6	6	4	3	2	2	3	5	7	11	12	12	13	11	8	7	6	7	7	7	6	7
21	4	1	0	0	-1	-1	-1	-1	-1	-1	0	0	1	2	3	2	1	-1	-2	-2	-3	-4	-4	-3	0
22	-3	-4	-4	-3	-2	-1	0	1	1	2	4	6	8	9	10	8	6	4	2	1	0	-1	-1	1	2
23	-2	-2	-1	0	0	0	0	0	1	2	2	3	3	4	4	4	3	2	3	3	3	3	2	2	2
24	2	1	1	1	1	1	0	0	0	0	1	4	5	4	4	5	4	1	-1	-2	-2	-2	-3	3	1
25	-4	-4	-4	-4	-3	-2	-2	-3	-4	-4	0	4	7	8	8	8	7	5	4	3	3	3	3	3	1
26	3	2	2	1	1	0	0	-1	-2	-1	1	2	3	4	4	2	0	-1	-2	-2	-2	-2	-2	-2	0
27	-2	-2	-4	-5	-5	-5	-4	-3	-2	0	2	3	4	4	4	1	-1	-2	-2	-2	-2	-2	-3	-3	-1
28	-3	-3	-3	-4	-4	-5	-5	-5	7	-7	-6	-4	-1	0	0	0	-3	-6	-9	-9	-10	-11	-12	-13	-5
29	-13	-12	-12	-12	-12	-12	-12	-12	-10	-8	-6	-3	-1	0	1	0	-2	-5	-6	-8	-9	-9	-9	-8	7
30	-7	-6	-5	-4	-3	-3	-2	-1	-1	0	1	3	4	6	6	5	5	4	4	4	4	4	4	4	1
31	3	2	2	2	2	3	2	2	2	2	3	3	6	9	9	9	6	2	-1	-2	-1	0	0	0	3
AVG	-6	-6	-7	-7	-7	-7	-7	-7	-7	-6	-4	-3	-1	0	0	-1	-2	-4	-5	-6	-6	-6	-6	-6	-6
MAX	9	8	7	6	6	6	6	6	5	5	5	8	11	12	12	13	11	8	7	6	8	9	9	9	9
MIN	-28	-28	-28	-29	-29	-29	-29	-29	-28	-27	-24	-23	-22	-21	-21	-22	-23	-24	-25	-26	-27	-27	-28	-28	-28

Percent of time operational: 100  
Monthly Average: -5      Monthly Maximum: 13      M - missing data  
Monthly Minimum: -29