

# PROMET

July 5, 2007

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 June 1 - 30, 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 was one Exceedance 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.**



Dr. William (Bill) Murray  
President

WM/kt  
Enc.

# PROMET

## MONTHLY REPORT SUMMARY

Stoney Trail

Lafarge Canada Inc.

**Name/Location**

**Company**

June 2007

**Monitoring Period**

Continuous Ambient Monitoring				
Parameter	% Time Operational	Average	Maximum	Number of Hours above Bylaw Limit for Industrial Area
Sound	100%	43	56 dB A	0
PM2.5	100%	15	34	1
TSP	100%	25	40	0
Wind	100%	13 km/h	35 km/h	-
Precipitation	100%	0	27	-
Trailer Temperature	100%	16	31	-

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.

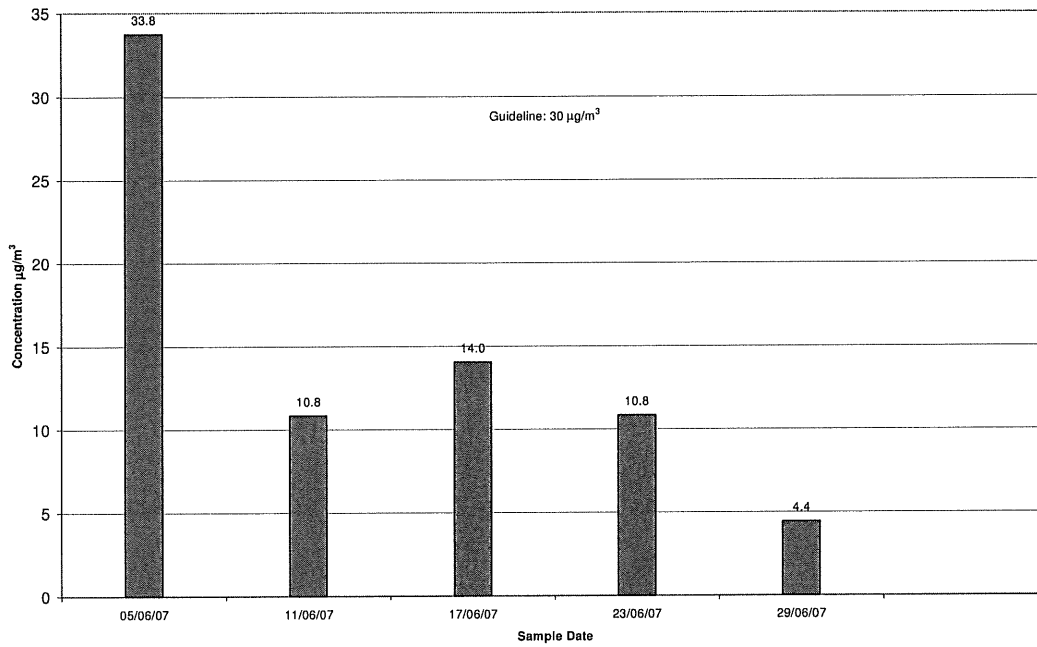
The TSP Objective is 100  $\mu\text{g}/\text{m}^3$  for the day.

One 24 hour sample of PM2.5 and TSP is taken every 6<sup>th</sup> day following the federal NAPS schedule.



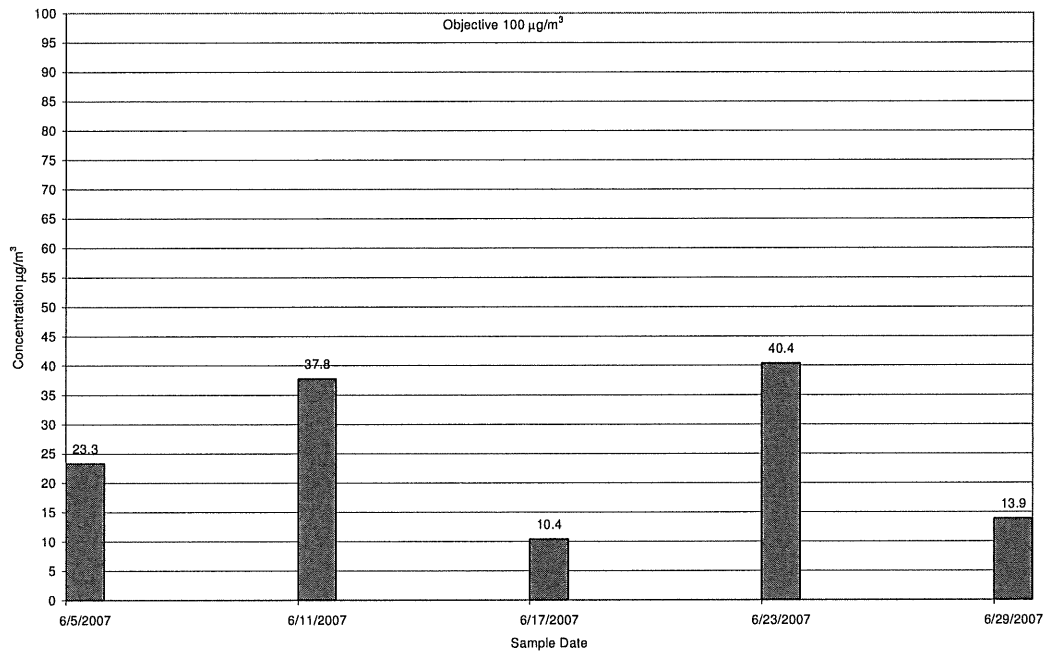
# PROMET

PM2.5 at Lafarge Stoney Trill June 2007



# PROMET

TSP at Lafarge Stoney Trail, June 2007



# PROMET

ABSTRACT OF THE WIND  
 Lafarge Canada Inc.  
 Stoney Trail  
 STATION 620  
 JUN 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	SSW	SSW	WSW	WSW	SW	W	WNW	NNW	NNE	SE	S	S	S	SSW	S	S	S	S	SSE	S	S	SSW	S	S	11	18		0							
2	SSW	SSW	SSW	WSW	WSW	W	WNW	W	SSW	SSW	SSW	S	S	SSE	SSE	S	SSE	ESE	ENE	SSE	SSW	SSW	SSW	SSW	SSW	11	17		0							
3	SW	ESE	N	NNE	N	N	N	N	NE	E	ESE	ESE	ESE	ESE	ESE	ENE	WNW	NW	NW	NNE	NNW	N	NNW	NW	9	15		0								
4	NW	N	NNW	N	NNW	NW	S	SSW	SSW	S	S	S	S	S	S	S	S	S	S	S	S	S	SSW	SSW	SSW	17	32		0							
5	WSW	W	NNW	N	WSW	W	WNW	WNW	WNW	WNW	NNW	N	NNW	N	NNW	NNE	NNE	NNE	NNE	NNW	WSW	WNW	N	NNW	N	10	18		0							
6	N	N	N	NNW	NE	ENE	NE	NE	NE	NE	NE	NE	NE	NNE	NE	NE	NE	NE	NNE	N	N	N	NNE	N	18	29		0								
7	N	NNW	NNW	NNW	NNW	NNW	N	NE	W	WSW	SSE	SSW	W	WSW	SE	SW	SSW	SSW	SSW	SSW	NE	N	N	N	9	15		0								
8	NNW	N	N	N	N	N	N	N	NNE	NE	NE	WSW	S	S	SSW	SSW	SSW	SSW	SSW	SW	E	ENE	ESE	S	11	15		0								
9	SSW	W	WNW	NW	NW	NNW	NNW	N	ENE	E	WNW	SSW	WSW	WSW	SSW	SSW	SSW	WSW	NW	WNW	W	W	W	W	10	17		0								
10	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	NW	WNW	W	NW	NNE	N	N	14	22		0								
11	N	N	N	N	N	NNW	NNE	NNW	NW	NW	NW	NW	NNE	ENE	E	NE	NE	E	SSE	SW	WNW	NE	NE	NW	11	21		0								
12	NNW	NNE	NNE	NNE	N	N	WSW	WNW	W	WSW	W	NW	NW	N	ENE	ENE	ENE	E	SW	WNW	WNW	WNW	WNW	WNW	13	21		0								
13	WNW	WNW	WNW	WNW	WNW	NW	WNW	W	WSW	SW	SSW	SSW	SW	SW	WSW	W	WNW	WNW	WNW	WNW	WNW	NW	N	NNE	13	20		0								
14	NNE	NNW	NNW	NNW	N	N	N	NNW	NNW	NW	NNW	N	NNW	NW	NW	N	NNE	NNE	N	NW	NW	NW	NW	NW	10	19		0								
15	NW	NW	NNW	N	N	N	N	N	N	N	NNE	SSE	NW	NNE	NE	N	NNE	NE	ENE	SSW	WSW	SW	WSW	WSW	8	13		0								
16	W	WNW	NW	WSW	NNE	ENE	ESE	SE	ESE	ESE	E	E	ESE	ESE	E	ENE	ENE	ENE	ENE	ESE	ESE	SSE	W	NW	11	21		0								
17	NW	NNW	NNW	W	WNW	NNW	N	N	NNE	NE	NNE	N	NNE	NNE	NNE	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	18	27		0								
18	WNW	NW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	W	WNW	N	ENE	NW	WSW	W	WNW	NW	WNW	WNW	WNW	WNW	WNW	11	17		0								
19	WNW	NW	NW	NW	WNW	WNW	WNW	W	W	WSW	WSW	WSW	WSW	WSW	W	W	W	W	WNW	W	WSW	W	W	W	13	18		0								
20	W	WNW	N	N	NNE	N	N	N	NE	E	SSE	ESE	SE	SE	SSE	SSE	S	SSE	SSE	S	S	SSW	SSW	SSW	13	23		0								
21	SSW	SSW	SSW	WSW	W	WNW	W	W	WSW	SW	SW	WNW	WNW	W	WNW	NW	NNW	N	N	NE	NE	NE	NNE	N	13	18		0								
22	NW	NNW	NNW	N	N	NNE	SW	SSW	SW	SW	WSW	SSW	SW	WNW	NW	NW	WSW	WNW	NW	NE	N	N	N	N	8	15		0								
23	N	N	N	N	N	N	N	NNE	NE	NE	ENE	E	E	ESE	ESE	ESE	E	E	E	ENE	ENE	ENE	ENE	ENE	13	20		0								
24	NE	ENE	E	E	NE	E	ENE	ENE	ENE	ENE	ENE	ENE	E	NE	E	SE	SE	ENE	NNE	NNE	NE	NNE	N	NNE	11	18		0								
25	N	NNE	NNW	NNW	NNW	N	NNE	NNE	NE	NE	NNE	NNE	N	NNW	NNW	NNW	NNW	N	N	NW	NW	NW	NW	NW	14	24		0								
26	NNW	WNW	WNW	NW	NW	NW	NW	NW	N	NE	NNE	S	S	S	SSE	SSE	S	S	SSE	SSE	SSE	S	S	S	15	20		0								
27	S	SSW	SSW	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	SSE	SSE	SSE	SSE	S	SSW	23	35		0								
28	S	S	SSW	S	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	ESE	ENE	ESE	ESE	E	NNE	15	25		0								
29	E	NNE	SSW	S	WSW	W	WNW	WNW	WNW	NW	W	NNE	N	NNE	SE	SE	SE	SE	SSE	SE	ESE	SSE	WNW	NW	13	23		0								
30	NW	WNW	WNW	NW	WNW	WNW	WNW	WNW	SW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	NW	NW	WNW	16	21		0								
MEAN																																				
SPEED	11	11	11	11	10	10	11	13	13	13	13	14	14	15	16	16	15	14	13	12	11	11	11	13	35	N	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 %																																				

# PROMET

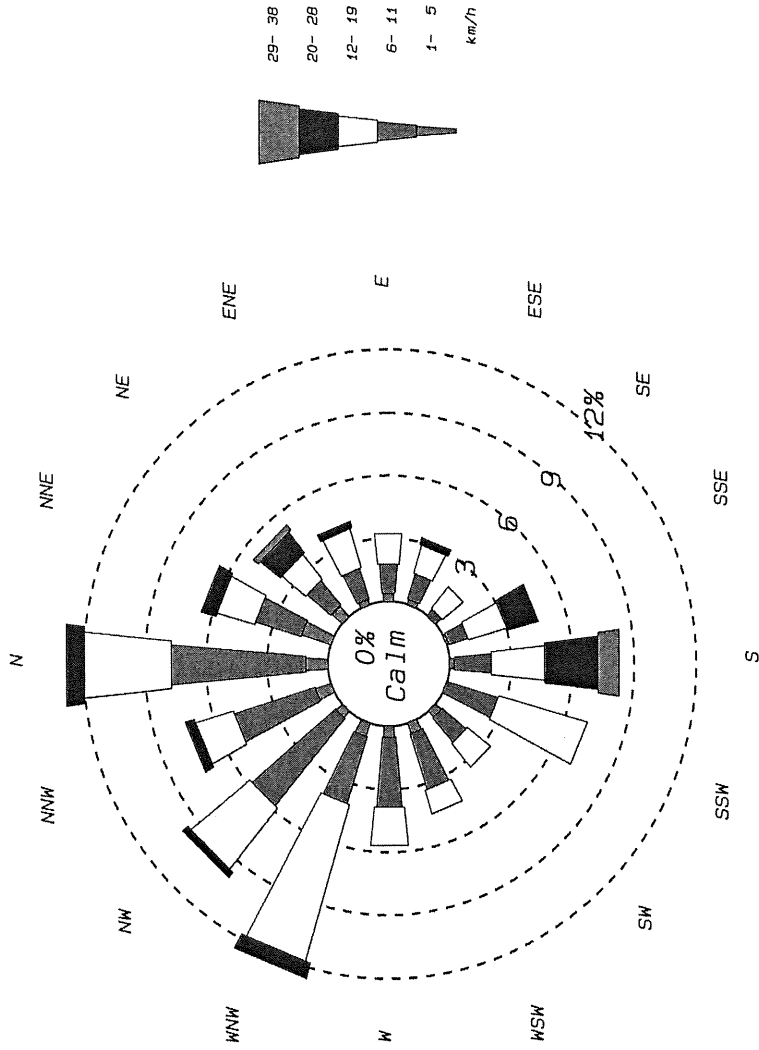
FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION  
 Lafarge Canada Inc.  
 Stoney Trail  
 STATION 620  
 JUN 2007

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	8	11	5	2	3	2	0	1	2	0	3	4	4	5	3	6	59	8
6- 11	48	17	11	11	10	9	3	7	13	19	11	20	24	24	39	30	296	41
12- 19	31	14	11	14	10	10	9	14	19	32	10	8	13	56	27	14	292	41
20- 28	6	5	9	2	0	2	0	11	19	0	0	0	0	5	2	3	64	9
29- 38	0	0	2	0	0	0	0	0	7	0	0	0	0	0	0	0	9	1
TOTAL	93	47	38	29	23	23	12	33	60	51	24	32	41	90	71	53	720	100
PERCENT	13	7	5	4	3	3	2	5	8	7	3	4	6	13	10	7		
AVERAGE	11	11	15	12	11	12	15	17	19	13	11	10	10	14	11	10	13	

5 JUL 2007 1320

Wind rose for JUN 2007  
Stoney Trail

Bar length is proportional to frequency of winds from its direction



5/ 7/2007

PROMET



# PROMET

PRECIPITATION [mm]  
 Lafarge Canada Inc.  
 Stoney Trail  
 STATION 620  
 JUN 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	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	1	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
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	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
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	1
16	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
17	0	0	0	0	1	1	0	0	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	10
18	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	2
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	1	1	0	0	0	0	0	0	0	0	0	2
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	1	0	0	0	0	0	0	0	0	1	0	3
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
TOTL	1	0	0	1	3	2	4	7	5	1	1	2	1	2	1	3	3	7	0	28	2	2	1	0	0	0
MAX	0	0	0	0	1	1	4	4	3	1	0	1	1	1	1	2	3	6	0	27	2	2	1	0	0	0

Percent of time operational: 100 M - missing data  
 Monthly Total: 79 Maximum in an hour: 27  
 Year to Date: 137

# PROMET

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

Percent of time operational: 100 M - missing data  
Monthly Average: 16 Monthly Maximum: 31 Monthly Minimum: 5