



July 23, 2008

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

Re: **Noise Monitoring for Lafarge – Stoney Trail #1**

Dear Mr. Thurber;

Attached are results of the monitoring for the period June 1 - 30, 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.

There were no exceedances of the city of Calgary noise bylaw.

There were no exceedances of the Alberta Air Quality Objectives for TSP or 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".

Dr. William (Bill) Murray  
President

WM/kt  
Enc.

# PROMET

## MONTHLY REPORT SUMMARY

Stoney Trail #1

Lafarge Canada Inc.

**Name/Location**

**Company**

June 2008

**Monitoring Period**

Continuous Ambient Monitoring				
Parameter	% Time Operational	Average	Maximum	Number of Hours above Bylaw Limit for Industrial Area
Sound	100%	46	72 dB A	0
PM2.5	100%	10	13	0
TSP	100%	28	39	0
Wind	100%	12 km/h	31 km/h	-
Precipitation	100%	-	4	-
Trailer Temperature	100%	15	33	-

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

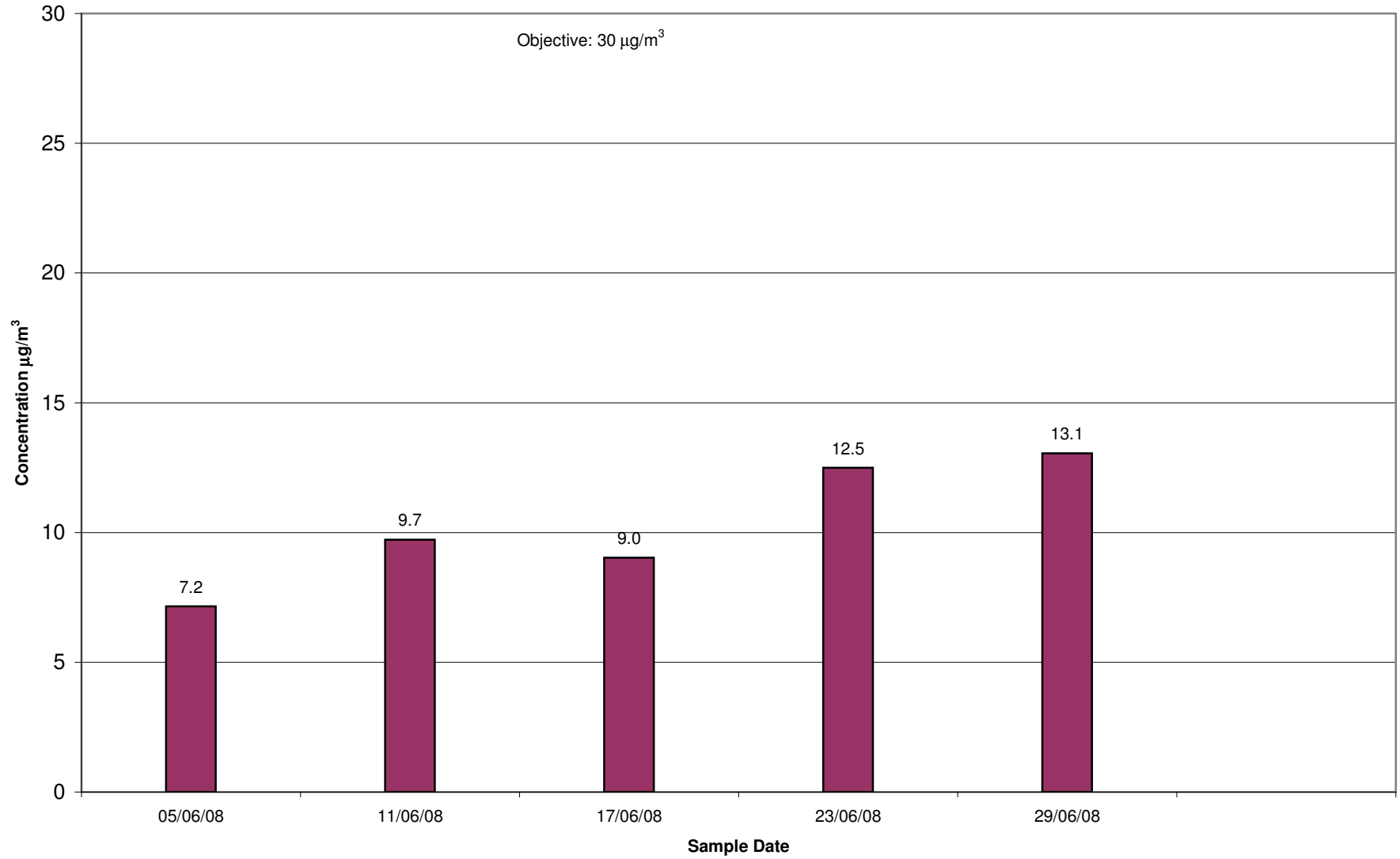
JUN 2008

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	41	37	38	37	38	44	41	40														43	40	38	33	
2	36	36	35							42	C	43						44	50	45	46	47	36	42	37	
3	34	39	38	31	39	41	49	49								46	49		47	46	47	47	40	40	41	
4	39	38	39	40	39	72	51	49	54	44	47		49					44	47	46	46	44	45	41	50	
5	41	40	41	44	43	48	51	46	45													41	40	39	38	
6	36	36				43	48													50	43	48	47		36	
7																		47	47	48		49		42	33	
8																48	47	50	49		47	48	39	40	37	
9	34	39	37	41	45	60	51	50	46	45	42												44	43	42	
10		41								47															M	
11																		45	51	51	45				33	
12			40	48																	48	47	47	45	44	35
13	43	41	44				52	48	49	45	48	50										45	44		40	
14		39	35	48	38																		44	43	39	
15	42	39	37	36	40					46	47	46	40	47	49							44	45		39	
16		41	39	38		48	62	54	41	43	38	38	41									41	43	42	43	
17	41	43	42		46		50	49	41	42	39	40	42										43	43	38	
18	43	39	47	44	47	48	55							56		54						42	42	41	42	
19	41	42	39	39	42	45	49	51		50	55	54	46	42				42	43		39	45	44		44	
20	33				38	45	49	48	53	38	47	43						45	40	39	43	43			40	
21			41	43	42	44	43	40	38																	31
22														44	41					41			39	37		27
23			30	36	45	44	49	46	44	45	47	49	48	44	48	42	45	47	47	41	42	38	36	35	44	
24	31	34	53				47	47							60	45	46	46		44	43	59	47	37	44	
25	35	36	41	48	42	49	53	49	48	48	48	49	43	42	40	42	43	42	44	43	48	44	43	36	45	
26	38	35	38	39	42	50	50	50	48	48			44								46	47	40	38	41	
27	40	42	35	49	42	47	54	48	44	47	46	48	47	50	46							39	39	36	43	
28				38	38	42	46	44	44																	30
29									60	41	43	45	39													37
30				34	38	58	58	54									63	45		45	46		44	36	45	
AVG	39	39	41	42	42	54	52	49	49	45	47	47	44	48	50	47	50	46	47	44	46	46	42	40		
MAX	43	43	53	49	47	72	62	54	60	50	55	54	49	56	60	54	63	51	51	48	49	59	47	44		
MIN	31	34	30	31	38	41	41	40	38	38	38	38	39	42	40	42	42	40	39	39	41	38	36	34		

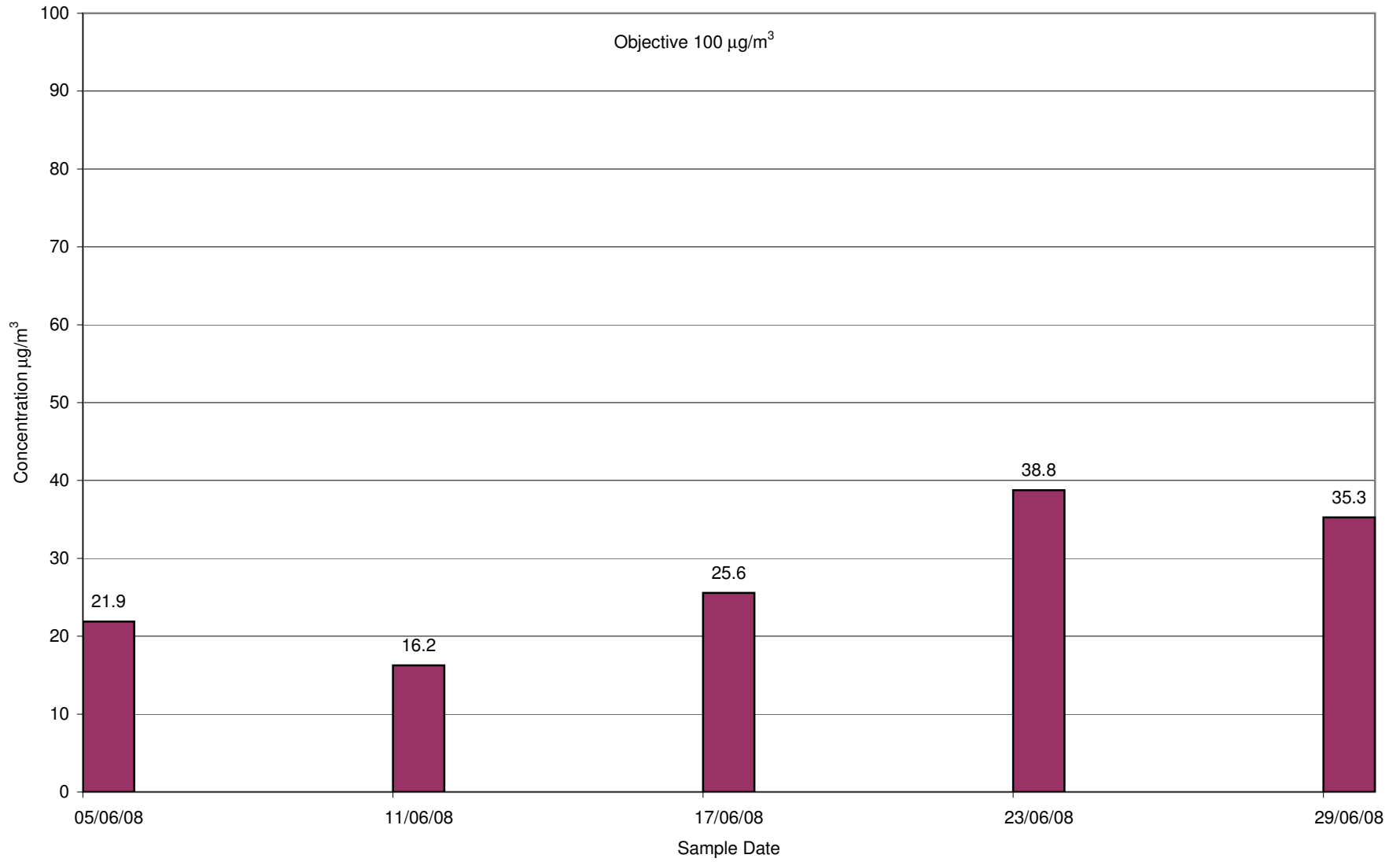
\*\*\* SOUND DATA REPORTED ONLY FOR WIND SPEED < 11.5 KM/H \*\*\*

Percent of time operational: 100  
 Monthly Average: 46 Monthly Maximum: 72 Monthly Minimum: 30  
 M - missing data C - Calibration  
 \*\*\* 0 Exceedances of Guideline\*\*\*

PM2.5 at Lafarge Stoney Trail #1 June 2008



TSP at Lafarge Stoney Trail #1, June 2008





FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION

Lafarge Canada Inc.

Stoney Trail

STATION 620

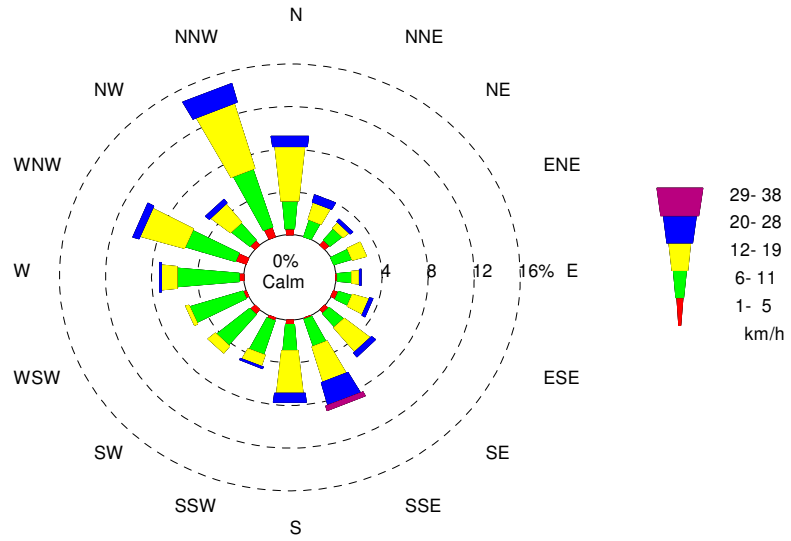
JUN 2008

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	4	0	4	0	1	3	3	1	3	2	4	2	3	7	4	7	48	7
6- 11	19	12	10	12	9	9	12	19	18	24	27	35	39	33	15	41	334	46
12- 19	37	12	5	9	5	11	21	25	29	8	6	2	10	29	16	46	271	38
20- 28	7	5	2	0	1	2	3	16	6	1	0	0	1	4	3	13	64	9
29- 38	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0
TOTAL	67	29	21	21	16	25	39	64	56	35	37	39	53	73	38	107	720	100
PERCENT	9	4	3	3	2	3	5	9	8	5	5	5	7	10	5	15		
AVERAGE	14	14	10	12	12	12	13	16	14	10	9	9	10	11	13	13	12	

23 JUL 2008 1644

Wind rose for JUN 2008  
Stoney Trail

Bar length is proportional to frequency of winds from its direction







TRAILER TEMPERATURE  
Lafarge Canada Inc.  
Stoney Trail  
STATION 620  
JUN 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	10	8	7	6	5	6	10	13	16	18	19	20	20	20	19	18	17	16	15	13	12	11	10	14	
2	11	11	11	11	11	11	11	11	12	13	14	16	18	19	18	16	14	12	11	11	10	10	10	13	
3	10	10	10	9	9	9	9	10	11	11	11	12	11	11	11	13	15	15	13	12	11	10	9	11	
4	9	8	8	7	6	7	8	11	15	15	15	16	15	17	17	19	21	20	20	18	15	12	10	9	
5	8	7	7	6	6	7	10	14	18	19	20	20	20	20	21	21	21	20	18	17	15	13	11	10	
6	9	9	10	9	9	9	9	11	12	15	15	15	16	14	13	14	14	13	12	11	10	9	8	12	
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8	6	7	7	7	7	7	8	8	8	8	9	11	13	15	15	13	11	10	10	9	8	7	6	9	
9	6	6	5	4	3	4	7	11	14	15	18	17	17	16	15	13	11	11	13	11	9	8	8	10	
10	7	7	7	7	7	7	7	7	7	7	8	8	8	10	11	11	10	10	9	8	7	7	7	8	
11	7	7	8	8	8	8	8	8	7	8	9	10	10	10	10	10	10	10	10	9	8	8	7	9	
12	7	7	6	6	6	7	8	9	12	14	15	16	17	18	19	17	18	18	18	17	15	11	9	12	
13	9	9	10	10	10	11	11	13	16	19	21	21	21	19	18	19	19	16	14	13	10	8	7	14	
14	6	6	6	6	6	6	7	8	10	12	14	16	17	17	18	17	17	17	18	17	14	10	7	12	
15	5	5	4	4	4	5	8	10	13	14	16	18	19	20	20	21	21	21	20	19	16	13	11	13	
16	9	8	7	7	6	7	10	14	18	20	22	23	23	24	24	24	25	24	23	22	19	16	13	17	
17	10	9	9	9	9	10	12	16	20	22	24	25	26	27	27	26	24	23	20	17	16	15	13	18	
18	10	10	9	8	8	8	11	15	17	19	20	20	20	21	22	22	23	21	19	17	15	13	11	15	
19	9	8	7	7	6	7	10	14	16	18	19	20	21	22	23	23	24	24	22	21	18	15	12	16	
20	10	10	10	10	10	11	14	17	20	22	23	24	25	25	26	25	25	26	25	24	20	17	16	19	
21	14	13	11	10	10	12	16	19	22	23	24	25	26	27	27	28	28	28	26	25	23	21	20	21	
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24	14	13	13	12	11	11	11	11	12	13	13	15	17	19	19	19	21	22	21	19	16	14	12	15	
25	9	8	8	7	7	8	9	10	14	17	20	22	24	24	25	25	24	24	24	22	19	16	14	16	
26	10	9	8	8	7	8	11	13	13	14	16	19	22	24	22	20	19	17	16	15	13	10	8	14	
27	6	6	5	5	5	7	10	14	16	19	20	21	22	23	24	25	24	24	23	21	19	15	13	16	
28	11	10	10	9	8	9	13	17	20	22	23	24	25	26	27	28	28	28	27	25	23	21	20	20	
29	16	15	16	17	17	18	20	23	26	29	31	32	33	33	33	33	33	32	31	29	27	24	22	25	
30	18	19	19	19	18	19	21	24	27	28	30	31	31	29	25	22	21	20	20	19	19	18	17	22	
AVG	10	9	9	9	8	9	11	13	15	17	18	19	20	20	20	20	20	19	18	17	15	13	12	11	
MAX	19	19	19	19	18	19	21	24	27	29	31	32	33	33	33	33	33	32	31	29	27	24	22	19	
MIN	5	5	4	4	3	4	6	7	7	7	8	8	8	10	10	10	8	8	8	7	7	7	6	6	

Percent of time operational: 100  
 Monthly Average: 15      Monthly Maximum: 33      Monthly Minimum: 3