Lakeland Industry & Community Association

Cold Lake Monitoring Site
Ambient Air Monitoring
Data Report
For
March 2010

Prepared By:

Maxxam Analytics

Driven by Service and Science

April 30, 2010

Lakeland Industry & Community Association
Ambient Air Monitoring

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Introduction

The following Ambient Air Monitoring report was prepared for:

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Monitoring Location: Cold Lake
Data Period: March 2010

The monthly ambient data report:

- Prepared by Lily Lin
- Reviewed by Craig Snider

The monthly analytical report for passive monitoring:
Authorized by Levi Manchak

The 6-day analytical report for VOCs and PAHs:
Authorized by Petro Oh

Calibration Procedure

The following calibration procedure applies to all calibrations conducted at the Lakeland Industry & Community Association Air Monitoring Station.

Calibration gas concentrations are generated using a dynamic mass flow controlled calibrator. EPA Protocol one gases are diluted with zero air generated on site. The Mass Flow Controllers in the calibrator are referenced using an NIST traceable flow meter once per month. All listed flows are reported as corrected to Standard Temperature and Pressure (STP).

Generated zero gas is introduced to the analyzer first. Three concentrations of calibration gas are then generated in order to introduce points at approximately 50-80%, 25-40% & 10-20% of the analyzer's full-scale range. An auto zero and span are then performed to validate the daily zero and span values recorded to the next multi-point calibration.

All indicated concentrations are taken from the ESC data logger used to collect the data for monthly reporting.

Conformance of each calibration to Alberta Environment regulations is outlined in the individual calibration reports. The slope and correlation coefficient are derived from the calculated and indicated analyzer responses. The percent change is calculated using the previous calibration correction factor and the current correction factor before adjustment. The calibration conforms to the procedure outlined in the *Air Monitoring Directive, Appendix A-10, Section 1.6.*

MONTHLY CONTINUOUS DATA SUMMARY
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

Continuous Ambient Monitoring – March 2010

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION COLD LAKE SITE						MAXIMUM VALUES							OPERATIONAL TIME (PERCENT)
						1-HOUR					24-HOUR		
PARAMETER	OBJECTIVES		EXCEEDENCES		MONTHLY AVERAGE	READING	DAY	HOUR	WIND SPEED (KPH)	WIND DIRECTION (DEGREES)	READING	DAY	
	1-HR	24-HR	1-HR	24-HR									
SO_2 (PPB)	172	57	0	0	0.07	4	5	12	4	156(SSE)	0.7	12	100.0
TRS (PPB)	-	-	-	-	0.00	0	ALL	ALL	VAR	VAR	0.0	ALL	99.9
NO_2 (PPB)	212	106	0	0	4.12	27	29	6	0.7	60(ENE)	10.6	4	99.9
NO (PPB)	-	-	-	-	0.94	43	1	8	1.4	43(NE)	4.7	5	99.9
NOx (PPB)	-	-	-	-	5.21	69	1	8	1.4	43(NE)	15.2	5	99.9
O_3 (PPB)	82	-	0	-	28.98	51	29	13	10.9	142(SE)	42.1	30	99.9
THC (PPM)	-	-	-	-	2.09	3.6	1	23	1.9	93(E)	2.7	1, 6	99.9
PM 2.5 (UG/M^3)	-	30	-	0	6.84	44.4	4	6	1.7	251(WSW)	21.7	6	98.7
TEMPERATURE (DEG C)	-	-	-	-	-0.11	15.1	28	14	10.4	225(SW)	7.4	29	100.0
RELATIVE HUMIDITY (%)	-	-	-	-	68.92	97.0	8	11	4.8	239(WSW)	89.8	10	100.0
VECTOR WS (KPH)	-	-	-	-	6.14	23.0	30	12	-	254(WSW)	16.0	30	100.0
VECTOR WD (DEGREES)	-	-	-	-	206(SSW)	-	-	-	-	-	-	-	100.0

VAR-VARIOUS

Monthly Non-Continuous Data Summary
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

Passive Ambient Monitoring Network – March 2010

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION PASSIVE NETWORK			
NETWORK MAXIMUM			NETWORK AVERAGE
PARAMETER	STATION	READING (PPB)	READING (PPB)
SO_2	#27	0.9	0.5
H_2S	#5	0.16	0.11
NO_2	#28	4.8	1.3
O_3	#32	38.3	32.3

Volatile Volatile Organics Data Summary
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

Xontech Model 910A – March 03, 2010

Maximum reading (ug/m3)	Volatile Organic
<32	Hexachlorobutadiene

Note: the results of Heptane and Cyclohexane are missing. The result was reported in 2 significant figures because the detection limit was entered as 2 sig figs by lab.

Xontech Model 910A – March 09, 2010

Maximum reading (ug/m3)	Volatile Organic
<32	Hexachlorobutadiene

Xontech Model 910A – March 15, 2010

Maximum reading (ug/m3)	Volatile Organic
<32	Hexachlorobutadiene

Xontech Model 910A – March 21, 2010

Maximum reading (ug/m3)	Volatile Organic
<32	Hexachlorobutadiene

Xontech Model 910A – March 27, 2010

Maximum reading (ug/m3)	Volatile Organic
<32	Hexachlorobutadiene

Polycyclic Aromatic Hydrocarbons (PAHs) Data Summary
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

PUF cartridge – March 03, 2010

Maximum reading (ng/m3)	Volatile Organic
<6.054	3-Methylcholanthrene

PUF cartridge – March 09, 2010

Maximum reading (ng/m3)	Volatile Organic
<6.054	3-Methylcholanthrene

PUF cartridge – March 15, 2010

Maximum reading (ng/m3)	Volatile Organic
<6.054	3-Methylcholanthrene

PUF cartridge – March 21, 2010

Maximum reading (ng/m3)	Volatile Organic
<6.054	3-Methylcholanthrene

PUF cartridge – March 27, 2010

Maximum reading (ng/m3)	Volatile Organic
<6.054	3-Methylcholanthrene

General Monthly Summary - Cold Lake

Equipment Operation
The following summary outlines the analyzer performance. Any non-conformances, problems or maintenance performed are detailed at the end of each section.

AQM STATION – LICA – COLD LAKE

Sulphur Dioxide (PPB)
- Analyzer make / model – Thermo 43i, S/N: 806528242

No operational issues observed during the month. The instrument firmware was upgraded to ver 0.1.06.01.245 following the as found pints on March 10th; the firmware was loaded successfully. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

Total Reduced Sulphur (PPB)
- Analyzer make / model –TEI 450i, S/N: 812728560
- Converter - CD NOVA CDN 101, S/N: 250

No operational issues observed during the month. The SO2 scrubbing material in the TRS converter was replaced following the as found points on March 9th. The converter was allowed time to warm up, and then a multi-point calibration was performed. The analyzer was pun in the “Maintenance” mode to challenge the SO2 scrubber; the result was good, no scrubber issues. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

Total Hydrocarbon (PPM)
- Analyzer make / model -TECO 51C-LT, S/N: 427408718

No operational issues observed during the month. The pump in the zero air supply was rebuilt following the as found points on March 9th. After that, the analyzer was allowed time to warm up and stabilize, then a dilution calibration was resumed. The analyzer was put in the “Maintenance” mode for an hour for the manifold and inlet pipe cleaning activities on March 10th. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

General Monthly Summary - Cold Lake

AQM STATION – LICA – COLD LAKE

Nitrogen Dioxide (PPB)

- Analyzer make / model - TECO 42C, S/N: 427408716

No operational issues observed during the month. The inlet filter was changed before the monthly calibration was started. The analyzer was calibrated as per new AENV bulletin; no adjustment to the NO2 coefficient needed. Performed an extra O3 point following the low NO2 point for use in the O3 calibration. During the adjusted zero point, power to the zero air supply was halted twice due to a bad power cord, the problem was rectified and the point was repeated. The analyzer was put in the "Maintenance" mode for an hour for the manifold and inlet pipe cleaning activities on March 10th. Data was corrected using daily zero information.

Ozone (PPB)

- Analyzer make / model - TECO 49i, S/N: 700419951

No operational issues observed during the month. The inlet filter was changed before the monthly calibration was started. The analyzer was put in the "Maintenance" mode for an hour for the manifold and inlet pipe cleaning activities on March 10th.

Particulate Matter 2.5 (ug/m^3)

- Analyzer make / model –TEOM1405F, S/N: 1405A201620804

No operational issues observed during the month. A Teom audit was performed on March 29th; the audit passed all criteria. The Teom and FDMS filters were replaced on March 29th. Data was corrected using Alberta air quality guideline for PM2.5 analyzer. If the data was between 0 to –3, the data was corrected to 0. If the data was below –3, the data was invalidated. 10 hours of data were invalidated as the data were below –3.0 ug/m^3.

Vector Wind Speed (KPH) & Vector Wind Direction (DEG)

- System make / model – Met One 50.5, S/N: F1644

No operational issues observed during the month. The wind system is reported as vector wind speed and vector wind direction.

General Monthly Summary - Cold Lake

AQM STATION – LICA – COLD LAKE

Relative Humidity (PERCENT)

- System make / model - Rotronic Hygroclip-S3

No operational issues observed during the month.

Ambient Temperature (DEGC)

- System make / model - Rotronic Hygroclip-S3

No operational issues observed during the month.

Trailer Temperature (DEGC)

- System make / model - R&R 61

No operational issues observed during the month.

Datalogger

- System make / model - ESC 8832, S/N: 263
- Software make / version - ESC v 5.51a

The ESC 8832 is connected to a modem with DSL for continuous connection with the base computer.

Trailer

No issue was observed during this month. The manifold and inlet pipe was cleaned on March 10th. The throw-away filter on the Bard (the air conditioner and heater system) was replaced on March 9th.

General Monthly Summary - Cold Lake

AQM STATION – LICA – COLD LAKE

Air Quality Index (AQI)
The AQI data was adjusted to reflect regular monthly and daily calibrations, maintenance, and downtime. Eleven hours of data were within the Fair range, and all were due to PM2.5. The highest AQI value of PM2.5 was 33 on March 4th, hour of 6. The highest AQI value of Ozone was 25 on March 29th, hour of 11 and 12.

Passive Network
No issue was observed during this month.

Volatile Organics (VOCs)
The volatile organics were sampled on March 3rd, 9th, 15th, 21st, and 27th. The sampler was programmed to run for 24 hours, and, every 6 days per sample cycle.
The values for the VOCs in this report were reported as ug/m3 in 3 significant figures.
The results of Heptane and Cyclohexane in March 3rd report are missing. The values in March 3rd report were reported in 2 significant figures because the detection limit was entered in 2 sig figs by the lab.

Polycyclic Aromatic Hydrocarbons (PAHs)
The PAHs were sampled on March 3rd, 9th, 15th, 21st, and 27th. The sampler was programmed to run for 24 hours, and, every 6 days per sample cycle.
The values for the PAHs in this report were reported as ng/m3.

Continuous Monitoring

Monthly Summaries, Graphs & Wind Roses

Air Quality Index

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

AIR QUALITY INDEX (AQI)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	9	8	7	10	12	11	12	13	19	19	18	19	20	22	22	21	20	20	16	14	12	15	-	17	22
	O3_	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	PM2	O3_
2	14	10	12	10	12	8	15	19	20	21	20	21	21	23	24	24	24	23	23	22	23	-	22	22	24
	PM2	O3_	PM2	O3_	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_
3	22	22	21	20	20	20	20	19	19	19	19	19	18	18	18	18	18	18	17	15	-	15	19	18	22
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	O3_	**NA**	PM2	PM2	PM2	O3_
4	14	16	17	17	30	30	**33**	30	32	31	28	16	18	20	21	21	20	17	15	-	11	11	10	7	33
	PM2	PM2	PM2	PM2	PM2	PM2	**PM2**	PM2	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	**NA**	PM2	PM2	PM2	PM2	O3_
5	6	9	11	13	12	15	11	9	13	11	18	18	21	23	23	23	23	23	-	20	19	14	11	18	23
	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	PM2	PM2	PM2	O3_
6	19	18	21	24	23	22	22	26	29	29	29	24	19	16	20	21	19	-	11	16	17	14	12	11	29
	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	O3_	O3_	O3_	O3_	**NA**	PM2	O3_	O3_	PM2	PM2	PM2	O3_
7	13	10	12	12	15	15	15	14	12	15	14	17	19	21	22	22	-	21	17	17	18	17	16	12	22
	PM2	PM2	PM2	PM2	PM2	PM2	PM2	PM2	O3_	PM2	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
8	11	9	6	7	3	11	8	10	11	9	13	12	14	12	13	-	20	19	19	19	18	18	17	19	20
	O3_	O3_	PM2	PM2	PM2	PM2	PM2	O3_	PM2	PM2	PM2	PM2	PM2	PM2	PM2	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
9	19	19	18	17	17	17	16	13	13	18	19	20	21	21	-	5	5	6	16	13	16	10	19	21	21
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	PM2	PM2	PM2	O3_	PM2	PM2	O3_	O3_	O3_	O3_
10	21	18	17	16	16	16	14	14	-	-	-	-	-	-	-	-	-	-	13	13	12	10	10	12	21
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_
11	13	16	18	19	18	15	12	12	17	18	19	20	-	20	20	-	20	18	18	17	17	17	16	15	20
	O3_	O3_	O3_	O3_	O3_	O3_	PM2	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	NA	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
12	13	10	7	10	10	7	10	9	11	12	19	-	18	16	21	22	21	21	20	19	18	17	17	15	22
	O3_	O3_	O3_	O3_	O3_	O3_	PM2	PM2	PM2	O3_	PM2	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
13	12	13	8	6	5	4	5	10	14	17	-	20	20	21	21	20	21	20	19	13	9	8	6	3	21
	O3_	O3_	O3_	PM2	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
14	4	4	4	7	4	4	6	4	6	-	18	20	22	21	22	22	22	22	19	19	20	20	20	19	22
	O3_	PM2	PM2	PM2	O3_	PM2	PM2	PM2	PM2	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
15	19	-	18	18	17	16	16	16	-	17	17	17	16	16	16	16	16	15	14	10	8	6	3	5	19
	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	O3_
16	8	7	3	2	6	3	3	-	3	7	9	10	14	15	14	15	16	14	13	13	14	17	10	9	17
	PM2	PM2	PM2	PM2	PM2	PM2	O3_	**NA**	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	PM2	PM2	PM2	O3_	O3_
17	13	12	10	12	11	9	-	13	13	12	8	10	11	12	12	14	15	15	-	14	15	-	18	-	18
	O3_	O3_	O3_	O3_	O3_	PM2	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	**NA**	O3_	**NA**	O3_
18	-	-	-	-	17	-	17	17	17	17	17	17	17	17	17	18	18	18	18	17	18	18	18	18	18
	NA	**NA**	**NA**	**NA**	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
19	17	16	16	18	-	17	18	17	17	17	16	16	16	16	16	16	16	15	15	13	12	10	8	7	18
	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	O3_
20	7	5	4	-	7	3	3	7	10	12	13	15	16	19	20	20	19	18	17	16	15	15	15	16	20
	O3_	PM2	PM2	**NA**	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
21	17	18	-	17	18	16	18	19	18	18	18	18	18	18	18	19	19	18	17	17	16	15	15	16	19
	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
22	14	-	14	14	17	18	18	17	18	18	19	19	20	20	19	20	20	20	19	18	19	18	16	14	20
	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
23	-	14	18	18	18	17	16	15	15	16	16	17	18	18	18	18	19	19	19	17	13	18	18	-	19
	NA	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_
24	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	20	17	17	19	19	-	19	20
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_
25	20	19	19	19	18	18	17	17	17	17	18	18	17	17	16	15	14	14	14	14	13	-	8	11	20
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_
26	12	13	13	13	13	10	9	11	12	13	13	14	15	16	16	16	17	16	13	9	-	8	11	11	17
	O3_	O3_	O3_	O3_	O3_	O3_	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	PM2	O3_	O3_	O3_
27	12	15	12	11	6	5	6	15	14	13	13	15	18	22	23	23	23	21	19	-	14	10	7	4	23
	O3_	PM2	O3_	O3_	O3_	PM2	O3_	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_
28	6	7	4	9	3	7	2	5	9	16	17	20	20	20	22	21	20	18	-	15	13	14	17	17	22
	PM2	PM2	PM2	PM2	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_
29	14	15	16	14	12	7	9	9	18	21	23	**25**	**25**	-	-	-	22	-	19	19	20	20	23	24	25
	O3_	O3_	O3_	O3_	O3_	O3_	PM2	PM2	O3_	O3_	O3_	**O3_**	**O3_**	**NA**	**NA**	**NA**	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_
30	22	19	19	19	20	21	22	23	23	22	22	22	24	23	22	-	-	22	22	21	21	21	20	20	24
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
31	19	20	19	19	18	18	18	18	19	19	20	21	22	21	22	-	22	21	21	21	20	18	19	18	22
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
PEAK	22	22	21	24	30	30	33	30	32	31	29	25	25	23	24	24	24	23	23	22	23	21	23	24	
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	

STATUS FLAG CODES	NA - NOT APPLICABLE

V - VARIOUS

AQI CLASS	OZONE (O_3)					PARTICULATE MATTER 2.5 (PM2)					NITROGEN DIOXIDE (NO_2)					SULPHUR DIOXIDE (SO_2)					FREQUENCY	
	HRS	%	MAX AQI	HR	DAY	HRS	%	MAX AQI	HR	DAY	HRS	%	MAX AQI	HR	DAY	HRS	%	MAX AQI	HR	DAY	HRS	%
VERY POOR (101-255)	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%
POOR (51-100)	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%
FAIR (26-50)	0	0.0%	-	-	-	11	1.5%	33	6	4	0	0.0%	-	-	-	0	0.0%	-	-	-	11	1.5%
GOOD (1-25)	552	74.2%	25	11, 12	29	127	17.1%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	679	91.3%
OVERALL	552	74.2%	-	-	-	138	18.5%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	690	92.7%
UNAVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	7.3%

Sulphur Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

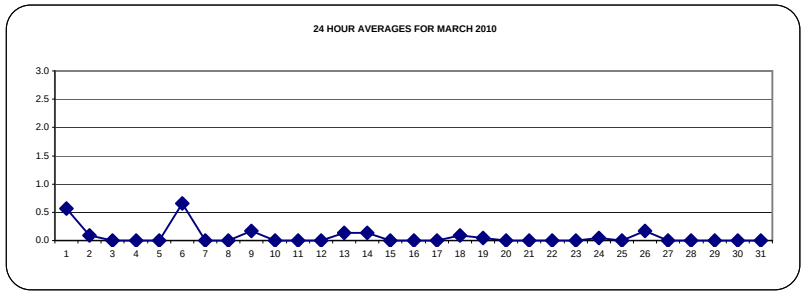
SULPHUR DIOXIDE (SO_2) hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	**4**	3	1	1	0	0	**IZS**	0	**4**	0.6	24
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	1	1	0.1	24
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
6	0	0	0	0	0	0	0	0	0	0	1	2	1	1	1	3	3	**IZS**	1	1	1	0	0	0	3	**0.7**	24
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
9	0	0	0	0	0	1	1	0	0	0	0	0	1	0	**IZS**	0	1	0	0	0	0	0	0	0	1	0.2	24
10	0	0	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0.0	24
11	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
12	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
13	0	0	0	0	0	0	0	0	0	0	**IZS**	1	0	2	0	0	0	0	0	0	0	0	0	0	2	0.1	24
14	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0.1	24
15	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.1	24
19	1	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
20	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	**IZS**	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
22	0	**IZS**	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
23	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
24	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	0.0	24
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
26	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	**IZS**	0	0	0	1	0.2	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	1	0	1	0	0	1	NA	0	0	0	1	2	1	2	1	3	4	3	1	1	1	1	1	1			
HOURLY AVG	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.0			

STATUS FLAG CODES

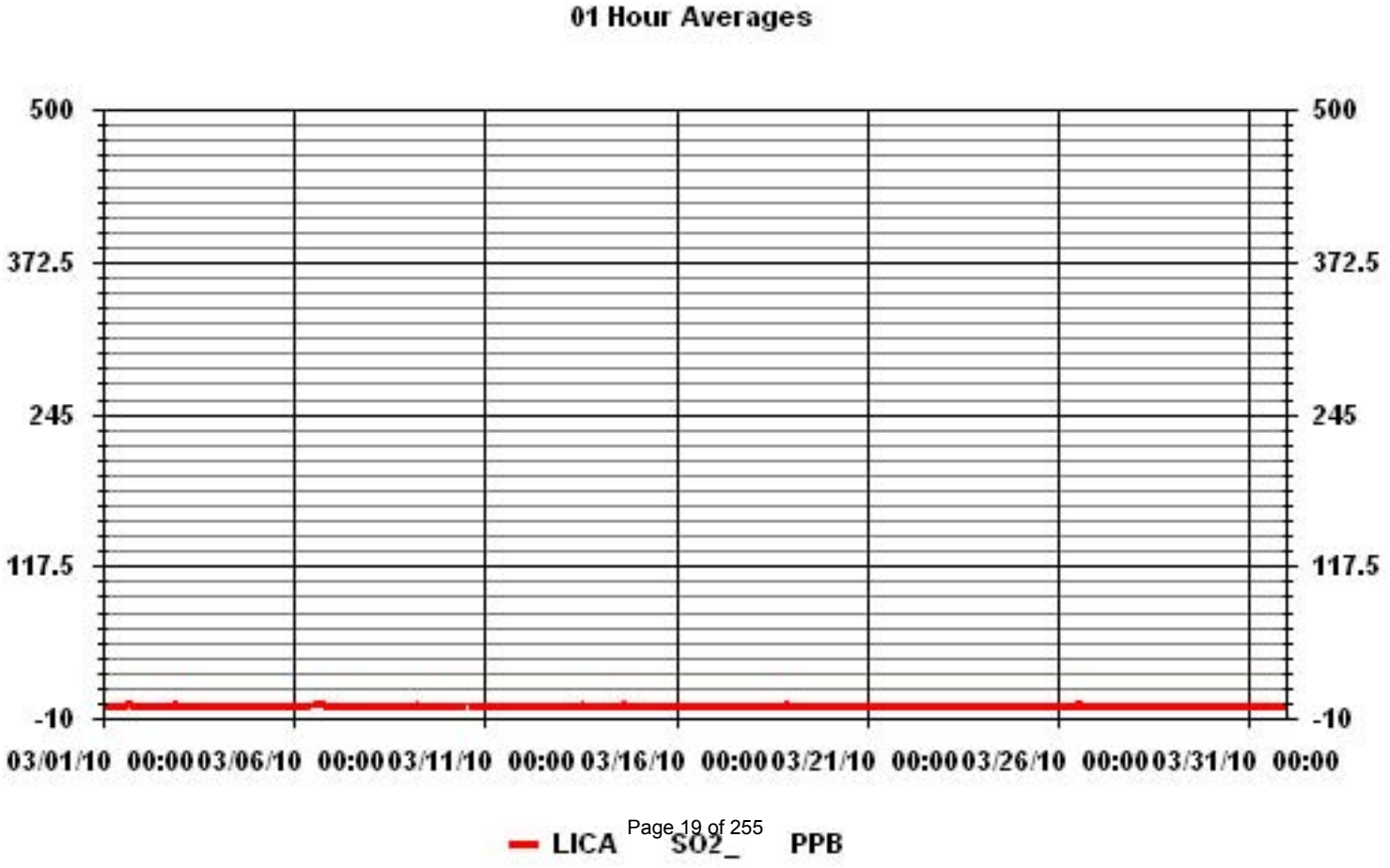
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 172 PPB | 24-HR 57 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	35					
MAXIMUM 1-HR AVERAGE:	4	PPB	@ HOUR(S)	12	ON DAY(S)	5
MAXIMUM 24-HR AVERAGE:	0.7	PPB			ON DAY(S)	12
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	5	HRS	AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	0.35		MONTHLY AVERAGE:		0.07	PPB


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA SO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

MST

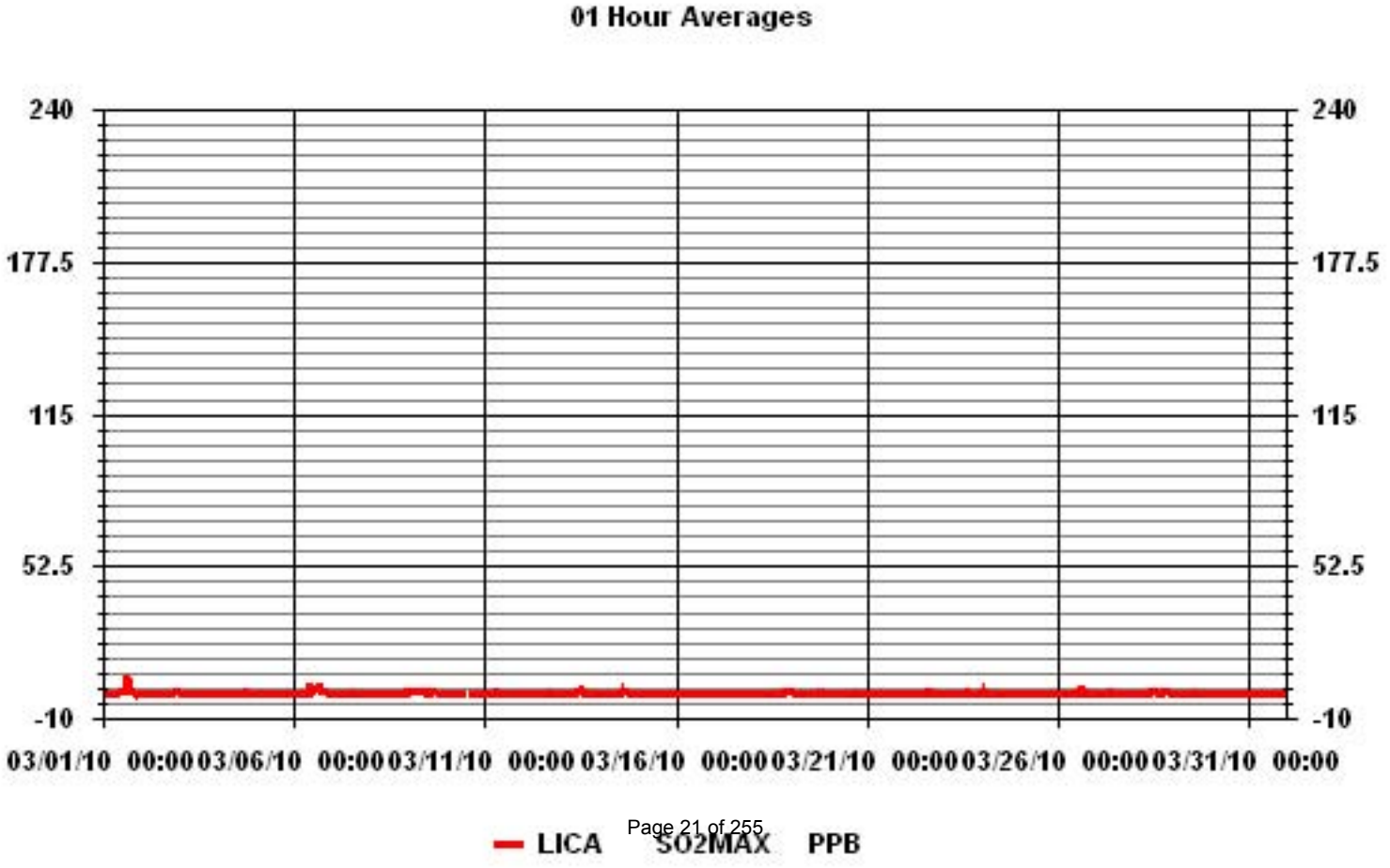
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	**6**	**6**	3	2	1	0	1	**IZS**	1	**6**	1.1	24
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	1	1	0.1	24
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	**IZS**	0	0	0	0	1	0.1	24
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
6	0	0	0	0	0	0	0	0	0	0	3	3	1	2	2	3	3	**IZS**	1	1	1	1	0	0	3	0.9	24
7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	**IZS**	0	0	0	0	0	0	0	1	0.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	0	0	1	0.0	24
9	1	1	1	1	1	1	1	1	1	1	0	0	2	0	**IZS**	1	1	1	0	0	0	0	0	0	2	0.7	24
10	0	0	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0.0	24
11	0	0	0	0	0	0	0	1	1	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
12	0	0	0	0	0	0	0	0	0	0	1	**IZS**	0	0	0	0	1	0	0	0	0	0	0	0	1	0.1	24
13	0	0	0	0	0	0	0	0	0	0	**IZS**	2	0	3	0	0	0	0	0	0	0	0	0	0	3	0.2	24
14	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	2	1	1	1	0	0	0	0	0	0	2	0.2	24
15	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.2	24
19	1	1	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0.2	24
20	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.0	24
21	0	0	**IZS**	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
22	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0.1	24
23	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	**IZS**	1	0.1	24
24	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	2	0.2	24
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
26	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	**IZS**	0	0	0	2	0.3	24
27	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	0.1	24
28	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	**IZS**	1	1	1	0	0	1	0.3	24
29	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	**IZS**	0	0	0	0	0	0	1	0.0	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	1	2	1	1	1	1	1	1	1	1	3	3	2	3	2	6	6	3	2	1	1	1	1	1			
HOURLY AVG	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.2	0.1	0.1	0.1	0.2	0.1	0.1			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	84					
MAXIMUM INSTANTANEOUS VALUE:	6	PPB	@ HOUR(S)	15, 16	ON DAY(S)	1
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	5	HRS				
STANDARD DEVIATION:	0.55					


01 Hour Averages
240
177.5
115
52.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA SO2MAX PPB

LICA
SO2_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : SO2_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	20	3.67	4.66	4.94	6.77	6.21	7.48	19.35	2.68	2.68	4.51	11.29	6.63	7.20	2.82	4.09	4.94	100.00
<	60	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	170	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.67	4.66	4.94	6.77	6.21	7.48	19.35	2.68	2.68	4.51	11.29	6.63	7.20	2.82	4.09	4.94	

Calm : .00 %

Total # Operational Hours : 708

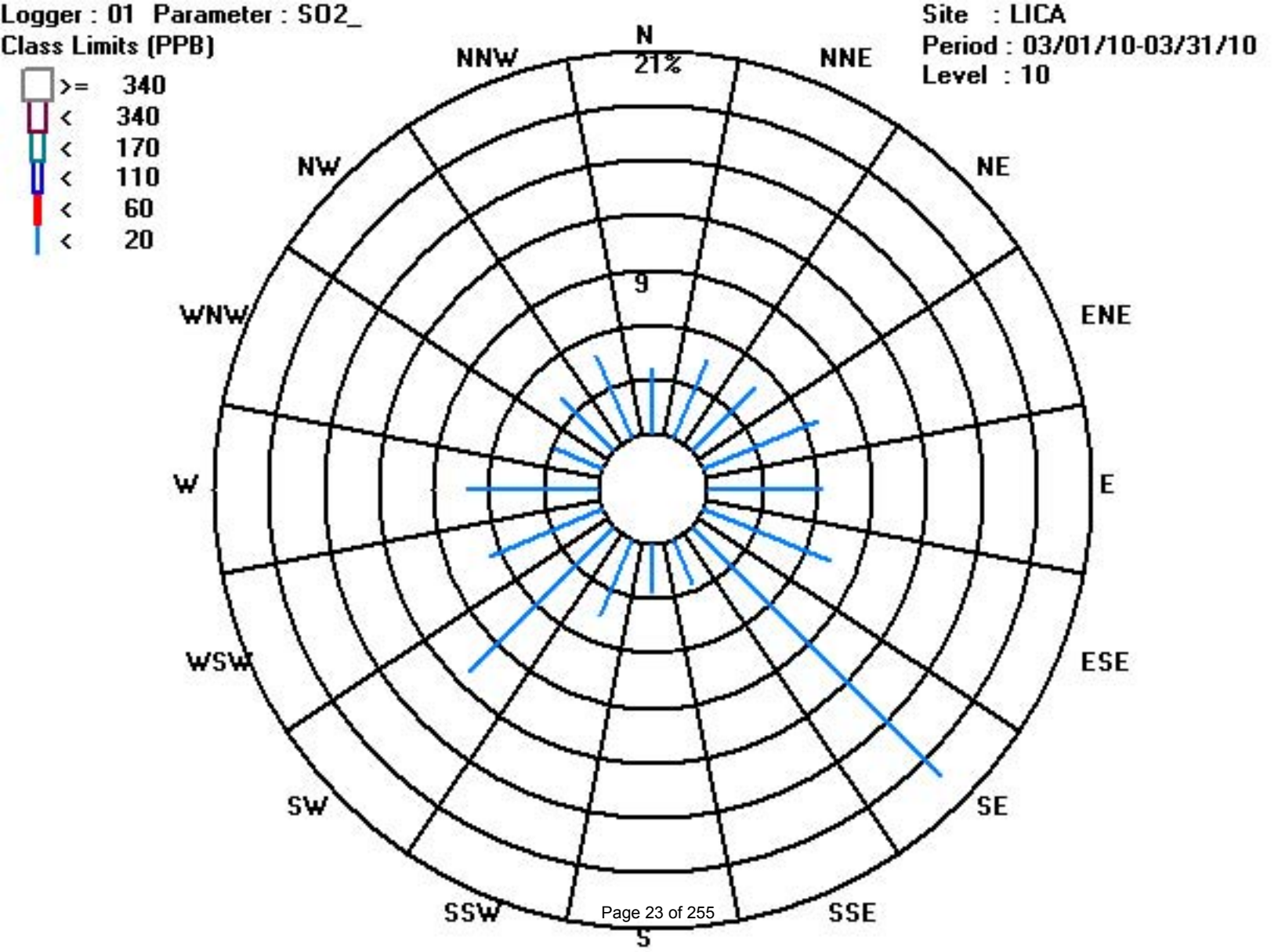
Distribution By Samples

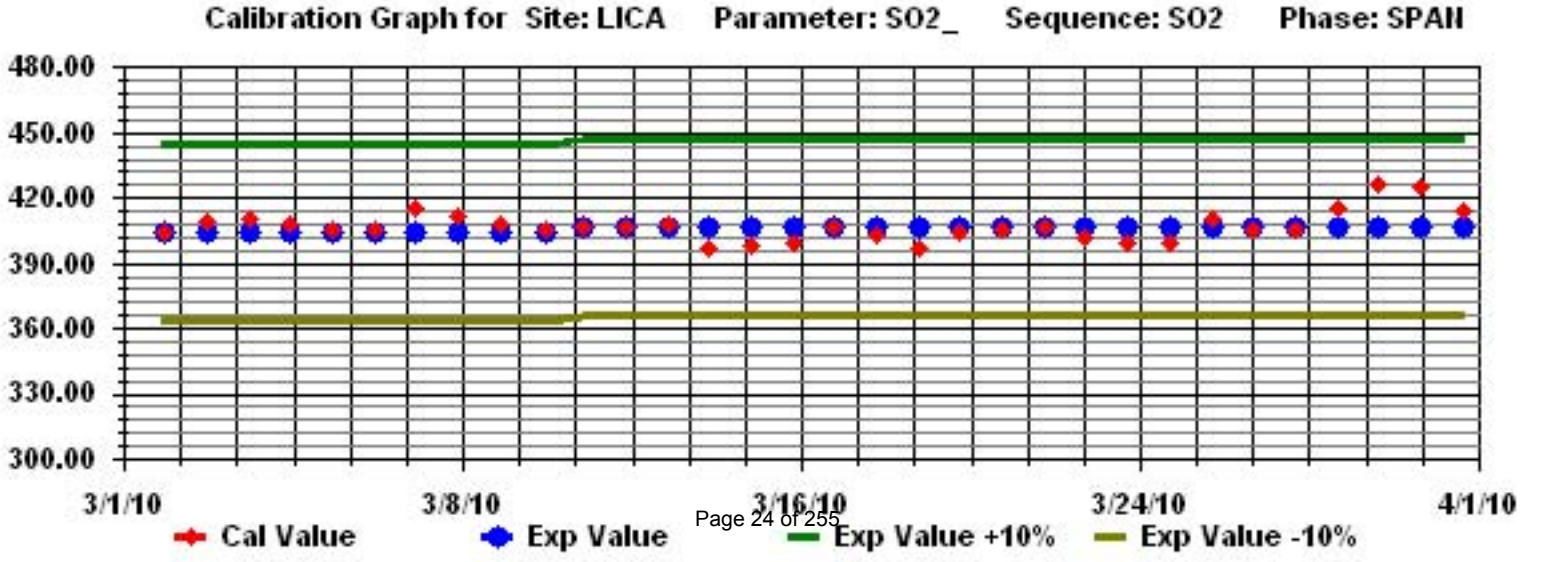
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	20	26	33	35	48	44	53	137	19	19	32	80	47	51	20	29	35	708
<	60																	
<	110																	
<	170																	
<	340																	
>=	340																	
	Totals	26	33	35	48	44	53	137	19	19	32	80	47	51	20	29	35	

Calm : .00 %

Total # Operational Hours : 708


Logger : 01 Parameter : SO2_
Class Limits (PPB)
>= 340
< 340
< 170
< 110
< 60
< 20
Site : LICA
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA Parameter: SO2_ Sequence: SO2 Phase: SPAN
480.00
450.00
420.00
390.00
360.00
330.00
300.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Reduced Sulphur

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

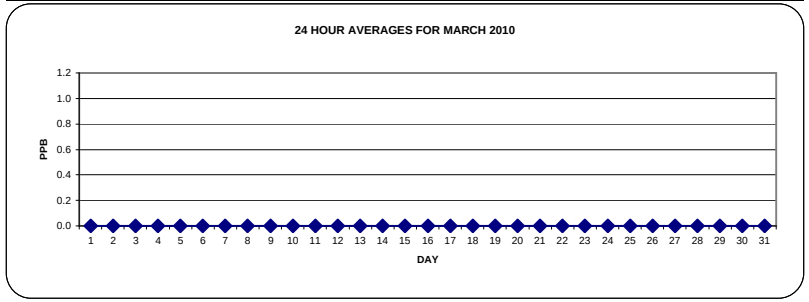
TOTAL REDUCED SULPHUR (TRS) hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
9	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0	0.0	24
10	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	**M**	0	0	0	0	0	0	0	0	0	0.0	23
11	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
12	0	0	0	0	0	0	0	0	0	0	0	**IZS**	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
13	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
14	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
15	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	**0**	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	**IZS**	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
22	0	**IZS**	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
23	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY 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			
HOURLY AVG	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

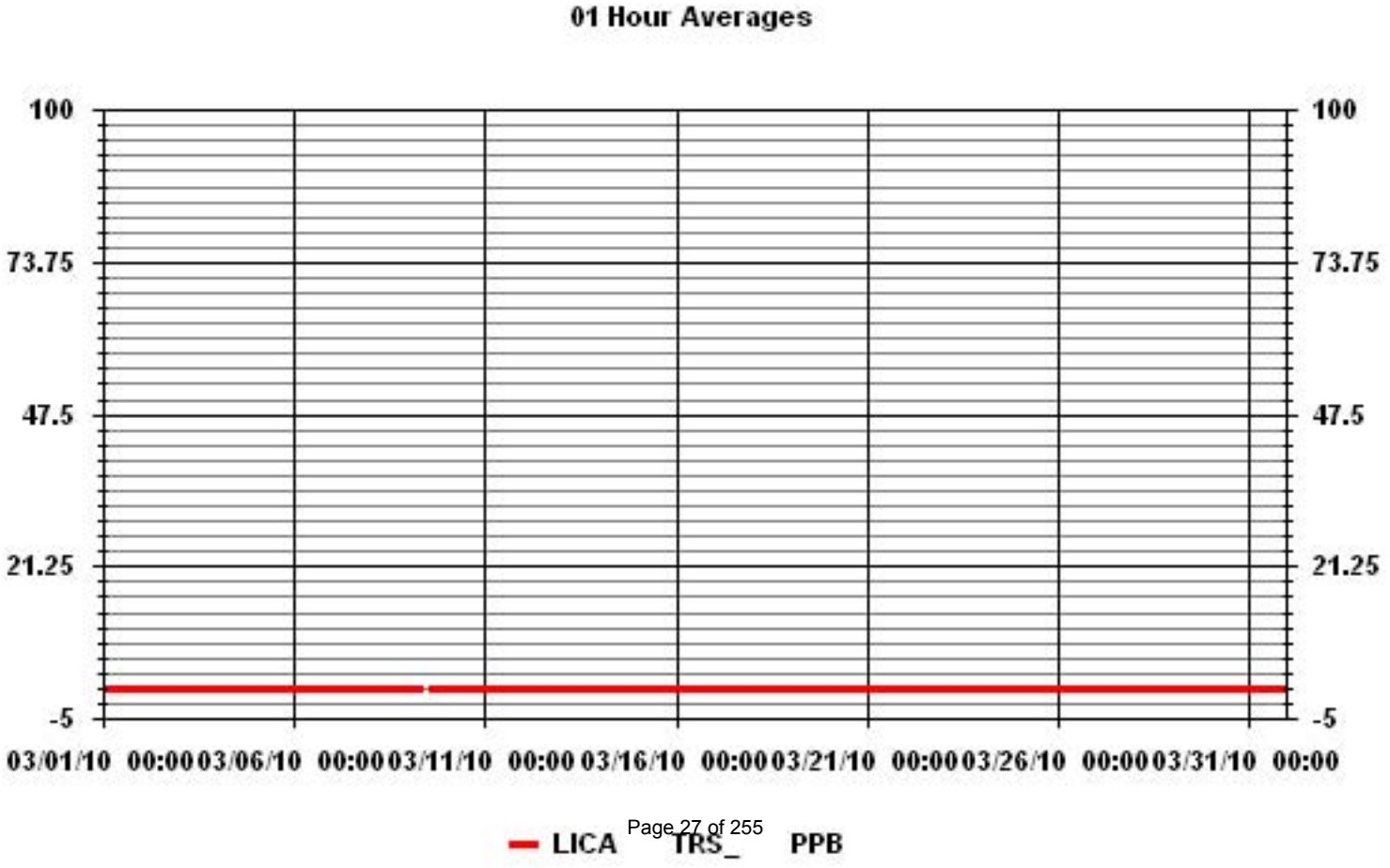


OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 172 PPB | 24-HR 57 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	0					
MAXIMUM 1-HR AVERAGE:	0	PPB	@ HOUR(S)	ALL	ON DAY(S)	ALL
MAXIMUM 24-HR AVERAGE:	0.0	PPB			ON DAY(S)	ALL
				VAR-VARIOUS		

IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	7	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	0.00		MONTHLY AVERAGE:	0.00	PPB


01 Hour Averages
100
73.75
47.5
21.25
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA TRS_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

TOTAL REDUCED SULPHUR MAX instantaneous maximum in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
9	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0.0	24
10	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	**M**	**M**	0	0	0	0	0	0	0	0	0	0.0	22
11	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
12	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
13	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
14	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
15	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	**IZS**	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
22	0	**IZS**	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
23	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY 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			
HOURLY AVG	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS: 0

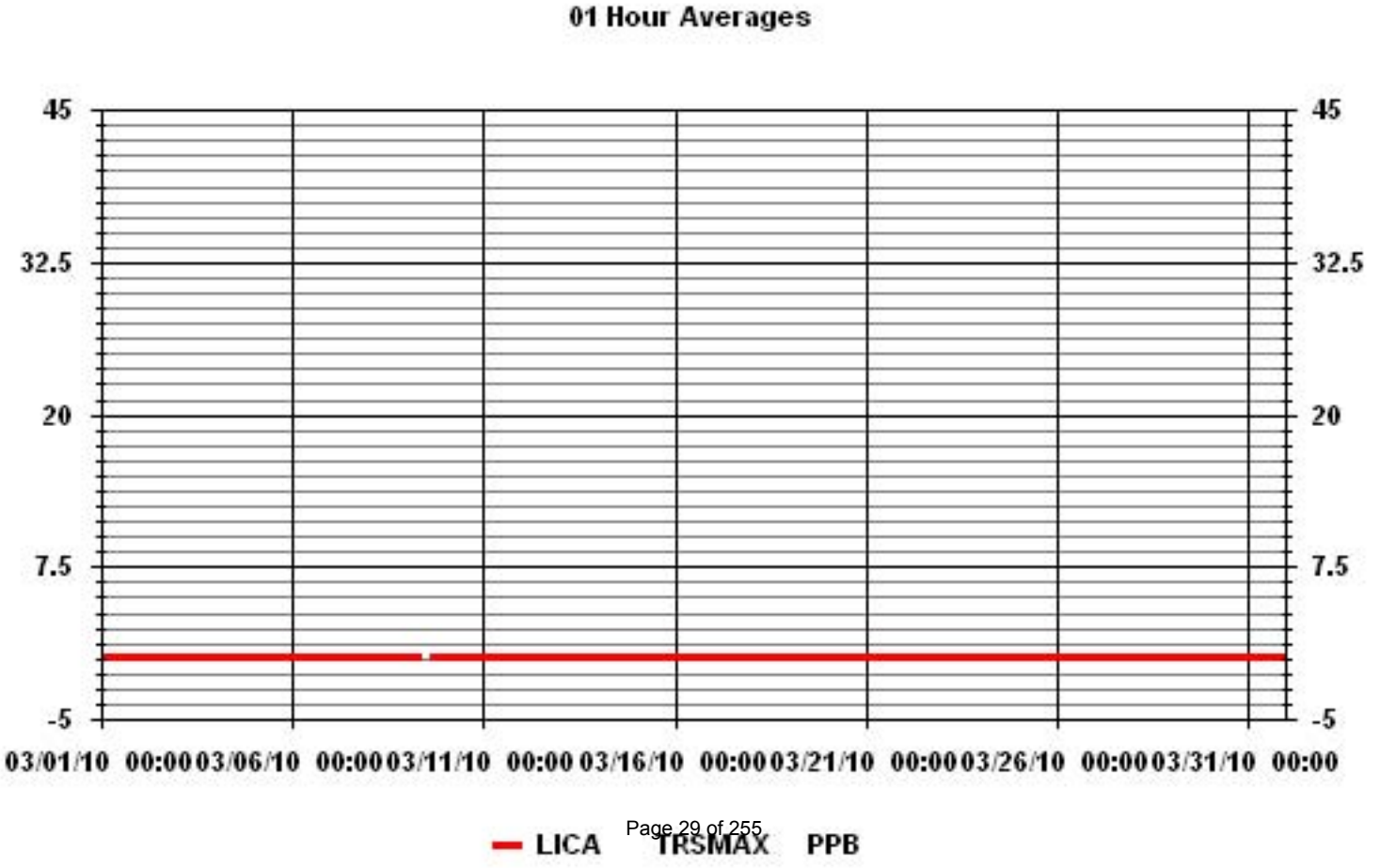
MAXIMUM INSTANTANEOUS VALUE: 0 PPB @ HOUR(S) ALL ON DAY(S) ALL

VAR - VARIOUS

IZS CALIBRATION TIME: 31 HRS OPERATIONAL TIME: 742 HRS

MONTHLY CALIBRATION TIME: 8 HRS

STANDARD DEVIATION: 0.00


01 Hour Averages
45
32.5
20
7.5
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA
TRSMAX
PPB

LICA
TRS_ / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : TRS_
Units : PPB

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3	3.54	4.39	4.68	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	100.00
<	10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.54	4.39	4.68	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	

Calm : .00 %

Total # Operational Hours : 705

Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3	25	31	33	48	46	54	137	19	19	32	80	46	51	20	29	35	705
<	10																	
<	50																	
>=	50																	
	Totals	25	31	33	48	46	54	137	19	19	32	80	46	51	20	29	35	

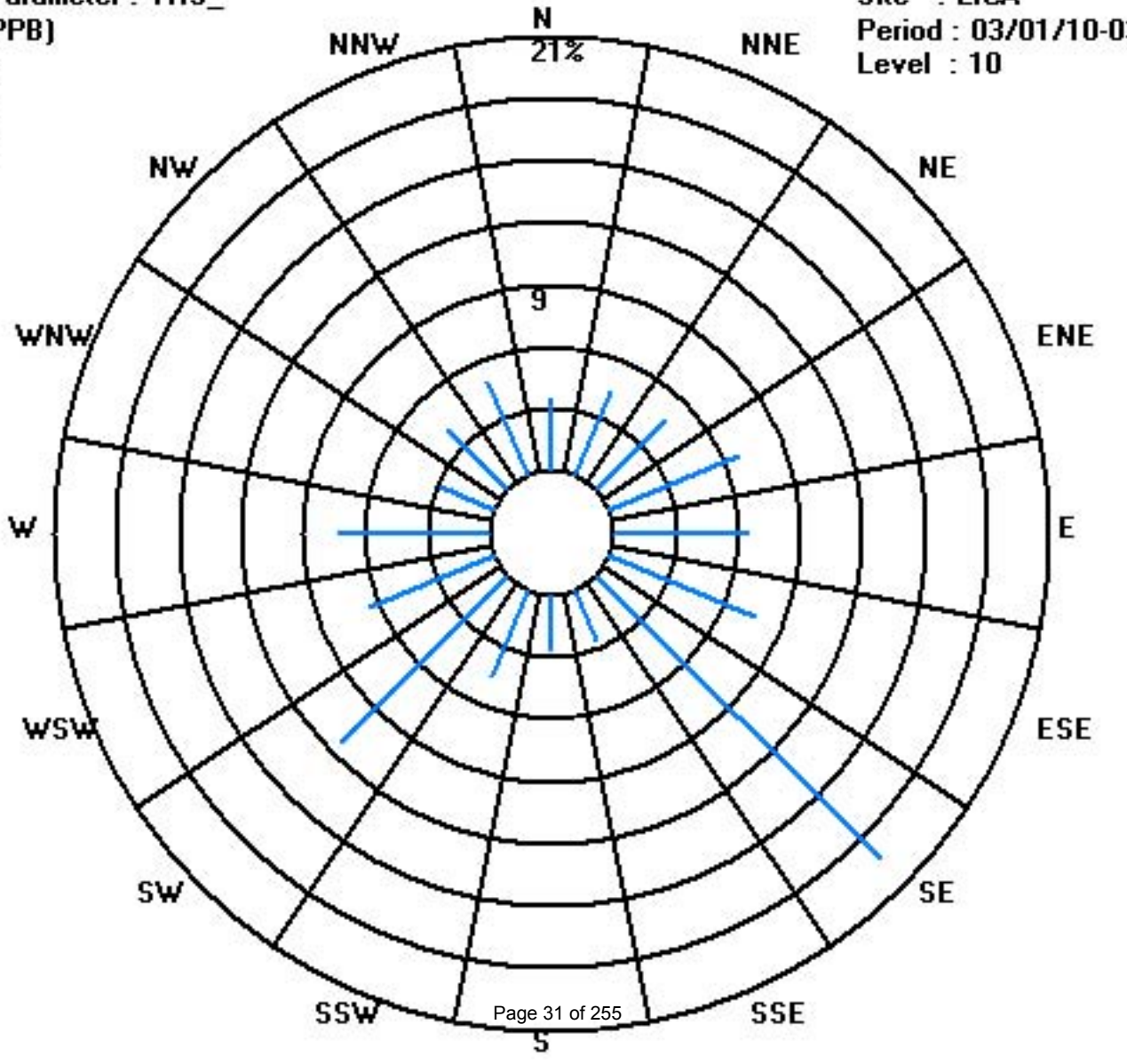
Calm : .00 %

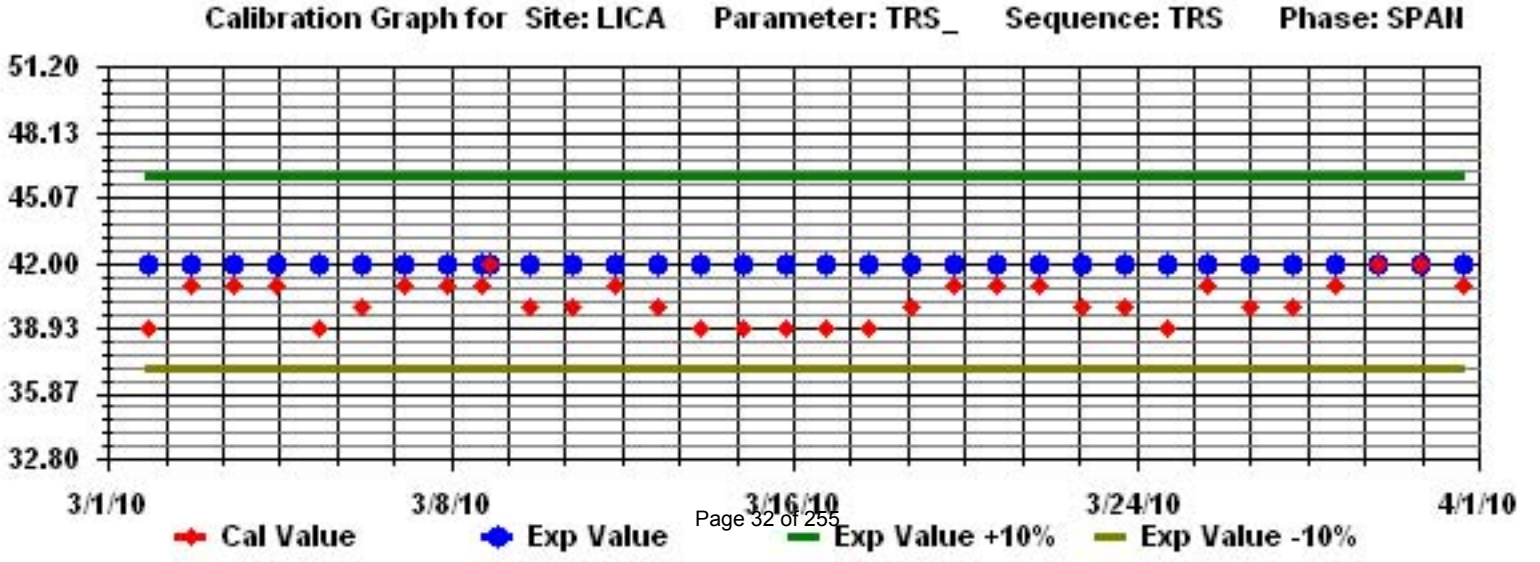
Total # Operational Hours : 705

Logger : 01 Parameter : TRS_
Class Limits (PPB)

>= 50
< 50
< 10
< 3

Site : LICA
Period : 03/01/10-03/31/10
Level : 10




Calibration Graph for Site: LICA Parameter: TRS_ Sequence: TRS Phase: SPAN
51.20
48.13
45.07
42.00
38.93
35.87
32.80
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Hydrocarbons

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

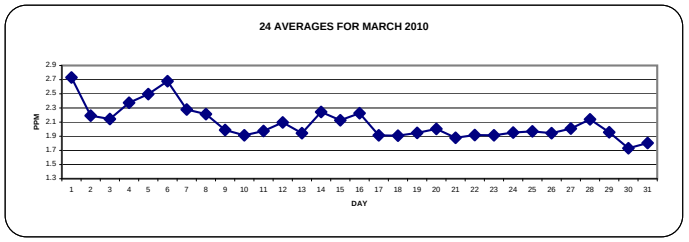
TOTAL HYDROCARBONS (THC) hourly averages in ppm

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.4	2.6	2.8	3.2	3.2	3.3	3.2	3.3	3.4	2.8	2.5	2.5	2.4	2.3	2.3	2.3	2.2	2.3	2.4	2.5	2.5	2.8	**IZS**	**3.6**	**3.6**	**2.7**	24
2	3.1	3	2.9	2.6	2.6	2.6	2.3	2.1	2.1	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	2	3.1	2.2	24
3	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	**IZS**	2.2	2.4	2.4	2.4	2.1	24
4	2.4	2.4	2.4	2.5	2.8	2.9	2.7	2.7	2.7	2.6	2.3	2.3	2.3	2.1	2	2	2.1	2.2	2.2	**IZS**	2.3	2.2	2.2	2.3	2.9	2.4	24
5	2.4	2.5	2.6	2.7	2.8	3	2.9	2.6	2.4	2.4	2.5	2.4	2.2	2	2	2	2	2.1	**IZS**	2.8	2.6	2.7	2.7	3.1	3.1	2.5	24
6	3.1	2.9	3.1	3	3	3	3.1	3	3.2	3	2.8	2.6	2.8	2.5	2.2	2.1	2.2	**IZS**	2.3	2.2	2.3	2.3	2.4	2.5	3.2	**2.7**	24
7	2.6	2.5	2.6	2.6	2.7	2.8	2.7	2.7	2.5	2.4	2.3	2.2	2.1	2	1.9	1.9	**IZS**	1.9	2	2	2	2	2	2	2.8	2.3	24
8	2.1	2.1	2.1	2.1	2.2	2.4	2.1	2.1	2.3	2.5	2.7	2.9	2.5	2.8	2.5	**IZS**	1.9	1.9	2	1.9	1.9	2	2	1.9	2.9	2.2	24
9	1.9	1.9	2.1	2	2	2.1	2	2	2	2	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1.9	1.9	2	2.2	2	1.9	1.9	2.2	2.0	24
10	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	**IZS**	1.9	**M**	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.3	2.3	1.9	23
11	2.2	2	2	2	1.9	2	2	2.1	2	2	2	2	**IZS**	2	1.9	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	2	2.2	2.0	24
12	2	2	2.1	2.4	2.5	2.4	2.5	2.6	2.3	2.2	2.1	**IZS**	2	2.1	1.9	1.9	2	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.6	2.1	24
13	2	1.9	2	2	2	2	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2.1	2.1	1.9	24
14	2.3	2.6	2.6	2.7	2.7	2.7	2.5	2.7	2.5	**IZS**	2	2	2	2.1	2	2	2	2	2	2	2	2	2.1	2.1	2.7	2.2	24
15	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.1	24
16	2.4	2.3	2.4	2.4	2.6	2.5	2.3	**IZS**	2.3	2.4	2.4	2.3	2.2	2.1	2.1	2	2	2	2	2.1	2.2	2.1	2.1	2	2.6	2.2	24
17	1.9	1.9	2	1.9	1.9	2	**IZS**	1.9	1.9	2	2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	2.1	1.9	24
18	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.9	2.1	1.9	24
19	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2.1	2	2	2.1	1.9	24
20	2.1	2.1	2.1	**IZS**	2.1	2.2	2.2	2.2	2.1	2.1	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	2.0	24
21	1.9	1.9	**IZS**	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	24
22	1.9	**IZS**	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	24
23	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	2	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	1.9	1.9	1.9	1.9	**IZS**	2.0	1.9	24
24	1.9	1.9	1.9	1.9	1.9	2	2	2	2	2	2	2	2	2	1.9	1.9	M	M	2	1.9	1.9	1.9	**IZS**	2	2.0	2.0	24
25	2.1	2	2	2	2	2	2	2	2	1.9	1.9	1.9	1.9	2	2	2	1.9	2	2	2	1.9	**IZS**	1.9	1.9	2.1	2.0	24
26	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	**IZS**	2.1	2.2	2.1	2.2	1.9	24
27	2.2	2	2	2	2.1	2.1	2.2	2.2	2.1	2	2	2	1.9	1.9	1.8	1.8	1.9	1.9	1.9	**IZS**	2	2	2.1	2.1	2.2	2.0	24
28	2.2	2.2	2.5	2.7	2.6	2.4	2.3	2.2	2.2	2.4	2.3	2.1	2	2	1.8	1.8	1.8	1.9	**IZS**	1.8	1.9	2	2	2.1	2.7	2.1	24
29	2.2	2.2	2.3	2.1	2.2	2.5	2.6	2.4	1.9	1.8	1.7	1.8	1.7	1.7	1.9	1.9	1.8	**IZS**	1.8	1.7	1.7	1.7	1.7	1.7	2.6	2.0	24
30	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	**IZS**	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.7	24
31	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	**IZS**	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	24
HOURLY MAX	3.1	3.0	3.1	3.2	3.2	3.3	3.2	3.3	3.4	3.0	2.8	2.9	2.8	2.8	2.5	2.3	2.2	2.3	2.4	2.8	2.6	2.8	2.7	3.6			
HOURLY AVG	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1			

STATUS FLAG CODES

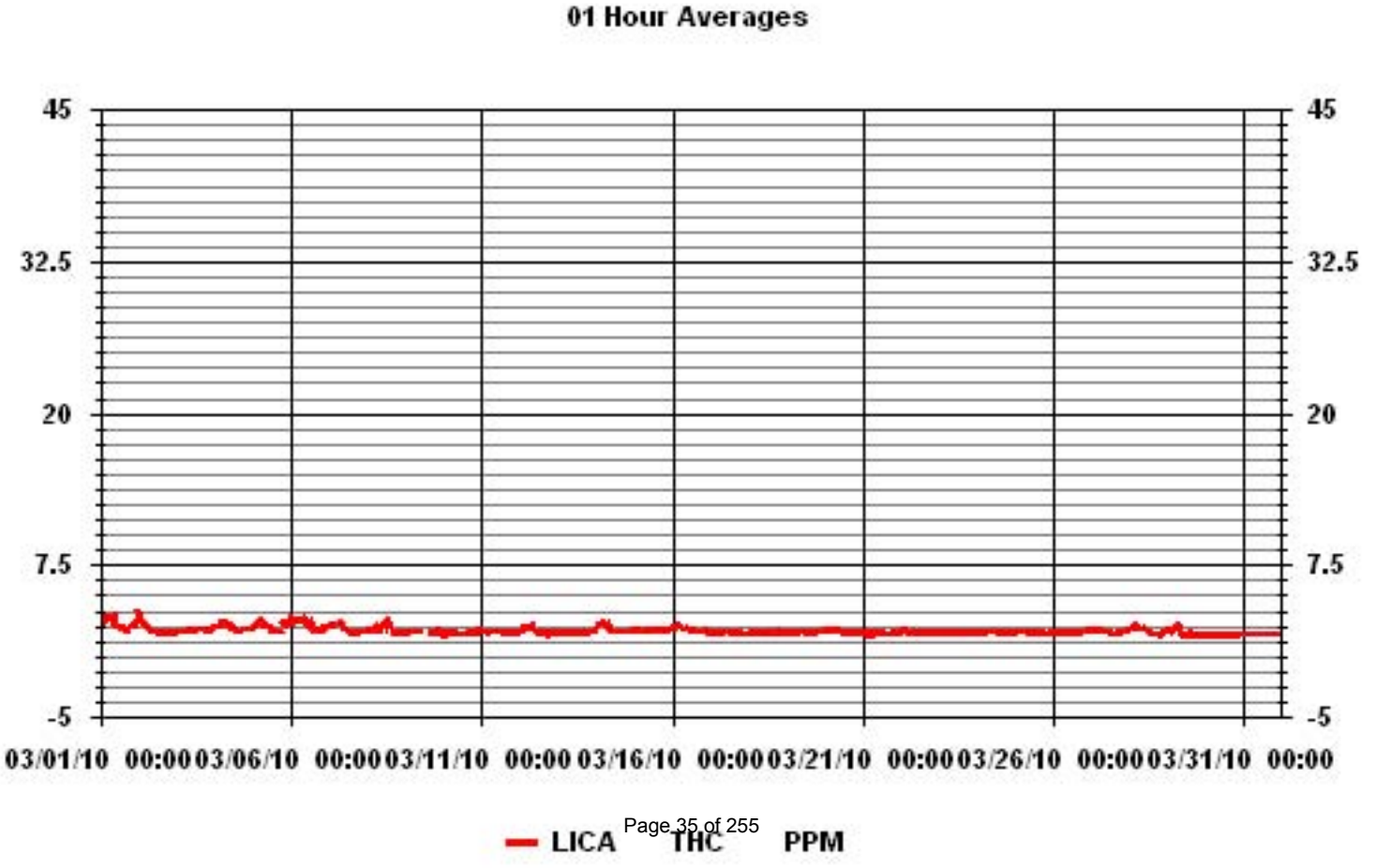
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE
BB	- BELOW BACKGROUND OF 1.5 PPM		



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	703					
MAXIMUM 1-HR AVERAGE:	3.6	PPM	@ HOUR(S)	23	ON DAY(S)	1
MAXIMUM 24-HR AVERAGE:	2.7	PPM			ON DAY(S)	1, 6

IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	7	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	0.31		MONTHLY AVERAGE:	2.09	PPM


01 Hour Averages
45
32.5
20
7.5
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA THC PPM

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.6	2.9	3	3.5	3.3	3.5	3.5	3.5	3.9	3.7	2.6	2.5	2.5	2.4	2.4	3.3	2.3	2.4	2.5	2.7	2.6	3.1	**IZS**	4	4	3.0	24
2	3.4	3.2	3.2	2.9	2.7	**5.7**	2.5	2.3	2.7	2.1	2.1	2.1	2.1	2	2.2	2.2	1.9	1.9	2.1	1.9	1.9	**IZS**	2	2	**5.7**	2.5	24
3	2	2	2	2.1	2.1	2.1	2.1	2.1	3	2.1	2.1	2.2	2.3	2.4	2.3	2.2	2.3	2.3	2.3	2.3	**IZS**	2.4	2.5	2.5	3	2.2	24
4	2.5	2.5	2.5	2.7	3	3	3	2.9	3	2.7	2.4	2.4	2.4	2.3	2.1	2.1	2.2	2.2	2.4	**IZS**	2.5	2.5	2.4	2.5	3	2.5	24
5	2.5	2.7	2.7	2.9	3	3.3	4	3	2.5	2.5	2.6	2.5	2.5	2.1	2.1	2.1	2.1	2.3	**IZS**	3	2.7	2.8	3	3.3	4	2.7	24
6	3.3	3.1	3.2	3.5	3.5	3.5	3.3	3.2	3.4	3.2	2.9	2.8	2.9	2.7	2.4	2.2	2.3	**IZS**	2.4	2.4	2.3	2.4	2.6	2.7	3.5	2.9	24
7	2.7	2.9	2.9	2.9	2.9	3.2	3	2.8	2.6	2.5	2.4	2.3	2.2	2.1	2	2.2	**IZS**	2	2	2	2	2.1	2.1	2.1	3.2	2.4	24
8	2.2	2.2	2.2	2.3	2.4	2.8	2.2	2.1	2.4	2.6	3	3.1	2.6	3.1	3.1	**IZS**	1.9	1.9	2.1	1.9	2.1	2.1	2.2	2	3.1	2.4	24
9	1.9	2	2.1	2	2	2.2	2.1	2.1	2.2	2.1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2.2	2.3	2.3	2.3	2	1.9	2.3	2.1	24
10	1.9	2	1.9	1.9	1.9	1.9	2.6	2.1	2.1	1.9	1.9	1.9	1.9	**IZS**	**M**	**M**	1.9	2.1	1.9	2.1	2	2	2.4	2.4	2.6	2.0	22
11	2.4	2.1	2	2	2	2.1	2.1	4.7	2.5	2	2	2.1	**IZS**	2	2	2.2	2	2	2	2	2	2	2	2	4.7	2.2	24
12	2.1	2.1	2.3	2.6	2.6	2.5	2.6	3	2.8	2.4	2.2	**IZS**	2.1	2.1	2.1	3.1	2.4	1.9	1.9	1.9	1.9	2.1	1.9	2.1	3.1	2.3	24
13	2.1	2.1	2.1	2.1	2.1	2.1	2	2	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	2.1	2.2	2.2	2.2	2.0	24
14	2.6	2.8	2.7	2.9	2.9	3	2.7	3	2.9	**IZS**	2.4	2.1	2.1	2.2	2	2.2	2	2	2.1	2	2.1	2.1	2.1	2.1	3	2.4	24
15	2.1	2.2	2.2	2.2	2.2	2.2	2.2	3.1	**IZS**	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.5	2.6	3.1	2.2	24
16	2.6	2.6	2.6	2.6	2.8	2.7	2.4	**IZS**	2.5	2.5	2.5	2.4	2.3	2.2	2.1	2	2.1	2.6	2.1	2.5	2.5	2.2	2.2	2.1	2.8	2.4	24
17	2	2	2	2	2	2.1	**IZS**	2	2	2.7	2.2	2.2	2	2	2	2	1.9	1.9	2	1.9	2	1.9	1.9	1.9	2.7	2.0	24
18	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	2	2	2	2	2	2	2	2	2.1	2.2	2	2	2	2	2.2	2.0	24
19	2	2	2	2	**IZS**	2	2	2	2	2.1	2.1	2.1	2	2	2	2	2.1	2.3	2	2	2.1	2.1	2.1	2.1	2.3	2.0	24
20	2.1	2.2	2.2	**IZS**	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2	2	2	2	2.1	2.3	2	1.9	1.9	1.9	2.1	1.9	2.3	2.1	24
21	1.9	1.9	**IZS**	1.9	2	1.9	1.9	1.9	1.9	1.9	2.7	2.2	1.9	2	2	1.9	1.9	2	2.1	1.9	1.9	1.9	1.9	1.9	2.7	2.0	24
22	1.9	**IZS**	2.1	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	1.9	2.1	2.2	2	2	2	2	2	2	2.3	2.0	24
23	**IZS**	2	2	2	2	2	2	3.3	2	2	2	2	2	2	2	2	2	2	2.1	2	2	2	2	**IZS**	3.3	2.1	24
24	2	2	2	2	2.3	2	2	2	2	2	2.5	2	2	2	2.1	2	2	2.1	2	2	2	2	**IZS**	2	2.5	2.0	24
25	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2	2	2	1.9	2	2	2.2	2.1	2	2	2	2.3	2	**IZS**	2	2	2.3	2.1	24
26	2	1.9	1.9	1.9	2	2.1	2	2	2	2	2	2	2	2	2.1	2	2	2	2	2.1	**IZS**	2.2	2.3	2.2	2.3	2.0	24
27	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.1	2.2	2	2	1.9	1.9	1.9	1.9	1.9	2	**IZS**	2.1	2.2	2.4	2.2	2.4	2.1	24
28	2.4	2.4	2.7	3.1	2.8	2.6	2.5	2.3	2.5	2.6	2.5	2.2	2.1	2.1	1.9	1.9	1.9	1.9	**IZS**	1.9	2.1	2.2	2.1	2.1	3.1	2.3	24
29	2.2	2.3	2.4	2.2	2.4	2.7	3.1	2.7	2.2	1.8	1.8	1.8	1.8	1.9	2.3	2	2.1	**IZS**	1.9	1.8	1.7	1.8	1.7	1.7	3.1	2.1	24
30	1.7	1.8	1.8	1.9	1.9	1.8	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.8	**IZS**	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.8	24
31	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	**IZS**	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.8	24
HOURLY MAX	3	3	3	4	4	6	4	5	4	4	3	3	3	3	3	3	2	3	3	3	3	3	3	4			
HOURLY AVG	2.2	2.3	2.3	2.3	2.4	2.5	2.4	2.5	2.4	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.2			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE
BB	- BELOW BACKGROUND OF 1.5 PPM		

MONTHLY SUMMARY

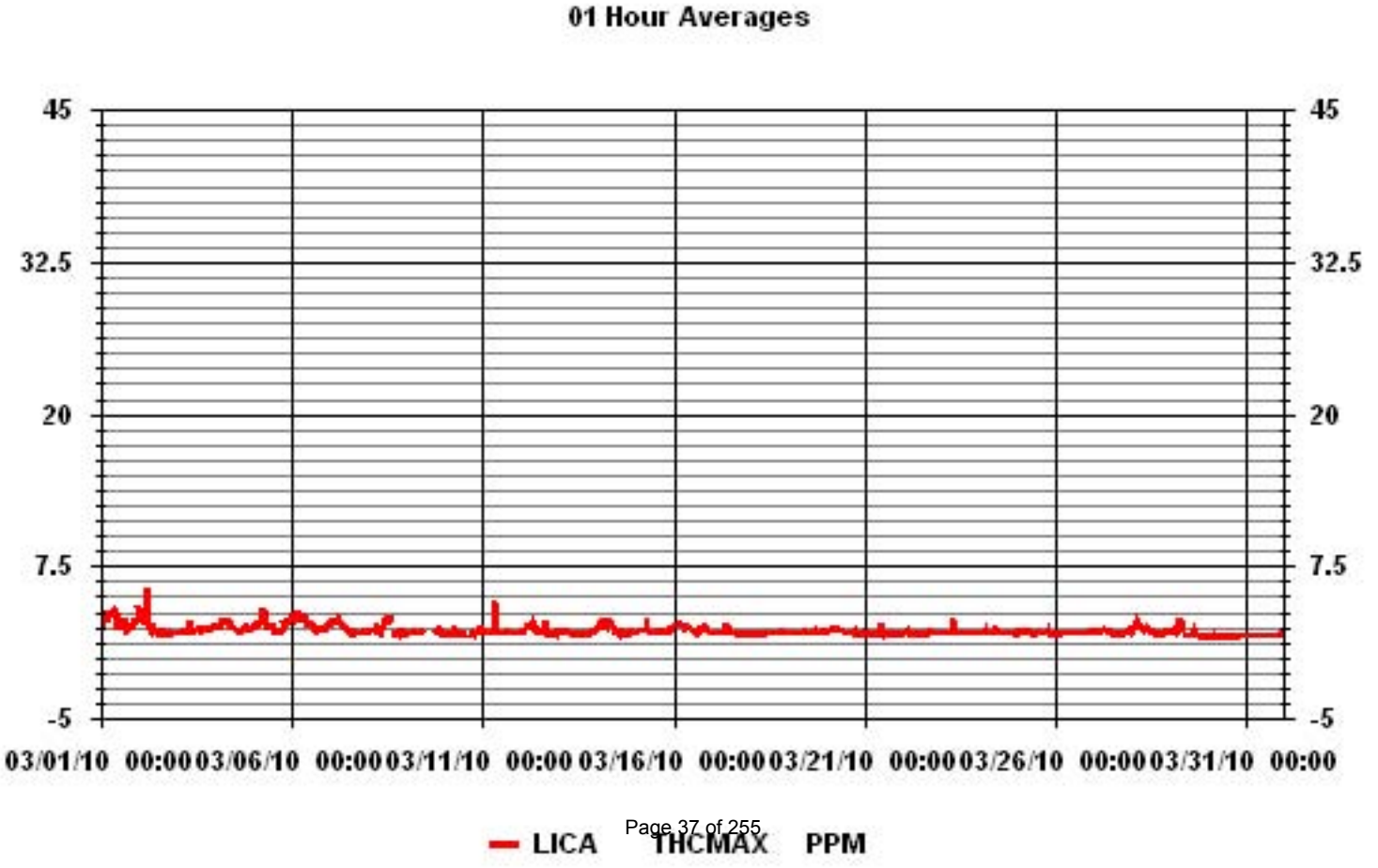
NUMBER OF NON-ZERO READINGS: 703

MAXIMUM INSTANTANEOUS VALUE: 5.7 PPM @ HOUR(S) 5 ON DAY(S) 2

IZS CALIBRATION TIME: 31 HRS OPERATIONAL TIME: 742 HRS

MONTHLY CALIBRATION TIME: 8 HRS

STANDARD DEVIATION: 0.42


01 Hour Averages
45
32.5
20
7.5
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA THCMAX PPM

LICA
THC / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : THC
Units : PPM

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	3.68	4.25	4.25	6.52	6.09	6.80	19.29	2.69	2.69	4.53	11.06	6.52	6.95	2.83	3.97	4.96	97.16
<	10.0	.00	.00	.28	.28	.42	.85	.14	.00	.00	.00	.28	.14	.28	.00	.14	.00	2.83
<	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.68	4.25	4.53	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.66	7.23	2.83	4.11	4.96	

Calm : .00 %

Total # Operational Hours : 705

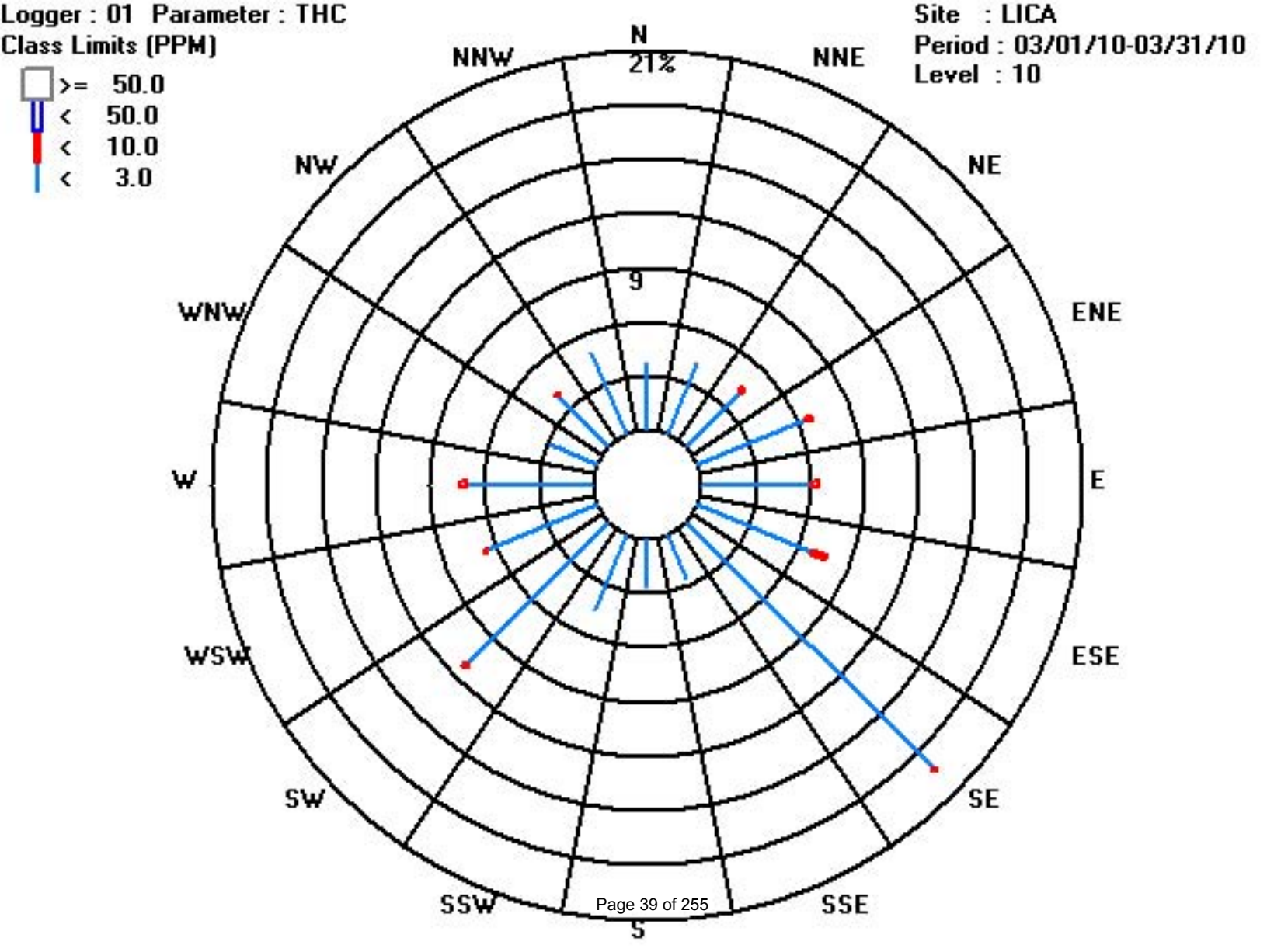
Distribution By Samples

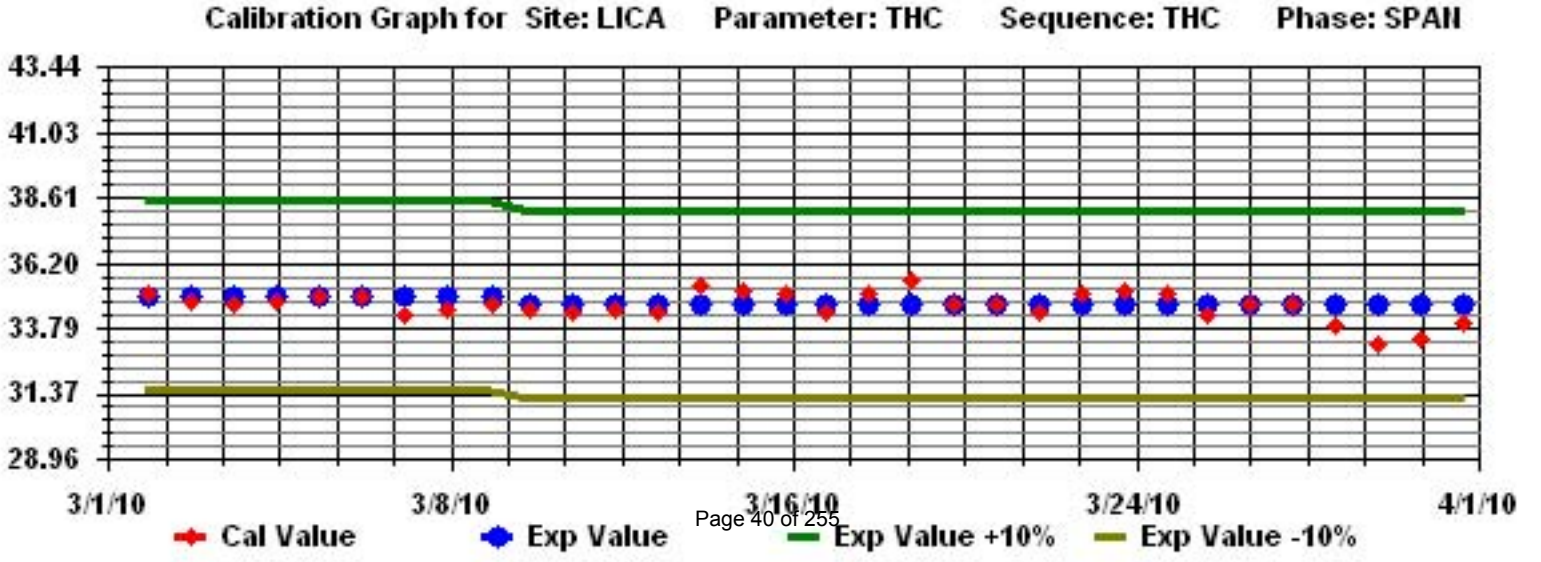
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	26	30	30	46	43	48	136	19	19	32	78	46	49	20	28	35	685
<	10.0			2	2	3	6	1				2	1	2		1		20
<	50.0																	
>=	50.0																	
	Totals	26	30	32	48	46	54	137	19	19	32	80	47	51	20	29	35	

Calm : .00 %

Total # Operational Hours : 705


Logger : 01 Parameter : THC
Class Limits (PPM)
>= 50.0
< 50.0
< 10.0
< 3.0
Site : LICA
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA Parameter: THC Sequence: THC Phase: SPAN
43.44
41.03
38.61
36.20
33.79
31.37
28.96
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Particulate Matter 2.5

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

PARTICULATE MATTER 2.5 (PM2.5) hourly averages in ug/m^3

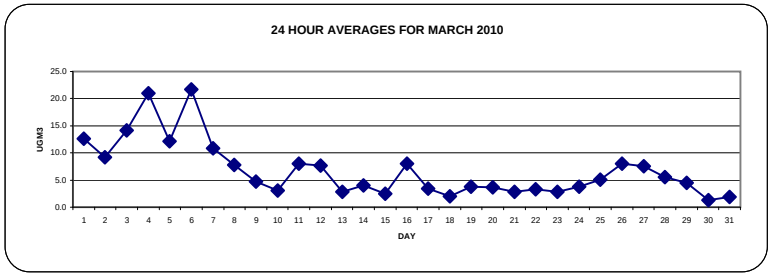
MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	9.9	9.4	8.9	11.9	14.4	12.9	14.9	15.9	22.4	22.4	13.4	14.4	12.9	11.9	9.4	10.9	8.9	6.9	8.9	8.9	10.4	8.4	15.4	20.4	22.4	12.7	24
2	16.9	11.9	14.4	9.4	14.4	9.9	11.4	10.9	12.4	12.4	7.9	10.4	9.4	4.4	4.4	5.9	6.9	5.9	4.4	5.4	5.4	4.9	10.9	11.4	16.9	9.2	24
3	13.9	13.4	11.4	9.9	9.9	12.9	10.4	9.4	14.4	17.9	9.4	7.4	10.4	13.4	12.9	15.4	12.4	16.9	20.9	17.9	17.9	18.4	22.4	21.4	22.4	14.2	24
4	16.9	19.4	20.9	20.4	37.9	38.9	**44.4**	38.4	42.4	40.4	33.4	15.9	9.4	7.4	6.4	8.9	10.9	14.4	18.4	11.9	12.9	12.9	11.9	8.9	**44.4**	21.0	24
5	7.4	11.4	13.4	15.9	14.9	17.4	12.9	10.4	15.9	12.9	21.9	14.9	10.9	3.4	2.4	4.9	4.4	5.4	13.4	11.4	15.4	16.9	13.4	21.4	21.9	12.2	24
6	22.9	21.4	25.4	28.4	27.4	25.9	26.4	30.4	35.4	36.9	36.4	28.4	22.4	17.9	9.9	11.9	13.9	11.9	12.9	12.9	18.4	16.4	14.9	12.9	36.9	**21.7**	24
7	15.9	12.4	14.4	14.9	17.9	18.4	18.4	16.9	13.4	18.4	14.9	11.9	10.9	6.4	4.9	3.9	1.4	1.9	5.4	7.9	7.9	7.9	9.4	3.9	18.4	10.8	24
8	5.9	5.4	6.9	7.9	3.9	12.9	9.4	11.4	13.4	11.4	15.9	14.9	16.4	14.4	15.4	4.4	1.9	0.9	1.4	1.4	2.9	0.9	7.4	0	16.4	7.8	24
9	7.4	0	1.4	0	1.4	2.9	2.9	5.9	2.4	0	0	0	10.4	0	7.9	5.4	5.9	7.4	2.9	15.9	19.4	9.9	1.4	2.9	19.4	4.7	24
10	6.4	2.9	4.9	1.4	6.4	1.4	1.9	0	3.9	2.9	2.4	2.9	1.9	2.4	0	4.9	1.4	5.9	0	2.4	2.4	5.9	3.4	4.9	6.4	3.0	24
11	8.4	7.4	6.9	6.9	3.9	8.4	14.9	14.4	10.9	6.9	4.4	4.9	7.9	5.9	5.9	9.9	9.9	9.4	6.4	9.9	6.4	7.9	8.4	5.4	14.9	8.0	24
12	8.9	8.9	5.4	8.4	6.4	7.4	11.9	10.9	13.4	14.3	22.3	13.5	9.4	14.1	4.7	0.4	3.3	1.4	4.9	0	6.4	1	1.8	4.3	22.3	7.6	24
13	8	6.7	6.3	6.8	1.6	4.1	0	2.9	0	0	4.9	3.9	4.3	0.5	0.6	0.3	1.9	4.3	1.5	5.8	0	0.9	2.6	0	8.0	2.8	24
14	0	4.3	5.1	8.6	3.4	4.5	6.7	4.9	7.4	6.5	4.2	2.1	1.1	0	0.4	4.6	6.4	3.4	4.6	5.9	5.1	4.1	1.9	0	8.6	4.0	24
15	3.5	**N**	6.8	1.6	0	5.4	1.6	0	4.7	0.9	1.9	0.4	0	4.9	1.3	2.9	5.2	2.2	3.3	1	0	3.4	0	5.4	6.8	2.5	23
16	9.9	8.2	3.1	2.2	6.9	3.6	3.4	10.7	4.1	8.2	4.6	8.6	8.2	6.9	3.4	3.4	7.4	7.1	10.2	15.5	17	20.4	12.5	7.6	20.4	8.0	24
17	6.2	1.9	2.4	1.9	2.7	11.4	2.2	4.2	8.6	3.7	6.5	0	5.7	0.9	1	2	1	0	**N**	0	0	**N**	8.9	**N**	11.4	3.4	21
18	**N**	**N**	**N**	**N**	1.3	**N**	0	0.4	2.3	5.9	0	2.4	0	6.4	1.9	1.9	1.3	3.5	0	1.9	0.9	2.4	2.9	3.4	6.4	2.0	19
19	4.9	3.4	3.4	0.4	5.9	0	0	2.9	3.4	0	0	4.9	0.4	0.4	3.9	4.9	5.9	6.4	8.9	6.4	5.4	4.9	5.9	7.9	8.9	3.8	24
20	5.9	5.4	4.9	3.4	8.9	3.4	2.9	0.4	4.9	2.9	3.4	1.9	3.4	1.9	4.9	1.9	5.9	6.4	6.9	1.9	5.4	0.4	0.4	0	8.9	3.7	24
21	4.9	5.9	1.9	0	0	1.4	0	0	5.4	1.4	4.4	0	2.4	0	2.4	3.4	3.4	1.4	4.9	8.4	0	6.9	4.9	3.9	8.4	2.8	24
22	3.4	10.4	0.9	3.4	6.4	2.9	2.9	4.9	3.9	2.9	1.4	1.9	0	0.9	0.4	4.4	5.9	0	2.4	5.9	6.4	3.9	0	2.4	10.4	3.2	24
23	4.4	0	4.4	0	4.9	4.4	3.4	2.4	1.4	1.9	5.9	3.4	1.9	0.9	1.9	3.4	5.4	0	2.9	0	4.4	2.4	0.9	6.4	6.4	2.8	24
24	1.4	3.9	5.9	2.4	0.9	0.9	0	2.4	3.9	3.4	5.9	3.4	0	3.9	3.4	16.9	5.4	4.9	0.9	2.4	6.4	2.9	5.4	4.9	16.9	3.8	24
25	3.4	3.4	3.9	0	0	2.4	4.4	2.9	3.4	3.4	5.9	3.9	0	10.9	8.9	5.4	5.4	5.4	3.9	8.4	5.4	13.9	8.9	9.4	13.9	5.1	24
26	5.4	10.9	9.4	12.9	7.4	9.9	10.9	11.9	6.9	8.4	6.4	6.4	7.9	7.9	3.9	2.4	10.4	6.4	8.9	4.9	4.9	9.9	9.4	9.9	12.9	8.1	24
27	6.9	18.4	8.9	9.4	6.4	6.4	6.4	17.4	16.4	15.9	14.9	3.9	7.4	3.9	0.9	0.4	0	5.4	4.9	5.9	5.9	3.4	7.4	3.9	18.4	7.5	24
28	7.4	8.4	4.9	11.4	3.9	7.9	2.4	4.4	1.9	3.9	6.9	2.4	3.9	4.4	2.9	8.9	3.9	4.4	9.4	5.9	10.4	6.9	3.9	2.9	11.4	5.6	24
29	1.4	4.9	2.4	3.9	6.4	6.4	11.4	10.4	4.4	3.9	1.9	6.4	5.9	**C**	**C**	**C**	1.4	0.4	1.4	3.4	10.9	5.4	1.9	0	11.4	4.5	24
30	0	1.4	0	2.4	1.4	3.4	1.4	0.4	4.4	0	0	0	0.9	0.9	0	**N**	0	0.4	1.9	0.9	3.4	2.9	0.4	3.9	4.4	1.3	23
31	2.4	0.4	2.4	5.4	5.9	1.9	2.4	3.4	2.9	1.4	1.4	0	5.4	1.4	1.9	0	0	0	1.4	0	1.9	1.4	1.9	1.4	5.9	1.9	24
HOURLY MAX	23	21	25	28	38	39	44	38	42	40	36	28	22	18	15	17	14	17	21	18	19	20	22	21			
HOURLY AVG	7.3	7.6	7.0	7.1	7.5	8.3	7.8	8.4	9.4	8.8	8.5	6.3	6.2	5.3	4.3	5.3	5.1	4.8	5.9	6.1	7.1	6.9	6.5	6.4			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

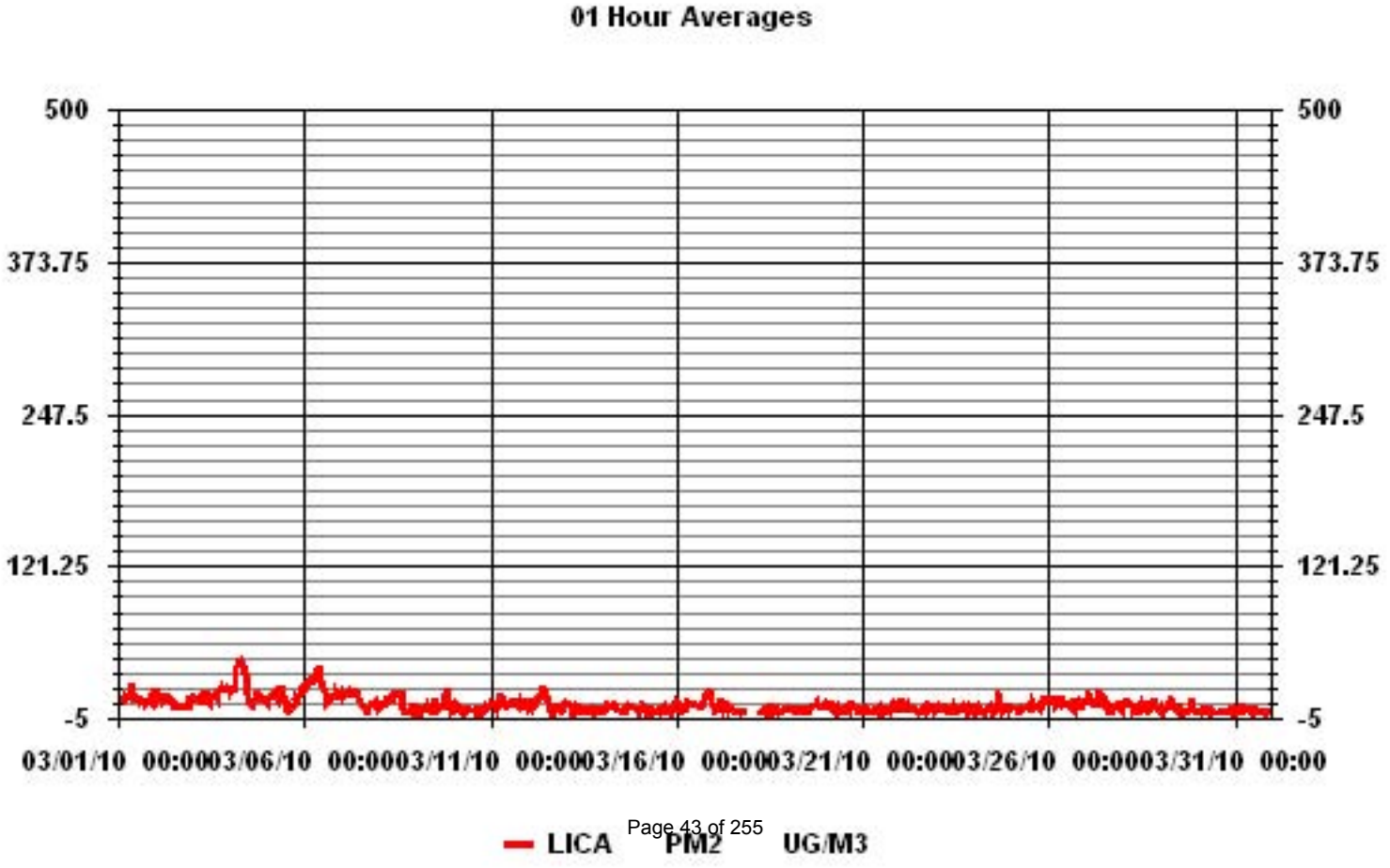
OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR - PPB | 24-HR 30 PPB



MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	-					
NUMBER OF 24-HR EXCEEDENCES:	0	PROPOSED CANADA WIDE GUIDELINE				
NUMBER OF NON-ZERO READINGS:	661					
MAXIMUM 1-HR AVERAGE:	44.4	UG/M^3	@ HOUR(S)	6	ON DAY(S)	4
MAXIMUM 24-HR AVERAGE:	21.7	UG/M^3			ON DAY(S)	6

IZS CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	734	HRS
MONTHLY CALIBRATION TIME:	3	HRS	AMD OPERATION UPTIME:	98.7	%
STANDARD DEVIATION:	6.71		MONTHLY AVERAGE:	6.84	UG/M^3


01 Hour Averages
500
373.75
247.5
121.25
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA PM2 UG/M3

LICA
PM2 / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : PM2
Units : UG/M3

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	30.0	3.41	4.65	4.78	6.70	6.70	7.79	19.15	2.73	2.73	4.65	11.08	6.15	6.70	2.87	3.69	4.65	98.49
<	60.0	.00	.00	.13	.00	.00	.13	.00	.00	.00	.00	.13	.54	.54	.00	.00	.00	1.50
<	80.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	120.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	240.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	240.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.41	4.65	4.92	6.70	6.70	7.93	19.15	2.73	2.73	4.65	11.21	6.70	7.25	2.87	3.69	4.65	

Calm : .00 %

Total # Operational Hours : 731

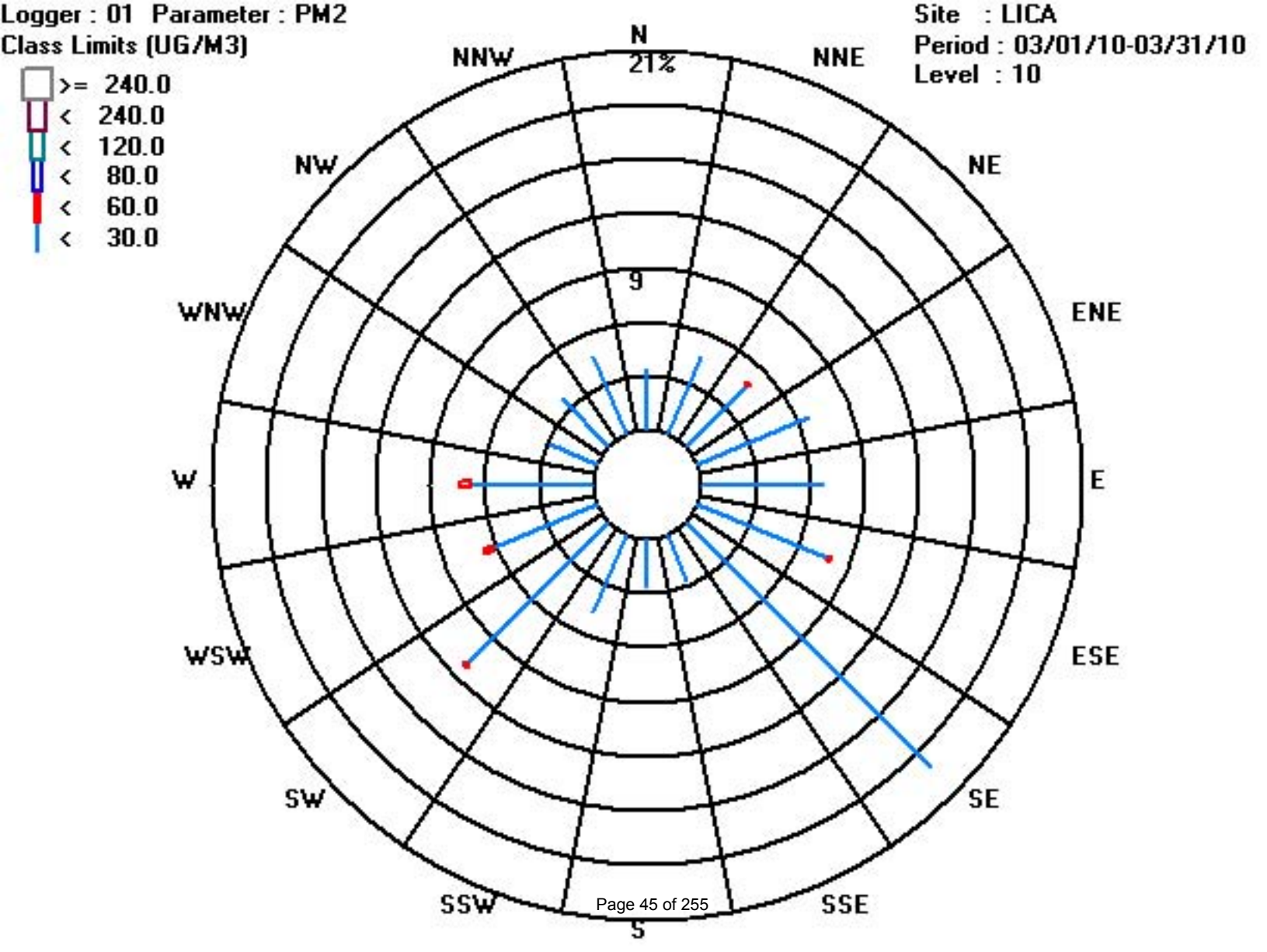
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	30.0	25	34	35	49	49	57	140	20	20	34	81	45	49	21	27	34	720
<	60.0			1			1					1	4	4				11
<	80.0																	
<	120.0																	
<	240.0																	
>=	240.0																	
	Totals	25	34	36	49	49	58	140	20	20	34	82	49	53	21	27	34	

Calm : .00 %

Total # Operational Hours : 731


Logger : 01 Parameter : PM2
Class Limits (UG/M3)
>= 240.0
< 240.0
< 120.0
< 80.0
< 60.0
< 30.0
Site : LICA
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9

Nitrogen Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

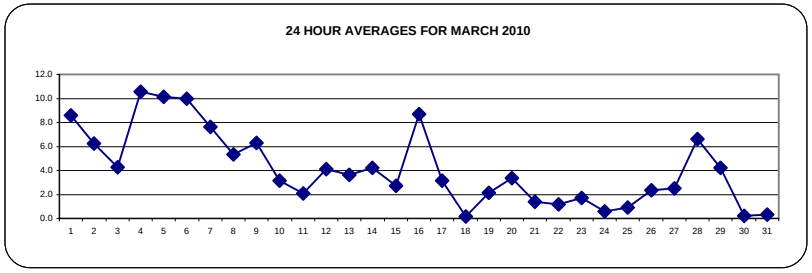
NITROGEN DIOXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4	5	4	5	8	11	11	18	26	16	4	4	4	4	4	5	6	7	11	10	10	8	**IZS**	13	26	8.6	24
2	10	12	13	14	10	18	13	6	5	4	4	4	3	2	3	3	2	2	3	3	3	**IZS**	3	3	18	6.2	24
3	3	3	3	3	3	3	3	4	4	3	3	3	4	4	4	5	5	5	5	8	**IZS**	9	6	5	9	4.3	24
4	5	5	4	5	11	13	18	18	14	13	8	7	6	4	4	4	8	13	19	**IZS**	19	19	15	11	19	**10.6**	24
5	17	21	19	20	20	19	16	15	9	11	12	4	3	2	2	3	3	4	**IZS**	6	5	7	8	7	21	10.1	24
6	8	7	7	8	9	9	11	10	18	9	9	9	8	8	6	6	8	**IZS**	16	9	8	10	17	19	19	10.0	24
7	21	19	15	13	11	8	16	12	5	4	4	3	3	3	3	3	**IZS**	3	6	5	4	5	5	4	21	7.6	24
8	4	5	4	3	4	14	10	8	13	4	5	7	5	6	6	**IZS**	3	3	3	3	3	3	4	3	14	5.3	24
9	2	3	4	4	5	5	5	10	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	2	5	6	19	23	12	1	0	23	6.3	24
10	0	3	3	4	4	5	8	7	4	3	2	1	2	**IZS**	3	**M**	1	3	4	2	1	3	3	3	8	3.1	23
11	2	2	1	1	1	3	11	9	2	1	1	1	**IZS**	1	1	1	1	1	2	2	1	1	1	1	11	2.1	24
12	2	3	3	4	5	5	11	16	9	4	4	**IZS**	3	4	2	2	2	2	2	2	2	2	2	4	16	4.1	24
13	6	4	7	10	8	4	5	5	1	1	**IZS**	1	1	0	0	0	0	0	0	7	5	5	6	7	10	3.6	24
14	5	9	10	10	7	10	5	10	14	**IZS**	1	0	0	1	1	1	1	1	4	3	2	1	1	0	14	4.2	24
15	0	1	1	1	1	2	2	2	**IZS**	1	1	1	1	1	1	1	2	2	4	7	6	4	9	11	11	2.7	24
16	12	11	9	10	14	16	12	**IZS**	15	7	5	3	2	2	2	2	3	6	9	14	18	13	8	7	18	8.7	24
17	3	3	4	3	5	18	**IZS**	4	3	4	8	4	1	2	2	1	1	1	2	2	1	0	0	0	18	3.1	24
18	0	0	0	0	0	**IZS**	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	1	0.2	24
19	1	1	0	0	**IZS**	0	2	2	1	1	1	1	1	0	0	1	1	2	3	5	6	7	7	6	7	2.1	24
20	3	3	4	**IZS**	4	14	7	5	4	4	3	2	2	1	1	1	4	3	3	2	2	2	2	1	14	3.3	24
21	1	1	**IZS**	2	2	4	2	1	1	1	1	1	0	0	1	0	1	2	2	3	4	2	0	0	4	1.4	24
22	0	**IZS**	1	1	0	0	0	1	0	0	0	0	0	0	1	1	1	1	3	5	2	3	4	3	5	1.2	24
23	**IZS**	5	1	1	0	0	2	5	2	1	1	0	0	1	1	2	2	1	1	3	6	1	1	**IZS**	6	1.7	24
24	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	0	**IZS**	0	5	0.6	24
25	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	1	2	2	3	**IZS**	4	4	4	0.9	24
26	3	1	1	1	1	7	4	2	1	1	1	1	1	1	2	2	1	1	3	8	**IZS**	5	3	3	8	2.3	24
27	2	1	1	1	1	3	2	4	4	3	3	2	1	0	0	0	0	1	2	**IZS**	3	5	10	9	10	2.5	24
28	10	11	15	14	16	12	12	9	7	3	2	1	1	1	1	2	2	3	**IZS**	6	8	7	5	4	16	6.6	24
29	5	4	4	3	4	14	**27**	20	3	1	0	0	0	0	0	0	1	**IZS**	4	2	1	2	2	0	**27**	4.2	24
30	0	0	0	0	0	1	1	1	0	0	1	0	0	0	1	0	**IZS**	0	0	0	0	0	0	0	1	0.2	24
31	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	1	1	1	0.3	24
HOURLY MAX	21	21	19	20	20	19	27	20	26	16	12	9	8	8	6	6	8	13	19	19	23	19	17	19			
HOURLY AVG	4.3	4.8	4.6	4.7	5.2	7.4	7.3	6.9	5.7	3.4	2.9	2.1	1.8	1.7	1.8	1.7	2.1	2.5	4.3	4.9	5.0	4.7	4.4	4.3			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

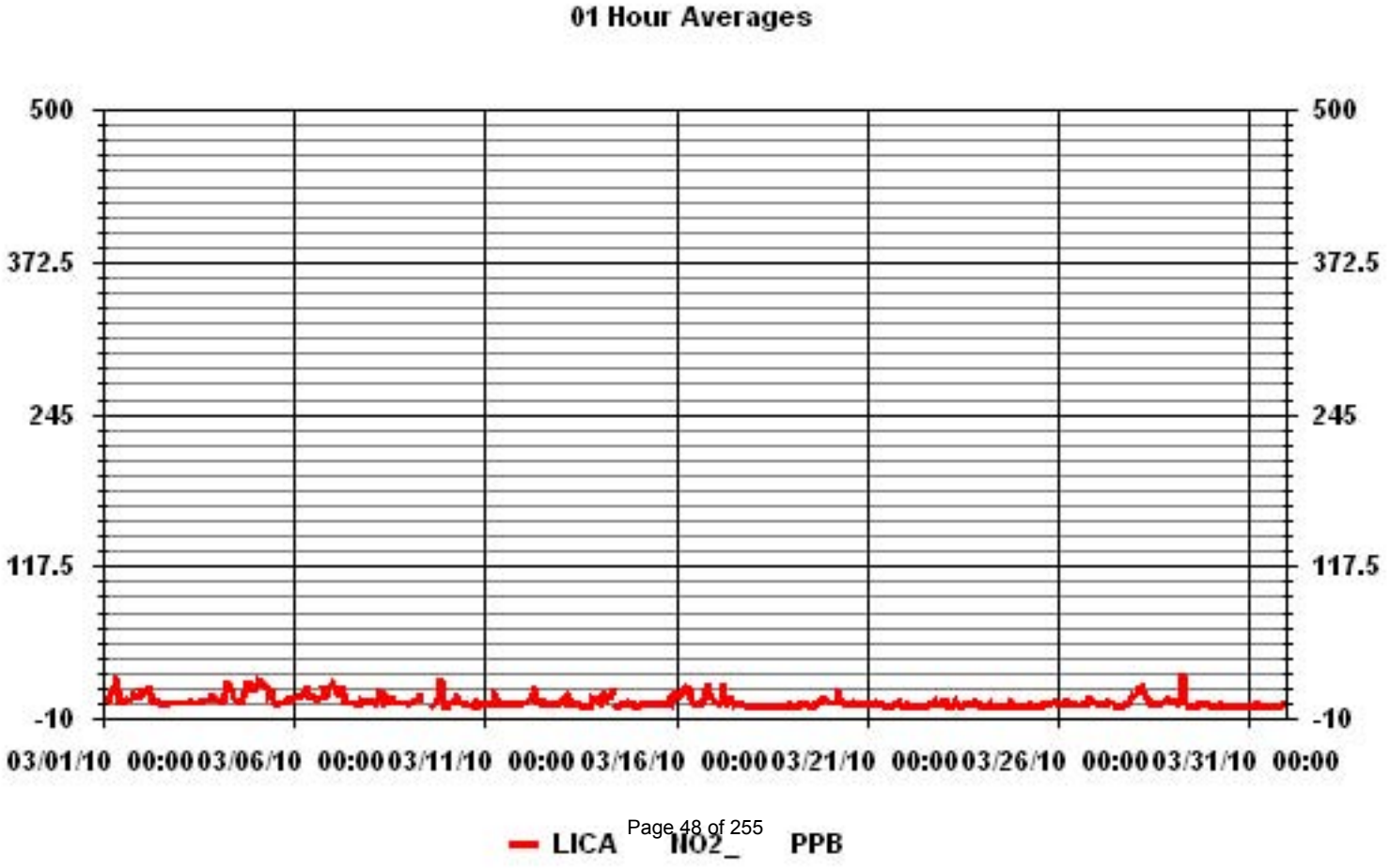


OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 212 PPB | 24-HR 106 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	571					
MAXIMUM 1-HR AVERAGE:	27	PPB	@ HOUR(S)	6	ON DAY(S)	29
MAXIMUM 24-HR AVERAGE:	10.6	PPB			ON DAY(S)	4

IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	7	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	4.76		MONTHLY AVERAGE:	4.12	PPB


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA NO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

NITROGEN DIOXIDE MAX instantaneous maximum in ppb

MST

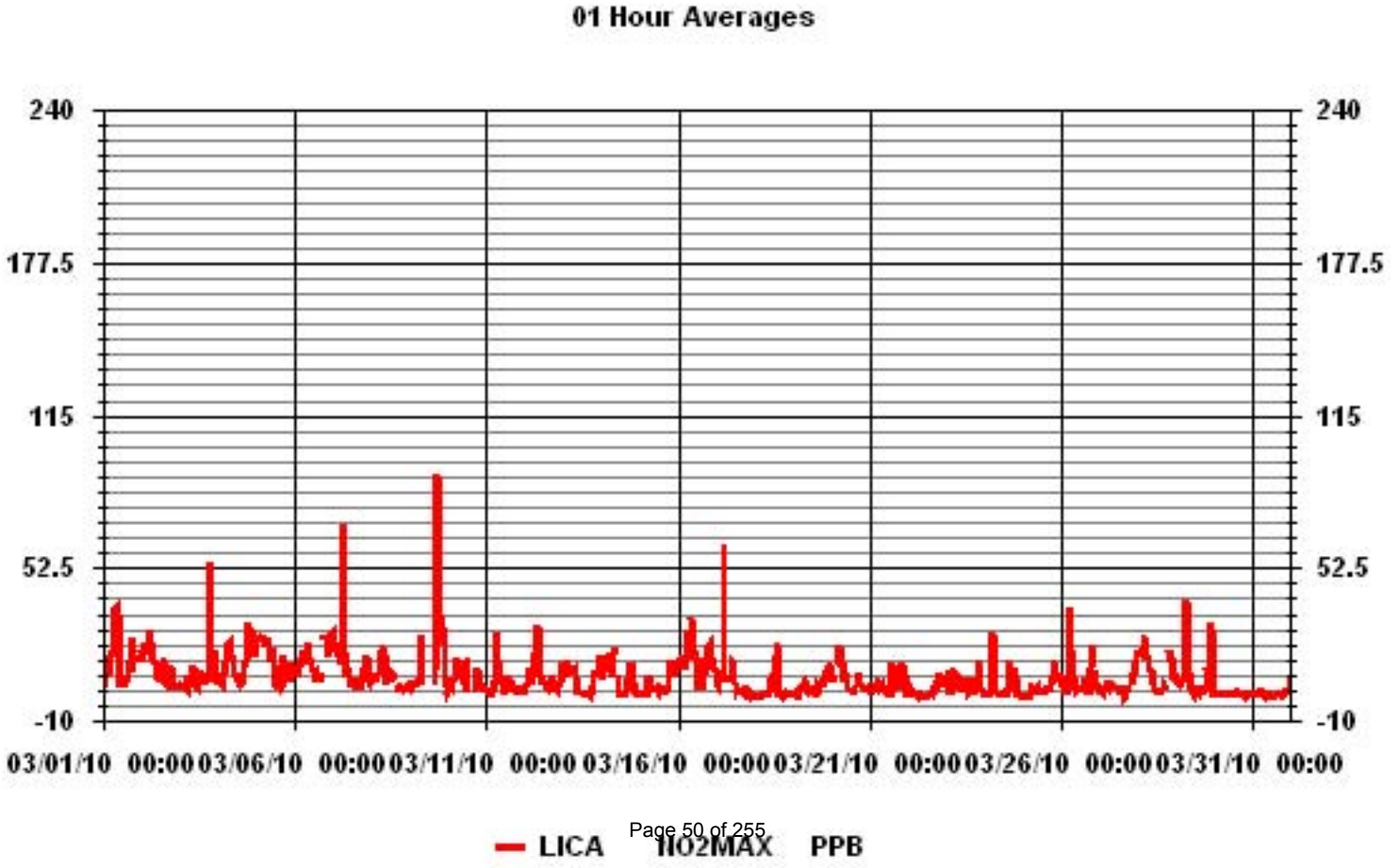
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	5	17	8	9	14	19	16	36	37	34	5	5	5	8	6	8	15	10	24	14	17	15	**IZS**	18	37	15.0	24
2	14	22	17	22	19	27	23	15	14	7	14	7	7	8	16	6	5	3	13	6	4	**IZS**	4	4	27	12.0	24
3	5	4	4	4	3	8	5	5	13	5	4	8	5	10	6	6	6	7	7	54	**IZS**	18	7	6	54	8.7	24
4	6	6	5	9	14	15	21	22	17	15	10	9	7	8	6	7	12	15	29	**IZS**	27	27	23	16	29	14.2	24
5	24	25	24	23	23	25	20	24	15	16	20	4	13	3	4	3	4	16	**IZS**	10	6	12	12	10	25	14.6	24
6	10	8	10	14	14	19	15	16	22	16	14	11	9	10	7	7	9	**IZS**	24	24	16	23	25	26	26	15.2	24
7	27	23	19	17	18	13	70	19	8	9	5	5	7	4	4	7	**IZS**	4	12	10	6	17	7	6	70	13.8	24
8	8	8	6	9	10	19	16	21	18	5	7	12	6	8	8	**IZS**	3	3	4	4	3	4	5	4	21	8.3	24
9	3	4	5	5	5	6	6	24	**C**	**C**	**C**	**C**	**C**	**C**	**C**	6	11	**91**	23	34	29	22	5	1	**91**	16.5	24
10	2	5	4	6	7	16	13	11	10	15	6	2	15	**IZS**	**M**	**M**	3	7	11	6	3	5	3	3	16	7.3	22
11	3	2	1	1	2	6	26	16	5	6	6	2	**IZS**	7	2	7	4	4	2	2	3	2	2	2	26	4.9	24
12	4	5	12	6	6	9	18	24	29	9	6	**IZS**	6	5	4	3	4	8	3	3	2	4	6	14	29	8.3	24
13	11	8	15	13	11	10	10	11	8	2	**IZS**	2	1	1	1	1	2	1	4	11	8	10	13	17	17	7.4	24
14	7	17	16	12	10	18	8	17	19	**IZS**	7	1	1	1	1	2	7	4	14	11	6	2	1	1	19	8.0	24
15	1	1	1	1	1	9	3	3	**IZS**	3	3	2	5	2	2	2	3	3	11	15	12	8	15	14	15	5.2	24
16	15	14	12	12	17	20	26	**IZS**	31	15	19	17	3	4	4	4	9	16	13	21	22	17	12	11	31	14.5	24
17	5	4	7	7	11	61	**IZS**	7	8	14	13	6	2	3	2	2	2	1	3	3	2	0	1	0	61	7.1	24
18	0	0	0	0	2	**IZS**	1	1	1	7	8	3	3	17	22	0	2	0	1	2	1	1	1	1	22	3.2	24
19	1	1	2	0	**IZS**	3	5	6	4	2	3	2	4	1	1	5	4	6	4	7	8	10	12	14	14	4.6	24
20	6	7	7	**IZS**	14	21	13	13	6	7	4	3	2	2	3	4	7	9	6	4	3	3	4	3	21	6.6	24
21	2	2	**IZS**	5	4	7	4	5	3	2	2	4	1	1	14	2	3	5	6	6	14	3	10	0	14	4.6	24
22	4	**IZS**	1	2	1	1	0	1	1	0	0	0	0	1	2	1	3	3	6	9	4	6	7	7	9	2.6	24
23	**IZS**	9	2	2	12	3	4	9	5	4	2	4	3	7	2	3	7	1	4	5	15	4	2	**IZS**	15	5.0	24
24	1	1	1	1	2	26	1	3	1	1	1	2	1	1	1	15	2	3	12	8	0	1	**IZS**	0	26	3.7	24
25	0	0	0	0	1	5	2	3	4	1	3	2	2	2	3	3	3	6	5	15	7	**IZS**	7	6	15	3.5	24
26	9	5	2	2	3	36	20	8	4	2	3	3	3	3	5	7	2	2	12	20	**IZS**	9	4	4	36	7.3	24
27	2	2	1	2	3	6	4	5	5	4	4	3	3	1	4	0	1	2	4	**IZS**	6	9	15	19	19	4.6	24
28	17	17	20	17	25	15	17	12	11	6	3	2	2	2	2	3	5	4	**IZS**	18	15	15	8	7	25	10.6	24
29	8	6	5	6	7	38	38	30	10	4	2	1	4	2	1	3	3	**IZS**	10	4	5	30	28	1	38	10.7	24
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	**IZS**	1	1	0	1	1	1	1	3	1.0	24
31	1	1	1	2	2	1	2	1	0	1	1	1	0	0	1	**IZS**	2	1	2	1	2	2	2	6	6	1.4	24
HOURLY MAX	27	25	24	23	25	61	70	36	37	34	20	17	15	17	22	15	15	91	29	54	29	30	28	26			
HOURLY AVG	6.7	7.5	7.0	7.0	8.7	15.4	13.6	12.3	10.7	7.3	6.1	4.3	4.2	4.2	4.7	4.2	4.9	8.1	9.3	11.3	8.5	9.7	8.3	7.4			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	678					
MAXIMUM INSTANTANEOUS VALUE:	91	PPB	@ HOUR(S)	17	ON DAY(S)	9
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		742	HRS
MONTHLY CALIBRATION TIME:	7	HRS				
STANDARD DEVIATION	8.73					


01 Hour Averages
240
177.5
115
52.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA
NO2MAX
PPB

LICA
NO2_ / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : NO2_
Units : PPB

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	3.54	4.39	4.68	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	3.54	4.39	4.68	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	

Calm : .00 %

Total # Operational Hours : 705

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	25	31	33	48	46	54	137	19	19	32	80	46	51	20	29	35	705
< 110																	
< 210																	
>= 210																	
Totals	25	31	33	48	46	54	137	19	19	32	80	46	51	20	29	35	

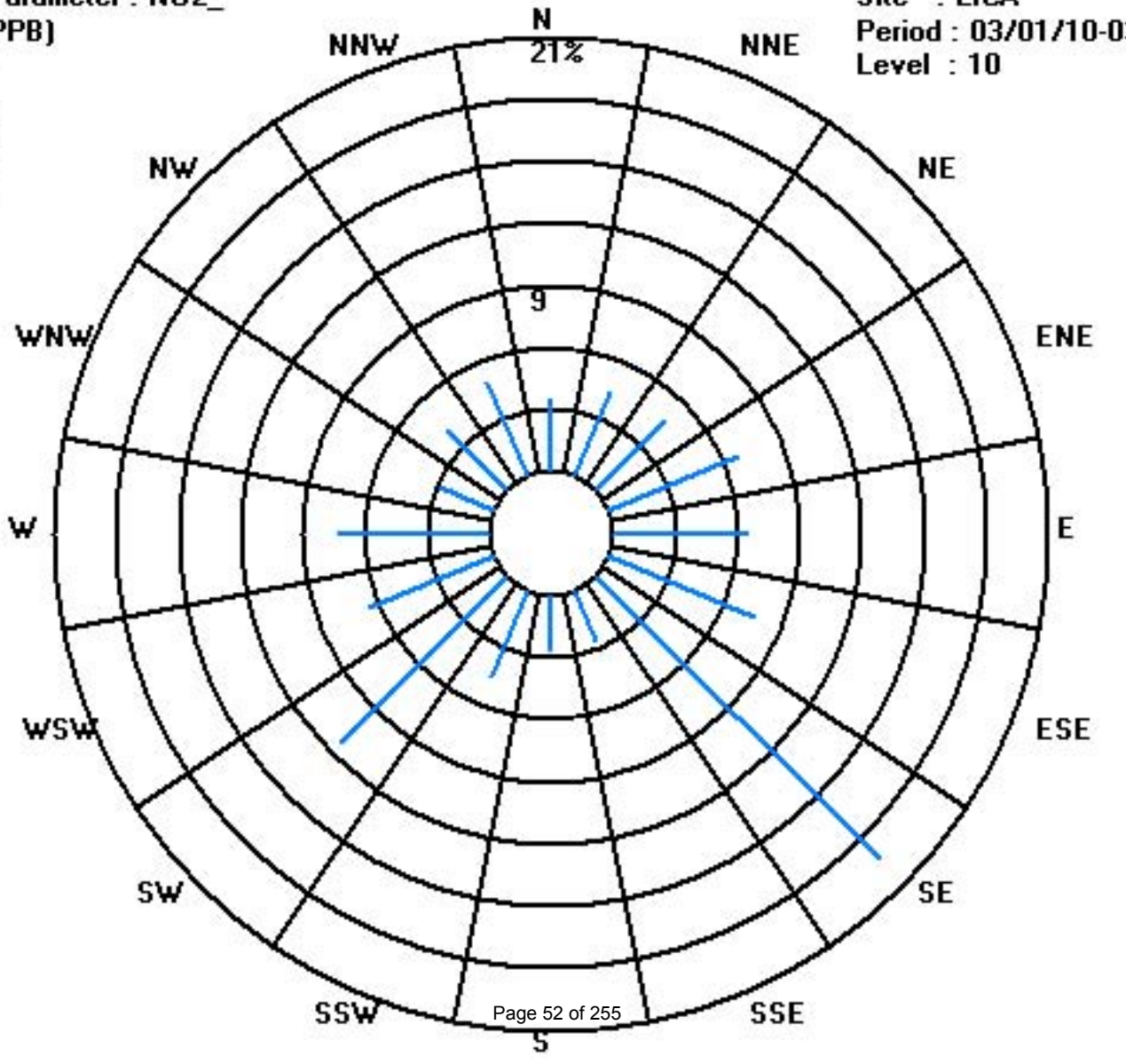
Calm : .00 %

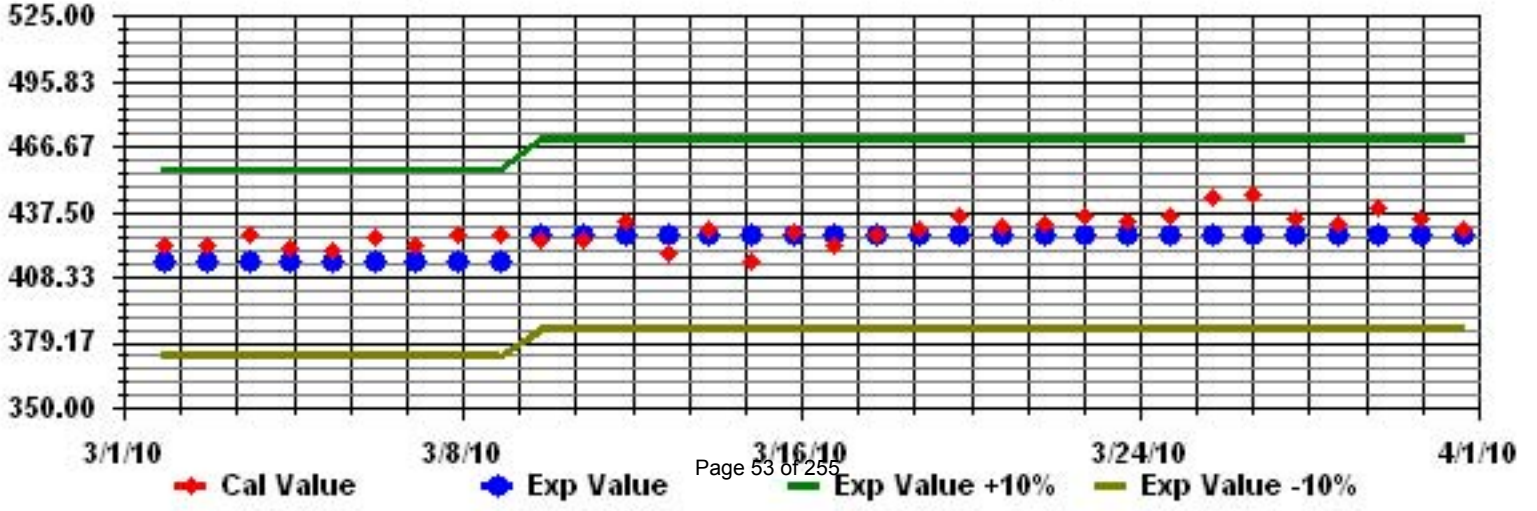
Total # Operational Hours : 705

Logger : 01 Parameter : NO2_
Class Limits (PPB)

>= 210
< 210
< 110
< 50

Site : LICA
Period : 03/01/10-03/31/10
Level : 10




Calibration Graph for Site: LICA Parameter: NO2_ Sequence: NO2 Phase: SPAN
525.00
495.83
466.67
437.50
408.33
379.17
350.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitric Oxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

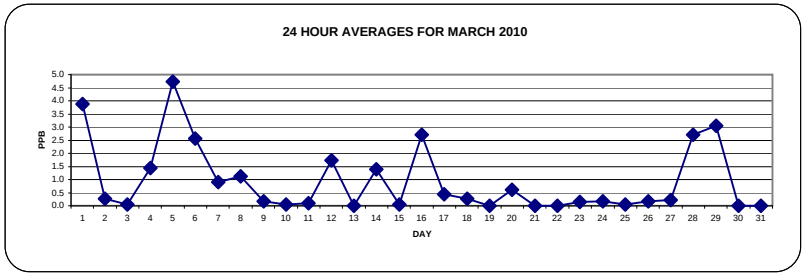
NITRIC OXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	1	1	20	**43**	20	1	1	1	1	0	0	0	0	0	0	0	0	**IZS**	0	**43**	3.9	24
2	0	0	0	0	0	2	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	**IZS**	0	0	2	0.3	24
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	**IZS**	0	0	0	1	0.0	24
4	0	0	0	0	0	0	1	7	9	8	4	2	2	0	0	0	0	0	0	**IZS**	0	0	0	0	9	1.4	24
5	2	1	3	8	11	20	23	21	7	6	7	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	23	**4.7**	24
6	0	0	0	0	0	1	3	4	23	6	5	4	3	2	1	0	0	**IZS**	0	1	0	1	3	2	23	2.6	24
7	1	2	5	3	2	1	3	2	0	0	1	1	0	0	0	0	**IZS**	0	0	0	0	0	0	0	5	0.9	24
8	0	0	0	0	0	10	1	0	4	0	1	3	2	3	2	**IZS**	0	0	0	0	0	0	0	0	10	1.1	24
9	0	0	0	0	0	0	0	1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	1	0	1	0	0	0	0	1	0.2	24
10	0	0	0	0	0	0	0	0	0	1	0	0	0	**IZS**	0	**M**	0	0	0	0	0	0	0	0	1	0.0	23
11	0	0	0	0	0	0	1	1	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
12	0	0	0	0	0	0	3	23	8	2	2	**IZS**	1	1	0	0	0	0	0	0	0	0	0	0	23	1.7	24
13	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
14	0	2	2	1	0	3	0	10	14	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1.4	24
15	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.0	24
16	4	1	2	4	14	9	3	**IZS**	14	4	2	3	1	0	0	0	0	1	0	0	0	0	0	0	14	2.7	24
17	0	0	0	0	0	10	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0.4	24
18	0	0	0	0	0	**IZS**	0	0	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	5	0.3	24
19	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	**IZS**	0	3	0	3	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0.6	24
21	0	0	**IZS**	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
22	0	**IZS**	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
23	**IZS**	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	0.1	24
24	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	**IZS**	0	3	0.2	24
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	**IZS**	0	0	1	0.0	24
26	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	4	0.2	24
27	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	2	2	0.2	24
28	0	1	6	10	21	10	7	4	3	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	21	2.7	24
29	0	0	0	0	0	8	28	33	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	33	3.0	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	4	2	6	10	21	20	28	33	43	20	7	4	3	5	2	0	0	1	1	1	0	1	3	2			
HOURLY AVG	0.2	0.2	0.6	0.9	1.6	2.8	2.5	4.3	4.5	1.8	1.0	0.5	0.4	0.4	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.2			

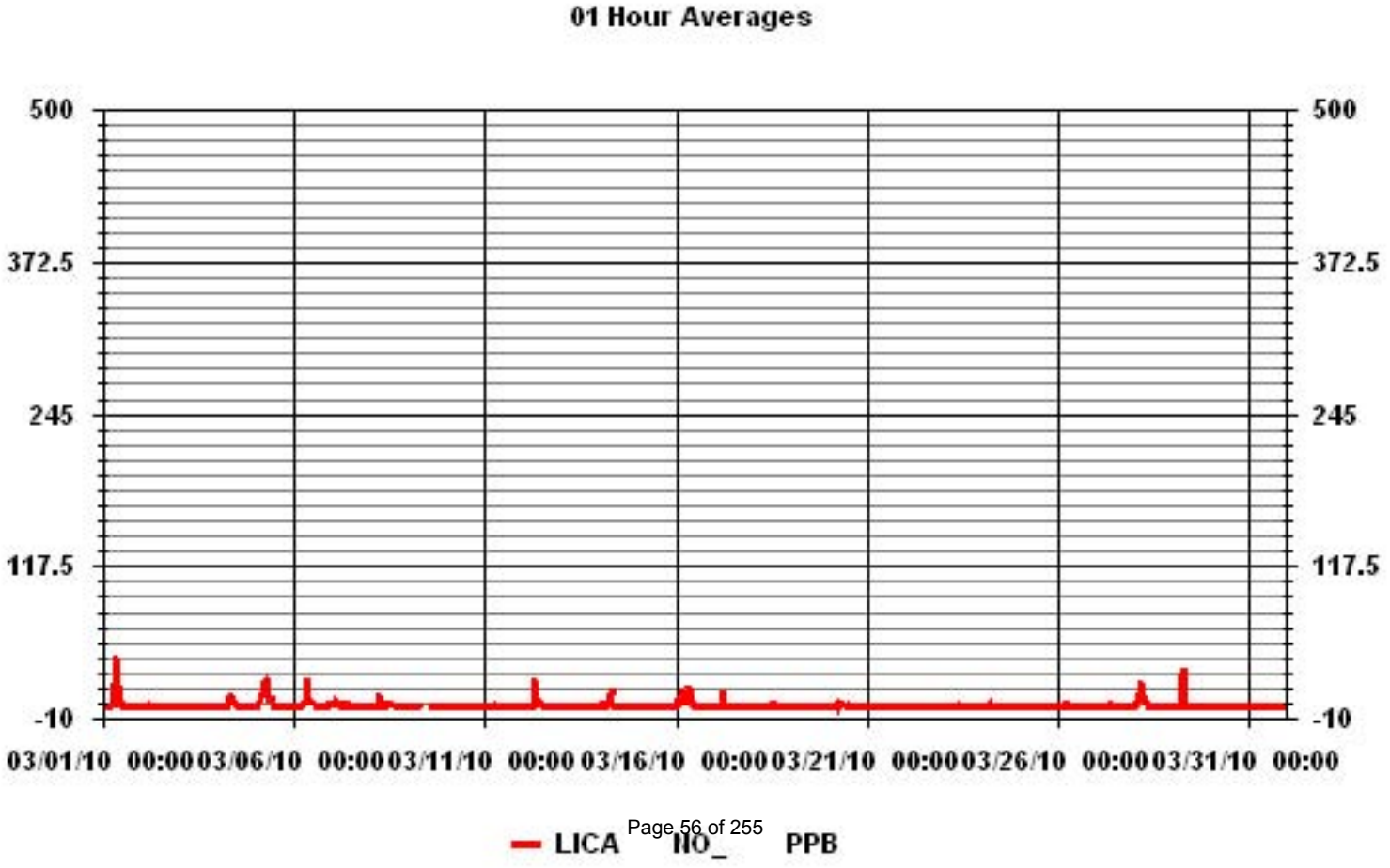
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:		131					
MAXIMUM 1-HR AVERAGE:		43	PPB	@ HOUR(S)	8	ON DAY(S)	1
MAXIMUM 24-HR AVERAGE:		4.7	PPB			ON DAY(S)	5
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:			743	HRS
MONTHLY CALIBRATION TIME:	7	HRS	AMD OPERATION UPTIME:			99.9	%
STANDARD DEVIATION:	3.61		MONTHLY AVERAGE:			0.94	PPB


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA NO_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

NITRIC OXIDE MAX instantaneous maximum in ppb

MST

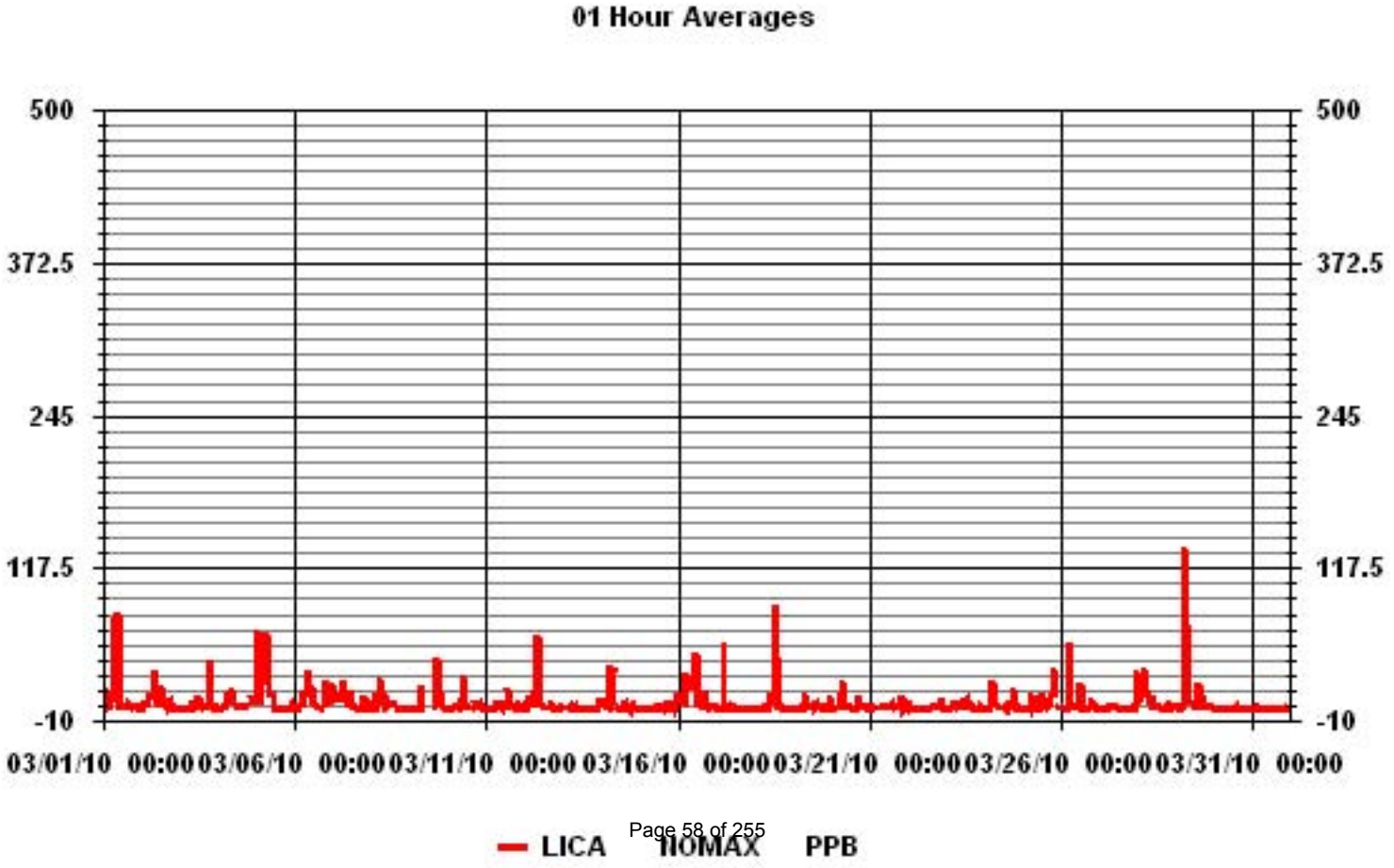
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	17	1	1	3	10	7	75	78	80	1	1	2	3	2	5	3	0	5	1	2	0	**IZS**	2	80	13.0	24
2	1	4	3	3	7	13	7	13	32	3	11	2	19	1	7	3	6	5	7	0	0	**IZS**	0	0	32	6.4	24
3	0	0	0	0	0	0	0	0	7	3	0	10	1	4	1	2	1	1	1	37	**IZS**	4	0	0	37	3.1	24
4	0	0	0	1	1	4	12	13	16	10	6	3	2	2	2	3	2	1	1	**IZS**	9	3	9	3	16	4.5	24
5	66	3	9	20	27	42	63	50	13	12	12	1	2	1	0	0	0	2	**IZS**	1	0	1	4	1	66	14.3	24
6	2	0	0	3	3	16	11	13	33	14	19	6	4	3	2	2	1	**IZS**	3	23	5	20	18	21	33	9.7	24
7	7	8	12	8	8	6	23	6	10	4	3	14	3	2	0	1	**IZS**	0	0	10	1	9	0	0	23	5.9	24
8	1	0	0	12	9	25	8	6	12	1	2	7	4	5	5	**IZS**	0	0	0	0	0	0	0	0	25	4.2	24
9	0	0	0	0	0	0	0	17	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	7	43	1	16	4	2	0	0	43	5.4	24
10	0	1	0	1	1	3	3	2	8	28	1	1	2	**IZS**	**M**	**M**	6	2	3	2	5	2	0	0	28	3.4	22
11	0	0	0	0	0	1	6	3	4	2	7	2	**IZS**	15	2	1	1	2	0	0	7	0	0	0	15	2.3	24
12	0	6	10	4	1	6	16	38	61	5	4	**IZS**	2	2	1	2	7	2	0	1	0	0	3	2	61	7.5	24
13	1	2	1	2	1	4	2	1	4	2	**IZS**	0	0	0	0	0	0	0	0	1	0	0	3	8	8	1.4	24
14	1	7	7	3	2	37	2	35	33	**IZS**	2	1	0	3	0	1	4	1	3	0	3	0	0	0	37	6.3	24
15	0	0	0	0	0	1	0	2	**IZS**	2	1	0	2	3	1	4	2	0	0	7	3	0	3	5	7	1.6	24
16	13	4	8	7	30	20	25	**IZS**	26	15	27	47	4	4	2	2	7	15	2	1	3	2	1	2	47	11.6	24
17	0	0	0	0	1	52	**IZS**	2	1	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	52	2.9	24
18	0	0	0	0	1	**IZS**	1	1	0	3	13	6	6	86	45	0	4	0	0	0	0	0	0	0	86	7.2	24
19	0	0	0	0	**IZS**	2	1	12	5	1	1	1	3	0	2	5	2	3	0	0	2	0	1	11	12	2.3	24
20	0	0	0	**IZS**	2	12	2	24	3	4	3	2	2	1	0	0	1	10	1	1	1	1	1	1	24	3.1	24
21	0	0	**IZS**	1	1	2	1	1	1	1	1	2	2	3	5	1	2	2	3	5	11	0	2	0	11	2.0	24
22	5	**IZS**	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2	3	1	1	1	9	0	0	9	1.1	24
23	**IZS**	1	0	1	1	6	2	4	2	2	2	6	6	8	1	1	2	0	1	0	0	3	1	**IZS**	8	2.3	24
24	0	0	0	0	3	24	1	5	1	1	1	2	1	1	0	6	3	2	17	2	1	3	**IZS**	0	24	3.2	24
25	0	0	0	0	3	14	0	2	5	1	0	3	12	7	6	1	2	9	13	34	13	**IZS**	1	1	34	5.5	24
26	2	2	0	0	2	56	6	3	1	1	2	2	21	1	2	1	0	1	7	6	**IZS**	1	1	0	56	5.1	24
27	0	0	0	0	0	3	2	3	2	2	2	1	1	0	1	0	0	0	0	**IZS**	0	0	4	32	32	2.3	24
28	5	6	14	23	35	17	12	8	9	1	1	1	2	2	0	0	2	0	**IZS**	5	3	0	1	1	35	6.4	24
29	1	2	0	1	3	**134**	49	70	4	7	6	0	4	2	21	12	1	**IZS**	1	1	1	3	3	0	**134**	14.2	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	**IZS**	0	0	0	0	0	0	1	3	0.2	24
31	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	1	0	2	2	0.3	24
HOURLY MAX	66	17	14	23	35	134	63	75	78	80	27	47	21	86	45	12	7	43	17	37	13	20	18	32			
HOURLY AVG	3.5	2.1	2.2	3.1	4.9	17.0	8.8	13.6	12.8	7.2	4.5	4.3	3.7	5.5	3.9	2.0	2.3	3.6	2.4	5.3	2.6	2.2	1.9	3.1			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	475					
MAXIMUM INSTANTANEOUS VALUE:	134	PPB	@ HOUR(S)	5	ON DAY(S)	29
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		742	HRS
MONTHLY CALIBRATION TIME:	7	HRS				
STANDARD DEVIATION	11.72					


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA
NOMAX
PPB

LICA
NO_ / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : NO_
Units : PPB

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	3.54	4.39	4.68	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	100.00
<	110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.54	4.39	4.68	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	

Calm : .00 %

Total # Operational Hours : 705

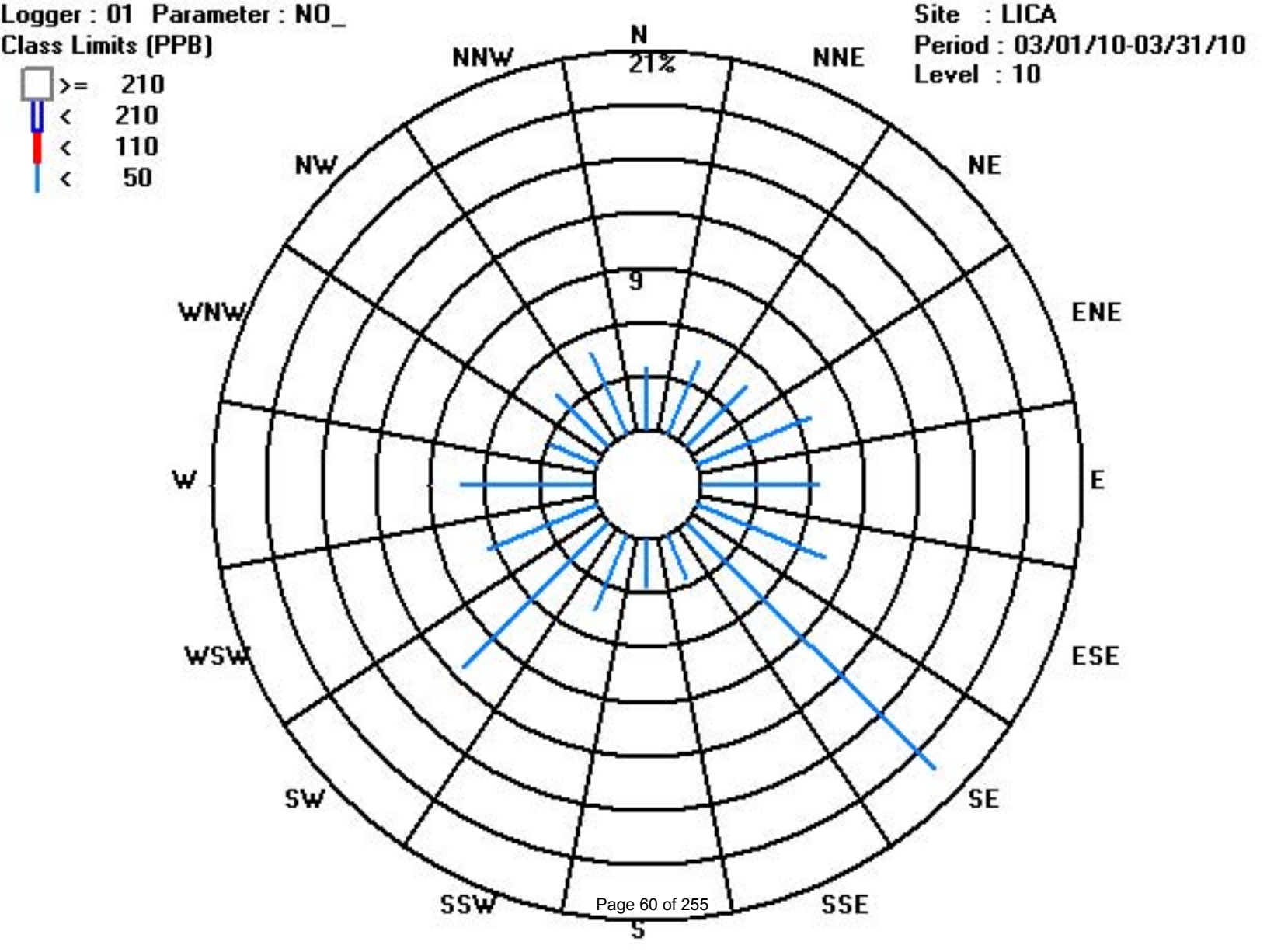
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	25	31	33	48	46	54	137	19	19	32	80	46	51	20	29	35	705
<	110																	
<	210																	
>=	210																	
	Totals	25	31	33	48	46	54	137	19	19	32	80	46	51	20	29	35	

Calm : .00 %

Total # Operational Hours : 705


Logger : 01 Parameter : NO_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9

Oxides of Nitrogen

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

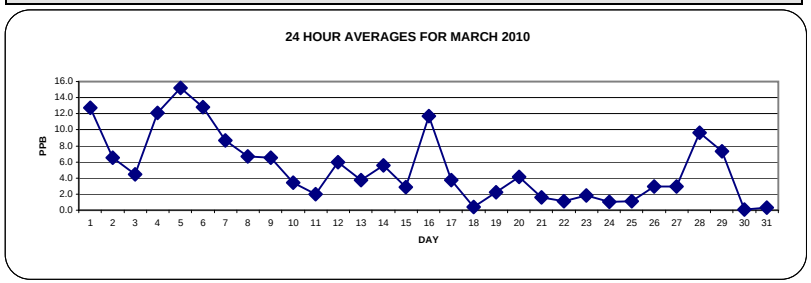
OXIDES OF NITROGEN hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	3	6	4	5	8	13	11	38	**69**	37	5	6	6	5	5	6	7	7	11	10	10	8	**IZS**	13	**69**	12.7	24
2	10	12	14	14	10	20	14	7	7	4	5	4	4	3	3	3	2	2	3	3	2	**IZS**	2	3	20	6.6	24
3	3	3	3	3	3	3	3	3	5	3	3	4	4	5	5	5	5	5	5	9	**IZS**	10	6	5	10	4.5	24
4	5	5	4	5	11	13	19	25	23	21	12	10	8	5	4	4	9	13	19	**IZS**	19	19	15	11	25	12.1	24
5	20	23	23	28	32	40	39	36	16	18	20	4	4	2	2	2	3	4	**IZS**	6	5	7	8	7	40	**15.2**	24
6	8	7	7	8	9	10	14	14	41	16	15	14	12	11	7	7	8	**IZS**	17	10	8	11	20	21	41	12.8	24
7	22	22	21	16	14	9	19	14	5	4	5	4	4	3	3	3	**IZS**	3	6	5	4	5	5	4	22	8.7	24
8	4	5	4	3	5	24	12	8	17	5	6	11	7	10	8	**IZS**	3	3	3	3	3	3	4	3	24	6.7	24
9	2	3	4	4	4	5	5	12	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	2	6	6	20	24	12	1	0	24	6.5	24
10	0	3	3	4	4	5	9	8	5	4	2	2	3	**IZS**	3	**M**	2	4	4	2	1	3	3	2	9	3.5	23
11	1	1	1	0	1	3	12	10	2	1	1	1	**IZS**	2	1	1	1	1	1	1	1	1	1	1	12	2.0	24
12	1	3	4	4	5	5	15	40	17	7	6	**IZS**	4	5	2	2	2	2	2	2	2	2	2	4	40	6.0	24
13	6	4	7	10	8	5	5	5	1	2	**IZS**	1	1	0	0	0	0	0	0	6	5	5	7	8	10	3.7	24
14	5	11	12	11	7	13	5	20	28	**IZS**	2	0	0	1	1	1	1	1	4	3	1	1	0	0	28	5.6	24
15	0	0	1	1	1	2	2	2	**IZS**	2	2	1	2	1	2	2	2	2	3	7	6	4	9	12	12	2.9	24
16	16	13	12	14	28	25	15	**IZS**	30	12	7	7	2	3	3	2	4	8	9	14	18	13	8	7	30	11.7	24
17	3	3	4	3	5	28	**IZS**	5	3	5	9	4	2	2	2	1	1	1	2	2	1	0	0	0	28	3.7	24
18	0	0	0	0	0	**IZS**	0	0	0	1	2	1	0	5	0	0	0	0	0	1	0	0	0	0	5	0.4	24
19	1	0	0	0	**IZS**	0	2	2	2	1	2	2	2	0	0	1	2	2	2	5	6	6	7	6	7	2.2	24
20	3	3	4	**IZS**	4	17	8	8	6	6	5	4	3	2	1	1	4	4	4	2	2	2	2	1	17	4.2	24
21	1	1	**IZS**	2	2	4	2	1	2	1	1	1	1	1	1	0	1	3	3	3	4	1	0	0	4	1.6	24
22	0	**IZS**	0	1	0	0	0	0	0	0	0	0	0	0	2	1	1	1	3	5	2	3	4	3	5	1.1	24
23	**IZS**	5	0	1	0	1	2	6	2	3	2	1	0	1	1	2	2	0	1	3	6	1	1	**IZS**	6	1.9	24
24	0	0	0	0	0	7	1	1	0	0	0	0	0	0	0	1	1	1	7	5	0	0	**IZS**	0	7	1.0	24
25	0	0	0	0	0	1	1	1	0	0	0	0	1	1	1	1	1	1	2	3	3	**IZS**	4	4	4	1.1	24
26	4	1	1	1	1	11	5	3	2	1	2	2	2	2	2	3	1	1	3	8	**IZS**	5	3	3	11	2.9	24
27	2	1	1	1	1	3	2	5	5	4	4	3	2	0	0	0	0	1	2	**IZS**	3	5	10	12	12	2.9	24
28	11	12	21	25	37	22	19	14	10	3	3	2	2	2	1	2	2	3	**IZS**	6	8	7	5	4	37	9.6	24
29	5	4	3	3	5	22	55	54	4	1	0	0	0	0	0	0	1	**IZS**	4	2	1	2	2	0	55	7.3	24
30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	**IZS**	0	0	0	0	0	0	0	1	0.1	24
31	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	1	2	2	0.3	24
HOURLY MAX	22	23	23	28	37	40	55	54	69	37	20	14	12	11	8	7	9	13	19	20	24	19	20	21			
HOURLY AVG	4.5	5.0	5.3	5.6	6.9	10.4	9.9	11.5	10.4	5.6	4.2	3.1	2.6	2.5	2.0	1.9	2.3	2.7	4.3	5.0	5.0	4.7	4.5	4.5			

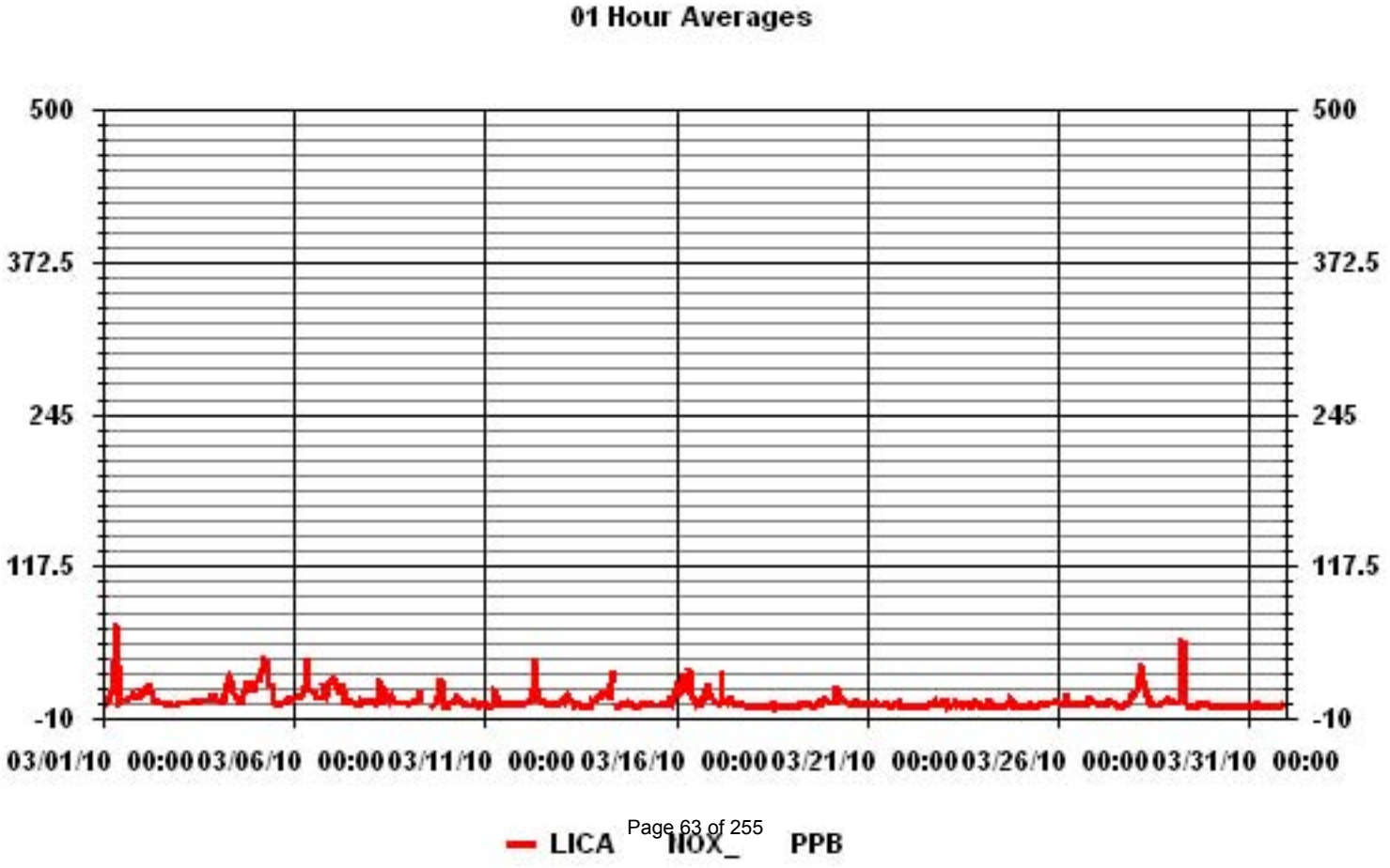
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	572						
MAXIMUM 1-HR AVERAGE:	69	PPB	@ HOUR(S)	8	ON DAY(S)	1	
MAXIMUM 24-HR AVERAGE:	15.2	PPB			ON DAY(S)	5	
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		743	HRS	
MONTHLY CALIBRATION TIME:	7	HRS	AMD OPERATION UPTIME:		99.9	%	
STANDARD DEVIATION:	7.55		MONTHLY AVERAGE:		5.21	PPB	


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA NOX_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

OXIDES OF NITROGEN MAX instantaneous maximum in ppb

MST

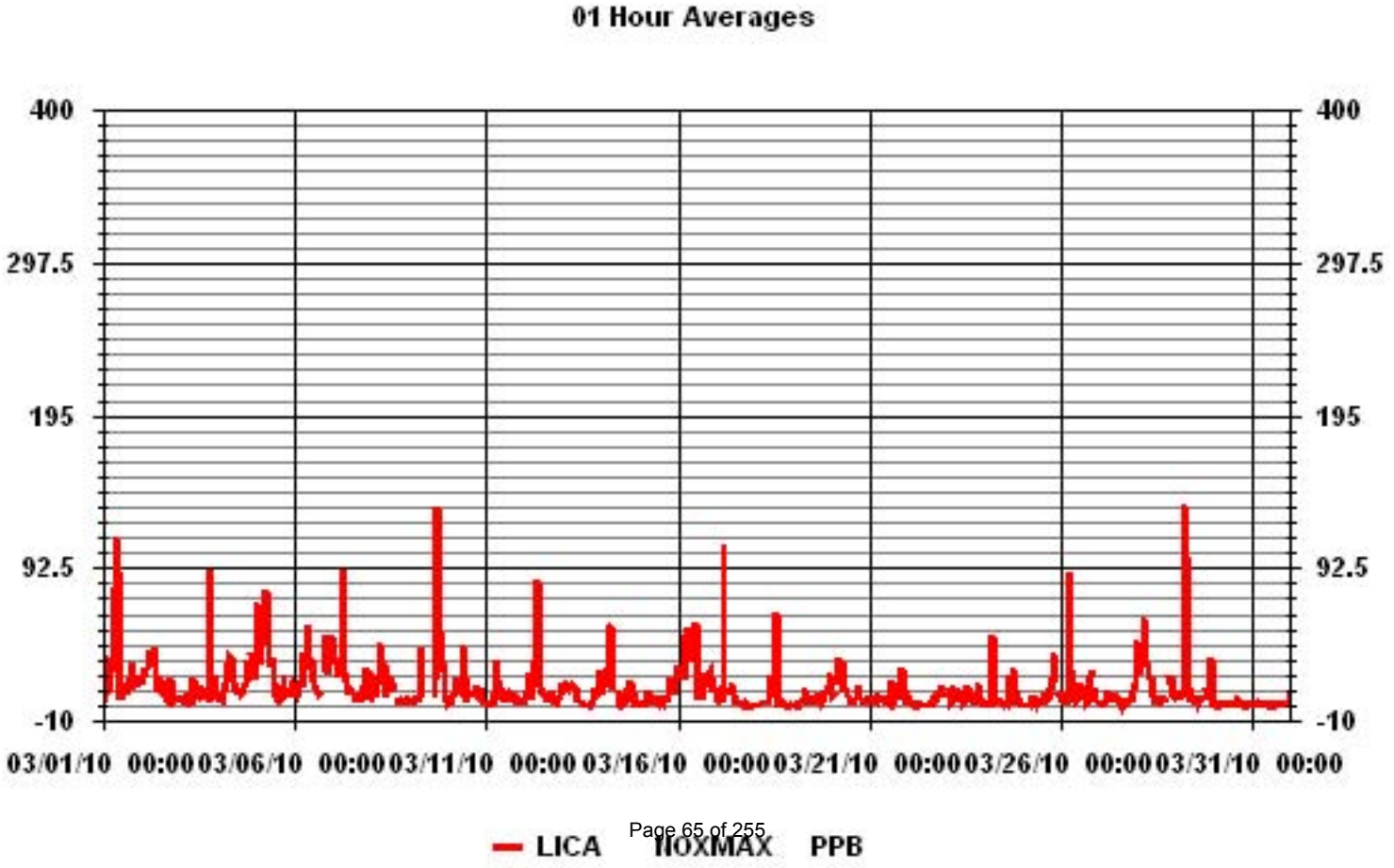
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	5	34	9	10	18	25	23	79	114	91	6	6	7	10	7	12	18	10	29	14	19	15	**IZS**	19	114	25.2	24
2	14	26	20	25	26	38	29	27	39	9	21	9	11	10	17	8	5	4	18	6	4	**IZS**	4	4	39	16.3	24
3	5	4	4	4	3	9	6	5	18	6	4	13	6	13	7	8	6	8	7	89	**IZS**	19	8	6	89	11.2	24
4	6	6	5	9	14	16	29	34	33	26	16	12	10	10	8	9	13	16	29	**IZS**	34	29	27	18	34	17.8	24
5	69	28	31	41	50	66	78	69	28	28	32	6	15	4	4	3	4	18	**IZS**	11	6	12	15	12	78	27.4	24
6	11	8	10	15	15	35	25	29	54	30	33	18	13	13	10	8	9	**IZS**	25	47	21	37	42	47	54	24.1	24
7	34	30	30	24	25	19	92	24	17	14	8	11	10	5	5	7	**IZS**	4	12	13	6	25	7	6	92	18.6	24
8	9	8	6	19	18	43	22	27	27	7	9	20	10	13	13	**IZS**	3	3	4	4	3	4	4	4	43	12.2	24
9	3	3	5	4	5	5	6	37	**C**	**C**	**C**	**C**	**C**	**C**	**C**	7	18	133	23	50	31	24	4	1	133	21.1	24
10	2	5	4	7	8	19	15	13	18	41	8	3	17	**IZS**	**M**	**M**	8	8	13	7	6	8	3	3	41	10.3	22
11	2	2	1	1	2	8	30	19	7	8	11	4	**IZS**	8	2	7	5	6	2	2	7	2	2	2	30	6.1	24
12	4	10	22	9	8	12	31	59	84	14	10	**IZS**	8	7	5	4	4	10	3	3	2	5	7	16	84	14.7	24
13	12	9	16	14	12	14	12	12	12	4	**IZS**	3	1	1	1	1	2	1	4	11	8	10	14	23	23	8.6	24
14	8	22	23	15	13	54	10	52	51	**IZS**	8	2	1	4	2	3	11	5	17	11	9	2	1	1	54	14.1	24
15	1	1	2	1	2	10	4	3	**IZS**	4	4	2	5	4	2	5	5	3	11	18	13	7	18	19	19	6.3	24
16	27	19	19	19	47	39	50	**IZS**	45	29	44	56	5	8	6	6	12	22	13	22	24	20	12	11	56	24.1	24
17	5	4	8	7	13	106	**IZS**	10	8	14	14	8	3	3	3	2	2	1	3	2	2	0	1	0	106	9.5	24
18	0	0	0	1	3	**IZS**	2	2	2	10	20	8	8	61	61	0	3	0	0	2	1	0	1	1	61	8.1	24
19	1	2	2	0	**IZS**	4	5	10	9	2	4	4	7	1	3	9	6	9	4	6	9	10	13	22	22	6.2	24
20	6	7	8	**IZS**	16	32	16	31	9	12	7	5	4	3	3	4	9	14	7	4	3	4	5	3	32	9.2	24
21	3	3	**IZS**	6	4	8	5	6	5	3	3	6	3	2	17	2	4	7	9	11	25	4	12	1	25	6.5	24
22	6	**IZS**	1	2	1	1	0	1	1	0	0	0	0	1	3	2	5	5	8	9	6	14	7	7	14	3.5	24
23	**IZS**	10	2	3	14	7	6	12	6	6	3	5	5	14	3	5	8	2	4	5	15	7	3	**IZS**	15	6.6	24
24	1	1	1	1	5	47	2	7	2	2	3	3	1	2	1	21	3	4	25	11	0	4	**IZS**	0	47	6.4	24
25	0	0	0	0	2	7	2	3	6	1	3	3	6	6	6	4	5	11	18	35	17	**IZS**	8	6	35	6.5	24
26	10	7	2	2	4	90	26	9	5	3	4	5	16	5	7	8	2	3	20	23	**IZS**	11	5	3	90	11.7	24
27	2	2	1	2	3	10	6	7	7	5	6	4	4	1	4	0	1	2	4	**IZS**	5	10	16	44	44	6.3	24
28	23	23	32	39	59	30	28	20	19	7	4	3	4	4	2	3	7	4	**IZS**	19	15	16	8	6	59	16.3	24
29	8	7	6	7	10	**135**	84	99	13	5	5	1	7	2	4	4	4	**IZS**	11	4	7	33	31	1	**135**	21.2	24
30	1	1	0	1	1	1	1	1	1	1	1	1	1	1	6	1	**IZS**	1	1	0	1	1	1	2	6	1.2	24
31	2	1	2	3	3	2	2	1	1	1	2	1	0	1	1	**IZS**	2	1	2	1	2	2	2	8	8	1.9	24
HOURLY MAX	69	34	32	41	59	135	92	99	114	91	44	56	17	61	61	21	18	133	29	89	34	37	42	47			
HOURLY AVG	9.3	9.4	9.1	9.7	13.5	29.7	21.6	23.6	22.1	13.2	10.1	7.7	6.5	7.5	7.3	5.5	6.3	10.9	11.2	15.2	10.4	11.6	9.7	9.9			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	679					
MAXIMUM INSTANTANEOUS VALUE:	135	PPB	@ HOUR(S)	5	ON DAY(S)	29
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		742	HRS
MONTHLY CALIBRATION TIME:	7	HRS				
STANDARD DEVIATION	16.80					


01 Hour Averages
400
297.5
195
92.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA
NOXMAX
PPB

LICA
NOX_ / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : NOX_
Units : PPB

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	3.54	4.39	4.53	6.66	6.52	7.65	19.29	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	99.57
<	110	.00	.00	.14	.14	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.42
<	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.54	4.39	4.68	6.80	6.52	7.65	19.43	2.69	2.69	4.53	11.34	6.52	7.23	2.83	4.11	4.96	

Calm : .00 %

Total # Operational Hours : 705

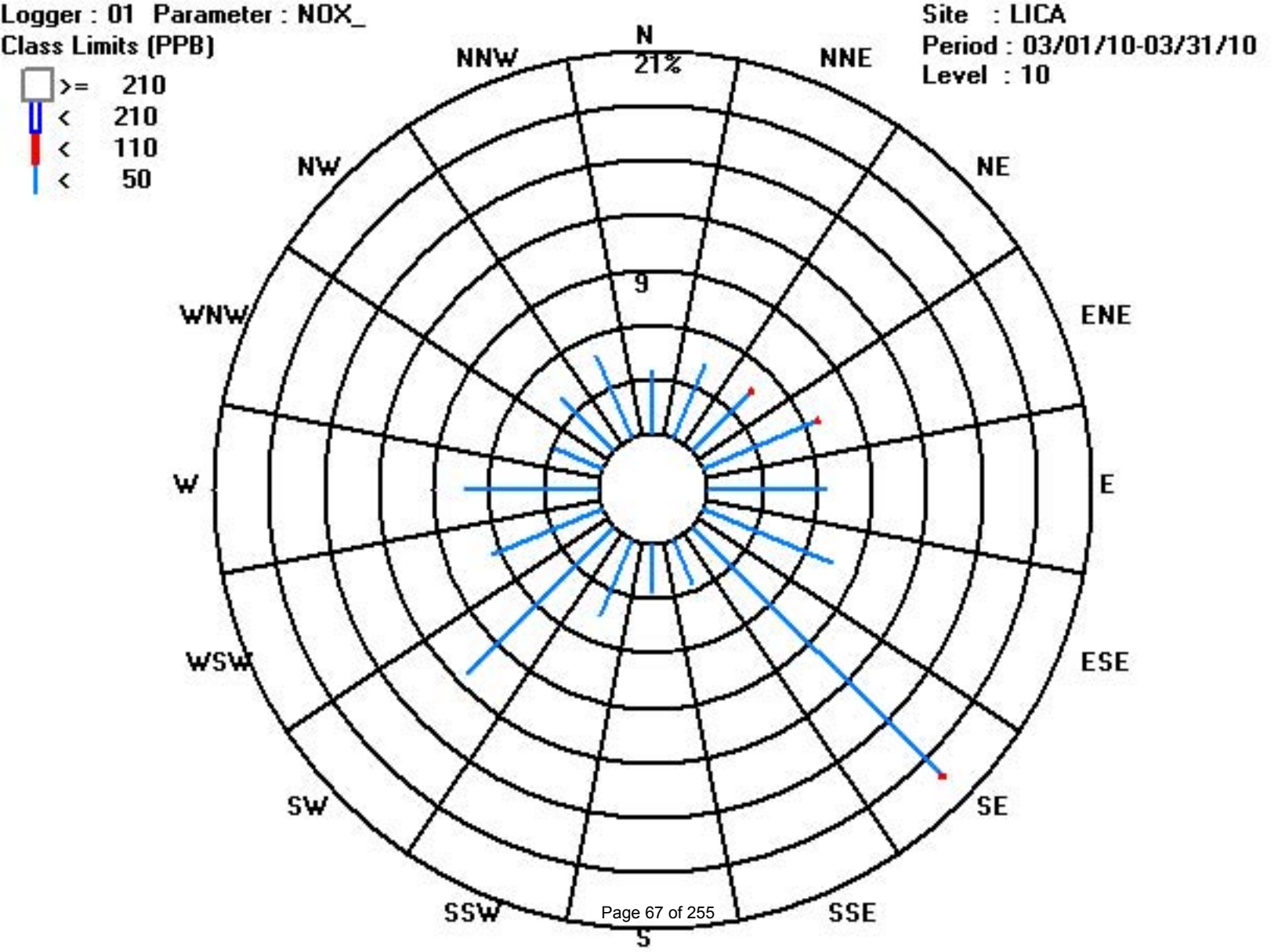
Distribution By Samples

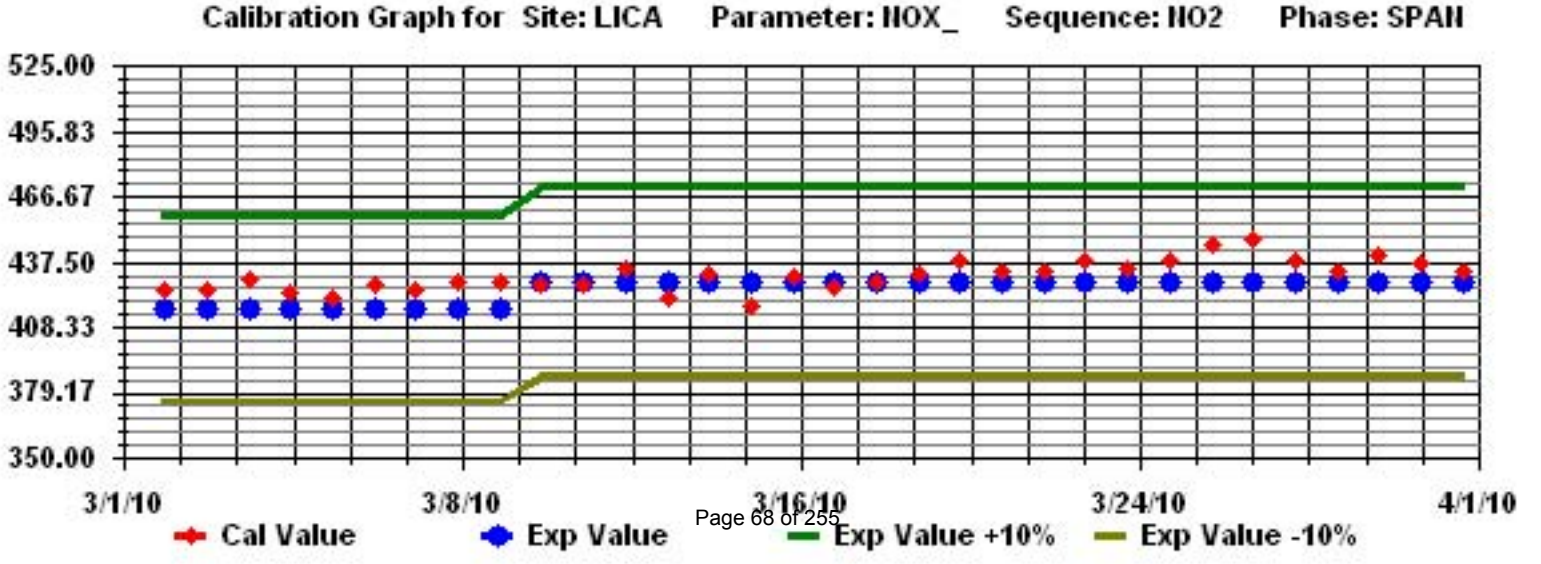
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	25	31	32	47	46	54	136	19	19	32	80	46	51	20	29	35	702
<	110			1	1			1										3
<	210																	
>=	210																	
	Totals	25	31	33	48	46	54	137	19	19	32	80	46	51	20	29	35	

Calm : .00 %

Total # Operational Hours : 705


Logger : 01 Parameter : NOX_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA Parameter: NOX_ Sequence: NO2 Phase: SPAN
525.00
495.83
466.67
437.50
408.33
379.17
350.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Ozone

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

OZONE (O_3) hourly averages in ppb

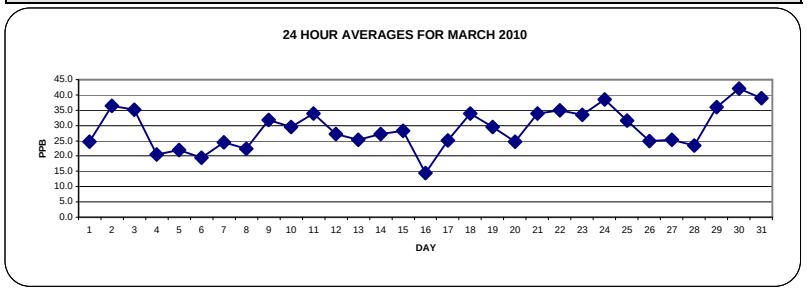
MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	17	13	14	15	11	8	7	2	4	21	36	37	39	43	44	42	40	40	31	28	24	29	**IZS**	23	44	24.7	24
2	28	20	15	19	19	13	29	38	39	41	40	41	42	45	47	47	47	46	45	44	45	**IZS**	44	43	47	36.4	24
3	43	43	41	40	40	40	39	38	37	37	37	37	36	36	36	35	36	36	34	30	**IZS**	17	21	20	43	35.2	24
4	22	18	16	15	11	8	4	2	6	14	25	32	36	40	41	42	39	34	24	**IZS**	13	9	11	12	42	20.6	24
5	5	2	0	1	0	0	0	2	8	18	24	35	41	46	46	46	46	45	**IZS**	40	37	26	17	19	46	21.9	24
6	24	21	14	8	5	3	1	5	5	14	19	27	29	32	40	41	37	**IZS**	20	31	33	22	9	8	41	19.5	24
7	4	4	2	2	4	15	10	12	23	25	28	33	37	41	44	44	**IZS**	41	34	34	36	34	31	23	44	24.4	24
8	22	18	11	9	5	1	11	19	12	18	16	15	19	20	25	**IZS**	39	38	38	37	36	36	34	37	39	22.4	24
9	38	37	36	34	34	33	31	25	25	35	38	39	41	42	**IZS**	**C**	**C**	**C**	31	13	7	20	37	41	42	31.9	24
10	41	36	34	32	32	31	28	27	32	33	34	34	33	**IZS**	31	M	28	26	25	26	24	19	20	23	41	29.5	23
11	26	32	35	37	36	30	24	24	33	35	38	39	**IZS**	39	40	41	39	36	35	34	34	33	32	30	41	34.0	24
12	25	19	14	20	19	14	5	3	15	24	27	**IZS**	36	31	41	43	42	42	39	37	35	34	33	29	43	27.3	24
13	23	26	16	11	9	7	10	20	28	34	**IZS**	40	40	41	41	40	41	40	38	26	18	15	11	6	41	25.3	24
14	8	5	3	3	7	5	9	5	12	**IZS**	36	40	43	42	43	43	44	43	38	38	40	40	39	38	44	27.1	24
15	38	37	36	35	34	32	32	32	**IZS**	33	34	34	32	32	32	32	31	30	27	19	15	12	6	3	38	28.2	24
16	1	1	1	1	1	2	6	**IZS**	6	14	18	19	27	29	28	30	31	28	26	18	7	10	12	18	31	14.5	24
17	25	23	19	24	22	13	**IZS**	25	26	23	16	19	22	23	24	27	29	29	29	28	29	31	35	35	35	25.0	24
18	35	33	33	33	33	**IZS**	33	33	33	33	33	33	33	33	34	35	36	36	35	33	35	36	35	36	36	34.0	24
19	33	32	32	35	**IZS**	33	35	34	34	33	32	31	31	32	32	31	31	30	29	26	24	20	15	13	35	29.5	24
20	14	9	8	**IZS**	10	2	5	14	19	23	26	29	32	37	40	40	37	36	33	31	29	30	30	32	40	24.6	24
21	34	35	**IZS**	34	35	32	35	37	35	35	35	35	35	36	37	37	36	34	33	31	29	30	31	31	37	34.0	24
22	28	**IZS**	28	27	33	35	35	34	35	36	37	38	39	39	38	39	40	40	37	35	37	35	31	27	40	34.9	24
23	**IZS**	27	35	36	35	34	31	29	30	31	32	33	35	36	36	36	37	37	37	33	25	35	35	**IZS**	37	33.4	24
24	38	40	40	39	40	40	40	40	39	39	39	39	39	39	39	39	38	39	34	34	38	38	**IZS**	37	40	38.6	24
25	39	38	38	37	36	35	34	34	34	34	35	35	34	33	31	29	27	27	27	27	25	**IZS**	16	21	39	31.6	24
26	23	25	26	25	25	20	18	21	24	25	25	28	30	32	31	32	33	32	26	17	**IZS**	13	21	21	33	24.9	24
27	23	25	24	21	12	8	11	13	14	19	25	29	35	43	45	45	45	41	38	**IZS**	27	19	13	8	45	25.3	24
28	8	6	1	1	0	1	2	9	17	31	34	39	39	40	43	42	40	35	**IZS**	30	25	27	33	34	43	23.3	24
29	27	30	32	27	24	13	2	10	36	42	46	49	50	**51**	49	48	44	**IZS**	38	38	39	40	45	47	**51**	36.0	24
30	44	37	37	37	39	41	43	45	45	44	43	44	47	45	44	45	**IZS**	44	44	41	41	41	39	39	47	**42.1**	24
31	38	39	38	37	36	36	36	36	37	38	40	41	43	42	43	**IZS**	44	42	42	41	39	36	37	35	44	39.0	24
HOURLY MAX	44	43	41	40	40	41	43	45	45	44	46	49	50	51	49	48	47	46	45	44	45	41	45	47			
HOURLY AVG	25.8	24.4	22.6	23.2	21.6	19.5	20.2	22.3	24.8	29.4	31.6	34.1	35.8	37.3	38.2	38.9	37.8	36.7	33.3	31.0	29.2	27.1	26.7	26.3			

STATUS FLAG CODES

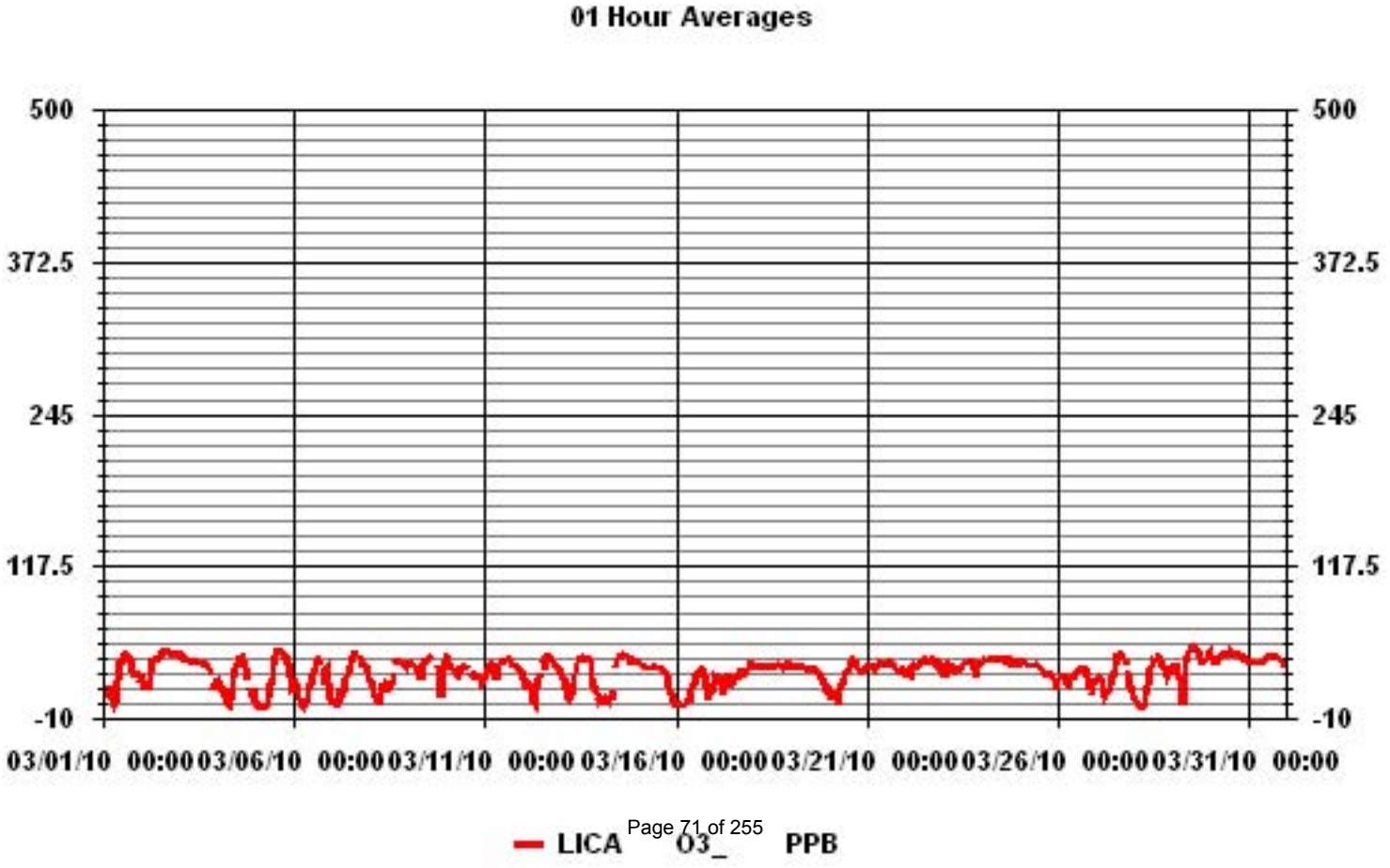
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 82 PPB



MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	703					
MAXIMUM 1-HR AVERAGE:	51	PPB	@ HOUR(S)	13	ON DAY(S)	29
MAXIMUM 24-HR AVERAGE:	42.1	PPB			ON DAY(S)	30
					VAR-VARIOUS	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	3	HRS	AMD OPERATION UPTIME		99.9	%
STANDARD DEVIATION	11.97		MONTHLY AVERAGE		28.98	PPB


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA O3_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

OZONE MAX instantaneous maximum in ppb

MST

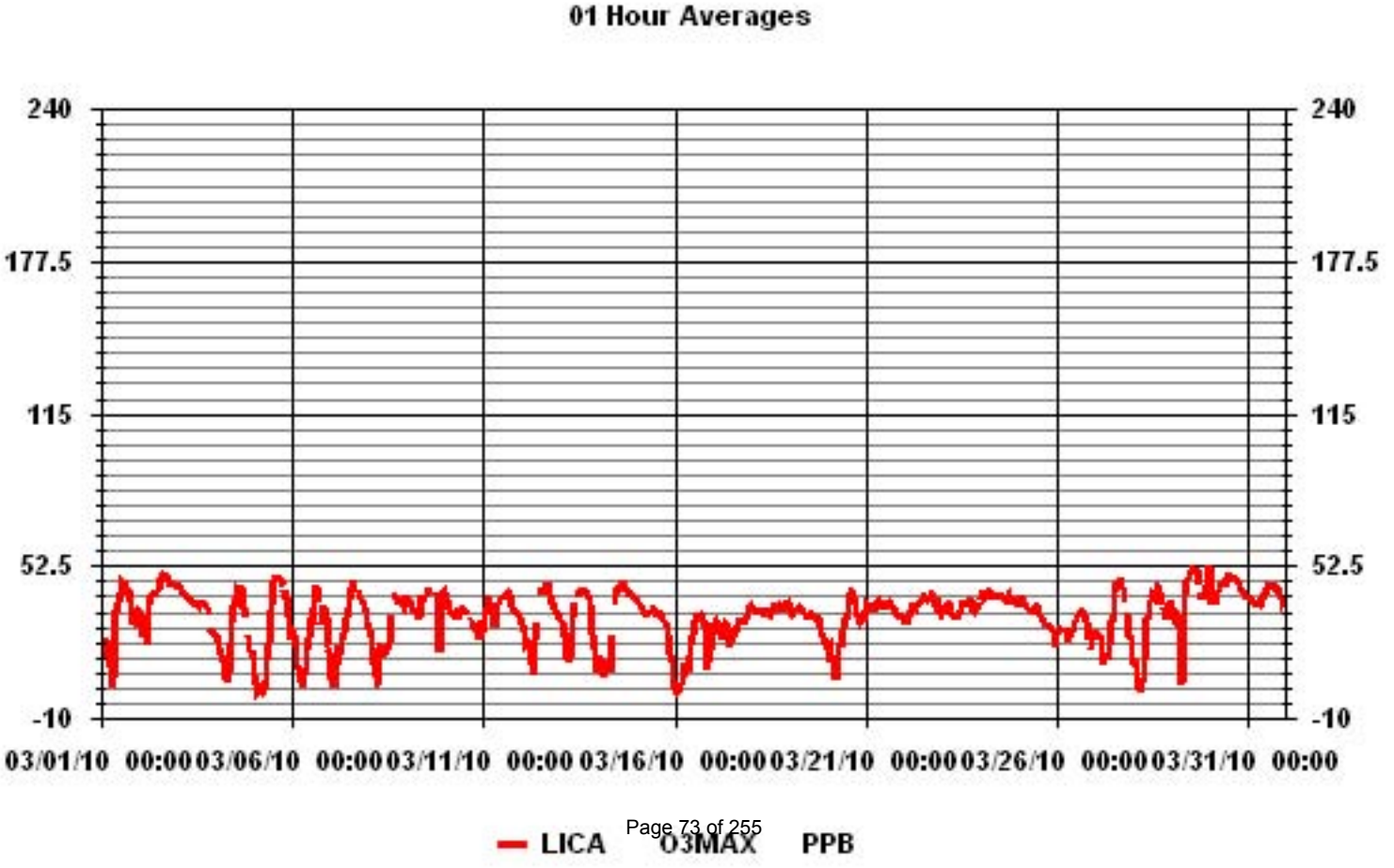
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	21	17	18	23	15	15	12	3	7	34	37	38	41	46	45	45	42	42	39	33	28	34	**IZS**	29	46	28.9	24
2	34	33	23	26	24	20	37	40	41	41	41	42	43	47	49	48	48	48	47	45	45	**IZS**	45	44	49	39.6	24
3	44	44	42	41	41	40	40	39	38	38	37	37	37	36	37	37	37	37	36	34	**IZS**	26	25	25	44	36.9	24
4	24	22	20	17	14	10	7	5	9	21	29	36	39	43	42	43	43	36	33	**IZS**	23	18	16	16	43	24.6	24
5	8	5	1	2	3	1	2	5	14	21	34	37	46	47	47	47	47	46	**IZS**	42	40	32	23	24	47	25.0	24
6	26	25	20	12	11	6	3	8	9	18	23	30	30	35	43	43	39	**IZS**	30	35	35	32	20	18	43	24.0	24
7	7	6	3	9	12	20	16	22	25	26	31	35	39	43	45	45	**IZS**	42	40	38	38	36	35	30	45	28.0	24
8	27	24	16	13	8	3	19	21	17	18	17	18	20	21	31	**IZS**	40	40	38	38	38	37	36	39	40	25.2	24
9	39	38	38	36	35	34	32	32	31	39	39	40	42	42	**IZS**	**C**	**C**	**C**	40	23	17	35	42	43	43	35.9	24
10	42	39	36	34	33	33	32	32	34	34	35	35	34	**IZS**	**M**	**M**	30	28	27	28	26	23	23	25	42	31.6	22
11	30	35	39	39	38	33	29	29	35	37	39	40	**IZS**	40	41	42	41	37	36	35	34	34	33	32	42	36.0	24
12	29	26	21	22	21	19	13	8	22	28	28	**IZS**	42	42	44	44	44	44	41	38	36	35	34	32	44	31.0	24
13	31	30	24	15	15	13	15	25	31	36	**IZS**	41	41	42	42	42	42	41	40	37	25	19	16	9	42	29.2	24
14	14	14	9	7	10	11	14	9	23	**IZS**	38	43	44	43	44	45	45	44	43	41	41	41	40	39	45	30.5	24
15	39	38	36	36	34	33	33	33	**IZS**	34	35	35	33	33	33	33	32	31	30	28	25	17	14	6	39	30.5	24
16	3	1	2	2	4	7	12	**IZS**	10	16	20	24	30	33	29	32	33	32	29	29	10	13	18	26	33	18.0	24
17	28	29	24	30	27	24	**IZS**	26	29	28	19	21	23	24	26	28	30	30	30	30	31	32	36	37	37	27.9	24
18	36	35	35	34	34	**IZS**	34	33	33	34	34	33	35	36	35	36	36	37	36	34	36	37	36	37	37	35.0	24
19	35	33	34	35	**IZS**	35	36	35	35	34	32	32	32	33	33	32	32	31	31	28	25	24	21	19	36	31.2	24
20	20	14	14	**IZS**	15	6	9	20	20	26	28	31	33	40	41	43	38	38	34	33	30	31	31	34	43	27.3	24
21	37	36	**IZS**	35	37	34	37	38	36	36	37	36	36	37	37	38	37	36	34	33	32	32	32	32	38	35.4	24
22	30	**IZS**	30	32	34	36	36	35	36	37	38	39	40	40	39	40	41	41	40	37	38	38	34	32	41	36.7	24
23	**IZS**	34	36	37	37	35	33	32	32	32	33	34	37	37	37	37	37	38	38	35	34	36	36	**IZS**	38	35.3	24
24	40	42	40	41	41	43	41	40	40	40	40	40	40	40	40	39	40	41	37	39	39	38	**IZS**	37	43	39.9	24
25	39	39	39	38	37	36	35	34	34	35	36	36	34	33	32	31	28	28	28	28	27	**IZS**	20	25	39	32.7	24
26	25	27	27	26	26	26	21	23	26	26	27	30	32	33	33	34	34	33	30	24	**IZS**	20	23	23	34	27.3	24
27	25	25	25	24	18	12	15	15	17	20	30	32	42	45	46	46	46	44	39	**IZS**	32	24	23	12	46	28.6	24
28	13	12	5	3	1	5	6	14	31	32	38	41	40	42	44	44	42	38	**IZS**	34	30	33	37	38	44	27.1	24
29	31	34	34	30	29	27	4	32	41	46	47	50	51	51	50	50	46	**IZS**	40	40	41	44	48	51	51	39.9	24
30	51	38	38	38	41	42	44	45	46	45	45	46	49	47	47	47	**IZS**	47	46	43	42	42	40	40	51	43.9	24
31	39	39	39	38	37	37	38	37	38	39	41	43	44	44	44	**IZS**	45	43	43	42	40	37	38	38	45	40.1	24
HOURLY MAX	51	44	42	41	41	43	44	45	46	46	47	50	51	51	50	50	48	48	47	45	45	44	48	51			
HOURLY AVG	28.9	27.8	25.6	25.8	24.4	23.2	23.5	25.7	28.0	31.7	33.6	35.8	37.6	39.2	39.9	40.4	39.1	38.3	36.4	34.6	32.3	31.0	30.2	29.7			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	707					
MAXIMUM INSTANTANEOUS VALUE:	51	PPB	@ HOUR(S)	23, 0	ON DAY(S)	29, 30
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		742	HRS
MONTHLY CALIBRATION TIME:	3	HRS				
STANDARD DEVIATION	10.90					


01 Hour Averages
240
177.5
115
52.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA O3MAX PPB

LICA
O3_ / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : O3_
Units : PPB

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	3.53	4.51	4.80	6.77	6.49	7.62	19.06	2.68	2.68	4.51	11.29	6.63	7.20	2.82	4.09	4.94	99.71
<	110	.00	.00	.00	.00	.00	.00	.28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.28
<	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.53	4.51	4.80	6.77	6.49	7.62	19.35	2.68	2.68	4.51	11.29	6.63	7.20	2.82	4.09	4.94	

Calm : .00 %

Total # Operational Hours : 708

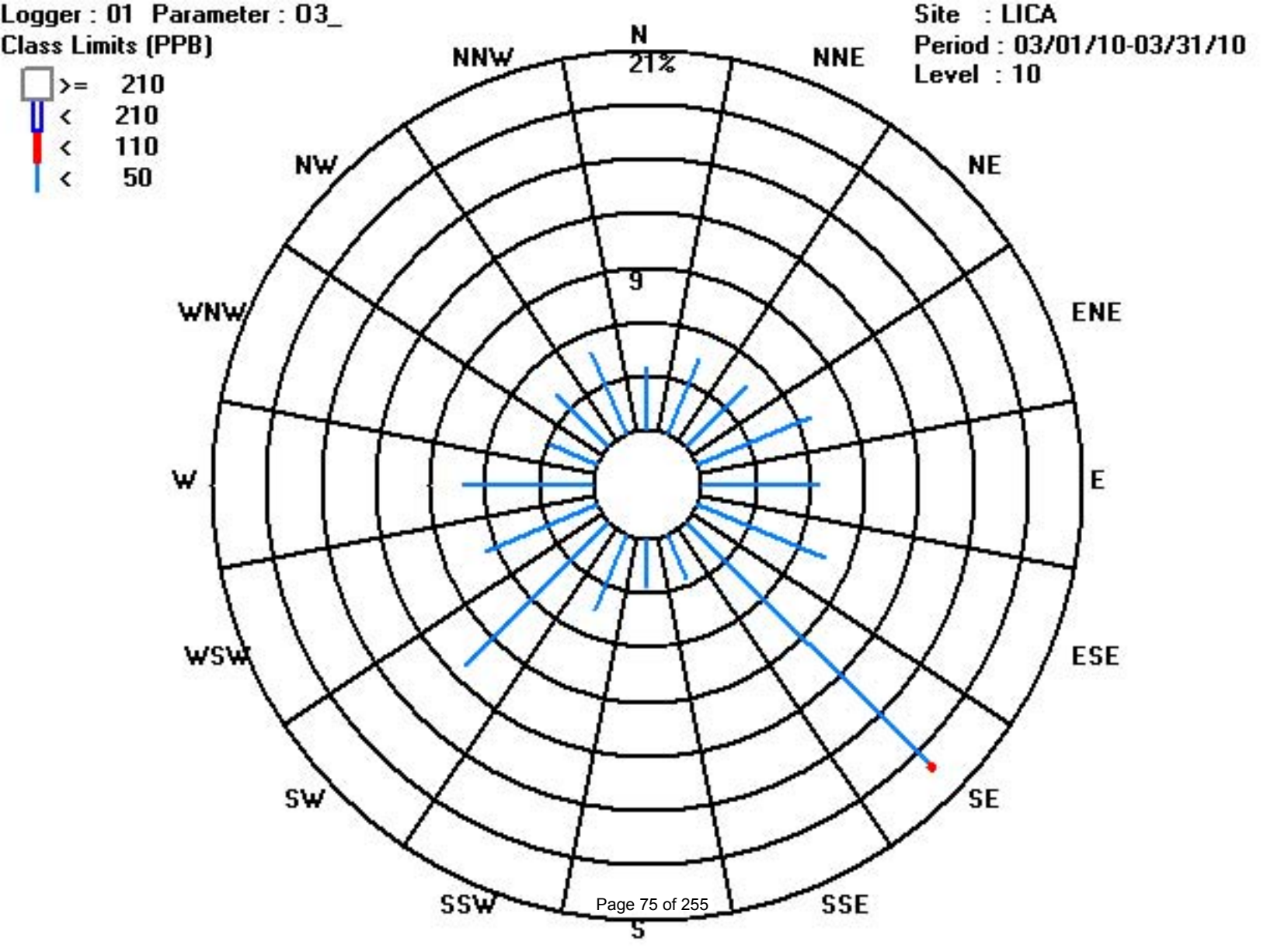
Distribution By Samples

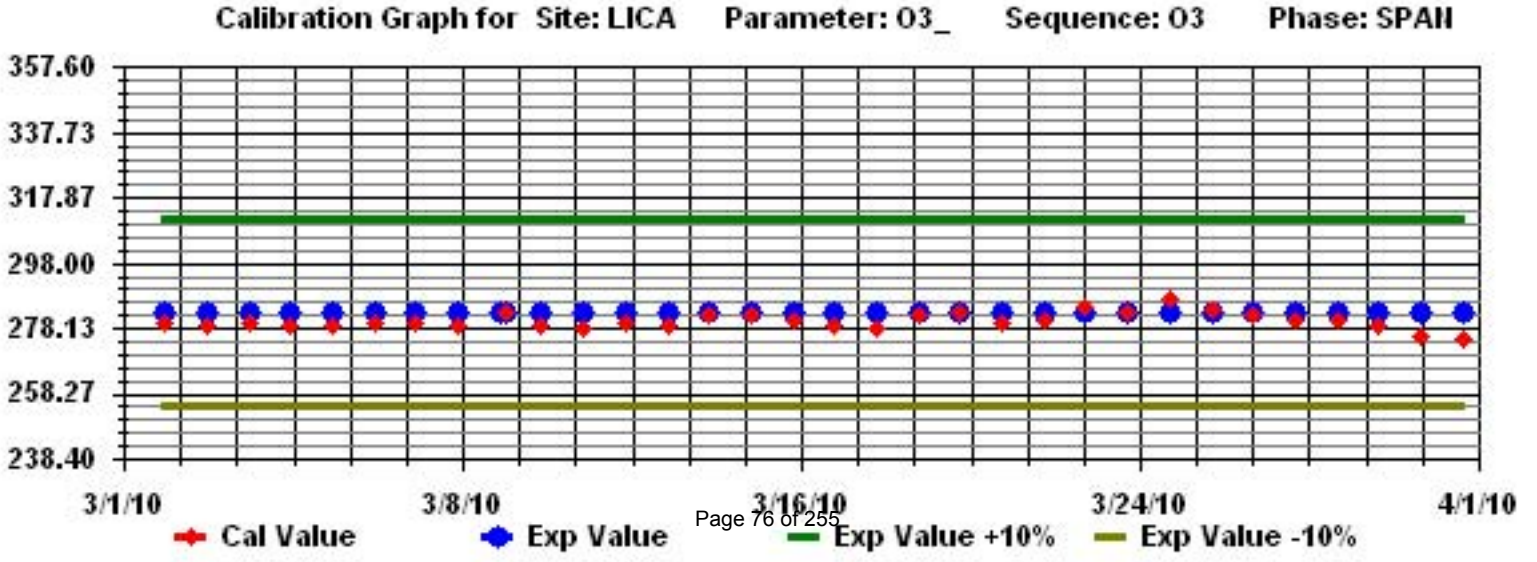
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	25	32	34	48	46	54	135	19	19	32	80	47	51	20	29	35	706
<	110							2										2
<	210																	
>=	210																	
	Totals	25	32	34	48	46	54	137	19	19	32	80	47	51	20	29	35	

Calm : .00 %

Total # Operational Hours : 708


Logger : 01 Parameter : 03_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA Parameter: O3_ Sequence: O3 Phase: SPAN
357.60
337.73
317.87
298.00
278.13
258.27
238.40
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Ambient Temperature

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

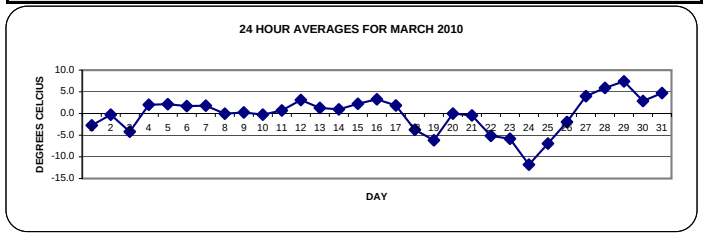
AMBIENT TEMPERATURE hourly averages (Degrees C)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	-8.4	-9.2	-10.1	-10.6	-10.8	-11.1	-11.4	-11.5	-8.6	-5	-1.4	0.9	3.8	5.8	6.5	6.6	7.4	6.1	2.9	0.5	-1.4	-1.4	-2.1	-3.1	7.4	-2.7	24
2	-3.4	-4.5	-6.2	-6.1	-7.5	-8.8	-5.9	-5.1	-3.9	-2	0.1	2.4	5.4	7.1	7	6.9	6.3	5.2	3.8	2.7	1.6	0.6	-0.6	-1.8	7.1	-0.3	24
3	-2.6	-3.7	-4.8	-5.5	-5.9	-6.2	-6.2	-6.1	-6.1	-5.7	-5.1	-4.6	-3.9	-3.1	-2.7	-2.5	-2.6	-2.6	-2.3	-2.6	-3.7	-4.4	-4	-3.7	-2.3	-4.2	24
4	-3.7	-3.6	-3.4	-2.9	-1.9	-2.1	-1.7	-2	-1.3	0.8	4.8	7.9	8.8	10	10.4	9.8	8.4	6.8	3.7	1.7	0.7	0	-0.9	-1.8	10.4	2.0	24
5	-2.6	-2.7	-3.4	-4	-4.2	-4.6	-5.4	-5.4	-2.1	2.2	4.8	7.3	9.7	10.7	11.8	11.5	10.8	9	5.5	3.6	2.4	0	-1.5	-1.7	11.8	2.2	24
6	-1.3	-1.7	-2.9	-4	-4.8	-5.5	-6.1	-6.1	-2.3	1.2	3.4	6.2	8.6	9.9	10.9	10.8	10.4	8.7	4.2	3.3	2.4	0	-1.8	-2.5	10.9	1.7	24
7	-3.1	-3.6	-4.2	-4.8	-5.3	-3.1	-4.6	-5.3	-0.6	0.6	3.2	5.8	8.1	10.1	10.7	11	10.2	8.4	5.1	3.2	2.3	0.9	0	-1.6	11.0	1.8	24
8	-1.9	-2.4	-3.5	-4.3	-5	-5.6	-6	-5.3	-4	-3.1	-2.3	-1.3	0.3	4	7.6	9.8	8.8	6.6	3.5	1.8	0.9	0.3	-0.2	0.3	9.8	0.0	24
9	0.1	-0.2	-0.9	-1.7	-1.9	-2.6	-3.6	-4.2	-2.4	-0.1	0.1	1.5	2.6	3	3.5	3.9	3.5	3.1	1.1	-0.3	-0.2	0	0.9	0.8	3.9	0.3	24
10	-0.3	-1	-1.5	-2	-1.8	-1.7	-1.7	-1.6	-1.2	-0.8	-0.3	0	0.4	0.8	0.9	1.2	1.1	1	0.6	0.3	0.4	0.4	0.4	0.2	1.2	-0.3	24
11	0	-0.2	-0.7	-1.1	-1.7	-2.8	-3.4	-3.1	-1.6	-0.3	1.5	2.6	3.7	4.7	5	5	4.3	3	1.7	1.1	0.4	0	-0.5	-0.9	5.0	0.7	24
12	-2	-2.9	-3.9	-3.2	-3.2	-4.3	-5.7	-5.3	-0.5	2.1	4.4	6.4	9	7.4	10.6	11.7	10.8	9.7	7.5	6.2	5.5	5.1	4.9	4.3	11.7	3.1	24
13	2.2	2.6	0.6	-0.7	-1	-2	-2.4	-1.1	0.9	3.1	5.5	6.1	6	5.9	5.1	4.4	4.5	4	2.6	-0.6	-2.2	-3.3	-4.3	-5.1	6.1	1.3	24
14	-6.2	-6.4	-7.2	-7.6	-8.1	-8.5	-9	-6.6	-0.5	2	5.1	7	8	8.5	9.1	9.2	8.9	7.7	5.3	3.7	3.1	2.7	1.9	0.8	9.2	1.0	24
15	0.5	-0.1	-0.6	-0.7	-1	-1.1	-0.9	-0.1	0.8	2.8	4.2	5.4	5.3	6.1	7.4	8.2	8.2	7.8	5.3	2	0	-1.2	-2	-2.7	8.2	2.2	24
16	-3.2	-3.6	-3.9	-4	-3.8	-2.7	-2.9	-2.5	-0.9	1.7	3.3	5.4	10.4	10.7	9.9	12.6	13.2	12.8	8	5.6	3.3	2.5	2.8	4	13.2	3.3	24
17	5.2	4.3	3.3	3.5	2.5	2	3.4	3.4	3.5	3.3	2.9	2	1.3	1.8	0.9	0.3	0.4	0.4	0.5	0.4	0.4	0.3	-0.5	-1.1	5.2	1.9	24
18	-1.4	-1.9	-2.3	-2.6	-2.8	-3	-3.4	-4.1	-4.1	-4	-3.8	-3.6	-3.3	-3	-3.1	-3.3	-3.5	-3.8	-4.4	-4.8	-5.2	-5.9	-6.1	-6.6	-1.4	-3.8	24
19	-7.4	-8.3	-9.3	-9.7	-10.4	-10.2	-10	-9.7	-8.9	-8.1	-6.7	-6	-4.9	-3.5	-2.8	-2	-1.6	-1.7	-2.6	-3.3	-3.6	-4.7	-6.4	-6.5	-1.6	-6.2	24
20	-7.2	-6.9	-6.9	-6.1	-5	-4.2	-4.1	-2.7	-0.7	1	2.7	4.5	5.3	5.8	6.2	6	5.5	3.6	2.2	1.3	1	0.2	-0.6	-1.4	6.2	0.0	24
21	-1.8	-2.5	-3.1	-3.7	-3.7	-3.8	-4.2	-4	-3.1	-1.8	-0.9	0.8	1.5	2.3	3.2	3.7	3.4	3	2.3	1.4	0.3	0	0.1	0.1	3.7	-0.4	24
22	0	0.2	0.4	-0.1	-3.4	-5.9	-7.5	-9.1	-8.8	-8.2	-7.3	-6.3	-5.5	-4.3	-3.6	-3.2	-3.1	-4.2	-4.8	-5.9	-7.2	-8	-8.6	-9.5	0.4	-5.2	24
23	-10.2	-9.8	-8.9	-8.8	-9.1	-9.5	-9.1	-8.4	-8	-6.4	-4.7	-3.5	-2.9	-2.7	-2	-2	-2.2	-2	-2.6	-3.9	-4.8	-5.6	-6.3	-6.2	-2.0	-5.8	24
24	-6.6	-7.6	-9.4	-11.6	-13.2	-15	-15.9	-16.5	**-16.8**	-16.3	-15.4	-14.4	-13.1	-11.8	-10.8	-10	-9.3	-8.7	-9.9	-10.1	-10	-10.1	-10.2	-10.6	-6.6	-11.8	24
25	-10.5	-10.5	-10.3	-10.2	-10.1	-10	-9.9	-9.6	-9.3	-8.8	-7.8	-7.1	-6.3	-5.5	-4.5	-3.2	-2.8	-2.9	-3.1	-3.3	-4.2	-5.4	-6.2	-5.1	-2.8	-6.9	24
26	-4.4	-4	-4.1	-4.2	-4.4	-4.8	-4.7	-4	-2.9	-1.8	-1.4	-0.9	-0.6	0.2	0.8	1.2	1	1.2	0.5	-1.7	-2.8	-3.1	-1.5	-0.6	1.2	-2.0	24
27	-0.3	0	0	-0.3	-1.9	-2.7	-2.2	-0.2	1.9	4.3	6.3	7.9	9.3	10.6	11.4	11.3	11.8	11.3	9.3	5.9	3.4	0.9	-0.4	-1.6	11.8	4.0	24
28	-2.3	-2.7	-2.9	-3.2	-3.5	-3.6	-2.9	0	3.4	6.6	9	11.6	13.3	14.2	**15.1**	14.3	13.7	12.5	10.9	9.4	7.5	7	7.7	6.6	**15.1**	5.9	24
29	3.4	2.9	2.4	0.7	0	-0.8	-1.3	2.6	6.2	9	10.5	12.7	14	14.2	13.9	13.7	12.6	11.6	10.5	9.7	9.3	7.3	6.3	6.5	14.2	**7.4**	24
30	5.7	4.5	3.4	2.2	1.8	2.2	3.2	3.1	2.5	2.3	2.6	2.8	1.9	2.6	3.8	3.5	2.9	2.8	3.1	2.7	2.3	2.4	2.4	2.5	5.7	2.9	24
31	2.6	2.6	2.5	2.6	2.6	2.6	2.8	3.3	4.2	5.2	6.5	7.2	7.6	7.9	7.5	6.5	6.2	6.1	5.7	5.2	4.7	4.1	3.9	2.9	7.9	4.7	24
HOURLY MAX	5.7	4.5	3.4	3.5	2.6	2.6	3.4	3.4	6.2	9.0	10.5	12.7	14.0	14.2	15.1	14.3	13.7	12.8	10.9	9.7	9.3	7.3	7.7	6.6			
HOURLY AVG	-2.3	-2.7	-3.3	-3.7	-4.1	-4.5	-4.6	-4.1	-2.4	-0.8	0.8	2.2	3.3	4.2	4.8	5.1	4.8	4.1	2.5	1.1	0.2	-0.6	-1.1	-1.5			

STATUS FLAG CODES

S	- OUT OF SERVICE	OD	- OUTSIDE DECTECTION LIMITS
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

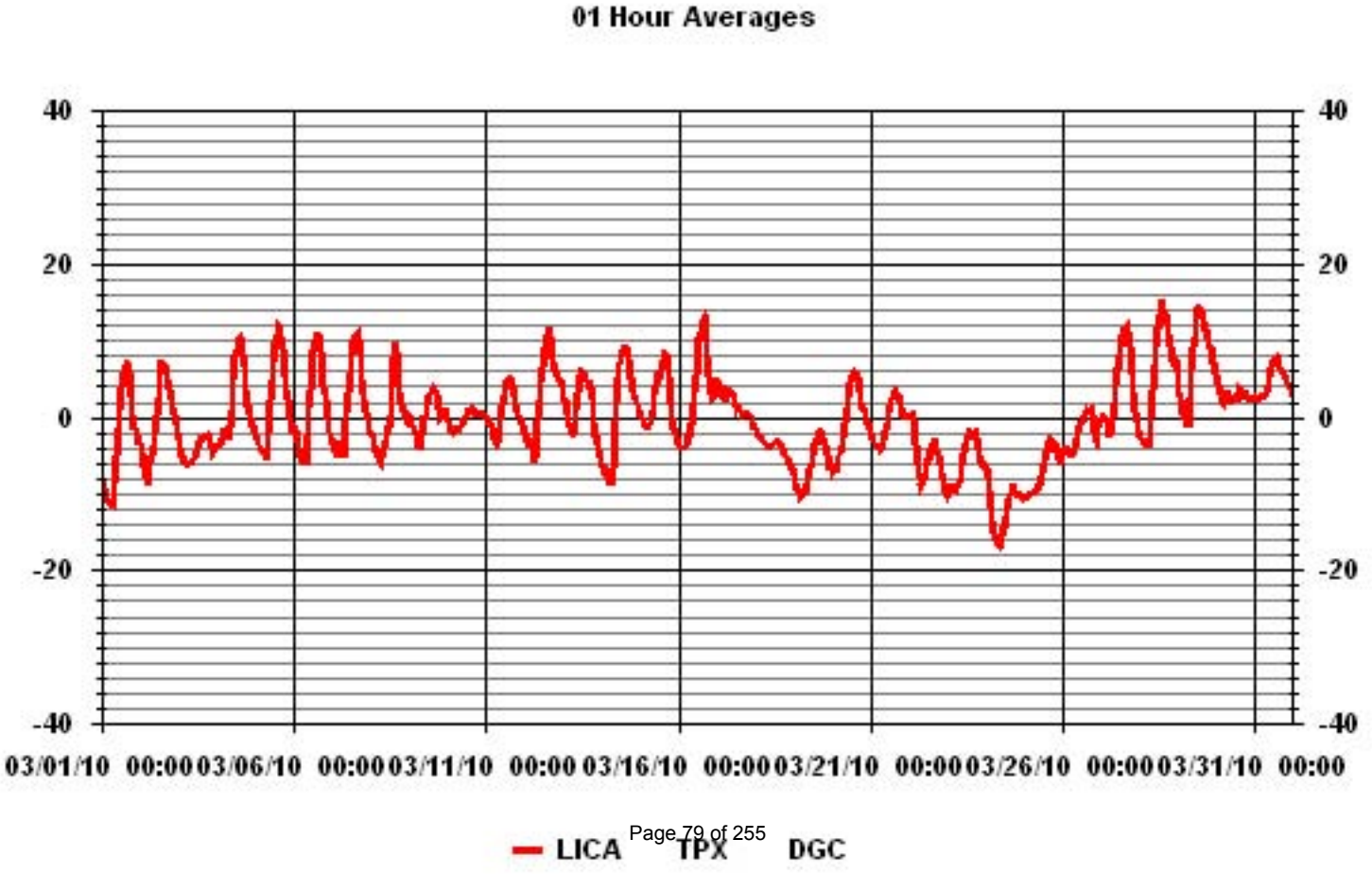


MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	-16.8	^{O}C	@ HOUR(S)	8	ON DAY(S)	24
MAXIMUM 1-HR AVERAGE:	15.1	^{O}C	@ HOUR(S)	14	ON DAY(S)	28
MAXIMUM 24-HR AVERAGE:	7.4	^{O}C			ON DAY(S)	29
					VAR-VARIOUS	

CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	744	HRS
			AMD OPERATION UPTIME:	100.0	%
STANDARD DEVIATION:	5.81		MONTHLY AVERAGE:	-0.11	^{O}C

*** Outside detection limits of sensor.**


01 Hour Averages
40
20
0
-20
-40
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA
TPX
DGC

Relative Humidity

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

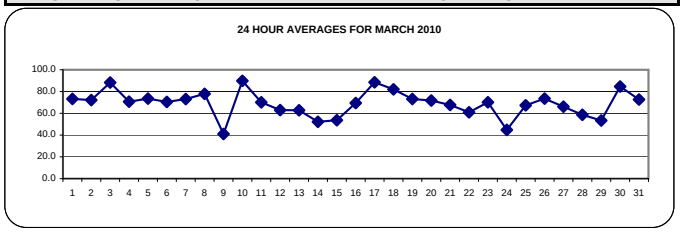
RELATIVE HUMIDITY hourly averages (%)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	87.0	87.0	86.0	86.0	84.0	84.0	84.0	84.0	81.0	80.0	71.0	62.0	55.0	51.0	50.0	50.0	48.0	53.0	67.0	75.0	81.0	82.0	84.0	86.0	87.0	73.3	24
2	87.0	87.0	89.0	90.0	89.0	88.0	91.0	89.0	83.0	76.0	68.0	60.0	52.0	50.0	51.0	52.0	54.0	58.0	63.0	67.0	71.0	71.0	72.0	74.0	91.0	72.2	24
3	77.0	79.0	82.0	85.0	88.0	90.0	91.0	92.0	94.0	94.0	93.0	93.0	89.0	86.0	85.0	85.0	87.0	88.0	88.0	89.0	91.0	92.0	91.0	90.0	94.0	88.3	24
4	90.0	90.0	90.0	90.0	89.0	90.0	88.0	89.0	88.0	78.0	61.0	48.0	44.0	38.0	34.0	35.0	45.0	53.0	64.0	71.0	76.0	78.0	82.0	85.0	90.0	70.7	24
5	87.0	88.0	89.0	90.0	91.0	91.0	90.0	89.0	83.0	72.0	68.0	62.0	54.0	48.0	44.0	43.0	42.0	49.0	64.0	74.0	79.0	86.0	90.0	91.0	91.0	73.5	24
6	92.0	92.0	92.0	92.0	92.0	91.0	90.0	91.0	85.0	78.0	68.0	54.0	48.0	43.0	37.0	36.0	39.0	46.0	60.0	61.0	64.0	75.0	81.0	84.0	92.0	70.5	24
7	85.0	86.0	88.0	89.0	90.0	93.0	92.0	91.0	87.0	81.0	73.0	63.0	55.0	47.0	45.0	42.0	42.0	46.0	60.0	69.0	76.0	81.0	85.0	89.0	93.0	73.1	24
8	92.0	92.0	92.0	92.0	91.0	91.0	92.0	93.0	95.0	96.0	96.0	**97.0**	94.0	72.0	57.0	43.0	44.0	51.0	62.0	66.0	68.0	68.0	70.0	55.0	**97.0**	77.9	24
9	40.0	39.0	42.0	47.0	48.0	51.0	56.0	60.0	56.0	49.0	47.0	38.0	29.0	25.0	21.0	19.0	22.0	23.0	30.0	43.0	48.0	50.0	48.0	53.0	60.0	41.0	24
10	76.0	87.0	94.0	93.0	92.0	93.0	94.0	94.0	91.0	91.0	88.0	87.0	87.0	89.0	89.0	85.0	85.0	86.0	90.0	94.0	94.0	94.0	93.0	90.0	94.0	**89.8**	24
11	88.0	83.0	81.0	76.0	78.0	83.0	85.0	83.0	78.0	73.0	62.0	54.0	51.0	49.0	47.0	44.0	50.0	60.0	68.0	72.0	75.0	79.0	81.0	83.0	88.0	70.1	24
12	87.0	89.0	90.0	88.0	88.0	89.0	91.0	89.0	77.0	65.0	57.0	50.0	39.0	49.0	30.0	26.0	31.0	33.0	42.0	51.0	56.0	61.0	65.0	68.0	91.0	63.0	24
13	75.0	76.0	82.0	86.0	86.0	88.0	90.0	88.0	74.0	54.0	43.0	37.0	33.0	33.0	36.0	39.0	36.0	39.0	44.0	58.0	71.0	75.0	80.0	84.0	90.0	62.8	24
14	86.0	84.0	86.0	86.0	87.0	86.0	86.0	81.0	60.0	44.0	30.0	25.0	23.0	25.0	25.0	28.0	28.0	31.0	39.0	42.0	43.0	42.0	42.0	44.0	87.0	52.2	24
15	44.0	47.0	50.0	52.0	56.0	58.0	57.0	54.0	52.0	46.0	43.0	42.0	45.0	44.0	42.0	41.0	42.0	44.0	52.0	64.0	72.0	77.0	81.0	83.0	83.0	53.7	24
16	85.0	87.0	87.0	88.0	88.0	88.0	88.0	87.0	84.0	79.0	71.0	64.0	47.0	46.0	49.0	43.0	41.0	42.0	55.0	62.0	69.0	71.0	73.0	73.0	88.0	69.5	24
17	71.0	75.0	78.0	77.0	81.0	82.0	77.0	78.0	79.0	89.0	95.0	96.0	96.0	94.0	95.0	97.0	97.0	97.0	97.0	96.0	96.0	94.0	95.0	92.0	97.0	88.5	24
18	89.0	90.0	87.0	86.0	87.0	88.0	86.0	84.0	83.0	82.0	80.0	80.0	77.0	75.0	73.0	73.0	72.0	73.0	77.0	82.0	83.0	88.0	88.0	85.0	90.0	82.0	24
19	85.0	83.0	82.0	80.0	78.0	79.0	76.0	75.0	74.0	75.0	71.0	72.0	70.0	63.0	62.0	60.0	58.0	62.0	66.0	70.0	72.0	76.0	83.0	84.0	85.0	73.2	24
20	87.0	88.0	88.0	88.0	87.0	87.0	88.0	82.0	74.0	65.0	60.0	54.0	52.0	47.0	46.0	49.0	53.0	64.0	71.0	75.0	74.0	79.0	84.0	80.0	88.0	71.8	24
21	75.0	76.0	78.0	77.0	76.0	77.0	75.0	67.0	67.0	67.0	65.0	61.0	59.0	57.0	55.0	55.0	57.0	60.0	64.0	67.0	71.0	72.0	72.0	74.0	78.0	67.7	24
22	76.0	76.0	76.0	78.0	75.0	72.0	74.0	70.0	65.0	62.0	58.0	55.0	51.0	47.0	45.0	43.0	41.0	46.0	48.0	53.0	56.0	59.0	65.0	71.0	78.0	60.9	24
23	77.0	72.0	68.0	67.0	72.0	82.0	86.0	85.0	82.0	76.0	71.0	67.0	65.0	62.0	60.0	62.0	62.0	59.0	58.0	70.0	76.0	71.0	70.0	64.0	86.0	70.2	24
24	58.0	58.0	61.0	67.0	70.0	51.0	57.0	50.0	50.0	44.0	38.0	35.0	35.0	33.0	32.0	33.0	32.0	29.0	36.0	39.0	37.0	40.0	43.0	46.0	70.0	44.8	24
25	45.0	47.0	49.0	54.0	62.0	63.0	62.0	66.0	69.0	70.0	66.0	64.0	64.0	66.0	65.0	67.0	72.0	76.0	75.0	76.0	80.0	84.0	87.0	87.0	87.0	67.3	24
26	86.0	85.0	87.0	86.0	86.0	88.0	88.0	84.0	75.0	70.0	69.0	66.0	63.0	59.0	57.0	56.0	58.0	58.0	62.0	72.0	77.0	79.0	76.0	77.0	88.0	73.5	24
27	80.0	86.0	88.0	88.0	91.0	92.0	93.0	88.0	80.0	67.0	57.0	51.0	44.0	36.0	34.0	34.0	34.0	41.0	47.0	57.0	64.0	72.0	79.0	83.0	93.0	66.1	24
28	85.0	87.0	87.0	88.0	89.0	88.0	87.0	79.0	70.0	52.0	44.0	33.0	31.0	31.0	30.0	33.0	37.0	43.0	47.0	51.0	56.0	56.0	50.0	53.0	89.0	58.6	24
29	63.0	65.0	70.0	77.0	80.0	82.0	83.0	69.0	56.0	41.0	33.0	30.0	29.0	26.0	26.0	29.0	35.0	40.0	43.0	46.0	47.0	68.0	72.0	71.0	83.0	53.4	24
30	76.0	76.0	80.0	84.0	84.0	84.0	81.0	82.0	87.0	89.0	87.0	86.0	90.0	87.0	76.0	79.0	84.0	85.0	83.0	88.0	91.0	91.0	90.0	91.0	91.0	84.6	24
31	91.0	90.0	90.0	89.0	90.0	88.0	86.0	84.0	80.0	75.0	68.0	63.0	57.0	58.0	58.0	60.0	62.0	59.0	58.0	60.0	65.0	70.0	69.0	74.0	91.0	72.7	24
HOURLY MAX	92.0	92.0	94.0	93.0	92.0	93.0	94.0	94.0	95.0	96.0	96.0	97.0	96.0	94.0	95.0	97.0	97.0	97.0	97.0	96.0	96.0	94.0	95.0	92.0			
HOURLY AVG	78.1	78.9	80.3	81.2	82.1	82.5	82.7	80.5	76.1	70.3	64.5	59.6	55.7	52.8	50.2	49.7	51.3	54.6	60.6	66.5	70.3	73.6	75.5	76.3			

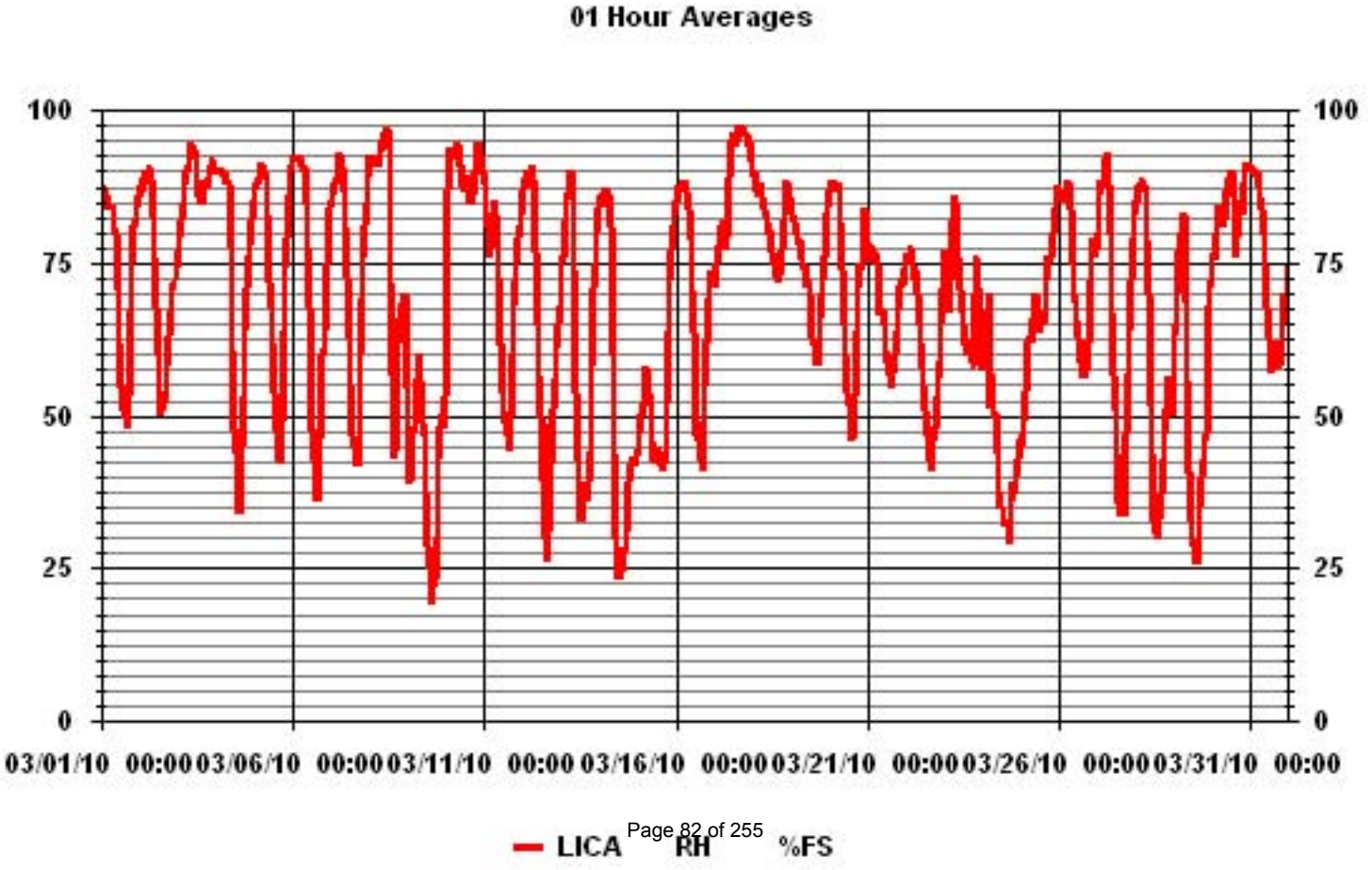
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:	97.0	%	@ HOUR(S)	11	ON DAY(S)	8
MAXIMUM 24-HR AVERAGE:	89.8	%			ON DAY(S)	10
CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:		744	HRS
			AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	19.05		MONTHLY AVERAGE:		68.92	%


01 Hour Averages
100
75
50
25
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA RH %FS

Vector Wind Speed

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

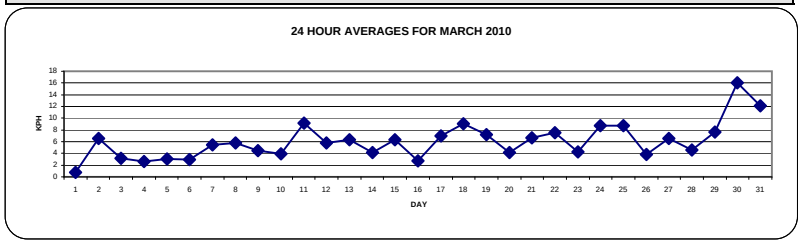
VECTOR WIND SPEED (WS) hourly averages (km/hr)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0.7	0.3	1.2	0.9	0.1	0.2	0	0.9	1.4	2.8	0.8	3	2.9	4.8	1.9	3.4	2.8	2.5	1.1	2.6	1.2	3.7	2.7	1.9	4.8	0.8	24
2	2.9	2	2.4	2.3	1.8	2.6	3.4	5.5	9.2	7.7	5.9	6.4	6.2	10.5	13	9.9	11.7	9.3	8	7.5	6.8	8.7	9.9	9	13	6.5	24
3	10	7.5	8.7	5.4	6.4	7.5	5.3	5	5.1	3.3	2.7	4.1	5.3	5.3	6.1	5.9	5.8	5.5	4.5	2.5	1.3	1.1	0.8	0.8	10	3.2	24
4	0.6	0.9	1.1	1.4	2.6	3.3	1.7	1.6	2.1	3.8	5.4	5.9	5.9	5.5	7.3	6.8	4.9	3.4	1.8	1.8	0.5	0.2	0.7	0.3	7.3	2.6	24
5	1.3	1.1	0	1.7	1.8	0.8	0.3	0.8	1.4	1.4	1.7	4.3	4	8.2	4.2	7.7	6.8	5.4	6	3.3	3.4	1.8	1.6	3.3	8.2	3.0	24
6	4.2	2.9	1.3	0.6	0.4	0.8	0.5	0.7	0.5	2.5	3.4	6.4	5.5	8	8.1	8.2	6.2	3.7	0.7	0.9	2.4	1.5	0.6	1.2	8.2	3.0	24
7	1.2	1.2	1.9	1	1.5	3.7	1.9	3	8.2	9.7	7.1	10.6	9.8	11	10.4	12.1	8.6	4.9	2.3	5.2	6	6	1.9	1.7	12.1	5.5	24
8	2.4	0.4	0.6	0.2	0.1	1.1	1.5	1	2.6	**2**	4.4	4.8	5	6.9	9	12.3	16.5	14	12.2	11	8.8	7.4	4.7	10.7	16.5	5.8	24
9	9.6	8.2	6.4	4.4	5.2	4.6	3.5	1.9	2.7	2.8	6.1	6	5.6	8.4	7.4	5.1	4.3	1.3	0.1	1	1	2.4	3.9	5.4	9.6	4.5	24
10	4.9	2.6	3.6	3.7	4.7	4	3.3	3.8	4.9	6	5.2	4.6	3.3	3.9	4	5.2	4.9	3.5	3	3.4	2.3	1.5	3.8	3.2	6.0	3.9	24
11	3.9	5.6	3.1	3.6	2.5	3.3	3.4	3.9	10.6	12.6	12.8	15.2	14.5	13.3	14.6	16.5	12.5	11.2	10	11.7	11.2	10.3	8.5	5.5	16.5	9.2	24
12	1.9	0.8	2.2	4.8	4.2	1.1	0.2	1.9	1	1.9	4.4	6.3	6	7.5	8.5	13.1	15.1	12	9.6	9.1	10.3	8	6.2	1.7	15.1	5.7	24
13	2.4	3.4	1.5	2.2	1	0.7	1.2	2.2	6.2	9.9	13.3	16.6	17.1	17.8	16.3	13.5	10.3	7.6	4.3	2.2	2	0.7	0.3	0.3	17.8	6.4	24
14	2.2	0.7	0.7	0.6	0.9	0.5	0	0.9	0.4	2.5	4.8	5.4	6.9	7.1	6.5	7.1	5.9	5	3.3	5.5	7.6	7.4	8.1	9.5	9.5	4.1	24
15	10.6	10.4	10.4	10.7	9.6	9.8	8	8.9	6.7	6.9	6.1	6.3	7.6	8	7.6	5.9	6.6	4.4	2.2	1.1	1.1	0.7	0.5	0.6	10.7	6.3	24
16	0.7	0.5	0.5	0.2	1.5	2.9	0.3	1.6	3.2	3.2	3.8	5.7	7.3	5.4	6.9	5	3.4	3.4	2	1.5	1.5	2.4	0.6	1.5	7.3	2.7	24
17	0.6	0.5	1.8	1.6	0.9	2.9	1.9	3.5	3.9	1.1	3.8	10.4	8.8	10.9	9.6	9.7	10.6	13.5	14.1	10.7	11.4	12.3	11.5	12.4	14.1	7.0	24
18	10.1	8.8	9	8.4	7.9	6.3	10.2	11.2	9.8	8.4	8.3	7.3	8.6	10.8	12.8	13.7	11.2	10.3	8.3	6	7.9	6.4	7.4	7.7	13.7	9.0	24
19	7.4	6.2	6.5	9.1	4.5	2.6	4.3	1.5	3.6	6.2	8.1	10.8	12.7	14.2	14.2	13.7	11.4	8.7	6.8	6.3	7.2	3.4	1.4	0.7	14.2	7.1	24
20	1.4	0.4	0.9	0.3	0.3	0.4	0.9	4.3	4.2	4.5	5.5	4.4	6.7	5.8	6.9	4	4.8	5.1	4.5	7.2	6.3	6.8	5.4	7.2	7.2	4.1	24
21	7.5	6.2	6	5.4	6.8	4.4	5.8	7.8	7.1	8	8.7	8.4	7.4	9.4	9.5	8.9	9	7.6	6	3.2	3	4.4	4.9	3.6	9.5	6.6	24
22	1.9	5	5.5	6.8	13.3	12	10.8	12.6	11.9	13.2	12	10.5	9.7	8	7.7	8.4	7.4	6	3.8	3	4.2	3.4	1.6	1.4	13.3	7.5	24
23	0.9	3.2	6.2	6.9	8.1	6.6	4.2	4.2	4.9	4.1	3.6	3.9	4	3.2	2.5	4.3	3.4	5.1	5.4	2.8	1.7	4.4	5.4	4	8.1	4.3	24
24	7.8	12.9	15.3	13.1	11.3	13.6	10.2	11.6	10.1	10.2	8.2	7	5.4	3.1	3.8	6.8	5.2	4.5	4.5	5	11.5	10	8.8	9.5	15.3	8.7	24
25	8.4	10.5	10.7	11.7	11.4	10.9	12.8	14.5	15.1	13.2	11.1	12.6	10.9	8.8	9.8	5.2	5.1	6.6	7.3	5.5	3.4	1.6	1.4	2.2	15.1	8.8	24
26	2.4	3.7	5.7	4.7	6.4	2.9	0.8	2.9	4.9	7.7	6.9	5.4	5.1	2.9	1.6	3.9	6.1	5.2	1.8	0.9	1	1.1	2.1	5.2	7.7	3.8	24
27	6.5	6.8	5.5	2.7	1.2	1.5	3.3	5.4	6.7	10.1	9.1	12.3	12.6	14.5	15.1	14	10.7	7.6	4.7	3.6	2.3	0.1	0.6	0.5	15.1	6.6	24
28	0.8	0.8	1	0.9	1.7	0.8	2.5	1.8	2.1	6.4	6.1	7.5	8.7	8.3	10.4	8	9.1	7.1	5.3	4.2	3.2	3.8	4.7	4.5	10.4	4.6	24
29	4.1	6.5	5.4	4	4.3	1	0.7	1.5	4	7.5	9.1	9.9	12	10.9	10.9	12.3	11.7	8.7	6.4	8.3	2.2	15.9	8.8	16.3	16.3	7.6	24
30	8.9	8.6	10.9	11.2	12	12.1	15.7	19.9	19.8	20.3	19.1	20.6	**23**	21.5	20.2	20.9	20.3	18.2	14	13.6	14	14.5	12.8	12.9	**23.0**	**16.0**	24
31	10.2	12.3	10	9.6	9.8	9.8	9.9	13.3	13.2	15.5	16.1	15.5	16.3	17.4	15.4	18.7	18.6	17.2	13	7.3	5.1	5.4	5.7	6	18.7	12.1	24
HOURLY MAX	10.6	12.9	15.3	13.1	13.3	13.6	15.7	19.9	19.8	20.3	19.1	20.6	23.0	21.5	20.2	20.9	20.3	18.2	14.1	13.6	14.0	15.9	12.8	16.3			
HOURLY AVG	4.5	4.5	4.7	4.5	4.7	4.3	4.1	5.1	6.0	6.9	7.2	8.3	8.5	9.1	9.1	9.4	8.7	7.4	5.7	5.1	4.9	5.1	4.4	4.9			

STATUS FLAG CODES

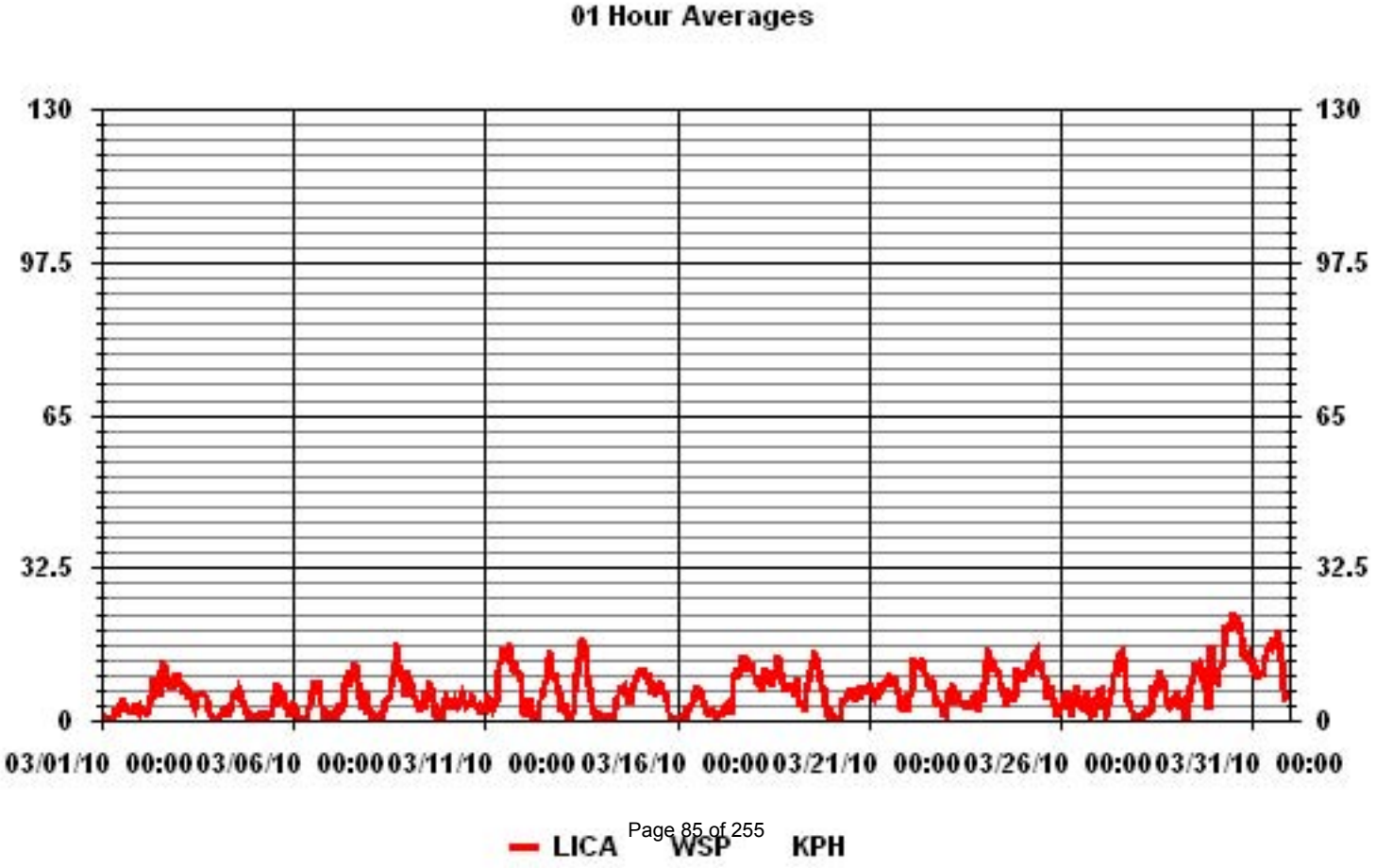
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



LAST CALIBRATION: November 5, 2008

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		23.0	KPH	@ HOUR(S)	12	ON DAY(S)	30
MAXIMUM 24-HR AVERAGE:		16.0	KPH			ON DAY(S)	30
CALMS (≤ 0 KPH)	2.69	%		OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	0	HRS		AMD OPERATION UPTIME		100.0	%
STANDARD DEVIATION:	4.50			MONTHLY AVERAGE:		6.14	KPH


01 Hour Averages
130
97.5
65
32.5
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA WSP KPH

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

MST

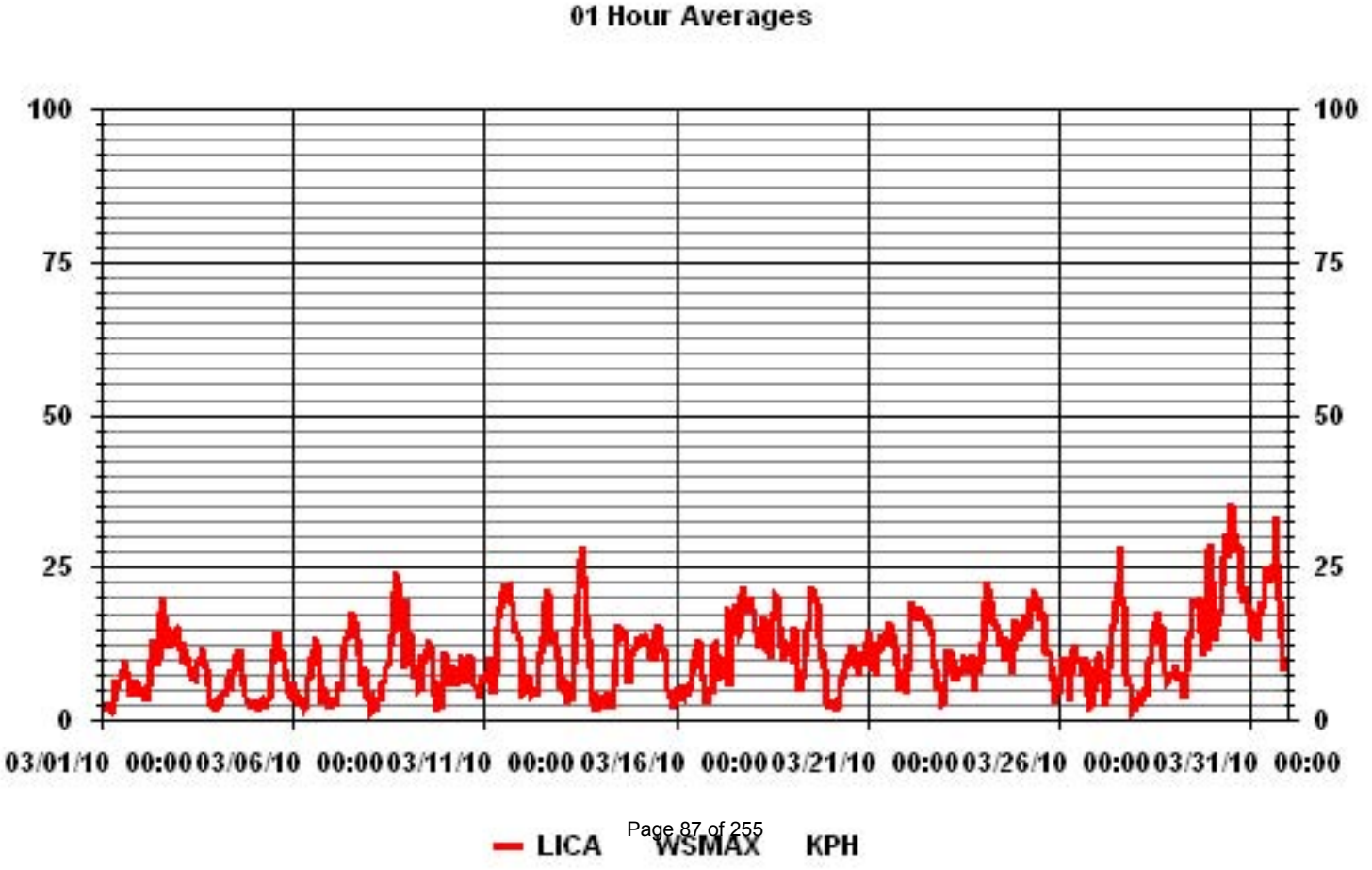
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	1.9	2.7	2.6	1.9	2	1.7	2.9	2.3	3	6.5	5.8	6.3	6.7	8.2	9.9	7.5	8.2	7	3.6	5.6	4.6	5.9	6.4	3.7	9.9
2	5.1	3.8	4.4	3.9	3.8	5.6	5.8	9.8	13.3	12.3	9.5	9.4	10	17.5	20.3	15.6	16.9	15.6	11.5	13.6	11.9	14.4	14.7	11.9	20.3
3	15.4	12.1	12.3	9.3	11.7	10.8	9.2	7.2	7.7	7.1	6.9	8.2	9.1	9.6	10.3	11.9	9.7	9	8.5	6	2.8	2.4	2.9	2.3	15.4
4	2.5	2.2	2.4	3.8	4.3	4.9	3.7	6	5.7	8.4	7.6	9.7	9.3	9	11.6	10.9	7.9	5.8	4.1	3.4	3	2	2.7	2.9	11.6
5	2.9	2.1	1.5	3.2	3.5	2.7	1.8	2.8	3.5	3.7	7.3	9	11.6	14.2	11.2	14.4	12.1	9.6	11.3	8.4	6.6	4.7	4.2	5	14.4
6	6.2	5.1	3.3	2.4	3.9	3.3	2.2	2.7	1.9	7	6.6	10.3	8.9	11.4	13.5	12.7	11	7.6	3.1	3.1	5.5	3	1.7	2.5	13.5
7	2.4	2.8	3.7	2.1	5.1	6.1	4.8	9.8	12.3	13.3	13.5	14.5	14.8	17.7	16.1	16.5	13.7	10.7	5.4	8.3	8.5	8.3	3.9	3.6	17.7
8	4	1.7	2.1	2.2	1.4	3.6	3.8	3.7	5.9	6.7	8.4	9	9.4	11.9	13.9	20.8	24.1	21.8	22.5	15.4	15.1	12.6	8.5	19.6	24.1
9	14.8	11.7	14	6.5	8.9	7.8	5.1	5.4	4.7	10.5	10.7	10.3	11.3	13	12.2	11.2	7	4	1.4	2.3	2.3	6.3	9.6	11.3	14.8
10	8.2	5.5	5.9	6.3	9.2	6.2	5.4	7.8	7.1	10.7	8.9	8.7	5.8	6.5	6.4	10.5	9.1	5.9	5.4	5.4	5.4	3.5	6.5	6.5	10.7
11	7.3	7.9	6.3	10.3	5.6	5.9	4.4	7.3	15.3	16.7	18.4	21.1	20.4	22.3	21.7	21.9	19.5	18.9	14	15.9	14.8	13.6	13.3	10.5	22.3
12	4.6	4.8	7.2	7.1	6.6	4.1	4.4	5.2	4	4.9	9.1	10.9	13.4	13.3	19.4	21.3	19.6	20.6	13.8	12.3	14.2	12.4	10.5	5.5	21.3
13	5.3	6.8	5.6	3.8	2.5	6.2	2.9	4.2	9.1	15.1	20.6	26.4	24.5	28.6	23.8	22	17.3	13.6	8.5	3.6	3.8	2.1	2.2	2.1	28.6
14	3.9	3.8	2.1	2.1	2.5	4.3	1.9	2.6	2.1	5.4	9.7	12.5	15.6	14.5	14.1	14.9	13.5	12	5.7	8.9	10.7	11.1	11.4	11.9	15.6
15	13.5	12.8	12.2	13.9	12.4	13.5	13.2	12.9	10.4	10	10	14.9	12.6	15.7	14.8	11.4	11.4	9.8	5.2	4.2	4.3	4.5	1.9	2.4	15.7
16	3.1	5.5	2.8	4.5	4.1	5.7	4.3	4.3	5.2	4.8	7.4	9.8	11.4	10.8	13.1	8.8	6.8	6.8	4.4	2.6	4.1	4.9	4.8	12.2	13.1
17	12.4	7.5	7.3	10.9	7.2	9.9	6.8	7.5	18.4	5.6	11.3	17.3	15.6	18.9	15.6	13.8	14.2	20.5	21.7	17.6	18.5	19.4	17.4	20.3	21.7
18	18.3	14.8	14.9	11.8	12.6	12.3	13.9	16.9	15.3	12.9	11.1	9.9	16	17.7	20.7	20.5	17.2	15.7	12.1	9.7	13	10.6	11.8	11.5	20.7
19	10.8	9	15.2	13.3	8.8	4.7	7.2	7	7.7	10.3	14.7	16	19.6	21.7	21.2	20.3	19.3	13.8	11.3	10.2	11.3	8.8	3.1	1.8	21.7
20	3.3	1.7	2.3	2.7	1.5	2.1	2.4	7.1	6.7	8.2	8.6	9.8	10.8	11.9	11.8	9.5	9.3	9.9	7.1	11.3	9.7	10.1	8.8	12.6	12.6
21	14.9	11.3	9.6	7.8	12.7	7	10.9	11.8	11.4	14	13.3	13.1	14.4	15.5	16	13.9	13.9	12.2	9.3	5.4	4.6	7.6	7.3	6.6	16
22	4.3	10.6	7.8	19.5	18.2	18	16.4	17.3	18.4	18.3	17.7	16.6	16.6	15.2	17	15.3	14.1	10.1	8.7	5.1	6.4	5.2	2.8	3	19.5
23	3.2	7.6	11.6	10	11.3	10.2	6.9	6.9	8.3	7.6	8.1	8.1	10.5	8	9.3	9.2	7.7	10.3	10.9	4.6	7.9	8.1	7.6	9	11.6
24	12.8	19.4	22.8	21.8	17.4	19.7	15.7	16.3	15.7	15	13.3	13.7	12.7	12.7	9.7	13.7	10.5	12.7	7.5	11.2	16.3	15.2	12.8	14.5	22.8
25	14.4	15.8	14.3	17.3	16.3	15	19.3	19.4	21.4	20.3	18.8	19	16.7	16.2	17.7	11.1	10.4	11.4	11.1	9.2	6.7	2.6	4.4	5.2	21.4
26	4.3	7.1	10.1	8.4	10.1	8.5	3	7.6	11.4	12	12	10.7	9.2	9.9	7	9.2	10.3	9.7	4	2.2	2.4	3.8	4.6	8.7	12
27	10.1	10.9	8.5	6.2	2.4	3.5	5.7	8.3	12.1	14.6	15.6	19.3	20.4	22.8	28.5	20.5	18.8	13	7.3	5.4	6.3	1.5	1.8	1.8	28.5
28	2.8	2.5	2.5	4.5	3.6	3.9	5.4	3.7	9.4	10.3	12.6	14.7	16.1	14.6	17.6	12.4	15.7	9.8	8.1	5.9	6.1	6.6	7.9	6.8	17.6
29	7.6	9.1	7.1	6.4	7.8	6.3	3.5	4.9	7.8	13.5	14.6	18.1	19.6	18.7	18.8	19.1	20	14.4	10.6	12	11.3	28	15.1	28.8	28.8
30	23.2	12.8	17.8	15.3	17.8	17.8	22	26.6	30.4	26.4	27.8	31.4	**35.3**	27.4	30.8	29.3	28.9	28.6	20.9	19.7	19.8	21.9	19.1	17.6	**35.3**
31	13.9	18.1	14.3	14.5	13.4	13.5	16.8	19.5	18.4	22.8	24.9	22.4	24	23.8	25.6	28.1	33.2	26	19.7	13.8	8	10.3	9.6	8.4	33.2
PEAK	23.2	19.4	22.8	21.8	18.2	19.7	22.0	26.6	30.4	26.4	27.8	31.4	35.3	28.6	30.8	29.3	33.2	28.6	22.5	19.7	19.8	28.0	19.1	28.8	

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

MAXIMUM INSTANTANEOUS READING	35.3	KPH	@ HOUR(S)	12
			ON DAY(S)	30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75
50
25
0
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03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA WSMAX KPH

LICA
WSP / WD Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : WSP
Units : KPH

Wind Parameter : WD
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	2.01	2.55	3.76	5.64	3.76	5.91	6.04	2.28	2.41	2.95	6.04	3.76	2.15	1.07	.80	.80	52.01
<	12.0	1.20	1.88	.94	.67	2.55	1.61	10.08	.00	.13	1.47	4.03	1.34	1.61	1.07	1.74	2.95	33.33
<	20.0	.40	.13	.13	.00	.00	.00	2.68	.00	.00	.00	.80	1.07	2.82	.53	1.20	1.20	11.02
<	29.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.40	.53	.00	.00	.00	.94
<	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	3.62	4.56	4.83	6.31	6.31	7.52	18.81	2.28	2.55	4.43	10.88	6.58	7.12	2.68	3.76	4.97	

Calm : 2.68 %

Total # Operational Hours : 744

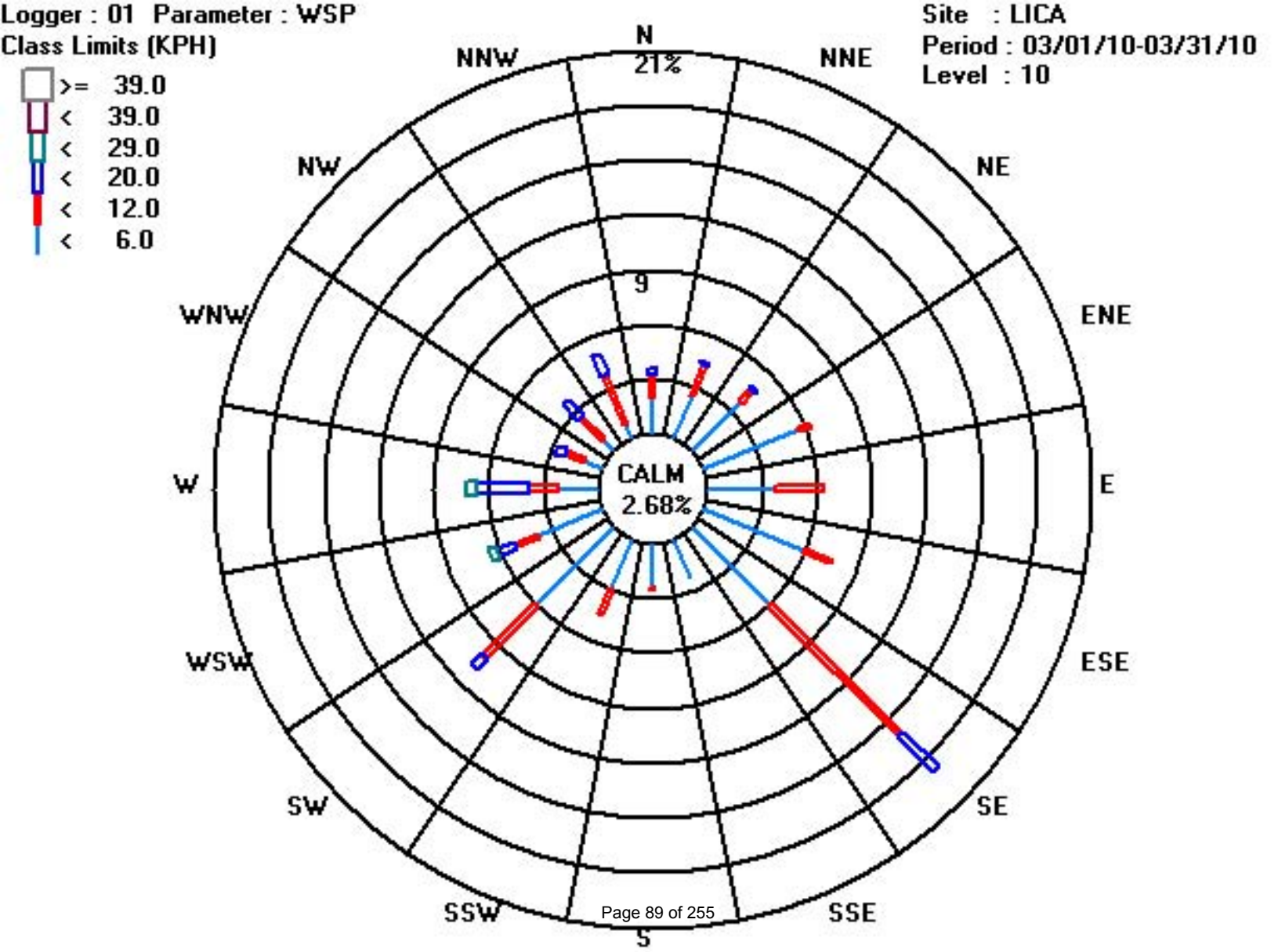
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	15	19	28	42	28	44	45	17	18	22	45	28	16	8	6	6	387
<	12.0	9	14	7	5	19	12	75		1	11	30	10	12	8	13	22	248
<	20.0	3	1	1				20				6	8	21	4	9	9	82
<	29.0												3	4				7
<	39.0																	
>=	39.0																	
	Totals	27	34	36	47	47	56	140	17	19	33	81	49	53	20	28	37	

Calm : 2.68 %

Total # Operational Hours : 744


Logger : 01 Parameter : WSP
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9
CALM
2.68%

Vector Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

VECTOR WIND DIRECTION (WD) hourly averages in degrees

MST

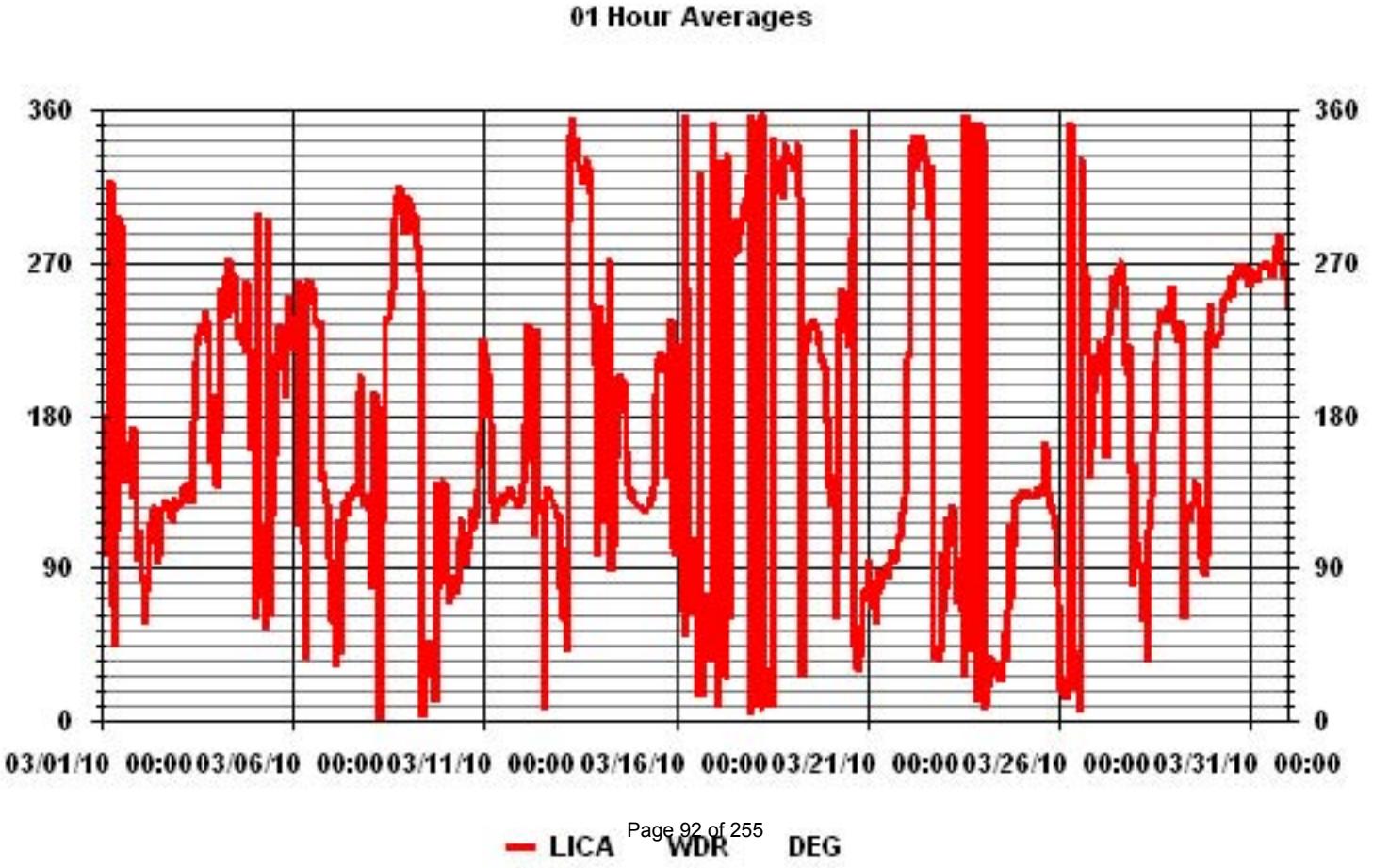
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	180	96	139	96	112	108	319	69	43	112	164	298	294	274	164	140	165	160	150	131	174	134	113	93	148	SE	24
2	112	83	85	57	76	86	104	117	124	127	110	92	96	119	126	124	128	128	126	121	120	128	131	127	118	ESE	24
3	126	127	128	137	138	132	134	135	128	143	177	212	222	228	234	230	231	242	237	224	189	151	193	138	169	SSE	24
4	175	137	169	255	236	262	251	238	273	266	258	264	242	235	224	231	226	223	217	260	249	159	202	219	239	WSW	24
5	60	125	300	74	115	78	73	54	297	65	61	120	156	217	206	232	234	216	207	190	218	251	228	239	204	SSW	24
6	235	224	220	114	259	142	107	106	35	261	248	260	256	247	236	236	232	233	142	147	138	129	108	97	231	SW	24
7	60	59	60	32	108	118	38	105	129	131	120	135	132	134	138	133	140	194	204	137	130	131	127	128	130	SE	24
8	127	77	129	194	129	47	0	0	117	185	235	239	237	242	253	296	308	308	311	316	303	304	286	306	292	WNW	24
9	310	307	299	288	292	299	281	265	255	2	29	26	41	46	46	44	33	11	141	77	81	130	141	140	353	N	24
10	132	85	68	72	84	86	74	81	106	120	105	104	94	91	101	111	124	113	119	137	149	170	212	225	108	ESE	24
11	218	216	178	204	177	129	117	120	131	132	130	132	133	130	131	133	138	133	131	129	131	125	129	129	135	SE	24
12	140	175	211	234	232	173	154	109	212	231	122	131	124	6	129	137	133	134	131	127	126	121	121	78	132	SE	24
13	60	103	58	65	40	294	345	356	340	341	331	329	325	324	316	325	332	328	312	244	244	210	97	179	329	NNW	24
14	245	235	219	122	116	198	273	88	96	102	139	155	202	204	192	201	182	160	139	132	130	136	130	128	158	SSE	24
15	126	126	126	126	125	124	125	127	131	129	138	193	213	205	218	206	217	212	142	191	145	237	103	96	150	SSE	24
16	137	223	119	133	66	49	357	257	70	62	80	89	108	38	13	323	29	13	36	63	76	47	35	353	50	NE	24
17	213	211	8	329	331	29	28	36	335	60	256	275	293	294	277	278	287	294	304	307	309	322	3	357	308	NW	24
18	337	340	346	354	8	357	359	10	11	16	28	31	8	344	331	328	328	329	312	308	341	332	336	331	346	NNW	24
19	329	332	332	324	341	310	28	28	229	215	223	233	235	231	237	235	231	223	214	211	213	210	175	181	245	WSW	24
20	138	127	143	145	59	98	234	233	255	250	231	234	220	263	284	349	45	32	28	37	57	77	75	78	355	N	24
21	88	95	85	65	77	56	75	89	77	83	84	86	92	83	93	100	93	97	95	106	109	122	123	132	90	E	24
22	134	214	218	301	340	345	325	335	332	334	346	342	333	316	295	314	328	36	45	38	38	35	40	99	334	NNW	24
23	64	77	120	102	128	125	111	77	69	80	96	65	26	358	351	46	41	307	316	353	10	26	24	353	61	ENE	24
24	343	6	10	19	28	38	26	35	30	31	23	27	23	52	40	35	65	115	72	102	130	131	129	130	45	NE	24
25	136	134	134	134	133	134	134	133	133	133	137	135	133	139	133	165	162	137	127	127	123	115	92	81	134	SE	24
26	70	20	17	16	12	26	304	353	18	33	40	38	42	5	332	268	268	264	216	143	165	160	193	214	7	N	24
27	216	224	217	204	174	154	211	227	241	250	263	244	264	266	270	269	258	224	211	204	223	147	78	152	244	WSW	24
28	106	102	89	93	73	58	66	34	113	130	133	170	212	230	225	236	241	234	239	235	242	242	254	254	214	SSW	24
29	231	231	223	231	236	234	60	127	126	118	122	126	129	142	140	135	127	97	88	85	97	230	239	246	156	SSE	24
30	227	221	221	224	228	229	240	248	250	252	251	262	254	250	260	265	269	267	266	269	261	265	266	256	252	WSW	24
31	260	266	259	263	258	264	267	267	269	270	270	268	270	262	268	270	280	284	288	270	263	262	272	245	268	W	24
HOURLY AVG	343	340	346	354	341	357	359	356	340	341	346	342	333	358	351	349	332	329	316	353	341	332	336	357			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

LAST CALIBRATION:	November 5, 2008
DECLINATION :	19 DEGREES FROM MAGNETIC NORTH

MONTHLY CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	744	HRS
STANDARD DEVIATION	92.99		AMD OPERATION UPTIME	100.0	%
			MONTHLY AVERAGE	206	DEG


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA WDR DEG

Standard Deviation Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

MARCH 2010

STANDARD DEVIATION WIND DIRECTION (STDWDIR) hourly averages in degrees

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
DAY																								
1	29	49	28	37	43	43	45	25	26	21	40	29	28	24	40	27	42	37	59	20	47	13	20	15
2	17	26	18	14	42	18	20	19	14	16	21	19	22	20	15	18	13	13	12	16	19	16	13	12
3	12	15	13	24	23	15	19	17	13	33	33	31	23	27	25	25	21	18	20	22	30	32	42	54
4	47	25	32	48	15	11	20	46	31	23	20	21	24	25	22	20	17	13	41	27	42	68	44	52
5	37	26	40	28	17	48	48	45	47	31	53	20	40	23	44	19	17	22	25	37	24	43	45	14
6	13	17	42	54	63	33	49	42	47	35	35	20	28	19	25	19	18	19	64	68	29	29	48	18
7	26	32	18	33	36	13	33	34	14	13	23	14	16	19	21	15	22	31	20	14	12	13	25	27
8	22	61	52	56	64	34	30	43	22	37	27	27	26	22	19	18	14	13	13	13	12	12	13	13
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10	14	18	17	15	17	17	17	19	22	19	18	22	28	22	23	21	19	21	18	23	31	31	19	20
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15	11	11	10	11	11	13	16	13	15	14	26	35	24	34	28	34	30	28	44	26	45	36	59	59
16	34	59	64	50	27	16	30	30	20	21	23	20	24	31	19	19	26	30	21	15	23	20	31	65
17	68	66	46	67	48	51	54	36	34	43	26	19	17	15	17	19	16	14	12	12	13	15	19	18
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23	42	21	19	20	13	12	20	21	21	28	36	46	46	41	60	33	33	30	15	21	55	17	19	22
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25	16	13	13	14	14	14	14	13	14	16	20	17	19	28	19	43	37	21	14	15	14	25	28	27
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28	49	40	25	37	19	65	17	24	59	17	21	33	26	23	21	19	17	17	13	13	30	20	18	16
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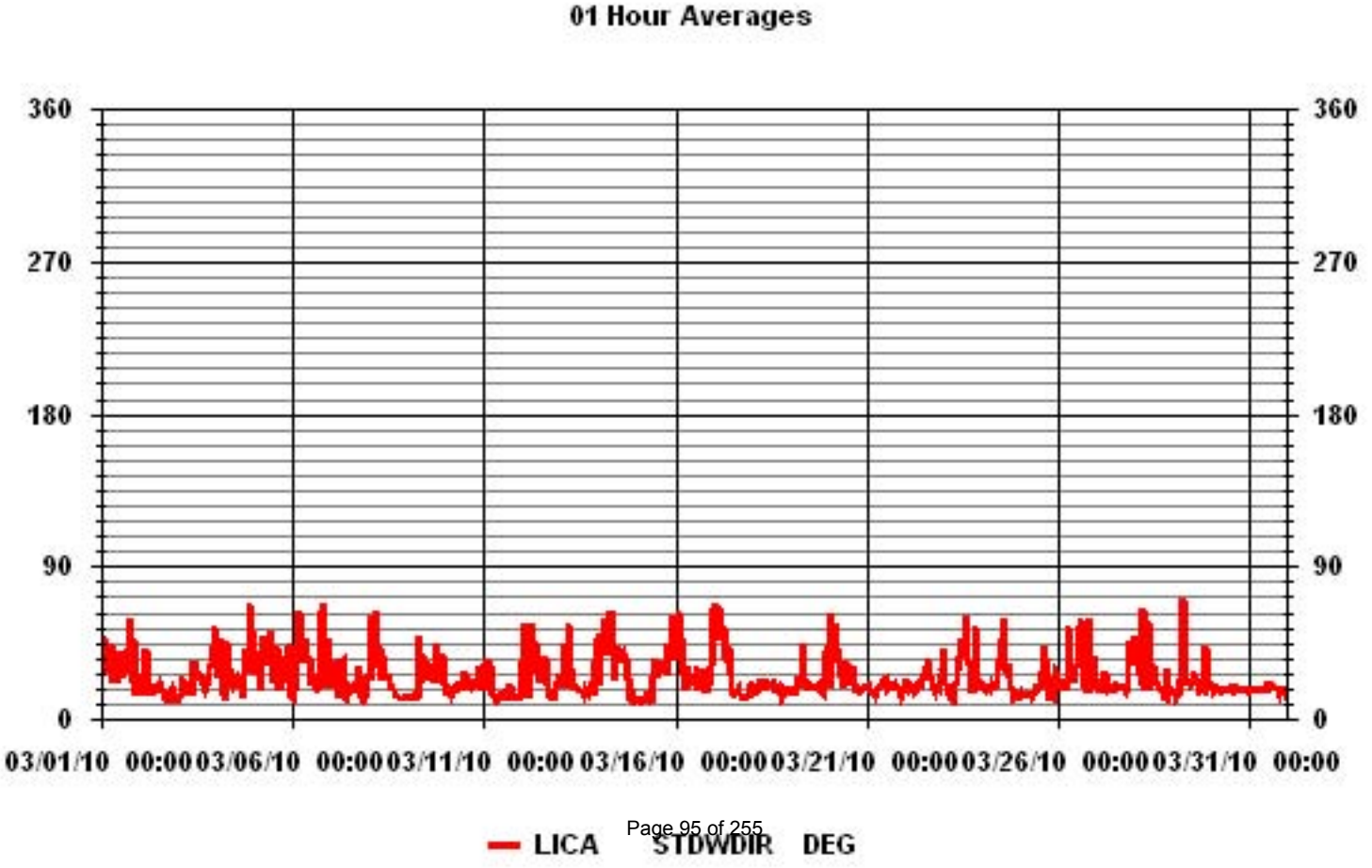
30	22	17	18	19	18	18	16	17	17	17	17	19	17	16	19	19	18	18	18	18	18	18	18	16
31	17	17	18	17	17	18	18	18	19	18	20	21	19	20	20	19	19	18	16	18	18	17	18	13

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

LAST CALIBRATION: November 5, 2008

CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 744 HRS


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA STDWDIR DEG

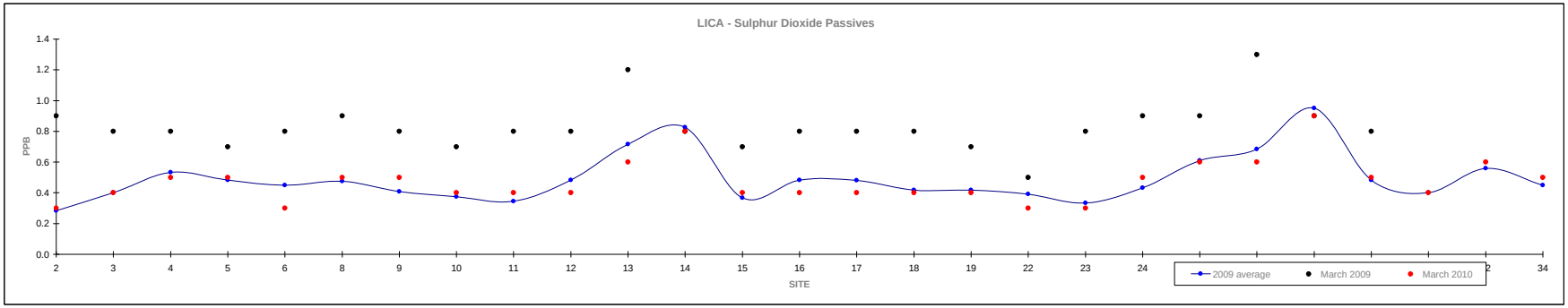
Non-Continuous Monitoring

Passive Summary Results for March 2010

Lakeland Industry & Community Association

Sulphur Dioxide
ppb

	2009																									March 2010	
	2	**3**	**4**	**5**	**6**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**32**	**34**	**Reading**	**Site**
Mean	0.3	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.5	0.7	0.8	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.6	0.7	1.0	0.5	0.4	0.6	0.5	0.5	-
Minimum	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.3	VAR
Maximum	0.9	0.9	1.3	1.1	1.2	0.9	1.0	0.9	0.8	1.1	1.2	2.2	0.9	1.1	1.0	1.3	0.8	0.9	0.8	1.1	1.4	1.4	2.6	0.9	0.8	1.2	0.5	0.9	#27

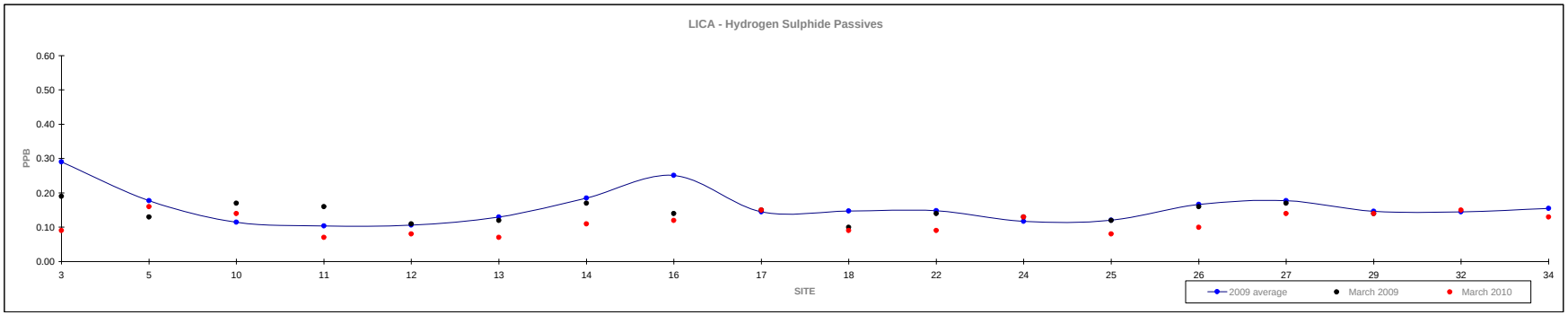


Passive Summary Results for March 2010

Lakeland Industry & Community Association

Hydrogen Sulphide
ppb

	2009																	March 2010	
	3	**5**	**10**	**11**	**12**	**13**	**14**	**16**	**17**	**18**	**22**	**24**	**25**	**26**	**27**	**29**	**32**	**34**	**Reading**	**Site**
Mean	0.29	0.18	0.12	0.10	0.11	0.13	0.19	0.25	0.15	0.15	0.15	0.12	0.12	0.17	0.18	0.15	0.15	0.16	0.11	-
Minimum	0.05	0.09	0.03	0.03	0.05	0.03	0.11	0.07	0.08	0.05	0.04	0.06	0.03	0.06	0.07	0.04	0.10	0.10	0.07	#11, #13
Maximum	0.80	0.29	0.20	0.16	0.21	0.20	0.30	0.54	0.26	0.29	0.24	0.24	0.18	0.28	0.35	0.28	0.19	0.21	0.16	#5

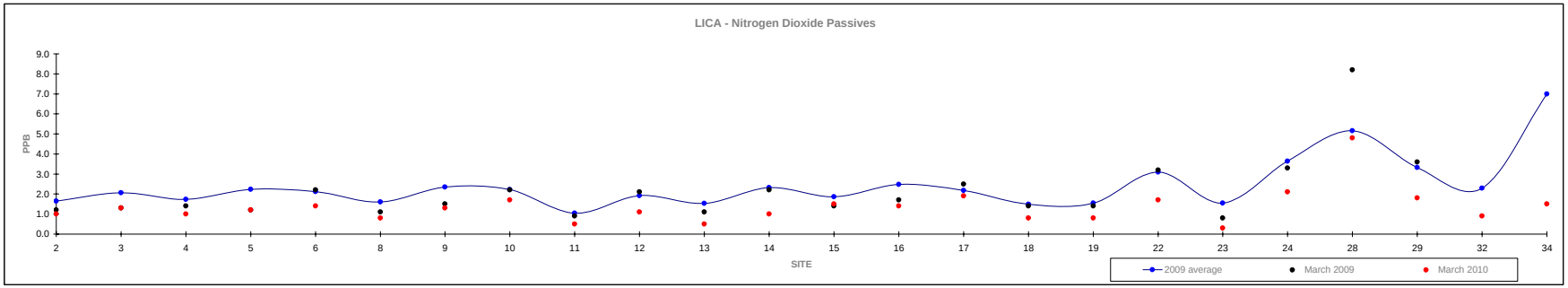


Passive Summary Results for March 2010

Lakeland Industry & Community Association

Nitrogen Dioxide
ppb

	2009																							March 2010	
	2	**3**	**4**	**5**	**6**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**22**	**23**	**24**	**28**	**29**	**32**	**34**	**Reading**	**Site**
Mean	1.6	2.1	1.7	2.2	2.1	1.6	2.4	2.2	1.0	1.9	1.5	2.3	1.9	2.5	2.2	1.5	1.5	3.1	1.5	3.6	5.2	3.3	2.3	7.0	1.3	-
Minimum	0.9	0.8	0.8	1.0	0.8	0.9	1.5	0.4	0.5	0.5	0.9	0.9	1.0	1.7	0.7	0.7	0.9	0.2	0.4	2.7	1.0	0.5	1.2	5.6	0.3	#23
Maximum	2.9	4.6	3.7	5.0	4.4	3.0	4.0	5.0	2.0	6.4	2.9	6.1	3.6	3.9	4.1	3.5	2.4	7.2	2.6	5.6	10.6	7.0	3.0	8.4	4.8	#28

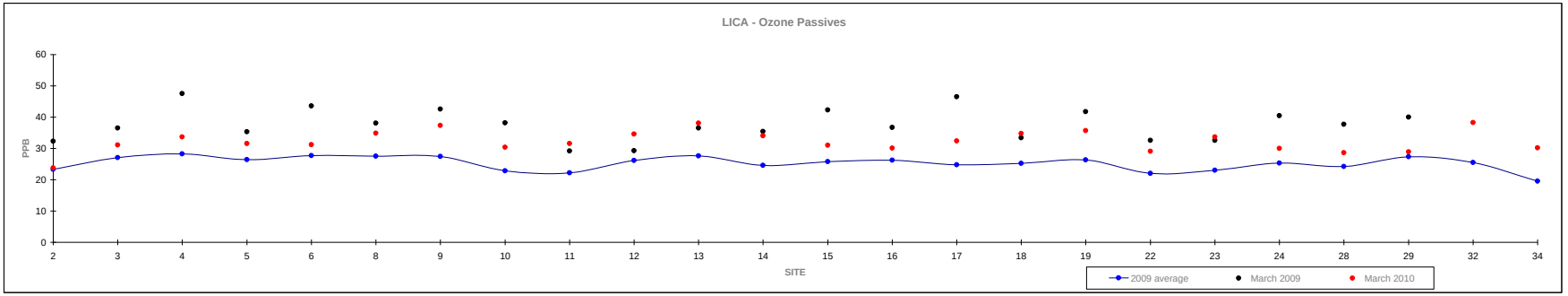


Passive Summary Results for March 2010

Lakeland Industry & Community Association

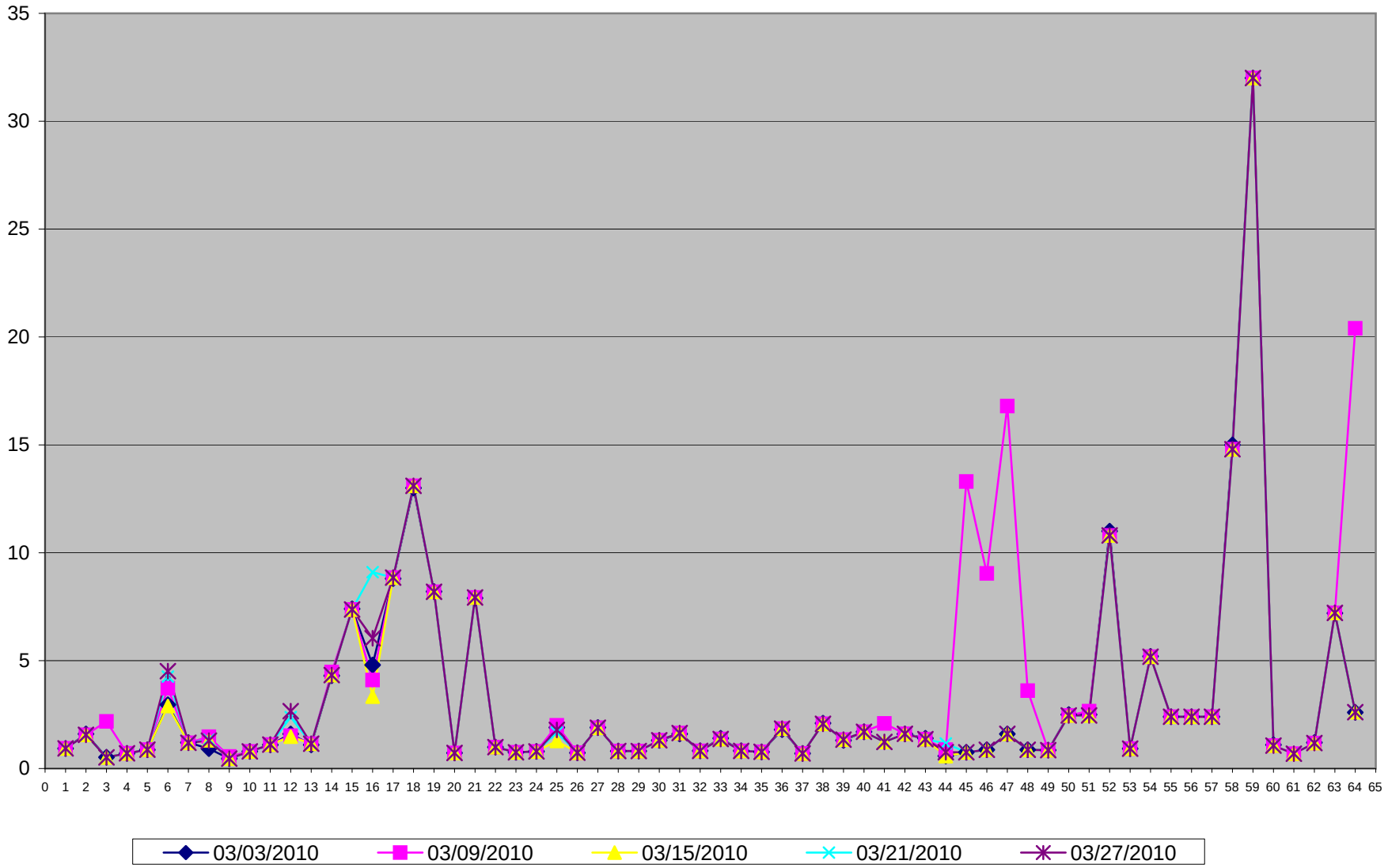
Ozone
ppb

	2009																							March 2010	
	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	22	23	24	28	29	32	34	Reading	Site
Mean	23.3	27.1	28.3	26.5	27.7	27.5	27.5	22.8	22.2	26.2	27.6	24.6	25.8	26.2	24.8	25.2	26.3	22.0	23.0	25.3	24.2	27.3	25.5	19.6	32.3	-
Minimum	13.3	17.9	17.3	16.0	17.7	15.4	14.9	12.0	14.6	17.3	15.5	14.8	15.5	15.1	13.8	17.7	14.7	13.6	15.3	12.5	14.8	17.8	24.7	18.5	23.8	#2
Maximum	32.3	38.6	47.5	37.9	43.6	38.6	42.6	38.2	30.2	46.0	36.5	35.4	42.3	36.7	46.5	36.2	41.7	32.6	32.6	40.5	37.7	40.0	26.3	20.6	38.3	#32



Volatile Organics

Volatile Organics in ug/m3 Site: LICA - Cold Lake South



1	2,2,4-Trimethylpentane	33	1,1,2,2-Tetrachloroethane
2	Carbon Disulfide	34	cis-1,3-Dichloropropene
3	Propene	35	trans-1,3-Dichloropropene
4	Vinyl Acetate	36	1,2-Dichloropropane
5	Vinyl Bromide	37	Bromomethane
6	Dichlorodifluoromethane (FREON 12)	38	Bromoform
7	1,2-Dichlorotetrafluoroethane	39	Bromodichloromethane
8	Chloromethane	40	Dibromochloromethane
9	Vinyl Chloride	41	Heptane
10	Chloroethane	42	Trichloroethylene
11	1,3-Butadiene	43	Tetrachloroethylene
12	Trichlorofluoromethane (FREON 11)	44	Benzene
13	Trichlorotrifluoroethane	45	Toluene
14	Ethanol	46	Ethylbenzeze
15	2-Propanol	47	p+m-Xylene
16	2-Propanone	48	o-Xylene
17	Wethyl Ethyl Ketone (2-Butanone)	49	Styrene
18	Methyl Isobutyl Ketone	50	1,3,5-Trimethylbenzene
19	Methyl Butyl Ketone (2-Hexanone)	51	1,2,4-Trimethylbenzene
20	Methyl t-butyl ether (MTBE)	52	4-ethyltoluene
21	Ethyl Acetate	53	Chlorobenzene
22	1,1-Dichloroethylene	54	Benzyl chloride
23	cis-1,2-Dichloroethylene	55	1,3-Dichlorobenzene
24	trans-1,2-Dichloroethylene	56	1,4-Dichlorobenzene
25	Methylene Chloride (Dichloromethane)	57	1,2-Dichlorobenzene
26	Chloroform	58	1,2,4-Trichlorobenzene
27	Carbon Tetrachloride	59	Hexachlorobutadiene
28	1,1-Dichloroethane	60	Hexane
29	1,2-Dichloroethane	61	Cyclohexane
30	Ethylene Dibromide	62	Tetrahydrofuran
31	1,1,1-Trichloroethane	63	1,4-Dioxane
32	1,1,2-Trichloroethane	64	Xylene (Total)

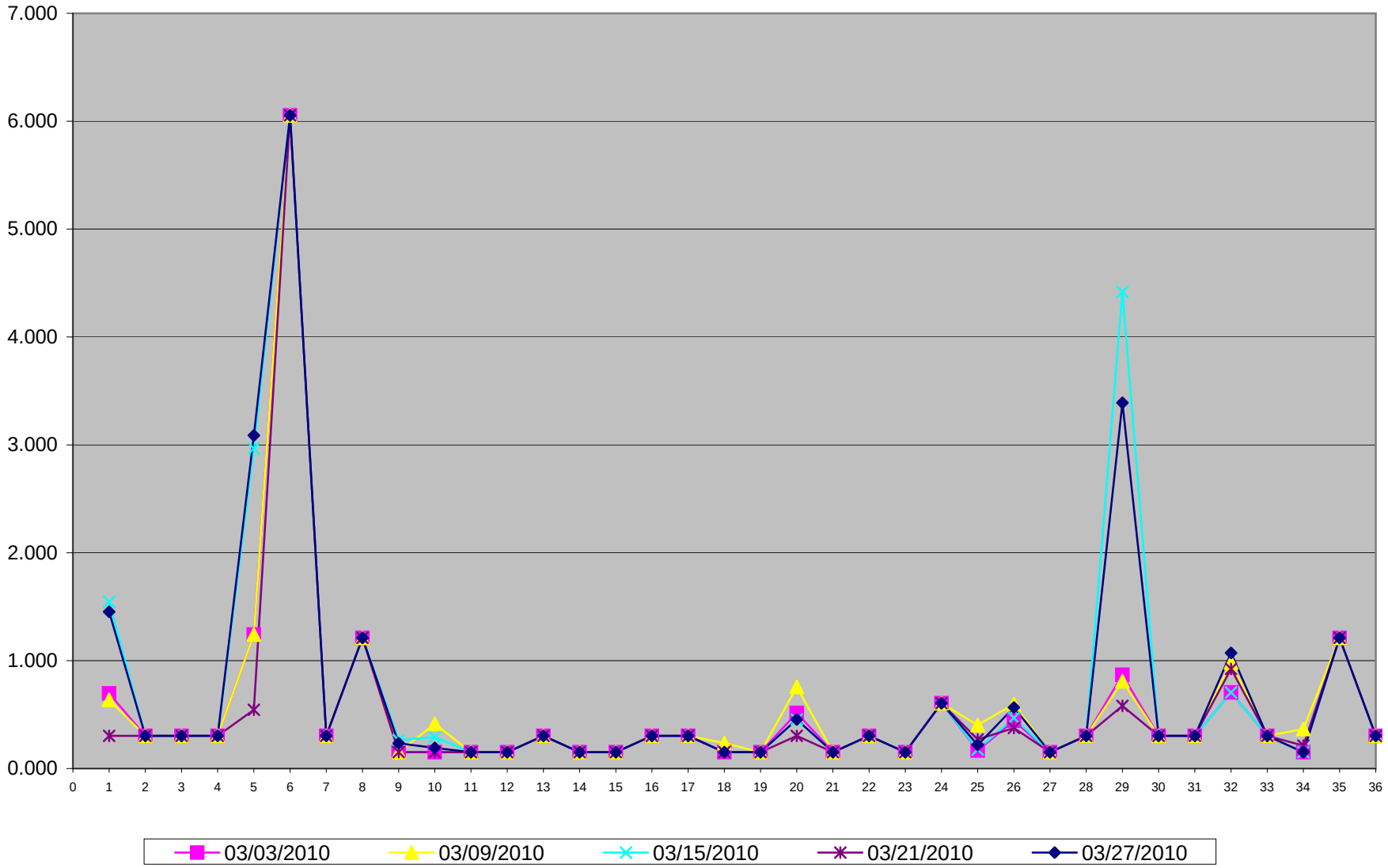
Polycyclic Aromatic Hydrocarbons

Polycyclic Aromatic Hydrocarbons (PAHs) Results for March 2010
LICA- Cold Lake South Site
Unit: ng/m3

	PAHs	03/03/2010	03/09/2010	03/15/2010	03/21/2010	03/27/2010
	Sample Volume (unit: m3)	330.35	330.36	330.35	330.38	330.34
1	1-Methylnaphthalene	0.696	0.636	1.544	0.303	1.453
2	1-Methylphenanthrene	0.303	0.303	0.303	0.303	0.303
3	2-Chloronaphthalene	0.303	0.303	0.303	0.303	0.303
4	2-Methlyanthracene	0.303	0.303	0.303	0.303	0.303
5	2-Methylnaphthalene	1.241	1.241	2.967	0.545	3.088
6	3-Methylcholanthrene	6.054	6.054	6.054	6.054	6.054
7	7,12-Dimethylbenzo(a)anthracene	0.303	0.303	0.303	0.303	0.303
8	9,10-Dimethylanthracene	1.211	1.211	1.211	1.211	1.211
9	Acenaphthene	0.151	0.151	0.263	0.151	0.233
10	Acenaphthylene	0.151	0.415	0.291	0.151	0.191
11	Anthracene	0.151	0.151	0.151	0.151	0.151
12	Benzo(a)anthracene	0.151	0.151	0.151	0.151	0.151
13	Benzo(a)fluorene	0.303	0.303	0.303	0.303	0.303
14	Benzo(a)pyrene	0.151	0.151	0.151	0.151	0.151
15	Benzo(b)fluoranthene	0.151	0.151	0.151	0.151	0.151
16	Benzo(b)fluorene	0.303	0.303	0.303	0.303	0.303
17	Benzo(e)pyrene	0.303	0.303	0.303	0.303	0.303
18	Benzo(g,h,I)perylene	0.151	0.236	0.151	0.151	0.151
19	Benzo(k)fluoranthene	0.151	0.151	0.151	0.151	0.151
20	Biphenyl	0.515	0.757	0.454	0.303	0.454
21	Chrysene	0.151	0.151	0.151	0.151	0.151
22	Coronene	0.303	0.303	0.303	0.303	0.303
23	Dibenz(a,h)anthracene	0.151	0.151	0.151	0.151	0.151
24	Dibenzo(a,e)pyrene	0.605	0.605	0.605	0.605	0.605
25	Fluoranthene	0.166	0.403	0.176	0.269	0.218
26	Fluorene	0.442	0.596	0.469	0.375	0.566
27	Indeno(1,2,3-cd)pyrene	0.151	0.151	0.151	0.151	0.151
28	m-Terphenyl	0.303	0.303	0.303	0.303	0.303
29	Naphthalene	0.869	0.808	4.420	0.581	3.390
30	o-Terphenyl	0.303	0.303	0.303	0.303	0.303
31	Perylene	0.303	0.303	0.303	0.303	0.303
32	Phenanthrene	0.705	0.981	0.705	0.923	1.072
33	p-Terphenyl	0.303	0.303	0.303	0.303	0.303
34	Pyrene	0.151	0.366	0.151	0.212	0.151
35	Quinoline	1.211	1.211	1.211	1.211	1.211
36	Tetralin	0.303	0.303	0.303	0.303	0.303

Note: - values were calculated by the formula of [reading (ug) x 1000 / sample volume (m3)].
- Where the analytical results are less than the minimum detection limit (MDL), the MDL has been used in calculations.
- See analytical for details.

PAHs in ng/m3 Site: LICA - Cold Lake South



1	1-Methylnaphthalene
2	1-Methylphenanthrene
3	2-Chloronaphthalene
4	2-Methlyanthracene
5	2-Methylnaphthalene
6	3-Methylcholanthrene
7	7,12-Dimethylbenzo(a)anthracene
8	9,10-Dimethylanthracene
9	Acenaphthene
10	Acenaphthylene
11	Anthracene
12	Benzo(a)anthracene
13	Benzo(a)fluorene
14	Benzo(a)pyrene
15	Benzo(b)fluoranthene
16	Benzo(b)fluorene
17	Benzo(e)pyrene
18	Benzo(g,h,I)perylene
19	Benzo(k)fluoranthene
20	Biphenyl
21	Chrysene
22	Coronene
23	Dibenz(a,h)anthracene
24	Dibenzo(a,e)pyrene
25	Fluoranthene
26	Fluorene
27	Indeno(1,2,3-cd)pyrene
28	m-Terphenyl
29	Naphthalene
30	o-Terphenyl
31	Perylene
32	Phenanthrene
33	p-Terphenyl
34	Pyrene
35	Quinoline
36	Tetralin

Calibration Reports

Sulphur Dioxide

SO_2 Calibration Report

Station Information

Calibration Date	March 10, 2010	Previous Calibration	February 4, 2010
Company	Lakeland Community and Industry Association		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	11:00	End Time (MST)	15:30
Reason:	Monthly Calibraiton		
Barometric Pressure	714 mmHg	Station Temperature	23 Deg C
Cal Gas	52.2 ppm	Cal Gas Expiry date	12/19/2010
DAS Output Voltage	0 - 10 Volts		

Equipment Information

Analyzer Make / Model:	Thermon 43i	S/N :	806528242	Method:	UV absorbtion
Converter Make / Model:	NA	S/N :	NA		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	3485		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 500 ppb					
Sample Flow / Box Temp	446 ccm		27.8 Deg C		446 ccm		28.8 Deg C	
HVPS / Lamp Setting	-631.2		749		-631.2		749	
PMT / RxCell Temp	OK Deg C		45.2 Deg C		OK Deg C		44.9 Deg C	
Converter / IZS Temp	NA Deg C		45.0 Deg C		NA Deg C		45.0 Deg C	
Offset / Slope	5.5		1.041		5.5		1.03	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4996	0	0	0	N/A
4961	38.3	400	404	0.9899
4996	0	0	0	N/A
4959	38.3	400	401	0.9977
4981	19.2	200	202	0.9923
4987	11.5	120	122	0.9844
4999	0	0	0	N/A
			Sum of Least Squares	0.2533
			New Correction Factor	0.9977

	Before Calibration	After Calibration
Auto Zero	-0.2	-0.1
Auto Span	409	407
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		0.5%

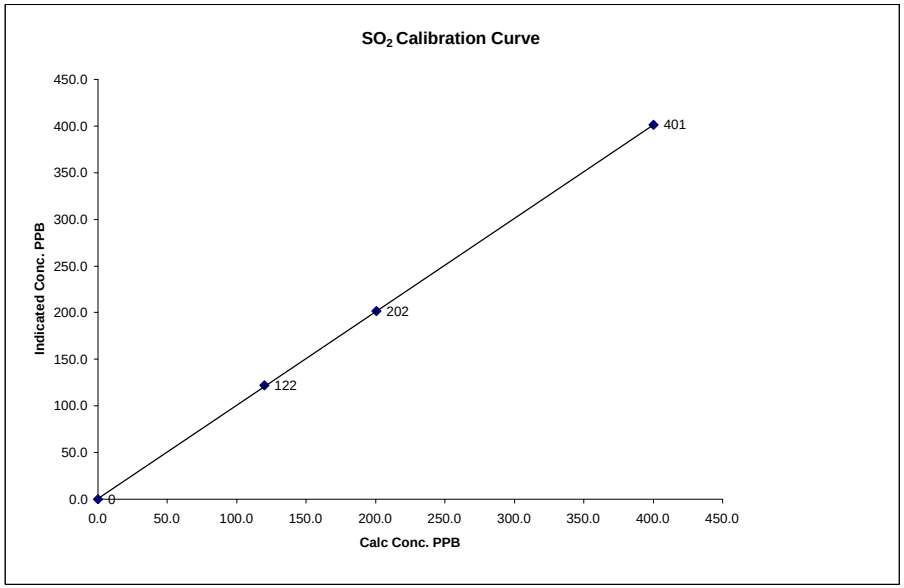
Calibration Performed by: Shea Beaton

SO_2 Calibration Curve

Calibration Date	March 10, 2010		
Company	Lakeland Community and Industry Association		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	11:00	End Time (MST)	15:30

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
120	122	0.9844
200	202	0.9923
400	401	0.9977

Correlation Coefficient	(≥ 0.995)	0.999977
Slope	(0.85 to 1.15)	1.001441
Intercept	(± 3% F.S.)	0.839361



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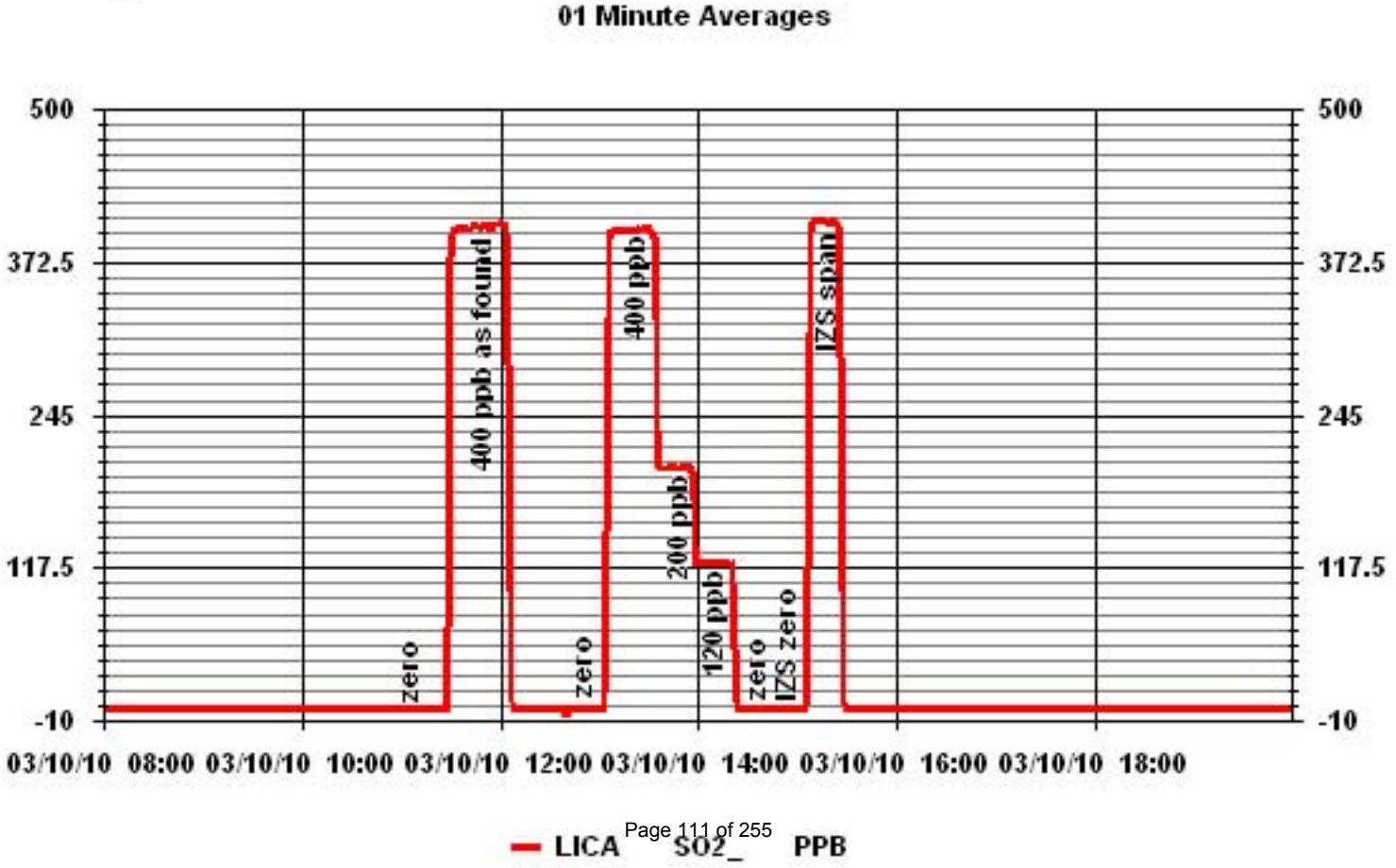

01 Minute Averages
500
372.5
245
117.5
-10
zero
400 ppb as found
zero
400 ppb
200 ppb
120 ppb
zero
IZS zero
IZS span
03/10/10 08:00
03/10/10 10:00
03/10/10 12:00
03/10/10 14:00
03/10/10 16:00
03/10/10 18:00
LICA SO2_ PPB

Total Reduced Sulphur

TRS Calibration Report

Station Information

Calibration Date	March 9, 2010		Previous Calibration	February 4, 2010	
Company	Lakeland Industry & Community Association				
Plant / Location	LICA 1 - Cold Lake South				
Start Time (MST)	8:35		End Time (MST)	15:14	
Reason:	Monthly Calibration				
Barometric Pressure	713	mm Hg	Station Temperature	23	Deg C
Cal Gas	10.8	ppm	Cal Gas Expiry date	June 22, 2010	
DAS Output Voltage	0 - 10	Volts			

Equipment Information

Analyzer Make / Model:	TEI 450i	S/N :	812728560	Method:	Fluorescent
Converter Make / Model:	CD Nova CDN 101	S/N :	250		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	3485		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range	0 -100 ppb							
Sample Flow / Box Temp	358	ccm	31.1	Deg C	357	ccm	30.1	Deg C
HVPS / Lamp Setting	-622.3		761		-622.3		760	
PMT / RxCell Temp	OK	Deg C	45.0	Deg C	OK	Deg C	45.3	Deg C
Converter / IZS Temp	850	Deg C	45.0	Deg C	849	Deg C	45.0	Deg C
Offset / Slope	11.1		1.179		11.3		1.179	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4996	0	0	0	N/A
4961	37	80	80	0.9994
4996	0	0	0	N/A
4961	37	80	80	0.9994
4981	18.5	40	40	0.9991
4989	11.6	25	25	1.0021
4998	0	0	0	N/A
			Sum of Least Squares	0.9995
			New Correction Factor	0.9994

	Before Calibration	After Calibration
Auto Zero	0.0	0.0
Auto Span	42	42
Sample Lines Connected		YES
Percent Change from Previous Calibration		0.0%

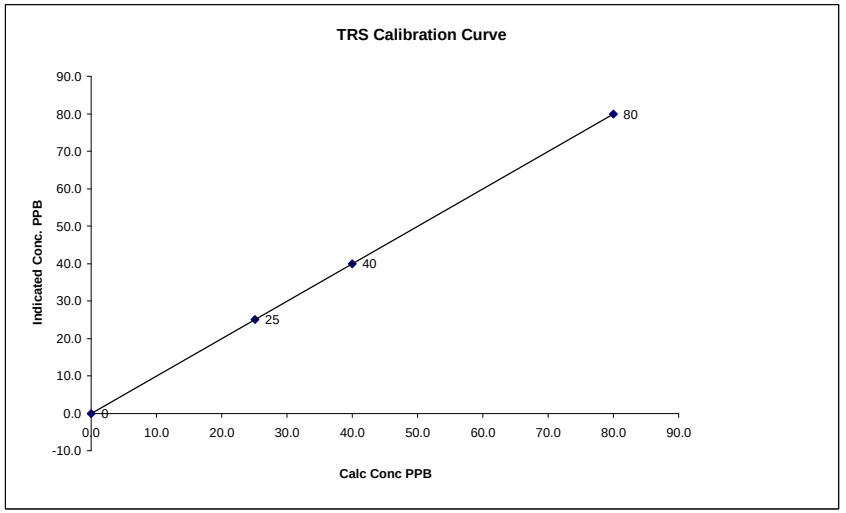
Calibration Performed by: Shea Beaton

TRS Calibration Curve

Calibration Date	March 9, 2010				
Company	Lakeland Industry & Community Association				
Plant / Location	LICA 1 - Cold Lake South				
Start Time (MST)	8:35		End Time (MST)	15:14	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
25	25	1.0021
40	40	0.9991
80	80	0.9994

Correlation Coefficient	(≥ 0.995)	0.999999
Slope	(0.85 to 1.15)	1.000840
Intercept	(± 3% F.S.)	-0.022696



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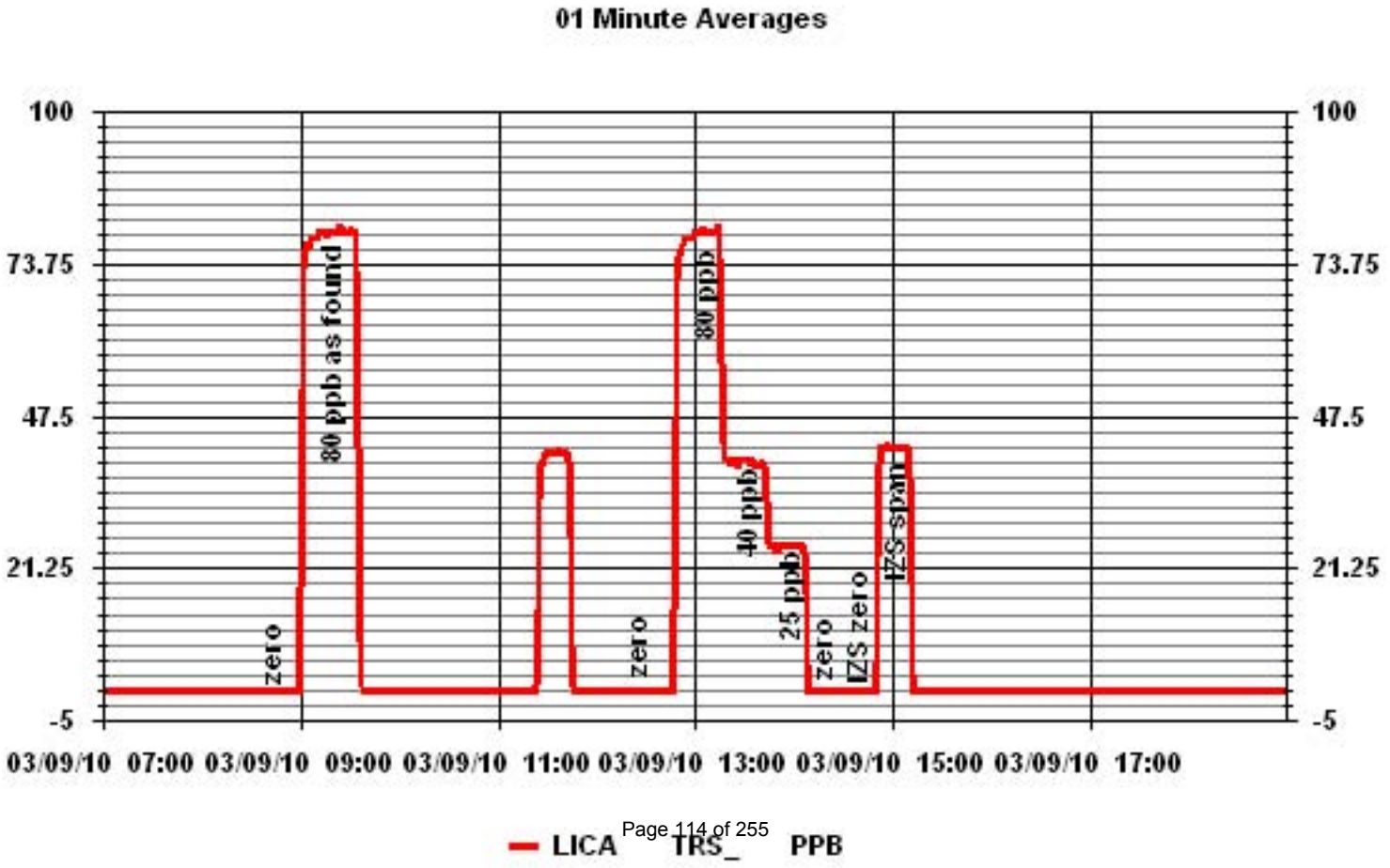

01 Minute Averages
100
73.75
47.5
21.25
-5
zero
80 ppb as found
zero
80 ppb
40 ppb
25 ppb
zero
IZS zero
IZS span
03/09/10 07:00
03/09/10 09:00
03/09/10 11:00
03/09/10 13:00
03/09/10 15:00
03/09/10 17:00
LICA TRS_ PPB

Total Hydrocarbons

THC Calibration Report

Station Information

Calibration Date:	March 9, 2010	Previous Calibration	February 4, 2010		
Company:	**Lakeland Industry and Community Association**				
Plant / Location:	**LICA1/Cold Lake**				
Start Time (MST)	10:15	End Time (MST)	17:05		
Reason:	Monthly Calibration				
Barometric Pressure:	713 mmHg	Station Temperature:	23	Deg C	
Calibrator:	API 700	S/N:	831		
Cal Gas Concentration:	207Prop/602Meth	ppm	Cal Gas Expiry Date:	8/11/2011	
DAS make & Model:	NA	S/N :	NA		
Output Voltage Range:	0 - 10 VDC				

Analyzer Information

Make / Model	S/N :	Method
TECO 51C-LT	51CLT-42740-8718	Flame Ionization

Analyzer Settings

	Before Calibration		After Calibration	
Concentration Range	0 - 50	ppm	0 - 50	ppm
Sample Pressure	6.5	psi	6.5	psi
Hydrogen Pressure	8	psi	8	psi
Air Pressure	20	psi	20	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
2000	0	0.0	0.0	N/A
2001	70	39.6	40.3	0.9823
2000	0	0.0	0.0	N/A
2000	70	39.6	39.9	0.9927
2000	35	20.1	19.8	1.0174
2000	20	11.6	11.3	1.0262
2000	0	0.0	0.0	N/A
			Correction Factor:	0.9927

Percent Change

Previous Calibration Correction Factor:	0.9927
Current Correction Factor Before Span Adjust:	0.9823
Percent Change:	1.1%

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	0.0	0.0
Auto Span	34.6	34.7
Sample Lines Connected		**YES**

Cylinder Pressures			
Span	850	psi	
Hydrogen	950	psi	
Zero Air	unlimited	psi	Maxxam-owned API 701 zero air supply with catalytic oxidizer

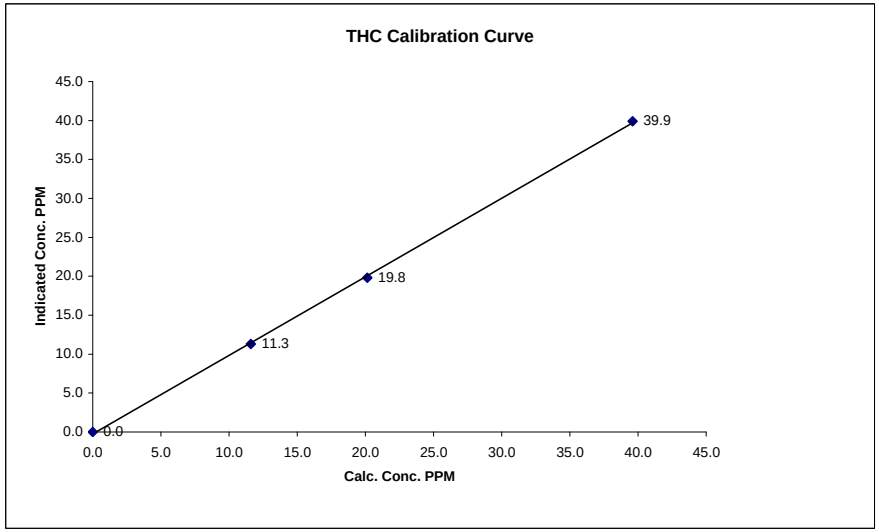
Calibration Performed by: Shea Beaton

THC Calibration Curve

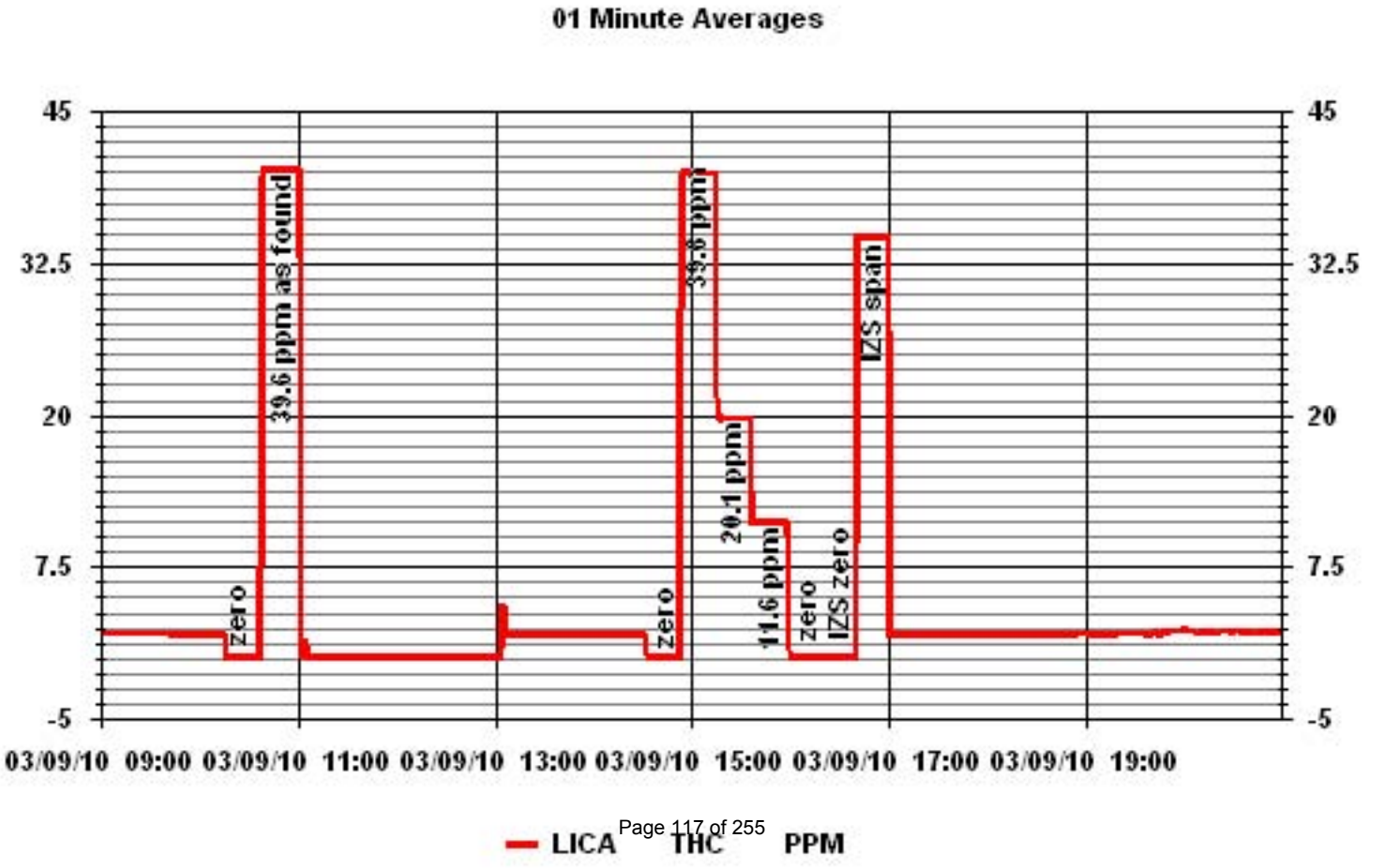
Calibration Date	March 9, 2010		
Company	**Lakeland Industry and Community Association**		
Plant / Location	**LICA1/Cold Lake**		
Start Time (MST)	10:15	End Time (MST)	17:05

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	0.0	
11.6	11.3	1.0262
20.1	19.8	1.0174
39.6	39.9	0.9927

Correlation Coefficient	(≥ 0.995)	0.999770
Slope	(0.85 to 1.15)	1.008877
Intercept	(± 3% F.S.)	-0.245424



Notes: Following the A/F points, the zero air supply pump was rebuilt, the analyzer was re-lit and allowed time to stabilize. Dilution calibration began at 14:30.


01 Minute Averages
45
32.5
20
7.5
-5
zero
39.6 ppm as found
zero
39.6 ppm
20.1 ppm
11.6 ppm
zero
IZS zero
IZS span
03/09/10 09:00
03/09/10 11:00
03/09/10 13:00
03/09/10 15:00
03/09/10 17:00
03/09/10 19:00
LICA THC PPM

Particulate Matter 2.5

TEOMÒ 1405F Audit

Station		Audit Transfer Standard	
Date:	March 29, 2010	Make/Model:	Chinook FTS
Station Name:	LICA 1	Serial Number:	Hi-091001
Location:	Cold Lake South	Cell s/n:	Lo-019099
Operator:	LICA	Thermometer s/n:	VWR

Sampler		Set-up and current Sampler readings	
Make/Model	Thermo Scientific Series 1405F	F-Main Set Pt (l/min)	3.00
Unit #	AMU 1775	F-Aux Set Pt (l/min)	13.67
Unit s/n	1405A201620804	Filter Load (%)	33.9%
Firmware Ver.	1.51	K_o Factor	14578.0
Parameter	PM 2.5 (with FDMS)	Temp (^oC)	14.6
		Press (ATM)	0.911

Conversion from mmHg or "Hg to ATM (Atmospheres)

ATM = (mmHg) X (1.316 X 10 -3) or ATM = ("Hg) X (3.34207 X 10 -2)

Note: Tolerances are noted as BOLD in Brackets

Audit

Status

Noise **<0.10*u* g**	0.016	Warnings	None
Pump Vacuum	0.33		

Temperature/Pressure

Measured Temp **(± 2 ^oC)**	14.2	**D ^oC**	0.4
Measured Press **(± 0.01atm)**	0.911	**DATM**	0.000

Flow Audit

Indicated Main Flow (l/min)	3.00	Main Flow Drift **(±10.0%)**	2.10%
Measured Main Flow (l/min)	3.08	Flow Adjusted to Measured?	Yes
Indicated Bypass Flow (l/min)	13.67	Bypass Flow Drift **(±10.0%)**	1.65%
Measured Bypass Flow (l/min)	13.84	Flow Adjusted to Measured?	Yes

Leak Check

Main **(< 0.15 l/min)**	NA
Aux **(< 0.15 l/min)**	NA

Instrument Setup

Flow Control = Active

Report Conditions = Standard (25.0 C and 1atm)

K_o Factor

Measured	NA
K_o Difference **(± 2.5%)**	NA

Start Time: 12:52 **Finish Time:** 14:25

Sample Inlet Cleaned: YES **New Filters Installed:** YES

New Filter Loading %: 18.2%

Comments: Allowed the Teom time to stabilize following the audit.

Auditor/s: Shea Beaton

Nitrogen Dioxide

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	March 9, 2010		Previous Calibration	February 4, 2010	
Company	LICA		Plant/Location	Maskwa	
Start Time (MST)	8:35		End Time (MST)	14:57	
Reason:	Monthly Calibration			Other	
Barometric Pressure	713 mmHg	Station Temperature	23 Deg C	MFCF	1
Cal Gas Concentration	NOx 51.8 ppm	NO 51.6 ppm	Cal Gas Expiry date	19-Dec-10	
DAS Output Voltage	0 - 1 Volts		Chart Rec. Output	NA Volts	

Equipment Information

Analyzer Make / Model:	API 200E	S/N :	594	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	3485		
Chart Recorder Make / Model:	NA	S/N:	NA		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration					After Calibration			
Concentration Range					0-1000		ppb		
Sample Flow/Conv. Temp	727	ccm	316	Deg C		725	ccm	317.0	Deg C
Ozone Flow / Vacuum	OK	ccm	178.0	"Hg-A		OK	ccm	178.5	"Hg-A
HVPS / A ZERO	-820	Volts	NA	MV		-820	Volts	NA	MV
Rx/ Temp / PMT Temp	49.8	Deg C	-2.5	Deg C		49.9	Deg C	-2.5	Deg C
Box Temp / IZS Temp	31.9	Deg C	OK	Deg C		33.2	Deg C	OK	Deg C
Offset	4.3	NOx	3.8	NO		4.8	NOx	3.8	NO
Slope	1.007	NOx	0.920	NO		1.007	NOx	0.920	NO
NO_2 COEF / Conv Efficency	1.007	NO2	NA			1.007	NO2	NA	

Dilution Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			Correction Factor	
			NOx	NO	NO2	NOx	NO	NO2	NOx	NO
3005	0.0	-----	0	0	0	1	0	1	-----	-----
3005	0.0		0	0	1	0	0	0	-----	-----
			No adjustement required							
2979	23.3	-----	402	400	-----	402	399	3	1.0025	1.0036
2989	11.6	-----	200	199	-----	201	200	2	1.0013	0.9974
2992	8.7	-----	150	150	-----	151	150	2	1.0012	0.9974
3001	0.0	-----	0	0	0	1	1	1	-----	-----

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			NO_2 Correction Factor	NO2 Conv Efficency
			NOx	NO	NO2	NOx	NO	NO2		
2981	23.3	-----	402	400	-----	401	398	3	-----	-----
2981	23.3	300	402		273	398	128	270	1.0149	98.89%
2981	23.3	150	402	-----	140	399	261	139	1.0145	99.27%
2981	23.3	75	402	-----	63	399	338	62	1.0328	98.33%
2981	23.3	350	402	-----	318	397	83	312	1.0225	98.10%

Linearity			Sum of Least Squares	NOx=	0.999	NO=	1.002	NO2= 1.017
OK?	Yes	No	Correction Factors:	NOx=	1.0025	NO=	1.0036	NO2= 1.0145
						Average Converter Efficiency=		98.65%

	Before Calibration					After Calibration			
Auto Zero	-0.3	NOx	-0.2	NO2		-0.8	NOx	-0.7	NO2
Auto Span	429	NOx	427	NO2		429	NOx	428	NO2
					Sample Lines Connected	YES			

Notes: Following the adjustment at the zero point, the dilution gas flow was accidentally halted, problem correcred, point restarted. This issues happened two times-bad power cord. Extra point (O3 set pt 350) done for O3 cal; point not used for calculations.

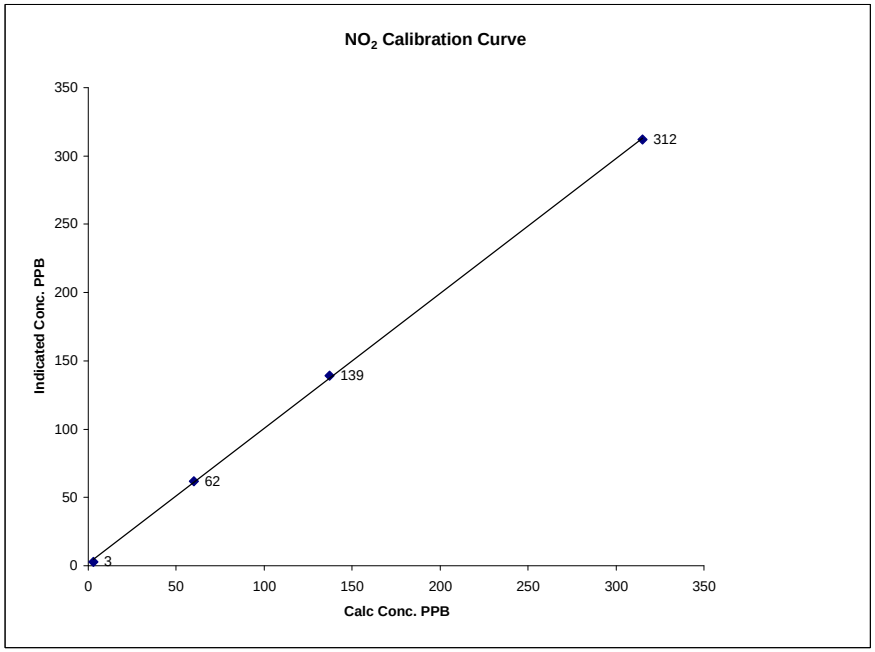
Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	March 9, 2010		
Company	LICA		
Plant / Location	Maskwa		
Start Time (MST)	8:35	End Time (MST)	14:57

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
3	3	N/A
315	312	1.0096
60	62	0.9677
137	139	0.9856

Correlation Coefficient	(≥ 0.995)	0.999844
Slope	(0.85 to 1.15)	0.987707
Intercept	(± 3% F.S.)	1.83269

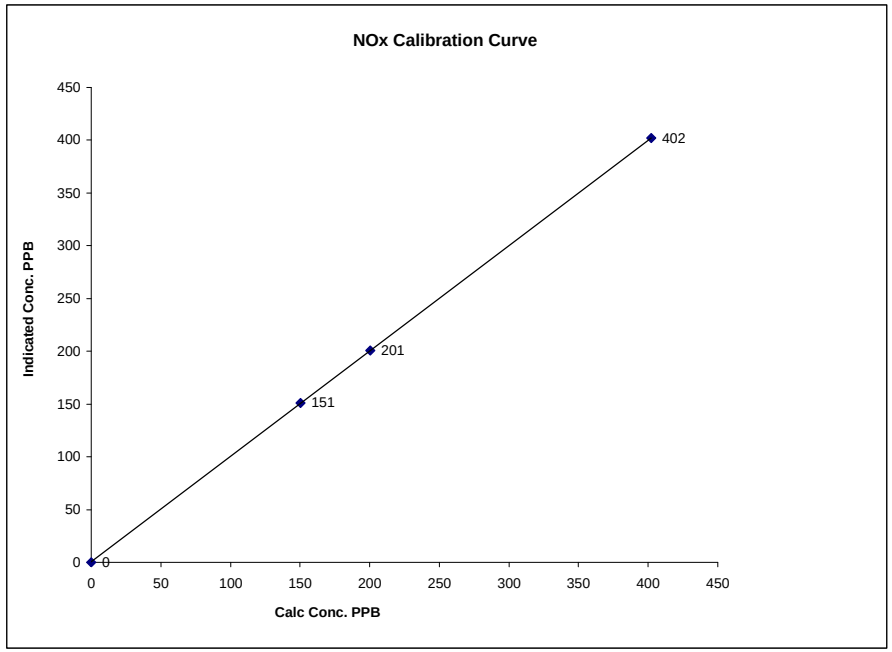


Notes:

NOx Calibration Curve

Calibration Date	March 9, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	8:35	End Time (MST)	14:57		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999993
			Slope (0.85 to 1.15)	0.999723
0	0	N/A	Intercept (± 3% F.S.)	0.44133
150	151	0.9946		
200	201	0.9963		
402	402	1.0000		

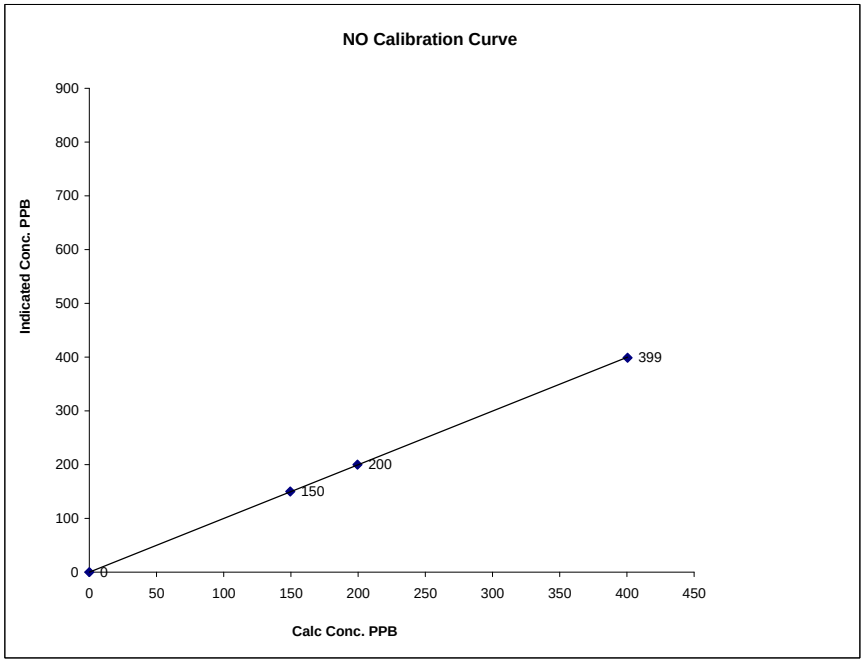


Notes:

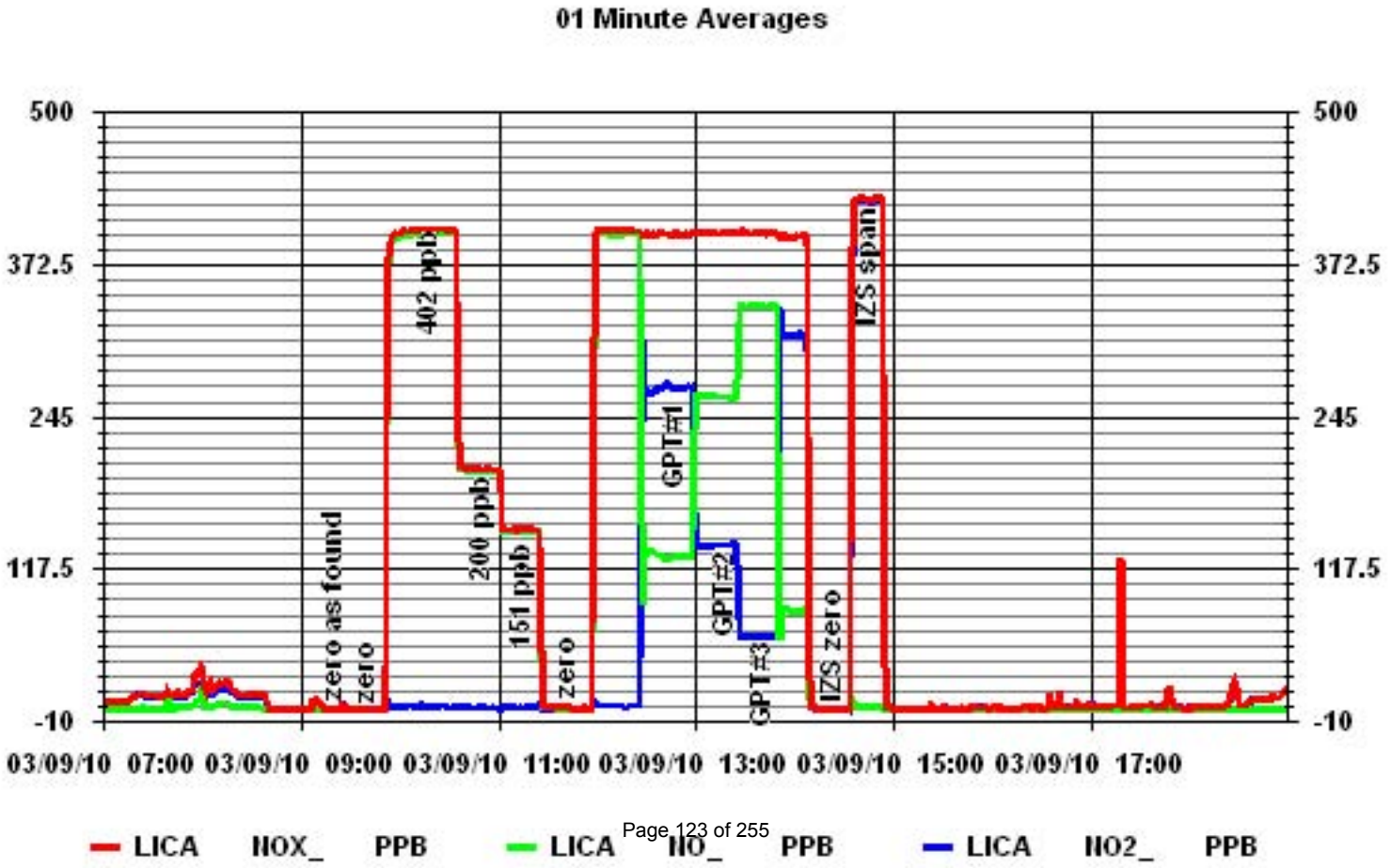
NO Calibration Curve

Calibration Date	March 9, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	8:35	End Time (MST)	14:57		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999985
			Slope (0.85 to 1.15)	0.991930
0	0	N/A	Intercept (± 3% F.S.)	2.4781
150	150	0.9974		
199	200	0.9974		
400	399	1.0036		



Notes:


01 Minute Averages
500
372.5
245
117.5
-10
zero as found
zero
402 ppb
200 ppb
151 ppb
zero
GPT#1
GPT#2
GPT#3
IZS zero
IZS span
03/09/10 07:00
03/09/10 09:00
03/09/10 11:00
03/09/10 13:00
03/09/10 15:00
03/09/10 17:00
LICA NOX_ PPB
LICA NO_ PPB
LICA NO2_ PPB

Ozone

O_3 Calibration Report

Station Information

Calibration Date	March 9, 2010	Previous Calibration	February 4, 2010
Company	**Lakeland Industry & Community Association**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	14:30	End Time (MST)	17:31
Reason:		Monthly Calibration	
Barometric Pressure	713 mm Hg	Station Temperature	23 Deg C
DAS Output Voltage	0 - 10 Volts		

Equipment Information

Analyzer Make / Model:	TEI 49i	S/N :	700419951	Method:	Fluorescent
Calibrator Make / Model:	Environics 2000	S/N :	1991	Method:	GPT
DAS Make / Model:	ESC 8832	S/N :	263		

Analyzer Settings

	Before Calibration		After Calibration	
Concentration Range	0 - 500 ppb			
Bench Temp/ Pressure	29	Deg C	29.2	Deg C
O_3 Set Level	29%		29%	
Sample Flow A/B	0.735 LPM	0.753 LPM	0.742 LPM	0.757 LPM
Offset / Slope	0.7	0.991	0.7	0.991

Calibration Data

Dilution Flow Rate	Ozone Set Point	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
3004	0	0	0	N/A
3004	350	315	317	0.9937
3004	150	137	134	1.0224
3004	75	60	58	1.0345
3004	0	0	0	N/A
			Sum of Least Squares	N/A
			New Correction Factor	0.9937

	Before Calibration	After Calibration
Auto Zero	0.0	-0.1
Auto Span	280	283
Sample Lines Connected		YES
Percent Change from Previous Calibration		0.4%

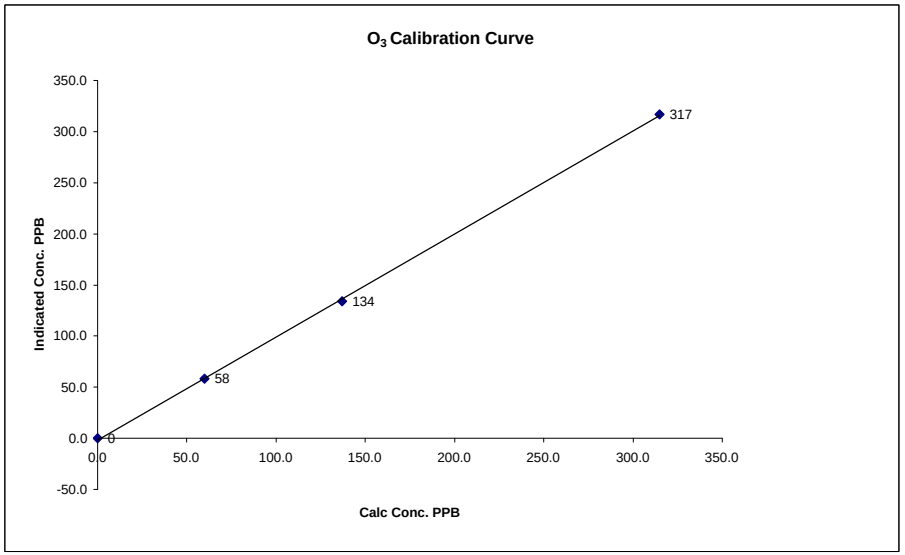
Calibration Performed by: Shea Beaton

O_3 Calibration Curve

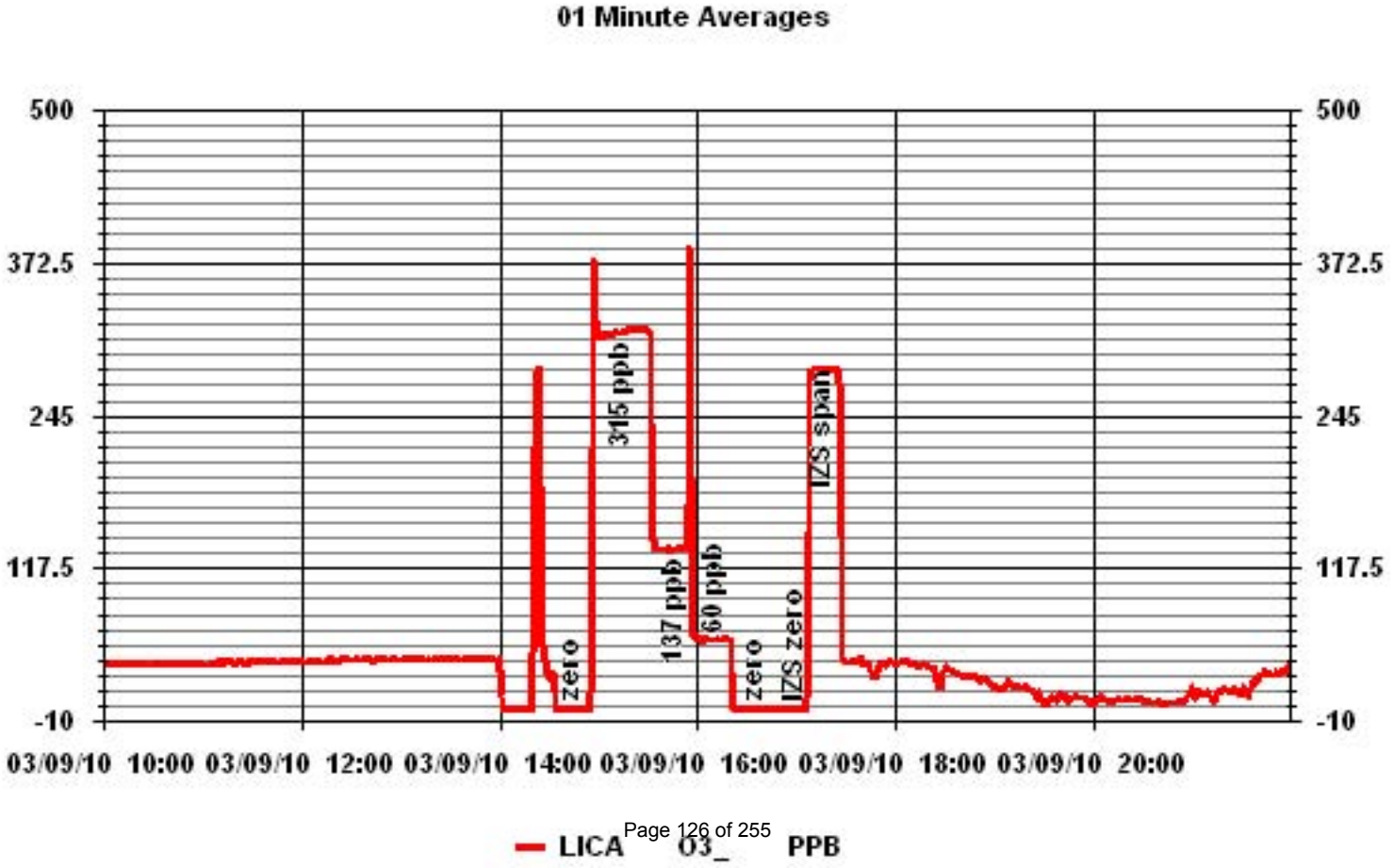
Calibration Date	March 9, 2010		
Company	**Lakeland Industry & Community Association**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	14:30	End Time (MST)	17:31

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
60	58	1.0345
137	134	1.0224
315	317	0.9937

Correlation Coefficient	(≥ 0.995)	0.999814
Slope	(0.85 to 1.15)	1.008616
Intercept	(± 3% F.S.)	-1.852858



Notes: Bench Temp=53.5C, O3 lamp temp=67.6C.


01 Minute Averages
500
372.5
245
117.5
-10
zero
315 ppb
137 ppb
60 ppb
zero
IZS zero
IZS span
03/09/10 10:00 03/09/10 12:00 03/09/10 14:00 03/09/10 16:00 03/09/10 18:00 03/09/10 20:00
LICA O3_ PPB

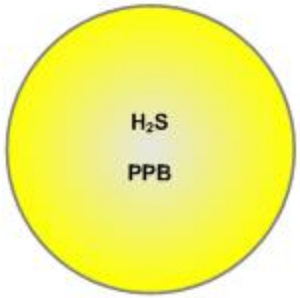
Passive Bubble Maps

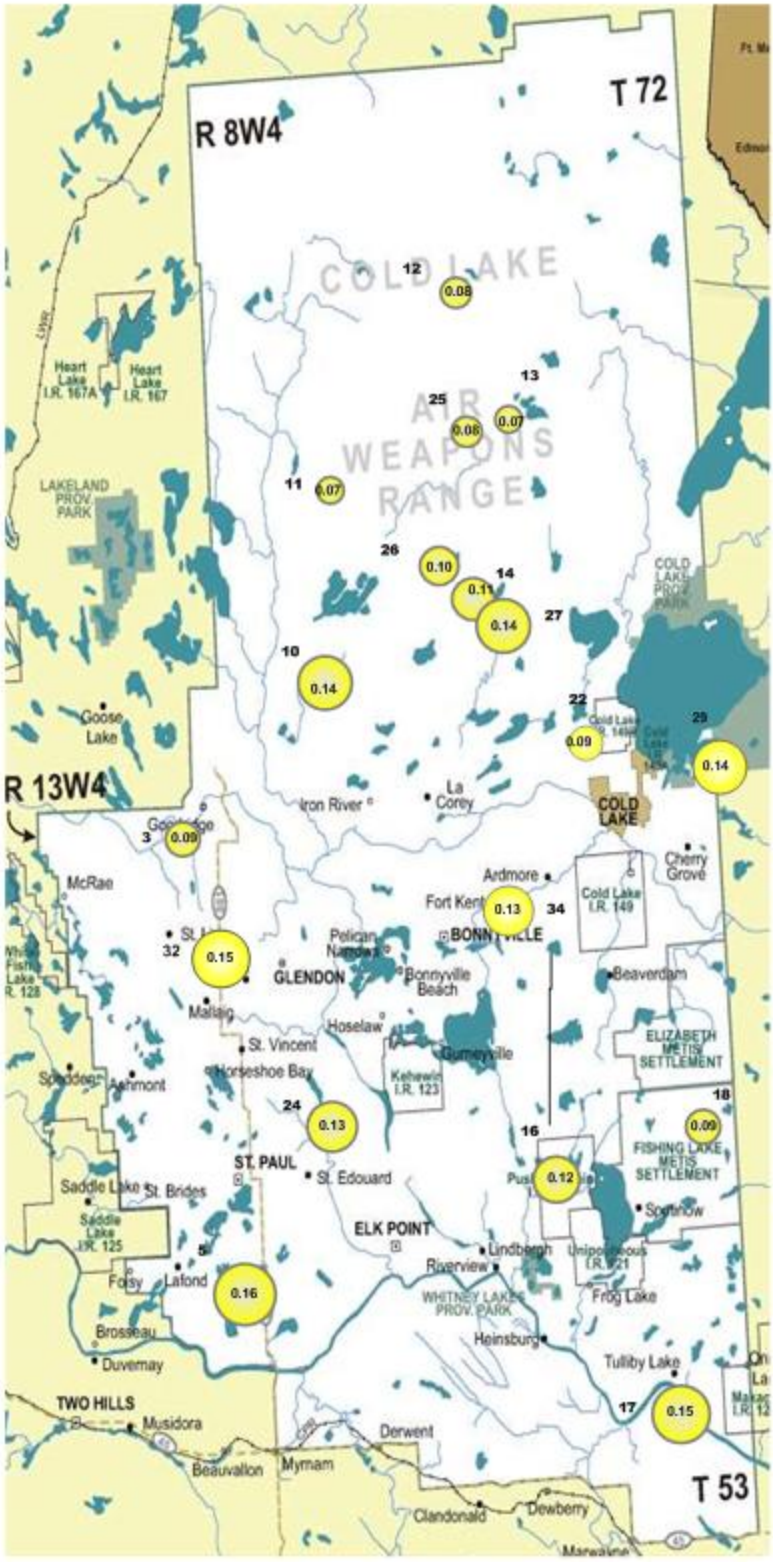
Lakeland Industry & Community Association
H_2S Passive Bubble Map

MARCH 2010

PASSIVE STATIONS

		DUPLICATE
3 – Therien	0.09 PPB	NA
5 – Lake Eliza	0.18 PPB	0.14 PPB
10 – La Corey	0.14 PPB	0.13 PPB
11 – Wolf Lake	0.07 PPB	NA
12 – Foster Creek	0.07 PPB	0.08 PPB
13 – Primrose	0.07 PPB	NA
14 – Maskwa	0.10 PPB	0.11 PPB
16 – Frog Lake	0.12 PPB	NA
17 – Clear Range	0.13 PPB	0.15 PPB
18 – Fishing Lake	0.09 PPB	NA
22 – Cold Lake South	0.09 PPB	NA
24 – Fort George	0.13 PPB	0.13 PPB
25 – Burnt Lake	0.08 PPB	NA
26 – Mahihkan	0.10 PPB	0.09 PPB
27 – Mahkeses	0.14 PPB	NA
29 – Cold Lake South 2	0.11 PPB	0.16 PPB
32 – St. Lina	0.15 PPB	NA
34 – Portable	0.13 PPB	NA





Summary

Minimum : 0.07 PPB – Burnt Lake
Maximum: 0.38 PPB – Wolf Lake AND Primrose
Average: 0.11 PPB *Includes Duplicates

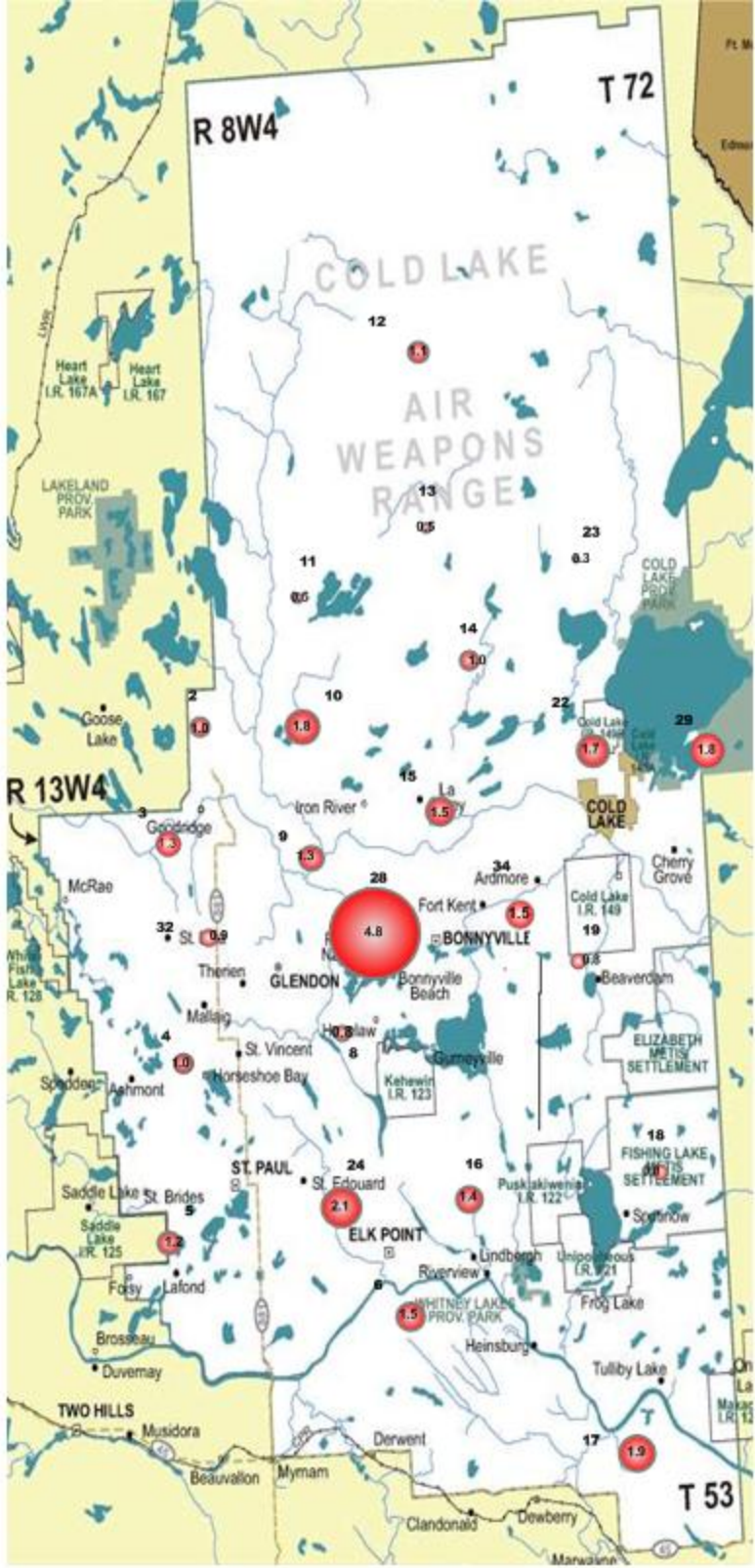
Lakeland Industry & Community Association
NO_2 Passive Bubble Map

MARCH 2010

PASSIVE STATIONS		DUPLICATE
2 – Sand River	1.0 PPB	NA
3 – Therien	1.3 PPB	1.4 PPB
4 – Flat Lake	1.0 PPB	NA
5 – Lake Eliza	1.3 PPB	1.0 PPB
6 – Telegraph Creek	1.5 PPB	NA
8 – Muriel-Kehewin	0.8 PPB	0.7 PPB
9 – Dupre	1.3 PPB	NA
10 – La Corey	1.7 PPB	1.8 PPB
11 – Wolf Lake	0.5 PPB	NA
12 – Foster Creek	1.1 PPB	1.1 PPB
13 – Primrose	0.5 PPB	NA
14 – Maskwa	1.0 PPB	1.0 PPB
15 – Ardmore	1.5 PPB	NA
16 – Frog Lake	1.4 PPB	1.4 PPB
17 – Clear Range	1.9 PPB	NA
18 – Fishing Lake	0.8 PPB	0.7 PPB
19 – Beaverdam	0.8 PPB	NA
22 – Cold Lake South	1.7 PPB	NA
23 – Medley-Martineau	0.3 PPB	0.2 PPB
24 – Fort George	2.1 PPB	NA
28 – Town of Bonnyville	5.0 PPB	4.6 PPB
29 – Cold Lake South 2	1.8 PPB	NA
32 – St. Lina	0.9 PPB	NA
34 – Portable	1.5 PPB	NA

Summary

Minimum : 0.3 PPB – Medley-Martineau
Maximum: 4.8 PPB – Town of Bonnyville
Average: 1.3 PPB *Includes Duplicates



Lakeland Industry & Community Association
O_3 Passive Bubble Map

MARCH 2010

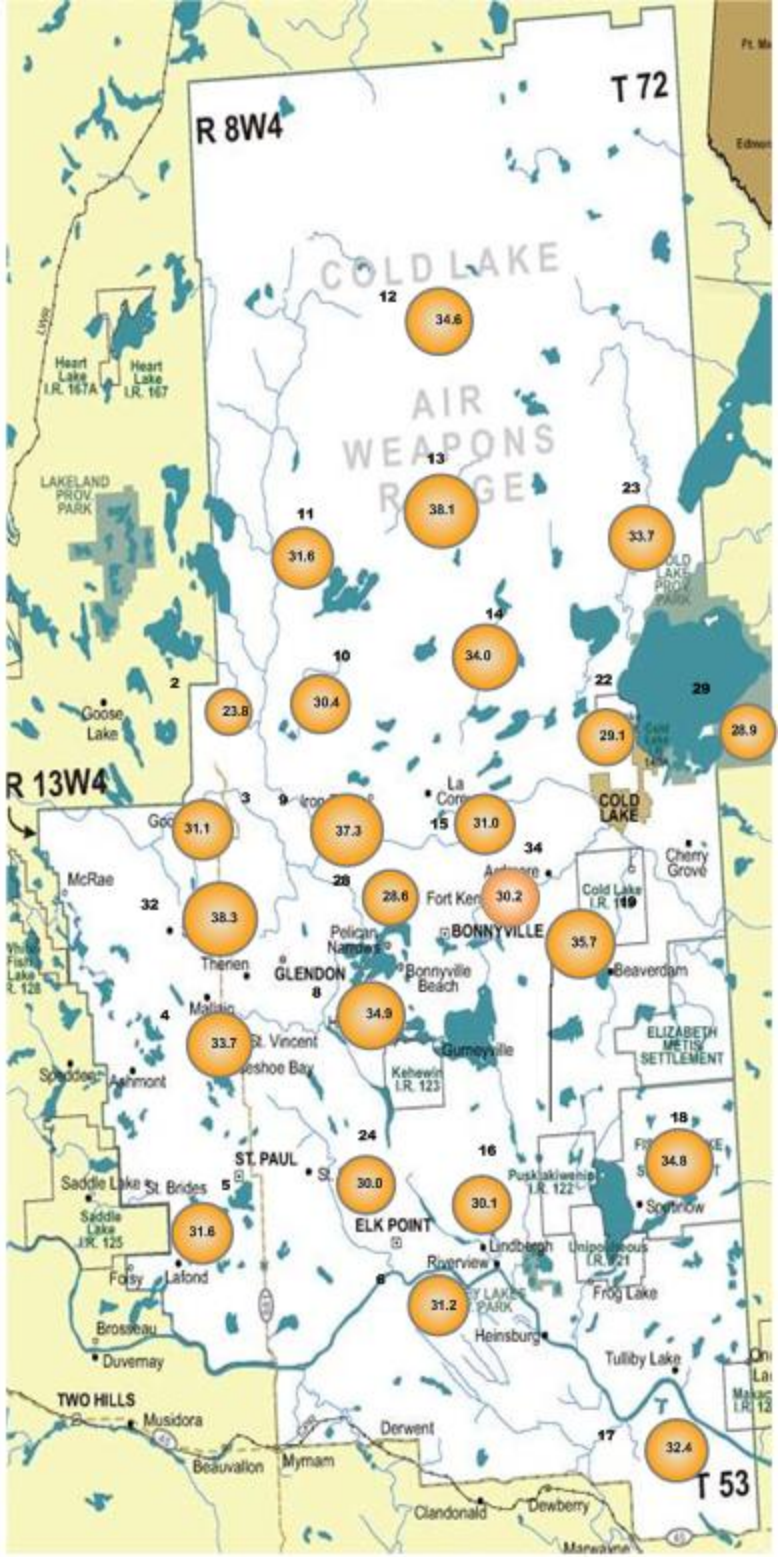
PASSIVE STATIONS

		DUPLICATE
2 – Sand River	23.8 PPB	NA
3 – Therien	32.5 PPB	29.7 PPB
4 – Flat Lake	33.7 PPB	NA
5 – Lake Eliza	32.6 PPB	30.6 PPB
6 – Telegraph Creek	31.2 PPB	NA
8 – Muriel-Kehewin	35.4 PPB	34.9 PPB
9 – Dupre	37.3 PPB	NA
10 – La Corey	30.6 PPB	30.1 PPB
11 – Wolf Lake	31.6 PPB	NA
12 – Foster Creek	34.0 PPB	35.1 PPB
13 – Primrose	38.1 PPB	NA
14 – Maskwa	33.7 PPB	34.2 PPB
15 – Ardmore	31.0 PPB	NA
16 – Frog Lake	30.6 PPB	29.5 PPB
17 – Clear Range	32.4 PPB	NA
18 – Fishing Lake	34.3 PPB	35.3 PPB
19 – Beaverdam	35.7 PPB	NA
22 – Cold Lake South	29.1 PPB	NA
23 – Medley-Martineau	33.7 PPB	33.6 PPB
24 – Fort George	30.0 PPB	NA
28 – Town of Bonnyville	29.3 PPB	27.8 PPB
29 – Cold Lake South 2	28.9 PPB	NA
32 – St. Lina	38.3 PPB	NA
34 – Portable	30.2 PPB	NA

O_3 PPB

Summary

Minimum : 23.8 PPB –Sand River
Maximum: 38.3 PPB –St. Lina
Average: 32.3 PPB *Includes Duplicates



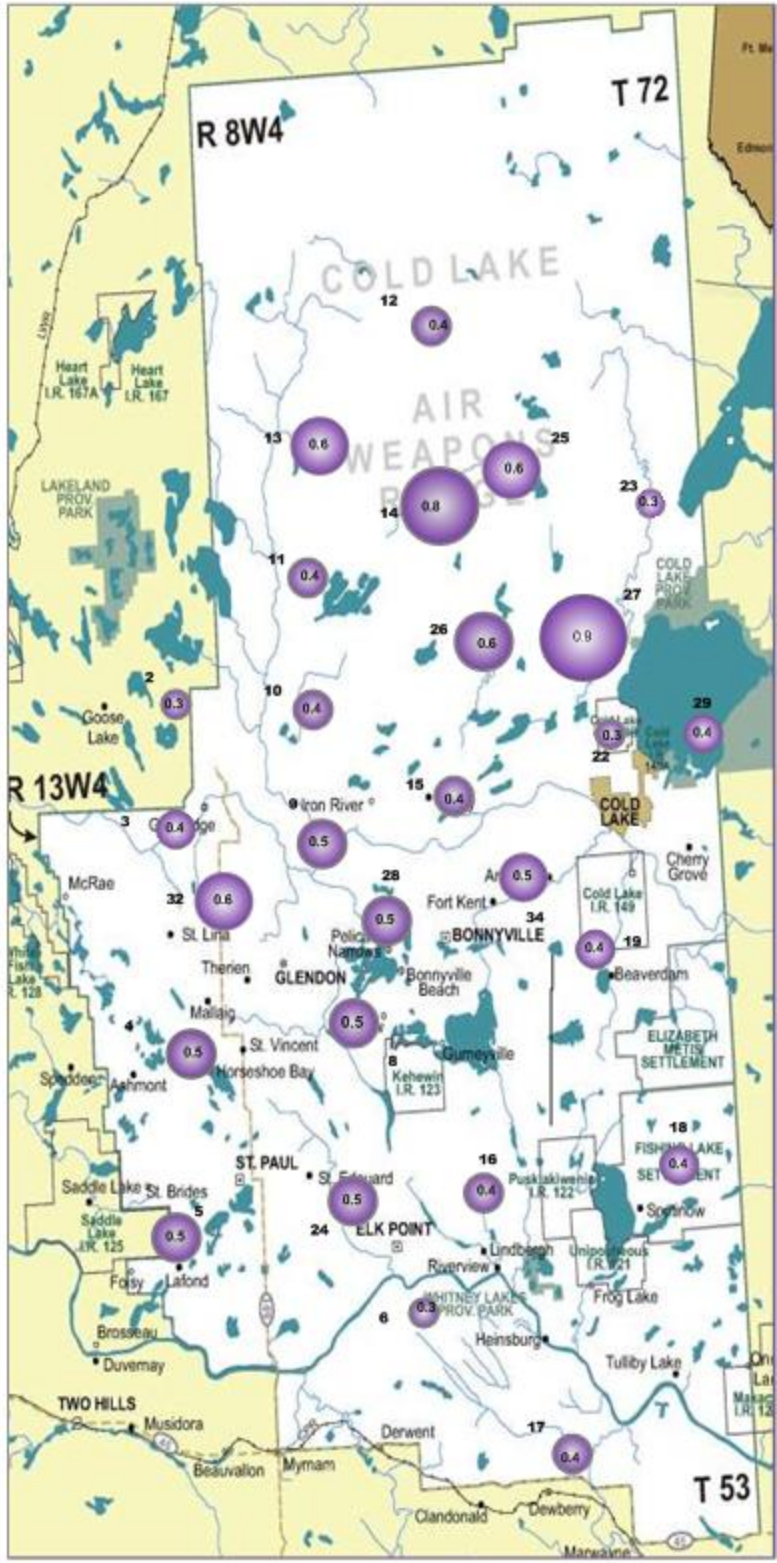
Lakeland Industry & Community Association
SO_2 Passive Bubble Map

MARCH 2010

PASSIVE STATIONS		DUPLICATE
2 – Sand River	0.3 PPB	NA
3 – Therien	0.4 PPB	0.4 PPB
4 – Flat Lake	0.5 PPB	NA
5 – Lake Eliza	0.5 PPB	0.5 PPB
6 – Telegraph Creek	0.3 PPB	NA
8 – Muriel-Kehewin	0.5 PPB	0.5 PPB
9 – Dupre	0.5 PPB	NA
10 – La Corey	0.4 PPB	0.4 PPB
11 – Wolf Lake	0.4 PPB	NA
12 – Foster Creek	0.4 PPB	0.4 PPB
13 – Primrose	0.6 PPB	NA
14 – Maskwa	0.8 PPB	0.8 PPB
15 – Ardmore	0.4 PPB	NA
16 – Frog Lake	0.4 PPB	0.4 PPB
17 – Clear Range	0.4 PPB	NA
18 – Fishing Lake	0.4 PPB	0.4 PPB
19 – Beaverdam	0.4 PPB	NA
22 – Cold Lake South	0.3 PPB	NA
23 – Medley-Martineau	0.3 PPB	0.3 PPB
24 – Fort George	0.5 PPB	NA
25 – Burnt Lake	0.5 PPB	0.6 PPB
26 – Mahikan	0.6 PPB	NA
27 – Mahkeses	0.9 PPB	0.9 PPB
28 – Town of Bonnyville	0.5 PPB	NA
29 – Cold Lake South 2	0.4 PPB	0.3 PPB
32 – St. Lina	0.6 PPB	NA
34 – Portable	0.5 PPB	NA

Summary

Minimum : 0.3 PPB – VARIOUS
Maximum: 0.9 PPB –Mahkeses
Average: 0.5 PPB *Includes Duplicates



Passive Field Data

Field Notes

ID	SAMPLER	START		END		NOTES
		DATE	TIME	DATE	TIME	
2	$SO_2/NO_2/O_3$	03/01/10	11:10	04/01/10	08:25	
2A (Dup)	NA	NA	NA	NA	NA	
3	$H_2S/SO_2/NO_2/O_3$	03/01/10	10:30	04/01/10	07:50	
3A (Dup)	$SO_2/NO_2/O_3$	03/01/10	10:30	04/01/10	07:50	
4	$SO_2/NO_2/O_3$	03/02/10	16:45	04/02/10	13:15	
4A (Dup)	NA	NA	NA	NA	NA	
5	$H_2S/SO_2/NO_2/O_3$	03/02/10	16:05	04/02/10	12:35	
5A (Dup)	$H_2S/SO_2/NO_2/O_3$	03/02/10	16:05	04/02/10	12:35	
6	$SO_2/NO_2/O_3$	03/02/10	14:45	04/02/10	11:15	
6A (Dup)	NA	NA	NA	NA	NA	
8	$SO_2/NO_2/O_3$	03/02/10	17:40	04/02/10	14:10	
8A (Dup)	$SO_2/NO_2/O_3$	03/02/10	17:40	04/02/10	14:10	
9	$SO_2/NO_2/O_3$	03/01/10	09:05	04/01/10	17:45	
9A (Dup)	NA	NA	NA	NA	NA	
10	$H_2S/SO_2/NO_2/O_3$	03/01/10	12:10	04/01/10	09:15	
10A (Dup)	$H_2S/SO_2/NO_2/O_3$	03/01/10	12:10	04/01/10	09:15	
11	$H_2S/SO_2/NO_2/O_3$	03/01/10	12:50	04/01/10	09:55	
11A (Dup)	NA	NA	NA	NA	NA	
12	$H_2S/SO_2/NO_2/O_3$	03/01/10	14:05	04/01/10	11:20	
12A (Dup)	$H_2S/SO_2/NO_2/O_3$	03/01/10	14:05	04/01/10	11:20	
13	$H_2S/SO_2/NO_2/O_3$	03/01/10	15:50	04/01/10	13:00	
13A (Dup)	NA	NA	NA	NA	NA	
14	$H_2S/SO_2/NO_2/O_3$	03/01/10	16:50	04/01/10	13:50	
14A (Dup)	$H_2S/SO_2/NO_2/O_3$	03/01/10	16:50	04/01/10	13:50	
15	$SO_2/NO_2/O_3$	03/01/10	08:05	04/01/10	17:15	
15A (Dup)	NA	NA	NA	NA	NA	
16	$H_2S/SO_2/NO_2/O_3$	03/02/10	13:05	04/02/10	09:40	
16A (Dup)	$SO_2/NO_2/O_3$	03/02/10	13:05	04/02/10	09:40	

ID	SAMPLER	START		END		NOTES
		DATE	TIME	DATE	TIME	
17	$H_2S/SO_2/NO_2/O_3$	03/02/10	13:55	04/02/10	10:30	
17A (Dup)	H_2S	03/02/10	13:55	04/02/10	10:30	
18	$H_2S/SO_2/NO_2/O_3$	03/02/10	12:25	04/02/10	09:00	
18A (Dup)	$SO_2/NO_2/O_3$	03/02/10	12:25	04/02/10	09:00	
19	$SO_2/NO_2/O_3$	03/02/10	11:20	04/02/10	08:10	
19A (Dup)	NA	NA	NA	NA	NA	
22	$H_2S/SO_2/NO_2/O_3$	03/02/10	08:20	04/01/10	16:25	
22A (Dup)	NA	NA	NA	NA	NA	
23	$SO_2/NO_2/O_3$	03/01/10	18:10	04/01/10	15:20	
23A (Dup)	$SO_2/NO_2/O_3$	03/01/10	18:10	04/01/10	15:20	
24	$H_2S/SO_2/NO_2/O_3$	03/02/10	15:15	04/02/10	11:50	
24A (Dup)	H_2S	03/02/10	15:15	04/02/10	11:50	
25	H_2S/SO_2	03/01/10	15:30	04/01/10	12:40	
25A (Dup)	SO_2	03/01/10	15:30	04/01/10	12:40	
26	H_2S/SO_2	03/01/10	16:20	04/01/10	13:35	
26A (Dup)	H_2S	03/01/10	16:20	04/01/10	13:35	
27	H_2S/SO_2	03/01/10	17:15	04/01/10	14:20	
27A (Dup)	SO_2	03/01/10	17:15	04/01/10	14:20	
28	$SO_2/NO_2/O_3$	03/01/10	08:35	04/02/10	14:50	
28A (Dup)	NO_2/O_3	03/01/10	08:35	04/02/10	14:50	
29	$H_2S/SO_2/NO_2/O_3$	03/02/10	08:30	04/01/10	16:10	
29A (Dup)	H_2S/SO_2	03/02/10	08:30	04/01/10	16:10	
32	$H_2S/SO_2/NO_2/O_3$	03/01/10	10:00	04/01/10	06:45	
32A(Dup)	NA	NA	NA	NA	NA	
34	$H_2S/SO_2/NO_2/O_3$	03/02/10	10:25	03/31/10	08:45	
34A(Dup)	NA	NA	NA	NA	NA	

Passive Network Laboratory Analysis

Your Project #: 2010/03/01 - 2010/04/01
Site:LICA

Attention: MICHAEL BISAGA
LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
PO BOX 8237
5107W- 50TH STREET
BONNYVILLE, AB
CANADA T9N 2J5

Report Date: 2010/04/27

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B019949
Received: 2010/04/07, 08:29

Sample Matrix: Air
Samples Received: 43

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis (1)	26	2010/04/27	2010/04/27	EINDSOP-00150	Tang.Passive H2S in
NO2 Passive Analysis (1)	34	2010/04/24	2010/04/27	EINDSOP-00148	Tang Passive NO2 in
O3 Passive Analysis (1)	34	2010/04/20	2010/04/27	EINDSOP-00197	EPA 300 R2.1
SO2 Passive Analysis (1)	39	2010/04/24	2010/04/27	EINDSOP-00149	Tang Passive SO2 in

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) The detection limit is based on a 30 day sampling period.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

LEVI MANCHAK,
Email:
Phone# (780) 378-8500

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Maxxam Analytics

Maxxam Job #: B019949
Report Date: 2010/04/27

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Client Project #: 2010/03/01 - 2010/04/01
Site Reference: LICA
Sampler Initials: SB

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		T48505	T48507	T48508	T48509	T48511		
Sampling Date		2010/03/01 11:10	2010/03/01 10:30	2010/03/01 10:30	2010/03/01 16:45	2010/03/02 16:05		
	Units	**2**	**3**	**3A (DUP)**	**4**	**5**	**RDL**	**QC Batch**
Passive Monitoring								
Calculated H2S	ppb		0.09			0.18	0.02	3914922
Calculated NO2	ppb	1.0	1.1	1.4	1.0	1.3	0.1	3909237
Calculated O3	ppb	23.8	32.5	29.7	33.7	32.6	0.1	3898702
Calculated SO2	ppb	0.3	0.4	0.4	0.5	0.5	0.1	3909241

RDL = Reportable Detection Limit

Maxxam ID		T48512	T48513	T48514	T48515	T48516		
Sampling Date		2010/03/02 16:05	2010/03/02 14:45	2010/03/02 17:40	2010/03/02 17:40	2010/03/01 09:05		
	Units	**5A (DUP)**	**6**	**8**	**8A (DUP)**	**9**	**RDL**	**QC Batch**
Passive Monitoring								
Calculated H2S	ppb	0.14					0.02	3914922
Calculated NO2	ppb	1.0	1.5	0.8	0.7	1.3	0.1	3909237
Calculated O3	ppb	30.6	31.2	35.4	34.3	37.3	0.1	3898702
Calculated SO2	ppb	0.5	0.3	0.5	0.5	0.5	0.1	3909241

RDL = Reportable Detection Limit

Maxxam ID		T48517	T48518	T48519	T48520	T48521		
Sampling Date		2010/03/01 12:10	2010/03/01 12:10	2010/03/01 12:50	2010/03/01 14:05	2010/03/01 14:05		
	Units	**10**	**10A (DUP)**	**11**	**12**	**12A (DUP)**	**RDL**	**QC Batch**
Passive Monitoring								
Calculated H2S	ppb	0.14	0.13	0.07	0.07	0.08	0.02	3914922
Calculated NO2	ppb	1.7	1.8	0.5	1.1	1.1	0.1	3909237
Calculated O3	ppb	30.6	30.1	31.6	34.0	35.1	0.1	3898702
Calculated SO2	ppb	0.4	0.4	0.4	0.4	0.4	0.1	3909241

RDL = Reportable Detection Limit

Maxxam Job #: B019949
Report Date: 2010/04/27

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Client Project #: 2010/03/01 - 2010/04/01
Site Reference: LICA
Sampler Initials: SB

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		T48522		T48523	T48524		T48525		
Sampling Date		2010/03/01 15:50		2010/03/01 16:50	2010/03/01 16:50		2010/03/01 08:05		
	Units	**13**	**QC Batch**	**14**	**14A (DUP)**	**QC Batch**	**15**	**RDL**	**QC Batch**
Passive Monitoring									
Calculated H2S	ppb	0.07	3914922	0.10	0.11	3914922		0.02	3914922
Calculated NO2	ppb	0.5	3909237	1.0	1.0	3909238	1.5	0.1	3909238
Calculated O3	ppb	38.1	3898702	33.7	34.2	3898704	31.0	0.1	3898704
Calculated SO2	ppb	0.6	3909241	0.8	0.8	3909241	0.4	0.1	3909244

RDL = Reportable Detection Limit

Maxxam ID		T48526	T48527	T48529	T48530	T48531		
Sampling Date		2010/03/02 13:05	2010/03/02 13:55	2010/03/02 13:55	2010/03/02 12:25	2010/03/02 12:25		
	Units	**16**	**17**	**17A (DUP)**	**18**	**18A (DUP)**	**RDL**	**QC Batch**
Passive Monitoring								
Calculated H2S	ppb	0.12	0.13	0.16	0.09		0.02	3914922
Calculated NO2	ppb	1.4	1.9		0.8	0.7	0.1	3909238
Calculated O3	ppb	30.6	32.4		34.3	35.3	0.1	3898704
Calculated SO2	ppb	0.4	0.4		0.4	0.4	0.1	3909244

RDL = Reportable Detection Limit

Maxxam ID		T48532	T48534	T48535	T48536	T48537		
Sampling Date		2010/03/02 11:20	2010/03/02 08:20	2010/03/01 18:10	2010/03/01 18:10	2010/03/02 15:15		
	Units	**19**	**22**	**23**	**23A (DUP)**	**24**	**RDL**	**QC Batch**
Passive Monitoring								
Calculated H2S	ppb		0.09			0.13	0.02	3914922
Calculated NO2	ppb	0.8	1.7	0.3	0.2	2.1	0.1	3909238
Calculated O3	ppb	35.7	29.1	33.7	33.6	30.0	0.1	3898704
Calculated SO2	ppb	0.4	0.3	0.3	0.3	0.5	0.1	3909244

RDL = Reportable Detection Limit

Maxxam Job #: B019949
Report Date: 2010/04/27

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Client Project #: 2010/03/01 - 2010/04/01
Site Reference: LICA
Sampler Initials: SB

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		T48538	T48539	T48540	T48541	T48542		
Sampling Date		2010/03/02 15:15	2010/03/01 15:30	2010/03/01 15:30	2010/03/01 16:20	2010/03/01 16:20		
	Units	**24A (DUP)**	**25**	**25A (DUP)**	**26**	**26A (DUP)**	**RDL**	**QC Batch**
Passive Monitoring								
Calculated H2S	ppb	0.13	0.08		0.10	0.09	0.02	3914922
Calculated SO2	ppb		0.5	0.6	0.6		0.1	3909244

RDL = Reportable Detection Limit

Maxxam ID		T48543	T48544	T48545	T48546	T48547		
Sampling Date		2010/03/01 17:15	2010/03/01 17:15	2010/03/01 08:35	2010/03/01 08:35	2010/03/02 08:30		
	Units	**27**	**27A (DUP)**	**28**	**28A (DUP)**	**29**	**RDL**	**QC Batch**
Passive Monitoring								
Calculated H2S	ppb	0.14				0.11	0.02	3914922
Calculated NO2	ppb			5.0	4.6	1.8	0.1	3909238
Calculated O3	ppb			29.3	27.8	28.9	0.1	3898704
Calculated SO2	ppb	0.9	0.9	0.5		0.4	0.1	3909244

RDL = Reportable Detection Limit

Maxxam ID		T48548	T48549	T48553	T48599		
Sampling Date		2010/03/02 08:30	2010/03/01 10:00	2010/03/02 10:25	2010/03/02 13:05		
	Units	**29A (DUP)**	**32**	**34**	**16A (DUP)**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.16	0.15	0.13		0.02	3914922
Calculated NO2	ppb		0.9	1.5	1.4	0.1	3909238
Calculated O3	ppb		38.3	30.2	29.5	0.1	3898704
Calculated SO2	ppb	0.3	0.6	0.5	0.4	0.1	3909244

RDL = Reportable Detection Limit

General Comments

Results relate only to the items tested.

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Attention: MICHAEL BISAGA
Client Project #: 2010/03/01 - 2010/04/01
P.O. #:
Site Reference: LICA

Quality Assurance Report

Maxxam Job Number: PB019949

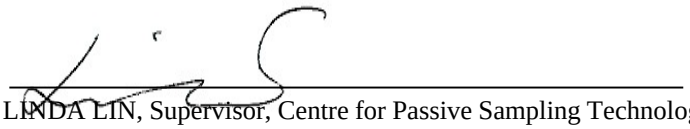
QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
3898702	OZ	Calibration Check	Calculated O3	2010/04/26		101	%	91 - 107
		Spiked Blank	Calculated O3	2010/04/26		102	%	N/A
		Method Blank	Calculated O3	2010/04/26	<0.1		ppb	
3898704	OZ	Calibration Check	Calculated O3	2010/04/26		104	%	91 - 107
		Spiked Blank	Calculated O3	2010/04/26		100	%	N/A
		Method Blank	Calculated O3	2010/04/26	<0.1		ppb	
3909237	DF4	Calibration Check	Calculated NO2	2010/04/24		99	%	76 - 118
		Spiked Blank	Calculated NO2	2010/04/24		99	%	N/A
		Method Blank	Calculated NO2	2010/04/24	<0.1		ppb	
3909238	DF4	Calibration Check	Calculated NO2	2010/04/24		98	%	76 - 118
		Spiked Blank	Calculated NO2	2010/04/24		100	%	N/A
		Method Blank	Calculated NO2	2010/04/24	<0.1		ppb	
3909241	DF4	Calibration Check	Calculated SO2	2010/04/24		104	%	95 - 105
		Spiked Blank	Calculated SO2	2010/04/24		95	%	N/A
		Method Blank	Calculated SO2	2010/04/24	<0.1		ppb	
3909244	DF4	Calibration Check	Calculated SO2	2010/04/24		97	%	95 - 105
		Spiked Blank	Calculated SO2	2010/04/24		100	%	N/A
		Method Blank	Calculated SO2	2010/04/24	<0.1		ppb	
3914922	TM5	Calibration Check	Calculated H2S	2010/04/27		102	%	80 - 120
		Spiked Blank	Calculated H2S	2010/04/27		101	%	N/A

Calibration Check: A calibration standard analyzed at different times to evaluate on-going calibration accuracy.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Validation Signature Page

Maxxam Job #: B019949

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



LINDA LIN, Supervisor, Centre for Passive Sampling Technology

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Volatile Organics Laboratory Analysis

Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: Cold Lake South
Station ID: Lica 1
Field Sample ID: LICA VOC/ CLS /Mar 3, 10

Sampler s/n: 6167
Canister ID: 7844
Canister Installation Date/Time: Mar 2, 10 @ 07:55 mst
Canister Removal Date/Time: Mar 4, 10 @ 07:20 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
03-Mar-10	03/03/2010 0:00	03/04/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	594	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	20

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC # 2476

Technician Signiture: Shea Beaton

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/28
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B027268
Received: 2010/03/08, 08:39

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/16	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (ug/m3)	2	N/A	2010/04/28	BRL SOP-00304	

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Total cover pages: 1

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

RESULTS OF ANALYSES OF AIR

Maxxam ID		FG6744	FG6745	
Sampling Date		2010/03/03 00:00	2010/03/05 00:00	
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	19.0	20.0	2102505

QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

CALCULATED VOLATILE ORGANICS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
Calculated Parameters					
2,2,4-Trimethylpentane	ug/m3	<0.93	<0.93	0.93	2136522
Carbon Disulfide	ug/m3	<1.6	<1.6	1.6	2136522
Propene	ug/m3	<0.52	<0.52	0.52	2136522
Vinyl Acetate	ug/m3	<0.70	<0.70	0.70	2136522
Vinyl Bromide	ug/m3	<0.87	<0.87	0.87	2136522
Dichlorodifluoromethane (FREON 12)	ug/m3	2.96	3.01	0.99	2136522
1,2-Dichlorotetrafluoroethane	ug/m3	<1.2	<1.2	1.2	2136522
Chloromethane	ug/m3	0.92	0.86	0.62	2136522
Vinyl Chloride	ug/m3	<0.46	<0.46	0.46	2136522
Chloroethane	ug/m3	<0.79	<0.79	0.79	2136522
1,3-Butadiene	ug/m3	<1.1	<1.1	1.1	2136522
Trichlorofluoromethane (FREON 11)	ug/m3	1.6	1.6	1.1	2136522
Ethanol	ug/m3	<4.3	<4.3	4.3	2136522
Trichlorotrifluoroethane	ug/m3	<1.1	<1.1	1.1	2136522
2-propanol	ug/m3	<7.4	<7.4	7.4	2136522
2-Propanone	ug/m3	4.8	5.7	1.9	2136522
Methyl Ethyl Ketone (2-Butanone)	ug/m3	<8.8	<8.8	8.8	2136522
Methyl Isobutyl Ketone	ug/m3	<13	<13	13	2136522
Methyl Butyl Ketone (2-Hexanone)	ug/m3	<8.2	<8.2	8.2	2136522
Methyl t-butyl ether (MTBE)	ug/m3	<0.72	<0.72	0.72	2136522
Ethyl Acetate	ug/m3	<7.9	<7.9	7.9	2136522
1,1-Dichloroethylene	ug/m3	<0.99	<0.99	0.99	2136522
cis-1,2-Dichloroethylene	ug/m3	<0.75	<0.75	0.75	2136522
trans-1,2-Dichloroethylene	ug/m3	<0.79	<0.79	0.79	2136522
Methylene Chloride(Dichloromethane)	ug/m3	1.9	1.8	1.0	2136522
Chloroform	ug/m3	<0.73	<0.73	0.73	2136522
Carbon Tetrachloride	ug/m3	<1.9	<1.9	1.9	2136522
1,1-Dichloroethane	ug/m3	<0.81	<0.81	0.81	2136522
1,2-Dichloroethane	ug/m3	<0.81	<0.81	0.81	2136522
Ethylene Dibromide	ug/m3	<1.3	<1.3	1.3	2136522
1,1,1-Trichloroethane	ug/m3	<1.6	<1.6	1.6	2136522
1,1,2-Trichloroethane	ug/m3	<0.82	<0.82	0.82	2136522

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

CALCULATED VOLATILE ORGANICS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
1,1,2,2-Tetrachloroethane	ug/m3	<1.4	<1.4	1.4	2136522
cis-1,3-Dichloropropene	ug/m3	<0.82	<0.82	0.82	2136522
trans-1,3-Dichloropropene	ug/m3	<0.77	<0.77	0.77	2136522
1,2-Dichloropropane	ug/m3	<1.8	<1.8	1.8	2136522
Bromomethane	ug/m3	<0.70	<0.70	0.70	2136522
Bromoform	ug/m3	<2.1	<2.1	2.1	2136522
Bromodichloromethane	ug/m3	<1.3	<1.3	1.3	2136522
Dibromochloromethane	ug/m3	<1.7	<1.7	1.7	2136522
Trichloroethylene	ug/m3	<1.6	<1.6	1.6	2136522
Tetrachloroethylene	ug/m3	<1.4	<1.4	1.4	2136522
Benzene	ug/m3	<0.58	<0.58	0.58	2136522
Toluene	ug/m3	<0.75	<0.75	0.75	2136522
Ethylbenzene	ug/m3	<0.87	<0.87	0.87	2136522
p+m-Xylene	ug/m3	<1.6	<1.6	1.6	2136522
o-Xylene	ug/m3	<0.87	<0.87	0.87	2136522
Styrene	ug/m3	<0.85	<0.85	0.85	2136522
4-ethyltoluene	ug/m3	<11	<11	11	2136522
1,3,5-Trimethylbenzene	ug/m3	<2.5	<2.5	2.5	2136522
1,2,4-Trimethylbenzene	ug/m3	<2.5	<2.5	2.5	2136522
Chlorobenzene	ug/m3	<0.92	<0.92	0.92	2136522
Benzyl chloride	ug/m3	<5.2	<5.2	5.2	2136522
1,3-Dichlorobenzene	ug/m3	<2.4	<2.4	2.4	2136522
1,4-Dichlorobenzene	ug/m3	<2.4	<2.4	2.4	2136522
1,2-Dichlorobenzene	ug/m3	<2.4	<2.4	2.4	2136522
1,2,4-Trichlorobenzene	ug/m3	<15	<15	15	2136522
Hexachlorobutadiene	ug/m3	<32	<32	32	2136522
Hexane	ug/m3	<1.1	<1.1	1.1	2136522
Tetrahydrofuran	ug/m3	<1.2	<1.2	1.2	2136522
1,4-Dioxane	ug/m3	<7.2	<7.2	7.2	2136522
Xylene (Total)	ug/m3	<2.6	<2.6	2.6	2136522

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

GENERAL COMMENTS

VOCTO15M-A
Benzyl Chloride and 1,2,4-trichlorobenzene are above 40% RSD in initial calibration.
No positives found for these compounds.

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation. No positives found for this compound.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: Cold Lake South
Station ID: Lica 1
Field Sample ID: LICA VOC/ CLS /Mar 9, 10

Sampler s/n: 6167
Canister ID: 7791
Canister Installation Date/Time: Mar 8, 10 @ 10:30 mst
Canister Removal Date/Time: Mar 10, 10 @ 07:50 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
09-Mar-10	03/09/2010 0:00	03/10/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	594	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	21

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC #2803

Technician Signiture: Shea Beaton

Your C.O.C. #: 2803

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B029945
Received: 2010/03/12, 14:04

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/19	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/03/19	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

RESULTS OF ANALYSES OF AIR

Maxxam ID		FH8486	FH8487	
Sampling Date		2010/03/09 00:00	2010/03/09 00:00	
COC Number		2803	2803	
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**LICA VOC/PORT/MAR9,10 / 7859**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	19	20	2104789

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8486				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2105655
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2105655
Propene	ppbv	1.27	0.30	2.18	0.516	2105655
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2105655
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2105655
Dichlorodifluoromethane (FREON 12)	ppbv	0.75	0.20	3.72	0.989	2105655
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2105655
Chloromethane	ppbv	0.71	0.30	1.47	0.620	2105655
Vinyl Chloride	ppbv	0.22	0.18	0.556	0.460	2105655
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2105655
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2105655
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.52	1.12	2105655
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2105655
Ethanol	ppbv	2.4	2.3	4.47	4.33	2105655
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2105655
2-Propanone	ppbv	1.73	0.80	4.10	1.90	2105655
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2105655
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2105655
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2105655
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2105655
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2105655
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2105655
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2105655
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2105655
Methylene Chloride(Dichloromethane)	ppbv	0.58	0.30	2.00	1.04	2105655
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2105655
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2105655
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2105655

RDL = Reportable Detection Limit
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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8486				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2105655
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2105655
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2105655
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2105655
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2105655
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2105655
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2105655
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2105655
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2105655
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2105655
Heptane	ppbv	0.51	0.30	2.09	1.23	2105655
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2105655
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2105655
Benzene	ppbv	0.27	0.18	0.876	0.575	2105655
Toluene	ppbv	3.53	0.20	13.3	0.753	2105655
Ethylbenzene	ppbv	2.08	0.20	9.04	0.868	2105655
p+m-Xylene	ppbv	3.86	0.37	16.8	1.61	2105655
o-Xylene	ppbv	0.83	0.20	3.61	0.868	2105655
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2105655
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2105655
1,2,4-Trimethylbenzene	ppbv	0.54	0.50	2.66	2.46	2105655
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2105655
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2105655
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2105655
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2105655
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2105655
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2105655
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2105655
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2105655

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8486				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2105655
Xylene (Total)	ppbv	4.69	0.60	20.4	2.61	2105655
Surrogate Recovery (%)						
Bromochloromethane	%	91		N/A	N/A	2105655
D5-Chlorobenzene	%	94		N/A	N/A	2105655
Difluorobenzene	%	92		N/A	N/A	2105655

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8487				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/PORT/MAR9,10 / 7859**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2105655
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2105655
Propene	ppbv	0.31	0.30	0.542	0.516	2105655
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2105655
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2105655
Dichlorodifluoromethane (FREON 12)	ppbv	0.58	0.20	2.87	0.989	2105655
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2105655
Chloromethane	ppbv	0.70	0.30	1.45	0.620	2105655
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2105655
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2105655
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2105655
Trichlorofluoromethane (FREON 11)	ppbv	0.25	0.20	1.43	1.12	2105655
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2105655
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2105655
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2105655
2-Propanone	ppbv	1.59	0.80	3.79	1.90	2105655
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2105655
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2105655
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2105655
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2105655
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2105655
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2105655
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2105655
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2105655
Methylene Chloride(Dichloromethane)	ppbv	0.42	0.30	1.45	1.04	2105655
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2105655
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2105655
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2105655

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8487				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/PORT/MAR9,10 / 7859**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2105655
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2105655
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2105655
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2105655
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2105655
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2105655
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2105655
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2105655
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2105655
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2105655
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2105655
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2105655
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2105655
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2105655
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2105655
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2105655
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2105655
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2105655
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2105655
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2105655
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2105655
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2105655
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2105655
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2105655
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2105655
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2105655
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2105655
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2105655
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2105655

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8487				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/PORT/MAR9,10 / 7859**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2105655
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2105655
Surrogate Recovery (%)						
Bromochloromethane	%	89		N/A	N/A	2105655
D5-Chlorobenzene	%	88		N/A	N/A	2105655
Difluorobenzene	%	89		N/A	N/A	2105655

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

Test Summary

Maxxam ID FH8486 **Collected** 2010/03/09
Sample ID LICA VOC/CLS/MAR9,10 / 7791 **Shipped**
Matrix AIR **Received** 2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2104789	N/A	2010/03/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	2105655	N/A	2010/03/19	S_S

Maxxam ID FH8487 **Collected** 2010/03/09
Sample ID LICA VOC/PORT/MAR9,10 / 7859 **Shipped**
Matrix AIR **Received** 2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2104789	N/A	2010/03/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	2105655	N/A	2010/03/19	S_S

Maxxam ID FH8487 Dup **Collected** 2010/03/09
Sample ID LICA VOC/PORT/MAR9,10 / 7859 **Shipped**
Matrix AIR **Received** 2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Volatile Organics in Air (TO-15)	GC/MS	2105655	N/A	2010/03/19	S_S

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	Spiked Blank	Bromochloromethane	2010/03/19		95	%	60 - 140
			D5-Chlorobenzene	2010/03/19		97	%	60 - 140
			Difluorobenzene	2010/03/19		98	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/19		109	%	70 - 130
			Carbon Disulfide	2010/03/19		124	%	70 - 130
			Propene	2010/03/19		106	%	70 - 130
			Vinyl Acetate	2010/03/19		122	%	70 - 130
			Vinyl Bromide	2010/03/19		107	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/03/19		114	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/03/19		91	%	70 - 130
			Chloromethane	2010/03/19		109	%	70 - 130
			Vinyl Chloride	2010/03/19		110	%	70 - 130
			Chloroethane	2010/03/19		109	%	70 - 130
			1,3-Butadiene	2010/03/19		92	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/03/19		109	%	70 - 130
			Trichlorotrifluoroethane	2010/03/19		99	%	70 - 130
			Ethanol	2010/03/19		105	%	70 - 130
			2-propanol	2010/03/19		105	%	70 - 130
			2-Propanone	2010/03/19		98	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/03/19		122	%	70 - 130
			Methyl Isobutyl Ketone	2010/03/19		112	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/03/19		116	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/03/19		105	%	70 - 130
			Ethyl Acetate	2010/03/19		108	%	70 - 130
			1,1-Dichloroethylene	2010/03/19		111	%	70 - 130
			cis-1,2-Dichloroethylene	2010/03/19		110	%	70 - 130
			trans-1,2-Dichloroethylene	2010/03/19		110	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/03/19		104	%	70 - 130
			Chloroform	2010/03/19		108	%	70 - 130
			Carbon Tetrachloride	2010/03/19		118	%	70 - 130
			1,1-Dichloroethane	2010/03/19		107	%	70 - 130
			1,2-Dichloroethane	2010/03/19		107	%	70 - 130
			Ethylene Dibromide	2010/03/19		110	%	70 - 130
			1,1,1-Trichloroethane	2010/03/19		111	%	70 - 130
			1,1,2-Trichloroethane	2010/03/19		112	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/03/19		101	%	70 - 130
			cis-1,3-Dichloropropene	2010/03/19		126	%	70 - 130
			trans-1,3-Dichloropropene	2010/03/19		127	%	70 - 130
			1,2-Dichloropropane	2010/03/19		108	%	70 - 130
			Bromomethane	2010/03/19		101	%	70 - 130
			Bromoform	2010/03/19		120	%	70 - 130
			Bromodichloromethane	2010/03/19		118	%	70 - 130
			Dibromochloromethane	2010/03/19		123	%	70 - 130
			Heptane	2010/03/19		111	%	70 - 130
			Trichloroethylene	2010/03/19		106	%	70 - 130
			Tetrachloroethylene	2010/03/19		110	%	70 - 130
			Benzene	2010/03/19		101	%	70 - 130
			Toluene	2010/03/19		104	%	70 - 130
			Ethylbenzene	2010/03/19		89	%	70 - 130
			p+m-Xylene	2010/03/19		87	%	70 - 130
			o-Xylene	2010/03/19		86	%	70 - 130
			Styrene	2010/03/19		99	%	70 - 130
			1,3,5-Trimethylbenzene	2010/03/19		99	%	70 - 130
			1,2,4-Trimethylbenzene	2010/03/19		99	%	70 - 130
			4-ethyltoluene	2010/03/19		99	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	Spiked Blank	Chlorobenzene	2010/03/19		98	%	70 - 130
			Benzyl chloride	2010/03/19		114	%	70 - 130
			1,3-Dichlorobenzene	2010/03/19		92	%	70 - 130
			1,4-Dichlorobenzene	2010/03/19		87	%	70 - 130
			1,2-Dichlorobenzene	2010/03/19		92	%	70 - 130
			1,2,4-Trichlorobenzene	2010/03/19		72	%	70 - 130
			Hexachlorobutadiene	2010/03/19		90	%	70 - 130
			Hexane	2010/03/19		106	%	70 - 130
			Cyclohexane	2010/03/19		112	%	70 - 130
			Tetrahydrofuran	2010/03/19		110	%	70 - 130
			1,4-Dioxane	2010/03/19		104	%	70 - 130
		Method Blank	Bromochloromethane	2010/03/19		92	%	60 - 140
			D5-Chlorobenzene	2010/03/19		92	%	60 - 140
			Difluorobenzene	2010/03/19		98	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/19	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/03/19	ND, RDL=0.50		ppbv	
			Propene	2010/03/19	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/03/19	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/03/19	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/03/19	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/03/19	ND, RDL=0.17		ppbv	
			Chloromethane	2010/03/19	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/03/19	ND, RDL=0.18		ppbv	
			Chloroethane	2010/03/19	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/03/19	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/03/19	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/03/19	ND, RDL=0.15		ppbv	
			Ethanol	2010/03/19	ND, RDL=2.3		ppbv	
			2-propanol	2010/03/19	ND, RDL=3.0		ppbv	
			2-Propanone	2010/03/19	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/03/19	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/03/19	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/03/19	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/03/19	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/03/19	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/03/19	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/03/19	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/03/19	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/03/19	ND, RDL=0.30		ppbv	
			Chloroform	2010/03/19	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/03/19	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/03/19	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/03/19	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/03/19	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/03/19	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/03/19	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/03/19	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/03/19	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/03/19	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/03/19	ND, RDL=0.40		ppbv	
			Bromomethane	2010/03/19	ND, RDL=0.18		ppbv	
			Bromoform	2010/03/19	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/03/19	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/03/19	ND, RDL=0.20		ppbv	
			Heptane	2010/03/19	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	Method Blank	Trichloroethylene	2010/03/19	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/03/19	ND, RDL=0.20		ppbv	
			Benzene	2010/03/19	ND, RDL=0.18		ppbv	
			Toluene	2010/03/19	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/03/19	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/03/19	ND, RDL=0.37		ppbv	
			o-Xylene	2010/03/19	ND, RDL=0.20		ppbv	
			Styrene	2010/03/19	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/03/19	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/03/19	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/03/19	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/03/19	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/03/19	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/03/19	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/03/19	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/03/19	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/03/19	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/03/19	ND, RDL=3.0		ppbv	
			Hexane	2010/03/19	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/03/19	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/03/19	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/03/19	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/03/19	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	2,2,4-Trimethylpentane	2010/03/19	NC		%	25
			Carbon Disulfide	2010/03/19	NC		%	25
			Propene	2010/03/19	NC		%	25
			Vinyl Acetate	2010/03/19	NC		%	25
			Vinyl Bromide	2010/03/19	NC		%	25
			Dichlorodifluoromethane (FREON 12)	2010/03/19	NC		%	25
			1,2-Dichlorotetrafluoroethane	2010/03/19	NC		%	25
			Chloromethane	2010/03/19	NC		%	25
			Vinyl Chloride	2010/03/19	NC		%	25
			Chloroethane	2010/03/19	NC		%	25
			1,3-Butadiene	2010/03/19	NC		%	25
			Trichlorofluoromethane (FREON 11)	2010/03/19	NC		%	25
			Trichlorotrifluoroethane	2010/03/19	NC		%	25
			Ethanol	2010/03/19	NC		%	25
			2-propanol	2010/03/19	NC		%	25
			2-Propanone	2010/03/19	NC		%	25
			Methyl Ethyl Ketone (2-Butanone)	2010/03/19	NC		%	25
			Methyl Isobutyl Ketone	2010/03/19	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2010/03/19	NC		%	25
			Methyl t-butyl ether (MTBE)	2010/03/19	NC		%	25
			Ethyl Acetate	2010/03/19	NC		%	25
			1,1-Dichloroethylene	2010/03/19	NC		%	25
			cis-1,2-Dichloroethylene	2010/03/19	NC		%	25
			trans-1,2-Dichloroethylene	2010/03/19	NC		%	25
			Methylene Chloride(Dichloromethane)	2010/03/19	NC		%	25
			Chloroform	2010/03/19	NC		%	25
			Carbon Tetrachloride	2010/03/19	NC		%	25
			1,1-Dichloroethane	2010/03/19	NC		%	25
			1,2-Dichloroethane	2010/03/19	NC		%	25
			Ethylene Dibromide	2010/03/19	NC		%	25

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	RPD - Sample/Sample Dup	1,1,1-Trichloroethane	2010/03/19	NC		%	25
			1,1,2-Trichloroethane	2010/03/19	NC		%	25
			1,1,2,2-Tetrachloroethane	2010/03/19	NC		%	25
			cis-1,3-Dichloropropene	2010/03/19	NC		%	25
			trans-1,3-Dichloropropene	2010/03/19	NC		%	25
			1,2-Dichloropropane	2010/03/19	NC		%	25
			Bromomethane	2010/03/19	NC		%	25
			Bromoform	2010/03/19	NC		%	25
			Bromodichloromethane	2010/03/19	NC		%	25
			Dibromochloromethane	2010/03/19	NC		%	25
			Heptane	2010/03/19	NC		%	25
			Trichloroethylene	2010/03/19	NC		%	25
			Tetrachloroethylene	2010/03/19	NC		%	25
			Benzene	2010/03/19	NC		%	25
			Toluene	2010/03/19	NC		%	25
			Ethylbenzene	2010/03/19	NC		%	25
			p+m-Xylene	2010/03/19	NC		%	25
			o-Xylene	2010/03/19	NC		%	25
			Styrene	2010/03/19	NC		%	25
			1,3,5-Trimethylbenzene	2010/03/19	NC		%	25
			1,2,4-Trimethylbenzene	2010/03/19	NC		%	25
			4-ethyltoluene	2010/03/19	NC		%	25
			Chlorobenzene	2010/03/19	NC		%	25
			Benzyl chloride	2010/03/19	NC		%	25
			1,3-Dichlorobenzene	2010/03/19	NC		%	25
			1,4-Dichlorobenzene	2010/03/19	NC		%	25
			1,2-Dichlorobenzene	2010/03/19	NC		%	25
			1,2,4-Trichlorobenzene	2010/03/19	NC		%	25
			Hexachlorobutadiene	2010/03/19	NC		%	25
			Hexane	2010/03/19	NC		%	25
			Cyclohexane	2010/03/19	NC		%	25
			Tetrahydrofuran	2010/03/19	NC		%	25
			1,4-Dioxane	2010/03/19	NC		%	25
			Xylene (Total)	2010/03/19	NC		%	25

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: Cold Lake South
Station ID: Lica 1
Field Sample ID: LICA VOC/ CLS /Mar 15, 10

Sampler s/n: 6167
Canister ID: 7852
Canister Installation Date/Time: Mar 12, 10 @ 14:35 mst
Canister Removal Date/Time: Mar 16, 10 @ 08:25 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
15-Mar-10	03/15/2010 0:00	03/16/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	594	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	21

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC #2303

Technician Signiture: Shea Beaton

Your C.O.C. #: 2303

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B032308
Received: 2010/03/18, 10:59

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/22	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/03/22	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

RESULTS OF ANALYSES OF AIR

Maxxam ID		FJ0439	FJ0440	
Sampling Date		2010/03/15	2010/03/15	
COC Number		2303	2303	
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**LICA VOC/ PORT/MAR 15/10 - 7795**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	19	20	2106119

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0439				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2106127
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2106127
Propene	ppbv	<0.30	0.30	<0.516	0.516	2106127
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2106127
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2106127
Dichlorodifluoromethane (FREON 12)	ppbv	0.59	0.20	2.90	0.989	2106127
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2106127
Chloromethane	ppbv	0.63	0.30	1.31	0.620	2106127
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2106127
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2106127
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2106127
Trichlorofluoromethane (FREON 11)	ppbv	0.26	0.20	1.48	1.12	2106127
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2106127
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2106127
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2106127
2-Propanone	ppbv	1.40	0.80	3.33	1.90	2106127
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2106127
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2106127
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2106127
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2106127
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2106127
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2106127
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2106127
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2106127
Methylene Chloride(Dichloromethane)	ppbv	0.37	0.30	1.28	1.04	2106127
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2106127
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2106127
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2106127
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2106127

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0439				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2106127
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2106127
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2106127
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2106127
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2106127
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2106127
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2106127
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2106127
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2106127
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2106127
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2106127
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2106127
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2106127
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2106127
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2106127
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2106127
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2106127
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2106127
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2106127
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2106127
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2106127
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2106127
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2106127
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2106127
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2106127
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2106127
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2106127
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2106127

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0439				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	86		N/A	N/A	2106127
D5-Chlorobenzene	%	83		N/A	N/A	2106127
Difluorobenzene	%	83		N/A	N/A	2106127

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0440				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/ PORT/MAR 15/10 - 7795**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2106127
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2106127
Propene	ppbv	<0.30	0.30	<0.516	0.516	2106127
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2106127
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2106127
Dichlorodifluoromethane (FREON 12)	ppbv	0.57	0.20	2.80	0.989	2106127
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2106127
Chloromethane	ppbv	0.69	0.30	1.43	0.620	2106127
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2106127
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2106127
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2106127
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.52	1.12	2106127
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2106127
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2106127
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2106127
2-Propanone	ppbv	1.41	0.80	3.35	1.90	2106127
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2106127
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2106127
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2106127
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2106127
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2106127
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2106127
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2106127
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2106127
Methylene Chloride(Dichloromethane)	ppbv	0.37	0.30	1.28	1.04	2106127
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2106127
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2106127
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2106127
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2106127

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0440				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/ PORT/MAR 15/10 - 7795**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2106127
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2106127
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2106127
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2106127
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2106127
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2106127
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2106127
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2106127
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2106127
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2106127
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2106127
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2106127
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2106127
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2106127
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2106127
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2106127
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2106127
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2106127
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2106127
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2106127
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2106127
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2106127
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2106127
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2106127
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2106127
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2106127
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2106127
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2106127

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0440				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/ PORT/MAR 15/10 - 7795**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	83		N/A	N/A	2106127
D5-Chlorobenzene	%	80		N/A	N/A	2106127
Difluorobenzene	%	79		N/A	N/A	2106127

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

Test Summary

Maxxam ID	FJ0439	**Collected**	2010/03/15
Sample ID	LICA VOC/CLS/MAR 15/10 - 7852	**Shipped**	
Matrix	AIR	**Received**	2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2106119	N/A	2010/03/22	S_S
Volatile Organics in Air (TO-15)	GC/MS	2106127	N/A	2010/03/22	S_S

Maxxam ID	FJ0440	**Collected**	2010/03/15
Sample ID	LICA VOC/ PORT/MAR 15/10 - 7795	**Shipped**	
Matrix	AIR	**Received**	2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2106119	N/A	2010/03/22	S_S
Volatile Organics in Air (TO-15)	GC/MS	2106127	N/A	2010/03/22	S_S

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB032308

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2106127	S_S	Spiked Blank	Bromochloromethane	2010/03/22		98	%	60 - 140
			D5-Chlorobenzene	2010/03/22		99	%	60 - 140
			Difluorobenzene	2010/03/22		100	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/22		105	%	70 - 130
			Carbon Disulfide	2010/03/22		117	%	70 - 130
			Propene	2010/03/22		102	%	70 - 130
			Vinyl Acetate	2010/03/22		117	%	70 - 130
			Vinyl Bromide	2010/03/22		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/03/22		107	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/03/22		86	%	70 - 130
			Chloromethane	2010/03/22		108	%	70 - 130
			Vinyl Chloride	2010/03/22		103	%	70 - 130
			Chloroethane	2010/03/22		103	%	70 - 130
			1,3-Butadiene	2010/03/22		89	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/03/22		101	%	70 - 130
			Trichlorotrifluoroethane	2010/03/22		93	%	70 - 130
			Ethanol	2010/03/22		100	%	70 - 130
			2-propanol	2010/03/22		97	%	70 - 130
			2-Propanone	2010/03/22		95	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/03/22		116	%	70 - 130
			Methyl Isobutyl Ketone	2010/03/22		107	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/03/22		111	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/03/22		98	%	70 - 130
			Ethyl Acetate	2010/03/22		103	%	70 - 130
			1,1-Dichloroethylene	2010/03/22		104	%	70 - 130
			cis-1,2-Dichloroethylene	2010/03/22		103	%	70 - 130
			trans-1,2-Dichloroethylene	2010/03/22		104	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/03/22		100	%	70 - 130
			Chloroform	2010/03/22		101	%	70 - 130
			Carbon Tetrachloride	2010/03/22		112	%	70 - 130
			1,1-Dichloroethane	2010/03/22		102	%	70 - 130
			1,2-Dichloroethane	2010/03/22		100	%	70 - 130
			Ethylene Dibromide	2010/03/22		103	%	70 - 130
			1,1,1-Trichloroethane	2010/03/22		105	%	70 - 130
			1,1,2-Trichloroethane	2010/03/22		105	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/03/22		94	%	70 - 130
			cis-1,3-Dichloropropene	2010/03/22		119	%	70 - 130
			trans-1,3-Dichloropropene	2010/03/22		119	%	70 - 130
			1,2-Dichloropropane	2010/03/22		103	%	70 - 130
			Bromomethane	2010/03/22		95	%	70 - 130
			Bromoform	2010/03/22		111	%	70 - 130
			Bromodichloromethane	2010/03/22		112	%	70 - 130
			Dibromochloromethane	2010/03/22		116	%	70 - 130
			Heptane	2010/03/22		108	%	70 - 130
			Trichloroethylene	2010/03/22		100	%	70 - 130
			Tetrachloroethylene	2010/03/22		103	%	70 - 130
			Benzene	2010/03/22		95	%	70 - 130
			Toluene	2010/03/22		99	%	70 - 130
			Ethylbenzene	2010/03/22		81	%	70 - 130
			p+m-Xylene	2010/03/22		80	%	70 - 130
			o-Xylene	2010/03/22		80	%	70 - 130
			Styrene	2010/03/22		87	%	70 - 130
			1,3,5-Trimethylbenzene	2010/03/22		92	%	70 - 130
			1,2,4-Trimethylbenzene	2010/03/22		91	%	70 - 130
			4-ethyltoluene	2010/03/22		91	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB032308

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2106127	S_S	Spiked Blank	Chlorobenzene	2010/03/22		90	%	70 - 130
			Benzyl chloride	2010/03/22		108	%	70 - 130
			1,3-Dichlorobenzene	2010/03/22		85	%	70 - 130
			1,4-Dichlorobenzene	2010/03/22		81	%	70 - 130
			1,2-Dichlorobenzene	2010/03/22		85	%	70 - 130
			1,2,4-Trichlorobenzene	2010/03/22		66 (1)	%	70 - 130
			Hexachlorobutadiene	2010/03/22		83	%	70 - 130
			Hexane	2010/03/22		102	%	70 - 130
			Cyclohexane	2010/03/22		109	%	70 - 130
			Tetrahydrofuran	2010/03/22		106	%	70 - 130
			1,4-Dioxane	2010/03/22		97	%	70 - 130
		Method Blank	Bromochloromethane	2010/03/22		87	%	60 - 140
			D5-Chlorobenzene	2010/03/22		86	%	60 - 140
			Difluorobenzene	2010/03/22		91	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/22	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/03/22	ND, RDL=0.50		ppbv	
			Propene	2010/03/22	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/03/22	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/03/22	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/03/22	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/03/22	ND, RDL=0.17		ppbv	
			Chloromethane	2010/03/22	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/03/22	ND, RDL=0.18		ppbv	
			Chloroethane	2010/03/22	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/03/22	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/03/22	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/03/22	ND, RDL=0.15		ppbv	
			Ethanol	2010/03/22	ND, RDL=2.3		ppbv	
			2-propanol	2010/03/22	ND, RDL=3.0		ppbv	
			2-Propanone	2010/03/22	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/03/22	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/03/22	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/03/22	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/03/22	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/03/22	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/03/22	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/03/22	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/03/22	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/03/22	ND, RDL=0.30		ppbv	
			Chloroform	2010/03/22	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/03/22	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/03/22	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/03/22	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/03/22	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/03/22	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/03/22	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/03/22	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/03/22	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/03/22	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/03/22	ND, RDL=0.40		ppbv	
			Bromomethane	2010/03/22	ND, RDL=0.18		ppbv	
			Bromoform	2010/03/22	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/03/22	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/03/22	ND, RDL=0.20		ppbv	
			Heptane	2010/03/22	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB032308

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2106127	S_S	Method Blank	Trichloroethylene	2010/03/22	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/03/22	ND, RDL=0.20		ppbv	
			Benzene	2010/03/22	ND, RDL=0.18		ppbv	
			Toluene	2010/03/22	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/03/22	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/03/22	ND, RDL=0.37		ppbv	
			o-Xylene	2010/03/22	ND, RDL=0.20		ppbv	
			Styrene	2010/03/22	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/03/22	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/03/22	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/03/22	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/03/22	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/03/22	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/03/22	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/03/22	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/03/22	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/03/22	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/03/22	ND, RDL=3.0		ppbv	
			Hexane	2010/03/22	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/03/22	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/03/22	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/03/22	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/03/22	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	Tetrachloroethylene	2010/03/22	0.4		%	25

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: Cold Lake South
Station ID: Lica 1
Field Sample ID: LICA VOC/ CLS /Mar 21, 10

Sampler s/n: 6167
Canister ID: 7822
Canister Installation Date/Time: Mar 19, 10 @ 10:30 mst
Canister Removal Date/Time: Mar 25, 10 @ 15:55 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
21-Mar-10	03/21/2010 0:00	03/22/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	594	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	20

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC 2304

Technician Signiture: Shea Beaton

Your C.O.C. #: 2304

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/08

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B037966
Received: 2010/03/30, 17:16

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

RESULTS OF ANALYSES OF AIR

Maxxam ID		FL6560	FL6561	
Sampling Date		2010/03/21	2010/03/21	
COC Number		2304	2304	
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**LICA VOC/PORT/MAR2110 - 7799**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	18	3.0	2116656

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6560				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.86	0.20	4.26	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.65	0.30	1.34	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.42	0.20	2.38	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	3.83	0.80	9.10	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.48	0.30	1.67	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6560				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	0.36	0.18	1.16	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6560				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	70		N/A	N/A	2116653
D5-Chlorobenzene	%	69		N/A	N/A	2116653
Difluorobenzene	%	72		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6561				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/PORT/MAR2110 - 7799**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.51	0.20	2.54	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.41	0.30	0.851	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.50	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	2.32	0.80	5.52	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.46	0.30	1.61	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6561				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/PORT/MAR2110 - 7799**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6561				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/PORT/MAR2110 - 7799**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	65		N/A	N/A	2116653
D5-Chlorobenzene	%	63		N/A	N/A	2116653
Difluorobenzene	%	69		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

Test Summary

Maxxam ID	FL6560	**Collected**	2010/03/21
Sample ID	LICA VOC/CLS/MAR 2110 - 7822	**Shipped**	
Matrix	AIR	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

Maxxam ID	FL6561	**Collected**	2010/03/21
Sample ID	LICA VOC/PORT/MAR2110 - 7799	**Shipped**	
Matrix	AIR	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB037966

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Bromochloromethane	2010/04/01		99	%	60 - 140
			D5-Chlorobenzene	2010/04/01		101	%	60 - 140
			Difluorobenzene	2010/04/01		102	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01		98	%	70 - 130
			Carbon Disulfide	2010/04/01		94	%	70 - 130
			Propene	2010/04/01		97	%	70 - 130
			Vinyl Acetate	2010/04/01		108	%	70 - 130
			Vinyl Bromide	2010/04/01		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/04/01		91	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/04/01		80	%	70 - 130
			Chloromethane	2010/04/01		88	%	70 - 130
			Vinyl Chloride	2010/04/01		93	%	70 - 130
			Chloroethane	2010/04/01		93	%	70 - 130
			1,3-Butadiene	2010/04/01		99	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/04/01		92	%	70 - 130
			Trichlorotrifluoroethane	2010/04/01		95	%	70 - 130
			Ethanol	2010/04/01		109	%	70 - 130
			2-propanol	2010/04/01		95	%	70 - 130
			2-Propanone	2010/04/01		98	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01		95	%	70 - 130
			Methyl Isobutyl Ketone	2010/04/01		100	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01		100	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/04/01		102	%	70 - 130
			Ethyl Acetate	2010/04/01		98	%	70 - 130
			1,1-Dichloroethylene	2010/04/01		90	%	70 - 130
			cis-1,2-Dichloroethylene	2010/04/01		99	%	70 - 130
			trans-1,2-Dichloroethylene	2010/04/01		98	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/04/01		79	%	70 - 130
			Chloroform	2010/04/01		92	%	70 - 130
			Carbon Tetrachloride	2010/04/01		95	%	70 - 130
			1,1-Dichloroethane	2010/04/01		91	%	70 - 130
			1,2-Dichloroethane	2010/04/01		92	%	70 - 130
			Ethylene Dibromide	2010/04/01		90	%	70 - 130
			1,1,1-Trichloroethane	2010/04/01		92	%	70 - 130
			1,1,2-Trichloroethane	2010/04/01		93	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/04/01		87	%	70 - 130
			cis-1,3-Dichloropropene	2010/04/01		97	%	70 - 130
			trans-1,3-Dichloropropene	2010/04/01		96	%	70 - 130
			1,2-Dichloropropane	2010/04/01		93	%	70 - 130
			Bromomethane	2010/04/01		96	%	70 - 130
			Bromoform	2010/04/01		98	%	70 - 130
			Bromodichloromethane	2010/04/01		96	%	70 - 130
			Dibromochloromethane	2010/04/01		99	%	70 - 130
			Heptane	2010/04/01		95	%	70 - 130
			Trichloroethylene	2010/04/01		94	%	70 - 130
			Tetrachloroethylene	2010/04/01		96	%	70 - 130
			Benzene	2010/04/01		93	%	70 - 130
			Toluene	2010/04/01		95	%	70 - 130
			Ethylbenzene	2010/04/01		92	%	70 - 130
			p+m-Xylene	2010/04/01		88	%	70 - 130
			o-Xylene	2010/04/01		88	%	70 - 130
			Styrene	2010/04/01		67 (1)	%	70 - 130
			1,3,5-Trimethylbenzene	2010/04/01		82	%	70 - 130
			1,2,4-Trimethylbenzene	2010/04/01		84	%	70 - 130
			4-ethyltoluene	2010/04/01		88	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB037966

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Chlorobenzene	2010/04/01		84	%	70 - 130
			Benzyl chloride	2010/04/01		84	%	70 - 130
			1,3-Dichlorobenzene	2010/04/01		80	%	70 - 130
			1,4-Dichlorobenzene	2010/04/01		73	%	70 - 130
			1,2-Dichlorobenzene	2010/04/01		84	%	70 - 130
			1,2,4-Trichlorobenzene	2010/04/01		74	%	70 - 130
			Hexachlorobutadiene	2010/04/01		97	%	70 - 130
			Hexane	2010/04/01		98	%	70 - 130
			Cyclohexane	2010/04/01		96	%	70 - 130
			Tetrahydrofuran	2010/04/01		102	%	70 - 130
			1,4-Dioxane	2010/04/01		82	%	70 - 130
		Method Blank	Bromochloromethane	2010/04/01		73	%	60 - 140
			D5-Chlorobenzene	2010/04/01		69	%	60 - 140
			Difluorobenzene	2010/04/01		77	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/04/01	ND, RDL=0.50		ppbv	
			Propene	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/04/01	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/04/01	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/04/01	ND, RDL=0.17		ppbv	
			Chloromethane	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/04/01	ND, RDL=0.18		ppbv	
			Chloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/04/01	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/04/01	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/04/01	ND, RDL=0.15		ppbv	
			Ethanol	2010/04/01	ND, RDL=2.3		ppbv	
			2-propanol	2010/04/01	ND, RDL=3.0		ppbv	
			2-Propanone	2010/04/01	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/04/01	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/04/01	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/04/01	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/04/01	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/04/01	0.41, RDL=0.30		ppbv	
			Chloroform	2010/04/01	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/04/01	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/04/01	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/04/01	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/04/01	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/04/01	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/04/01	ND, RDL=0.40		ppbv	
			Bromomethane	2010/04/01	ND, RDL=0.18		ppbv	
			Bromoform	2010/04/01	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Heptane	2010/04/01	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB037966

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Method Blank	Trichloroethylene	2010/04/01	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzene	2010/04/01	ND, RDL=0.18		ppbv	
			Toluene	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/04/01	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/04/01	ND, RDL=0.37		ppbv	
			o-Xylene	2010/04/01	ND, RDL=0.20		ppbv	
			Styrene	2010/04/01	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/04/01	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/04/01	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/04/01	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/04/01	ND, RDL=3.0		ppbv	
			Hexane	2010/04/01	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/04/01	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/04/01	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/04/01	ND, RDL=0.60		ppbv	

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: Cold Lake South
Station ID: Lica 1
Field Sample ID: LICA VOC/ CLS /Mar 27, 10

Sampler s/n: 6167
Canister ID: 7837
Canister Installation Date/Time: Mar 25, 10 @ 16:00 mst
Canister Removal Date/Time: Mar 29, 10 @ 11:25 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
27-Mar-10	03/27/2010 0:00	03/28/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	594	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	20

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC #902

Technician Signiture: Shea Beaton

Your C.O.C. #: 0902

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/08

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B038644
Received: 2010/03/31, 18:52

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

RESULTS OF ANALYSES OF AIR

Maxxam ID		FL9752	FL9753	
Sampling Date		2010/03/27	2010/03/27	
COC Number		0902	0902	
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**LICA/VOC/CLS/MAR27/10 - 7837**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	20	18	2116656

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9752				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.95	0.20	4.72	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.68	0.30	1.41	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.47	0.20	2.64	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	2.52	0.80	5.99	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.55	0.30	1.90	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9752				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653
Surrogate Recovery (%)						
Bromochloromethane	%	66		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9752				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	66		N/A	N/A	2116653
Difluorobenzene	%	70		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9753				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/CLS/MAR27/10 - 7837**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.91	0.20	4.51	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.62	0.30	1.29	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.47	0.20	2.66	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	2.54	0.80	6.04	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.51	0.30	1.79	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9753				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/CLS/MAR27/10 - 7837**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653
Surrogate Recovery (%)						
Bromochloromethane	%	65		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9753				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/CLS/MAR27/10 - 7837**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	64		N/A	N/A	2116653
Difluorobenzene	%	69		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

Test Summary

Maxxam ID FL9752 **Collected** 2010/03/27
Sample ID LICA/VOC/PORT/MAR27/10 - 7815 **Shipped**
Matrix AIR **Received** 2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

Maxxam ID FL9753 **Collected** 2010/03/27
Sample ID LICA/VOC/CLS/MAR27/10 - 7837 **Shipped**
Matrix AIR **Received** 2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB038644

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Bromochloromethane	2010/04/01		99	%	60 - 140
			D5-Chlorobenzene	2010/04/01		101	%	60 - 140
			Difluorobenzene	2010/04/01		102	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01		98	%	70 - 130
			Carbon Disulfide	2010/04/01		94	%	70 - 130
			Propene	2010/04/01		97	%	70 - 130
			Vinyl Acetate	2010/04/01		108	%	70 - 130
			Vinyl Bromide	2010/04/01		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/04/01		91	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/04/01		80	%	70 - 130
			Chloromethane	2010/04/01		88	%	70 - 130
			Vinyl Chloride	2010/04/01		93	%	70 - 130
			Chloroethane	2010/04/01		93	%	70 - 130
			1,3-Butadiene	2010/04/01		99	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/04/01		92	%	70 - 130
			Trichlorotrifluoroethane	2010/04/01		95	%	70 - 130
			Ethanol	2010/04/01		109	%	70 - 130
			2-propanol	2010/04/01		95	%	70 - 130
			2-Propanone	2010/04/01		98	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01		95	%	70 - 130
			Methyl Isobutyl Ketone	2010/04/01		100	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01		100	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/04/01		102	%	70 - 130
			Ethyl Acetate	2010/04/01		98	%	70 - 130
			1,1-Dichloroethylene	2010/04/01		90	%	70 - 130
			cis-1,2-Dichloroethylene	2010/04/01		99	%	70 - 130
			trans-1,2-Dichloroethylene	2010/04/01		98	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/04/01		79	%	70 - 130
			Chloroform	2010/04/01		92	%	70 - 130
			Carbon Tetrachloride	2010/04/01		95	%	70 - 130
			1,1-Dichloroethane	2010/04/01		91	%	70 - 130
			1,2-Dichloroethane	2010/04/01		92	%	70 - 130
			Ethylene Dibromide	2010/04/01		90	%	70 - 130
			1,1,1-Trichloroethane	2010/04/01		92	%	70 - 130
			1,1,2-Trichloroethane	2010/04/01		93	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/04/01		87	%	70 - 130
			cis-1,3-Dichloropropene	2010/04/01		97	%	70 - 130
			trans-1,3-Dichloropropene	2010/04/01		96	%	70 - 130
			1,2-Dichloropropane	2010/04/01		93	%	70 - 130
			Bromomethane	2010/04/01		96	%	70 - 130
			Bromoform	2010/04/01		98	%	70 - 130
			Bromodichloromethane	2010/04/01		96	%	70 - 130
			Dibromochloromethane	2010/04/01		99	%	70 - 130
			Heptane	2010/04/01		95	%	70 - 130
			Trichloroethylene	2010/04/01		94	%	70 - 130
			Tetrachloroethylene	2010/04/01		96	%	70 - 130
			Benzene	2010/04/01		93	%	70 - 130
			Toluene	2010/04/01		95	%	70 - 130
			Ethylbenzene	2010/04/01		92	%	70 - 130
			p+m-Xylene	2010/04/01		88	%	70 - 130
			o-Xylene	2010/04/01		88	%	70 - 130
			Styrene	2010/04/01		67 (1)	%	70 - 130
			1,3,5-Trimethylbenzene	2010/04/01		82	%	70 - 130
			1,2,4-Trimethylbenzene	2010/04/01		84	%	70 - 130
			4-ethyltoluene	2010/04/01		88	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB038644

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Chlorobenzene	2010/04/01		84	%	70 - 130
			Benzyl chloride	2010/04/01		84	%	70 - 130
			1,3-Dichlorobenzene	2010/04/01		80	%	70 - 130
			1,4-Dichlorobenzene	2010/04/01		73	%	70 - 130
			1,2-Dichlorobenzene	2010/04/01		84	%	70 - 130
			1,2,4-Trichlorobenzene	2010/04/01		74	%	70 - 130
			Hexachlorobutadiene	2010/04/01		97	%	70 - 130
			Hexane	2010/04/01		98	%	70 - 130
			Cyclohexane	2010/04/01		96	%	70 - 130
			Tetrahydrofuran	2010/04/01		102	%	70 - 130
			1,4-Dioxane	2010/04/01		82	%	70 - 130
		Method Blank	Bromochloromethane	2010/04/01		73	%	60 - 140
			D5-Chlorobenzene	2010/04/01		69	%	60 - 140
			Difluorobenzene	2010/04/01		77	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/04/01	ND, RDL=0.50		ppbv	
			Propene	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/04/01	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/04/01	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/04/01	ND, RDL=0.17		ppbv	
			Chloromethane	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/04/01	ND, RDL=0.18		ppbv	
			Chloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/04/01	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/04/01	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/04/01	ND, RDL=0.15		ppbv	
			Ethanol	2010/04/01	ND, RDL=2.3		ppbv	
			2-propanol	2010/04/01	ND, RDL=3.0		ppbv	
			2-Propanone	2010/04/01	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/04/01	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/04/01	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/04/01	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/04/01	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/04/01	0.41, RDL=0.30		ppbv	
			Chloroform	2010/04/01	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/04/01	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/04/01	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/04/01	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/04/01	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/04/01	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/04/01	ND, RDL=0.40		ppbv	
			Bromomethane	2010/04/01	ND, RDL=0.18		ppbv	
			Bromoform	2010/04/01	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Heptane	2010/04/01	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB038644

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Method Blank	Trichloroethylene	2010/04/01	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzene	2010/04/01	ND, RDL=0.18		ppbv	
			Toluene	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/04/01	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/04/01	ND, RDL=0.37		ppbv	
			o-Xylene	2010/04/01	ND, RDL=0.20		ppbv	
			Styrene	2010/04/01	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/04/01	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/04/01	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/04/01	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/04/01	ND, RDL=3.0		ppbv	
			Hexane	2010/04/01	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/04/01	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/04/01	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/04/01	ND, RDL=0.60		ppbv	

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Polycyclic Aromatic Hydrocarbons Laboratory Analysis

Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: Cold Lake South
Station ID: Lica1
Field Sample ID: LICA PUF/CLS/Mar 3, 10

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: Mar 3, 10 @ 08:05 mst
Removal Date/Time: Mar 4, 10 @ 07:30 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
03-Mar-10	03/03/2010 0:00	03/04/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
26-Feb-10	04-Mar-10	10-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 13-Jan-10

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
707	229	-4.1	330.35

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC # 2476 (out of source COC forms, used a Summa form)
GB011418 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Mar 3, 10
- Small amount of "dirt" around the edges of the 102mm QFF.

Technician Signiture: _____

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/19

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B027268
Received: 2010/03/08, 08:39

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/16	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/03/16	BRL SOP-00304	EPA TO-15

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/03/09	2010/03/15	BRL SOP-00201	CARB429(ARBM1,M2)mod

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/19

CERTIFICATE OF ANALYSIS

-2-

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CALA have approved this reporting process and electronic report format.

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Total cover pages: 2

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

RESULTS OF ANALYSES OF AIR

Maxxam ID		FG6744	FG6745	
Sampling Date		2010/03/03 00:00	2010/03/05 00:00	
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	19	20	2102505

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FG6746	FG6747		
Sampling Date		2010/03/03 00:00	2010/03/03 00:00		
	Units	**LICA PUF/CLS/MAR3,10**	**LICA PUF/PORT/MAR3,10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.23	0.12	0.10	2097995
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2097995
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2097995
2-Methylanthracene	ug	<0.10	<0.10	0.10	2097995
2-Methylnaphthalene	ug	0.41	0.20	0.10	2097995
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2097995
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2097995
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2097995
Acenaphthene	ug	<0.050	<0.050	0.050	2097995
Acenaphthylene	ug	<0.050	<0.050	0.050	2097995
Anthracene	ug	<0.050	<0.050	0.050	2097995
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2097995
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2097995
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2097995
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2097995
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2097995
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2097995
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2097995
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2097995
Biphenyl	ug	0.17	0.20	0.10	2097995
Chrysene	ug	<0.050	<0.050	0.050	2097995
Coronene	ug	<0.10	<0.10	0.10	2097995
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2097995
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2097995
Fluoranthene	ug	0.055	0.088	0.050	2097995
Fluorene	ug	0.146	0.182	0.050	2097995
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2097995
m-Terphenyl	ug	<0.10	<0.10	0.10	2097995
Naphthalene	ug	0.287	0.246	0.072	2097995
o-Terphenyl	ug	<0.10	<0.10	0.10	2097995
Perylene	ug	<0.10	<0.10	0.10	2097995
Phenanthrene	ug	0.233	0.343	0.050	2097995

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FG6746	FG6747		
Sampling Date		2010/03/03 00:00	2010/03/03 00:00		
	Units	**LICA PUF/CLS/MAR3,10**	**LICA PUF/PORT/MAR3,10**	**RDL**	**QC Batch**
p-Terphenyl	ug	<0.10	<0.10	0.10	2097995
Pyrene	ug	<0.050	0.063	0.050	2097995
Quinoline	ug	<0.40	<0.40	0.40	2097995
Tetralin	ug	<0.10	<0.10	0.10	2097995
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	64	72		2097995
D10-Fluoranthene	%	101	95		2097995
D10-Fluorene (FS)	%	63	66		2097995
D10-Phenanthrene	%	89	84		2097995
D12-Benzo(a)anthracene	%	96	94		2097995
D12-Benzo(a)pyrene	%	96	91		2097995
D12-Benzo(b)fluoranthene	%	91	88		2097995
D12-Benzo(ghi)perylene	%	96	91		2097995
D12-Benzo(k)fluoranthene	%	94	89		2097995
D12-Chrysene	%	89	86		2097995
D12-Indeno(1,2,3-cd)pyrene	%	89	82		2097995
D12-Perylene	%	100	95		2097995
D14-Dibenzo(a,h)anthracene	%	81	73		2097995
D14-Terphenyl (FS)	%	88	86		2097995
D8-Acenaphthylene	%	81	87		2097995
D8-Naphthalene	%	59	68		2097995

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
Volatile Organics					
2,2,4-Trimethylpentane	ppbv	<0.20	<0.20	0.20	2102500
Carbon Disulfide	ppbv	<0.50	<0.50	0.50	2102500
Propene	ppbv	<0.30	<0.30	0.30	2102500
Vinyl Acetate	ppbv	<0.20	<0.20	0.20	2102500
Vinyl Bromide	ppbv	<0.20	<0.20	0.20	2102500
Dichlorodifluoromethane (FREON 12)	ppbv	0.60	0.61	0.20	2102500
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	<0.17	0.17	2102500
Chloromethane	ppbv	0.44	0.42	0.30	2102500
Vinyl Chloride	ppbv	<0.18	<0.18	0.18	2102500
Chloroethane	ppbv	<0.30	<0.30	0.30	2102500
1,3-Butadiene	ppbv	<0.50	<0.50	0.50	2102500
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.29	0.20	2102500
Trichlorotrifluoroethane	ppbv	<0.15	<0.15	0.15	2102500
Ethanol	ppbv	<2.3	<2.3	2.3	2102500
2-propanol	ppbv	<3.0	<3.0	3.0	2102500
2-Propanone	ppbv	2.04	2.38	0.80	2102500
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	<3.0	3.0	2102500
Methyl Isobutyl Ketone	ppbv	<3.2	<3.2	3.2	2102500
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	<2.0	2.0	2102500
Methyl t-butyl ether (MTBE)	ppbv	<0.20	<0.20	0.20	2102500
Ethyl Acetate	ppbv	<2.2	<2.2	2.2	2102500
1,1-Dichloroethylene	ppbv	<0.25	<0.25	0.25	2102500
cis-1,2-Dichloroethylene	ppbv	<0.19	<0.19	0.19	2102500
trans-1,2-Dichloroethylene	ppbv	<0.20	<0.20	0.20	2102500
Methylene Chloride(Dichloromethane)	ppbv	0.53	0.52	0.30	2102500
Chloroform	ppbv	<0.15	<0.15	0.15	2102500
Carbon Tetrachloride	ppbv	<0.30	<0.30	0.30	2102500
1,1-Dichloroethane	ppbv	<0.20	<0.20	0.20	2102500
1,2-Dichloroethane	ppbv	<0.20	<0.20	0.20	2102500
Ethylene Dibromide	ppbv	<0.17	<0.17	0.17	2102500
1,1,1-Trichloroethane	ppbv	<0.30	<0.30	0.30	2102500
1,1,2-Trichloroethane	ppbv	<0.15	<0.15	0.15	2102500

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	<0.20	0.20	2102500
cis-1,3-Dichloropropene	ppbv	<0.18	<0.18	0.18	2102500
trans-1,3-Dichloropropene	ppbv	<0.17	<0.17	0.17	2102500
1,2-Dichloropropane	ppbv	<0.40	<0.40	0.40	2102500
Bromomethane	ppbv	<0.18	<0.18	0.18	2102500
Bromoform	ppbv	<0.20	<0.20	0.20	2102500
Bromodichloromethane	ppbv	<0.20	<0.20	0.20	2102500
Dibromochloromethane	ppbv	<0.20	<0.20	0.20	2102500
Heptane	ppbv	<0.30	<0.30	0.30	2102500
Trichloroethylene	ppbv	<0.30	<0.30	0.30	2102500
Tetrachloroethylene	ppbv	<0.20	<0.20	0.20	2102500
Benzene	ppbv	<0.18	<0.18	0.18	2102500
Toluene	ppbv	<0.20	<0.20	0.20	2102500
Ethylbenzene	ppbv	<0.20	<0.20	0.20	2102500
p+m-Xylene	ppbv	<0.37	<0.37	0.37	2102500
o-Xylene	ppbv	<0.20	<0.20	0.20	2102500
Styrene	ppbv	<0.20	<0.20	0.20	2102500
1,3,5-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	2102500
1,2,4-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	2102500
4-ethyltoluene	ppbv	<2.2	<2.2	2.2	2102500
Chlorobenzene	ppbv	<0.20	<0.20	0.20	2102500
Benzyl chloride	ppbv	<1.0	<1.0	1.0	2102500
1,3-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	2102500
1,4-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	2102500
1,2-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	2102500
1,2,4-Trichlorobenzene	ppbv	<2.0	<2.0	2.0	2102500
Hexachlorobutadiene	ppbv	<3.0	<3.0	3.0	2102500
Hexane	ppbv	<0.30	<0.30	0.30	2102500
Cyclohexane	ppbv	<0.20	<0.20	0.20	2102500
Tetrahydrofuran	ppbv	<0.40	<0.40	0.40	2102500
1,4-Dioxane	ppbv	<2.0	<2.0	2.0	2102500
Xylene (Total)	ppbv	<0.60	<0.60	0.60	2102500
Surrogate Recovery (%)					
Bromochloromethane	%	86	85		2102500

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
D5-Chlorobenzene	%	91	90		2102500
Difluorobenzene	%	88	87		2102500

QC Batch = Quality Control Batch

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Maxxam Job #: B027268
Report Date: 2010/03/19

Test Summary

Maxxam ID FG6744 **Collected** 2010/03/03
Sample ID LICA VOC/CLS/MAR3,10 **Shipped**
Matrix AIR **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2102505	N/A	2010/03/16	VEA
Volatile Organics in Air (TO-15)	GC/MS	2102500	N/A	2010/03/16	VEA

Maxxam ID FG6745 **Collected** 2010/03/05
Sample ID LICA VOC/PORT/MAR3,10 **Shipped**
Matrix AIR **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2102505	N/A	2010/03/16	VEA
Volatile Organics in Air (TO-15)	GC/MS	2102500	N/A	2010/03/16	VEA

Maxxam ID FG6746 **Collected** 2010/03/03
Sample ID LICA PUF/CLS/MAR3,10 **Shipped**
Matrix Filter **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2097995	2010/03/09	2010/03/15	WZ

Maxxam ID FG6747 **Collected** 2010/03/03
Sample ID LICA PUF/PORT/MAR3,10 **Shipped**
Matrix Filter **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2097995	2010/03/09	2010/03/15	WZ

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Maxxam Job #: B027268
Report Date: 2010/03/19

GENERAL COMMENTS

VOCTO15M-A
Benzyl Chloride and 1,2,4-trichlorobenzene are above 40% RSD in initial calibration.
No positives found for these compounds.

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation. No positives found for this compound.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Quality Assurance Report

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2097995	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/03/15		78	%	50 - 150
			D10-Fluoranthene	2010/03/15		99	%	50 - 150
			D10-Phenanthrene	2010/03/15		90	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/15		96	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/15		99	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/15		91	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/15		99	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/15		97	%	50 - 150
			D12-Chrysene	2010/03/15		87	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/03/15		90	%	50 - 150
			D12-Perylene	2010/03/15		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/15		82	%	50 - 150
			D8-Acenaphthylene	2010/03/15		93	%	50 - 150
			D8-Naphthalene	2010/03/15		77	%	50 - 150
			Acenaphthene	2010/03/15		81	%	60 - 130
		RPD	Acenaphthene	2010/03/15	7.4		%	50
		Spiked Blank	Acenaphthylene	2010/03/15		89	%	60 - 130
		RPD	Acenaphthylene	2010/03/15	9.1		%	50
		Spiked Blank	Anthracene	2010/03/15		86	%	60 - 130
		RPD	Anthracene	2010/03/15	4.4		%	50
		Spiked Blank	Benzo(a)anthracene	2010/03/15		78	%	60 - 130
		RPD	Benzo(a)anthracene	2010/03/15	1.5		%	50
		Spiked Blank	Benzo(a)pyrene	2010/03/15		84	%	60 - 130
		RPD	Benzo(a)pyrene	2010/03/15	1.7		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/03/15		85	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/03/15	1.9		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/03/15		85	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/03/15	1.6		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/03/15		84	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/03/15	2.2		%	50
		Spiked Blank	Chrysene	2010/03/15		87	%	60 - 130
		RPD	Chrysene	2010/03/15	1.0		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/03/15		71	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/03/15	6.8		%	50
		Spiked Blank	Fluoranthene	2010/03/15		100	%	60 - 130
		RPD	Fluoranthene	2010/03/15	0.8		%	50
		Spiked Blank	Fluorene	2010/03/15		81	%	60 - 130
		RPD	Fluorene	2010/03/15	7.7		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/03/15		78	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/03/15	3.1		%	50
		Spiked Blank	Naphthalene	2010/03/15		75	%	60 - 130
		RPD	Naphthalene	2010/03/15	5.3		%	50
		Spiked Blank	Phenanthrene	2010/03/15		80	%	60 - 130
		RPD	Phenanthrene	2010/03/15	4.2		%	50
		Spiked Blank	Pyrene	2010/03/15		91	%	60 - 130
		RPD	Pyrene	2010/03/15	0.9		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/03/15		89	%	50 - 150
			D10-Fluoranthene	2010/03/15		105	%	50 - 150
			D10-Phenanthrene	2010/03/15		95	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/15		98	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/15		98	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/15		92	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/15		99	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/15		96	%	50 - 150
			D12-Chrysene	2010/03/15		87	%	50 - 150

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Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2097995	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/03/15		89	%	50 - 150
			D12-Perylene	2010/03/15		103	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/15		80	%	50 - 150
			D8-Acenaphthylene	2010/03/15		106	%	50 - 150
			D8-Naphthalene	2010/03/15		87	%	50 - 150
			1-Methylnaphthalene	2010/03/15	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/03/15	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/03/15	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/03/15	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/03/15	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/03/15	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/03/15	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/03/15	ND, RDL=0.40		ug	
			Acenaphthene	2010/03/15	ND, RDL=0.050		ug	
			Acenaphthylene	2010/03/15	ND, RDL=0.050		ug	
			Anthracene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/03/15	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/03/15	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/03/15	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/03/15	ND, RDL=0.050		ug	
			Biphenyl	2010/03/15	ND, RDL=0.10		ug	
			Chrysene	2010/03/15	ND, RDL=0.050		ug	
			Coronene	2010/03/15	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/03/15	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/03/15	ND, RDL=0.20		ug	
			Fluoranthene	2010/03/15	ND, RDL=0.050		ug	
			Fluorene	2010/03/15	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/03/15	ND, RDL=0.050		ug	
			m-Terphenyl	2010/03/15	ND, RDL=0.10		ug	
			Naphthalene	2010/03/15	ND, RDL=0.072		ug	
			o-Terphenyl	2010/03/15	ND, RDL=0.10		ug	
			Perylene	2010/03/15	ND, RDL=0.10		ug	
			Phenanthrene	2010/03/15	ND, RDL=0.050		ug	
			p-Terphenyl	2010/03/15	ND, RDL=0.10		ug	
			Pyrene	2010/03/15	ND, RDL=0.050		ug	
			Quinoline	2010/03/15	ND, RDL=0.40		ug	
			Tetralin	2010/03/15	ND, RDL=0.10		ug	
2102500	VEA	Spiked Blank	Bromochloromethane	2010/03/16		102	%	60 - 140
			D5-Chlorobenzene	2010/03/16		110	%	60 - 140
			Difluorobenzene	2010/03/16		105	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/16		106	%	70 - 130
			Carbon Disulfide	2010/03/16		97	%	70 - 130
			Propene	2010/03/16		100	%	70 - 130
			Vinyl Acetate	2010/03/16		112	%	70 - 130
			Vinyl Bromide	2010/03/16		103	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/03/16		97	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/03/16		87	%	70 - 130
			Chloromethane	2010/03/16		93	%	70 - 130
			Vinyl Chloride	2010/03/16		104	%	70 - 130
			Chloroethane	2010/03/16		102	%	70 - 130
			1,3-Butadiene	2010/03/16		83	%	70 - 130

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Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2102500	VEA	Spiked Blank	Trichlorofluoromethane (FREON 11)	2010/03/16		94	%	70 - 130
			Trichlorotrifluoroethane	2010/03/16		99	%	70 - 130
			Ethanol	2010/03/16		101	%	70 - 130
			2-propanol	2010/03/16		97	%	70 - 130
			2-Propanone	2010/03/16		101	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/03/16		107	%	70 - 130
			Methyl Isobutyl Ketone	2010/03/16		100	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/03/16		105	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/03/16		103	%	70 - 130
			Ethyl Acetate	2010/03/16		101	%	70 - 130
			1,1-Dichloroethylene	2010/03/16		102	%	70 - 130
			cis-1,2-Dichloroethylene	2010/03/16		105	%	70 - 130
			trans-1,2-Dichloroethylene	2010/03/16		93	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/03/16		87	%	70 - 130
			Chloroform	2010/03/16		98	%	70 - 130
			Carbon Tetrachloride	2010/03/16		101	%	70 - 130
			1,1-Dichloroethane	2010/03/16		99	%	70 - 130
			1,2-Dichloroethane	2010/03/16		97	%	70 - 130
			Ethylene Dibromide	2010/03/16		101	%	70 - 130
			1,1,1-Trichloroethane	2010/03/16		99	%	70 - 130
			1,1,2-Trichloroethane	2010/03/16		99	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/03/16		101	%	70 - 130
			cis-1,3-Dichloropropene	2010/03/16		116	%	70 - 130
			trans-1,3-Dichloropropene	2010/03/16		120	%	70 - 130
			1,2-Dichloropropane	2010/03/16		99	%	70 - 130
			Bromomethane	2010/03/16		96	%	70 - 130
			Bromoform	2010/03/16		103	%	70 - 130
			Bromodichloromethane	2010/03/16		100	%	70 - 130
			Dibromochloromethane	2010/03/16		101	%	70 - 130
			Heptane	2010/03/16		104	%	70 - 130
			Trichloroethylene	2010/03/16		100	%	70 - 130
			Tetrachloroethylene	2010/03/16		101	%	70 - 130
			Benzene	2010/03/16		103	%	70 - 130
			Toluene	2010/03/16		109	%	70 - 130
			Ethylbenzene	2010/03/16		113	%	70 - 130
			p+m-Xylene	2010/03/16		110	%	70 - 130
			o-Xylene	2010/03/16		107	%	70 - 130
			Styrene	2010/03/16		105	%	70 - 130
			1,3,5-Trimethylbenzene	2010/03/16		104	%	70 - 130
			1,2,4-Trimethylbenzene	2010/03/16		110	%	70 - 130
			4-ethyltoluene	2010/03/16		110	%	70 - 130
			Chlorobenzene	2010/03/16		99	%	70 - 130
			Benzyl chloride	2010/03/16		136 (1)	%	70 - 130
			1,3-Dichlorobenzene	2010/03/16		108	%	70 - 130
			1,4-Dichlorobenzene	2010/03/16		103	%	70 - 130
			1,2-Dichlorobenzene	2010/03/16		105	%	70 - 130
			1,2,4-Trichlorobenzene	2010/03/16		110	%	70 - 130
			Hexachlorobutadiene	2010/03/16		90	%	70 - 130
			Hexane	2010/03/16		99	%	70 - 130
			Cyclohexane	2010/03/16		105	%	70 - 130
			Tetrahydrofuran	2010/03/16		106	%	70 - 130
			1,4-Dioxane	2010/03/16		107	%	70 - 130
		Method Blank	Bromochloromethane	2010/03/16		92	%	60 - 140
			D5-Chlorobenzene	2010/03/16		96	%	60 - 140
			Difluorobenzene	2010/03/16		93	%	60 - 140

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Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2102500	VEA	Method Blank	2,2,4-Trimethylpentane	2010/03/16	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/03/16	ND, RDL=0.50		ppbv	
			Propene	2010/03/16	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/03/16	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/03/16	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/03/16	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/03/16	ND, RDL=0.17		ppbv	
			Chloromethane	2010/03/16	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/03/16	ND, RDL=0.18		ppbv	
			Chloroethane	2010/03/16	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/03/16	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/03/16	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/03/16	ND, RDL=0.15		ppbv	
			Ethanol	2010/03/16	ND, RDL=2.3		ppbv	
			2-propanol	2010/03/16	ND, RDL=3.0		ppbv	
			2-Propanone	2010/03/16	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/03/16	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/03/16	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/03/16	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/03/16	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/03/16	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/03/16	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/03/16	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/03/16	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/03/16	0.47, RDL=0.30		ppbv	
			Chloroform	2010/03/16	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/03/16	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/03/16	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/03/16	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/03/16	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/03/16	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/03/16	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/03/16	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/03/16	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/03/16	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/03/16	ND, RDL=0.40		ppbv	
			Bromomethane	2010/03/16	ND, RDL=0.18		ppbv	
			Bromoform	2010/03/16	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/03/16	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/03/16	ND, RDL=0.20		ppbv	
			Heptane	2010/03/16	ND, RDL=0.30		ppbv	
			Trichloroethylene	2010/03/16	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/03/16	ND, RDL=0.20		ppbv	
			Benzene	2010/03/16	ND, RDL=0.18		ppbv	
			Toluene	2010/03/16	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/03/16	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/03/16	ND, RDL=0.37		ppbv	
			o-Xylene	2010/03/16	ND, RDL=0.20		ppbv	
			Styrene	2010/03/16	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/03/16	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/03/16	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/03/16	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/03/16	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/03/16	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/03/16	ND, RDL=0.40		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2102500	VEA	Method Blank	1,4-Dichlorobenzene	2010/03/16	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/03/16	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/03/16	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/03/16	ND, RDL=3.0		ppbv	
			Hexane	2010/03/16	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/03/16	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/03/16	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/03/16	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/03/16	ND, RDL=0.60		ppbv	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: Cold Lake South
Station ID: Lica1
Field Sample ID: LICA PUF/CLS/Mar 9, 10

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: Mar 8, 10 @ 10:40 mst
Removal Date/Time: Mar 10, 10 @ 08:05 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
09-Mar-10	03/09/2010 0:00	03/10/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
05-Mar-10	10-Mar-10	17-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 13-Jan-10

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
710	229	0.4	330.36

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC #
GB024218 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Mar 9, 10

Technician Signiture: _____

Your C.O.C. #: n/A, N/A

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B029627
Received: 2010/03/12, 08:55

Sample Matrix: PUF AND FILTER
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/03/12	2010/03/19	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

SEMI-VOLATILE ORGANICS BY GC-MS (PUF AND FILTER)

Maxxam ID		FH7025	FH7026		
Sampling Date		2010/03/09 00:00	2010/03/09 00:00		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.9/10**	**LICA PUF/QFF/PORT/MAR.9/10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.21	<0.10	0.10	2099147
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2099147
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2099147
2-Methylanthracene	ug	<0.10	<0.10	0.10	2099147
2-Methylnaphthalene	ug	0.41	0.16	0.10	2099147
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2099147
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2099147
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2099147
Acenaphthene	ug	<0.050	0.060	0.050	2099147
Acenaphthylene	ug	0.137	0.066	0.050	2099147
Anthracene	ug	<0.050	<0.050	0.050	2099147
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2099147
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2099147
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2099147
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2099147
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2099147
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2099147
Benzo(g,h,i)perylene	ug	0.078	<0.050	0.050	2099147
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2099147
Biphenyl	ug	0.25	0.18	0.10	2099147
Chrysene	ug	<0.050	<0.050	0.050	2099147
Coronene	ug	<0.10	<0.10	0.10	2099147
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2099147
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2099147
Fluoranthene	ug	0.133	0.090	0.050	2099147
Fluorene	ug	0.197	0.144	0.050	2099147
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2099147
m-Terphenyl	ug	<0.10	<0.10	0.10	2099147
Naphthalene	ug	0.267	0.127	0.072	2099147
o-Terphenyl	ug	<0.10	<0.10	0.10	2099147

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

SEMI-VOLATILE ORGANICS BY GC-MS (PUF AND FILTER)

Maxxam ID		FH7025	FH7026		
Sampling Date		2010/03/09 00:00	2010/03/09 00:00		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.9/10**	**LICA PUF/QFF/PORT/MAR.9/10**	**RDL**	**QC Batch**
Perylene	ug	<0.10	<0.10	0.10	2099147
Phenanthrene	ug	0.324	0.303	0.050	2099147
p-Terphenyl	ug	<0.10	<0.10	0.10	2099147
Pyrene	ug	0.121	0.053	0.050	2099147
Quinoline	ug	<0.40	<0.40	0.40	2099147
Tetralin	ug	<0.10	<0.10	0.10	2099147
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	68	77		2099147
D10-Fluoranthene	%	99	92		2099147
D10-Fluorene (FS)	%	58	68		2099147
D10-Phenanthrene	%	88	87		2099147
D12-Benzo(a)anthracene	%	98	112		2099147
D12-Benzo(a)pyrene	%	102	98		2099147
D12-Benzo(b)fluoranthene	%	99	97		2099147
D12-Benzo(ghi)perylene	%	106	104		2099147
D12-Benzo(k)fluoranthene	%	89	90		2099147
D12-Chrysene	%	93	87		2099147
D12-Indeno(1,2,3-cd)pyrene	%	108	106		2099147
D12-Perylene	%	100	98		2099147
D14-Dibenzo(a,h)anthracene	%	107	106		2099147
D14-Terphenyl (FS)	%	82	85		2099147
D8-Acenaphthylene	%	89	98		2099147
D8-Naphthalene	%	67	76		2099147

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

Test Summary

Maxxam ID	FH7025	**Collected**	2010/03/09
Sample ID	LICA PUF/QFF/CLS/MAR.9/10	**Shipped**	
Matrix	PUF AND FILTER	**Received**	2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2099147	2010/03/12	2010/03/19	WZ

Maxxam ID	FH7026	**Collected**	2010/03/09
Sample ID	LICA PUF/QFF/PORT/MAR.9/10	**Shipped**	
Matrix	PUF AND FILTER	**Received**	2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2099147	2010/03/12	2010/03/19	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

GENERAL COMMENTS

PAHMS-F
9.10-Dimethylanthracene and 7,12-Dimethylbenzo(a)anthracene are above 25% RSD in initial calibation. No positives found for these 2 compounds.

Sample FH7025-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug. Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FH7026-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug. Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB029627

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2099147	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/03/19		80	%	50 - 150
			D10-Fluoranthene	2010/03/19		103	%	50 - 150
			D10-Phenanthrene	2010/03/19		91	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/19		106	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/19		107	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/19		101	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/19		105	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/19		89	%	50 - 150
			D12-Chrysene	2010/03/19		98	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/03/19		111	%	50 - 150
			D12-Perylene	2010/03/19		103	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/19		111	%	50 - 150
			D8-Acenaphthylene	2010/03/19		101	%	50 - 150
			D8-Naphthalene	2010/03/19		82	%	50 - 150
			Acenaphthene	2010/03/19		81	%	60 - 130
		RPD	Acenaphthene	2010/03/19	3.1		%	50
		Spiked Blank	Acenaphthylene	2010/03/19		95	%	60 - 130
		RPD	Acenaphthylene	2010/03/19	1.2		%	50
		Spiked Blank	Anthracene	2010/03/19		87	%	60 - 130
		RPD	Anthracene	2010/03/19	4.1		%	50
		Spiked Blank	Benzo(a)anthracene	2010/03/19		93	%	60 - 130
		RPD	Benzo(a)anthracene	2010/03/19	1.2		%	50
		Spiked Blank	Benzo(a)pyrene	2010/03/19		89	%	60 - 130
		RPD	Benzo(a)pyrene	2010/03/19	2.8		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/03/19		88	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/03/19	0.6		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/03/19		92	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/03/19	2.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/03/19		82	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/03/19	4.3		%	50
		Spiked Blank	Chrysene	2010/03/19		84	%	60 - 130
		RPD	Chrysene	2010/03/19	2.8		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/03/19		93	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/03/19	4.0		%	50
		Spiked Blank	Fluoranthene	2010/03/19		99	%	60 - 130
		RPD	Fluoranthene	2010/03/19	0.3		%	50
		Spiked Blank	Fluorene	2010/03/19		82	%	60 - 130
		RPD	Fluorene	2010/03/19	0.07		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/03/19		92	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/03/19	2.6		%	50
		Spiked Blank	Naphthalene	2010/03/19		79	%	60 - 130
		RPD	Naphthalene	2010/03/19	1.9		%	50
		Spiked Blank	Phenanthrene	2010/03/19		82	%	60 - 130
		RPD	Phenanthrene	2010/03/19	3.2		%	50
		Spiked Blank	Pyrene	2010/03/19		89	%	60 - 130
		RPD	Pyrene	2010/03/19	2.4		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/03/19		83	%	50 - 150
			D10-Fluoranthene	2010/03/19		105	%	50 - 150
			D10-Phenanthrene	2010/03/19		94	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/19		121	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/19		110	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/19		102	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/19		110	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/19		91	%	50 - 150
			D12-Chrysene	2010/03/19		87	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029627

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2099147	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/03/19		115	%	50 - 150
			D12-Perylene	2010/03/19		107	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/19		115	%	50 - 150
			D8-Acenaphthylene	2010/03/19		107	%	50 - 150
			D8-Naphthalene	2010/03/19		84	%	50 - 150
			1-Methylnaphthalene	2010/03/19	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/03/19	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/03/19	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/03/19	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/03/19	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/03/19	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/03/19	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/03/19	ND, RDL=0.40		ug	
			Acenaphthene	2010/03/19	ND, RDL=0.050		ug	
			Acenaphthylene	2010/03/19	ND, RDL=0.050		ug	
			Anthracene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/03/19	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/03/19	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/03/19	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/03/19	ND, RDL=0.050		ug	
			Biphenyl	2010/03/19	ND, RDL=0.10		ug	
			Chrysene	2010/03/19	ND, RDL=0.050		ug	
			Coronene	2010/03/19	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/03/19	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/03/19	ND, RDL=0.20		ug	
			Fluoranthene	2010/03/19	ND, RDL=0.050		ug	
			Fluorene	2010/03/19	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/03/19	ND, RDL=0.050		ug	
			m-Terphenyl	2010/03/19	ND, RDL=0.10		ug	
			Naphthalene	2010/03/19	ND, RDL=0.072		ug	
			o-Terphenyl	2010/03/19	ND, RDL=0.10		ug	
			Perylene	2010/03/19	ND, RDL=0.10		ug	
			Phenanthrene	2010/03/19	ND, RDL=0.050		ug	
			p-Terphenyl	2010/03/19	ND, RDL=0.10		ug	
			Pyrene	2010/03/19	ND, RDL=0.050		ug	
			Quinoline	2010/03/19	ND, RDL=0.40		ug	
			Tetralin	2010/03/19	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: Cold Lake South
Station ID: Lica1
Field Sample ID: LICA PUF/CLS/Mar 15, 10

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: Mar 12, 10 @ 15:00 mst
Removal Date/Time: Mar 16, 10 @ 07:40 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
15-Mar-10	03/15/2010 0:00	03/16/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
11-Mar-10	16-Mar-10	23-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 13-Jan-10

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
718	229	2.0	330.35

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC #No Number, Source COC
GB024220 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Mar 15, 10

Technician Signiture: _____

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/26

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B032488
Received: 2010/03/18, 09:20

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/03/19	2010/03/25	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FJ1135	FJ1136		
Sampling Date		2010/03/15 00:00	2010/03/15 00:00		
	Units	**LICA PUF/CLS/MAR15,10**	**LICA PUF/PORT/MAR15,10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.51	0.16	0.10	2104630
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2104630
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2104630
2-Methylanthracene	ug	<0.10	<0.10	0.10	2104630
2-Methylnaphthalene	ug	0.98	0.27	0.10	2104630
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2104630
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2104630
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2104630
Acenaphthene	ug	0.087	<0.050	0.050	2104630
Acenaphthylene	ug	0.096	<0.050	0.050	2104630
Anthracene	ug	<0.050	<0.050	0.050	2104630
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2104630
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2104630
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2104630
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2104630
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2104630
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2104630
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2104630
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2104630
Biphenyl	ug	0.15	<0.10	0.10	2104630
Chrysene	ug	<0.050	<0.050	0.050	2104630
Coronene	ug	<0.10	<0.10	0.10	2104630
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2104630
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2104630
Fluoranthene	ug	0.058	<0.050	0.050	2104630
Fluorene	ug	0.155	0.095	0.050	2104630
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2104630
m-Terphenyl	ug	<0.10	<0.10	0.10	2104630
Naphthalene	ug	1.46	0.278	0.072	2104630
o-Terphenyl	ug	<0.10	<0.10	0.10	2104630
Perylene	ug	<0.10	<0.10	0.10	2104630
Phenanthrene	ug	0.233	0.152	0.050	2104630

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FJ1135	FJ1136		
Sampling Date		2010/03/15 00:00	2010/03/15 00:00		
	Units	**LICA PUF/CLS/MAR15,10**	**LICA PUF/PORT/MAR15,10**	**RDL**	**QC Batch**
p-Terphenyl	ug	<0.10	<0.10	0.10	2104630
Pyrene	ug	<0.050	<0.050	0.050	2104630
Quinoline	ug	<0.40	<0.40	0.40	2104630
Tetralin	ug	<0.10	<0.10	0.10	2104630
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	72	75		2104630
D10-Fluoranthene	%	106	91		2104630
D10-Fluorene (FS)	%	48 (1)	59		2104630
D10-Phenanthrene	%	92	83		2104630
D12-Benzo(a)anthracene	%	104	100		2104630
D12-Benzo(a)pyrene	%	106	98		2104630
D12-Benzo(b)fluoranthene	%	96	104		2104630
D12-Benzo(ghi)perylene	%	108	102		2104630
D12-Benzo(k)fluoranthene	%	93	80		2104630
D12-Chrysene	%	89	91		2104630
D12-Indeno(1,2,3-cd)pyrene	%	114	105		2104630
D12-Perylene	%	106	101		2104630
D14-Dibenzo(a,h)anthracene	%	115	105		2104630
D14-Terphenyl (FS)	%	79	82		2104630
D8-Acenaphthylene	%	92	89		2104630
D8-Naphthalene	%	69	76		2104630

QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

Test Summary

Maxxam ID	FJ1135	**Collected**	2010/03/15
Sample ID	LICA PUF/CLS/MAR15,10	**Shipped**	
Matrix	Filter	**Received**	2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2104630	2010/03/19	2010/03/25	WZ

Maxxam ID	FJ1136	**Collected**	2010/03/15
Sample ID	LICA PUF/PORT/MAR15,10	**Shipped**	
Matrix	Filter	**Received**	2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2104630	2010/03/19	2010/03/25	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

GENERAL COMMENTS

PAHMS-F
9.10-Dimethylanthracene and 7,12-Dimethylbenzo(a)anthracene are above 25% RSD in initial calibation. No positives found for these 2 compounds.

Sample FJ1135-01: PAHMS-F
Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FJ1136-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB032488

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2104630	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/03/25		88	%	50 - 150
			D10-Fluoranthene	2010/03/25		91	%	50 - 150
			D10-Phenanthrene	2010/03/25		85	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/25		103	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/25		98	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/25		108	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/25		98	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/25		84	%	50 - 150
			D12-Chrysene	2010/03/25		100	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/03/25		100	%	50 - 150
			D12-Perylene	2010/03/25		102	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/25		99	%	50 - 150
			D8-Acenaphthylene	2010/03/25		88	%	50 - 150
			D8-Naphthalene	2010/03/25		90	%	50 - 150
			Acenaphthene	2010/03/25		83	%	60 - 130
		RPD	Acenaphthene	2010/03/25	0.4		%	50
		Spiked Blank	Acenaphthylene	2010/03/25		89	%	60 - 130
		RPD	Acenaphthylene	2010/03/25	1.2		%	50
		Spiked Blank	Anthracene	2010/03/25		78	%	60 - 130
		RPD	Anthracene	2010/03/25	1.8		%	50
		Spiked Blank	Benzo(a)anthracene	2010/03/25		94	%	60 - 130
		RPD	Benzo(a)anthracene	2010/03/25	5.1		%	50
		Spiked Blank	Benzo(a)pyrene	2010/03/25		84	%	60 - 130
		RPD	Benzo(a)pyrene	2010/03/25	0.7		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/03/25		83	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/03/25	3.1		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/03/25		89	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/03/25	4.6		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/03/25		93	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/03/25	0.9		%	50
		Spiked Blank	Chrysene	2010/03/25		88	%	60 - 130
		RPD	Chrysene	2010/03/25	2.6		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/03/25		88	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/03/25	3.9		%	50
		Spiked Blank	Fluoranthene	2010/03/25		86	%	60 - 130
		RPD	Fluoranthene	2010/03/25	2.7		%	50
		Spiked Blank	Fluorene	2010/03/25		79	%	60 - 130
		RPD	Fluorene	2010/03/25	2.0		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/03/25		88	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/03/25	5.5		%	50
		Spiked Blank	Naphthalene	2010/03/25		88	%	60 - 130
		RPD	Naphthalene	2010/03/25	0.5		%	50
		Spiked Blank	Phenanthrene	2010/03/25		78	%	60 - 130
		RPD	Phenanthrene	2010/03/25	1.2		%	50
		Spiked Blank	Pyrene	2010/03/25		79	%	60 - 130
		RPD	Pyrene	2010/03/25	1.0		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/03/25		91	%	50 - 150
			D10-Fluoranthene	2010/03/25		95	%	50 - 150
			D10-Phenanthrene	2010/03/25		89	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/25		114	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/25		97	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/25		107	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/25		98	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/25		81	%	50 - 150
			D12-Chrysene	2010/03/25		86	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB032488

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2104630	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/03/25		100	%	50 - 150
			D12-Perylene	2010/03/25		100	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/25		99	%	50 - 150
			D8-Acenaphthylene	2010/03/25		95	%	50 - 150
			D8-Naphthalene	2010/03/25		93	%	50 - 150
			1-Methylnaphthalene	2010/03/25	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/03/25	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/03/25	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/03/25	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/03/25	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/03/25	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/03/25	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/03/25	ND, RDL=0.40		ug	
			Acenaphthene	2010/03/25	ND, RDL=0.050		ug	
			Acenaphthylene	2010/03/25	ND, RDL=0.050		ug	
			Anthracene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/03/25	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/03/25	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/03/25	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/03/25	ND, RDL=0.050		ug	
			Biphenyl	2010/03/25	ND, RDL=0.10		ug	
			Chrysene	2010/03/25	ND, RDL=0.050		ug	
			Coronene	2010/03/25	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/03/25	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/03/25	ND, RDL=0.20		ug	
			Fluoranthene	2010/03/25	ND, RDL=0.050		ug	
			Fluorene	2010/03/25	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/03/25	ND, RDL=0.050		ug	
			m-Terphenyl	2010/03/25	ND, RDL=0.10		ug	
			Naphthalene	2010/03/25	ND, RDL=0.072		ug	
			o-Terphenyl	2010/03/25	ND, RDL=0.10		ug	
			Perylene	2010/03/25	ND, RDL=0.10		ug	
			Phenanthrene	2010/03/25	ND, RDL=0.050		ug	
			p-Terphenyl	2010/03/25	ND, RDL=0.10		ug	
			Pyrene	2010/03/25	ND, RDL=0.050		ug	
			Quinoline	2010/03/25	ND, RDL=0.40		ug	
			Tetralin	2010/03/25	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: Cold Lake South
Station ID: Lica1
Field Sample ID: LICA PUF/CLS/Mar 21, 10

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: Mar 19, 10 @ 10:55 mst
Removal Date/Time: Mar 25, 10 @ 16:05 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
21-Mar-10	03/21/2010 0:00	03/22/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
18-Mar-10	26-Mar-10	30-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 13-Jan-10

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
708	229	-0.5	330.38

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC #No Number, Source COC
GB024228 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Mar 21, 10

Technician Signiture: _____

Your C.O.C. #: N/A

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/22

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B037513
Received: 2010/03/30, 08:52

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/04/01	2010/04/14	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL4573	FL4574		
Sampling Date		2010/03/21	2010/03/21		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.21/10**	**LICA PUF/QFF/PORT/MAR.21/10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	<0.10	<0.10	0.10	2115111
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2115111
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2115111
2-Methylanthracene	ug	<0.10	<0.10	0.10	2115111
2-Methylnaphthalene	ug	0.18	0.13	0.10	2115111
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2115111
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2115111
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2115111
Acenaphthene	ug	<0.050	<0.050	0.050	2115111
Acenaphthylene	ug	<0.050	<0.050	0.050	2115111
Anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2115111
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2115111
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Biphenyl	ug	<0.10	<0.10	0.10	2115111
Chrysene	ug	<0.050	<0.050	0.050	2115111
Coronene	ug	<0.10	<0.10	0.10	2115111
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2115111
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2115111
Fluoranthene	ug	0.089	0.055	0.050	2115111
Fluorene	ug	0.124	0.103	0.050	2115111
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2115111
m-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Naphthalene	ug	0.192	0.098	0.072	2115111
o-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Perylene	ug	<0.10	<0.10	0.10	2115111

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL4573	FL4574		
Sampling Date		2010/03/21	2010/03/21		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.21/10**	**LICA PUF/QFF/PORT/MAR.21/10**	**RDL**	**QC Batch**
Phenanthrene	ug	0.305	0.232	0.050	2115111
p-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Pyrene	ug	0.070	<0.050	0.050	2115111
Quinoline	ug	<0.40	<0.40	0.40	2115111
Tetralin	ug	<0.10	<0.10	0.10	2115111
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	74	70		2115111
D10-Fluoranthene	%	108	108		2115111
D10-Fluorene (FS)	%	50	47 (1)		2115111
D10-Phenanthrene	%	103	99		2115111
D12-Benzo(a)anthracene	%	111	109		2115111
D12-Benzo(a)pyrene	%	104	102		2115111
D12-Benzo(b)fluoranthene	%	105	102		2115111
D12-Benzo(ghi)perylene	%	108	105		2115111
D12-Benzo(k)fluoranthene	%	87	85		2115111
D12-Chrysene	%	89	85		2115111
D12-Indeno(1,2,3-cd)pyrene	%	112	109		2115111
D12-Perylene	%	100	97		2115111
D14-Dibenzo(a,h)anthracene	%	113	111		2115111
D14-Terphenyl (FS)	%	83	78		2115111
D8-Acenaphthylene	%	93	89		2115111
D8-Naphthalene	%	69	66		2115111

N/A = Not Applicable
QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

Test Summary

Maxxam ID	FL4573	**Collected**	2010/03/21
Sample ID	LICA PUF/QFF/CLS/MAR.21/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

Maxxam ID	FL4574	**Collected**	2010/03/21
Sample ID	LICA PUF/QFF/PORT/MAR.21/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

GENERAL COMMENTS

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation and 3-Methylcholanthrene ,Dibenzo(a,e)pyrene are above 25% in continuing. No positives found for this compounds.

Sample FL4573-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FL4574-01: PAHMS-F

Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB037513

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/04/14		85	%	50 - 150
			D10-Fluoranthene	2010/04/14		109	%	50 - 150
			D10-Phenanthrene	2010/04/14		105	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		106	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		105	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		93	%	50 - 150
			D12-Chrysene	2010/04/14		96	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/04/14		112	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		113	%	50 - 150
			D8-Acenaphthylene	2010/04/14		96	%	50 - 150
			D8-Naphthalene	2010/04/14		84	%	50 - 150
			Acenaphthene	2010/04/14		91	%	60 - 130
		RPD	Acenaphthene	2010/04/14	2.9		%	50
		Spiked Blank	Acenaphthylene	2010/04/14		96	%	60 - 130
		RPD	Acenaphthylene	2010/04/14	1.2		%	50
		Spiked Blank	Anthracene	2010/04/14		92	%	60 - 130
		RPD	Anthracene	2010/04/14	3.6		%	50
		Spiked Blank	Benzo(a)anthracene	2010/04/14		102	%	60 - 130
		RPD	Benzo(a)anthracene	2010/04/14	7.4		%	50
		Spiked Blank	Benzo(a)pyrene	2010/04/14		97	%	60 - 130
		RPD	Benzo(a)pyrene	2010/04/14	2.8		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/04/14		101	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/04/14	3.2		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/04/14		102	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/04/14	1.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/04/14		89	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/04/14	0.3		%	50
		Spiked Blank	Chrysene	2010/04/14		90	%	60 - 130
		RPD	Chrysene	2010/04/14	7.5		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/04/14		105	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/04/14	2.8		%	50
		Spiked Blank	Fluoranthene	2010/04/14		106	%	60 - 130
		RPD	Fluoranthene	2010/04/14	7.3		%	50
		Spiked Blank	Fluorene	2010/04/14		90	%	60 - 130
		RPD	Fluorene	2010/04/14	0.9		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/04/14		103	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/04/14	1.8		%	50
		Spiked Blank	Naphthalene	2010/04/14		82	%	60 - 130
		RPD	Naphthalene	2010/04/14	5.2		%	50
		Spiked Blank	Phenanthrene	2010/04/14		93	%	60 - 130
		RPD	Phenanthrene	2010/04/14	3.4		%	50
		Spiked Blank	Pyrene	2010/04/14		100	%	60 - 130
		RPD	Pyrene	2010/04/14	1.6		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/04/14		76	%	50 - 150
			D10-Fluoranthene	2010/04/14		107	%	50 - 150
			D10-Phenanthrene	2010/04/14		104	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		105	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		104	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		91	%	50 - 150
			D12-Chrysene	2010/04/14		91	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB037513

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/04/14		114	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		116	%	50 - 150
			D8-Acenaphthylene	2010/04/14		90	%	50 - 150
			D8-Naphthalene	2010/04/14		74	%	50 - 150
			1-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/04/14	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/04/14	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/04/14	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/04/14	ND, RDL=0.40		ug	
			Acenaphthene	2010/04/14	ND, RDL=0.050		ug	
			Acenaphthylene	2010/04/14	ND, RDL=0.050		ug	
			Anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Biphenyl	2010/04/14	ND, RDL=0.10		ug	
			Chrysene	2010/04/14	ND, RDL=0.050		ug	
			Coronene	2010/04/14	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/04/14	ND, RDL=0.20		ug	
			Fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Fluorene	2010/04/14	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/04/14	ND, RDL=0.050		ug	
			m-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Naphthalene	2010/04/14	ND, RDL=0.072		ug	
			o-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Perylene	2010/04/14	ND, RDL=0.10		ug	
			Phenanthrene	2010/04/14	ND, RDL=0.050		ug	
			p-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Pyrene	2010/04/14	ND, RDL=0.050		ug	
			Quinoline	2010/04/14	ND, RDL=0.40		ug	
			Tetralin	2010/04/14	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: Cold Lake South
Station ID: Lica1
Field Sample ID: LICA PUF/CLS/Mar 27, 10

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: Mar 25, 10 @ 16:20 mst
Removal Date/Time: Mar 29, 10 @ 11:40 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
27-Mar-10	03/27/2010 0:00	03/28/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
25-Mar-10	29-Mar-10	06-Apr-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 13-Jan-10

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
709	229	3.7	330.34

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC #No Number, Source COC
GB0242235 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Mar 27, 10

Technician Signiture: _____

Your C.O.C. #: N/A

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/22

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B038130
Received: 2010/03/31, 09:12

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/04/01	2010/04/14	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL7415	FL7416		
Sampling Date		2010/03/27	2010/03/27		
COC Number		N/A	N/A		
	Units	**LICA/PUF/QFF/CLS/MAR.27/10**	**LICA/PUF/QFF/PORT/MAR.27/10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.48	0.14	0.10	2115111
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2115111
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2115111
2-Methylanthracene	ug	<0.10	<0.10	0.10	2115111
2-Methylnaphthalene	ug	1.02	0.23	0.10	2115111
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2115111
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2115111
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2115111
Acenaphthene	ug	0.077	<0.050	0.050	2115111
Acenaphthylene	ug	0.063	<0.050	0.050	2115111
Anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2115111
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2115111
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Biphenyl	ug	0.15	0.23	0.10	2115111
Chrysene	ug	<0.050	<0.050	0.050	2115111
Coronene	ug	<0.10	<0.10	0.10	2115111
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2115111
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2115111
Fluoranthene	ug	0.072	0.097	0.050	2115111
Fluorene	ug	0.187	0.161	0.050	2115111
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2115111
m-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Naphthalene	ug	1.12	0.290	0.072	2115111
o-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Perylene	ug	<0.10	<0.10	0.10	2115111
Phenanthrene	ug	0.354	0.442	0.050	2115111

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL7415	FL7416		
Sampling Date		2010/03/27	2010/03/27		
COC Number		N/A	N/A		
	Units	**LICA/PUF/QFF/CLS/MAR.27/10**	**LICA/PUF/QFF/PORT/MAR.27/10**	**RDL**	**QC Batch**
p-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Pyrene	ug	<0.050	0.065	0.050	2115111
Quinoline	ug	<0.40	<0.40	0.40	2115111
Tetralin	ug	<0.10	<0.10	0.10	2115111
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	75	77		2115111
D10-Fluoranthene	%	110	105		2115111
D10-Fluorene (FS)	%	49 (1)	49 (1)		2115111
D10-Phenanthrene	%	106	105		2115111
D12-Benzo(a)anthracene	%	113	106		2115111
D12-Benzo(a)pyrene	%	109	102		2115111
D12-Benzo(b)fluoranthene	%	108	101		2115111
D12-Benzo(ghi)perylene	%	114	107		2115111
D12-Benzo(k)fluoranthene	%	93	92		2115111
D12-Chrysene	%	95	94		2115111
D12-Indeno(1,2,3-cd)pyrene	%	118	108		2115111
D12-Perylene	%	104	98		2115111
D14-Dibenzo(a,h)anthracene	%	119	108		2115111
D14-Terphenyl (FS)	%	84	85		2115111
D8-Acenaphthylene	%	98	97		2115111
D8-Naphthalene	%	70	75		2115111

N/A = Not Applicable
QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

Test Summary

Maxxam ID	FL7415	**Collected**	2010/03/27
Sample ID	LICA/PUF/QFF/CLS/MAR.27/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

Maxxam ID	FL7416	**Collected**	2010/03/27
Sample ID	LICA/PUF/QFF/PORT/MAR.27/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

GENERAL COMMENTS

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation and 3-Methylcholanthrene ,Dibenzo(a,e)pyrene are above 25% in continuing. No positives found for this compounds.

Sample FL7415-01: PAHMS-F

Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FL7416-01: PAHMS-F

Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB038130

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/04/14		85	%	50 - 150
			D10-Fluoranthene	2010/04/14		109	%	50 - 150
			D10-Phenanthrene	2010/04/14		105	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		106	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		105	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		93	%	50 - 150
			D12-Chrysene	2010/04/14		96	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/04/14		112	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		113	%	50 - 150
			D8-Acenaphthylene	2010/04/14		96	%	50 - 150
			D8-Naphthalene	2010/04/14		84	%	50 - 150
			Acenaphthene	2010/04/14		91	%	60 - 130
		RPD	Acenaphthene	2010/04/14	2.9		%	50
		Spiked Blank	Acenaphthylene	2010/04/14		96	%	60 - 130
		RPD	Acenaphthylene	2010/04/14	1.2		%	50
		Spiked Blank	Anthracene	2010/04/14		92	%	60 - 130
		RPD	Anthracene	2010/04/14	3.6		%	50
		Spiked Blank	Benzo(a)anthracene	2010/04/14		102	%	60 - 130
		RPD	Benzo(a)anthracene	2010/04/14	7.4		%	50
		Spiked Blank	Benzo(a)pyrene	2010/04/14		97	%	60 - 130
		RPD	Benzo(a)pyrene	2010/04/14	2.8		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/04/14		101	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/04/14	3.2		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/04/14		102	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/04/14	1.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/04/14		89	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/04/14	0.3		%	50
		Spiked Blank	Chrysene	2010/04/14		90	%	60 - 130
		RPD	Chrysene	2010/04/14	7.5		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/04/14		105	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/04/14	2.8		%	50
		Spiked Blank	Fluoranthene	2010/04/14		106	%	60 - 130
		RPD	Fluoranthene	2010/04/14	7.3		%	50
		Spiked Blank	Fluorene	2010/04/14		90	%	60 - 130
		RPD	Fluorene	2010/04/14	0.9		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/04/14		103	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/04/14	1.8		%	50
		Spiked Blank	Naphthalene	2010/04/14		82	%	60 - 130
		RPD	Naphthalene	2010/04/14	5.2		%	50
		Spiked Blank	Phenanthrene	2010/04/14		93	%	60 - 130
		RPD	Phenanthrene	2010/04/14	3.4		%	50
		Spiked Blank	Pyrene	2010/04/14		100	%	60 - 130
		RPD	Pyrene	2010/04/14	1.6		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/04/14		76	%	50 - 150
			D10-Fluoranthene	2010/04/14		107	%	50 - 150
			D10-Phenanthrene	2010/04/14		104	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		105	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		104	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		91	%	50 - 150
			D12-Chrysene	2010/04/14		91	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB038130

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/04/14		114	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		116	%	50 - 150
			D8-Acenaphthylene	2010/04/14		90	%	50 - 150
			D8-Naphthalene	2010/04/14		74	%	50 - 150
			1-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/04/14	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/04/14	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/04/14	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/04/14	ND, RDL=0.40		ug	
			Acenaphthene	2010/04/14	ND, RDL=0.050		ug	
			Acenaphthylene	2010/04/14	ND, RDL=0.050		ug	
			Anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Biphenyl	2010/04/14	ND, RDL=0.10		ug	
			Chrysene	2010/04/14	ND, RDL=0.050		ug	
			Coronene	2010/04/14	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/04/14	ND, RDL=0.20		ug	
			Fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Fluorene	2010/04/14	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/04/14	ND, RDL=0.050		ug	
			m-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Naphthalene	2010/04/14	ND, RDL=0.072		ug	
			o-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Perylene	2010/04/14	ND, RDL=0.10		ug	
			Phenanthrene	2010/04/14	ND, RDL=0.050		ug	
			p-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Pyrene	2010/04/14	ND, RDL=0.050		ug	
			Quinoline	2010/04/14	ND, RDL=0.40		ug	
			Tetralin	2010/04/14	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Lakeland Industry & Community Association

Maskwa Monitoring Site
Ambient Air Monitoring
Data Report
For
March 2010

Prepared By:

Maxxam Analytics

Driven by Service and Science

April 19, 2010

Lakeland Industry & Community Association
Ambient Air Monitoring
Maskwa

Table of Contents

Introduction

The following Ambient Air Monitoring report was prepared for:

Mr. Mike Bisaga
Lakeland Industry & Community Association
Box 8237
5107W – 50 Street
Bonnyville, Alberta
T9N 2J5

Monitoring Location: Maskwa
Data Period: March 2010

The monthly ambient data report:

- Prepared by Lily Lin
- Reviewed by Craig Snider

Calibration Procedure

The following calibration procedure applies to all calibrations conducted at the Lakeland Industry & Community Association Air Monitoring Station.

Calibration gas concentrations are generated using a dynamic mass flow controlled calibrator. EPA Protocol one gases are diluted with zero air generated on site. The Mass Flow Controllers in the calibrator are referenced using an NIST traceable flow meter once per month. All listed flows are reported as corrected to Standard Temperature and Pressure (STP).

Generated zero gas is introduced to the analyzer first. Three concentrations of calibration gas are then generated in order to introduce points at approximately 50-80%, 25-40% & 10-20% of the analyzer's full-scale range. An auto zero and span are then performed to validate the daily zero and span values recorded to the next multi-point calibration.

All indicated concentrations are taken from the ESC data logger used to collect the data for monthly reporting.

The calibrations conducted at the LICA - Maskwa Air Monitoring Stations conform to the following Maxxam Analytics Standard Operation Procedures:

- CAL SOP-00211
- CAL SOP-00209
- CAL SOP-00213
- CAL SOP-00214
- CAL SOP-00208

Conformance of each calibration to Alberta Environment regulations is outlined in the individual calibration reports. The slope and correlation coefficient are derived from the calculated and indicated analyzer responses. The percent change is calculated using the previous calibration correction factor and the current correction factor before adjustment. All calibration's and maintenance conforms to the procedures outlined in the *Air Monitoring Directive, Appendix A-10, Section 1.6.*

MONTHLY CONTINUOUS DATA SUMMARY
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION – MASKWA

Continuous Ambient Monitoring – March 2010

LICA MASKWA SITE						MAXIMUM VALUES							OPERATIONAL TIME (PERCENT)
						1-HOUR					24-HOUR		
PARAMETER	OBJECTIVES		EXCEEDENCES		MONTHLY AVERAGE	READING	DAY	HOUR	WIND SPEED (KPH)	WIND DIRECTION (DEGREES)	READING	DAY	
	1-HR	24-HR	1-HR	24-HR									
SO2 (PPB)	172	57	0	0	0.45	14	9	3	4.6	306(NW)	1.8	1	99.9
H2S (PPB)	10	3	0	0	0.06	1	VAR	VAR	VAR	VAR	0.5	28	99.3
THC (PPM)	-	-	-	-	2.15	3.6	4	7, 8	5.1, 4.3	213(SSW), 213SSW)	2.5	1, 5	99.5
NOx (PPB)	-	-	-	-	3.13	40	8	9	2.8	223(SW)	10.8	4	93.5
NO (PPB)	-	-	-	-	0.32	22	8	9	2.8	223(SW)	2.6	8	93.5
NO_2 (PPB)	212	106	0	0	2.59	22	4	7	5.1	213(SSW)	8.7	4	93.5
VECTOR WS (KPH)	-	-	-	-	5.67	14.9	24	3	-	19(NNE)	10.8	31	99.9
VECTOR WD (DEGREES)	-	-	-	-	191(S)	-	-	-	-	-	-	-	99.9
RELATIVE HUMIDITY (%)	-	-	-	-	64.49	89	17	VAR	VAR	VAR	82.3	30	99.9
TEMPERATURE (DEG C)	-	-	-	-	-0.15	13.9	29	13	8.5	124(ESE)	7.0	29	99.9
BAROMETRIC PRESSURE (MILIBAR)	-	-	-	-	937	956	19	VAR	VAR	VAR	952.2	24	99.9
PRECIPITATION (MM)	-	-	-	-	0.05	3.7	17	12	1.4	331(NNW)	16.3	17	99.9

VAR-VARIOUS

General Monthly Summary

Equipment Operation

The following summary outlines the analyzer performance. Any non-conformances, problems or maintenance performed are detailed at the end of each section.

AQM STATION – LICA – Maskwa

Sulphur Dioxide (PPB)

- Analyzer make / model - API 100E, S/N: 508

No operational issue was observed during the month. The inlet filter was changed before the monthly calibration was started. One hour of data is missing on March 30th. Data was corrected using daily zero information.

Hydrogen Sulphide (PPB)

- Analyzer make / model - API 101E, S/N: 511

No operational issue was observed during the month. The SO2 scrubber material was replaced following the as found point on March 11th. The UV lamp was peaked, an analog output check was performed, and the span and offset was adjusted on March 11th as well. A full calibration was performed on March 12th. The inlet filter was changed before as found point cal on March 11th. One hour of data is missing on March 30th. Data was corrected using daily zero information.

Total HydroCarbon (PPM)

- Analyzer make / model –TECO 51C-LT, S/N: 436609738

No operational issue was observed during the month. After as found point cal was performed on March 11th, the pump in the zero air supply was rebuilt, the piston screws with new aircraft aluminum screws were replaces; remainder of rebuild as per manufacturers specs. Some maintenance activities were also performed on the same day; the charcoal and purofil in the zero air scrubbers were replaced, the coalescing filter and H2O knock-off valve were checked- results were good; the diaphragm in the sample pump of the analyzer. A multi-point calibration was then performed. The inlet filter was changed before the monthly calibration was started. On hour of data is missing on March 30th. Data was corrected using daily zero information.

General Monthly Summary

AQM STATION – LICA – Maskwa

Nitrogen Dioxide (PPB)

- Analyzer make / model - API 200E, S/N:594

No operational issue was observed during the month. The inlet filter was changed before the monthly calibration was started. The monthly calibration was performed as per AENV bulletin; no adjustment to converter efficiency gain required. The analyzer did not span on March 24th. Went to check the analyzer on March 25th and found that the analyzer had no O3 flow. Replaced the O3 orifice, sintered filter, spring, and o-rings – used OP-86 O3 resistant o-rings. Allowed the analyzer time to stabilize. A post-repair calibration was performed on March 26th. Data was invalidated back to the last validated calibration, which was March 23rd. 47 hours of data were invalidated. One hour of data is missing on March 30th. Data was corrected using daily zero information.

Vector Wind Speed (KPH) & Vector Wind Direction (DEG)

- System make / model - Climatronics MIII replaced to Met One 50.5H, S/N: H10703

The wind system is reported as vector wind speed and vector wind direction. The wind system is reported as vector wind speed and vector wind direction. 3 hours of WS maximum data were invalidated as we received errors from the sensor. 1 hour of data is missing on March 30th.

Relative Humidity (PERCENT)

- System make / model - Met One 083

No operational issues observed during the month. 1 hour of data is missing on March 30th.

Precipitation (MM)

- System make / model - Met One 387

The tipping bucket was connected to the logger on March 17th. A junction box was added to tipping wiring inside the station. the tipping bucket was tested; 15 tips at bucket, DAS read 15mm. 1 hour of data is missing on March 30th.

General Monthly Summary

AQM STATION – LICA – Maskwa

Barometric Pressure (MILLIBAR)

- System make / model - Met One 092

No operation issue was observed during the month. 1 hour of data is missing on March 30th.

Ambient Temperature (DEGC)

- System make / model - Met One 060

No operational issue was observed during the month. 1 hour of data is missing on March 30th.

Trailer Temperature (DEG C)

- System make / model – R&R 61

No operational issue was observed during the month. 1 hour of data is missing on March 30th.

Standard Deviation Wind Direction (DEG)

- System make / model – Climatronics MIII replaced to Met One 50.5H

No operational issue was observed during the month. 1 hour of data is missing on March 30th.

General Monthly Summary

AQM STATION – LICA – Maskwa

Datalogger

- System make / model - ESC 8832
- Software make/version - ESC v 5.51a

No operational issue was observed during the month.

Trailer

A throw-away filter in the Bard (air conditioner/ heater system) was replaced on March 11th. The manifold and inlet pipe were cleaned on the same day.

Continuous Monitoring

Monthly Summaries, Graphs & Wind Roses

Sulphur Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

MARCH 2010

SULPHUR DIOXIDE (SO_2) hourly averages in ppb

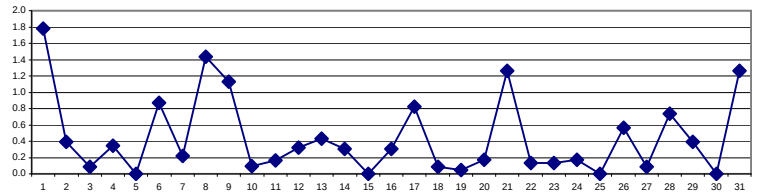
MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	**IZS**	1	1	1	5	6	7	7	5	2	2	1	1	1	1	7	**1.8**	24
2	0	0	0	0	0	0	0	0	**IZS**	2	0	0	0	1	1	0	0	1	1	1	1	0	0	1	2	0.4	24
3	1	1	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
4	0	0	0	1	0	0	**IZS**	0	1	2	0	0	0	0	0	0	0	0	0	1	1	1	1	0	2	0.3	24
5	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
6	0	0	0	0	**IZS**	0	0	0	0	1	1	2	3	2	2	1	1	1	1	1	1	1	1	1	3	0.9	24
7	1	0	0	**IZS**	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	1	0.2	24
8	0	0	**IZS**	0	0	0	1	2	5	4	3	1	1	5	6	1	1	2	0	0	1	0	0	0	6	1.4	24
9	0	**IZS**	1	**14**	3	0	0	0	1	1	0	0	1	1	1	1	1	1	0	0	0	0	0	0	**14**	1.1	24
10	**IZS**	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	0.1	24
11	0	0	0	0	0	0	0	1	1	1	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	**IZS**	0	1	0.2	24
12	0	0	0	0	0	0	0	0	0	0	1	1	1	**C**	2	1	0	0	0	0	0	**IZS**	1	0	2	0.3	24
13	0	0	0	0	0	0	0	0	1	3	2	1	2	0	1	0	0	0	0	0	**IZS**	0	0	0	3	0.4	24
14	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	**IZS**	0	1	1	0	2	0.3	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	1	1	**IZS**	0	0	0	0	0	0	3	0.3	24
17	0	1	1	1	0	0	0	0	0	0	1	1	1	3	5	3	**IZS**	2	0	0	0	0	0	0	5	0.8	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	1	0	1	0.1	24
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	1	0	0	1	0.0	24
20	0	0	0	0	0	0	0	0	0	0	0	1	0	**IZS**	1	1	1	0	0	0	0	0	0	0	1	0.2	24
21	0	0	0	1	0	0	0	0	0	0	0	1	**IZS**	2	3	3	4	4	5	3	3	0	0	0	5	1.3	24
22	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	1	1	0	0	0	0	0	0	0	0	0	1	0.1	24
23	0	0	0	0	0	0	0	0	0	0	**IZS**	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.1	24
24	0	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	2	0	0	0	0	0	0	0	2	0.2	24
25	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
26	0	0	0	0	0	0	0	**IZS**	0	1	1	2	2	2	1	1	1	1	1	0	0	0	0	0	2	0.6	24
27	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.1	24
28	0	0	0	0	0	**IZS**	0	0	0	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	2	0.7	24
29	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0	0	0	0	3	0.4	24
30	0	0	0	**IZS**	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	23
31	0	0	**IZS**	0	1	1	0	1	1	0	0	0	0	0	0	0	0	3	7	5	4	2	3	1	7	1.3	24
HOURLY MAX	1	1	1	14	3	1	1	2	5	4	3	2	3	5	6	7	7	5	7	5	4	2	3	1			
HOURLY AVG	0.1	0.1	0.1	0.7	0.1	0.0	0.0	0.1	0.4	0.6	0.4	0.5	0.6	1.0	1.2	0.8	0.7	0.7	0.7	0.5	0.4	0.4	0.4	0.2			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

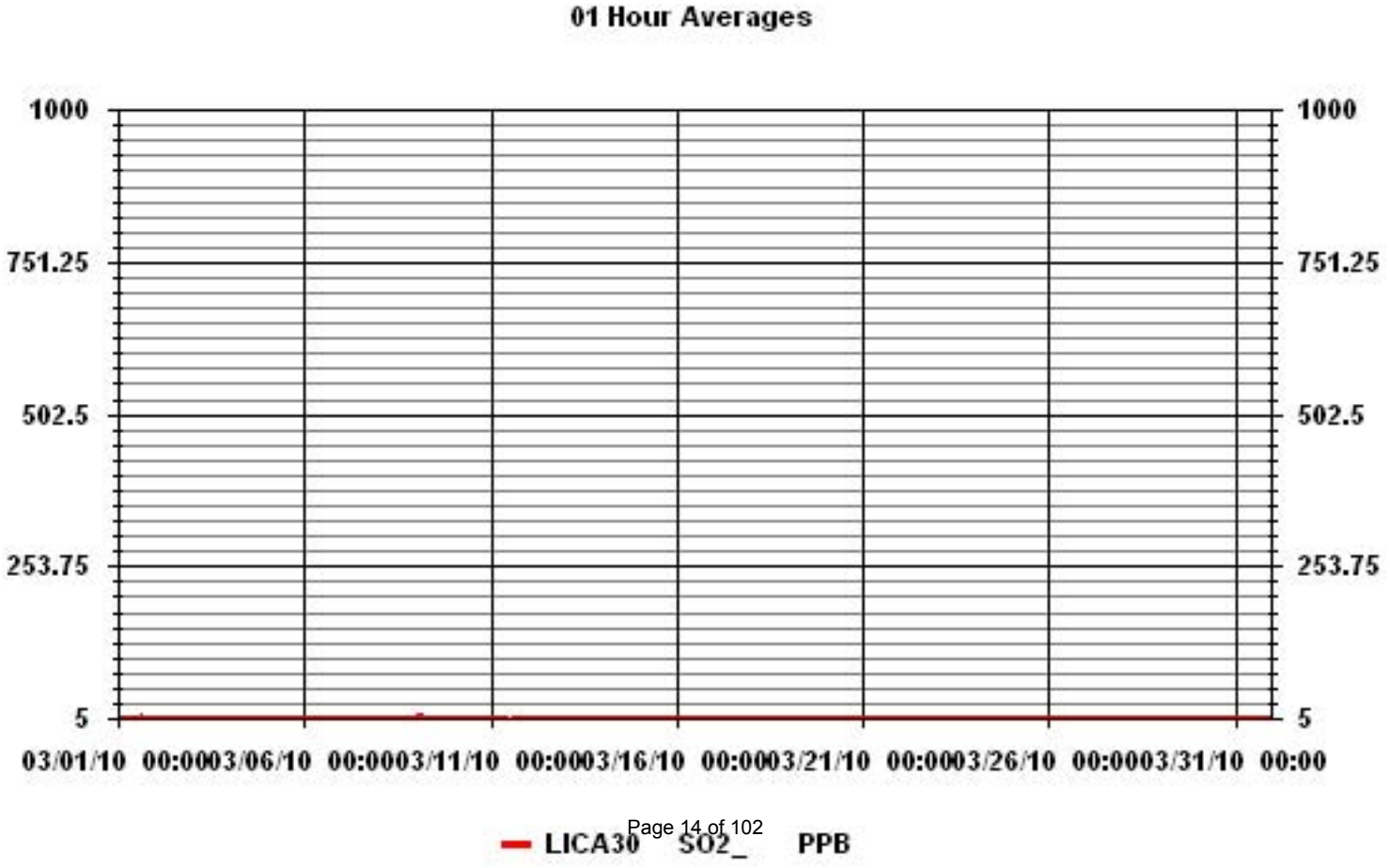
24 HOUR AVERAGES FOR MARCH 2010



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 172 PPB | 24-HR 57 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	184					
MAXIMUM 1-HR AVERAGE:	14	PPB	@ HOUR(S)	3	ON DAY(S)	9
MAXIMUM 24-HR AVERAGE:	1.8	PPB			ON DAY(S)	1
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	6	HRS	AMD OPERATION UPTIME:		99.9	%
STANDARD DEVIATION:	1.10		MONTHLY AVERAGE:		0.45	PPB


01 Hour Averages
1000
751.25
502.5
253.75
5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 SO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

MST

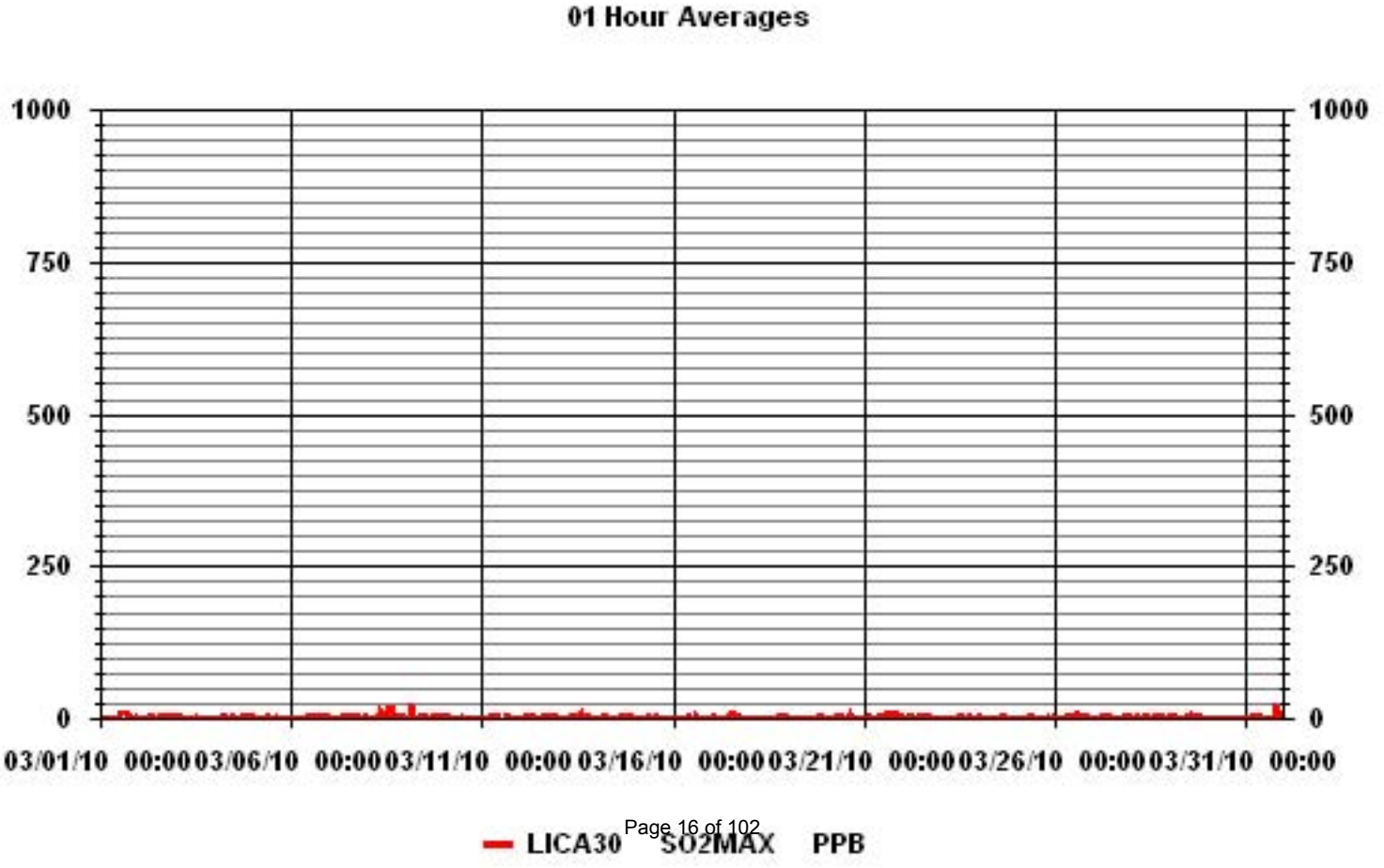
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	**IZS**	2	1	2	8	10	8	8	7	3	3	2	1	2	2	10	2.6	24
2	1	0	0	0	0	0	0	0	**IZS**	6	1	2	1	4	3	1	1	4	2	4	3	1	1	1	6	1.6	24
3	1	1	1	1	1	0	0	**IZS**	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	0.3	24
4	0	0	1	2	1	1	**IZS**	1	1	3	1	1	1	0	0	1	0	1	1	1	1	1	1	1	3	0.9	24
5	1	1	0	0	0	**IZS**	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0.3	24
6	0	0	0	0	**IZS**	0	0	0	1	2	2	3	3	3	2	2	2	1	2	2	2	2	1	1	3	1.3	24
7	1	1	0	**IZS**	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	0.9	24
8	1	0	**IZS**	0	0	0	4	3	11	7	4	1	2	15	16	4	9	7	3	2	3	0	1	1	16	4.1	24
9	0	**IZS**	10	26	9	0	0	1	2	2	1	1	4	2	2	2	4	2	1	1	1	1	1	1	26	3.2	24
10	**IZS**	0	1	1	1	0	0	0	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0	**IZS**	3	0.4	24
11	0	0	0	0	1	1	1	1	1	1	1	**C**	**C**	**C**	**C**	**C**	1	1	1	0	0	0	**IZS**	0	1	0.6	24
12	0	0	0	1	1	1	1	1	1	1	1	2	**C**	**C**	4	3	1	1	1	1	1	**IZS**	2	1	4	1.2	24
13	1	0	1	0	1	0	0	1	3	4	4	2	4	2	7	1	0	0	1	1	**IZS**	0	0	0	7	1.4	24
14	1	0	0	0	2	2	0	1	1	0	0	0	1	1	2	2	2	1	1	**IZS**	2	2	2	0	2	1.0	24
15	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	0	0	**IZS**	0	0	0	0	0	1	0.3	24
16	0	0	0	0	0	0	0	0	0	1	1	1	1	2	8	5	1	**IZS**	0	0	0	0	0	0	8	0.9	24
17	0	5	2	3	1	0	0	1	2	0	4	2	3	7	9	7	**IZS**	4	1	0	0	0	0	0	9	2.2	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	1	1	1	1	1	1	1	0.3	24
19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	1	1	1	1	1	0.3	24
20	0	0	0	0	0	1	1	1	1	1	1	1	2	**IZS**	1	8	3	1	0	0	0	0	0	0	8	1.0	24
21	0	0	2	4	0	0	0	0	0	3	3	5	**IZS**	5	6	7	8	8	7	7	9	1	1	1	9	3.3	24
22	1	1	2	1	1	1	1	1	1	2	1	**IZS**	6	7	3	3	1	1	1	0	0	0	0	0	7	1.5	24
23	0	0	0	0	1	0	0	0	0	1	**IZS**	5	2	2	2	2	1	1	1	1	0	0	0	0	5	0.8	24
24	1	1	1	0	0	0	0	0	0	**IZS**	0	0	0	0	2	2	5	0	0	1	0	0	0	0	5	0.6	24
25	0	0	0	0	0	0	0	0	**IZS**	1	1	1	0	0	0	0	0	0	0	1	1	0	1	1	1	0.3	24
26	0	0	0	0	0	0	0	**IZS**	1	1	2	2	6	8	3	2	1	1	1	1	1	1	1	0	8	1.4	24
27	0	0	0	0	0	0	**IZS**	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	0.4	24
28	1	0	0	1	1	**IZS**	0	1	1	1	1	2	2	1	1	1	2	2	2	2	3	1	1	3	1.2	24	
29	1	1	1	1	**IZS**	0	0	0	0	1	0	2	2	6	1	0	0	3	5	0	0	0	0	0	6	1.0	24
30	0	1	0	**IZS**	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	23
31	2	1	**IZS**	1	3	3	1	3	4	3	0	0	0	0	0	0	0	5	19	17	6	7	10	7	19	4.0	24
HOURLY MAX	2	5	10	26	9	3	4	3	11	7	4	5	6	15	16	8	9	8	19	17	9	7	10	7			
HOURLY AVG	0.5	0.4	0.8	1.4	0.8	0.4	0.3	0.6	1.3	1.6	1.2	1.3	1.6	2.7	2.9	2.2	1.7	1.7	1.8	1.6	1.3	0.8	1.0	0.7			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	383					
MAXIMUM INSTANTANEOUS VALUE:	26	PPB	@ HOUR(S)	7	ON DAY(S)	9
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	7	HRS				
STANDARD DEVIATION:	2.36					


01 Hour Averages
1000
750
500
250
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 SO2MAX PPB

LICA30
SO2_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 30
Site Name : LICA30
Parameter : SO2_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	20	5.81	4.68	6.66	6.09	4.39	5.24	9.78	6.52	5.24	15.60	10.07	3.26	5.81	3.12	3.54	4.11	100.00
<	60	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	170	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	5.81	4.68	6.66	6.09	4.39	5.24	9.78	6.52	5.24	15.60	10.07	3.26	5.81	3.12	3.54	4.11	

Calm : .00 %

Total # Operational Hours : 705

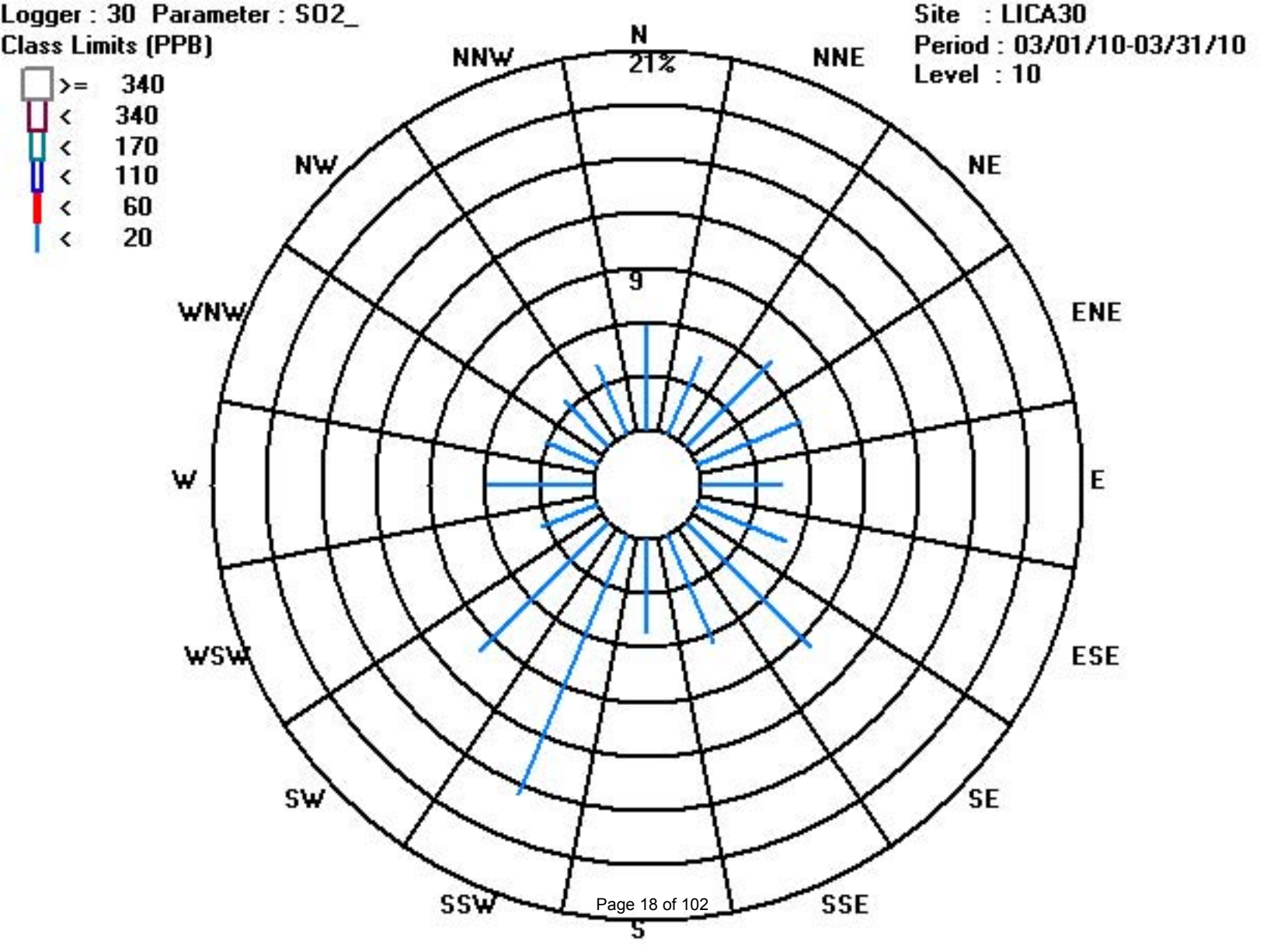
Distribution By Samples

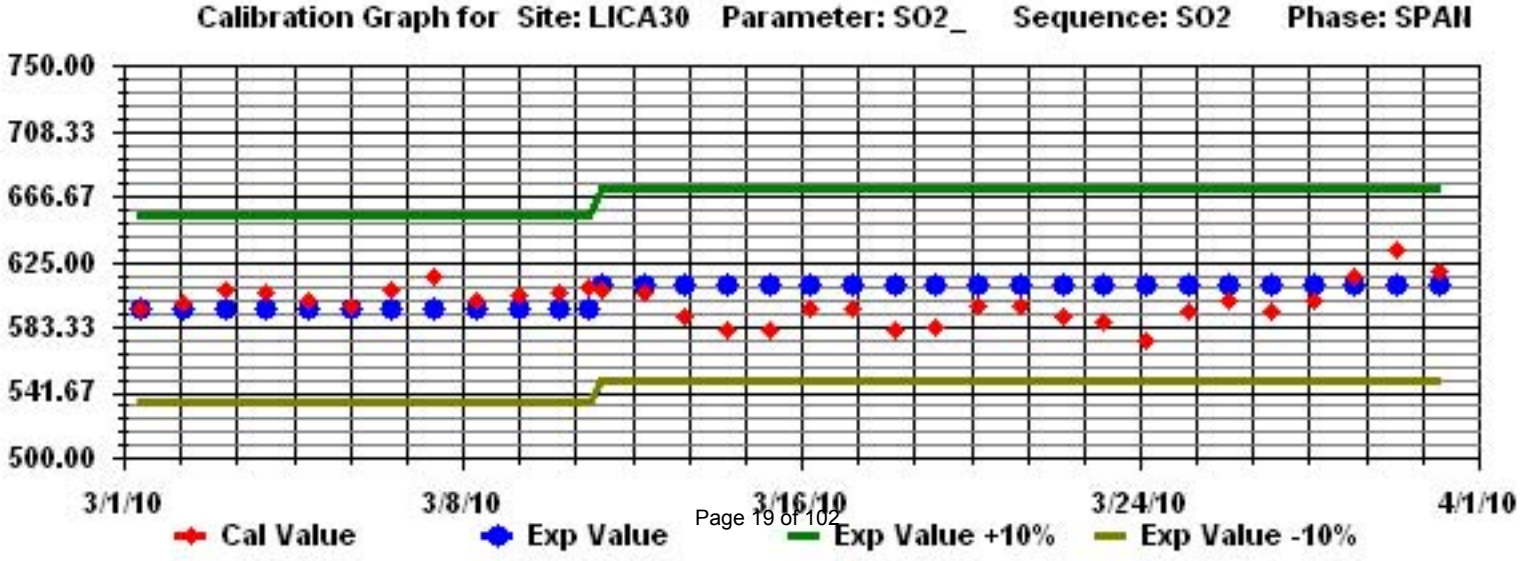
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	20	41	33	47	43	31	37	69	46	37	110	71	23	41	22	25	29	705
<	60																	
<	110																	
<	170																	
<	340																	
>=	340																	
	Totals	41	33	47	43	31	37	69	46	37	110	71	23	41	22	25	29	

Calm : .00 %

Total # Operational Hours : 705


Logger : 30 Parameter : SO2_
Class Limits (PPB)
>= 340
< 340
< 170
< 110
< 60
< 20
Site : LICA30
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA30 Parameter: SO2_ Sequence: SO2 Phase: SPAN
750.00
708.33
666.67
625.00
583.33
541.67
500.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Hydrogen Sulphide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

MARCH 2010

HYDROGEN SULPHIDE (H_2S) hourly averages in ppb

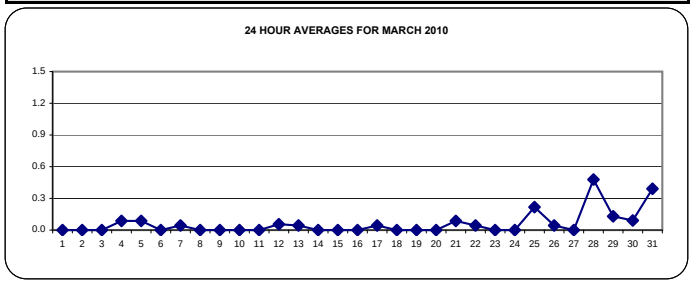
MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY 24-HOUR		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
2	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
3	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
4	0	0	0	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1	24
5	0	0	0	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
6	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
7	0	0	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
8	0	0	**IZS**	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
9	0	**IZS**	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
10	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
11	0	0	0	0	0	0	0	0	0	**C**	**C**	**M**	**M**	**M**	**M**	**C**	**C**	0	0	0	0	0	**IZS**	0	0	0.0	20
12	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	**IZS**	0	1	1	0.1	24
13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	1	0.0	24
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	**IZS**	0	0	0	0	0	0	0	1	0.0	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	1	1	0	0	0	1	0.1	24
22	0	0	0	0	1	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
23	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
25	0	0	0	0	0	0	0	0	**IZS**	0	0	0	1	1	0	0	0	0	1	1	0	0	0	1	1	0.2	24
26	0	0	0	0	0	1	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
27	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
28	1	1	0	0	0	**IZS**	0	0	0	0	1	0	1	0	0	1	0	1	1	1	0	1	1	1	1	**0.5**	24
29	1	0	0	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1	24
30	0	1	1	**IZS**	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	23
31	0	0	**IZS**	0	1	1	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0.4	24
HOURLY MAX	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1			
HOURLY AVG	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.2			

STATUS FLAG CODES

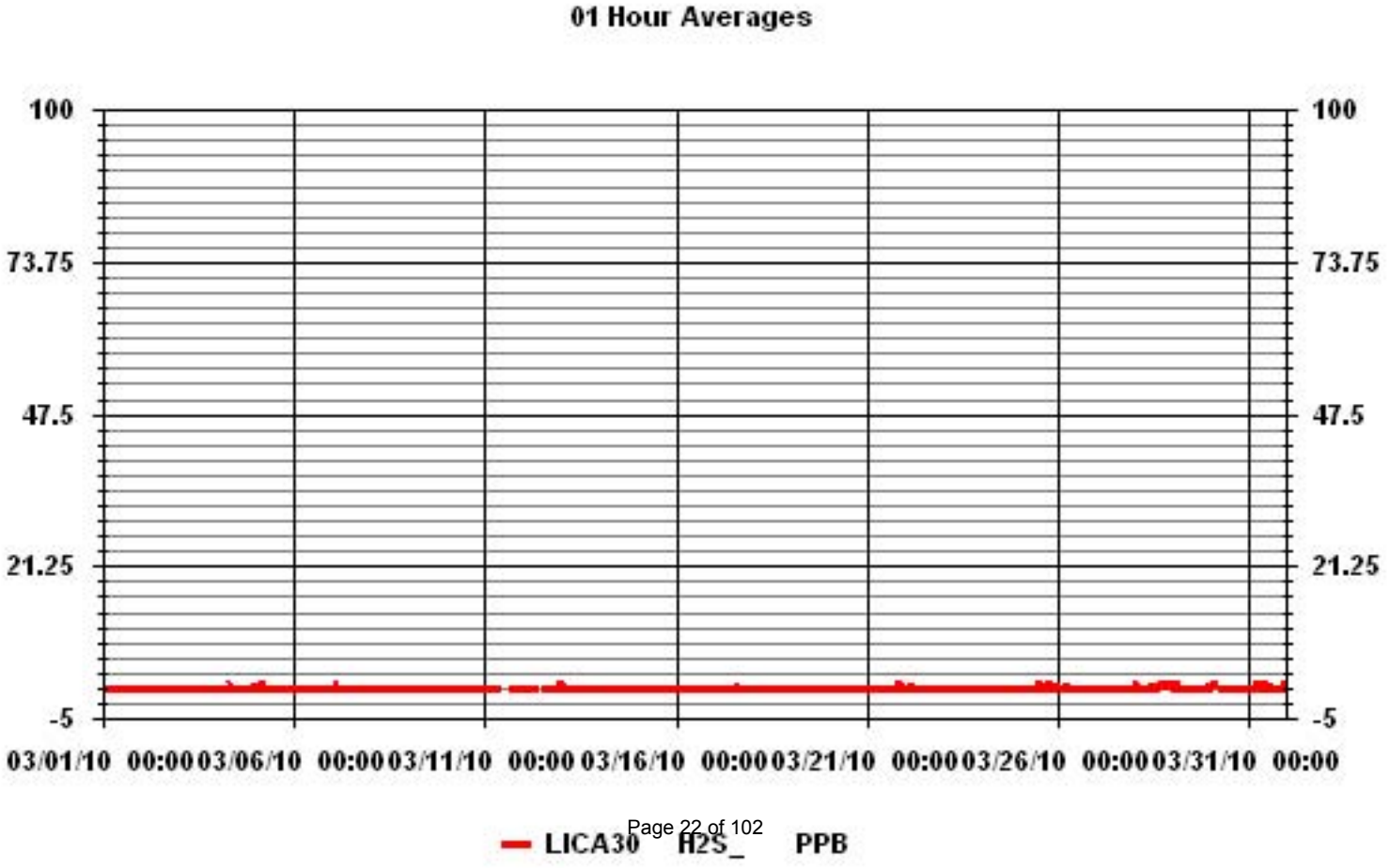
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 10 PPB | 24-HR 3 PPB



MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	42					
MAXIMUM 1-HR AVERAGE:	1	PPB	@ HOUR(S)	VAR	ON DAY(S)	VAR
MAXIMUM 24-HR AVERAGE:	0.5	PPB			ON DAY(S)	28
				VAR-VARIOUS		
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		739	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME:		99.3	%
STANDARD DEVIATION:	0.24		MONTHLY AVERAGE:		0.06	PPB


01 Hour Averages
100
73.75
47.5
21.25
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 H2S_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

HYDROGEN SULPHIDE MAX instantaneous maximum in ppb

MST

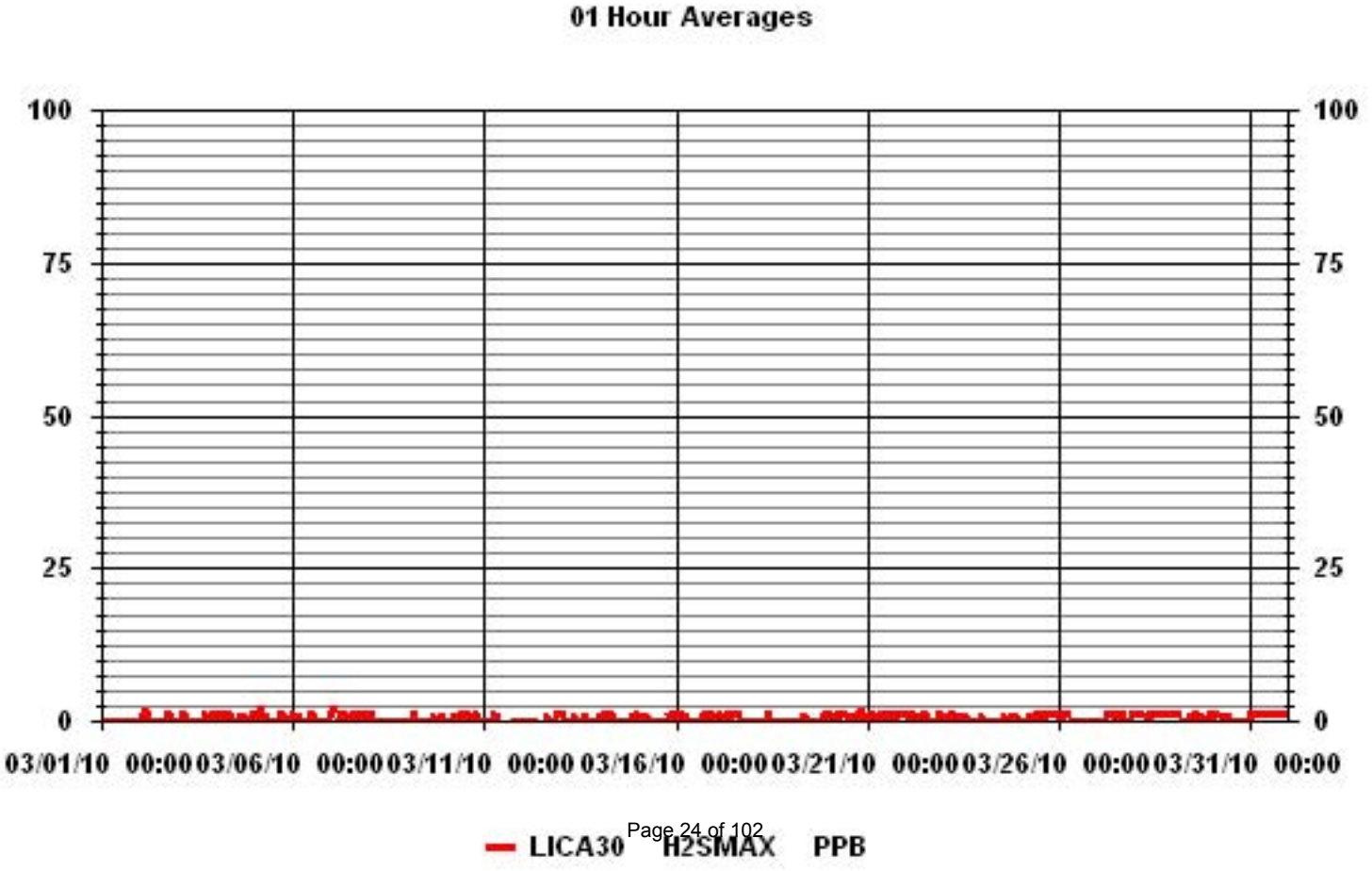
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
2	0	1	0	0	2	0	0	0	**IZS**	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0.2	24
3	0	0	0	1	1	0	0	**IZS**	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	0.3	24
4	0	0	1	1	0	0	**IZS**	1	1	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1	0.3	24
5	1	0	0	2	2	**IZS**	0	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	2	0.4	24
6	1	0	0	1	**IZS**	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0.2	24
7	1	2	2	**IZS**	0	1	1	1	1	0	0	1	0	1	1	1	1	0	1	0	1	1	0	0	2	0.7	24
8	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
9	0	**IZS**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0.2	24
10	**IZS**	0	0	0	0	1	0	0	0	1	1	0	0	1	1	0	0	0	1	1	0	0	0	**IZS**	1	0.3	24
11	0	0	0	0	0	1	1	0	1	**C**	**C**	**M**	**M**	**M**	**M**	**C**	**C**	**C**	0	0	0	0	**IZS**	0	1	0.2	20
12	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	0	1	0	0	0	0	0	**IZS**	1	1	1	0.2	24
13	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	**IZS**	0	0	0	1	0.2	24
14	1	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	0	1	1	0.3	24
15	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	0	0	1	1	1	0.2	24
16	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	**IZS**	1	1	0	0	1	1	1	0.4	24
17	0	1	0	1	1	0	0	0	1	1	0	1	1	1	1	1	**IZS**	0	0	0	0	0	0	0	1	0.4	24
18	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	1	0.1	24
19	0	0	0	0	0	0	0	1	0	1	0	0	0	0	**IZS**	0	0	0	0	0	1	0	1	1	1	0.2	24
20	1	0	0	0	1	0	1	1	1	1	1	0	0	**IZS**	0	1	0	0	1	1	2	0	0	1	2	0.6	24
21	0	0	1	1	1	0	0	0	1	1	0	0	**IZS**	1	1	0	0	0	1	1	1	1	1	1	1	0.6	24
22	1	1	0	1	1	1	0	1	0	0	0	**IZS**	1	1	0	0	0	0	0	0	1	1	0	0	1	0.4	24
23	1	0	0	0	1	1	0	0	0	1	**IZS**	1	0	1	0	0	0	0	0	0	0	0	1	1	1	0.3	24
24	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	1	0	0	0	0	1	0	0	1	0	0	1	0.1	24
25	0	0	0	0	0	0	1	0	**IZS**	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.6	24
26	0	0	0	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
27	0	0	0	0	0	0	**IZS**	1	1	1	1	0	1	1	0	1	1	0	0	0	0	1	1	1	1	0.5	24
28	1	1	1	1	1	**IZS**	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	24
29	1	1	1	1	**IZS**	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	1	1	1	0.4	24
30	0	1	1	**IZS**	0	**N**	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	23
31	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24
HOURLY MAX	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1			
HOURLY AVG	0.4	0.4	0.3	0.5	0.6	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.4	0.4	0.6			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	241					
MAXIMUM INSTANTANEOUS VALUE:	2	PPB	@ HOUR(S)	VAR	ON DAY(S)	VAR
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		739	HRS
MONTHLY CALIBRATION TIME:	10	HRS				
STANDARD DEVIATION:	0.50					


01 Hour Averages
100
75
50
25
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 H2SMAX PPB

LICA30
H2S_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 30
Site Name : LICA30
Parameter : H2S_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	5.87	4.72	6.73	6.16	4.44	5.30	9.59	6.16	5.15	15.61	10.17	3.29	5.87	3.15	3.58	4.15	100.00
< 10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	5.87	4.72	6.73	6.16	4.44	5.30	9.59	6.16	5.15	15.61	10.17	3.29	5.87	3.15	3.58	4.15	

Calm : .00 %

Total # Operational Hours : 698

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	41	33	47	43	31	37	67	43	36	109	71	23	41	22	25	29	698
< 10																	
< 50																	
>= 50																	
Totals	41	33	47	43	31	37	67	43	36	109	71	23	41	22	25	29	

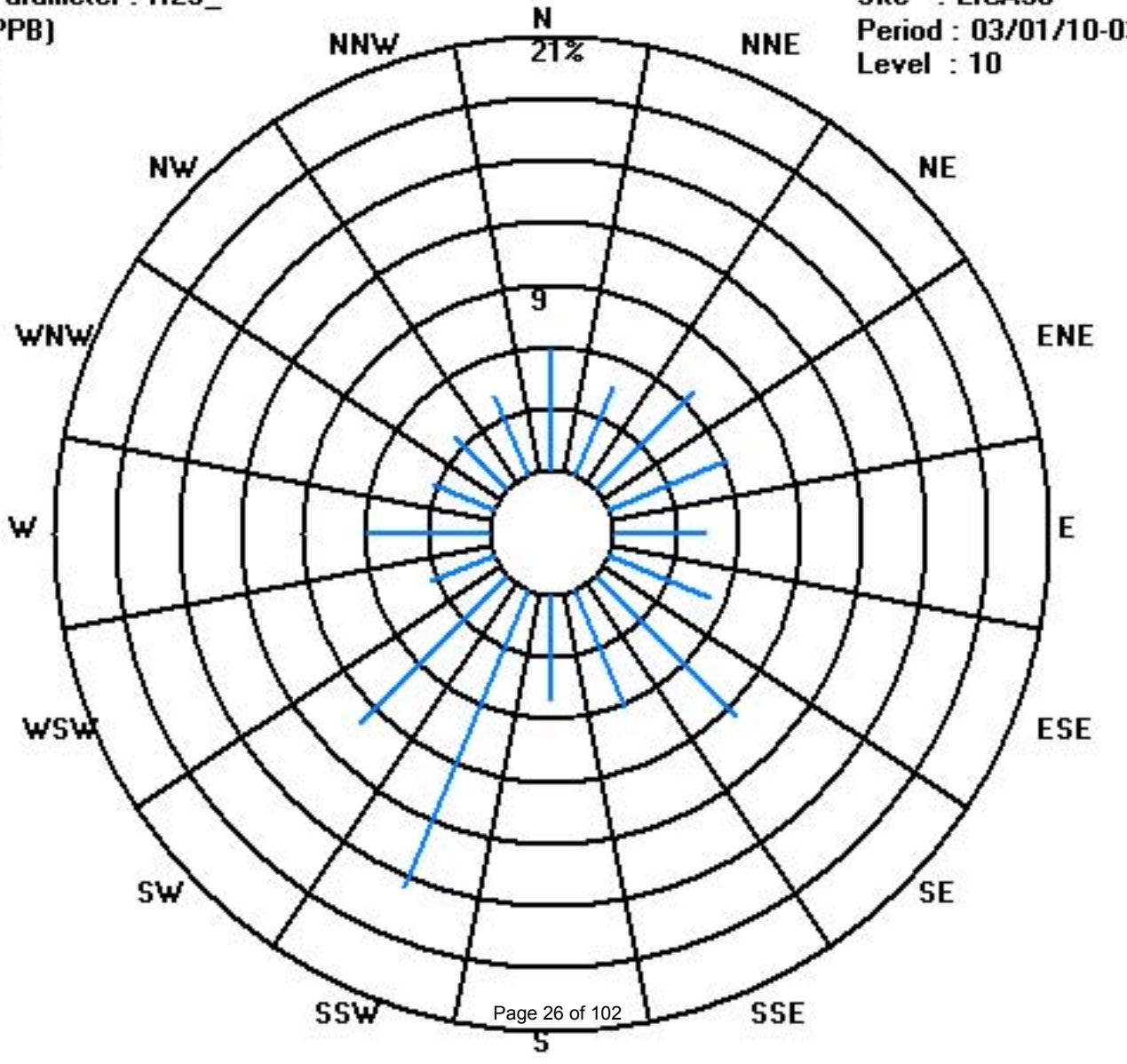
Calm : .00 %

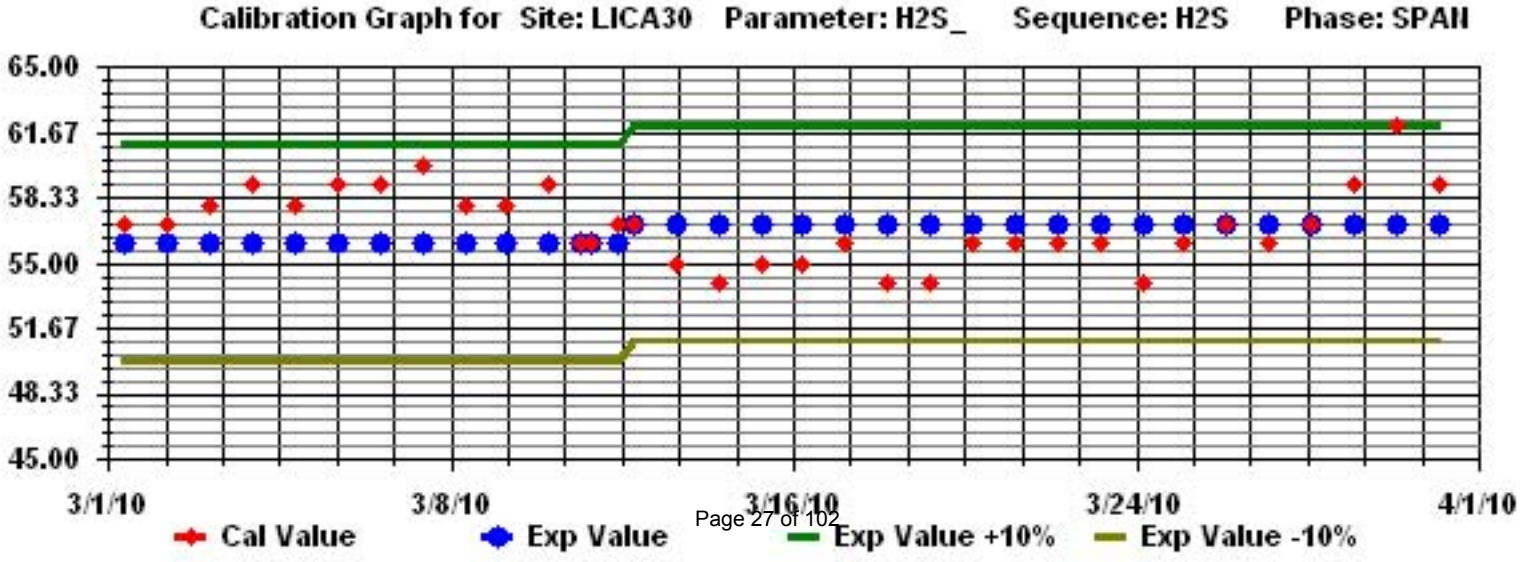
Total # Operational Hours : 698

Logger : 30 Parameter : H2S_
Class Limits (PPB)

>= 50
< 50
< 10
< 3

Site : LICA30
Period : 03/01/10-03/31/10
Level : 10




Calibration Graph for Site: LICA30 Parameter: H2S_ Sequence: H2S Phase: SPAN
65.00
61.67
58.33
55.00
51.67
48.33
45.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Hydrocarbons

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION -MASKWA

MARCH 2010

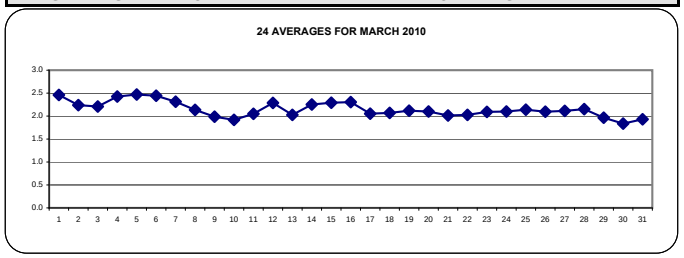
TOTAL HYDROCARBONS hourly averages in ppm

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.4	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	**IZS**	2.5	2.5	2.4	2.3	2.3	2.3	2.3	2.4	2.4	2.6	2.6	2.7	2.7	2.9	2.9	**2.5**	24
2	2.9	2.9	2.8	2.8	2.8	2.7	2.5	2.4	**IZS**	2.2	2.1	2.1	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2.9	2.2	24
3	2	2	2	2	2.1	2.1	2.1	**IZS**	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.2	24
4	2.4	2.5	2.6	2.6	2.5	2.4	**IZS**	**3.6**	**3.6**	3.2	2.7	2.2	1.9	1.9	1.9	2	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.4	**3.6**	2.4	24
5	2.3	2.3	2.3	2.5	2.5	**IZS**	2.4	2.4	2.4	2.5	2.4	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.4	2.8	3	2.8	2.8	2.8	3.0	**2.5**	24
6	2.9	2.9	3	2.9	**IZS**	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.4	2.4	2.5	3.0	2.4	24
7	2.5	2.5	2.5	**IZS**	2.4	2.5	2.7	2.7	2.7	2.5	2.4	2.3	2.2	2.2	2.1	2	2	2.1	2.2	2.2	2.1	2.1	2.1	2.2	2.7	2.3	24
8	2.2	2.2	**IZS**	2.2	2.1	2.2	2.4	2.3	2.5	2.5	2.5	2.4	2.4	2.1	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.5	2.1	24
9	1.9	**IZS**	2	2.1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.9	1.9	2	2	2	1.9	2.1	2.0	24
10	**IZS**	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	**IZS**	2.1	1.9	24
11	2.1	2	2	2	2	2	2.1	2	2	2.1	**C**	**C**	**M**	**M**	**M**	**C**	**C**	**C**	**C**	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	21
12	2.1	2.2	2.2	2.3	2.4	2.9	3.4	3	2.7	2.3	2.2	2.1	2.2	C	2.1	2.1	2.1	2	2	2	2	**IZS**	2	2	3.4	2.3	24
13	2	2	2	2	2	2	2	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	**IZS**	2.1	2.1	2.1	2.1	2.0	24
14	2.2	2.1	2.1	2.4	2.4	2.5	2.4	2.4	2.5	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	**IZS**	2.2	2.2	2.2	2.3	2.5	2.3	24
15	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.2	2.2	2.3	**IZS**	2.3	2.3	2.3	2.3	2.4	2.4	2.3	24
16	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.4	2.4	2.3	2.2	2.2	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.3	24
17	2.1	2.1	2.1	2.1	2	2	2	2	2.1	2	2.1	2.2	2.1	2.1	2.2	2	**IZS**	2	2	2	2	2	2	2	2.2	2.1	24
18	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	24
19	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.1	24
20	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2	**IZS**	2.1	2	2	2	2	2	2	2	2	2	2.3	2.1	24
21	2	2	2	2	2	2	2	2	2	2	2	2	**IZS**	2	2	2	2.1	2.1	2.1	2	2	2	2	2	2.1	2.0	24
22	2.1	2.1	2	2	2	2	2	2	2	2	2	**IZS**	2.1	2	2.1	2	2	2	2	2	2.1	2	2	2.1	2.1	2.0	24
23	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	24
24	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	24
25	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.1	24
26	2	2	2	2.1	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	24
27	2.2	2.1	2.1	2.2	2.2	2.3	**IZS**	2.4	2.3	2.2	2.1	2.1	2	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2.4	2.1	24
28	2.2	2.2	2.2	2.2	2.2	**IZS**	2.2	2.2	2.2	2.3	2.4	2.3	2.3	2.2	2.1	2	2	2	2	2.1	2.1	2.1	2	2	2.4	2.2	24
29	1.9	1.9	2	1.9	**IZS**	2.2	2.3	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.0	24
30	1.8	1.9	1.9	**IZS**	1.8	**N**	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	23
31	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2	2	2	2	2.0	1.9	24
HOURLY MAX	2.9	2.9	3.0	2.9	2.8	2.9	3.4	3.6	3.6	3.2	2.7	2.5	2.4	2.4	2.3	2.3	2.3	2.4	2.4	2.8	3.0	2.8	2.8	2.9			
HOURLY AVG	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2			

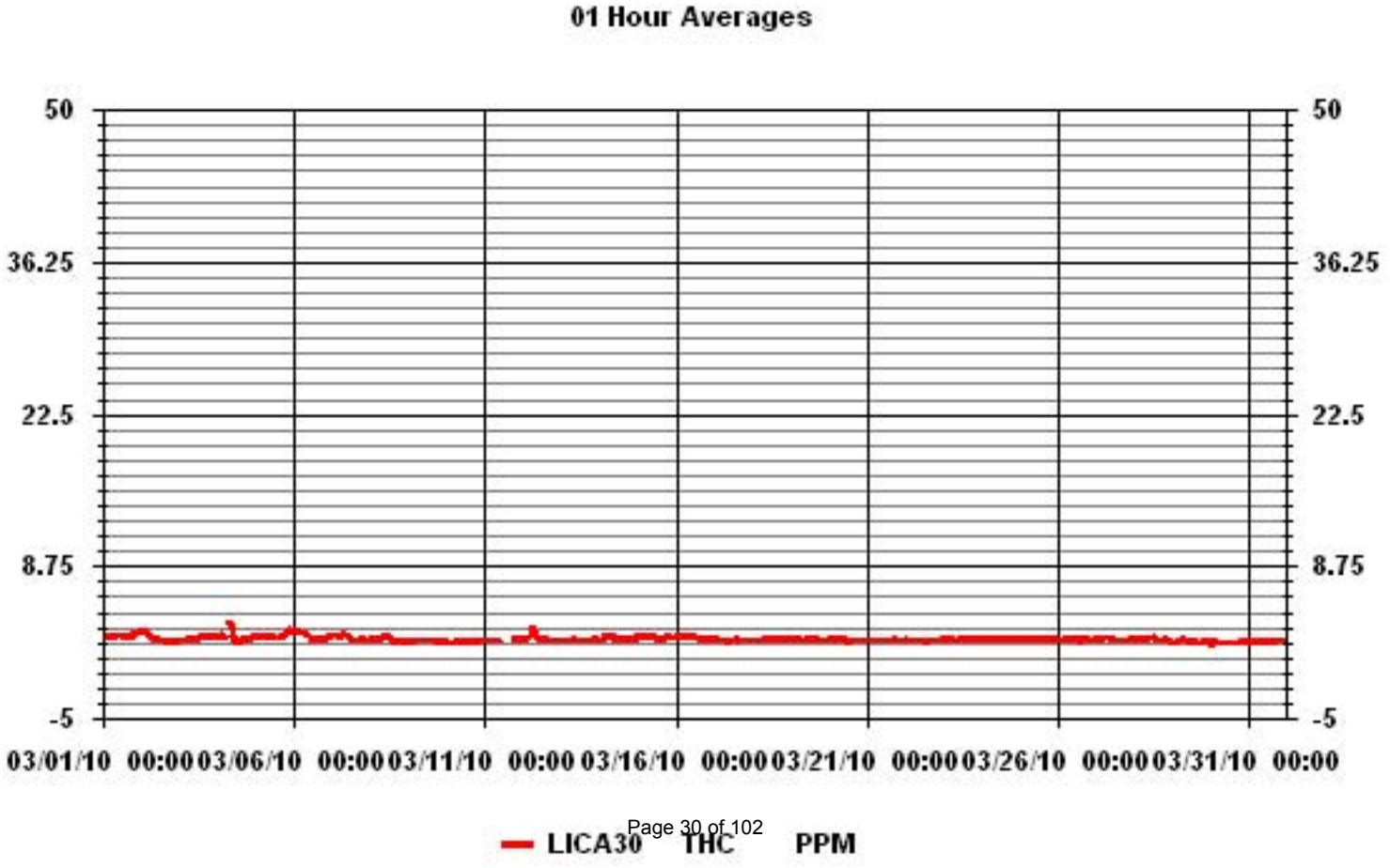
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	701					
MAXIMUM 1-HR AVERAGE:	3.6	PPM	@ HOUR(S)	7, 8	ON DAY(S)	4
MAXIMUM 24-HR AVERAGE:	2.5	PPM			ON DAY(S)	1, 5
					VAR- VARIOUS	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		740	HRS
MONTHLY CALIBRATION TIME:	7	HRS	AMD OPERATION UPTIME:		99.5	%
STANDARD DEVIATION:	0.24		MONTHLY AVERAGE:		2.15	PPM


01 Hour Averages
50
36.25
22.5
8.75
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 THC PPM

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

MST

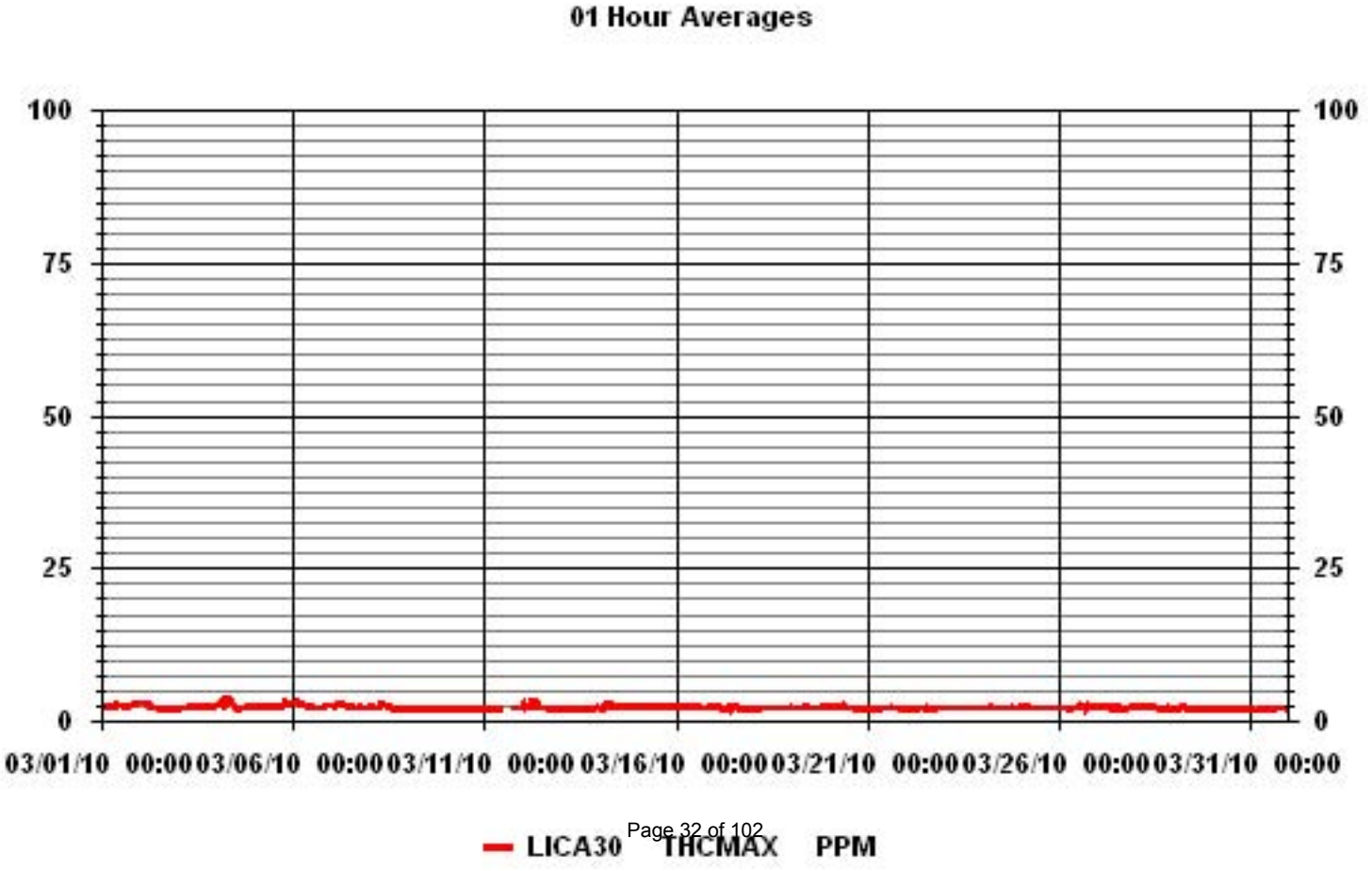
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.5	**IZS**	2.6	2.6	2.5	2.4	2.3	2.3	2.4	2.4	2.5	2.7	2.7	2.7	2.8	3	3	2.5	24
2	3.1	3	2.9	2.9	2.8	2.8	2.7	2.5	**IZS**	2.3	2.1	2.1	2	2.1	2	2	2	2	1.9	1.9	1.9	1.9	2	2	3.1	2.3	24
3	2	2	2.1	2.1	2.1	2.1	2.1	**IZS**	2.2	2.2	2.2	2.3	2.4	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.2	24
4	2.5	2.6	2.8	3.1	2.7	2.5	**IZS**	3.7	**3.8**	3.4	3	2.4	2	2	2	2	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.4	**3.8**	2.5	24
5	2.4	2.5	2.4	2.6	2.5	**IZS**	2.4	2.4	2.4	2.7	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.6	3	3	2.9	2.8	2.9	3	2.5	24
6	2.9	3	3.1	3.1	**IZS**	2.8	2.8	2.8	2.6	2.5	2.4	2.4	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.5	2.5	3.1	2.5	24
7	2.5	2.6	2.5	**IZS**	2.6	2.6	2.7	2.8	2.8	2.6	2.4	2.3	2.3	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.3	2.8	2.4	24
8	2.3	2.2	**IZS**	2.2	2.2	2.3	2.6	2.7	2.9	2.6	2.6	2.5	2.4	2.4	2	2	2	2	1.9	1.9	2	1.9	1.9	1.9	2.9	2.2	24
9	2	**IZS**	2.1	2.2	2	2	2	2	2	2	2	2	2	2	2	2	2.1	2	1.9	2	2	2	2	2	2.2	2.0	24
10	**IZS**	2	2	2	2	1.9	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2.2	**IZS**	2.2	1.9	24
11	2.2	2	2	2	2	2.1	2.1	2	2	2.1	**C**	**C**	**M**	**M**	**M**	**C**	**C**	**C**	**C**	2.1	2.1	2.1	**IZS**	2.1	2.2	2.1	21
12	2.1	2.8	2.2	2.4	2.4	3.4	3.5	3.3	3.2	2.4	2.3	2.2	**C**	**C**	2.2	2.1	2.1	2	2	2	2	**IZS**	2.1	2	3.5	2.4	24
13	2	2	2	2	2	2	2	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2.1	2.1	**IZS**	2.1	2.2	2.2	2.2	2.0	24
14	2.4	2.2	2.1	2.6	2.8	2.8	2.5	2.6	2.6	2.3	2.2	2.4	2.3	2.2	2.3	2.2	2.2	2.2	2.2	**IZS**	2.2	2.3	2.3	2.3	2.8	2.4	24
15	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	**IZS**	2.3	2.3	2.3	2.4	2.4	2.5	2.3	24
16	2.4	2.4	2.4	2.5	2.5	2.4	2.4	2.5	2.4	2.5	2.6	2.5	2.4	2.4	2.4	2.3	2.2	**IZS**	2.1	2.1	2.2	2.2	2.2	2.2	2.6	2.4	24
17	2.1	2.3	2.2	2.2	2.2	2	2	2.1	2.3	2	2.5	2.5	2.2	2.4	2.5	2.1	**IZS**	2	2	2	2	2	2	2	2.5	2.2	24
18	2	2	2	2	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	24
19	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.2	24
20	2.2	2.2	2.2	2.2	2.4	2.5	2.3	2.2	2.2	2.6	2.1	2.1	2.2	**IZS**	2.2	2.3	2.1	2	2	2	2	2	2	2	2.6	2.2	24
21	2	2	2.1	2.2	2	2	2	2	2	2.1	2.1	2.1	**IZS**	2.1	2.1	2.2	2.2	2.1	2.2	2.1	2.1	2	2	2	2.2	2.1	24
22	2.1	2.1	2.2	2	2	2	2	2	2	2.1	2.1	**IZS**	2.1	2.3	2.4	2.1	2	2	2	2.1	2.1	2.1	2.1	2.1	2.4	2.1	24
23	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	24
24	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	**IZS**	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.1	24
25	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	**IZS**	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.2	24
26	2.1	2.1	2.1	2.1	2.1	2.2	2.1	**IZS**	2.1	2.1	2.1	2.1	2.6	2.1	2.1	2.9	2.1	2.6	2.1	2.1	2.1	2.2	2.2	2.3	2.9	2.2	24
27	2.3	2.2	2.2	2.2	2.3	2.3	**IZS**	2.5	2.4	2.2	2.1	2.4	2.6	2.2	2.4	2.1	2	2	2	2.1	2.2	2.2	2.2	2.2	2.6	2.2	24
28	2.2	2.2	2.2	2.2	2.2	**IZS**	2.3	2.2	2.3	2.3	2.4	2.4	2.3	2.3	2.1	2	2	2	2.1	2.1	2.2	2.2	2	2	2.4	2.2	24
29	2	2	2	2	**IZS**	2.4	2.4	2.2	2.2	2	2	1.9	1.9	2	2	2.1	2.1	1.9	2.1	1.9	1.9	2	2	1.9	2.4	2.0	24
30	1.8	1.9	1.9	**IZS**	1.9	**N**	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	23
31	1.9	1.9	**IZS**	1.9	2	2	2	2	2	2	2	2	1.9	1.9	1.9	1.9	2	2.1	2.1	2.1	2.1	2.2	2.1	2	2.2	2.0	24
HOURLY MAX	3	3	3	3	3	3	4	4	4	3	3	3	3	2	3	3	2	3	3	3	3	3	3	3			
HOURLY AVG	2.2	2.3	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE
BB	- BELOW BACKGROUND OF 1.5 PPM		

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	700						
MAXIMUM INSTANTANEOUS VALUE:	3.8	PPM	@ HOUR(S)	8	ON DAY(S)	4	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:			740	HRS
MONTHLY CALIBRATION TIME:	8	HRS					
STANDARD DEVIATION:	0.27						


01 Hour Averages
100
75
50
25
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 THCMAX PPM

LICA30
THC / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 30
Site Name : LICA30
Parameter : THC
Units : PPM

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	5.84	4.70	6.70	6.13	4.42	5.27	9.55	6.27	5.27	15.12	9.70	3.28	5.84	3.13	3.56	4.13	99.00
<	10.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.57	.42	.00	.00	.00	.00	.00	.99
<	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	5.84	4.70	6.70	6.13	4.42	5.27	9.55	6.27	5.27	15.69	10.12	3.28	5.84	3.13	3.56	4.13	

Calm : .00 %

Total # Operational Hours : 701

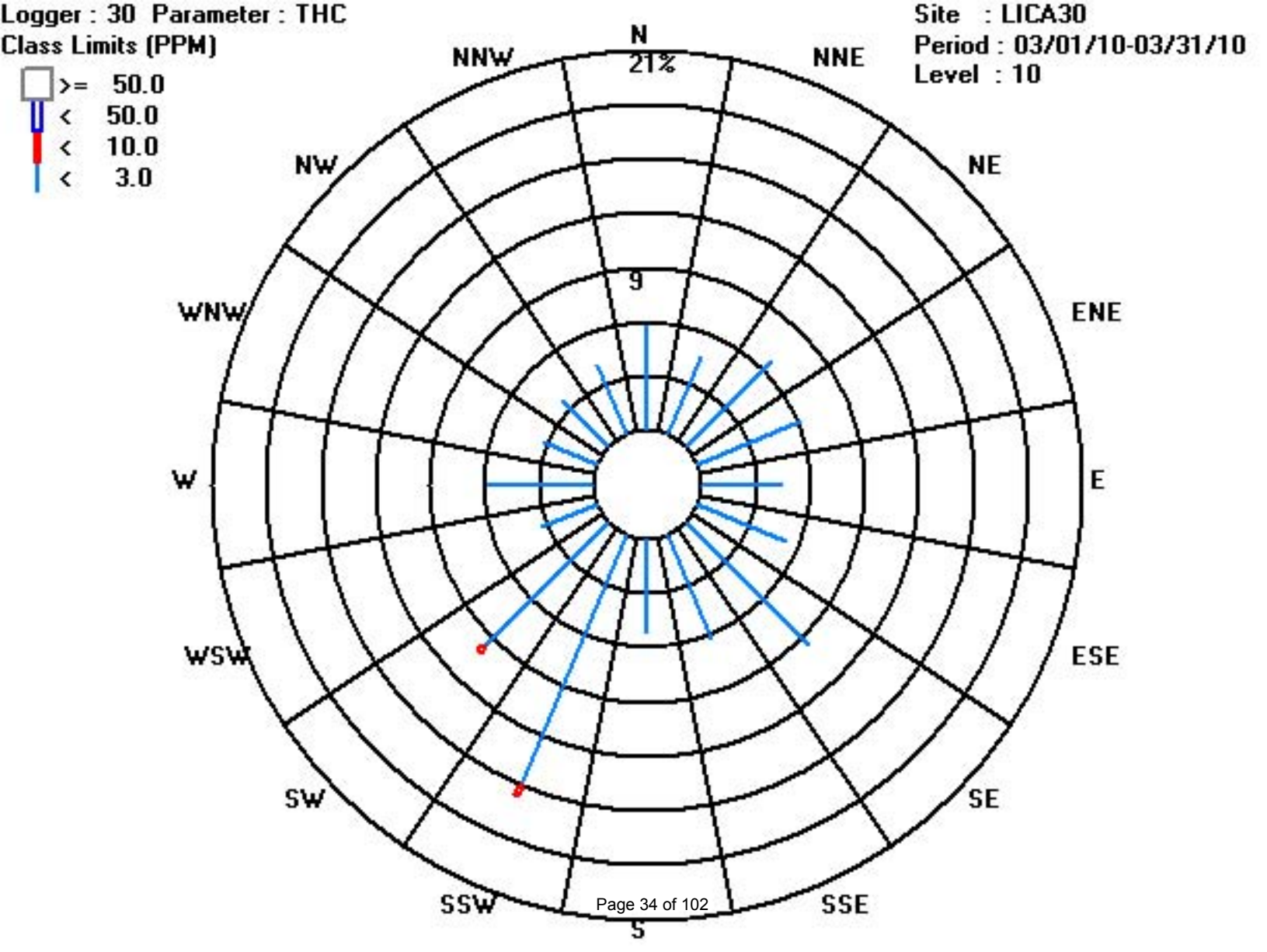
Distribution By Samples

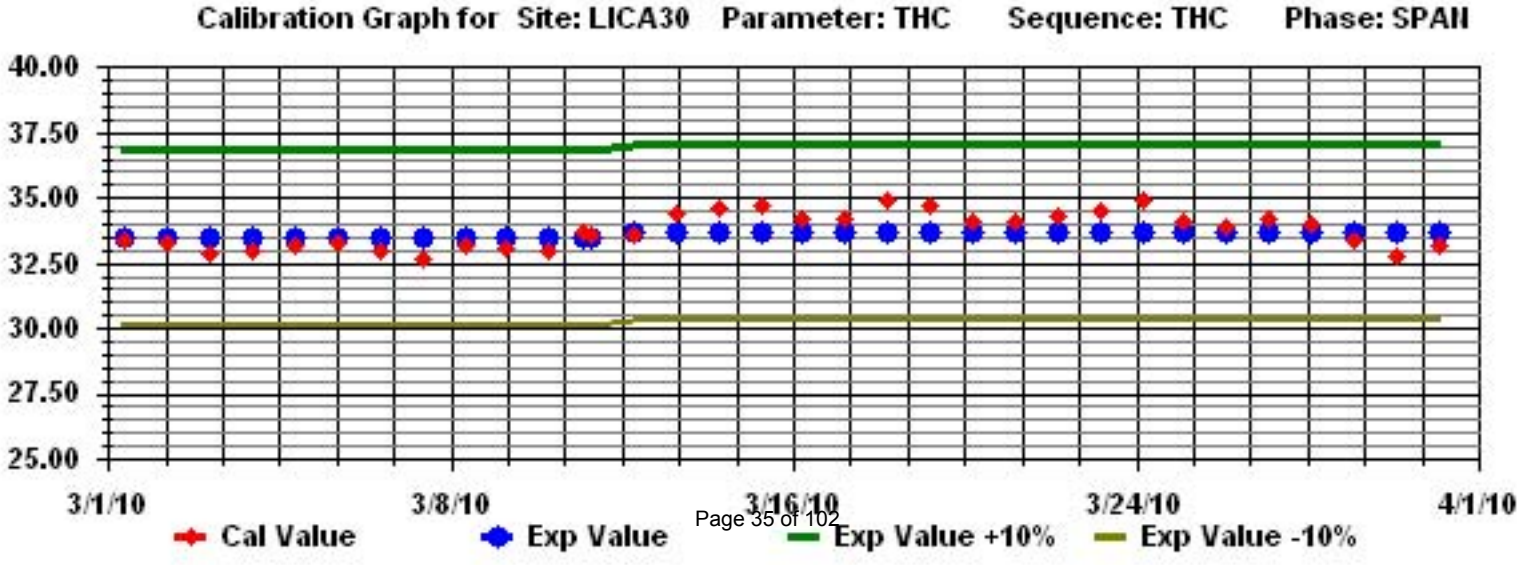
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	41	33	47	43	31	37	67	44	37	106	68	23	41	22	25	29	694
<	10.0										4	3						7
<	50.0																	
>=	50.0																	
	Totals	41	33	47	43	31	37	67	44	37	110	71	23	41	22	25	29	

Calm : .00 %

Total # Operational Hours : 701


Logger : 30 Parameter : THC
Class Limits (PPM)
>= 50.0
< 50.0
< 10.0
< 3.0
Site : LICA30
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA30 Parameter: THC Sequence: THC Phase: SPAN
40.00
37.50
35.00
32.50
30.00
27.50
25.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitrogen Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

MARCH 2010

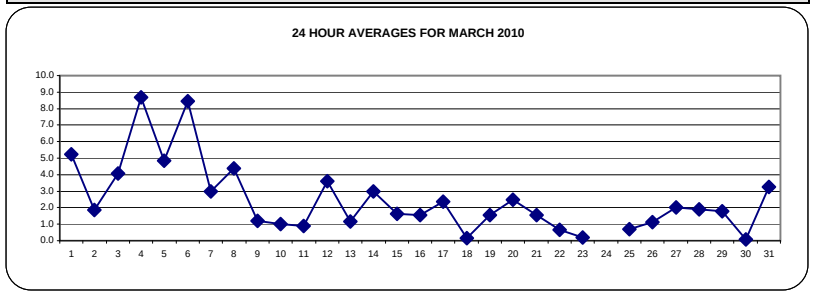
NITROGEN DIOXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	6	6	6	5	5	5	9	6	4	**IZS**	6	5	4	4	5	6	6	7	4	5	4	4	3	5	9	5.2	24
2	4	3	2	1	1	1	1	1	**IZS**	5	3	2	2	2	2	1	1	2	2	2	1	1	1	2	5	1.9	24
3	2	2	3	2	3	3	3	**IZS**	3	3	3	3	3	4	4	5	7	6	5	5	6	6	6	7	7	4.1	24
4	9	12	10	15	9	8	**IZS**	**22**	20	14	10	5	1	1	0	2	3	7	10	8	8	9	9	8	**22**	**8.7**	24
5	8	8	7	4	3	**IZS**	4	7	4	8	5	4	4	3	3	3	3	2	4	5	6	5	5	6	8	4.8	24
6	8	10	11	13	**IZS**	12	10	10	12	11	11	10	9	7	6	4	5	5	6	7	8	6	7	6	13	8.4	24
7	6	5	4	**IZS**	2	2	3	3	3	4	3	3	3	2	1	1	1	2	3	3	2	5	5	3	6	3.0	24
8	2	2	**IZS**	1	1	2	7	11	15	18	13	4	4	6	7	2	2	3	0	0	1	0	0	0	18	4.4	24
9	0	**IZS**	0	11	2	0	0	2	2	3	1	0	1	1	1	1	1	1	0	0	0	1	0	0	11	1.2	24
10	**IZS**	0	1	2	1	0	0	0	3	1	1	1	1	1	1	1	1	1	0	0	2	2	2	**IZS**	3	1.0	24
11	1	1	1	0	1	1	1	2	1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	1	1	1	1	**IZS**	1	2	0.9	24
12	0	0	1	2	5	10	14	10	7	5	5	4	4	C	3	2	1	1	1	1	1	**IZS**	2	0	14	3.6	24
13	0	0	0	0	2	1	1	1	3	3	1	1	0	0	1	0	0	0	0	2	**IZS**	5	4	2	5	1.2	24
14	4	1	1	3	3	9	11	9	7	2	1	1	1	1	2	2	1	1	1	**IZS**	2	3	2	1	11	3.0	24
15	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	2	**IZS**	3	4	3	2	2	4	1.6	24
16	2	2	2	1	1	1	4	4	2	2	3	2	1	2	3	2	1	**IZS**	0	0	1	0	0	0	4	1.6	24
17	0	3	2	1	0	1	0	1	3	1	3	6	3	6	14	7	**IZS**	3	0	0	0	0	0	0	14	2.3	24
18	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	**IZS**	0	0	0	0	0	0	1	1	2	0.2	24
19	1	0	0	0	0	0	0	2	3	1	2	1	0	0	**IZS**	0	0	0	1	4	6	6	5	4	6	1.6	24
20	3	3	3	3	3	4	10	9	5	3	2	2	2	**IZS**	2	2	1	0	0	0	0	0	0	0	10	2.5	24
21	0	0	1	3	0	0	0	0	0	0	0	1	**IZS**	1	2	3	4	5	7	3	5	0	0	1	7	1.6	24
22	1	1	1	1	1	1	1	1	1	1	1	**IZS**	2	1	1	0	0	0	0	0	0	0	0	0	2	0.7	24
23	0	0	0	0	1	1	0	0	0	0	**IZS**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	1	0.2	11
24	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
25	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	1	0	0	0	1	1	1	1	1	1	1	1	0	1	0.7	14
26	0	0	0	1	1	1	2	**IZS**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2	0	0	0	1	3	2	3	2	3	1.1	24
27	2	1	1	2	3	4	**IZS**	7	6	4	2	1	0	0	0	0	0	0	2	1	2	3	3	2	7	2.0	24
28	3	2	1	0	0	**IZS**	0	1	1	2	3	2	1	1	1	1	2	3	4	5	6	3	1	1	6	1.9	24
29	2	3	2	2	**IZS**	6	8	9	3	1	1	0	0	2	0	0	0	0	1	0	0	0	1	0	9	1.8	24
30	0	1	0	**IZS**	0	**N**	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	23
31	3	1	**IZS**	1	5	8	4	4	3	1	0	0	0	0	0	0	0	4	11	10	6	6	6	2	11	3.3	24
HOURLY MAX	9	12	11	15	9	12	14	22	20	18	13	10	9	7	14	7	7	7	11	10	8	9	9	8			
HOURLY AVG	2.4	2.4	2.3	2.8	2.0	3.2	3.5	4.6	4.2	3.7	3.2	2.4	1.9	1.8	2.3	1.8	1.5	2.0	2.3	2.4	2.7	2.6	2.5	2.0			

STATUS FLAG CODES

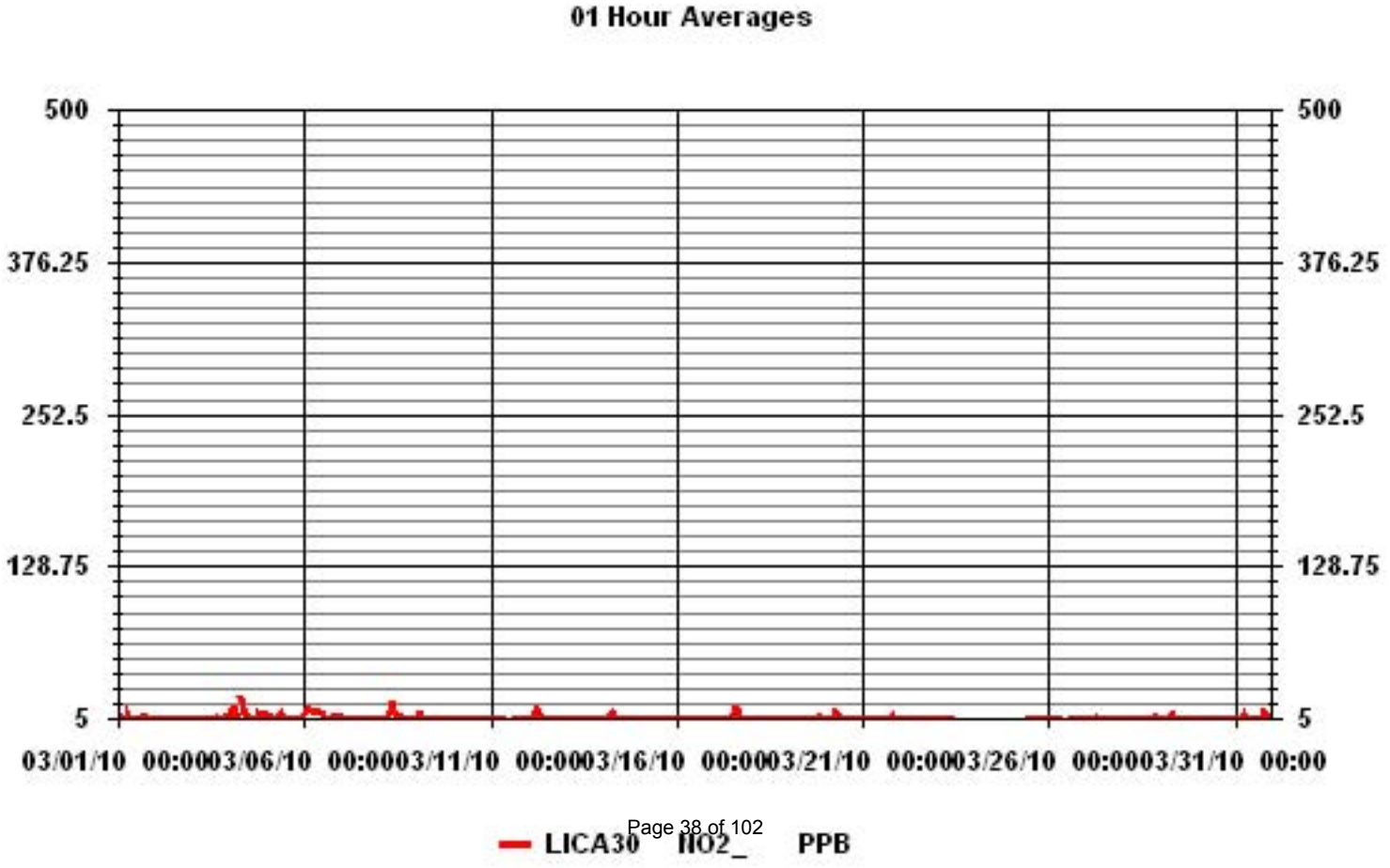
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 212 PPB | 24-HR 106 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	476					
MAXIMUM 1-HR AVERAGE:	22	PPB	@ HOUR(S)	7	ON DAY(S)	4
MAXIMUM 24-HR AVERAGE:	8.7	PPB			ON DAY(S)	4
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		696	HRS
MONTHLY CALIBRATION TIME:	16	HRS	AMD OPERATION UPTIME:		93.5	%
STANDARD DEVIATION:	3.15		MONTHLY AVERAGE:		2.59	PPB


01 Hour Averages
500
376.25
252.5
128.75
5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 NO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

NITROGEN DIOXIDE MAX instantaneous maximum in ppb

MST

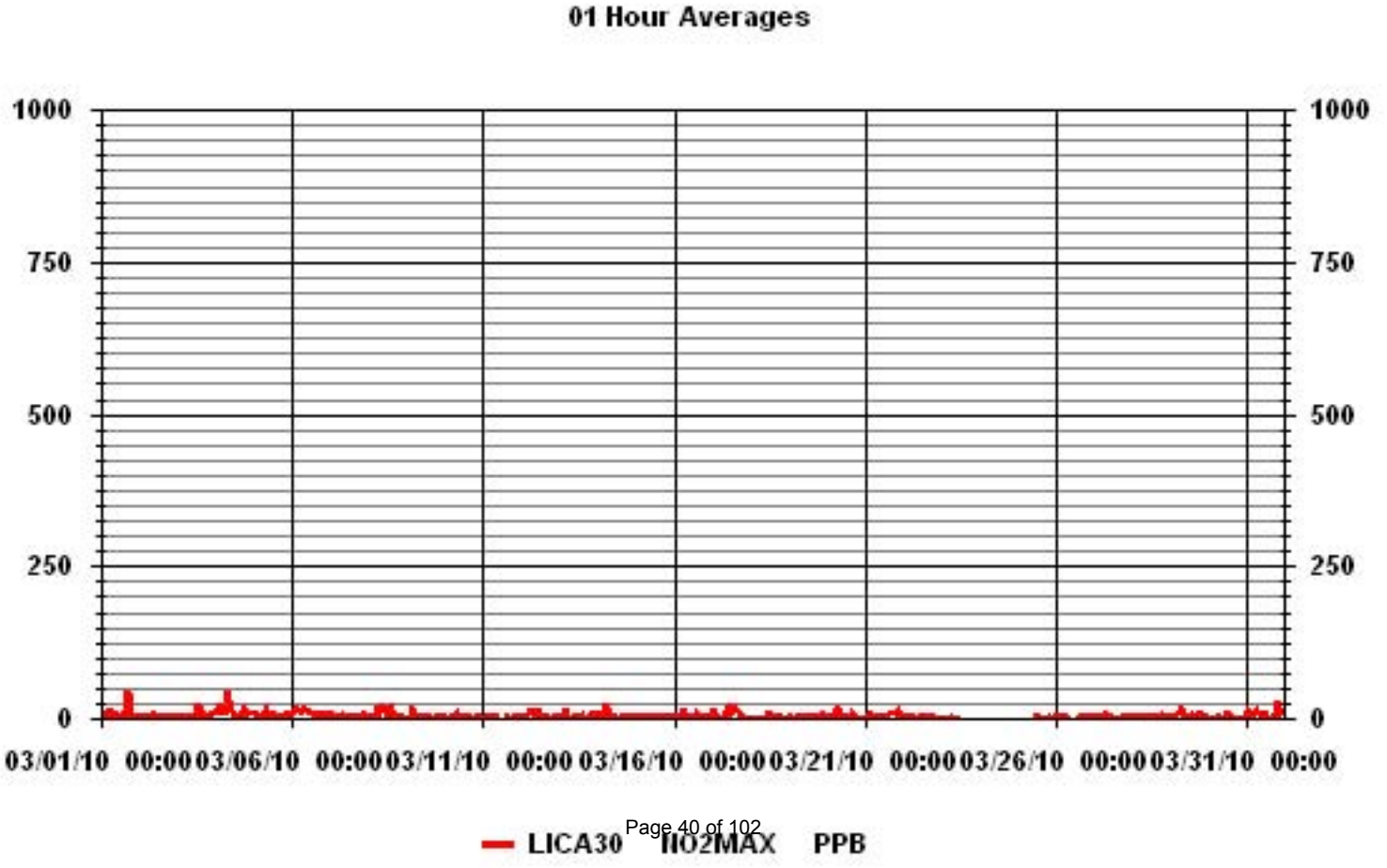
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	7	7	7	7	6	5	16	9	8	**IZS**	8	6	5	6	7	7	9	**46**	5	6	5	5	5	6	46	8.6	24
2	5	4	3	2	2	2	2	2	**IZS**	8	4	4	3	5	5	2	2	5	3	4	4	1	2	3	8	3.3	24
3	3	3	3	3	4	3	4	**IZS**	5	5	4	4	5	23	5	7	9	8	5	6	8	7	8	8	23	6.1	24
4	13	13	14	24	11	10	**IZS**	41	31	18	13	7	3	2	2	5	6	10	15	9	10	9	10	9	41	12.4	24
5	9	9	8	6	4	**IZS**	10	15	7	12	9	5	13	4	5	4	5	5	5	6	7	6	6	7	15	7.3	24
6	9	12	15	15	**IZS**	14	12	17	17	12	12	11	11	9	8	5	6	6	7	8	10	8	7	7	17	10.3	24
7	7	6	5	**IZS**	3	3	3	7	5	4	4	3	3	3	3	2	2	3	4	5	3	7	6	4	7	4.1	24
8	3	3	**IZS**	2	2	3	16	16	20	20	18	5	5	16	18	4	6	6	4	2	2	1	1	0	20	7.5	24
9	0	**IZS**	6	20	6	1	1	4	4	6	3	1	5	2	2	3	4	2	1	1	1	1	1	1	20	3.3	24
10	**IZS**	1	2	4	3	0	0	1	8	2	2	2	2	2	1	2	2	2	1	1	2	3	3	**IZS**	8	2.1	24
11	2	1	1	1	1	1	2	2	2	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	1	2	1	1	1	**IZS**	1	2	1.3	24
12	1	1	3	4	7	13	15	13	8	6	11	11	**C**	**C**	4	4	2	2	2	1	1	**IZS**	5	1	15	5.5	24
13	1	1	1	1	17	2	2	2	4	4	3	2	2	1	6	0	0	1	2	2	**IZS**	6	6	4	17	3.0	24
14	8	6	2	8	7	23	16	13	10	4	2	2	2	1	3	2	2	2	2	**IZS**	4	4	3	3	23	5.6	24
15	1	1	1	1	1	1	2	2	2	3	3	2	2	2	3	2	2	2	**IZS**	5	5	3	3	3	5	2.3	24
16	2	3	3	2	2	2	16	7	4	2	4	3	2	2	9	6	2	**IZS**	1	1	1	1	1	1	16	3.3	24
17	1	16	7	4	1	2	1	4	10	3	9	18	18	14	19	15	**IZS**	8	1	0	1	1	0	0	19	6.7	24
18	0	0	0	0	0	1	0	0	1	0	1	0	10	0	1	**IZS**	1	1	1	1	1	1	2	1	10	1.0	24
19	1	1	1	0	0	1	1	5	6	3	2	2	1	3	**IZS**	1	1	1	3	5	6	7	6	5	7	2.7	24
20	4	3	4	4	3	9	15	21	6	6	3	3	4	**IZS**	4	9	4	1	1	1	0	0	0	0	21	4.6	24
21	0	0	5	7	0	0	1	1	0	3	3	5	**IZS**	4	4	7	9	10	9	9	12	2	1	2	12	4.1	24
22	2	2	3	3	2	3	2	2	1	2	2	**IZS**	6	4	5	2	1	1	1	1	1	0	0	0	6	2.0	24
23	0	0	0	1	3	1	1	1	0	1	**IZS**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	3	0.8	11
24	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
25	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	1	1	1	1	1	2	1	1	2	2	1	2	2	2	1.4	14
26	1	1	1	1	2	2	4	**IZS**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	4	1	1	1	2	5	3	6	3	6	2.4	24
27	2	2	2	3	4	5	**IZS**	8	7	5	3	3	1	0	0	1	0	1	5	3	4	4	4	3	8	3.0	24
28	4	3	1	1	1	**IZS**	1	1	2	3	3	3	2	3	2	2	3	6	5	6	7	6	2	2	7	3.0	24
29	3	5	4	5	**IZS**	10	14	14	6	3	2	1	1	5	1	1	0	3	11	1	0	2	2	1	14	4.1	24
30	1	2	1	**IZS**	1	**N**	1	1	1	0	2	2	12	1	0	0	0	0	0	0	0	0	0	0	12	1.1	23
31	12	8	**IZS**	3	11	14	9	9	9	6	0	11	0	0	0	0	1	8	25	24	11	14	15	10	25	8.7	24
HOURLY MAX	13	16	15	24	17	23	16	41	31	20	18	18	18	23	19	15	9	46	25	24	12	14	15	10			
HOURLY AVG	3.6	4.1	3.8	4.9	3.9	5.0	6.2	8.1	6.8	5.4	5.0	4.5	4.8	4.5	4.5	3.6	3.0	5.1	4.4	4.0	4.1	3.7	3.8	3.1			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	591					
MAXIMUM INSTANTANEOUS VALUE:	46	PPB	@ HOUR(S)	17	ON DAY(S)	1
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		696	HRS
MONTHLY CALIBRATION TIME:	17	HRS				
STANDARD DEVIATION	5.10					


01 Hour Averages
1000
750
500
250
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 IIO2MAX PPB

LICA30
NO2_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 30
Site Name : LICA30
Parameter : NO2_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	5.23	3.69	6.46	6.30	4.61	4.92	9.23	6.00	5.69	16.92	10.92	3.53	6.30	3.38	3.38	3.38	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	5.23	3.69	6.46	6.30	4.61	4.92	9.23	6.00	5.69	16.92	10.92	3.53	6.30	3.38	3.38	3.38	

Calm : .00 %

Total # Operational Hours : 650

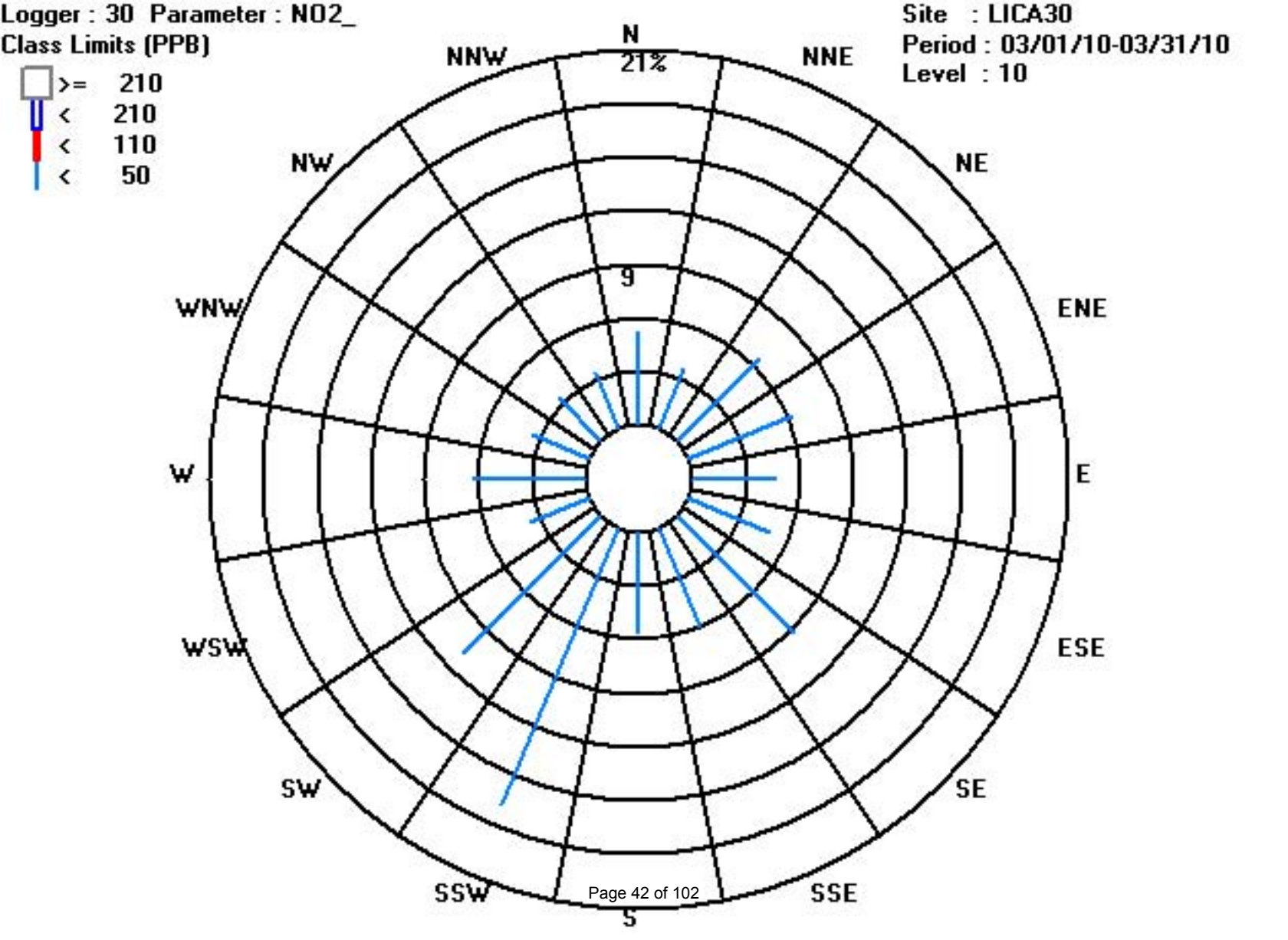
Distribution By Samples

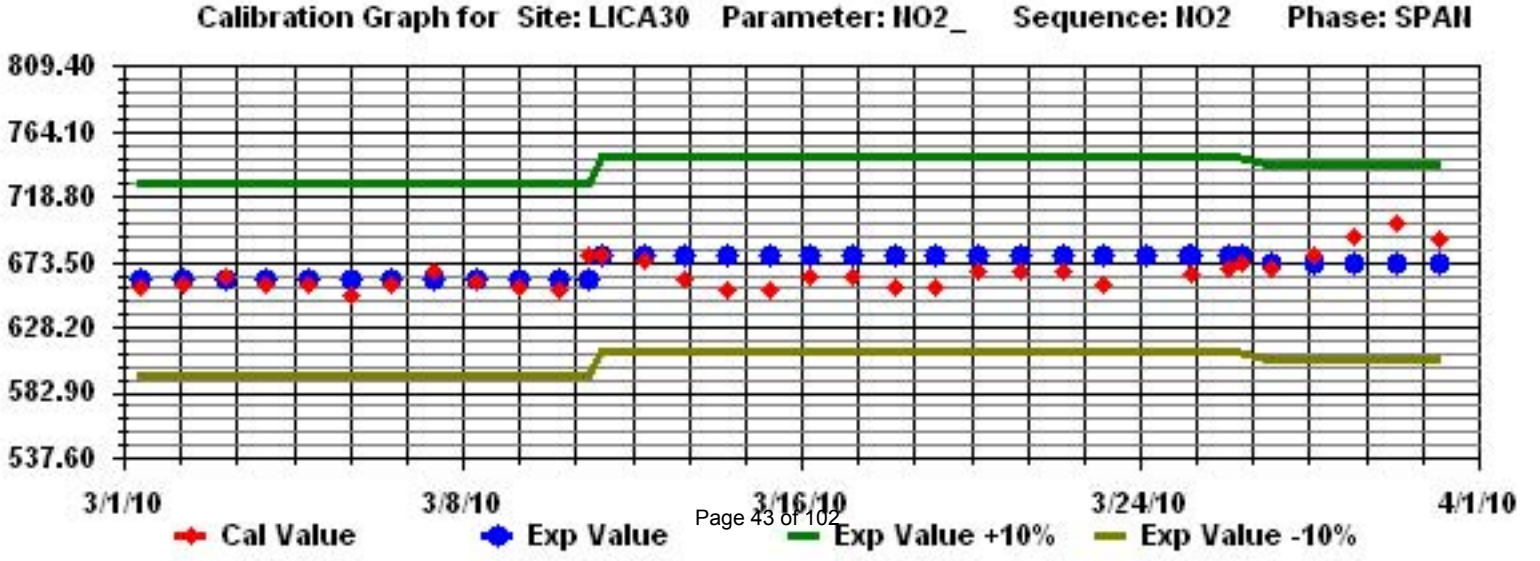
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	34	24	42	41	30	32	60	39	37	110	71	23	41	22	22	22	650
< 110																	
< 210																	
>= 210																	
Totals	34	24	42	41	30	32	60	39	37	110	71	23	41	22	22	22	

Calm : .00 %

Total # Operational Hours : 650


Logger : 30 Parameter : NO2_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA30
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA30 Parameter: NO2_ Sequence: NO2 Phase: SPAN
809.40
764.10
718.80
673.50
628.20
582.90
537.60
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitric Oxide

LAKELAND INDUSTRY & COMMUNITY ASSCOICATION - MASKWA

MARCH 2010

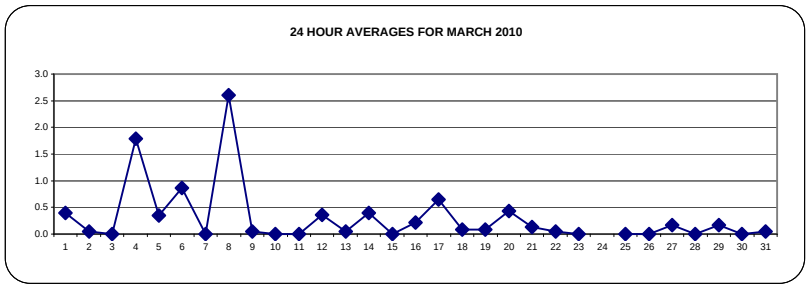
NITRIC OXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY 24-HOUR		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	**IZS**	3	1	1	1	1	1	1	0	0	0	0	0	0	0	3	0.4	24
2	0	0	0	0	0	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
3	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
4	0	0	0	0	0	0	**IZS**	8	16	10	5	2	0	0	0	0	0	0	0	0	0	0	0	0	16	1.8	24
5	0	0	0	0	0	**IZS**	0	3	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.3	24
6	0	0	0	0	**IZS**	0	0	1	3	4	3	3	3	2	1	0	0	0	0	0	0	0	0	0	4	0.9	24
7	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
8	0	0	**IZS**	0	0	0	0	1	11	**22**	16	2	2	3	3	0	0	0	0	0	0	0	0	0	**22**	**2.6**	24
9	0	**IZS**	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
10	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
11	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	**IZS**	0	0	0.0	24
12	0	0	0	0	0	0	0	1	3	2	1	1	0	**C**	0	0	0	0	0	0	0	**IZS**	0	0	3	0.4	24
13	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	1	0.0	24
14	0	0	0	0	0	1	2	2	4	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	4	0.4	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	3	1	0	0	1	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	3	0.2	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	3	**IZS**	0	0	0	0	0	0	0	8	0.7	24
18	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	**IZS**	0	0	0	0	0	0	0	0	2	0.1	24
19	0	0	0	0	0	0	0	0	1	0	1	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	1	0.1	24
20	0	0	0	0	0	0	0	3	2	1	1	1	1	**IZS**	1	0	0	0	0	0	0	0	0	0	3	0.4	24
21	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	1	1	0	0	0	0	0	0	0	1	0.1	24
22	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
23	0	0	0	0	0	0	0	0	0	0	**IZS**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	0	0.0	11
24	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
25	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	14
26	0	0	0	0	0	0	0	**IZS**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0	0.0	24
27	0	0	0	0	0	0	**IZS**	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	24
28	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
29	0	0	0	0	**IZS**	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.2	24
30	0	0	0	**IZS**	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	23
31	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.0	24
HOURLY MAX	0	0	0	1	1	1	3	8	16	22	16	3	3	4	8	3	1	0	1	0	0	0	0	0			
HOURLY AVG	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	1.6	1.7	1.3	0.4	0.4	0.4	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

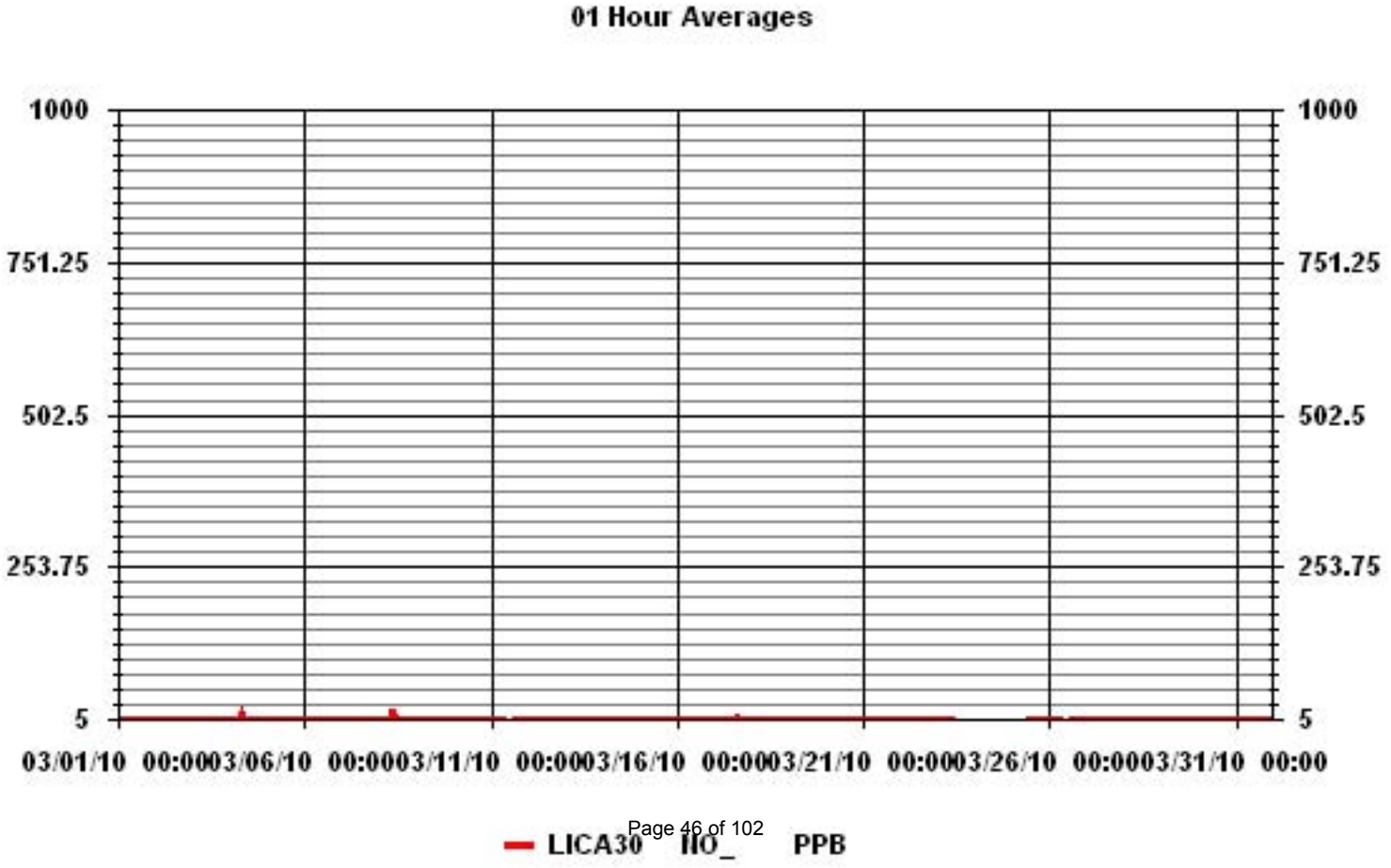
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	70						
MAXIMUM 1-HR AVERAGE:	22	PPB	@ HOUR(S)	9	ON DAY(S)	8	
MAXIMUM 24-HR AVERAGE:	2.6	PPB			ON DAY(S)	8	
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		696	HRS	
MONTHLY CALIBRATION TIME:	16	HRS	AMD OPERATION UPTIME:		93.5	%	
STANDARD DEVIATION:	1.55		MONTHLY AVERAGE:		0.32	PPB	


01 Hour Averages
1000
751.25
502.5
253.75
5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 NO_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

NITRIC OXIDE MAX instantaneous maximum in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	2	1	3	**IZS**	4	2	2	2	2	2	40	23	0	0	0	0	0	0	40	3.6	24
2	0	0	0	0	0	0	0	0	**IZS**	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0.2	24
3	0	0	0	0	0	0	0	**IZS**	0	0	0	1	1	14	1	1	1	0	0	0	0	0	0	0	14	0.8	24
4	0	0	0	1	0	0	**IZS**	**77**	58	16	7	4	1	1	0	1	0	0	1	0	0	0	0	0	**77**	7.3	24
5	0	0	0	0	0	**IZS**	5	14	3	4	16	1	13	1	2	0	0	0	0	0	0	0	0	0	16	2.6	24
6	0	0	0	0	**IZS**	2	0	6	4	5	4	4	4	2	3	1	0	0	0	0	0	0	0	0	6	1.5	24
7	0	0	0	**IZS**	0	0	0	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	2	0.3	24
8	0	0	**IZS**	0	0	0	1	4	25	29	26	4	3	10	14	1	2	1	0	0	0	0	0	0	29	5.2	24
9	0	**IZS**	0	3	0	0	0	0	1	2	1	0	2	0	1	0	0	0	0	0	0	0	0	0	3	0.4	24
10	**IZS**	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	0.0	24
11	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	**IZS**	0	0	0.0	24
12	0	0	0	0	0	0	0	2	4	3	7	8	**C**	**C**	1	1	0	0	0	0	0	**IZS**	0	0	8	1.2	24
13	0	0	0	0	29	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	**IZS**	0	0	0	29	1.4	24
14	0	0	0	0	0	12	10	3	6	1	1	1	1	0	1	1	0	0	0	**IZS**	0	0	0	0	12	1.6	24
15	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	1	0	0	**IZS**	0	0	0	0	0	2	0.3	24
16	0	0	0	0	0	0	43	3	1	1	2	1	1	0	3	1	0	**IZS**	0	0	0	0	0	0	43	2.4	24
17	0	4	0	0	0	0	0	0	1	1	8	6	6	14	14	9	**IZS**	2	0	0	0	0	0	0	14	2.8	24
18	0	0	0	0	0	0	0	0	0	0	1	0	25	0	0	**IZS**	0	0	0	0	0	0	0	0	25	1.1	24
19	0	0	0	0	0	0	0	2	2	1	2	2	1	3	**IZS**	1	0	0	0	0	0	0	0	0	3	0.6	24
20	0	0	0	0	0	0	1	25	3	4	2	2	2	**IZS**	2	3	1	0	0	0	0	0	0	0	25	2.0	24
21	0	0	0	0	0	0	0	0	0	1	1	3	**IZS**	2	2	3	2	2	0	0	0	0	0	0	3	0.7	24
22	0	0	0	0	0	0	0	0	0	1	1	**IZS**	5	3	2	2	0	0	0	0	0	0	0	0	5	0.6	24
23	0	0	0	0	0	0	0	0	0	1	**IZS**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	1	0.1	11
24	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
25	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.1	14
26	0	0	0	0	0	0	2	**IZS**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2	0	0	0	0	0	0	0	0	2	0.3	24
27	0	0	0	0	0	0	**IZS**	4	5	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0.6	24
28	0	0	0	0	0	**IZS**	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.2	24
29	0	0	0	0	**IZS**	0	3	5	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	0.6	24
30	0	0	0	**IZS**	0	**N**	0	0	0	0	0	0	19	1	0	0	0	0	0	0	0	0	0	0	19	0.9	23
31	0	0	**IZS**	0	0	30	1	1	3	2	0	8	0	0	1	0	0	1	6	5	0	2	0	0	30	2.6	24
HOURLY MAX	0	4	0	3	29	30	43	77	58	29	26	8	25	14	14	9	40	23	6	5	0	2	0	0			
HOURLY AVG	0.0	0.1	0.0	0.1	1.1	1.7	2.5	5.5	4.6	3.0	3.4	2.0	3.6	2.4	2.0	1.1	1.6	1.0	0.3	0.2	0.0	0.1	0.0	0.0			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

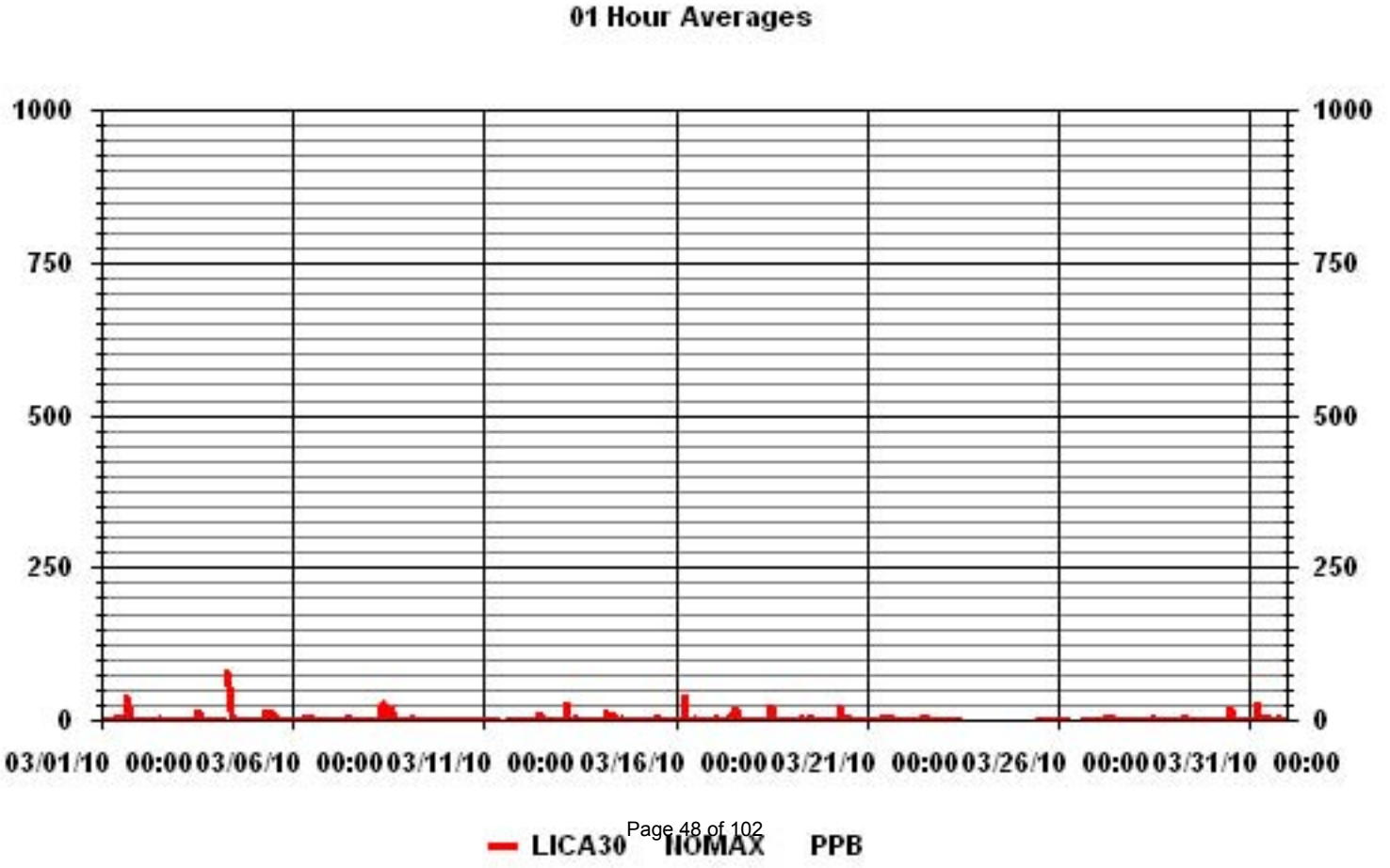
NUMBER OF NON-ZERO READINGS: 187

MAXIMUM INSTANTANEOUS VALUE: 77 PPB @ HOUR(S) 7 ON DAY(S) 4

IZS CALIBRATION TIME: 30 HRS OPERATIONAL TIME: 696 HRS

MONTHLY CALIBRATION TIME: 17 HRS

STANDARD DEVIATION 5.64


01 Hour Averages
1000
750
500
250
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 IIOMAX PPB

LICA30
NO_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 30
Site Name : LICA30
Parameter : NO_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	5.23	3.69	6.46	6.30	4.61	4.92	9.23	6.00	5.69	16.92	10.92	3.53	6.30	3.38	3.38	3.38	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	5.23	3.69	6.46	6.30	4.61	4.92	9.23	6.00	5.69	16.92	10.92	3.53	6.30	3.38	3.38	3.38	

Calm : .00 %

Total # Operational Hours : 650

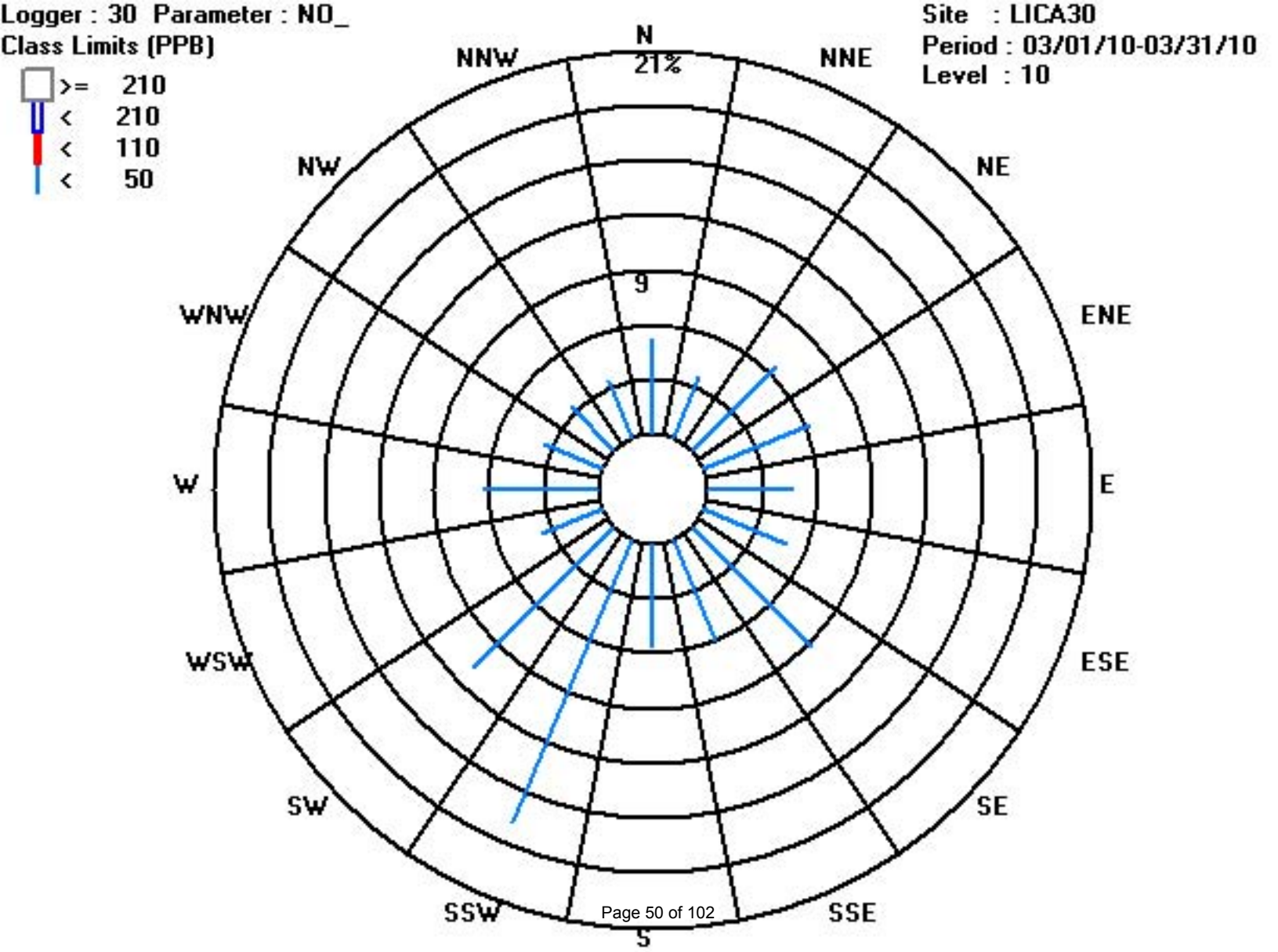
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	34	24	42	41	30	32	60	39	37	110	71	23	41	22	22	22	650
< 110																	
< 210																	
>= 210																	
Totals	34	24	42	41	30	32	60	39	37	110	71	23	41	22	22	22	

Calm : .00 %

Total # Operational Hours : 650


Logger : 30 Parameter : NO_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA30
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9

Oxides of Nitrogen

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

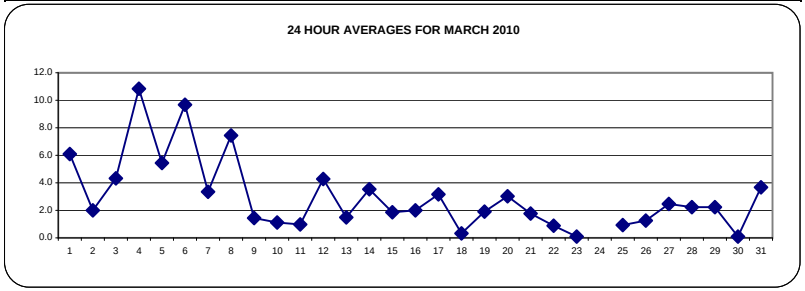
MARCH 2010

OXIDES OF NITROGEN hourly averages in ppb

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	6	6	7	5	5	5	9	7	5	**IZS**	9	7	5	6	7	8	8	8	5	5	5	4	3	5	9	6.1	24
2	4	3	2	1	1	1	1	1	**IZS**	6	3	3	2	2	3	1	1	2	2	2	1	1	1	2	6	2.0	24
3	2	2	2	2	3	3	3	**IZS**	4	3	3	3	4	6	5	6	8	6	5	5	6	6	6	7	8	4.3	24
4	9	12	10	16	9	8	**IZS**	31	37	25	15	8	2	1	0	3	3	8	10	8	8	9	9	8	37	**10.8**	24
5	8	8	7	4	3	**IZS**	4	10	6	11	8	5	5	4	3	3	3	2	4	5	6	5	5	6	11	5.4	24
6	8	10	11	13	**IZS**	12	11	12	16	16	15	14	13	9	8	5	5	5	6	6	8	6	7	6	16	9.7	24
7	6	5	4	**IZS**	2	2	3	4	4	5	4	4	4	3	2	1	1	2	3	3	2	5	5	3	6	3.3	24
8	2	2	**IZS**	1	1	2	8	13	27	40	31	8	7	9	11	2	2	3	1	0	1	0	0	0	**40**	7.4	24
9	0	**IZS**	0	12	2	0	0	2	3	4	2	0	2	1	1	1	1	1	0	0	0	1	0	0	12	1.4	24
10	**IZS**	1	1	2	1	0	0	0	4	1	1	1	2	1	1	1	1	1	0	0	2	2	2	**IZS**	4	1.1	24
11	1	1	1	1	1	1	1	2	2	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	1	1	1	1	**IZS**	1	2	1.0	24
12	1	0	1	2	5	10	14	11	10	8	7	6	5	**C**	4	2	1	1	1	1	1	**IZS**	2	1	14	4.3	24
13	0	0	0	0	3	1	1	2	4	4	2	1	1	0	1	0	0	0	0	2	**IZS**	5	5	2	5	1.5	24
14	4	1	1	3	3	10	14	11	11	2	1	2	1	1	2	2	2	1	1	**IZS**	2	3	2	1	14	3.5	24
15	1	1	1	1	1	1	1	1	2	3	2	2	2	2	2	2	2	2	**IZS**	3	4	3	2	2	4	1.9	24
16	2	2	2	1	1	1	7	5	3	3	4	3	2	2	5	2	1	**IZS**	0	0	0	0	0	0	7	2.0	24
17	0	3	2	1	0	0	0	1	3	1	3	7	4	11	22	10	**IZS**	5	0	0	0	0	0	0	22	3.2	24
18	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	**IZS**	0	0	0	0	0	0	1	1	5	0.3	24
19	1	0	0	0	0	0	0	3	5	2	3	1	1	1	**IZS**	0	0	0	2	4	6	6	5	4	6	1.9	24
20	3	3	3	3	2	4	10	12	7	5	3	4	3	**IZS**	4	3	1	0	0	0	0	0	0	0	12	3.0	24
21	0	0	0	3	0	0	0	0	0	0	0	1	**IZS**	2	4	4	5	6	7	3	5	0	0	1	7	1.8	24
22	1	1	1	2	1	1	1	1	1	2	1	**IZS**	3	2	1	1	0	0	0	0	0	0	0	0	3	0.9	24
23	0	0	0	0	1	0	0	0	0	0	**IZS**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	1	0.1	11
24	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
25	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.9	14
26	0	0	0	0	1	1	2	**IZS**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	3	1	0	1	1	3	2	3	2	3	1.3	24
27	2	1	2	2	3	4	**IZS**	9	9	6	3	2	1	0	0	0	0	0	2	1	2	3	3	2	9	2.5	24
28	3	1	0	0	0	**IZS**	1	1	2	2	4	3	2	2	2	2	2	3	4	6	6	3	1	1	6	2.2	24
29	2	3	2	2	**IZS**	6	9	13	5	2	1	1	0	3	0	0	0	0	1	0	0	0	1	0	13	2.2	24
30	0	1	0	**IZS**	0	**N**	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	23
31	3	1	**IZS**	1	5	10	5	5	4	1	0	0	0	0	0	0	0	5	12	11	6	7	7	2	12	3.7	24
HOURLY MAX	9	12	11	16	9	12	14	31	37	40	31	14	13	11	22	10	8	8	12	11	8	9	9	8			
HOURLY AVG	2.5	2.4	2.2	2.9	2.0	3.2	3.9	5.8	6.4	5.8	4.8	3.4	3.0	2.8	3.4	2.3	1.8	2.2	2.5	2.4	2.7	2.6	2.5	2.0			

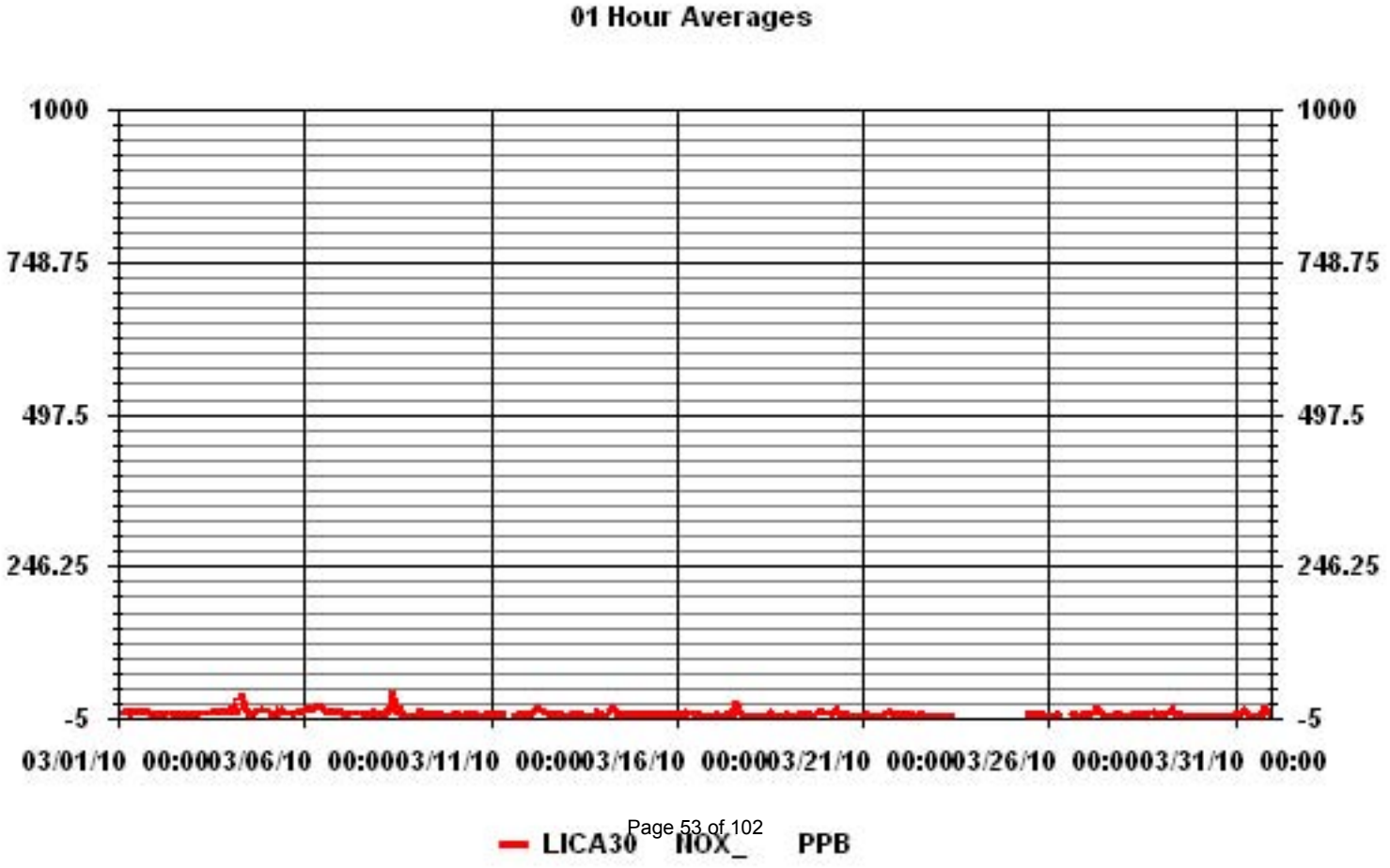
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	487						
MAXIMUM 1-HR AVERAGE:	40	PPB	@ HOUR(S)	9	ON DAY(S)	8	
MAXIMUM 24-HR AVERAGE:	10.8	PPB			ON DAY(S)	4	
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		696	HRS	
MONTHLY CALIBRATION TIME:	16	HRS	AMD OPERATION UPTIME:		93.5	%	
STANDARD DEVIATION:	4.35		MONTHLY AVERAGE:		3.13	PPB	


01 Hour Averages
1000
748.75
497.5
246.25
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 NOX_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

OXIDES OF NITROGEN MAX instantaneous maximum in ppb

MST

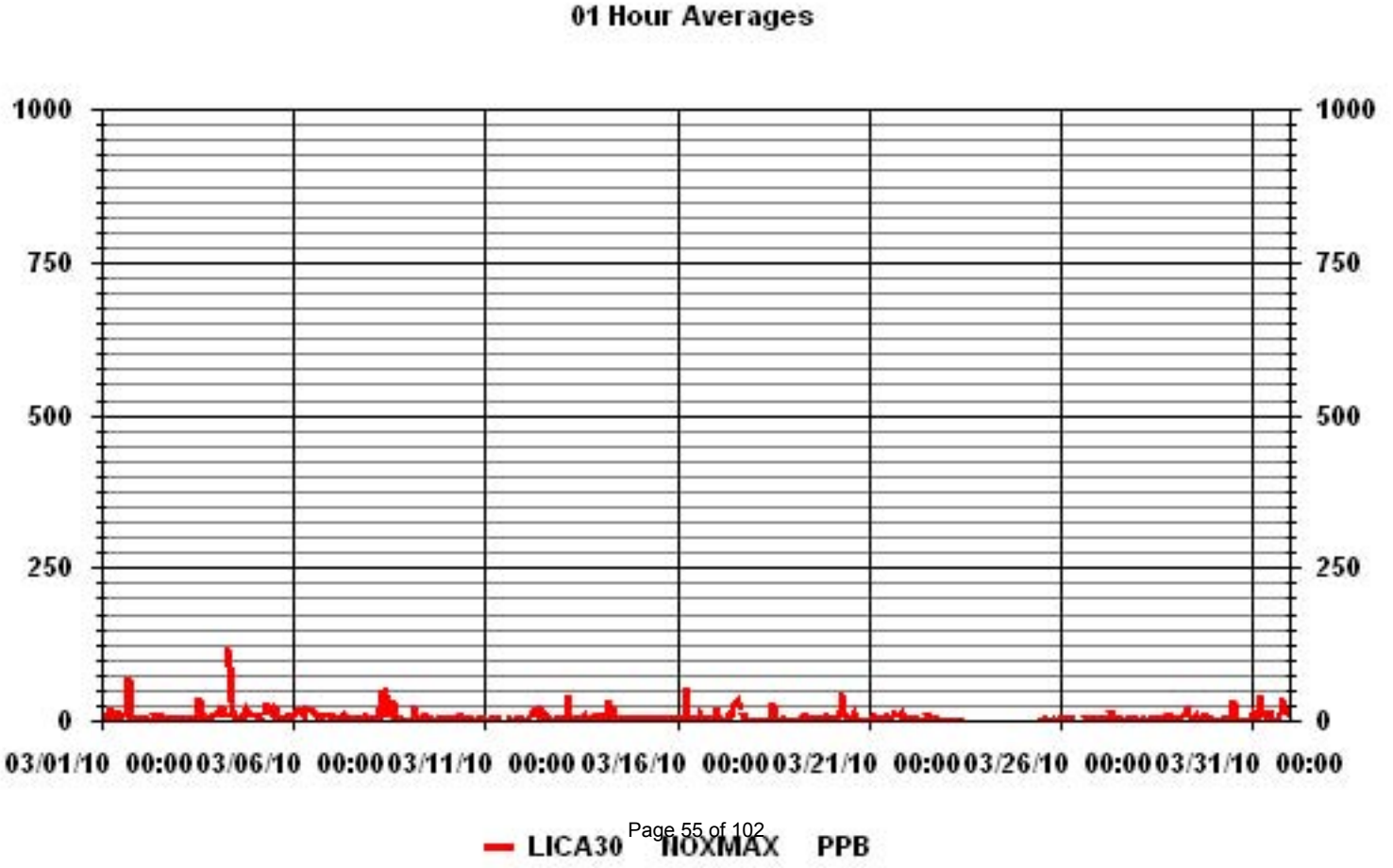
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	7	7	7	7	6	6	19	9	11	**IZS**	13	8	7	9	9	9	44	69	6	6	5	5	5	6	69	12.2	24
2	5	4	3	2	2	1	1	2	**IZS**	11	5	4	3	6	6	2	2	5	3	4	4	1	2	3	11	3.5	24
3	3	3	3	3	4	3	4	**IZS**	5	5	4	5	6	37	6	7	10	9	5	6	8	7	8	8	37	6.9	24
4	13	14	14	25	11	10	**IZS**	**113**	90	33	21	11	4	3	3	6	6	10	17	10	11	10	10	9	**113**	19.7	24
5	9	9	8	6	4	**IZS**	16	28	10	17	20	6	26	6	8	5	6	5	5	6	7	6	6	7	28	9.8	24
6	9	12	15	15	**IZS**	16	13	23	22	17	17	16	15	11	11	7	7	6	7	8	10	9	8	7	23	12.2	24
7	7	6	5	**IZS**	3	3	4	10	6	5	5	5	4	4	3	2	2	3	4	4	3	7	6	4	10	4.6	24
8	3	3	**IZS**	2	2	3	18	17	46	48	44	9	9	26	32	5	9	7	3	2	3	1	2	1	48	12.8	24
9	0	**IZS**	6	24	7	1	1	4	5	8	5	1	7	3	3	3	4	2	1	1	1	1	1	1	24	3.9	24
10	**IZS**	1	1	5	3	1	0	1	9	2	2	2	2	3	1	2	2	2	1	1	3	3	2	**IZS**	9	2.2	24
11	2	2	1	1	1	2	2	2	2	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	1	2	1	1	1	**IZS**	1	2	1.4	24
12	1	1	2	4	7	14	16	15	12	10	19	17	**C**	**C**	6	6	2	2	2	1	1	**IZS**	5	1	19	6.9	24
13	1	1	1	1	43	2	2	3	4	5	3	2	2	1	7	0	0	0	2	2	**IZS**	7	6	4	43	4.3	24
14	8	7	2	8	7	33	26	15	16	6	2	3	3	2	3	3	3	2	3	**IZS**	4	4	3	3	33	7.2	24
15	1	1	1	1	1	1	2	2	2	3	3	3	3	5	4	3	2	2	**IZS**	5	5	3	3	3	5	2.6	24
16	2	3	3	2	2	2	55	9	5	3	6	4	3	3	12	8	2	**IZS**	1	1	1	1	1	1	55	5.7	24
17	0	19	7	4	1	2	1	4	12	4	14	25	25	29	33	24	**IZS**	10	1	0	1	1	0	0	33	9.4	24
18	0	0	0	0	0	1	0	0	1	0	2	1	30	1	1	**IZS**	1	0	1	1	1	1	2	1	30	2.0	24
19	2	1	0	0	0	1	1	7	8	3	5	4	2	5	**IZS**	1	1	1	3	5	7	7	6	5	8	3.3	24
20	4	4	4	4	3	9	16	44	10	10	5	5	6	**IZS**	6	12	4	1	1	0	0	0	0	0	44	6.4	24
21	0	0	5	7	0	0	1	1	0	4	4	8	**IZS**	6	7	11	11	11	9	10	13	2	1	2	13	4.9	24
22	2	2	3	3	2	3	2	2	2	4	3	**IZS**	11	8	8	4	1	1	1	1	1	0	0	0	11	2.8	24
23	0	0	0	1	2	1	1	0	0	1	**IZS**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	2	0.6	11
24	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
25	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	2	1	2	2	2	2	1	1	2	2	1	2	2	2	1.7	14
26	1	1	1	1	1	2	6	**IZS**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	7	2	1	1	2	6	4	6	3	7	2.8	24
27	2	2	2	3	4	6	**IZS**	12	13	7	5	5	1	1	1	1	0	0	5	3	3	4	4	3	13	3.8	24
28	4	2	1	1	1	**IZS**	1	2	3	3	5	4	4	4	3	3	3	6	6	6	7	7	2	2	7	3.5	24
29	3	5	4	5	**IZS**	11	16	19	9	3	2	2	2	7	1	1	0	3	12	0	0	2	2	1	19	4.8	24
30	1	2	1	**IZS**	1	**N**	2	2	1	1	2	3	31	2	0	0	0	0	0	0	0	0	0	0	31	2.2	23
31	12	9	**IZS**	3	12	40	11	10	13	9	1	15	0	0	1	0	1	10	31	29	12	17	16	10	40	11.4	24
HOURLY MAX	13	19	15	25	43	40	55	113	90	48	44	25	31	37	33	24	44	69	31	29	13	17	16	10			
HOURLY AVG	3.6	4.3	3.7	5.1	4.8	6.7	8.8	13.2	11.7	8.5	8.3	6.5	8.3	7.4	6.8	5.0	4.6	6.1	4.8	4.2	4.3	4.0	3.9	3.1			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	592					
MAXIMUM INSTANTANEOUS VALUE:	113	PPB	@ HOUR(S)	7	ON DAY(S)	4
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		696	HRS
MONTHLY CALIBRATION TIME:	17	HRS				
STANDARD DEVIATION	9.48					


01 Hour Averages
1000
750
500
250
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 NOXMAX PPB

LICA30
NOX_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 30
Site Name : LICA30
Parameter : NOX_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	5.23	3.69	6.46	6.30	4.61	4.92	9.23	6.00	5.69	16.92	10.92	3.53	6.30	3.38	3.38	3.38	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	5.23	3.69	6.46	6.30	4.61	4.92	9.23	6.00	5.69	16.92	10.92	3.53	6.30	3.38	3.38	3.38	

Calm : .00 %

Total # Operational Hours : 650

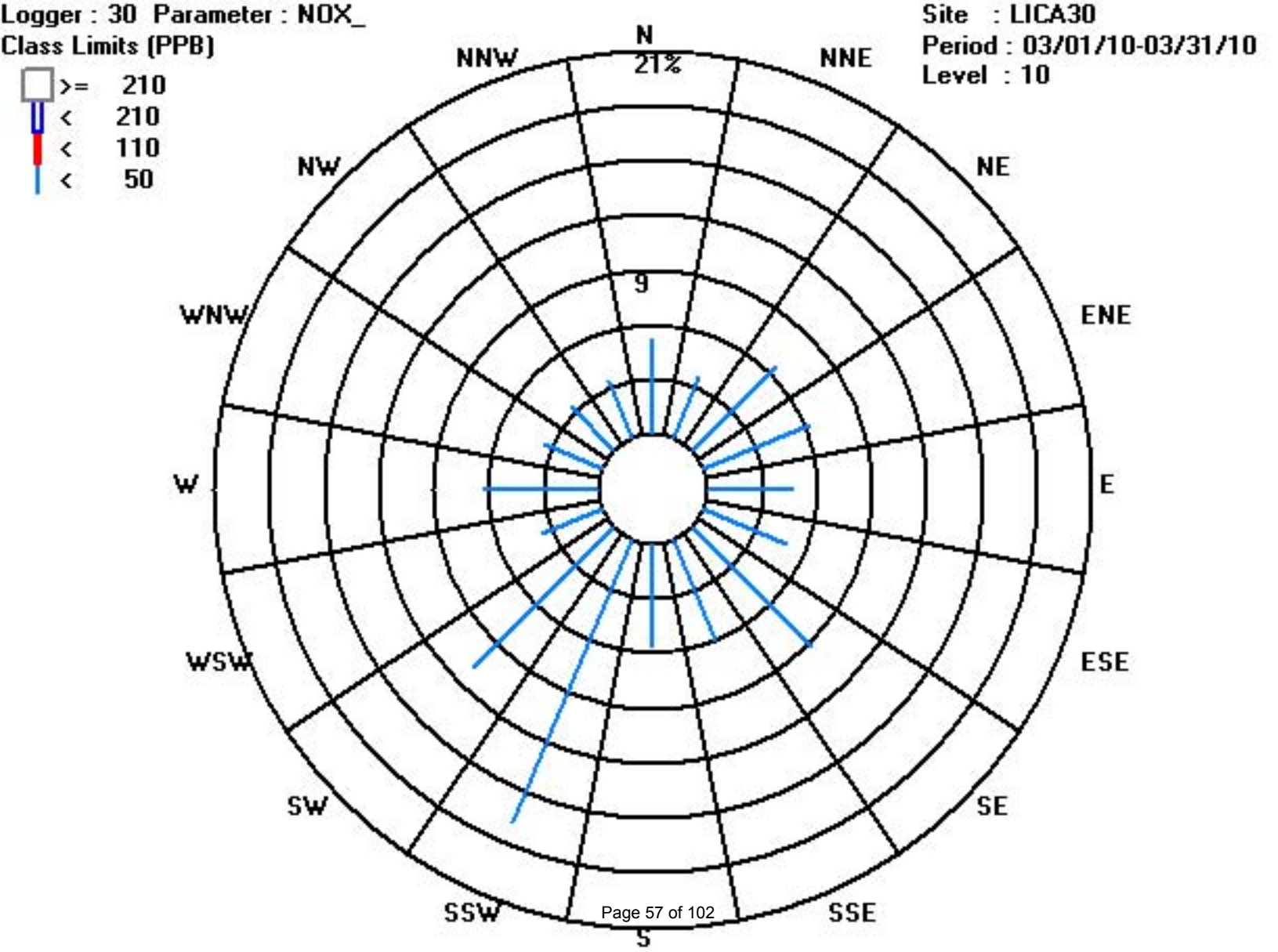
Distribution By Samples

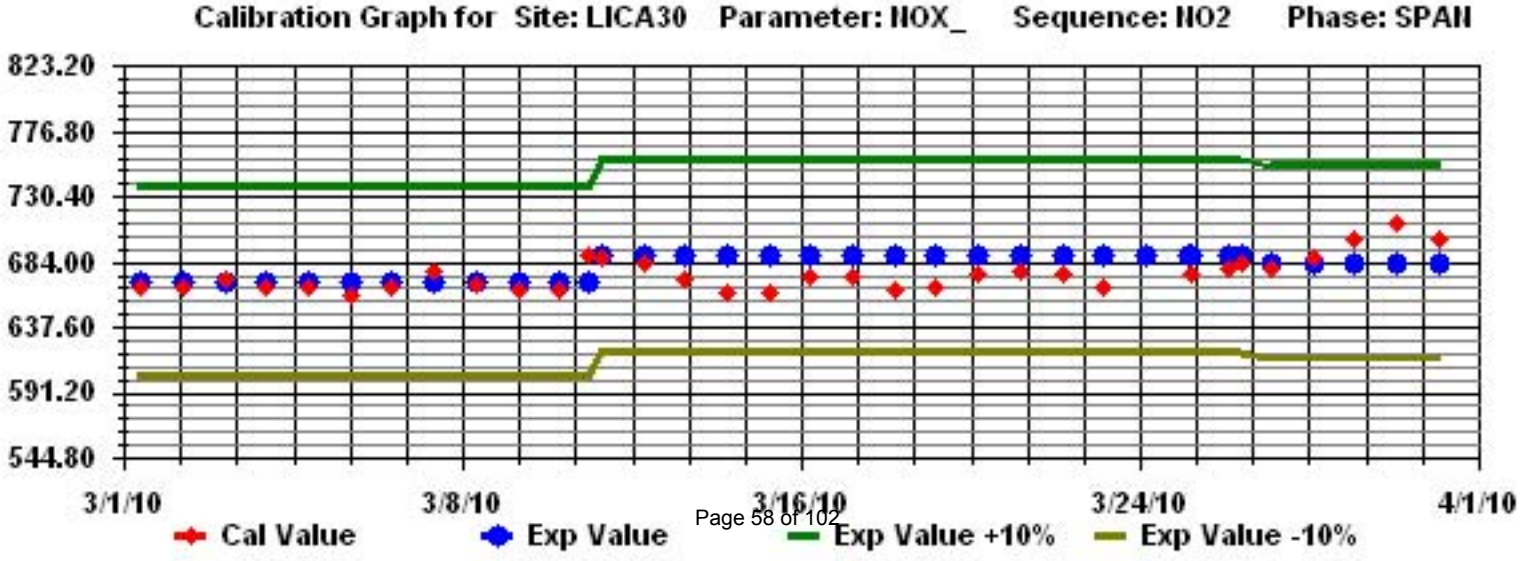
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	34	24	42	41	30	32	60	39	37	110	71	23	41	22	22	22	650
< 110																	
< 210																	
>= 210																	
Totals	34	24	42	41	30	32	60	39	37	110	71	23	41	22	22	22	

Calm : .00 %

Total # Operational Hours : 650


Logger : 30 Parameter : NOX_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA30
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA30 Parameter: NOX_ Sequence: NO2 Phase: SPAN
823.20
776.80
730.40
684.00
637.60
591.20
544.80
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Temperature

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

MARCH 2010

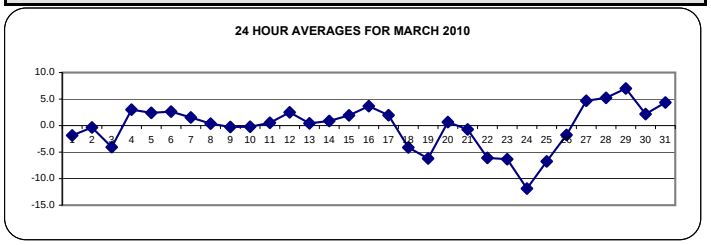
AMBIENT TEMPERATURE hourly averages (Degrees C)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	-5.5	-6.3	-6.9	-9.1	-9.5	-10	-10.3	-10.8	-7.9	-2.4	2.2	3.3	4.6	5.3	5.8	6.4	6.3	4.7	1.1	-0.4	-0.6	-0.9	-0.8	-2.8	6.4	-1.9	24
2	-3.8	-5.5	-6.6	-7.5	-8.3	-8.8	-9.4	-8.2	-5.2	-0.1	2.9	5	7.1	7.8	8.1	8.1	6.9	4.7	2.8	2	1.3	0.3	-0.5	-1.6	8.1	-0.4	24
3	-2.6	-3.5	-4.5	-5.5	-5.7	-6	-6.1	-6.2	-5.9	-5.7	-5.1	-4.4	-3.2	-2.2	-1.9	-1.7	-2.5	-2.9	-3.6	-3.8	-3.8	-4	-3.5	-3.1	-1.7	-4.1	24
4	-3	-2.8	-2.7	-2.5	-2.6	-2	-1.6	-2.2	-1	3.1	5.4	10	11.8	12.1	11	11	8.9	6.3	4.8	3.3	2.4	2.8	1.1	-1.4	12.1	3.0	24
5	-0.8	0.2	-2.4	-4	-4.9	-5.1	-6	-5.4	-1.1	4.6	7.1	8.1	8.9	9.9	10.5	10.9	10.1	7.8	5.1	2.8	1.7	0.8	-0.1	-0.9	10.9	2.4	24
6	-1.5	-1.7	-2.1	-2.4	-2.8	-3.3	-4.6	-4.3	-0.4	1.6	4.6	6.8	9.1	9.8	10.5	10.6	9.6	7.2	4.8	3.7	2.5	2.1	2	1.5	10.6	2.6	24
7	-0.4	-3	-4.3	-4.9	-5.7	-6.3	-5.8	-5.3	-1.9	2.8	4.7	6.5	8.2	9.6	10.6	11.3	10.4	6.9	3.8	0.8	1.1	0.8	-0.3	-2.7	11.3	1.5	24
8	-3.5	-4.2	-4.8	-5.1	-4.6	-4.1	-4.3	-4.4	-3.3	-2.2	-0.6	2.3	5.7	9.8	10	9.2	7.5	4.3	1.7	0.6	0	-0.5	-0.1	-0.6	10.0	0.4	24
9	-1.3	-1.6	-2.7	-2.8	-3.4	-4.6	-6	-5.5	-2.8	-0.4	2	2.9	4.8	5.1	5.5	4.8	3.3	2.1	-0.1	-1.7	-1.8	-1.6	-0.5	0	5.5	-0.3	24
10	-0.9	-1.9	-2.2	-2	-2.2	-2.4	-2.5	-2.3	-1.2	-0.1	1.2	1.8	2.2	2.4	1.3	2	1.2	0.6	0.2	0	0	0	0	-0.3	2.4	-0.2	24
11	-0.9	-1	-1.3	-1.9	-2.5	-3.9	-4.8	-3.4	-0.7	0.3	2.1	2.9	4.4	5.5	6.2	5.6	5.1	3	1.2	0.2	0	-0.5	-1.2	-1.8	6.2	0.5	24
12	-3.9	-4.5	-5.4	-4.3	-3.8	-4.2	-5	-4.3	-1.3	1.3	4.7	6.7	8.1	9.9	10	11.3	11.1	9.1	7.2	5.8	4.8	4.2	1.9	0.5	11.3	2.5	24
13	-0.4	-0.4	-1.3	-1.7	-2.2	-3	-3.3	-1.6	1.4	4.4	5.5	4.8	5	4.5	3.4	3.9	3.5	3	0.4	-1.5	-3	-3.7	-4	-3.5	5.5	0.4	24
14	-3.7	-4.4	-6.3	-7.3	-7.7	-8.3	-9.1	-6.9	-1.5	2.3	4.4	6	7.4	7.8	8.2	8.3	8	6.6	4.2	3.7	3.6	2.7	1.9	1	8.3	0.9	24
15	0.3	-0.1	-0.6	-0.7	-0.7	-0.6	-0.5	-0.1	0.6	2.2	3.5	4	4.7	6.1	6.7	7.3	7.1	6	3.8	1.4	2	-0.8	-2.3	-3	7.3	1.9	24
16	-3.9	-3.9	-4.4	-4.4	-4.3	-4.2	-3.9	-3.2	-0.8	2.7	7.1	9.3	10.6	12.1	12.5	13.3	13.6	11.2	7.7	5.7	3.2	3.8	4.1	4.1	13.6	3.7	24
17	4.2	4	4.7	4.3	4.2	4.4	3.9	3.2	3	3.5	3.1	1.5	0.9	1.2	0.6	0.8	0.6	0.4	0.3	0.2	0.1	0	-0.7	-1.5	4.7	2.0	24
18	-1.9	-2.4	-2.8	-2.9	-3.2	-3.5	-3.8	-4.2	-4	-3.6	-3.5	-3.2	-3.1	-3.1	-3.4	-3.9	-4.1	-4.3	-5.5	-5.8	-5.9	-6.4	-6.9	-7.6	-1.9	-4.1	24
19	-9.1	-10.2	-11	-11.7	-11.9	-11	-10.7	-10	-8.8	-7.5	-6	-4.3	-3.1	-2.5	-0.6	-0.4	-0.7	-2.1	-3.6	-4.4	-4.7	-4.9	-4.7	-4.7	-0.4	-6.2	24
20	-4.8	-4.1	-4	-3.4	-3.7	-3.9	-4.1	-2.7	-0.5	3.1	5.1	6.3	8.9	7.6	6.7	6.1	5.1	3.4	1.2	-0.3	-0.8	-1.6	-1.9	-1.9	8.9	0.7	24
21	-2.3	-2.9	-3.7	-4.1	-4.7	-6.1	-6.7	-5.8	-3.5	-1	0.2	2.5	2.9	3.7	4	3.7	3	2.2	1.2	0.2	-0.4	0	0.1	0.1	4.0	-0.7	24
22	0	-0.2	-0.8	-3.8	-6.7	-8.7	-10.5	-10.1	-9.3	-7.5	-6.4	-5.3	-3.1	-2.3	-2.5	-2.5	-3.4	-4.5	-6	-8.7	-9.6	-10.3	-11.4	-12.5	0.0	-6.1	24
23	-13.4	-13.4	-12.2	-11.3	-10.2	-10.3	-10.5	-9.9	-8.4	-5.9	-1.9	0.1	-1.4	-1.4	-0.5	-0.3	-0.8	-2	-4.2	-5.5	-6.5	-7.1	-7.3	-7.7	0.1	-6.3	24
24	-8.1	-9.5	-11.1	-13.3	-14.6	-15.9	-16.9	**-17.2**	-16.7	-15.7	-14	-12.6	-10.7	-9.5	-7.9	-7.9	-8.5	-9.3	-11.4	-11.4	-11	-10.9	-10.4	-10.4	-7.9	-11.9	24
25	-10.6	-10.8	-10.8	-10.7	-10.6	-10.4	-10.2	-9.7	-8.9	-8.2	-7.4	-6	-5.2	-4.2	-3.6	-3.4	-3.5	-3.7	-3.9	-3.9	-3.8	-3.9	-4.1	-4.4	-3.4	-6.7	24
26	-4.6	-4.8	-4.8	-4.8	-4.8	-4.7	-4.7	-3.8	-1.8	-1.4	-0.9	0	1	1.4	1.5	1.7	1	0.5	-0.1	-1.9	-2.1	-1.8	-1.3	-1.2	1.7	-1.8	24
27	-0.9	-0.5	-0.6	-1.2	-1.6	-1.6	-1.4	-0.2	2.3	5.4	8.5	9.5	10.5	11.1	11	11.4	11.8	10.6	8.2	6.4	5.5	4.8	3.3	0	11.8	4.7	24
28	0.1	-0.9	-2.9	-3.4	-4	-4.1	-3.6	-1	2.4	6.9	8	10	11.7	12.7	12.9	12.7	12.3	11.7	10.3	9.1	6.2	7.6	6.3	4.5	12.9	5.2	24
29	3.5	3.2	2	0.6	-0.4	0	-1.5	2.9	7	9.3	10.5	11.8	13.2	**13.9**	13	13.6	12.8	11.2	8.8	7.3	6.2	6.5	6.3	6.3	**13.9**	**7.0**	24
30	6.6	5.4	3.9	2.9	2.4	**N**	2.8	2.2	1.3	0.7	0.5	1	1.1	1.7	2.1	2.2	2	1.5	1.2	1.4	1.5	1.6	1.9	2	6.6	2.2	23
31	2.1	2.1	1.9	2.2	2.2	2.2	2.2	2.6	3.8	5.7	6.7	7.4	8.1	8.1	7.1	6.4	5.8	5.5	4.8	4.3	3.7	3.7	3.5	2.3	8.1	4.4	24
HOURLY MAX	6.6	5.4	4.7	4.3	4.2	4.4	3.9	3.2	7.0	9.3	10.5	11.8	13.2	13.9	13.0	13.6	13.6	11.7	10.3	9.1	6.2	7.6	6.3	6.3			
HOURLY AVG	-2.4	-2.9	-3.6	-4.1	-4.5	-5.0	-5.1	-4.4	-2.4	-0.1	1.7	3.1	4.2	5.0	5.1	5.2	4.6	3.3	1.5	0.3	-0.3	-0.6	-1.0	-1.7			

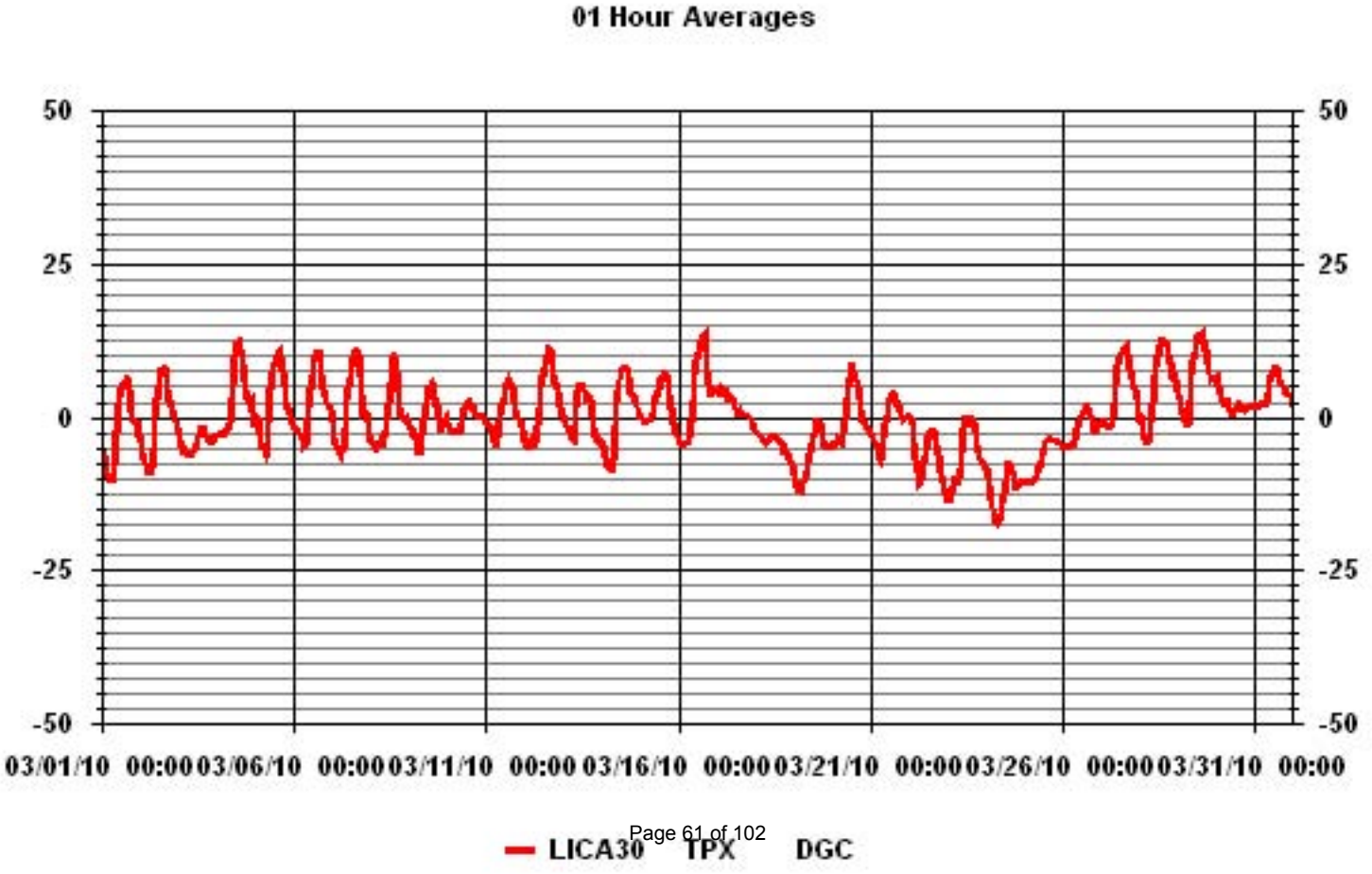
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	-17.2	^{O}C	@ HOUR(S)	7	ON DAY(S)	24	
MAXIMUM 1-HR AVERAGE:	13.9	^{O}C	@ HOUR(S)	13	ON DAY(S)	29	
MAXIMUM 24-HR AVERAGE:	7.0	^{O}C			ON DAY(S)	29	
CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:		743	HRS	
			AMD OPERATION UPTIME:		99.9	%	
STANDARD DEVIATION:	5.89		MONTHLY AVERAGE:		-0.15	^{O}C	


01 Hour Averages
50
25
0
-25
-50
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 TPX DGC

Precipitation

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

MARCH 2010

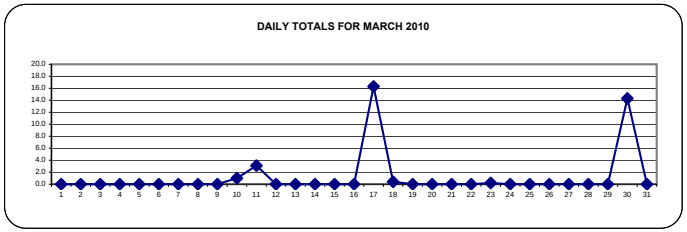
PRECIPITATION hourly averages (mm)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	DAILY	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	TOTAL	RDGS.
DAY																											
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
10	0	0	0	0.1	0	0.1	0.1	0	0.1	0	0.1	0.1	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0.2	1.0	24
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.1	0	0	0	0	0	0	0	3.1	3.1	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
17	0	0	0	0	0	0	0	0.1	0.5	0.1	0	3.1	**3.7**	1.5	2.4	1.2	1.4	1	0.4	0.4	0.4	0.1	0	0	**3.7**	**16.3**	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.1	0	0	0.3	0.4	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
23	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
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	0.0	24
30	0.1	0	0	0	0	**N**	0	1.1	0.7	2.6	2.7	1.1	1.2	0.5	0.3	0.4	0.6	0.9	1	1	0.1	0	0	0	2.7	14.3	23
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	0.0	24
HOURLY MAX	0.1	0.0	0.0	0.1	0.0	0.1	0.1	1.1	0.7	2.6	2.7	3.1	3.7	1.5	2.4	1.2	3.1	1.0	1.0	1.0	0.4	0.1	0.0	0.0			

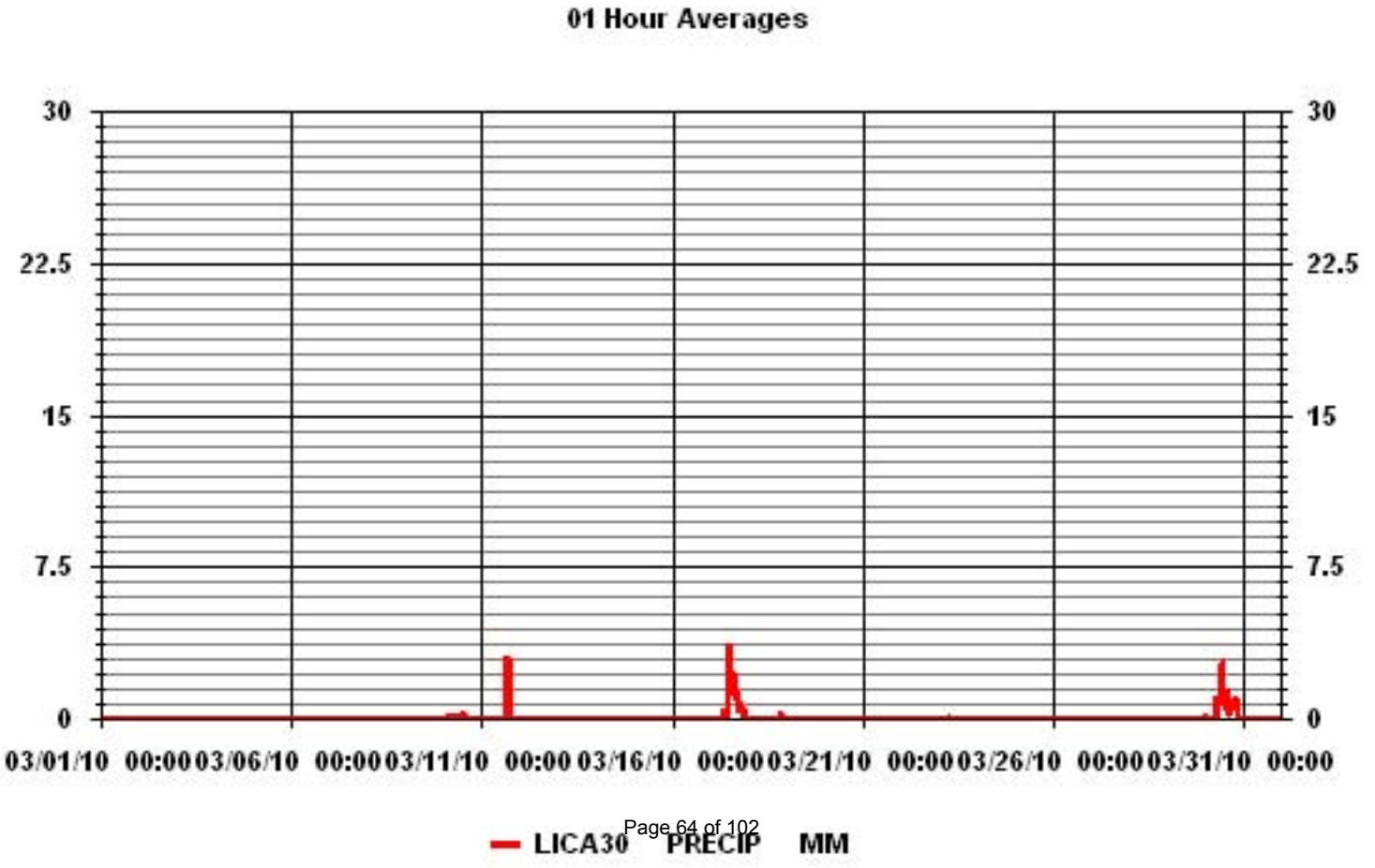
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	MD	-MISSING DATA



MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		3.7	MM	HOUR(S)	12	ON DAY(S)	17
MAXIMUM DAILY TOTAL		16.3	MM			ON DAY(S)	17
MONTHLY TOTAL		35.3	MM				
CALIBRATION TIME:	0	HRS		OPERATIONAL TIME:		743	HRS
				AMD OPERATION UPTIME:		99.9	%
STANDARD DEVIATION:	0.30			MONTHLY AVERAGE:		0.05	MM


01 Hour Averages
30
22.5
15
7.5
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 PRECIP MM

Relative Humidity

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

MARCH 2010

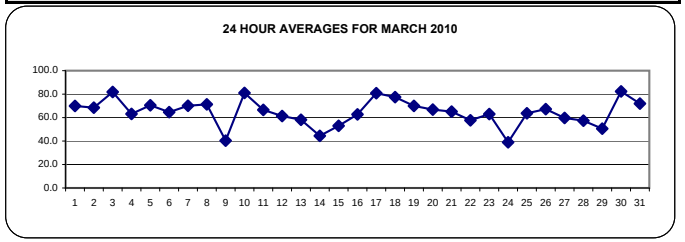
RELATIVE HUMIDITY hourly averages (%)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	84	86	86	83	83	82	82	81	76	65	57	56	53	52	51	50	50	54	66	72	74	77	76	82	86	69.9	24
2	83	84	86	85	85	84	84	84	79	69	60	53	47	45	46	47	51	57	64	67	69	71	71	72	86	68.5	24
3	73	75	77	79	80	83	86	86	85	85	84	83	82	79	77	76	80	82	84	85	86	86	86	85	86	81.8	24
4	85	85	84	83	84	82	80	81	77	65	57	40	31	30	33	35	40	51	56	60	63	63	70	80	85	63.1	24
5	81	78	84	83	84	85	86	84	71	65	63	61	56	53	50	49	51	55	61	70	75	79	83	85	86	70.5	24
6	87	87	88	88	88	88	87	86	78	70	58	48	41	39	37	36	39	45	52	55	60	62	65	68	88	64.7	24
7	75	80	83	84	84	85	87	85	78	71	64	59	54	50	46	42	43	53	64	75	76	78	81	85	87	70.1	24
8	87	87	87	87	87	88	88	87	86	87	87	79	66	45	41	43	47	58	64	67	67	68	62	46	88	71.3	24
9	43	43	46	48	51	56	62	61	53	48	39	31	26	22	19	19	20	23	27	41	45	48	44	53	62	40.3	24
10	69	78	80	84	85	86	86	85	82	79	75	74	75	75	82	78	79	81	84	84	85	87	87	84	87	81.0	24
11	82	80	76	74	75	80	83	79	70	65	57	54	48	46	44	45	44	54	64	70	73	76	79	80	83	66.6	24
12	84	85	86	87	85	85	86	82	74	67	54	46	43	37	35	30	30	35	41	49	55	60	66	70	87	61.3	24
13	75	76	79	80	82	85	86	73	55	45	39	38	36	37	42	38	40	42	48	57	64	63	63	52	86	58.1	24
14	49	50	57	61	61	68	74	66	50	31	29	30	28	28	29	31	33	36	42	42	42	42	43	44	74	44.4	24
15	45	46	49	50	52	54	52	50	49	46	46	48	48	45	45	44	45	48	55	63	62	73	77	80	80	53.0	24
16	82	83	83	83	82	81	82	81	76	67	53	46	43	41	41	38	37	43	52	58	66	62	61	64	83	62.7	24
17	65	67	66	72	70	69	73	75	80	84	86	87	87	85	88	87	88	89	89	89	89	87	84	83	**89**	80.8	24
18	84	83	84	83	83	84	83	81	78	75	74	72	71	70	69	69	70	70	76	80	82	81	79	78	84	77.5	24
19	79	78	77	77	79	77	76	74	74	72	69	63	60	59	55	54	56	62	69	72	73	75	75	74	79	70.0	24
20	75	72	72	71	76	78	78	73	68	55	52	52	46	48	51	51	57	65	71	74	77	81	81	80	81	66.8	24
21	79	80	78	75	75	80	80	75	64	56	54	49	50	49	49	51	54	58	63	67	70	68	68	70	80	65.1	24
22	71	73	75	72	70	70	69	64	60	55	52	48	41	39	40	38	41	43	49	60	60	61	65	69	75	57.7	24
23	71	72	69	70	72	74	77	76	72	65	55	49	53	53	50	50	52	54	60	62	65	66	64	61	77	63.0	24
24	58	55	59	60	62	52	47	44	45	35	28	25	23	20	21	21	22	25	36	38	36	39	41	43	62	39.0	24
25	44	45	47	49	54	59	61	61	63	65	65	61	60	60	62	66	70	73	78	79	77	77	76	76	79	63.7	24
26	78	82	81	81	81	80	79	76	67	64	60	55	51	51	52	52	55	58	61	68	69	69	69	74	82	67.2	24
27	75	79	82	85	87	88	87	82	73	60	47	43	38	36	36	35	35	37	43	47	52	55	60	71	88	59.7	24
28	72	76	82	84	84	84	82	75	67	47	46	41	38	36	37	38	41	42	46	49	58	48	50	54	84	57.4	24
29	57	59	64	69	73	72	78	64	51	38	35	34	32	31	28	28	32	39	46	50	54	55	63	62	78	50.6	24
30	58	62	71	74	75	**N**	77	82	87	88	88	87	87	86	85	85	86	87	88	88	88	88	88	88	88	**82.3**	23
31	87	87	87	86	86	84	84	83	79	72	68	63	59	57	59	63	65	61	63	63	66	66	67	71	87	71.9	24
HOURLY MAX	87	87	88	88	88	88	88	87	87	88	88	87	87	86	88	87	88	89	89	89	89	88	88	88			
HOURLY AVG	72.2	73.3	75.0	75.7	76.6	77.4	78.1	75.4	69.9	63.1	58.1	54.0	50.7	48.5	48.4	48.0	50.1	54.2	60.1	64.5	67.0	68.1	69.2	70.5			

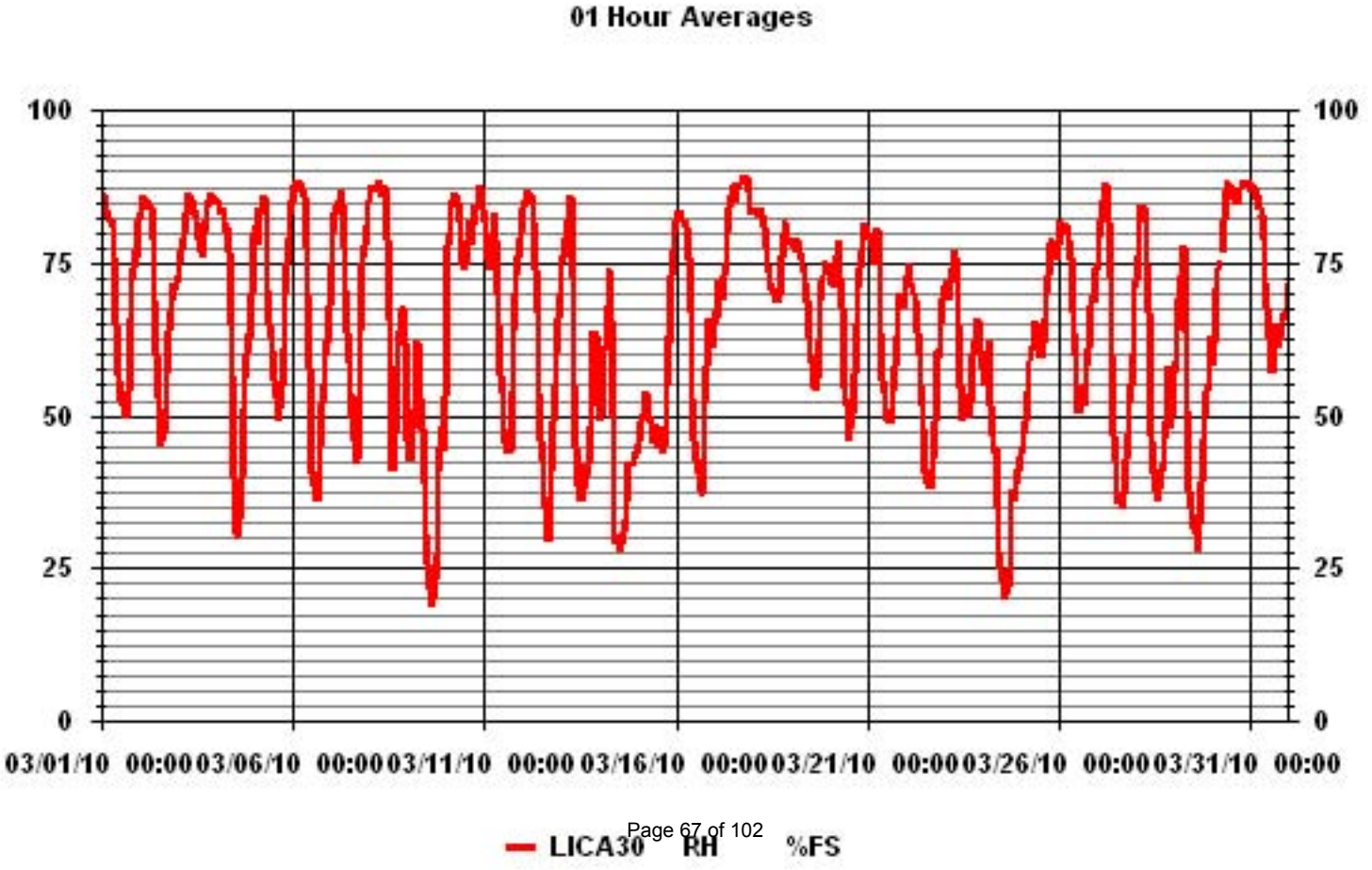
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		89	%	@ HOUR(S)	VAR	ON DAY(S)	17
MAXIMUM 24-HR AVERAGE:		82.3	%			ON DAY(S)	30
						VAR-VARIOUS	
CALIBRATION TIME:	0	HRS		OPERATIONAL TIME:		743	HRS
				AMD OPERATION UPTIME:		99.9	%
STANDARD DEVIATION:	17.38			MONTHLY AVERAGE:		64.49	%


01 Hour Averages
100
75
50
25
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 RH %FS

Barometric Pressure

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

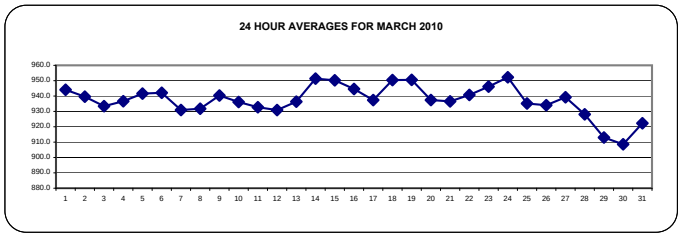
BAROMETRIC PRESSURE hourly averages (millibar)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	943	943	943	943	943	943	943	943	944	944	946	946	946	946	945	945	945	945	944	944	944	943	944	943	946	944.1	24
2	943	943	942	942	942	941	941	941	941	941	941	941	941	941	940	939	938	938	937	936	936	935	935	935	943	939.6	24
3	934	934	934	933	933	933	933	933	933	933	933	934	934	934	934	934	933	933	934	934	933	933	933	933	934	933.4	24
4	933	933	933	934	934	935	935	935	936	937	937	938	938	938	938	938	938	938	938	938	938	939	939	939	939	936.6	24
5	939	940	940	940	940	940	940	940	942	943	943	944	943	943	943	943	942	942	942	941	942	942	942	942	944	941.6	24
6	943	942	943	943	943	943	943	943	944	944	944	945	944	944	943	943	942	941	940	940	939	939	938	938	945	942.1	24
7	937	936	935	934	934	934	933	932	932	932	932	932	932	931	930	929	929	928	928	927	927	926	926	926	937	930.9	24
8	926	926	926	926	927	927	927	928	928	929	930	931	932	933	933	934	935	936	936	937	938	938	939	940	940	931.8	24
9	940	941	941	941	941	941	941	941	942	942	943	943	942	942	941	940	940	939	938	938	938	937	938	938	943	940.3	24
10	938	937	937	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	935	936	936	936	936	936	938	936.1	24
11	936	936	936	936	935	935	935	935	935	935	935	934	934	933	932	931	931	930	930	929	928	928	928	928	936	932.7	24
12	928	929	929	930	931	931	932	932	933	933	934	934	934	933	932	931	931	931	930	930	929	928	928	928	934	930.9	24
13	928	928	928	928	929	929	930	931	932	933	935	936	937	939	940	940	941	942	943	943	944	945	945	946	946	936.3	24
14	947	948	948	949	950	950	950	950	952	953	954	954	954	954	953	953	953	952	952	952	951	951	951	951	954	951.3	24
15	951	950	950	949	949	949	949	949	950	950	950	951	951	951	951	951	951	951	951	951	950	951	950	950	951	950.3	24
16	950	950	949	948	947	947	947	947	947	947	947	946	946	945	944	943	943	942	941	940	939	939	938	938	950	944.6	24
17	937	937	937	937	937	937	936	935	936	936	936	936	936	936	936	937	937	938	939	940	940	939	940	942	942	937.4	24
18	943	944	945	945	946	947	947	948	949	949	951	951	952	952	953	953	954	954	954	954	954	955	955	955	955	950.4	24
19	955	955	956	956	956	955	954	954	954	954	953	953	952	951	950	949	948	947	946	945	944	943	942	941	**956**	950.5	24
20	940	939	938	937	937	937	936	935	936	937	937	937	938	938	937	937	938	937	937	938	938	938	938	938	940	937.4	24
21	938	938	938	938	938	938	938	938	938	938	938	938	938	937	937	936	935	935	934	934	934	934	934	933	938	936.5	24
22	933	934	934	935	936	937	938	939	940	941	942	942	943	943	943	943	943	943	944	944	945	945	945	945	945	940.7	24
23	945	945	946	945	945	945	945	945	945	946	946	946	946	946	947	947	947	947	947	946	947	947	948	948	948	946.1	24
24	949	950	951	952	953	954	955	955	955	955	955	955	955	955	954	954	953	952	951	949	948	948	948	947	955	**952.2**	24
25	946	945	943	942	941	940	939	938	937	936	935	934	934	933	932	932	931	930	930	930	929	929	929	929	946	935.2	24
26	929	929	930	930	930	930	931	932	933	933	934	935	935	936	936	937	937	937	937	937	937	937	937	938	938	934.0	24
27	938	938	938	938	938	938	938	938	939	940	941	941	941	941	941	941	940	940	940	939	939	938	938	938	941	939.2	24
28	938	937	936	935	934	933	932	931	930	930	929	928	928	926	926	925	924	923	923	922	921	921	921	921	938	928.1	24
29	920	920	920	919	919	919	918	918	918	917	916	915	913	912	911	910	909	908	906	905	904	905	905	905	920	913.0	24
30	905	905	905	905	905	**N**	906	906	906	907	907	908	908	908	908	910	911	911	911	912	913	913	914	914	914	908.6	23
31	915	916	916	917	917	918	919	920	920	921	922	923	923	924	924	925	925	926	926	927	927	928	928	928	928	922.3	24
HOURLY MAX	955	955	956	956	956	955	955	955	955	955	955	955	955	955	954	954	954	954	954	954	954	955	955	955			
HOURLY AVG	937	937	937	937	937	938	937	937	938	938	938	938	938	938	938	938	937	937	937	937	937	936	937	937			

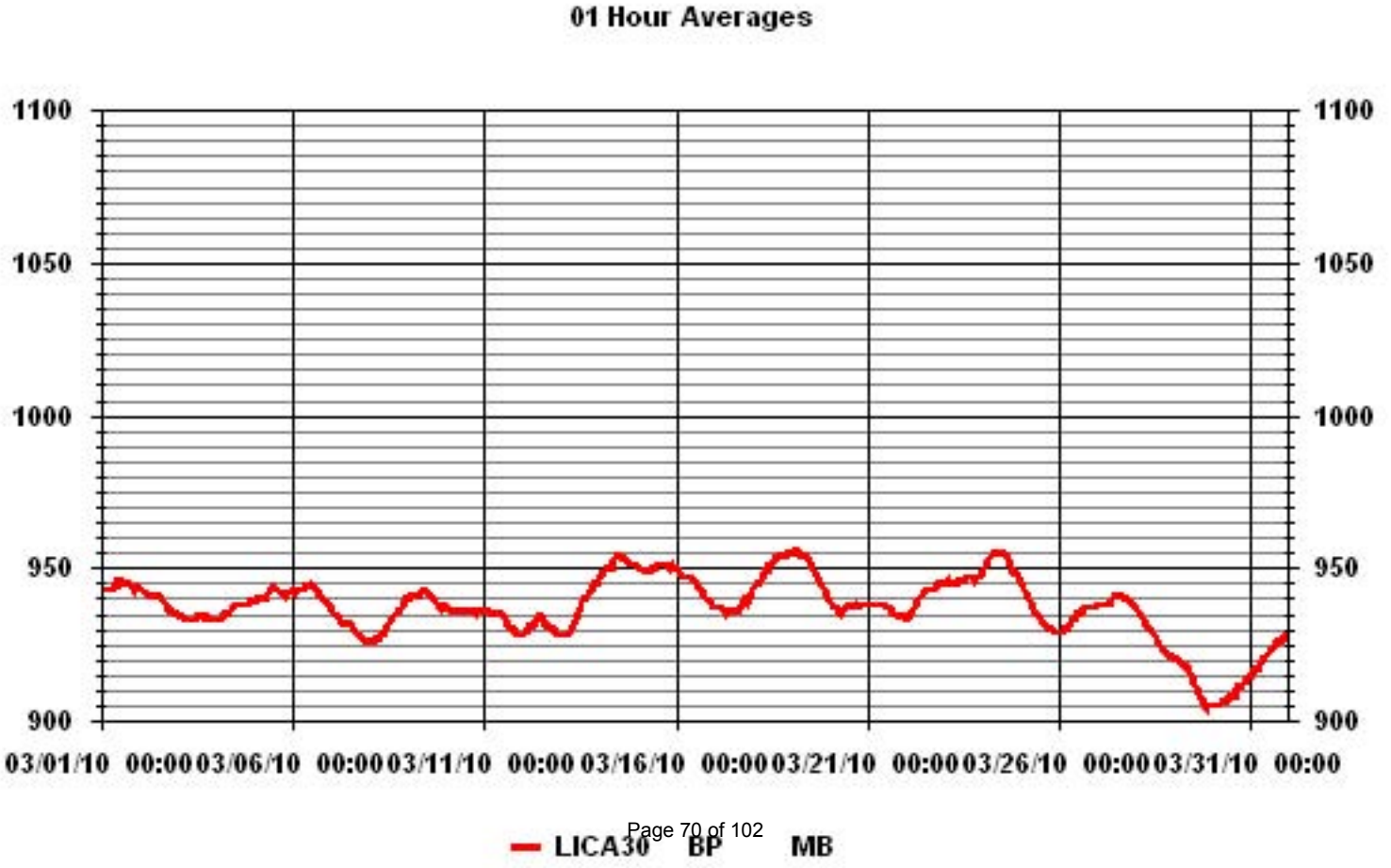
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		956	MB	@ HOUR(S)	VAR	ON DAY(S) 19
MAXIMUM 24-HR AVERAGE:		952.2	MB			ON DAY(S) 24
					VAR-VARIOUS	
CALIBRATION TIME:	0	HRS		OPERATIONAL TIME:		743 HRS
				AMD OPERATION UPTIME:		99.9 %
STANDARD DEVIATION:	10.42			MONTHLY AVERAGE:		937 MB


01 Hour Averages
1100
1050
1000
950
900
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 BP MB

Vector Wind Speed

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION -MASKWA

MARCH 2010

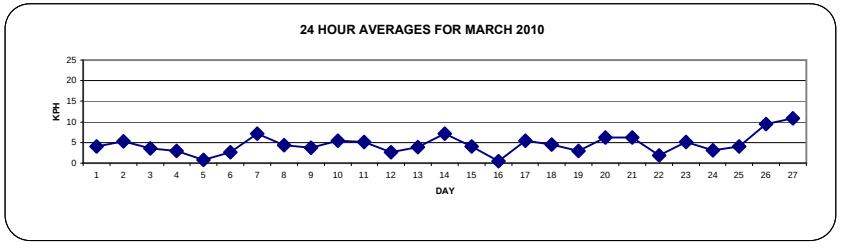
WIND SPEED hourly averages (km/hr)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	3.2	2.7	2.9	0.4	1.3	0.4	1.1	0.4	1.7	1.2	1.5	5.1	6.6	10	8.1	7.8	5.9	4	2.2	2.6	2	5.1	3.3	2.9	10	2.8	24
2	2.2	2.9	2.5	2.9	2.5	2.7	3.2	3.7	3.4	4.2	5.3	6.2	6.5	8.8	10.7	11.4	9.9	6.5	5.3	6.3	7.2	5.7	7.7	7.6	11.4	4.9	24
3	7.3	6.2	6.5	5.6	6.5	6.4	5.8	4.8	4.1	5.5	6.4	5.5	5.2	4.6	5	5	5.8	5.1	3.1	2.4	3.5	2.4	3.9	2.9	7.3	4.2	24
4	3.5	2.6	2.9	2.8	2.3	3.2	4.2	5.1	4.3	5	4.8	3.8	4.9	4.8	6.5	5.4	7.5	7.1	6.8	3.6	4.8	5.5	2.8	2.5	7.5	4.2	24
5	4.2	4	3.1	1.9	1.4	1.8	0.4	1.1	0.4	3.5	7.3	9.1	10.4	8.4	7.6	4.9	5.7	5.4	5.7	6.4	5	5.4	4.2	4.6	10.4	4	24
6	4.4	5	4.9	4.9	4	3.3	0.5	1.5	4.3	5.4	4.8	7.3	6.9	7.8	7.5	7.6	8.2	7.1	6.1	6.7	4.5	6.8	7.9	5.3	8.2	5.3	24
7	2.6	1.6	1.6	2	2.8	2.4	3.6	3	2.5	6.3	7	7.3	7.6	7.4	9.3	9.1	8.5	7.7	5	3.2	4.4	4.7	3	0.8	9.3	3.6	24
8	0.9	0.3	0.6	0.9	1.3	1.6	3.4	2.2	1.2	2.8	5.3	5.9	5.2	6.7	9.5	9.2	9.1	9.6	7.6	5.5	6.8	4.9	6.2	7.2	9.6	2.9	24
9	5.2	4.8	4.4	4.6	4	2.6	2	2.8	3.3	3.1	4.1	4.3	0.3	2.6	1.8	3.6	5.3	2.8	1.8	1.8	3.8	3.3	5	5.5	5.5	0.7	24
10	3.3	1	3.1	4.4	3.3	2.9	2.7	3.9	5.8	6.3	3.6	3.9	2.5	1	2.3	4.3	5.1	4.6	5.2	4	3.8	4	3.8	4.3	6.3	2.6	24
11	4.3	4.7	6.2	5.5	4.9	3.6	3.1	6.2	7.6	10.1	9.9	10.5	11.6	11.2	12.7	13.6	12.8	10.6	8.1	8.4	8.9	6.4	5	3.1	13.6	7.1	24
12	0.8	1.3	1.1	4.8	4.9	6.4	3.5	1.6	5.4	3.1	4.7	6.1	7.8	8.3	9.5	8.7	11.8	11	8	7.4	8.2	6	3.6	3.8	11.8	4.4	24
13	4.2	4	3.5	3.8	2.1	1.7	1.2	5.1	7.7	8.8	10.2	9.5	11.2	10.5	9.2	8.1	7.4	3.5	0.7	2.3	2.1	1.9	1.5	2.7	11.2	3.8	24
14	3	2.3	0.8	1.3	1.8	1.3	1.4	1.6	1.8	5.6	6.9	7.1	10	11.6	11.5	11	11.5	8.9	5.4	7.8	9.9	9.3	8.9	8	11.6	5.5	24
15	8.3	7.5	7.3	7	7.5	9.5	8.5	3.9	2.6	6.2	7.5	9.5	9.3	8.2	7.6	7.9	7.4	4.8	2.8	3.7	4.1	0.1	0.9	1.2	9.5	5.1	24
16	0.7	0.6	0.8	1.4	2.2	3.7	1	0.9	3.1	2.4	5.7	8.1	6.4	6.3	5.9	3.7	3.7	4.1	3.5	3.7	3.3	4.2	4.3	1.6	8.1	2.6	24
17	2.7	0.3	4	1.6	4.1	3.8	5.4	5.6	3.9	2.1	4	6	1.4	5	8.2	9.7	10.3	10.3	7.1	6.3	5.8	9.3	10.7	10.1	10.7	3.9	24
18	7.7	7.4	5.7	7	7.6	7.3	9.9	10.3	8.4	9.3	8.1	8.9	8.8	9	9.7	9.1	7.6	5.3	4.3	2.8	4.4	5.7	6.5	5.8	10.3	7.2	24
19	4.5	5.2	5.7	5.6	1.6	0.4	0.9	4.1	6.1	7.5	7	7.9	8.1	7	8.5	7.9	7.6	7	6	7	8.6	6.9	7.5	6.9	8.6	4.1	24
20	4.9	5.9	4.5	4.3	1.3	1.3	3.7	4.1	3.3	3.3	3.3	4.4	3.7	5.7	3.5	3.9	4	4.4	8.1	8.3	6	6.6	5.8	5.1	8.3	0.4	24
21	6	3.9	4	4.9	4.8	5.9	5.4	5.3	7.5	7	8.2	7.7	8.5	7.1	8.2	8.1	7.2	6.1	5.1	6.2	5.1	5.5	6.7	7	8.5	5.5	24
22	6.4	2.3	6.3	9	9.3	9.4	6.8	7.6	8	7.5	7.7	6.9	6.1	6.8	6.1	6.3	6	4.6	3.7	1.5	3.7	3.5	3.5	3.3	9.4	4.5	24
23	2.9	2.9	3	3.1	4.9	2.5	4	5.1	5.2	5.3	3.2	0.9	4.5	4.9	5.5	5.5	5.7	4.3	3.1	2.6	4.1	4.1	4.5	3.2	5.7	3	24
24	7.8	13.1	13.9	**14.9**	12.2	13.2	10.5	10.3	10.1	9.8	8.6	9	7.2	7.7	4.7	7.6	6.9	4.8	2.8	3.4	5.4	7	7.3	7.3	**14.9**	6.2	24
25	8.4	7.9	8.2	8.1	7	7.7	7.3	6.6	8.8	9.1	10.8	9.8	9.2	8.2	9	8.5	7.1	5.8	2.8	2	2.4	2.2	2.5	3	10.8	6.2	24
26	3.5	5.2	3.8	5.1	4.3	3.4	1.9	3.5	5.9	6.8	6.2	4.3	4.4	5.4	3.9	3.4	4.6	3.5	2.2	1.9	2.4	4.2	5.8	5.2	6.8	1.8	24
27	6.2	7.1	5.3	4.9	4.3	4.1	4.3	4.6	4.7	4.1	6.6	6.9	11	11.2	11.3	9.2	7.5	5.7	3.4	4.5	4.9	4.7	2.5	2	11.3	5.1	24
28	4.1	2.9	0.6	0.8	1.2	1.6	2.4	2.5	2.4	6.1	7.2	7.8	8.9	7.9	9.3	7.9	6	4.7	4.8	3.8	1.8	4	2.5	2.7	9.3	3.1	24
29	2.7	3.8	3.2	3.1	3.6	5.5	0.7	0.3	3.4	7.5	8.3	9.9	10.5	8.5	10.8	9.6	10.4	9.4	4	4	2.4	7.1	5.4	6.6	10.8	4	24
30	5.6	5.4	7.8	7.6	6.1	**N**	7.5	8.8	9.7	14.1	11.2	11.6	10.6	12.2	10.6	10.5	10.7	10.1	11.3	13.1	12.3	11.1	9.8	9.5	14.1	9.4	23
31	10.5	10.4	11.2	9.5	9.5	9.9	9.9	11.1	11.1	12.2	14.2	14.1	13	13.7	14.4	14.7	14.4	12.7	11.1	8.3	6.3	8	7.4	4.1	14.7	**10.8**	24
HOURLY MAX	10.5	13.1	13.9	14.9	12.2	13.2	10.5	11.1	11.1	14.1	14.2	14.1	13.0	13.7	14.4	14.7	14.4	12.7	11.3	13.1	12.3	11.1	10.7	10.1			
HOURLY AVG	4.6	4.4	4.5	4.6	4.3	4.3	4.1	4.4	5.1	6.2	6.8	7.3	7.4	7.7	8.0	7.8	7.8	6.5	5.1	4.9	5.1	5.3	5.2	4.7			

STATUS FLAG CODES

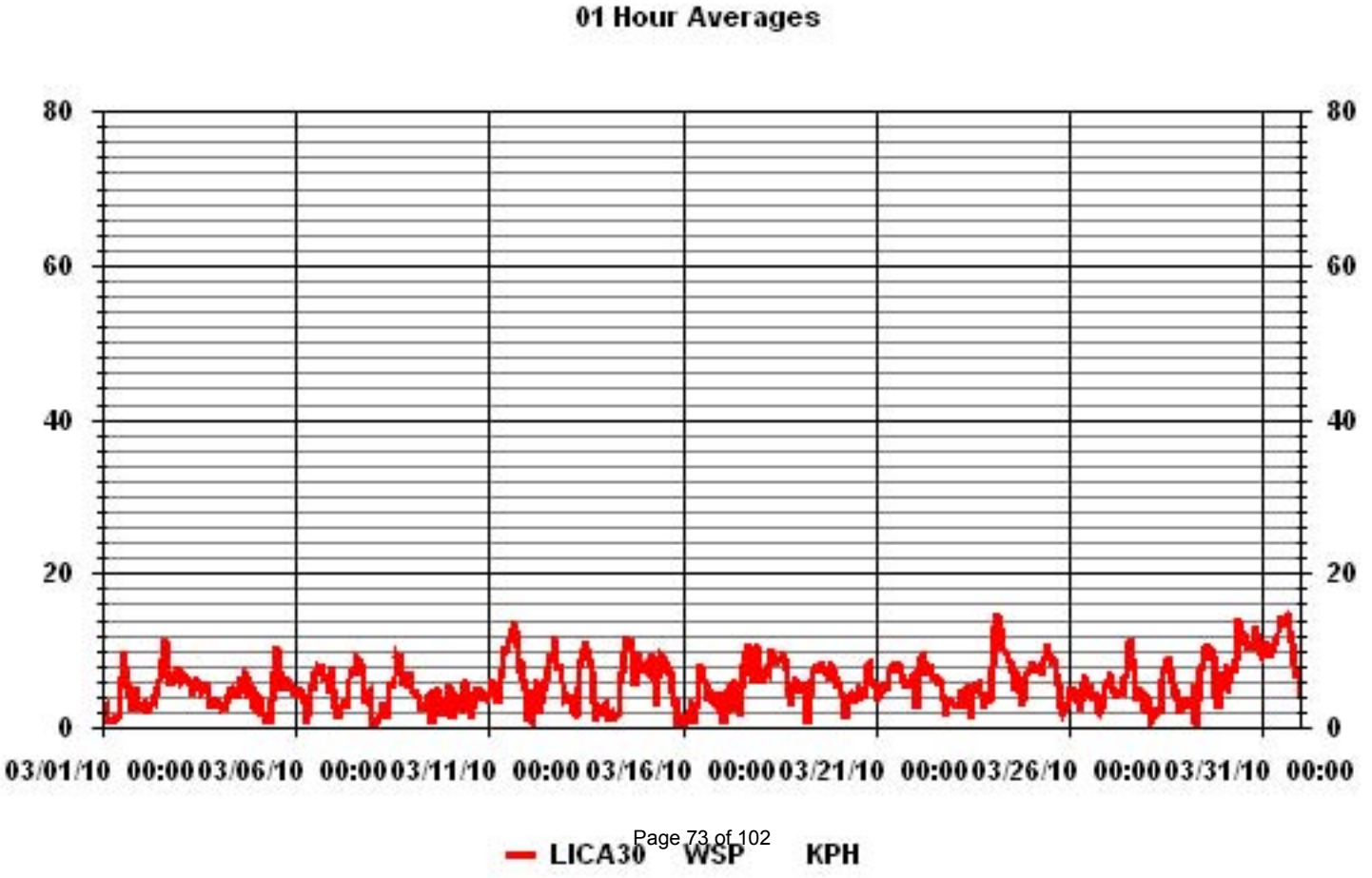
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



LAST CALIBRATION:	February 4, 2009

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:	14.9	KPH	@ HOUR(S)	3	ON DAY(S)	24	
MAXIMUM 24-HR AVERAGE:	10.8	KPH			ON DAY(S)	31	
CALMS (≤ 1 KPH)	3.09	%	OPERATIONAL TIME:		743	HRS	
MONTHLY CALIBRATION TIME:	0	HRS	AMD OPERATION UPTIME		99.9	%	
STANDARD DEVIATION	3.03		MONTHLY AVERAGE		5.67	KPH	


01 Hour Averages
80
60
40
20
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 WSP KPH

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

MST

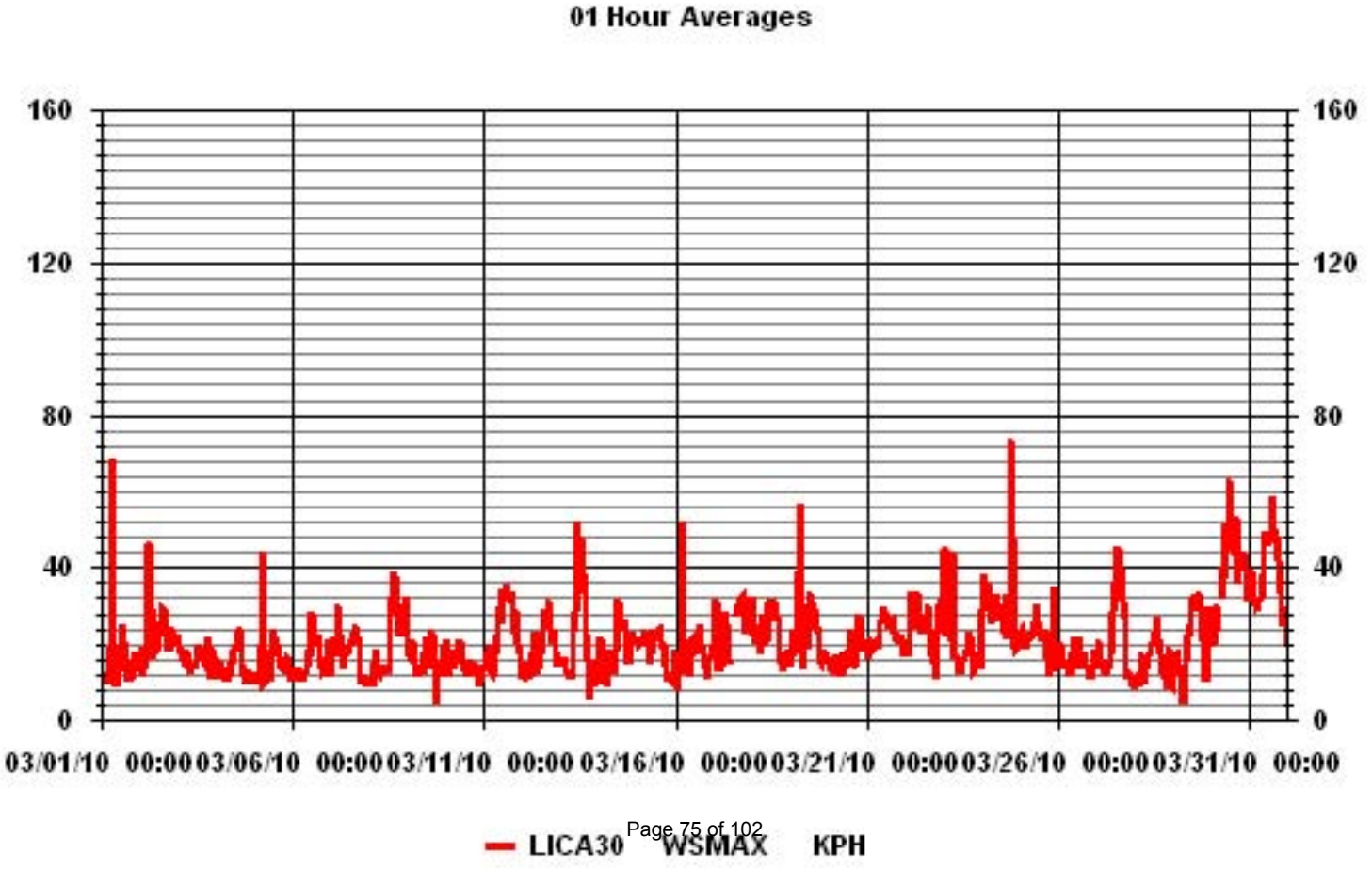
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	10.8	11.4	9.5	10.6	9.7	19	9.9	68.7	20.5	9.9	10.1	12.9	15.3	25.2	18.1	20.5	16.4	9.9	12.9	11	12.5	17.7	14	13.6	68.7
2	12.9	19.2	11.2	13.4	16.8	45.9	46.7	29.7	16.4	17.5	18.1	19.4	22	25.8	29.7	29.3	27.5	24.8	17.7	23.2	24.3	22.6	21.8	19.6	46.7
3	22.6	19.8	18.3	16	16.6	18.3	14	12.9	13.1	14.7	13.6	15.3	17.3	20	16.4	16.6	17.7	14.4	12.7	21.8	10.8	18.8	14.8	14.2	22.6
4	11	12.1	14.9	14.4	11.2	10.1	11.9	10.1	11.4	14.9	15.1	18.1	19.8	23.2	23.5	22.6	15.3	12.3	12.3	9.3	12.3	13.3	10.4	10.6	23.5
5	12.5	11.4	9.5	19.6	16.6	44.4	9.5	9.9	10.6	10.6	18.3	24	22.2	19.4	19.4	17.4	14	13.6	16.2	15.1	16.4	15.5	11.2	11	44.4
6	11	11.2	13.6	11.9	13.4	11.2	11	12.7	13.2	17	16.4	19.4	28.1	19.4	20.4	20.9	22.4	14	12.5	13.1	11.4	16.2	20.9	16.2	28.1
7	11.2	17.9	22	16.6	30.6	23	19.4	20.1	13.4	16.8	17.7	17.9	20.7	19.8	23.2	24.7	22.3	20.8	12.7	10.4	9.5	11.9	9.3	10.1	30.6
8	9.9	9.3	9.3	14.8	18.5	11	14	12.5	13.4	13.4	14.2	11.9	13.8	27.2	32.5	39.1	33.6	37.5	31	22	26.3	22	25.2	32.1	39.1
9	18.1	17	18.2	20.8	17	12.5	11.4	13.4	13.4	12.1	17.7	22	13.1	18.3	17	22.8	22.4	14.7	3.9	11.2	14.2	13.6	16.2	19.6	22.8
10	21.1	11.4	16.6	17.7	17.9	13.1	17.7	14.4	21.3	20.7	15.5	12.7	15.5	11.4	13.6	15.9	12.9	11.4	14	14	9.9	8.8	10.3	13.5	21.3
11	13.4	14.4	17.7	20	13.4	12.3	13.4	17.5	22.3	29.7	25.2	34.4	32.9	31.4	35.7	32.3	31.9	33.6	22.8	26.1	28.7	20.3	18.3	16	35.7
12	11.9	11.6	14.9	14	11	18.1	11.4	12.1	23	12.5	13.6	17.4	23	24.1	28.2	28.2	31.4	30.4	23.2	20.2	23.9	18.3	14	16.1	31.4
13	14.4	15.3	16.4	13.8	12.7	12.3	10.8	13.1	23	28.4	52.4	33.6	48.2	44.3	33.2	38.1	23	16.2	5.2	9.7	8.8	11.2	16.1	14.7	52.4
14	16.6	21.5	9.9	9.9	9.9	9.7	12.9	17.9	17.7	12.1	18.1	18.3	31.9	26.7	26	23.5	26	22.4	14.9	18.7	20.2	23	22.2	20.9	31.9
15	19.8	20.5	19.2	21.8	23	23	22.4	16.6	14.4	17.5	23.9	20.9	23	23.9	24.1	18.7	20.7	14.9	12.3	10.1	11.2	10.3	9.9	18.3	24.1
16	9.9	9.5	17.9	11.9	52.1	14.9	18.8	21	14	11.6	16.8	21.3	21.9	22.6	21.3	25.2	17.2	20	15.5	14	10.4	16	16.8	20	52.1
17	18.1	31.4	18.5	12.9	17.4	13.6	26.3	28.4	25.4	15.1	15.7	**N**	**N**	**N**	28.4	30.3	31.9	32.5	29.5	24.6	22.4	29.9	32.5	30.4	32.5
18	30.8	22.4	20.2	25	21.5	17.5	22.8	27.8	20.5	20.9	31.2	30.2	31.9	27.6	31.9	26.1	27.3	14.9	15.7	12.5	16	17	17.3	18.6	31.9
19	14	16.8	23.5	17.3	39.2	23.3	56.7	13.8	14.9	19.2	19.2	30.6	33.8	28	30.4	29.7	24.6	23.4	15.5	14.7	16.2	18.1	16.8	15.5	56.7
20	13.8	13.7	12.5	16.4	17.2	12.9	11.6	14	13.6	17.9	14	14.6	18.3	23.5	19.2	14.7	13.6	23.9	26.9	26.9	19.4	21.5	19.4	19.2	26.9
21	20.8	16.2	21.8	19.4	18.8	19.4	18.6	21.6	26	26.1	29.3	27.3	27.6	26.3	24.3	26	26.5	23.5	21.3	20.5	22.6	21.3	17	18.5	29.3
22	19.2	16.6	21.3	33.6	31.7	29.5	24.1	33.6	25.9	28	23.7	23.5	25	25.4	30.5	24.3	17.2	14.9	16.4	10.6	22.6	30.6	29.3	31.9	33.6
23	44.6	45.3	21.8	32.1	20.5	44.4	15.8	17.5	17	16.6	12.3	16.4	15.7	16.6	18.5	23.3	22.2	19.6	12.5	12.9	15.3	17.5	15.7	13.2	45.3
24	28.7	38.1	35.3	36.4	29.8	32.6	24.8	32.2	32.4	29.5	26.1	28.2	28.6	30.4	22.6	33.2	21.3	30	**73.7**	48	19.6	18.4	18.8	20.9	**73.7**
25	23.5	24.1	21.3	22.6	19	20.9	22.9	21.3	25.4	21.8	30	26.3	24.1	20.5	22.6	21.5	23.5	16.4	11	17.7	12.9	34.9	19.6	17.2	34.9
26	18.3	20.5	13.4	16	13.4	15.5	11.6	12.4	17.7	22	14.9	14.7	20.5	21.5	13.3	17	17.2	14.9	14.4	11	12.3	11	13.6	18.3	22
27	16.8	21.3	16.6	14.2	13.3	12.8	11.9	13.6	15.9	17.4	28.4	35.9	39	45.2	40.2	39.8	31.9	27.3	11.4	11.4	13.3	11.8	9.2	8	45.2
28	11	11.6	9.7	9.9	18.1	9.3	10.4	13.1	17	17.4	19.1	20.5	22.8	23.7	26.7	21.5	17.9	12.9	11.6	11.4	8.2	19.2	9.3	8.8	26.7
29	11.9	16.6	17	11.4	12.5	14.2	4.1	10.1	15.1	22.2	25	31.6	31.9	33.1	29.9	28.4	33.8	30.1	20.5	22	10.1	21.1	22.2	29.5	33.8
30	19.6	20.2	25	30.2	24.3	**N**	32.7	40	37	51.7	46.3	63.3	46.7	45.2	42.8	53.4	36	39.8	39	42.8	44.3	39.6	36.2	31	63.3
31	38.8	39.4	32.7	30.1	30.8	28.4	31.2	32.1	37.9	49.7	45.4	49.1	48.2	46.1	58.5	48.4	49.9	48.8	42.4	33.4	24.8	29.7	27.3	20	58.5
PEAK	44.6	45.3	35.3	36.4	52.1	45.9	56.7	68.7	37.9	51.7	52.4	63.3	48.2	46.1	58.5	53.4	49.9	48.8	73.7	48.0	44.3	39.6	36.2	32.1	

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

MAXIMUM INSTANTANEOUS READING	73.7	KPH	@ HOUR(S)	18
			ON DAY(S)	24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160
120
80
40
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 WSMAX KPH

LICA30
WSP / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 30
Site Name : LICA30
Parameter : WSP
Units : KPH

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	2.55	3.09	5.11	5.78	3.63	3.36	3.09	2.01	2.96	9.28	8.20	2.15	1.07	1.21	1.74	2.15	57.46
<	12.0	3.23	1.21	1.48	.40	.80	2.01	6.72	4.17	2.01	6.59	1.61	1.07	3.36	1.34	1.88	1.74	39.70
<	20.0	.00	.67	.00	.00	.00	.00	.26	.13	.00	.00	.00	.00	1.21	.53	.00	.00	2.82
<	29.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	5.78	4.97	6.59	6.19	4.44	5.38	10.09	6.32	4.97	15.88	9.82	3.23	5.65	3.09	3.63	3.90	

Calm : .00 %

Total # Operational Hours : 743

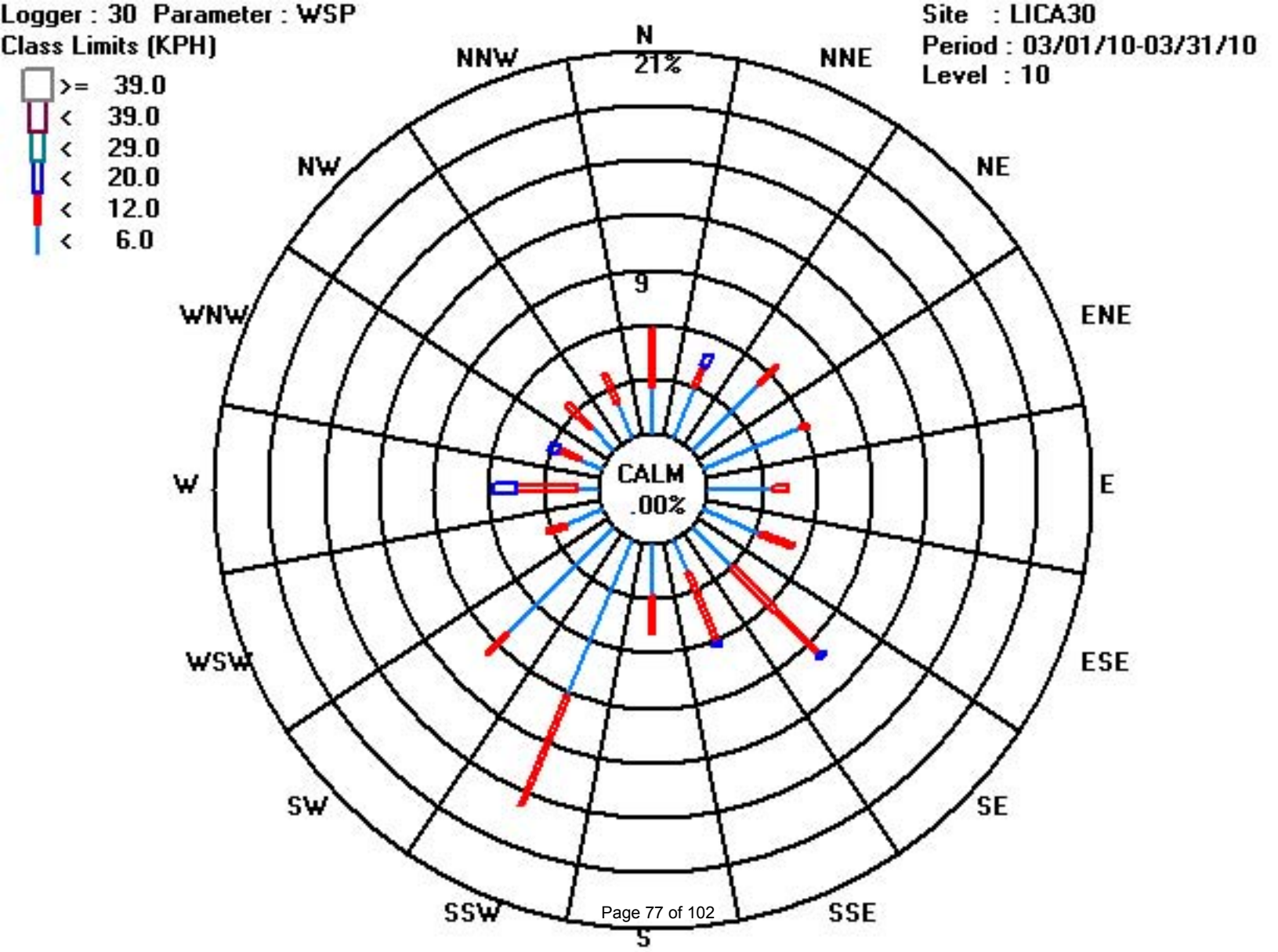
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	19	23	38	43	27	25	23	15	22	69	61	16	8	9	13	16	427
<	12.0	24	9	11	3	6	15	50	31	15	49	12	8	25	10	14	13	295
<	20.0		5					2	1					9	4			21
<	29.0																	
<	39.0																	
>=	39.0																	
	Totals	43	37	49	46	33	40	75	47	37	118	73	24	42	23	27	29	

Calm : .00 %

Total # Operational Hours : 743


Logger : 30 Parameter : WSP
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA30
Period : 03/01/10-03/31/10
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9
CALM
.00%

Vector Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION -COLD LAKE- MASKWA

MARCH 2010

WIND DIRECTION hourly averages in degrees

MST

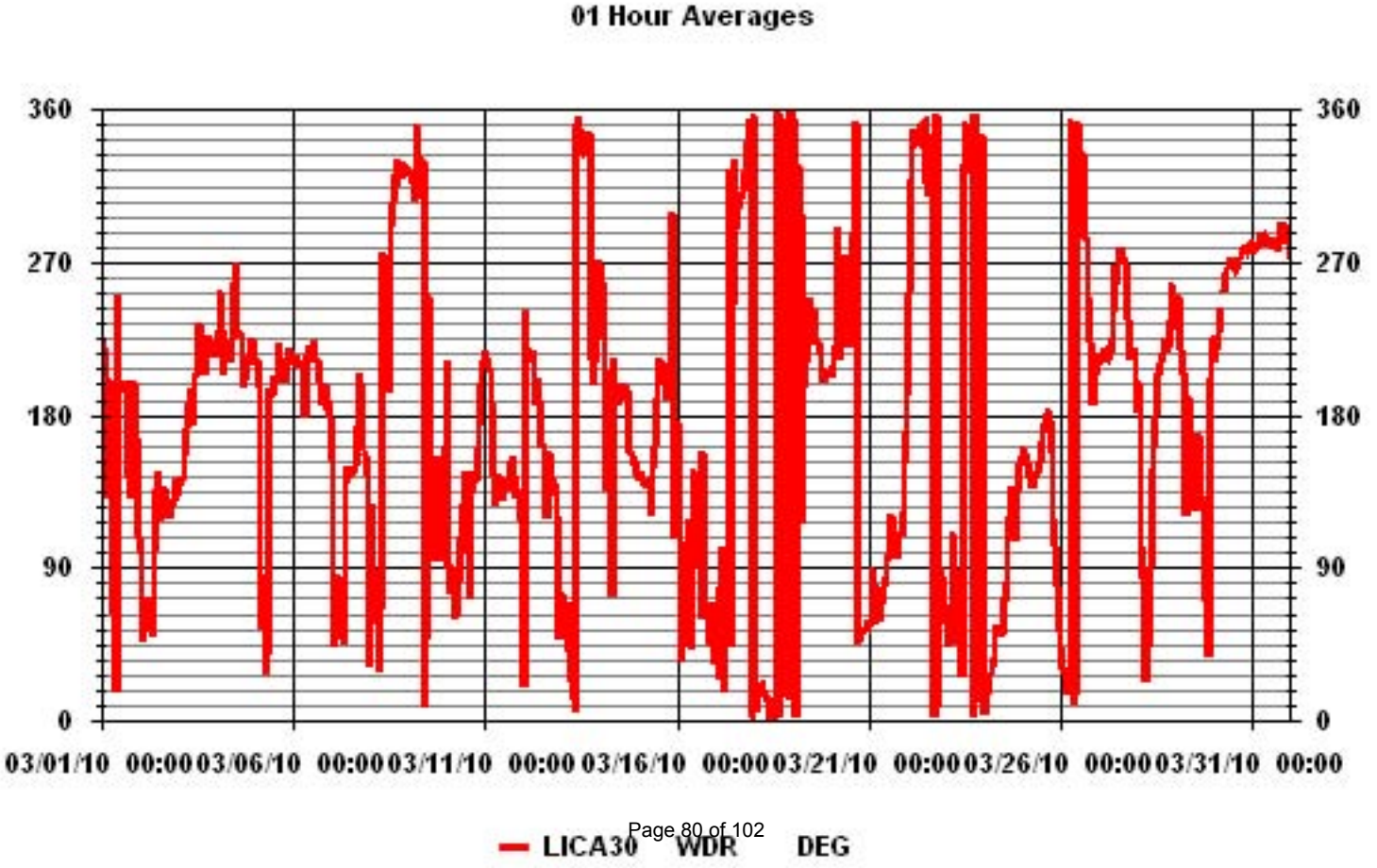
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	223	220	212	166	131	201	196	64	52	16	250	201	200	193	195	200	188	144	131	171	200	188	168	109	189	S	24
2	99	52	47	52	59	73	68	63	49	99	136	146	131	118	122	138	128	119	121	119	126	130	142	133	116	ESE	24
3	136	138	143	144	156	172	186	195	174	193	203	205	216	234	217	225	204	211	215	227	213	224	215	222	189	S	24
4	214	230	253	231	203	219	213	213	213	223	224	258	270	229	229	227	200	196	200	215	213	213	226	212	219	SW	24
5	211	211	197	63	54	84	85	27	38	196	193	191	203	200	212	223	204	208	200	200	213	218	218	211	202	SSW	24
6	211	209	214	208	212	210	212	178	214	217	221	214	211	224	213	212	200	197	185	196	198	182	188	179	204	SSW	24
7	154	43	81	66	86	47	65	45	50	139	150	148	146	147	147	150	173	204	200	180	160	157	146	31	145	SE	24
8	125	127	57	87	86	71	28	66	276	223	204	193	210	291	305	321	330	315	331	326	319	327	320	326	312	NW	24
9	325	324	317	306	317	351	333	310	311	331	7	48	251	180	94	113	106	117	155	96	94	107	136	162	30	NNE	24
10	212	90	75	92	77	60	62	82	108	113	128	147	132	99	72	133	146	143	141	160	173	199	208	212	131	SE	24
11	217	215	209	206	188	145	126	140	142	145	132	130	142	136	140	136	152	156	145	133	133	134	118	128	146	SE	24
12	20	241	213	219	212	212	218	202	186	202	190	163	162	123	119	140	158	149	143	140	134	122	48	66	154	SSE	24
13	76	57	56	53	40	70	24	14	5	351	355	349	336	334	335	345	344	347	214	198	211	228	248	272	352	N	24
14	269	259	225	208	135	157	199	73	214	191	193	185	195	194	193	199	193	196	159	157	150	155	154	146	180	S	24
15	142	147	144	141	140	141	138	121	133	148	162	190	201	213	201	200	211	188	193	188	196	299	107	139	167	SSE	24
16	177	160	34	106	63	72	43	118	54	42	148	146	124	115	90	60	159	59	65	67	47	44	70	33	91	E	24
17	64	38	79	24	103	17	47	64	325	43	299	244	331	290	302	309	307	311	323	327	341	355	4	3	339	NNW	24
18	358	6	8	15	21	22	19	15	11	15	1	7	1	1	3	359	2	344	347	354	14	18	13	359	7	N	24
19	356	355	2	36	327	299	115	196	205	211	221	249	237	243	238	225	223	217	209	201	201	205	204	204	224	SW	24
20	207	206	212	221	290	213	217	225	225	275	245	220	268	286	286	325	353	45	47	53	51	55	58	58	307	NW	24
21	56	59	90	81	58	60	60	64	69	79	85	98	96	97	121	112	108	96	102	111	109	123	151	171	95	E	24
22	192	252	319	336	349	338	349	347	352	337	352	353	317	308	318	346	4	4	358	7	69	90	86	70	346	NNW	24
23	58	43	51	66	111	91	45	52	50	32	26	328	353	332	327	322	344	1	358	336	22	14	11	346	16	NNE	24
24	4	13	20	19	28	31	37	51	56	51	55	50	73	70	82	106	120	138	108	106	120	135	151	155	57	ENE	24
25	161	157	157	152	145	143	137	145	145	146	153	151	165	170	175	180	184	178	159	120	104	81	80	54	153	SSE	24
26	45	32	28	15	20	26	355	17	9	17	18	353	318	325	335	285	284	250	224	189	186	200	204	209	346	NNW	24
27	216	211	217	216	218	216	214	217	226	241	269	256	279	276	278	273	270	257	237	213	215	216	220	181	244	WSW	24
28	199	198	104	84	61	23	43	44	91	148	161	180	205	210	204	211	217	225	217	220	235	258	238	235	200	SSW	24
29	242	230	250	219	206	205	120	186	192	145	137	124	126	124	169	156	134	125	72	48	37	202	213	226	157	SSE	24
30	211	227	218	229	241	N	255	264	266	272	267	269	267	265	266	272	273	277	277	280	277	279	280	276	265	W	23
31	281	278	279	279	284	287	280	282	285	283	280	285	278	281	281	276	284	287	293	288	280	290	289	273	282	W	24
HOURLY AVG	358	355	319	336	349	351	355	347	352	351	355	353	353	334	335	359	353	347	358	354	341	355	320	359			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

LAST CALIBRATION:	February 4, 2009
DECLINATION :	19 DEGREES FROM MAGNETIC NORTH

MONTHLY CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	743	HRS
STANDARD DEVIATION	93.41		AMD OPERATION UPTIME	99.9	%
			MONTHLY AVERAGE	191	DEG


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 WDR DEG

Standard Deviation Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

MARCH 2010

STANDARD DEVIATION WIND DIRECTION (STDWDIR) hourly averages in degrees

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
DAY																								
1	20	14	14	35	34	57	54	56	41	36	36	19	20	16	16	19	21	19	37	37	57	29	24	20
2	32	18	17	22	28	27	20	15	18	30	37	29	28	23	23	22	20	20	18	18	23	25	20	19
3	19	20	19	19	20	21	19	17	28	22	19	24	24	31	24	28	19	20	26	30	19	23	17	21
4	16	17	25	27	19	10	19	12	14	17	18	37	31	30	26	27	15	10	10	15	12	14	20	21
5	13	14	21	36	35	48	46	47	52	26	16	17	18	22	23	29	20	19	13	15	20	20	16	14
6	14	13	15	13	17	13	43	25	25	23	29	22	23	23	24	23	18	13	11	9	13	13	14	17
7	27	33	32	29	29	24	20	21	30	24	24	26	24	28	24	21	21	17	12	14	13	15	20	57
8	35	45	60	41	42	37	18	32	73	34	22	17	22	33	34	34	35	33	34	34	32	36	32	33
9	33	33	31	31	32	28	29	27	25	34	40	39	60	63	57	60	25	23	10	18	15	14	16	18
10	22	28	25	23	28	21	23	20	22	25	30	30	41	69	36	30	20	19	19	30	20	16	19	19
11	24	25	20	20	21	14	17	19	22	21	23	24	23	24	21	20	20	21	18	18	21	24	21	52
12	65	56	51	20	14	19	18	63	39	54	29	33	31	26	24	24	21	19	17	18	18	24	20	17
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14	24	27	39	23	17	32	23	26	28	16	20	22	24	23	19	21	19	14	13	16	15	17	15	15
15	18	17	18	20	20	18	19	31	40	25	25	19	21	26	23	23	21	22	19	19	22	68	36	46
16	36	75	65	36	28	19	45	32	21	28	33	26	29	29	25	44	49	22	17	15	15	27	23	62
17	39	75	31	46	33	31	24	52	42	43	34	38	45	40	32	29	27	29	36	35	32	29	24	25
18	27	24	28	23	16	18	18	21	23	20	30	25	27	27	25	27	24	31	28	28	22	19	20	26
19	24	23	24	17	40	73	53	18	18	22	25	34	31	36	32	30	26	20	16	12	11	13	14	14
20	16	15	17	19	41	39	22	18	23	30	31	25	40	28	34	32	27	22	20	21	22	22	22	21
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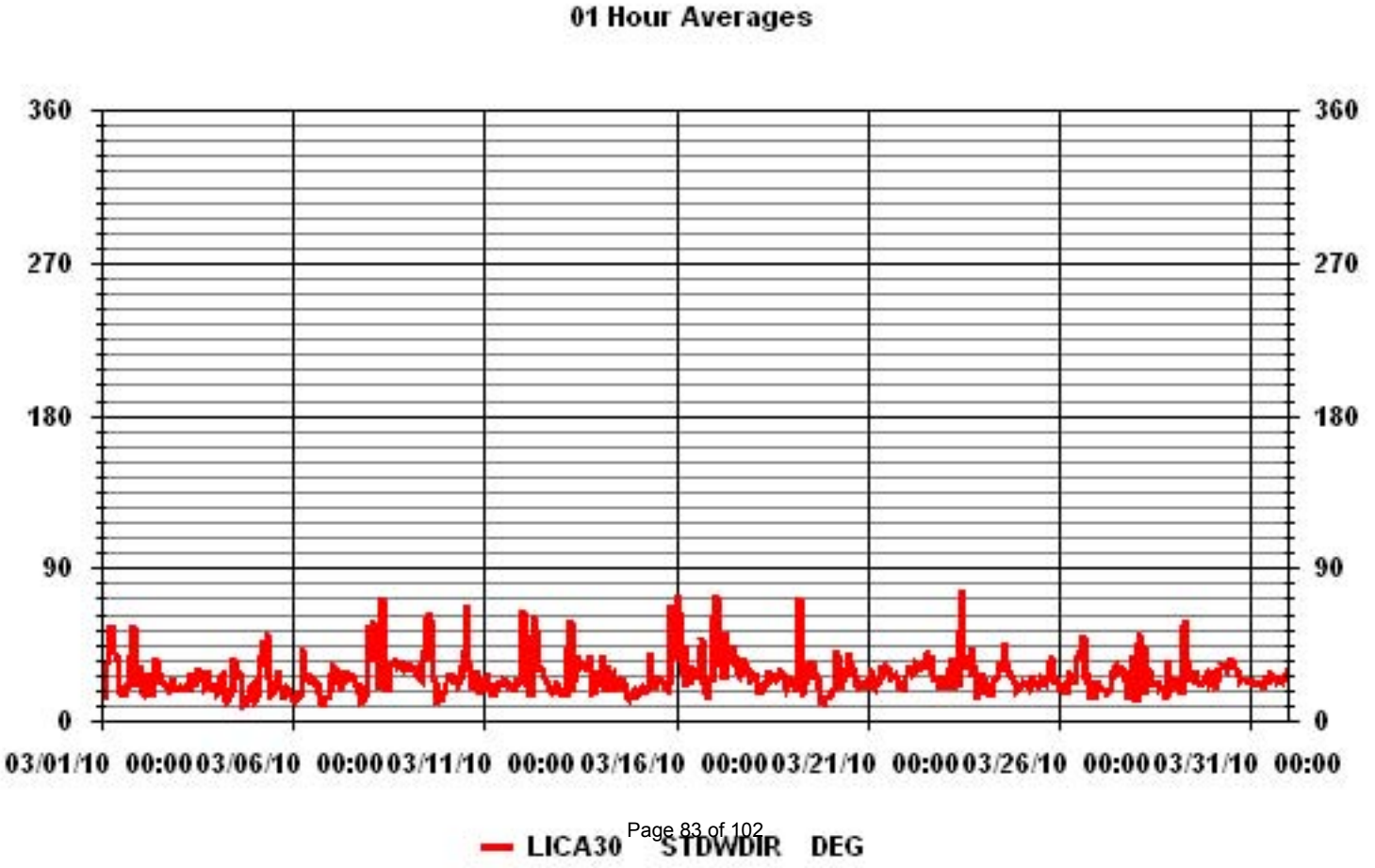
23	23	20	20	31	26	37	18	21	23	20	53	78	30	37	31	38	31	43	25	33	12	16	18	29
24	26	21	21	17	16	14	19	23	25	27	29	33	35	29	46	36	31	27	27	24	23	19	21	20
25	20	23	21	21	22	19	21	27	22	22	21	21	26	25	25	23	26	23	35	38	27	22	25	24
26	21	18	21	18	17	24	29	25	27	24	24	38	40	36	44	50	27	27	23	15	15	17	16	24
27	22	19	20	18	18	16	17	17	20	29	31	32	28	29	30	31	32	31	24	12	14	14	38	26
28	11	46	51	46	39	44	16	20	29	27	24	24	22	23	19	21	21	20	15	15	36	28	25	20
29	21	19	25	17	17	16	56	60	37	24	25	27	25	27	23	23	21	22	22	26	27	22	23	29
30	24	23	19	23	30	**N**	33	32	32	31	35	35	37	34	32	28	28	23	24	25	24	24	23	24
31	23	23	20	23	23	22	22	21	21	25	25	24	30	26	25	25	23	25	25	23	25	25	27	25

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

LAST CALIBRATION: February 4, 2009

CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 743 HRS


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA30 STDWDIR DEG

Calibration Reports

Sulphur Dioxide

SO_2 Calibration Report

Station Information

Calibration Date	March 11, 2010		Previous Calibration	February 17, 2010	
Company	**Lakeland Industry & Community Association**				
Plant / Location	**Cold Lake - Maskwa**				
Start Time (MST)	11:40		End Time (MST)	15:42	
Reason:	Monthly Calibration				
Barometric Pressure	935	mBar	Station Temperature	25	Deg C
Cal Gas	52.2	ppm	Cal Gas Expiry date	12/19/2010	
DAS Output Voltage	0 - 1	Volts	Chart Rec. Output	0 - 1	Volts

Equipment Information

Analyzer Make / Model:	API 100E	S/N :	508	Method:	Fluorescent
Converter Make / Model:	-	S/N :	-		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO 791		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 -1000	ppb				
Sample Flow / Box Temp	598	ccm	33.9	Deg C	596	ccm	34.6	Deg C
HVPS / Lamp Setting	494		3519		494		3520	
PMT / RxCell Temp	7.7	Deg C	50	Deg C	7.7	Deg C	50	Deg C
Converter / IZS Temp	NA	Deg C	45	Deg C	NA	Deg C	45	Deg C
Offset / Slope	32.2		0.963		32.2		0.953	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4996	0	0	0	N/A
4923	76.6	800	809	0.9886
4923	76.6	800	801	0.9985
4959	38.3	400	396	1.0103
4981	19.2	200	199	1.0072
4996	0	0	1	N/A
			Sum of Least Squares	1.0011
			New Correction Factor	0.9985

	Before Calibration	After Calibration
Auto Zero	0.8	0.8
Auto Span	607.0	610.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		1.1%

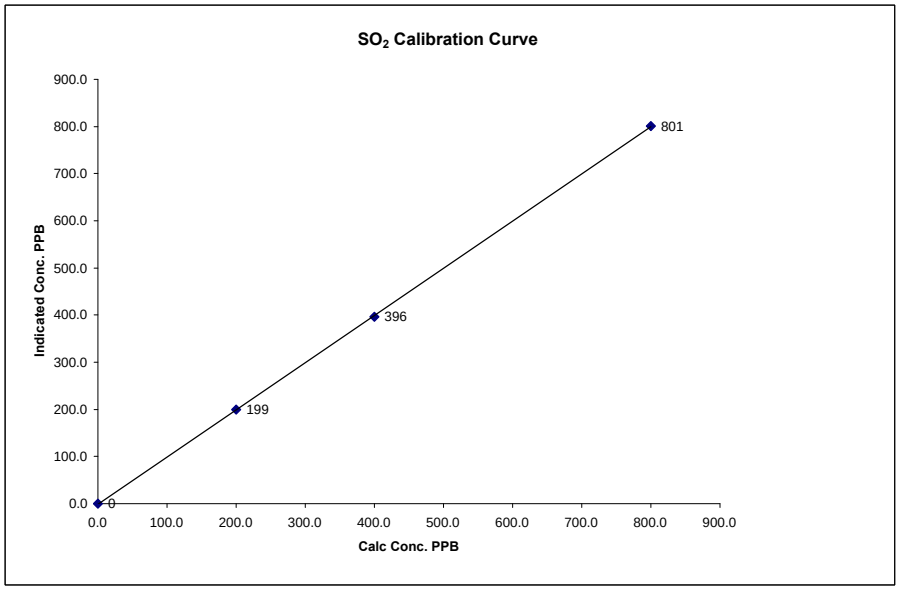
Calibration Performed by: Shea Beaton

SO_2 Calibration Curve

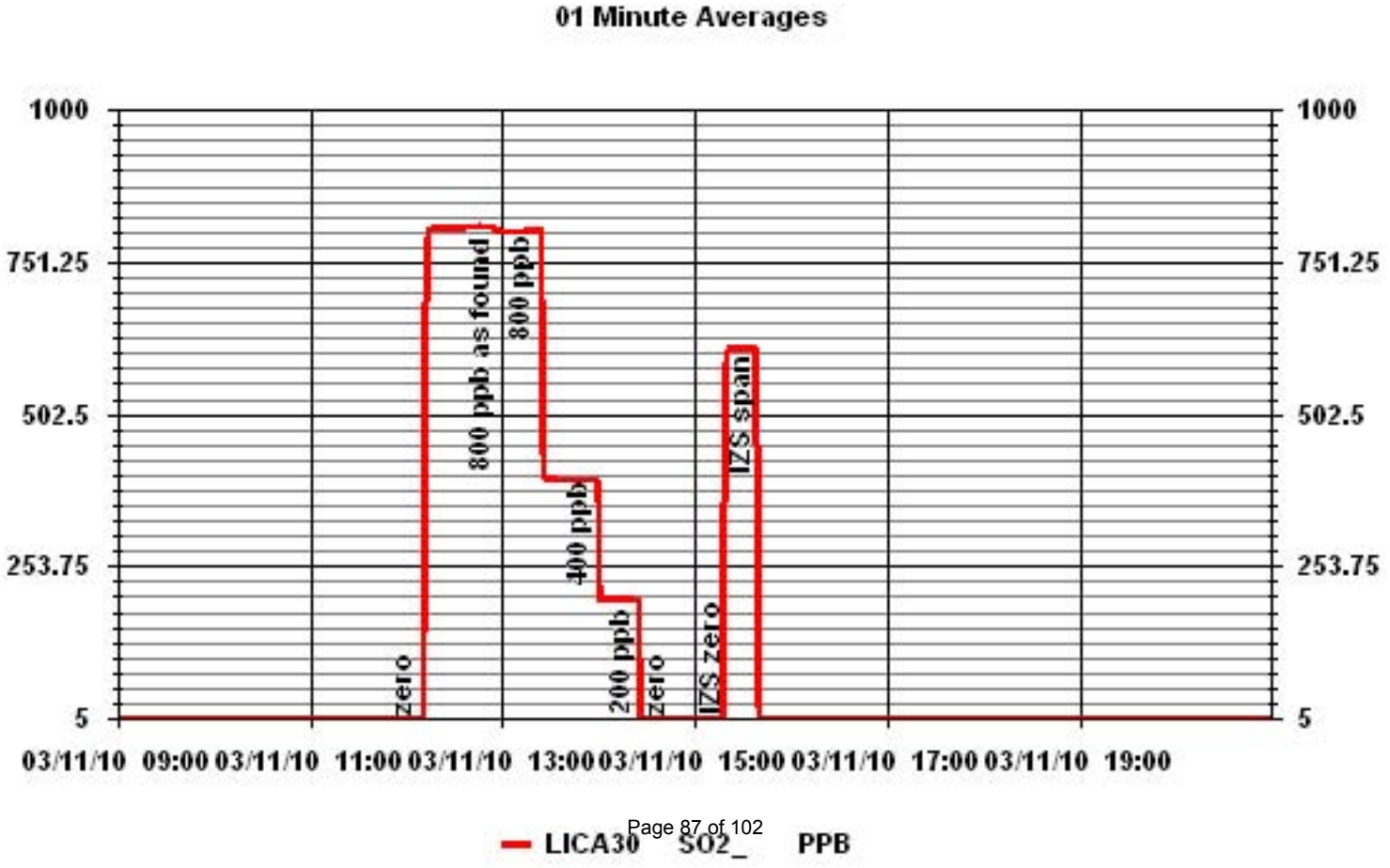
Calibration Date	March 11, 2010			
Company	**Lakeland Industry & Community Association**			
Plant / Location	**Cold Lake - Maskwa**			
Start Time (MST)	11:40	End Time (MST)	15:42	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
200	199	1.0072
400	396	1.0103
800	801	0.9985

Correlation Coefficient	(≥ 0.995)	0.999958
Slope	(0.85 to 1.15)	1.001619
Intercept	(± 3% F.S.)	-1.635755



Notes:


01 Minute Averages
1000
751.25
502.5
253.75
5
zero
800 ppb as found
800 ppb
400 ppb
200 ppb
zero
IZS zero
IZS span
03/11/10 09:00 03/11/10 11:00 03/11/10 13:00 03/11/10 15:00 03/11/10 17:00 03/11/10 19:00
LICA30 SO2_ PPB

Hydrogen Sulphide

H_2S Calibration Report

Station Information

Calibration Date	March 11, 2010		Previous Calibration	February 17, 2010	
Company	Lakelnad Industry & Community Association				
Plant / Location	Cold Lake - Maskwa				
Start Time (MST)	9:05		End Time (MST)	17:08	
Reason:			Monthly Calubration		
Barometric Pressure	935	mBar	Station Temperature	25	Deg C
Cal Gas	10.8	ppm	Cal Gas Install date	06/22/2009	
DAS Output Voltage	0 - 1	Volts			

Equipment Information

Analyzer Make / Model:	API 101E	S/N :	511	Method:	Fluorescent
Converter Make / Model:	Internal	S/N :	N/A		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO 791		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 100	ppb				
Sample Flow / Box Temp	526	ccm	32.9	Deg C	526	ccm	35	Deg C
HVPS / Lamp Setting	552		2321		552		2334	
PMT / RxCell Temp	7.9	Deg C	50	Deg C	7.9	Deg C	50	Deg C
Converter / IZS Temp	315.6	Deg C	45	Deg C	315.9	Deg C	45	Deg C
Offset / Slope	27.3		1.061		29.8		1.014	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4995	0	0	0	N/A
4959	37	80	82	0.9754
			Sum of Least Squares	0.9754
			New Correction Factor	0.9754

	Before Calibration	After Calibration
Auto Zero	0.4	-0.3
Auto Span	60	57
Sample Lines Connected		YES
Percent Change from Previous Calibration		2.5%

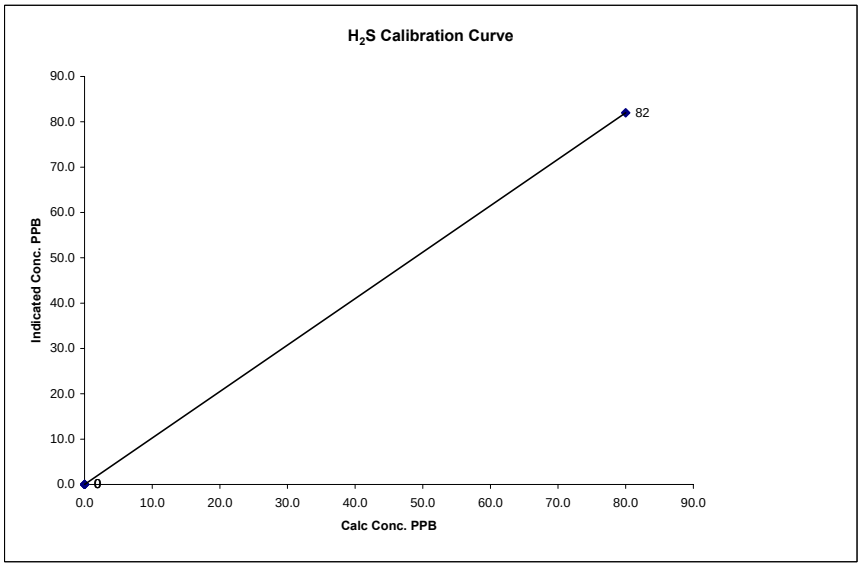
Calibration Performed by: Shea Beaton

H_2S Calibration Curve

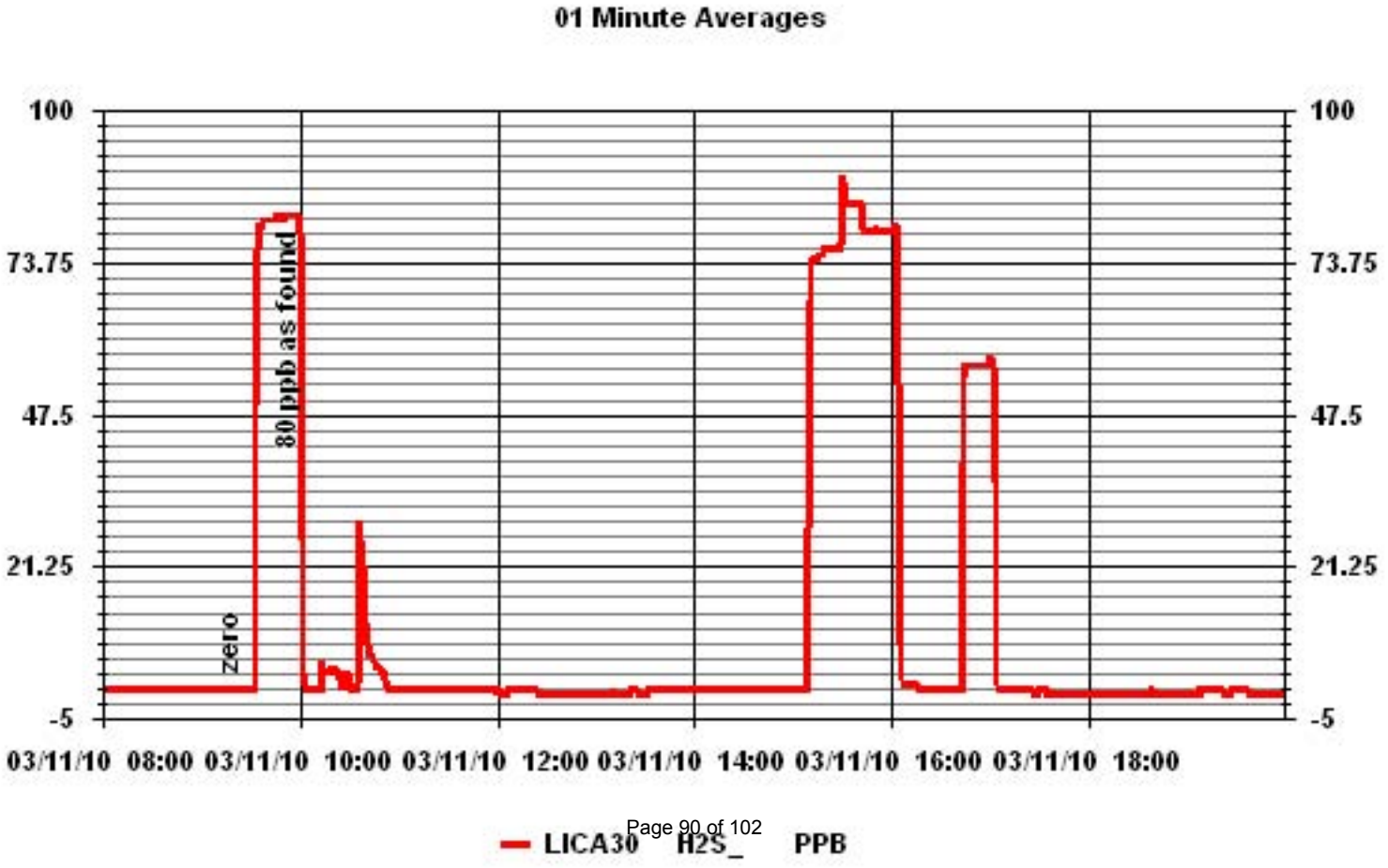
Calibration Date	March 11, 2010		
Company	Lakelnad Industry & Community Association		
Plant / Location	Cold Lake - Maskwa		
Start Time (MST)	9:05	End Time (MST)	17:08

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
0	0	#DIV/0!
0	0	#DIV/0!
80	82	0.9754

Correlation Coefficient	(≥ 0.995)	1.000000
Slope	(0.85 to 1.15)	1.025205
Intercept	(± 3% F.S.)	0.000000



Notes: Following the as found points the SO2 scrubber materal was changed, the UV lamp was peaked, and a factory cal was done. Adjusted the slope and offset; will do a full cal tomorrow.


01 Minute Averages
100
73.75
47.5
21.25
-5
zero
80 ppb as found
03/11/10 08:00
03/11/10 10:00
03/11/10 12:00
03/11/10 14:00
03/11/10 16:00
03/11/10 18:00
LICA30 H2S_ PPB

H_2S Calibration Report

Station Information

Calibration Date	March 12, 2010		Previous Calibration	February 17, 2010	
Company	Lakelnad Industry & Community Association				
Plant / Location	Cold Lake - Maskwa				
Start Time (MST)	9:44		End Time (MST)	13:17	
Reason:	Post Repair Calibration				
Barometric Pressure	934	mBar	Station Temperature	24	Deg C
Cal Gas	10.8	ppm	Cal Gas Install date	06/22/2009	
DAS Output Voltage	0 - 1	Volts			

Equipment Information

Analyzer Make / Model:	API 101E	S/N :	511	Method:	Fluorescent
Converter Make / Model:	Internal	S/N :	N/A		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO 791		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 100	ppb				
Sample Flow / Box Temp	533	ccm	32.3	Deg C	528	ccm	33.7	Deg C
HVPS / Lamp Setting	552		2339		552		2334	
PMT / RxCell Temp	7.8	Deg C	50	Deg C	7.9	Deg C	50	Deg C
Converter / IZS Temp	315.7	Deg C	45	Deg C	315.2	Deg C	45	Deg C
Offset / Slope	29.8		1.014		26.4		1.014	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4995	0	0	-2	N/A
4995	0	0	0	N/A
4959	37	80	78	1.0254
4959	37	80	80	0.9998
4980	18.5	40	40	0.9993
4985	11.6	25	25	1.0029
4995	0	0	1	N/A
			Sum of Least Squares	0.9999
			New Correction Factor	0.9998

	Before Calibration	After Calibration
Auto Zero	-0.9	0.6
Auto Span	56	57
Sample Lines Connected		YES
Percent Change from Previous Calibration		-

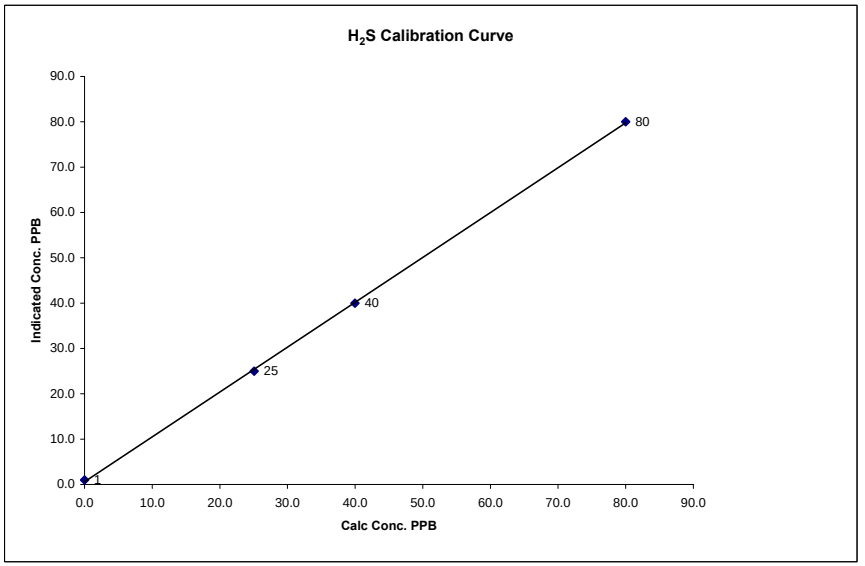
Calibration Performed by: Shea Beaton

H_2S Calibration Curve

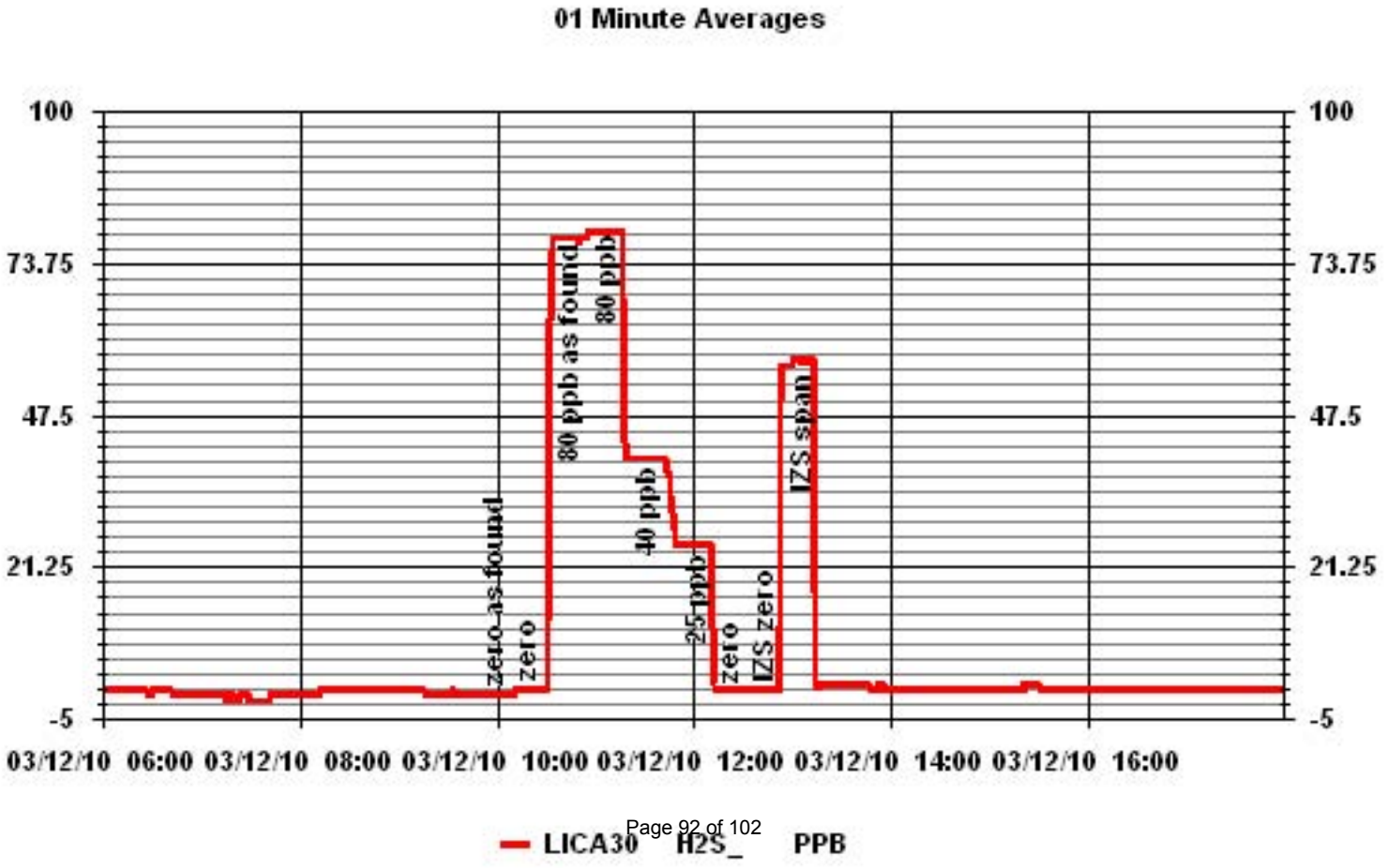
Calibration Date	March 12, 2010		
Company	Lakelnad Industry & Community Association		
Plant / Location	Cold Lake - Maskwa		
Start Time (MST)	9:44	End Time (MST)	13:17

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	1	n/a
25	25	1.0029
40	40	0.9993
80	80	0.9998

Correlation Coefficient	(≥ 0.995)	0.999874
Slope	(0.85 to 1.15)	0.989709
Intercept	(± 3% F.S.)	0.615884



Notes: Yesterday the SO2 scrubber materal was changed, the UV lamp was "peaked", and a factory cal was done.


01 Minute Averages
100
73.75
47.5
21.25
-5
zero as found
zero
80 ppb as found
80 ppb
40 ppb
25 ppb
zero
IZS zero
IZS span
03/12/10 06:00
03/12/10 08:00
03/12/10 10:00
03/12/10 12:00
03/12/10 14:00
03/12/10 16:00
LICA30 H2S_ PPB

Total Hydrocarbons

THC Calibration Report

Station Information

Calibration Date:	March 11, 2010	Previous Calibration	February 17, 2010
Company:	Lakeland Industry & Community Association		
Plant / Location:	Cold Lake - Maskwa		
: (MST)	10:21	End Time (MST)	18:18
Reason:	Monthly Calibration		
Barometric Pressure:	935 mBar	Station Temperature:	25 Deg C
Calibrator:	API 700	S/N:	831
Cal Gas Concentration:	207 Prop/ 602 Meth ppm	Cal Gas Expiry Date:	August 21, 2011
DAS make & Model:	ESC 8832	S/N :	AO 791
Output Voltage Range:	0 - 10 VDC		

Analyzer Information

Make / Model	TECO 51C-LT	S/N :	436609738	Method	Flame Ionization

Analyzer Settings

	Before Calibration		After Calibration	
Concentration Range	0 -50	ppm	0 - 50	ppm
Sample Pressure	7.5	psi	7.5	psi
Hydrogen Pressure	8	psi	8	psi
Air Pressure	20	psi	20	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
2000	0	0.0	0.0	N/A
2000	70.0	39.6	39.6	1.0002
2000	0.0	0.0	0.0	N/A
2000	70.0	39.6	39.9	0.9927
2000	35.0	20.1	20.0	1.0072
2000	20.0	11.6	11.5	1.0084
2000	0	0.0	0.0	N/A
			Correction Factor:	0.9927

Previous Calibration Correction Factor:	0.9902	
Current Correction Factor Before Span Adjust:	1.0002	
Percent Change:	-1.00%	

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	0.0	0.0
Auto Span	33.1	33.7
Sample Lines Connected		YES

Cylinder Pressures		
Span	1100	psi
Hydrogen	800	psi
Zero Air	NA	psi

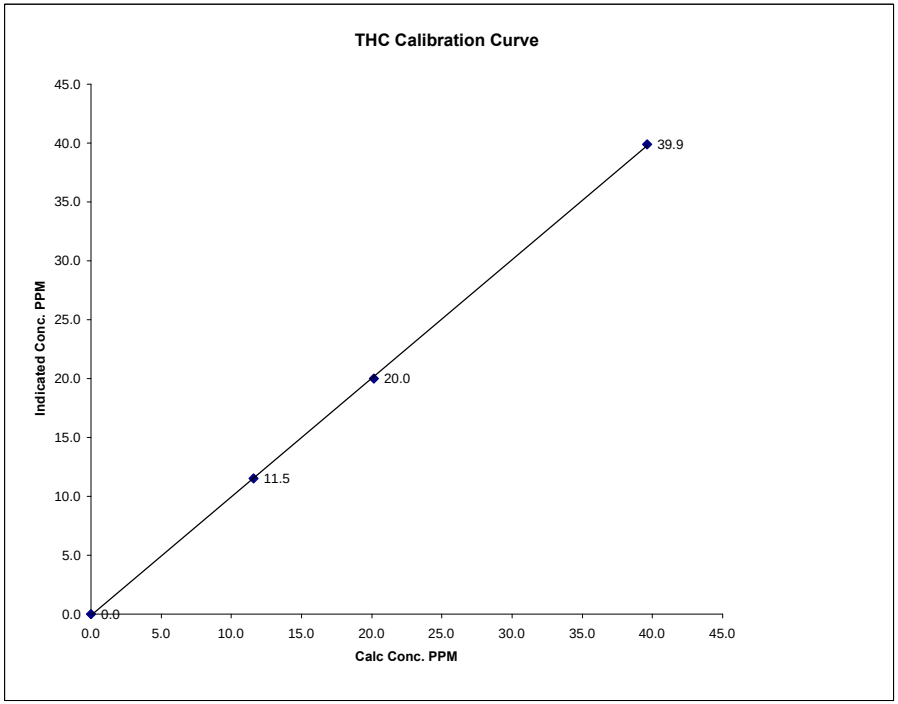
Calibration Performed by: Shea Beaton

THC Calibration Curve

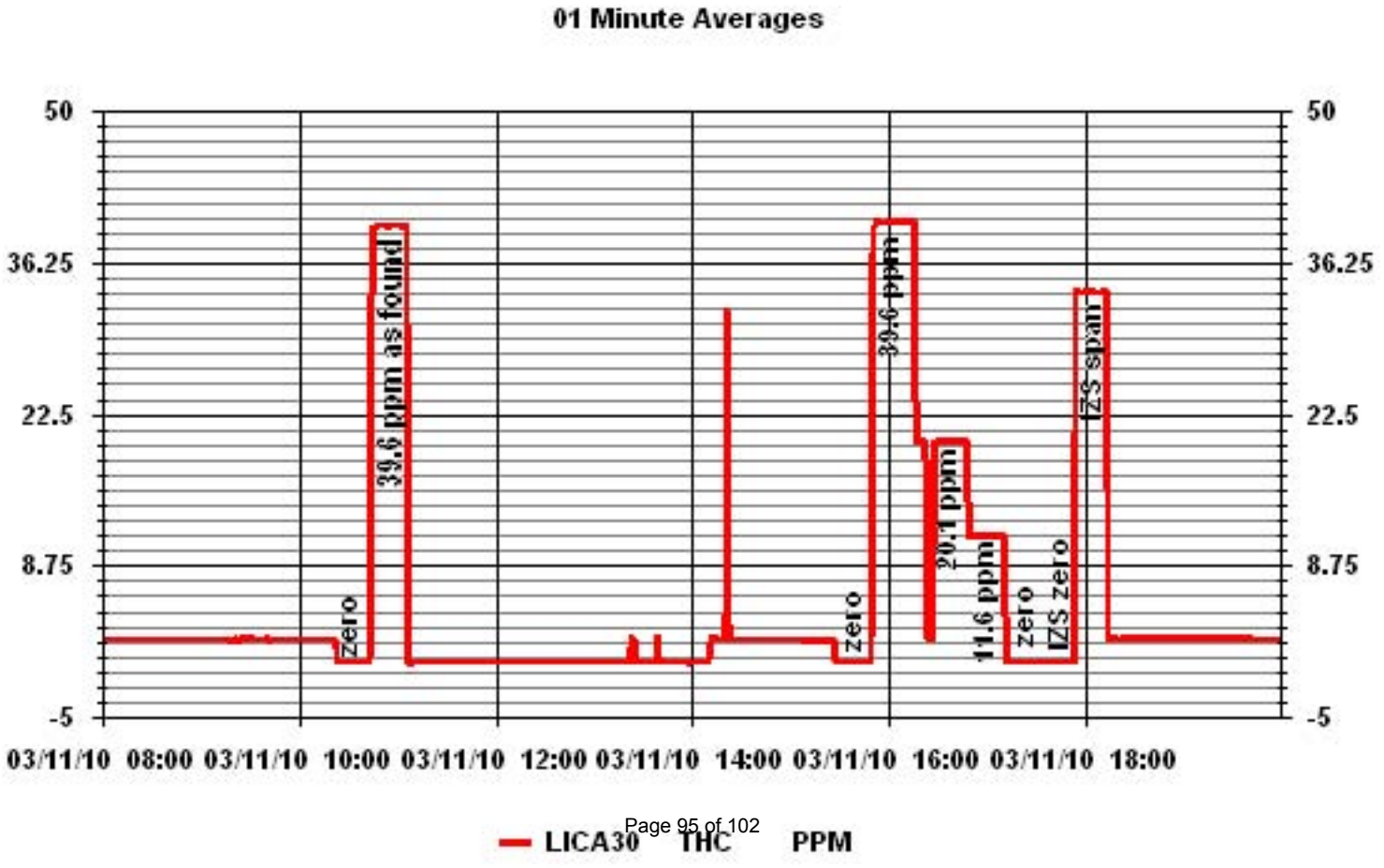
Calibration Date	March 11, 2010		
Company	Lakeland Industry & Community Association		
Plant / Location	Cold Lake - Maskwa		
Start Time (MST)	10:21	End Time (MST)	18:18

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	0.0	
11.6	11.5	1.0084
20.1	20.0	1.0072
39.6	39.9	0.9927

Correlation Coefficient	(≥ 0.995)	0.999927
Slope	(0.85 to 1.15)	1.007936
Intercept	(± 3% F.S.)	-0.128647



Notes: Following the A/F points, the smaple pump diaphragm was replaced. The zero air pump was rebuilt. Allowed some time to warm up and stabilize. Dilution cal resumed at 15:25.


01 Minute Averages
50
36.25
22.5
8.75
-5
zero
39.6 ppm as found
zero
39.6 ppm
20.1 ppm
11.6 ppm
zero
IZS zero
IZS span
03/11/10 08:00
03/11/10 10:00
03/11/10 12:00
03/11/10 14:00
03/11/10 16:00
03/11/10 18:00
LICA30 THC PPM

Nitrogen Dioxide

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	March 11, 2010		Previous Calibration	February 17, 2010	
Company	LICA		Plant/Location	Maskwa	
Start Time (MST)	9:05		End Time (MST)	15:48	
Reason:	Monthly Calibration			Other	
Barometric Pressure	935 mmHg	Station Temperature	25 Deg C	MFCF	1
Cal Gas Concentration	NOx 51.8 ppm	NO 51.6 ppm	Cal Gas Expiry date	19-Dec-10	
DAS Output Voltage	0 - 1 Volts		Chart Rec. Output	NA Volts	

Equipment Information

Analyzer Make / Model:	API 200E	S/N :	594	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	AO 791		
Chart Recorder Make / Model:	NA	S/N:	NA		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration					After Calibration				
Concentration Range					0-1000				ppb	
Sample Flow/Conv. Temp	456	ccm	314.4	Deg C		454	ccm	315.2	Deg C	
Ozone Flow / Vacuum	76	ccm	4.5	"Hg-A		76	ccm	4.5	"Hg-A	
HVPS / A ZERO	767	Volts	16.6	MV		767	Volts	17.3	MV	
Rx/ Temp / PMT Temp	50.0	Deg C	6.6	Deg C		50.0	Deg C	6.6	Deg C	
Box Temp / IZS Temp	32.3	Deg C	45.4	Deg C		36	Deg C	45.1	Deg C	
Offset	1.4	NOx	0.6	NO		1.4	NOx	0.6	NO	
Slope	1.111	NOx	1.105	NO		1.131	NOx	1.124	NO	
NO_2 COEF / Conv Efficency	NA	NO2	1.000			NA	NO2	1.000		

Dilution Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			Correction Factor	
			NOx	NO	NO2	NOx	NO	NO2	NOx	NO
3003	0.0	-----	0	0	0	0	0	0	-----	-----
2957	43.6	-----	753	750	-----	739	736	2	1.0185	1.0187
2960	43.7	-----	754	751	-----	754	750	3	0.9995	1.0010
2992	23.4	-----	402	400	-----	398	397	1	1.0100	1.0086
3003	11.7	-----	201	200	-----	199	197	1	1.0102	1.0165
3007	0.0	-----	0	0	0	0	0	-1	-----	-----

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			NO_2 Correction Factor	NO2 Conv Efficency
			NOx	NO	NO2	NOx	NO	NO2		
2971	43.8	-----	753	750	-----	755	752	3	-----	-----
2959	43.6	550	752	-----	485	751	270	480	1.0104	98.96%
2959	43.6	300	752	-----	271	754	484	268	1.0112	98.88%
2959	43.6	125	752	-----	107	757	648	108	0.9907	100.96%

Linearity			Sum of Least Squares	NOx=	1.002	NO=	1.003	NO2= 1.010
OK?	Yes	No	Correction Factors:	NOx=	0.9995	NO=	1.0010	NO2= 1.0104
						Average Converter Efficiency=		99.60%

	Before Calibration					After Calibration			
Auto Zero	0.0	NOx	0.0	NO2		-0.9	NOx	-1.0	NO2
Auto Span	665	NOx	656	NO2		689	NOx	679	NO2
				Sample Lines Connected		YES			

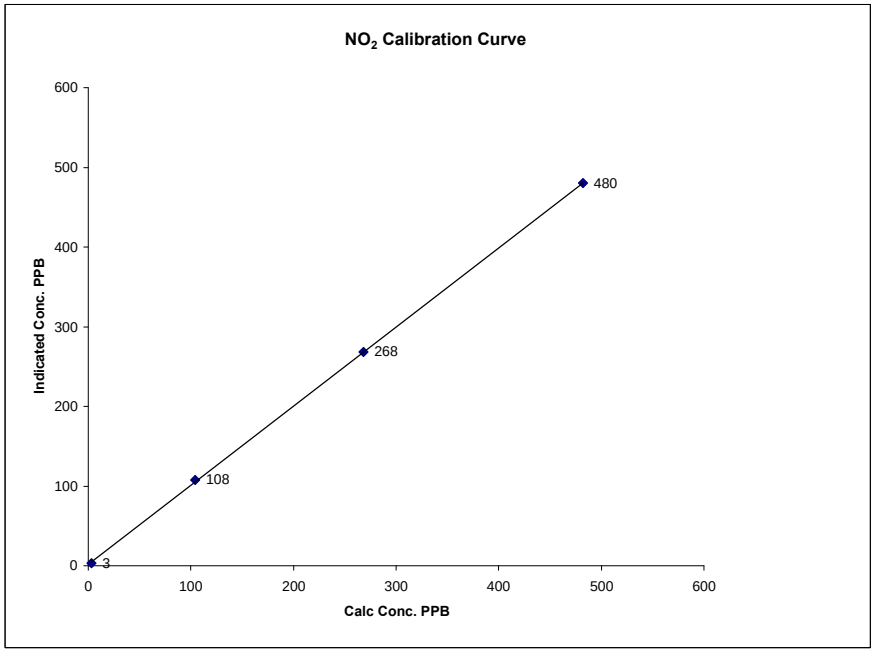
Notes: No adjustment to the analyzer NO2 CE gain required.
During the first NO2 point, the O3 concentration generated by the calibrator changed. Restarted point.

Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	March 11, 2010		
Company	LICA		
Plant / Location	Maskwa		
Start Time (MST)	9:05	End Time (MST)	15:48

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999909
3	3	N/A	Slope (0.85 to 1.15)	0.992566
104	108	0.9630	Intercept (± 3% F.S.)	2.09268
268	268	1.0000		
482	480	1.0042		

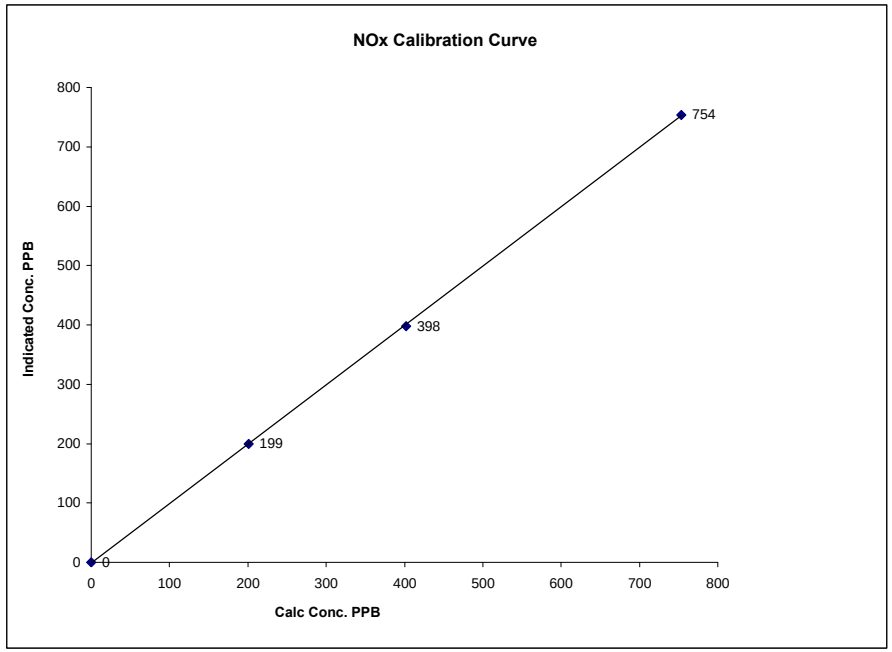


Notes:

NOx Calibration Curve

Calibration Date	March 11, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	9:05	End Time (MST)	15:48		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995)	0.999961
			Slope	(0.85 to 1.15)	1.000604
0	0	N/A	Intercept	(± 3% F.S.)	-1.61372
201	199	1.0102			
402	398	1.0100			
754	754	0.9995			

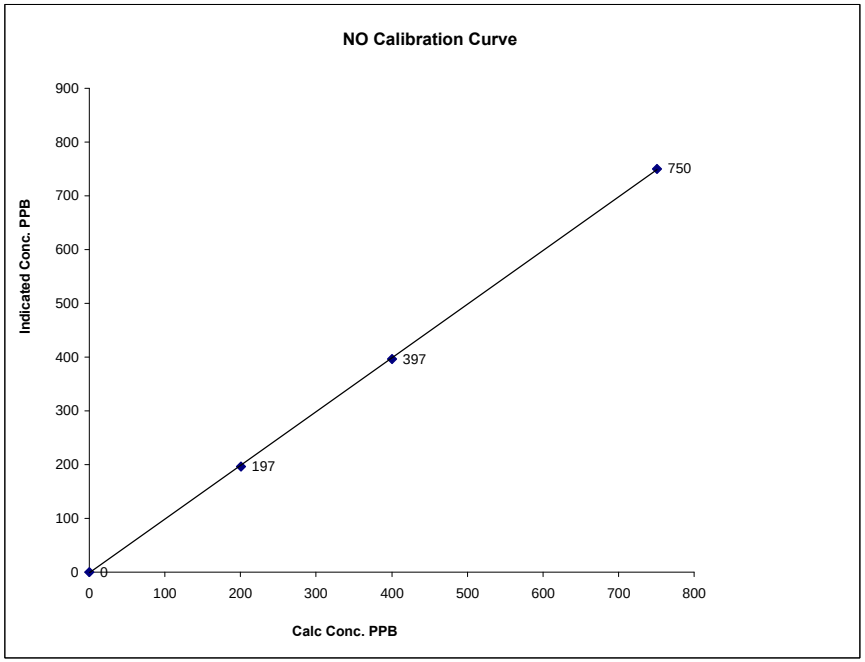


Notes:

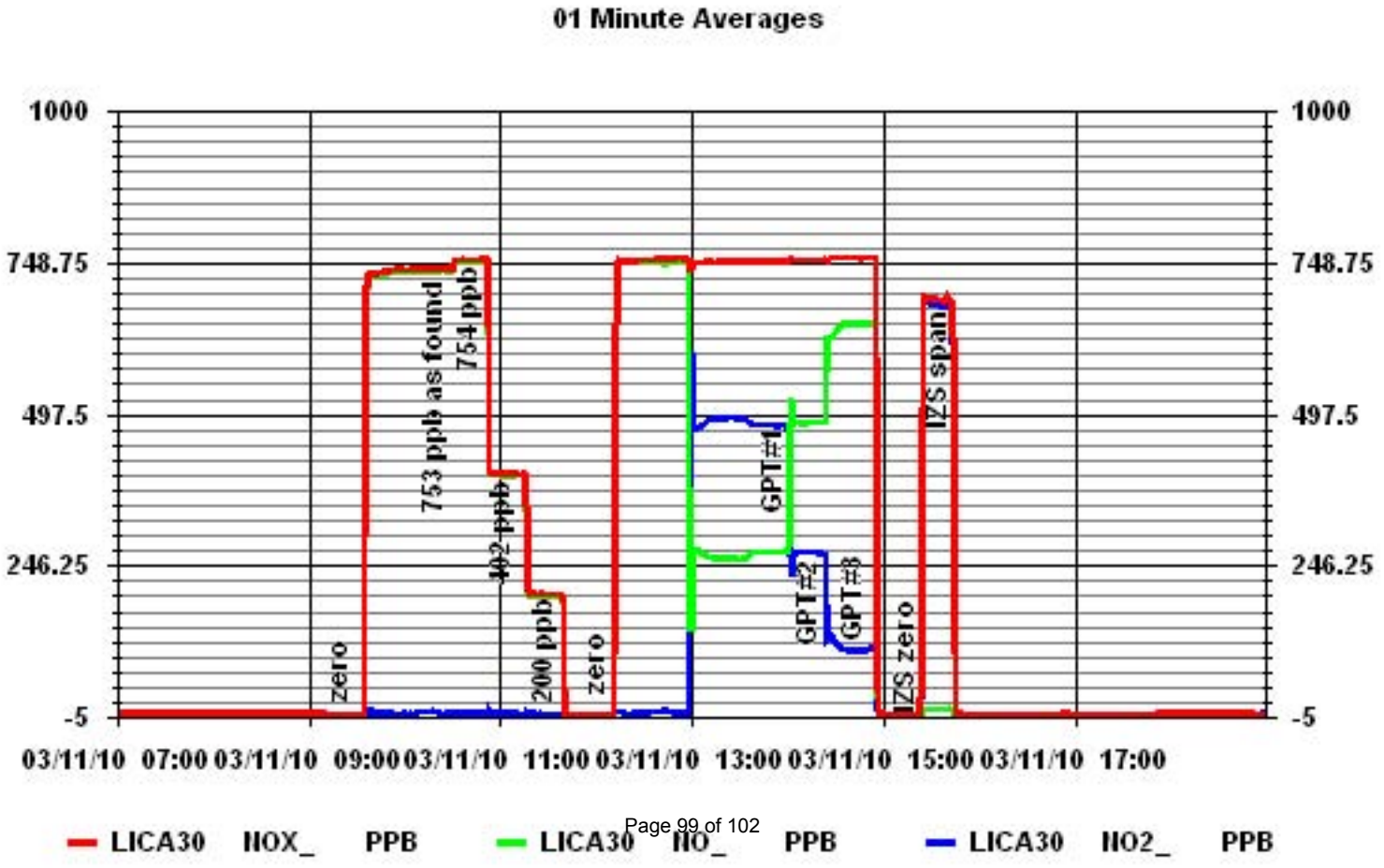
NO Calibration Curve

Calibration Date	March 11, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	9:05	End Time (MST)	15:48		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995)	0.999970
			Slope	(0.85 to 1.15)	1.004974
0	0	N/A	Intercept	(± 3% F.S.)	-6.5228
200	197	1.0165			
400	397	1.0086			
751	750	1.0010			



Notes:


01 Minute Averages
1000
748.75
497.5
246.25
-5
zero
753 ppb as found
754 ppb
402 ppb
200 ppb
zero
GPT#1
GPT#2
GPT#3
IZS zero
IZS span
03/11/10 07:00
03/11/10 09:00
03/11/10 11:00
03/11/10 13:00
03/11/10 15:00
03/11/10 17:00
LICA30 NOX_ PPB
LICA30 NO_ PPB
LICA30 NO2_ PPB

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	March 26, 2010		Previous Calibration	March 11, 2010	
Company	LICA		Plant/Location	Maskwa	
Start Time (MST)	8:00		End Time (MST)	14:43	
Reason:	Monthly Calibration			Other	
Barometric Pressure	933 mmHg	Station Temperature	23 Deg C	MFCF	1
Cal Gas Concentration	NOx 51.8 ppm	NO 51.6 ppm	Cal Gas Expiry date	19-Dec-10	
DAS Output Voltage	0 - 1 Volts		Chart Rec. Output	NA Volts	

Equipment Information

Analyzer Make / Model:	API 200E	S/N :	594	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	AO 791		
Chart Recorder Make / Model:	NA	S/N:	NA		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration					After Calibration				
Concentration Range					0-1000		ppb			
Sample Flow/Conv. Temp	455	ccm	314.2	Deg C		456	ccm	314.2	Deg C	
Ozone Flow / Vacuum	78	ccm	4.5	"Hg-A		78	ccm	4.5	"Hg-A	
HVPS / A ZERO	767	Volts	16.7	MV		767	Volts	16.4	MV	
Rx/ Temp / PMT Temp	50.0	Deg C	6.6	Deg C		50.0	Deg C	6.6	Deg C	
Box Temp / IZS Temp	31.6	Deg C	45.0	Deg C		32.1	Deg C	45.1	Deg C	
Offset	1.4	NOx	0.6	NO		1.4	NOx	0.6	NO	
Slope	1.131	NOx	1.124	NO		1.143	NOx	1.140	NO	
NO_2 COEF / Conv Efficency	NA	NO2	1.000			NA	NO2	1.000		

Dilution Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			Correction Factor	
			NOx	NO	NO2	NOx	NO	NO2	NOx	NO
3002	0.0	-----	0	0	0	0	0	-1	-----	-----
2959	43.7	-----	754	751	-----	747	740	6	1.0092	1.0148
2959	43.7	-----	754	751	-----	755	751	3	0.9985	1.0000
2989	23.3	-----	401	399	-----	400	397	2	1.0017	1.0053
3002	11.7	-----	201	200	-----	199	199	0	1.0106	1.0067
3005	0.0	-----	0	0	0	0	0	-1	-----	-----

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			NO_2 Correction Factor	NO2 Conv Efficency
			NOx	NO	NO2	NOx	NO	NO2		
2959	43.7	-----	754	751	-----	754	752	1	-----	-----
2959	43.7	550	754	-----	488	750	265	484	1.0062	99.18%
2959	43.7	300	754	-----	271	754	482	271	0.9963	100.00%
2959	43.7	125	754	-----	104	755	649	105	0.9811	100.97%

Linearity			Sum of Least Squares	NOx=	1.000	NO=	1.001	NO2= 1.006
OK?	Yes	No	Correction Factors:	NOx=	0.9985	NO=	1.0000	NO2= 1.0062
						Average Converter Efficiency=		100.05%

	Before Calibration					After Calibration			
Auto Zero	-0.1	NOx	0.1	NO2		0.0	NOx	-0.3	NO2
Auto Span	681	NOx	671	NO2		684	NOx	673	NO2
					Sample Lines Connected	YES			

Notes

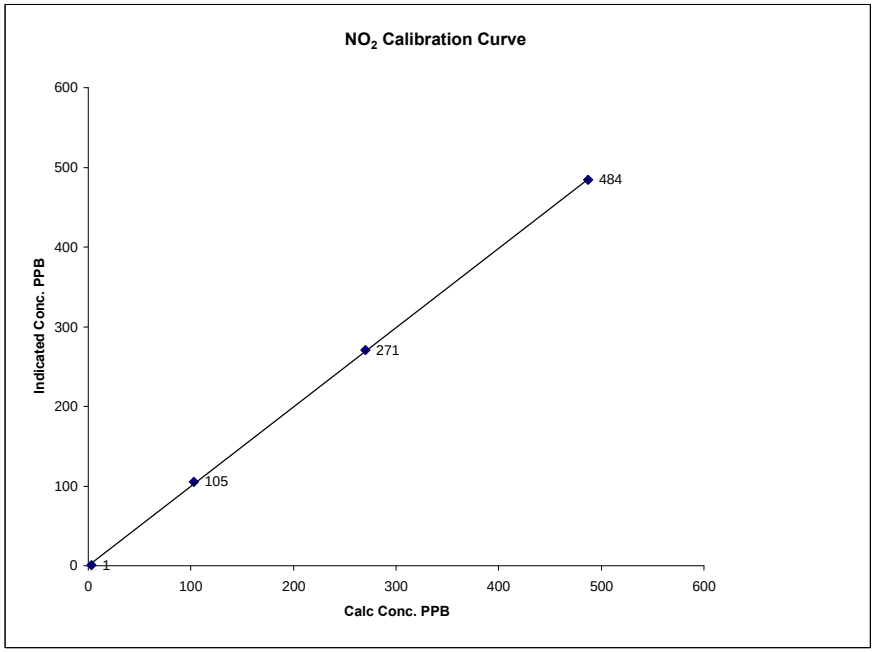
Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	March 26, 2010		
Company	LICA		
Plant / Location	Maskwa		
Start Time (MST)	8:00	End Time (MST)	14:43

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
3	1	N/A
103	105	0.9810
270	271	0.9963
487	484	1.0062

Correlation Coefficient	(≥ 0.995)	0.999890
Slope	(0.85 to 1.15)	0.995840
Intercept	(± 3% F.S.)	0.39752

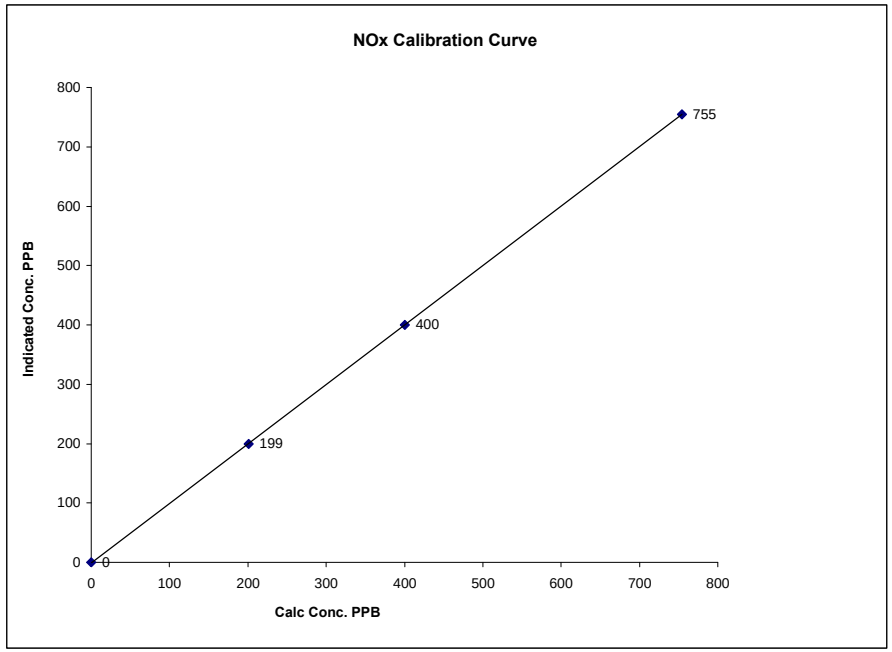


Notes:

NOx Calibration Curve

Calibration Date	March 26, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	8:00	End Time (MST)	14:43		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999988
			Slope (0.85 to 1.15)	1.002308
0	0	N/A	Intercept (± 3% F.S.)	-1.19392
201	199	1.0106		
401	400	1.0017		
754	755	0.9985		

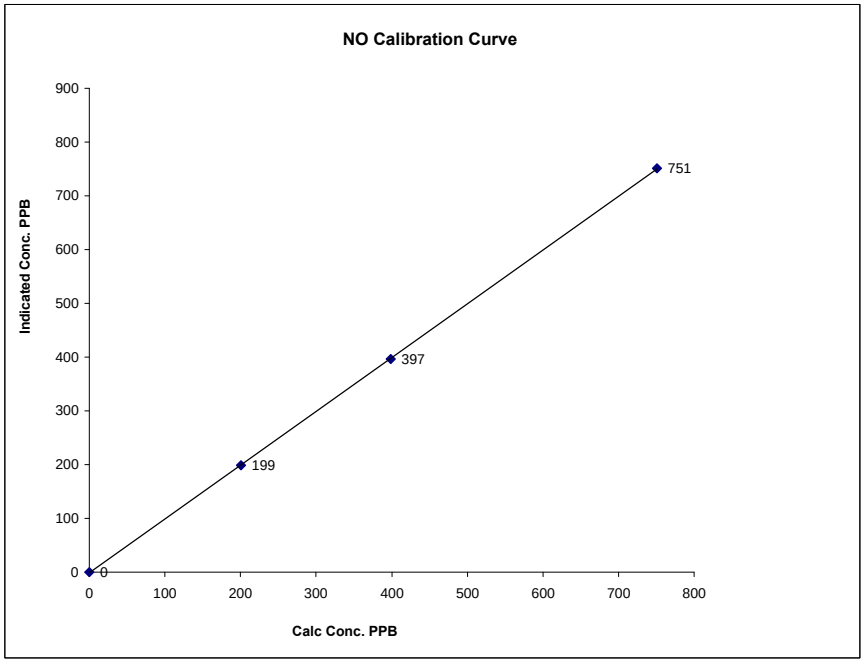


Notes:

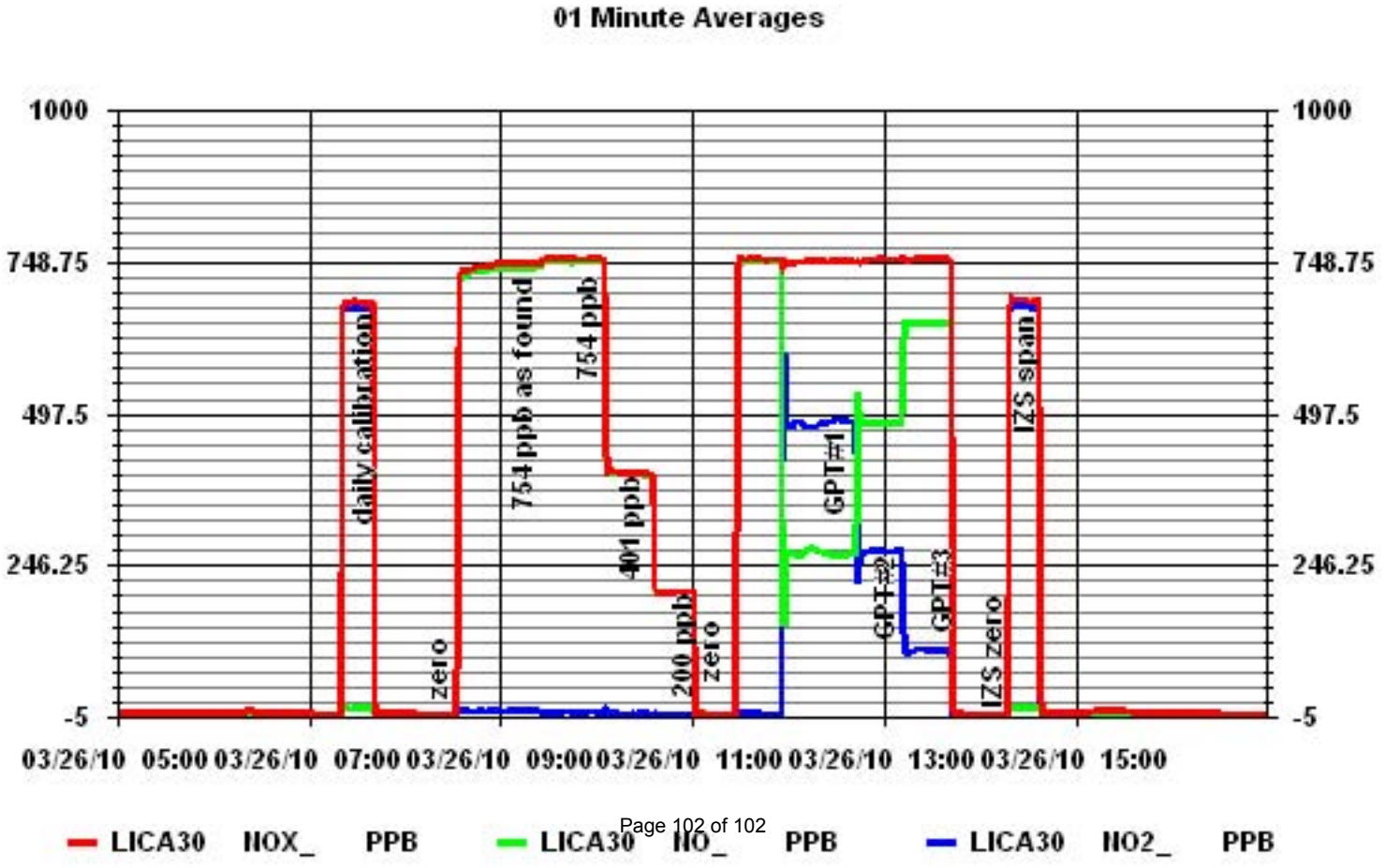
NO Calibration Curve

Calibration Date	March 26, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	8:00	End Time (MST)	14:43		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999989
			Slope (0.85 to 1.15)	1.002895
0	0	N/A	Intercept (± 3% F.S.)	-4.5733
200	199	1.0067		
399	397	1.0053		
751	751	1.0000		



Notes:


01 Minute Averages
1000
748.75
497.5
246.25
-5
daily calibration
zero
754 ppb as found
754 ppb
401 ppb
200 ppb
zero
GPT#1
GPT#2
GPT#3
IZS zero
IZS span
03/26/10 05:00
03/26/10 07:00
03/26/10 09:00
03/26/10 11:00
03/26/10 13:00
03/26/10 15:00
LICA30 NOX_ PPB
LICA30 NO_ PPB
LICA30 NO2_ PPB

Lakeland Industry & Community Association

St. Lina Monitoring Site
Ambient Air Monitoring
Data Report
For
March 2010

Prepared By:

Maxxam Analytics

Driven by Service and Science

April 13, 2010

Lakeland Industry & Community Association
St. Lina
Ambient Air Monitoring

Table of Contents

Introduction

The following Ambient Air Monitoring report was prepared for:

Mr. Mike Bisaga
Lakeland Industry & Community Association
Box 8237
5107W – 50 Street
Bonnyville, Alberta
T9N 2J5

Monitoring Location: St. Lina
Data Period: March 2010

The monthly ambient data report:

- Prepared by Lily Lin
- Reviewed by Craig Snider

Calibration Procedure

The following calibration procedure applies to all calibrations conducted at the Lakeland Industry & Community Association Air Monitoring Station.

Calibration gas concentrations are generated using a dynamic mass flow controlled calibrator. EPA Protocol one gases are diluted with zero air generated on site. The Mass Flow Controllers in the calibrator are referenced using an NIST traceable flow meter once per month. All listed flows are reported as corrected to Standard Temperature and Pressure (STP).

Generated zero gas is introduced to the analyzer first. Three concentrations of calibration gas are then generated in order to introduce points at approximately 50-80%, 25-40% & 10-20% of the analyzer's full-scale range. An auto zero and span are then performed to validate the daily zero and span values recorded to the next multi-point calibration.

All indicated concentrations are taken from the ESC data logger used to collect the data for monthly reporting.

The calibrations conducted at the LICA – St. Lina Air Monitoring Stations conform to the following Maxxam Analytics Standard Operation Procedures:

- CAL SOP-00211
- CAL SOP-00209
- CAL SOP-00213
- CAL SOP-00214
- CAL SOP-00208

Conformance of each calibration to Alberta Environment regulations is outlined in the individual calibration reports. The slope and correlation coefficient are derived from the calculated and indicated analyzer responses. The percent change is calculated using the previous calibration correction factor and the current correction factor before adjustment. All calibration's and maintenance conforms to the procedures outlined in the *Air Monitoring Directive, Appendix A-10, Section 1.6.*

MONTHLY CONTINUOUS DATA SUMMARY
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION – ST. LINA

Continuous Ambient Monitoring – March 2010

LICA ST. LINA SITE						MAXIMUM VALUES							OPERATIONAL TIME (PERCENT)
						1-HOUR					24-HOUR		
PARAMETER	OBJECTIVES		EXCEEDENCES		MONTHLY AVERAGE	READING	DAY	HOUR	WIND SPEED (KPH)	WIND DIRECTION (DEGREES)	READING	DAY	
	1-HR	24-HR	1-HR	24-HR									
SO2 (PPB)	172	57	0	0	0.14	5	1	14	12.8	182(S)	1.1	1	100.0
H2S (PPB)	10	3	0	0	0.01	1	VAR	VAR	VAR	VAR	0.2	29	100.0
THC (PPM)	-	-	-	-	2.11	3.2	1	20	14.9	171(S)	2.6	2	100.0
NOx (PPB)	-	-	-	-	3.14	30	4	10	7	299(WNW)	14.4	4	100.0
NO (PPB)	-	-	-	-	0.23	5	1, 4	VAR	VAR	VAR	1.3	4	100.0
NO_2 (PPB)	212	106	0	0	2.92	26	4	7	9.5	196(SSW)	13.2	4	100.0
VECTOR WS (KPH)	-	-	-	-	12.23	29.5	30	6	-	262(W)	21.6	30	99.9
VECTOR WD (DEGREES)	-	-	-	-	204(SSW)	-	-	-	-	-	-	-	99.9

VAR-VARIOUS

General Monthly Summary

Equipment Operation

The following summary outlines the analyzer performance. Any non-conformances, problems or maintenance performed are detailed at the end of each section.

AQM STATION – LICA – St. Lina

Sulphur Dioxide (PPB)

- Analyzer make / model - API 100E, S/N: 468

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started on March 30th. The IZS scrubber material, DFU filters and scrubber pads were also changed on March 30th. Data was corrected using daily zero information.

Hydrogen Sulphide (PPB)

- Analyzer make / model - API 101E, S/N: 510

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started on March 30th. The IZS scrubber material, DFU filters and scrubber pads were also changed on March 30th. Data was corrected using daily zero information.

Total HydroCarbon (PPM)

- Analyzer make / model –TECO 51C, S/N: 77021-384

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started on March 30th. Two spare hydrogen cylinders and two spare methane gas cylinders were dropped of at the station on March 30th. Data was corrected using daily zero information.

General Monthly Summary

AQM STATION – LICA – St. Lina

Nitrogen Dioxide (PPB)

- Analyzer make / model - API 200E, S/N: 592

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started on March 30th. The IZS scrubber material, DFU filters and scrubber pads were also replaced on March 30th. during the initial NOX GPT of the monthly calibration, the ozone concentration took long time to stabilize; this is a calibrator issue; the analyzer was working OK. Data was corrected using daily zero information.

Vector Wind Speed (KPH) & Vector Wind Direction (DEG)

- System make / model – Met 50.5, S/N: H12635

The wind system is reported as vector wind speed and vector wind direction. 1 hour of data is missing on March 30th, hour of 5. Furthermore, four hours of WS maximum data were invalidated as they were likely an instantaneous.

Datalogger

- System make / model - ESC 8832, S/N: AO717
- Software make/version - ESC v 5.51a

The station is connected to a modem to allow for daily polling of the station.

Trailer

No issue was discovered this month. The manifold was cleaned on March 30th. the three-away filter in the Bard HVAC unit was replaced on March 30th as well.

Continuous Monitoring

Monthly Summaries, Graphs & Wind Roses

Sulphur Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

MARCH 2010

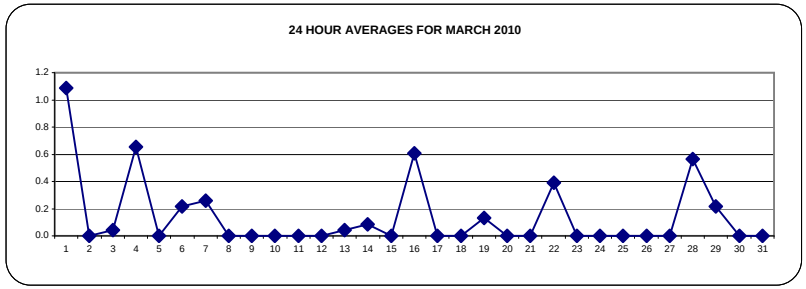
SULPHUR DIOXIDE (SO_2) hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	4	**IZS**	3	3	**5**	3	2	2	2	1	0	0	0	0	**5**	**1.1**	24
2	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
3	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.0	24
4	1	1	0	1	1	1	0	0	**IZS**	1	0	0	0	0	1	3	2	1	1	1	0	0	0	0	3	0.7	24
5	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
6	0	0	0	0	0	0	**IZS**	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0.2	24
7	0	0	0	0	0	**IZS**	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	2	0.3	24
8	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
9	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
10	0	0	**IZS**	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
11	0	**IZS**	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
12	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
13	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	0.0	24
14	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	**IZS**	0	0	1	0.1	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	1	3	2	4	2	1	1	0	0	0	0	**IZS**	0	0	0	0	4	0.6	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	2	1	0	0	0	0	0	2	0.1	24
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	0	0	1	1	1	1	1	1	1	**IZS**	1	1	0	0	0	0	0	0	0	0	1	0.4	24
23	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
25	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
26	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
27	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
28	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	1	2	2	2	1	1	0	1	1	1	2	0.6	24
29	1	1	0	0	0	0	**IZS**	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	1	0.2	24
30	0	0	0	0	0	**IZS**	0	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	1	1	0	1	1	1	1	1	1	3	4	4	3	3	5	3	2	2	2	1	0	1	1	1			
HOURLY AVG	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.1			

STATUS FLAG CODES

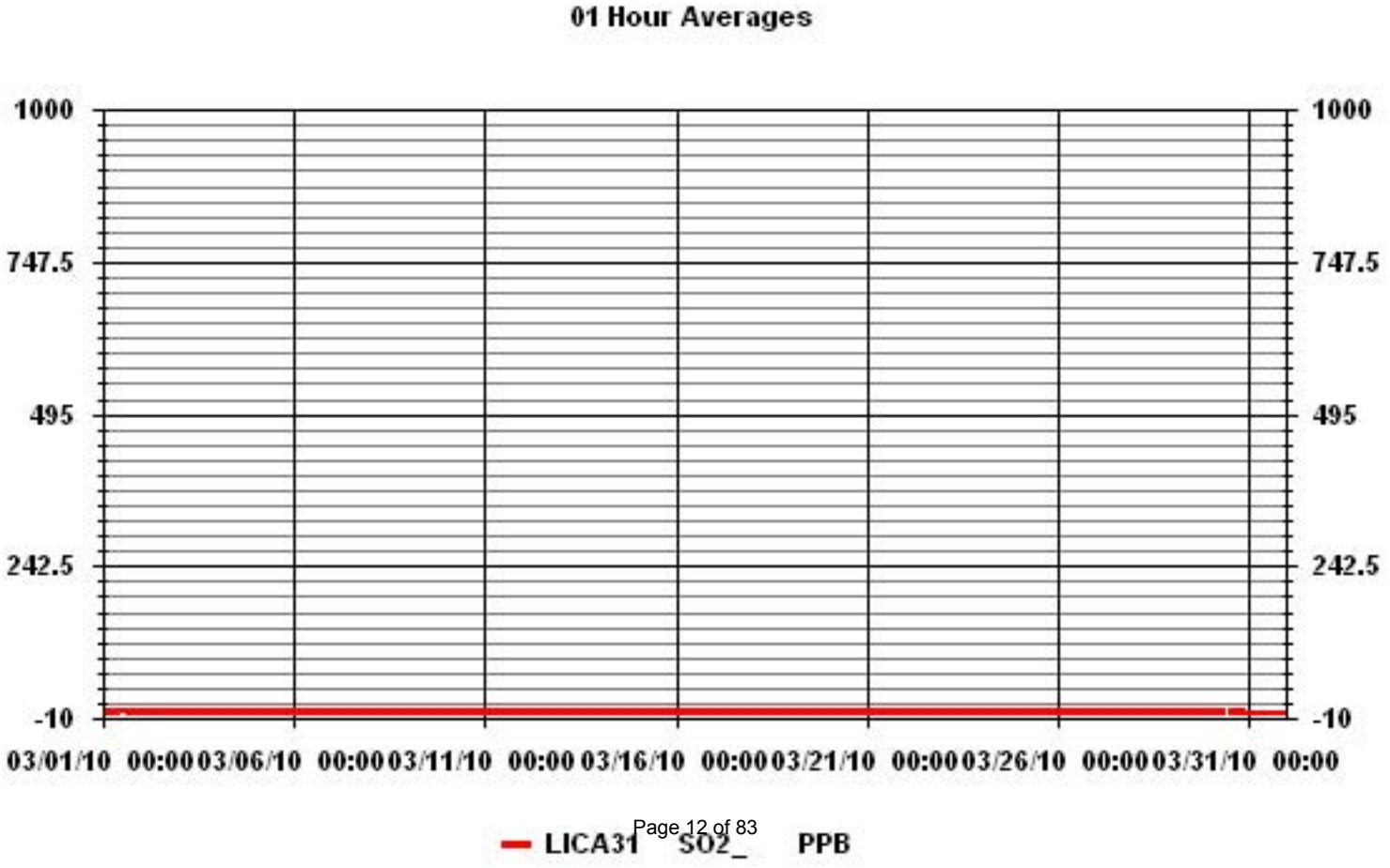
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 172 PPB | 24-HR 57 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	67					
MAXIMUM 1-HR AVERAGE:	5	PPB	@ HOUR(S)	14	ON DAY(S)	1
MAXIMUM 24-HR AVERAGE:	1.1	PPB			ON DAY(S)	1
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	5	HRS	AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	0.51		MONTHLY AVERAGE:		0.14	PPB


01 Hour Averages
1000
747.5
495
242.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 SO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

MARCH 2010

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

MST

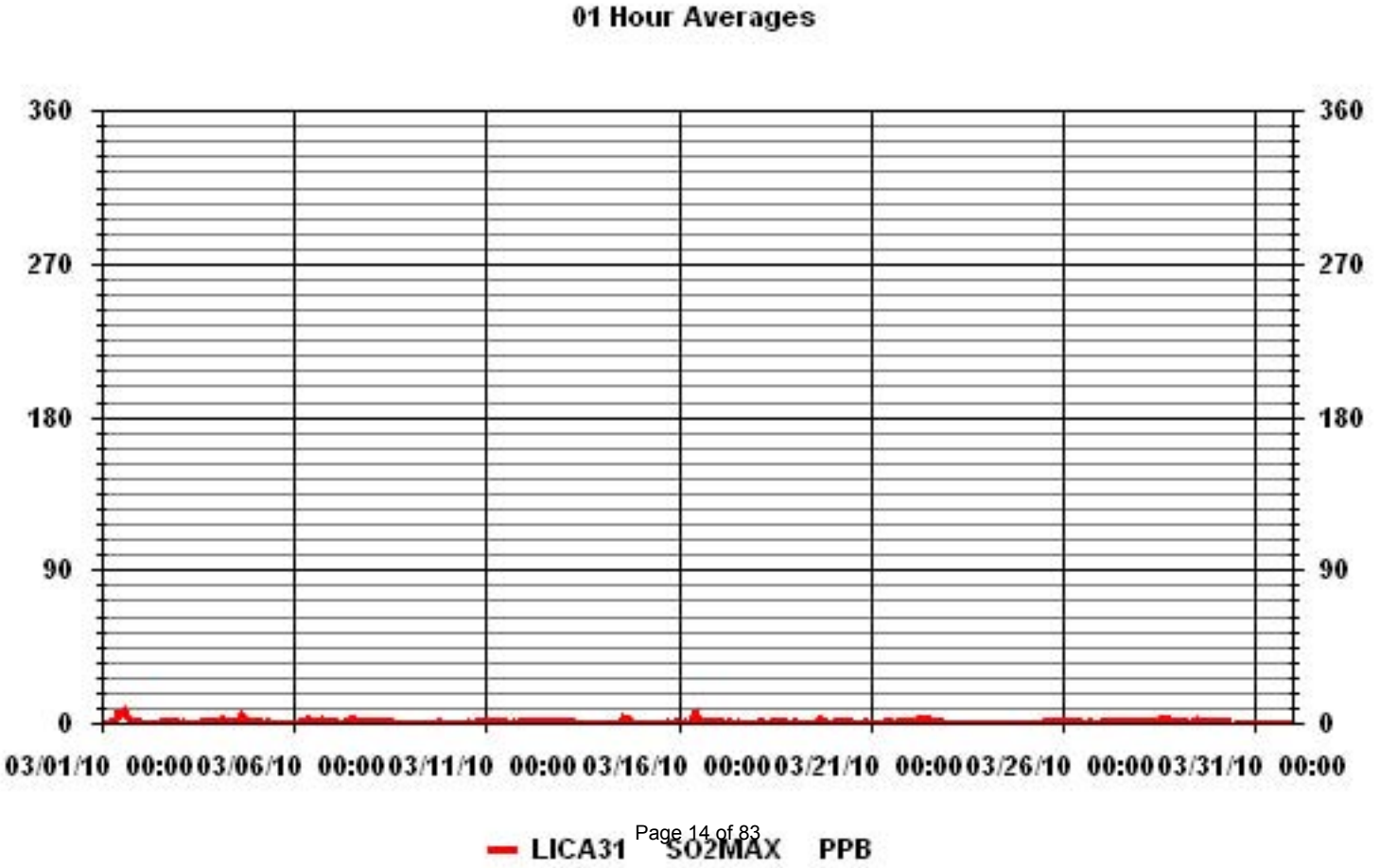
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	1	1	0	2	6	**IZS**	5	5	**7**	4	4	4	3	2	1	1	1	1	**7**	2.1	24
2	1	0	0	0	0	0	0	0	0	0	**IZS**	0	0	1	0	1	0	1	1	1	1	1	1	0	1	0.4	24
3	1	0	0	1	0	0	0	0	0	**IZS**	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0.5	24
4	2	1	1	2	2	2	1	2	**IZS**	2	1	1	1	1	2	5	4	2	2	1	1	1	1	1	5	1.7	24
5	1	1	1	1	1	0	1	**IZS**	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	24
6	0	0	0	1	1	1	**IZS**	1	1	2	2	1	1	1	1	1	1	1	3	2	1	1	1	1	3	1.1	24
7	1	1	1	1	0	**IZS**	0	0	1	1	2	3	3	3	1	1	1	1	1	1	1	1	1	1	3	1.2	24
8	1	1	1	1	**IZS**	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0.5	24
9	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0.1	24
10	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	1	0.2	24
11	0	**IZS**	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1	0.7	24
12	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1.0	24
13	1	1	1	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	2	0.4	24
14	0	0	0	0	0	0	0	0	0	0	0	1	1	3	1	0	2	2	1	0	0	**IZS**	0	0	3	0.5	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	**IZS**	0	1	1	1	0.2	24
16	1	0	0	0	1	0	0	1	3	5	4	6	4	2	2	1	1	1	1	**IZS**	1	1	1	1	6	1.6	24
17	1	1	1	1	1	0	0	1	1	0	0	0	0	1	0	0	0	1	**IZS**	0	0	0	0	0	1	0.4	24
18	0	0	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	**IZS**	1	1	1	0	0	0	1	0.6	24
19	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	**IZS**	3	3	2	1	0	0	0	3	0.5	24
20	0	0	1	1	1	1	1	1	1	1	1	0	1	0	1	**IZS**	0	0	0	0	1	1	0	0	1	0.6	24
21	0	0	0	0	0	0	0	0	0	1	0	0	1	0	**IZS**	0	0	1	1	1	1	1	1	1	1	0.4	24
22	1	1	1	1	1	1	2	2	2	2	2	2	2	**IZS**	2	1	1	1	1	1	1	1	0	0	2	1.3	24
23	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
25	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	24
26	1	1	1	1	1	1	1	1	1	**IZS**	0	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0.5	24
27	0	1	2	1	1	1	1	1	**IZS**	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1	2	0.8	24
28	1	1	1	1	1	1	1	**IZS**	1	1	1	1	2	2	2	3	3	3	3	2	1	1	1	2	3	1.6	24
29	1	1	1	1	1	1	**IZS**	1	0	1	1	1	3	2	1	1	1	1	2	1	1	1	1	1	3	1.1	24
30	1	1	1	1	1	**IZS**	1	1	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0	0	1	0.4	24
31	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	2	1	2	2	2	2	2	2	3	5	6	6	5	5	7	5	4	4	3	2	1	1	1	2			
HOURLY AVG	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.5	0.8	0.9	0.8	1.0	0.9	0.8	0.8	0.8	0.9	1.0	0.6	0.6	0.6	0.5	0.5			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	367					
MAXIMUM INSTANTANEOUS VALUE:	7	PPB	@ HOUR(S)	14	ON DAY(S)	1
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	5	HRS				
STANDARD DEVIATION:	0.89					


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 SO2MAX PPB

LICA31
SO2_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 31
Site Name : LICA31
Parameter : SO2_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 20	2.40	2.82	1.83	4.24	4.10	4.24	9.61	10.04	12.87	9.19	9.33	5.94	3.81	6.36	7.92	5.23	100.00
< 60	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 170	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	2.40	2.82	1.83	4.24	4.10	4.24	9.61	10.04	12.87	9.19	9.33	5.94	3.81	6.36	7.92	5.23	

Calm : .00 %

Total # Operational Hours : 707

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 20	17	20	13	30	29	30	68	71	91	65	66	42	27	45	56	37	707
< 60																	
< 110																	
< 170																	
< 340																	
>= 340																	
Totals	17	20	13	30	29	30	68	71	91	65	66	42	27	45	56	37	

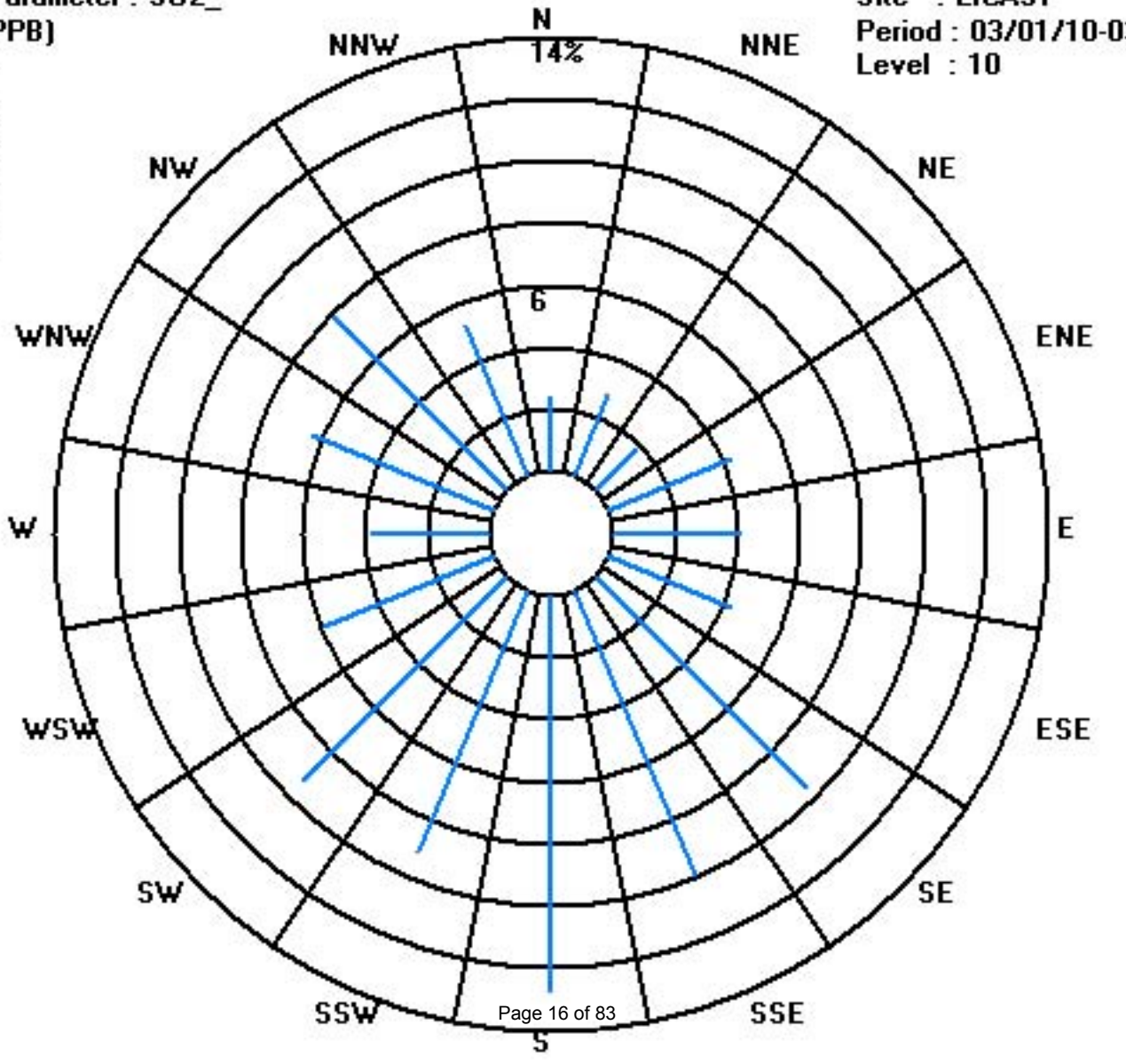
Calm : .00 %

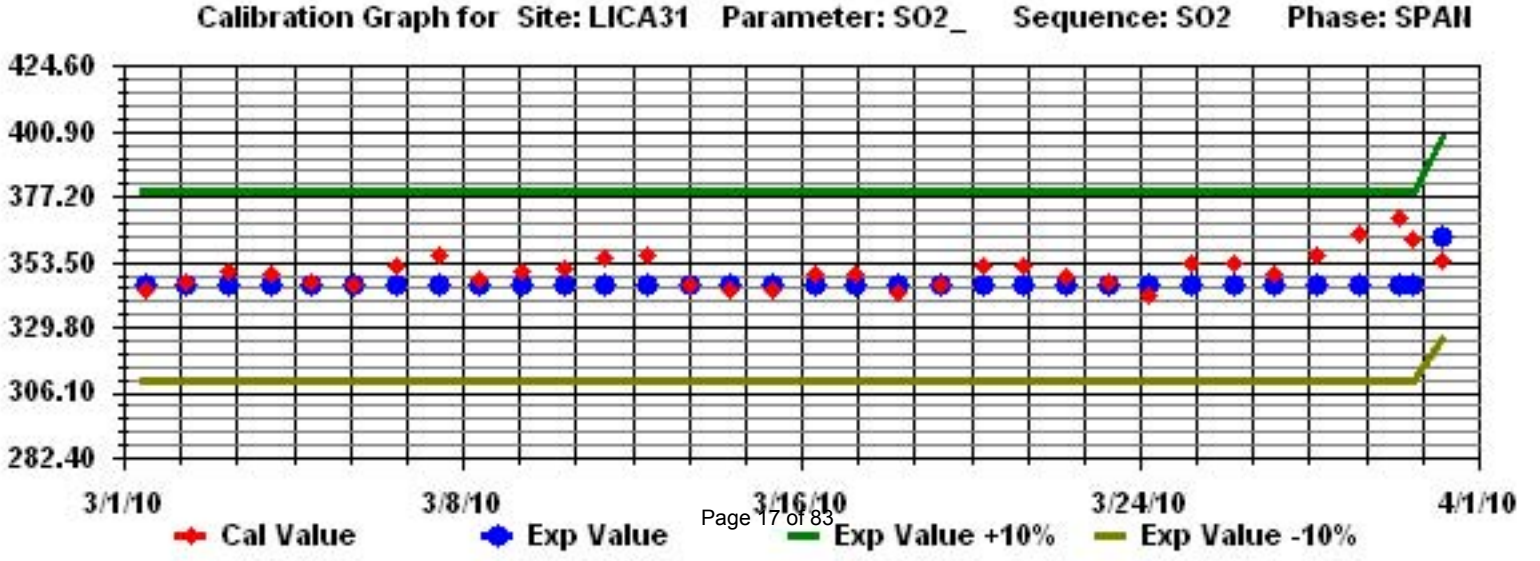
Total # Operational Hours : 707

Logger : 31 Parameter : SO2_
Class Limits (PPB)

>= 340
< 340
< 170
< 110
< 60
< 20

Site : LICA31
Period : 03/01/10-03/31/10
Level : 10




Calibration Graph for Site: LICA31 Parameter: SO2_ Sequence: SO2 Phase: SPAN
424.60
400.90
377.20
353.50
329.80
306.10
282.40
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Hydrogen Sulphide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

MARCH 2010

HYDROGEN SULPHIDE (H_2S) hourly averages in ppb

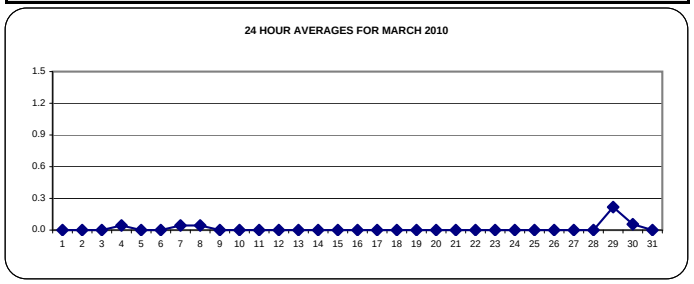
MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY 24-HOUR		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
2	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
3	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
4	0	0	0	0	0	0	0	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
5	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
6	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
7	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.0	24
8	0	0	0	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
9	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
10	0	0	**IZS**	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
11	0	**IZS**	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
12	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0.0	24
23	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
25	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
26	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
27	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
28	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
29	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	**0.2**	24
30	1	0	0	0	0	**IZS**	0	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
31	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1			
HOURLY AVG	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0			

STATUS FLAG CODES

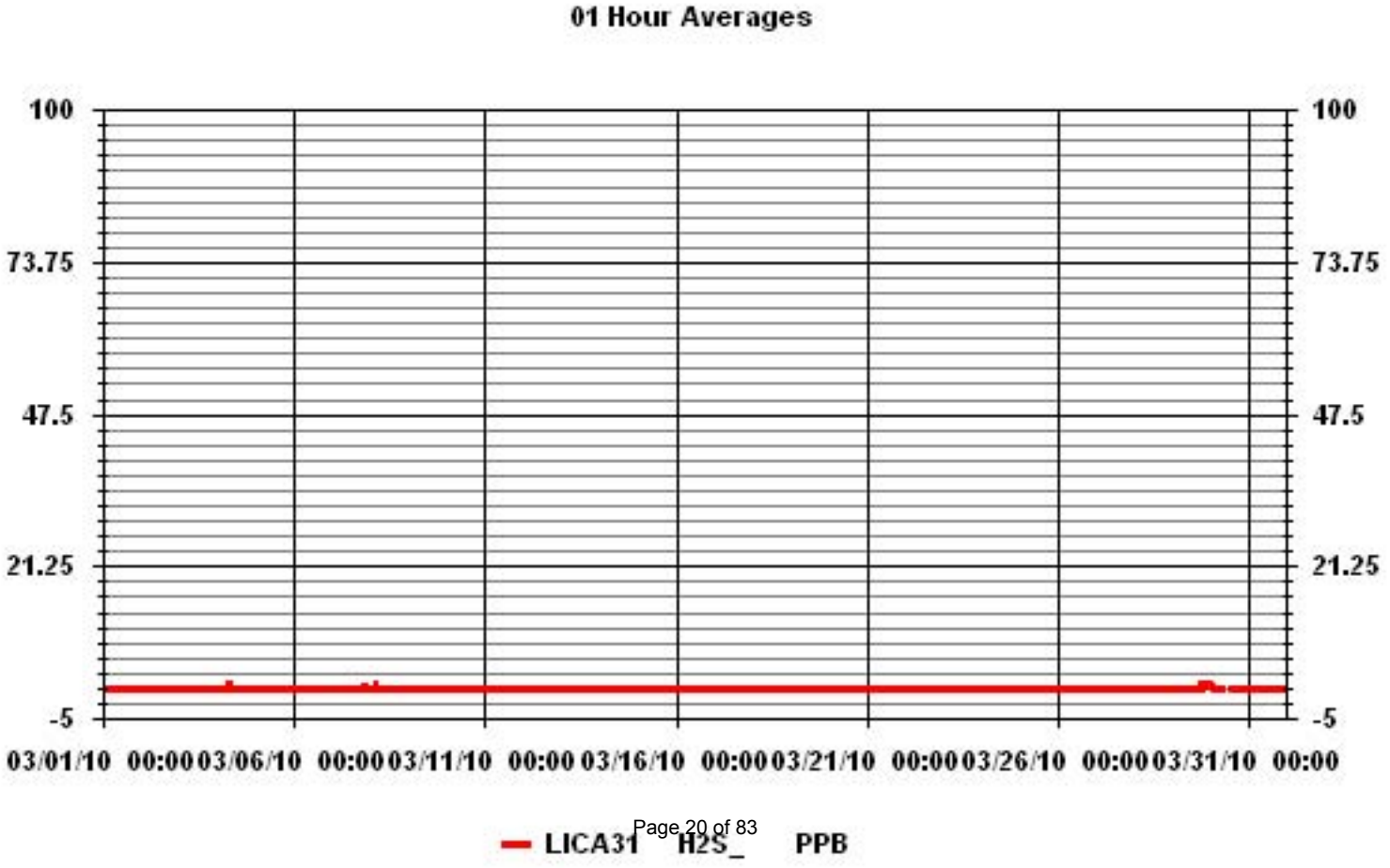
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 10 PPB | 24-HR 3 PPB



MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	9					
MAXIMUM 1-HR AVERAGE:	1	PPB	@ HOUR(S)	VAR	ON DAY(S)	VAR
MAXIMUM 24-HR AVERAGE:	0.2	PPB			ON DAY(S)	29
					VAR-VARIOUS	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	5	HRS	AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	0.11		MONTHLY AVERAGE:		0.01	PPB


01 Hour Averages
100
73.75
47.5
21.25
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 H2S_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST.LINA*

MARCH 2010

HYDROGEN SULPHIDE MAX instantaneous maximum in ppb

MST

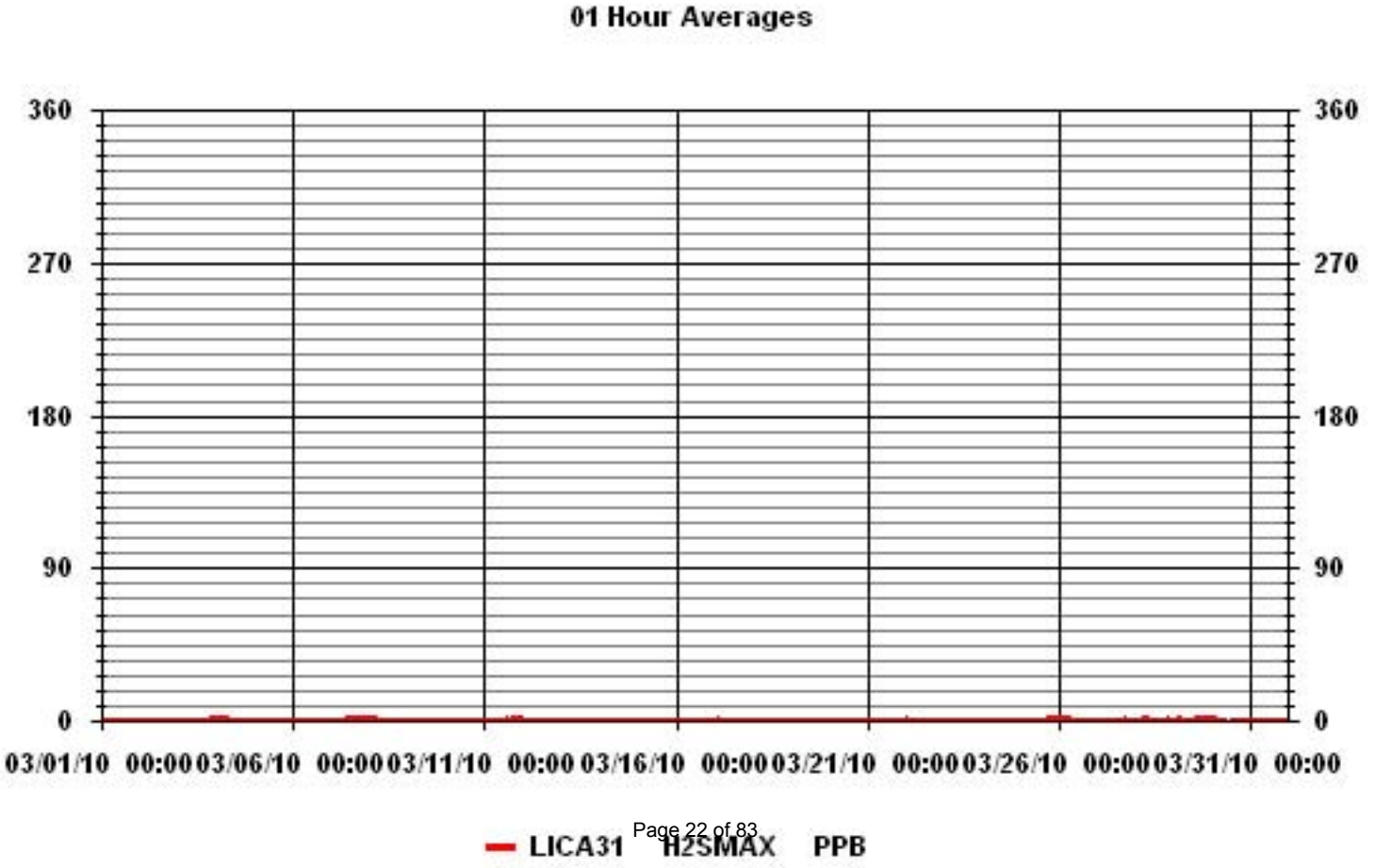
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
2	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
3	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.1	24
4	1	1	1	1	1	1	1	1	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	24
5	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
6	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
7	0	0	0	0	0	**IZS**	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	24
8	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
9	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
10	0	0	**IZS**	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
11	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	1	0.3	24
12	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
17	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	0.0	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0.0	24
22	1	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	1	0.0	24
23	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
25	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0.3	24
26	0	1	1	1	1	0	1	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
27	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.0	24
28	0	0	0	0	0	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.1	24
29	0	0	0	1	0	0	**IZS**	0	0	0	0	0	0	1	1	1	1	1	1	1	**2**	1	1	1	**2**	0.6	24
30	**2**	1	1	0	0	**IZS**	0	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0	0	**2**	0.2	24
31	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1			
HOURLY AVG	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	72					
MAXIMUM INSTANTANEOUS VALUE:	2	PPB	@ HOUR(S)	20, 0	ON DAY(S)	29, 30
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	5	HRS				
STANDARD DEVIATION:	0.32					


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 H2SMAX PPB

LICA31
H2S_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 31
Site Name : LICA31
Parameter : H2S_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	2.40	2.82	1.83	4.24	4.10	4.24	9.61	10.04	12.87	9.19	9.33	5.94	3.81	6.36	7.92	5.23	100.00
< 10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	2.40	2.82	1.83	4.24	4.10	4.24	9.61	10.04	12.87	9.19	9.33	5.94	3.81	6.36	7.92	5.23	

Calm : .00 %

Total # Operational Hours : 707

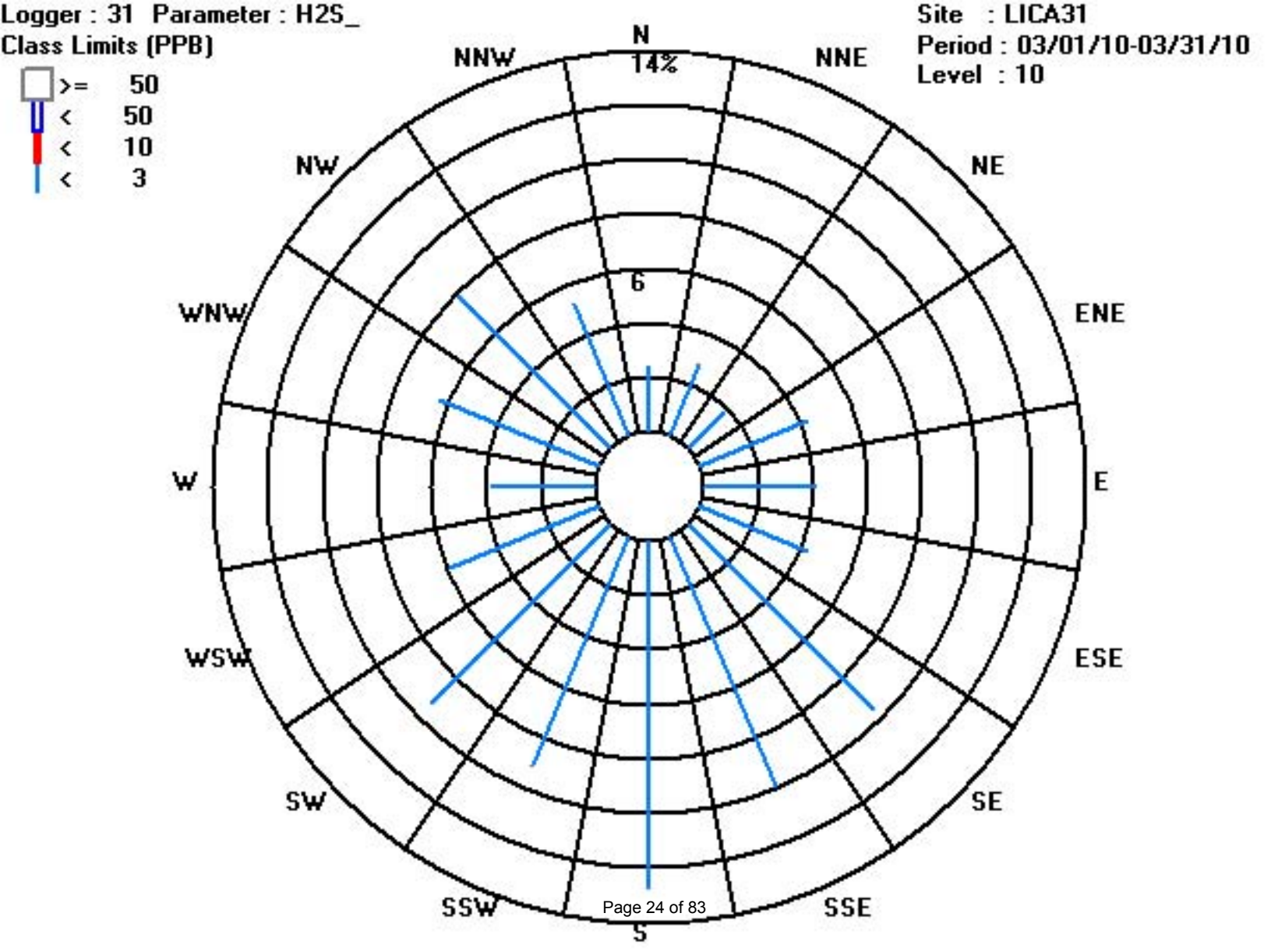
Distribution By Samples

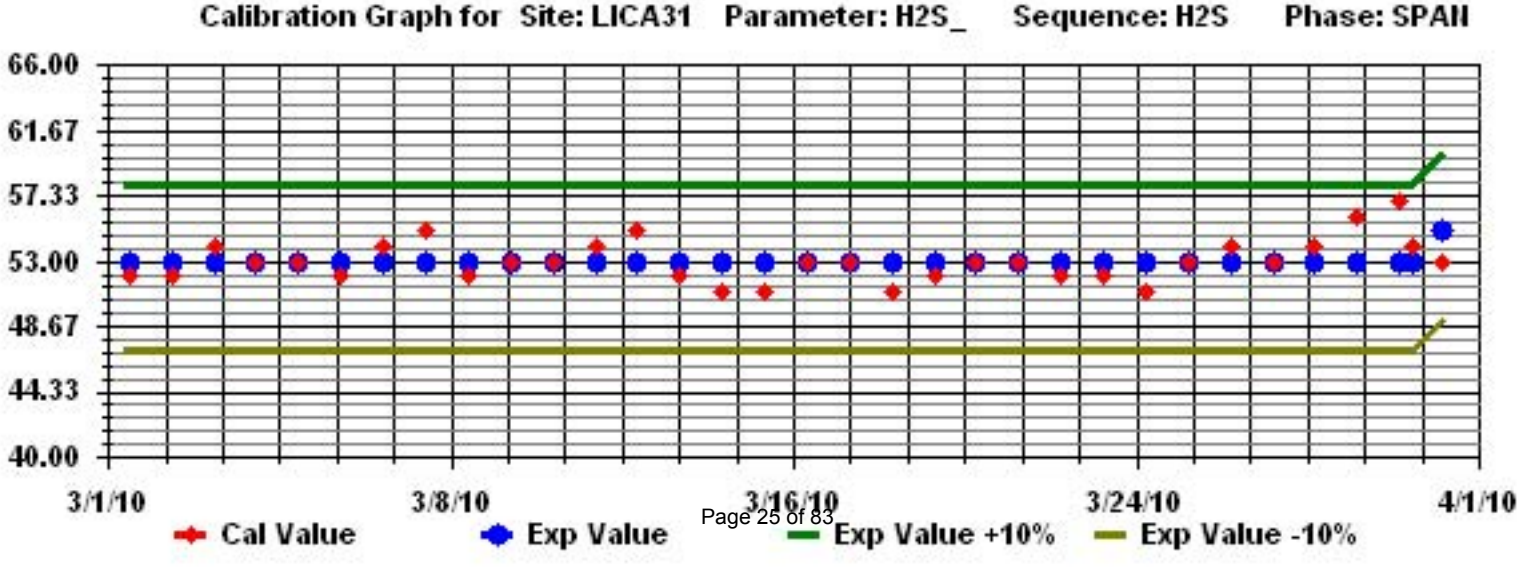
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	17	20	13	30	29	30	68	71	91	65	66	42	27	45	56	37	707
< 10																	
< 50																	
>= 50																	
Totals	17	20	13	30	29	30	68	71	91	65	66	42	27	45	56	37	

Calm : .00 %

Total # Operational Hours : 707


Logger : 31 Parameter : H2S_
Class Limits (PPB)
>= 50
< 50
< 10
< 3
Site : LICA31
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA31 Parameter: H2S_ Sequence: H2S Phase: SPAN
66.00
61.67
57.33
53.00
48.67
44.33
40.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Hydrocarbons

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION -ST.LINA

MARCH 2010

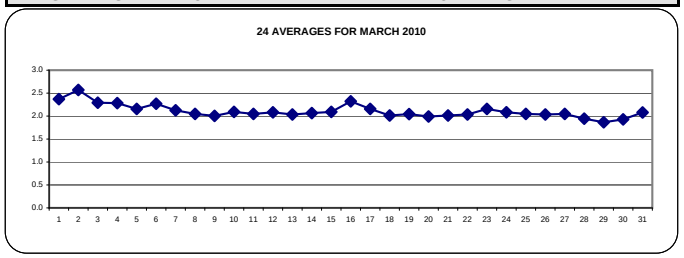
TOTAL HYDROCARBONS hourly averages in ppm

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	**IZS**	2.3	2.2	2.2	2.2	2.2	2.2	2.4	2.8	**3.2**	2.9	2.7	2.8	**3.2**	2.4	24
2	2.9	2.8	3	3	3	2.9	2.8	2.9	2.9	2.7	**IZS**	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3	3.0	**2.6**	24
3	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.3	2.3	**IZS**	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.5	2.4	2.5	2.3	24
4	2.4	2.4	2.3	2.3	2.4	2.4	2.4	2.5	**IZS**	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.5	2.3	24
5	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.3	2.4	2.4	2.2	24
6	2.3	2.4	2.4	2.5	2.5	2.5	**IZS**	2.4	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.5	2.3	24
7	2.2	2.2	2.2	2.2	2.1	**IZS**	2.2	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2	2	2	2.1	2.1	2.1	2	2	2.3	2.1	24
8	2	2	2.1	2.1	**IZS**	2.2	2.2	2.3	2.2	2.2	2.2	2	2	2	2	2	1.9	1.9	1.9	1.9	2	2	2	2	2.3	2.0	24
9	2	2	2	**IZS**	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.1	2	2	2	2	2.1	2.0	24
10	2	2	**IZS**	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2	2	2	2.2	2.1	24
11	2	**IZS**	2	2	2	2	2.2	2.3	2.3	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2	2	2.3	2.0	24
12	**IZS**	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2	2.2	2.1	2	2	2.1	2.1	2.1	2.2	2.1	IZS	2.2	2.1	24
13	2.1	2.2	2.4	2.3	2.1	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	2	2.4	2	2	2	**IZS**	2	2.4	2.0	24
14	2	2	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2.1	**IZS**	2.1	2.1	2.2	2.1	24
15	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2.1	2	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.1	2.1	2.2	2.2	2.1	24
16	2.2	2.2	2.1	2.1	2.1	2.2	2.4	2.3	2.4	2.5	2.5	2.4	2.3	2.2	2.1	2.5	2.7	2.6	2.6	**IZS**	2.4	2.2	2.2	2.2	2.7	2.3	24
17	2.1	2.3	2.4	2.3	2.3	2.4	2.4	2.3	2.3	2.1	2	2.1	2.1	2.1	2	2.1	2.1	2	**IZS**	2	2.1	2.1	2	2	2.4	2.2	24
18	2	2	2	2	2	2	2	2	2	2	2	2	2	2.1	2.1	2.1	2	**IZS**	2	2	2	2	2	2	2.1	2.0	24
19	2	2	2.1	2.1	2.1	2.1	2.3	2.2	2.1	2	2	2	2	2	2	2	**IZS**	2	2	2	2	2	2	2	2.3	2.0	24
20	2	2	2	2	2	2	2	2	2.1	2	2	2	2	2	2	2.1	**IZS**	1.9	1.9	1.9	2	2	2	2	2.1	2.0	24
21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	**IZS**	2	2	2	2	2	2	2.1	2.2	2.2	2.0	24
22	2.1	2	2.1	2	2.1	2.1	2.1	2	2	2	2	2	2	**IZS**	2	2	2	2	2	2	2	2.2	2	2.1	2.2	2.0	24
23	2	2.1	2.1	2.1	2	2.2	2.4	2.4	2.4	2.3	2.3	2.3	**IZS**	2.2	2.1	2.1	2	2.1	2.1	2.1	2.1	2.1	2.1	2	2.4	2.2	24
24	2	2	2	2	2	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.1	24
25	2.1	2.1	2.1	2.1	2	2	2	2	2	2	**IZS**	2	2	2	2	2	2	2	2	2.1	2.2	2.1	2.1	2.1	2.2	2.0	24
26	2.1	2.1	2.1	2.1	2.1	2	2	2	2	**IZS**	2	2	2	2	2	2.1	2	2	2	2	2	2.1	2	2.1	2.1	2.0	24
27	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	**IZS**	2.2	2.1	2	2	2	2	1.9	1.9	1.9	1.9	2	2	2	2	2	2.2	2.0	24
28	2	2.1	2	2	2	2	2	**IZS**	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.1	1.9	24
29	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	24
30	1.8	1.8	1.8	1.8	1.8	**IZS**	1.9	1.9	1.9	1.9	1.9	**C**	**C**	**C**	**C**	**C**	2	2.1	2	2	2.1	2	2	2	2.1	1.9	24
31	2	2	2	2	**IZS**	2	2	2	2	2.1	2.1	2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.2	2.1	24
HOURLY MAX	2.9	2.8	3.0	3.0	3.0	2.9	2.8	2.9	2.9	2.7	2.5	2.4	2.4	2.4	2.4	2.5	2.7	2.6	2.6	2.8	3.2	2.9	2.7	2.8			
HOURLY AVG	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1			

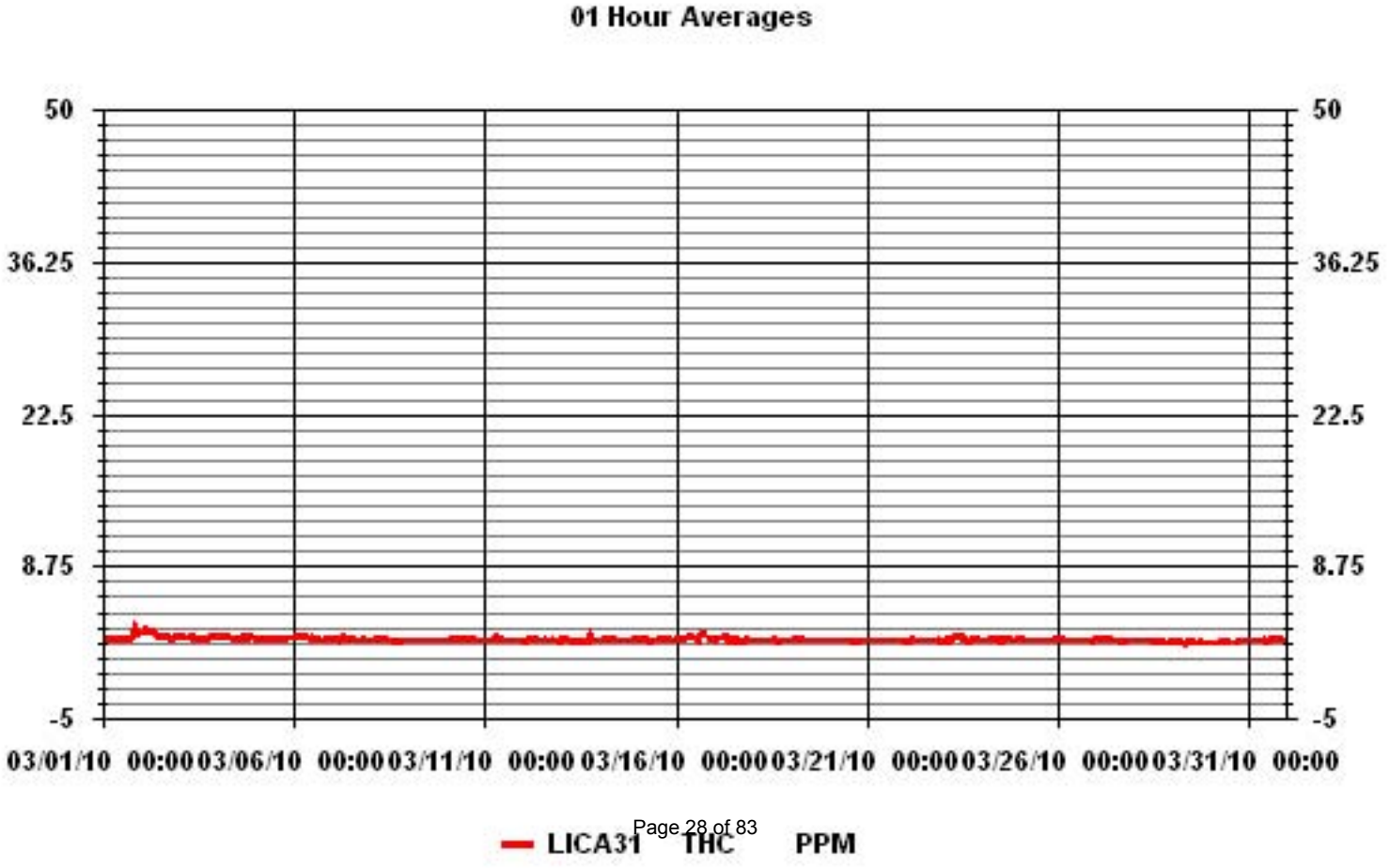
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	707					
MAXIMUM 1-HR AVERAGE:	3.2	PPM	@ HOUR(S)	20	ON DAY(S)	1
MAXIMUM 24-HR AVERAGE:	2.6	PPM			ON DAY(S)	2
					VAR- VARIOUS	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	5	HRS	AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	0.18		MONTHLY AVERAGE:		2.11	PPM


01 Hour Averages
50
36.25
22.5
8.75
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 THC PPM

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

MARCH 2010

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

MST

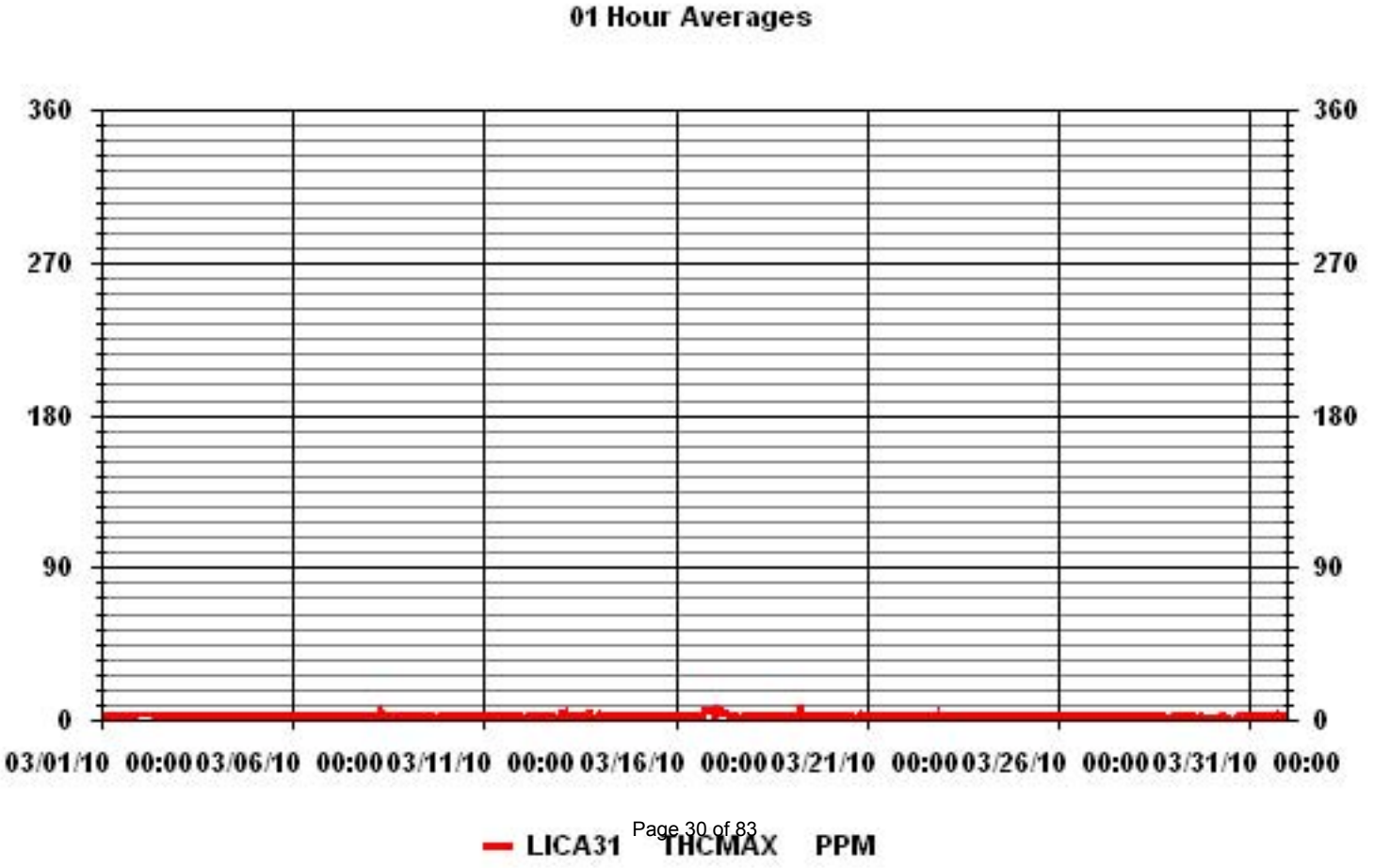
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	**IZS**	2.3	2.3	2.2	2.2	2.3	2.3	2.5	3.2	3.3	3	2.8	2.9	3.3	2.4	24
2	2.9	2.9	3.1	3.1	3.1	3	2.9	2.9	3	2.8	**IZS**	2.5	2.4	2.5	2.5	2.6	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	2.6	24
3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.3	**IZS**	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.5	2.6	2.5	2.6	2.3	24
4	2.5	2.4	2.4	2.4	2.5	2.4	2.5	2.5	**IZS**	3	2.5	2.3	2.2	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	3	2.4	24
5	2.1	2.1	2.1	2.1	2.1	2.2	2.2	**IZS**	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.3	2.3	2.4	2.4	2.6	2.6	2.2	24
6	2.3	2.4	2.4	2.5	2.5	2.5	**IZS**	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.5	2.3	24
7	2.2	2.3	2.3	2.2	2.1	**IZS**	2.3	2.3	2.4	2.3	2.2	2.1	2.1	2.1	2.2	2.2	2.1	2	2	2.1	2.1	2.1	2.1	2.1	2.4	2.2	24
8	2.1	2.1	2.1	2.2	**IZS**	2.5	3.2	5.3	2.2	2.4	2.3	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2	2.1	2.2	2.1	2.4	2.1	5.3	2.4	24
9	2.1	2.3	2.3	**IZS**	2	2	2	2.3	2.2	2	2.2	2.1	2.2	2.2	2.2	2.2	2	2	2.1	2.7	2.7	2.5	2.1	2.1	2.7	2.2	24
10	2.1	2.5	**IZS**	2.7	2.6	2.4	2.5	2.6	2.3	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2	2	2.7	2.2	24
11	2	**IZS**	2	2	2	2.1	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2	2.3	2.1	24
12	**IZS**	2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.6	2.2	**IZS**	2.6	2.1	24
13	2.1	5.9	2.5	4.6	2.2	2	2	2	1.9	2	2.3	2.1	2.1	2	2	3.3	3.3	2.4	6.3	4.3	2.5	2	**IZS**	2.4	6.3	2.8	24
14	3.7	2	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.1	2.1	2	2	2	2	2	2	2	2	2	2.1	**IZS**	2.2	2.2	3.7	2.2	24
15	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.2	2.2	2.2	2.2	2.1	24
16	2.2	2.2	2.2	2.2	2.1	2.4	2.4	2.4	2.6	2.6	2.6	2.5	2.5	2.4	2.1	2.9	3.4	3	5.7	**IZS**	4.8	4.6	6.3	5.9	6.3	3.1	24
17	2.3	2.4	8.1	4.1	4.8	5.7	4.6	3.8	4.2	2.4	2.2	2.8	2.9	3.1	2.5	2.5	2.6	2.3	**IZS**	2.8	2.7	3.4	2.2	2	8.1	3.3	24
18	2.3	2.3	2.1	2.7	2.9	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2.1	**IZS**	2.1	2	2.1	2	2	2	2.9	2.1	24
19	2.1	2.1	2.1	2.1	2.1	2.5	**8.6**	5.2	4	2.6	2	2	2	2.1	2	2	**IZS**	2.1	2.1	2	2	2	2	2	**8.6**	2.6	24
20	2	2	2	2	2	2	2	2	2.1	2.1	2	2	3.1	2.9	3.2	**IZS**	1.9	1.9	2.3	2.3	3.5	2.2	2.2	2.2	3.5	2.3	24
21	2.2	2.3	2.1	2	2	2.1	2.2	2.1	2.3	2.2	2.2	2.2	2.2	2.2	**IZS**	2.2	2.1	2	2	2	2	2.1	2.2	3	3	2.2	24
22	3	2.8	3	2.8	2.9	3.4	3	2.3	2.2	2.2	2.1	2.4	2.7	**IZS**	2.9	2.7	2.5	2.2	2	2	2	4.4	2.1	2.1	4.4	2.6	24
23	2.2	2.7	2.4	2.4	2.1	2.4	2.8	2.8	2.7	2.5	2.4	2.4	**IZS**	2.2	2.4	2.3	2.2	2.3	2.6	2.9	2.7	2.6	2.6	2	2.9	2.5	24
24	2	2	2	2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	**IZS**	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.3	2.1	24
25	2.1	2.2	2.1	2.1	2.1	2	2	2	2	2.1	**IZS**	2	2	2	2	2	2	2.3	2.5	2.6	2.1	2.1	2.1	2.1	2.6	2.1	24
26	2.1	2.1	2.1	2.3	2.3	2.1	2	2	2	**IZS**	2.3	2.3	2.5	2.3	2.3	3.1	2.8	2	2	2	2.1	2.1	2.1	2.1	3.1	2.2	24
27	2.1	2.1	2.1	2.2	2.2	2.7	2.2	2.2	**IZS**	2.3	2.2	2.1	2	2	2	2	1.9	1.9	2	2.1	2	2	2	2	2.7	2.1	24
28	2.1	2.1	2	2	2	2	2	**IZS**	2	2	2	2	2	1.9	1.9	2	2	2.1	2	1.9	1.9	2.2	1.9	1.9	2.2	2.0	24
29	2	1.9	1.9	2	2	2	**IZS**	1.9	1.9	1.9	2	2	1.9	1.9	1.9	1.8	1.8	2.3	2.4	2.2	1.8	1.9	1.8	1.8	2.4	2.0	24
30	1.8	1.8	1.8	1.8	1.8	**IZS**	1.9	1.9	1.9	1.9	2.5	**C**	**C**	**C**	**C**	**C**	2.1	3	2.2	2.5	3.3	2.7	2.3	2.2	3.3	2.2	24
31	2.2	2.1	2.3	2.4	**IZS**	2	2	2.2	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.2	3.4	3.4	3.8	2.4	3.2	3.5	2.3	3.8	2.5	24
HOURLY MAX	4	6	8	5	5	6	9	5	4	3	3	3	3	3	3	3	3	3	6	4	5	5	6	6			
HOURLY AVG	2.3	2.4	2.4	2.4	2.3	2.4	2.6	2.5	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.5	2.4	2.4	2.5	2.4	2.3			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE
BB	- BELOW BACKGROUND OF 1.5 PPM		

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	707						
MAXIMUM INSTANTANEOUS VALUE:	8.6	PPM	@ HOUR(S)	6	ON DAY(S)	19	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:	744	HRS		
MONTHLY CALIBRATION TIME:	5	HRS					
STANDARD DEVIATION:	0.64						


01 Hour Averages
360
270
180
90
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03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 THCMAX PPM

LICA31
THC / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 31
Site Name : LICA31
Parameter : THC
Units : PPM

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	2.40	2.82	1.83	4.24	4.10	4.24	9.47	9.75	12.72	9.19	9.33	6.22	3.53	6.36	7.92	5.23	99.43
<	10.0	.00	.00	.00	.00	.00	.00	.14	.28	.14	.00	.00	.00	.00	.00	.00	.00	.56
<	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	2.40	2.82	1.83	4.24	4.10	4.24	9.61	10.04	12.87	9.19	9.33	6.22	3.53	6.36	7.92	5.23	

Calm : .00 %

Total # Operational Hours : 707

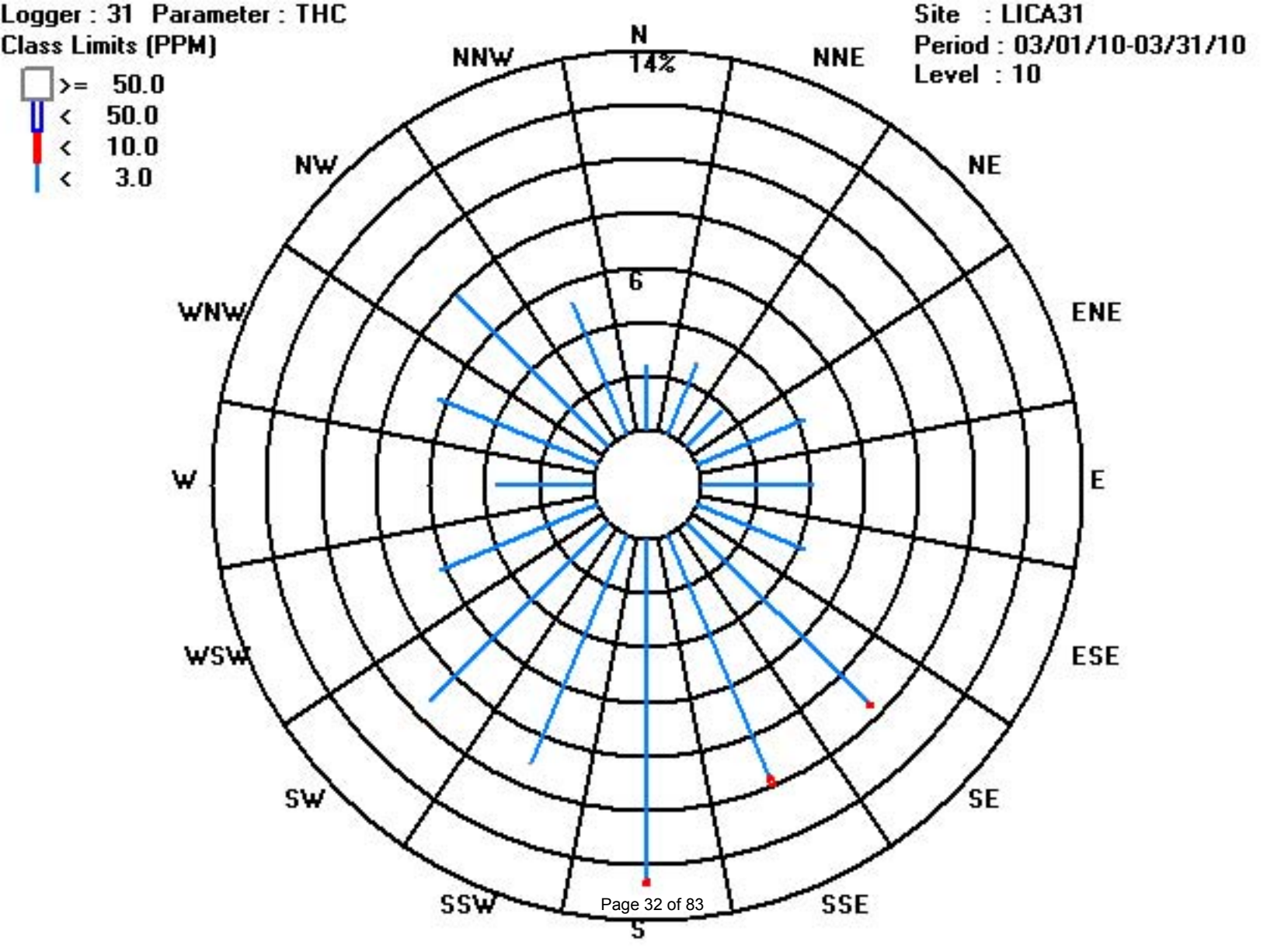
Distribution By Samples

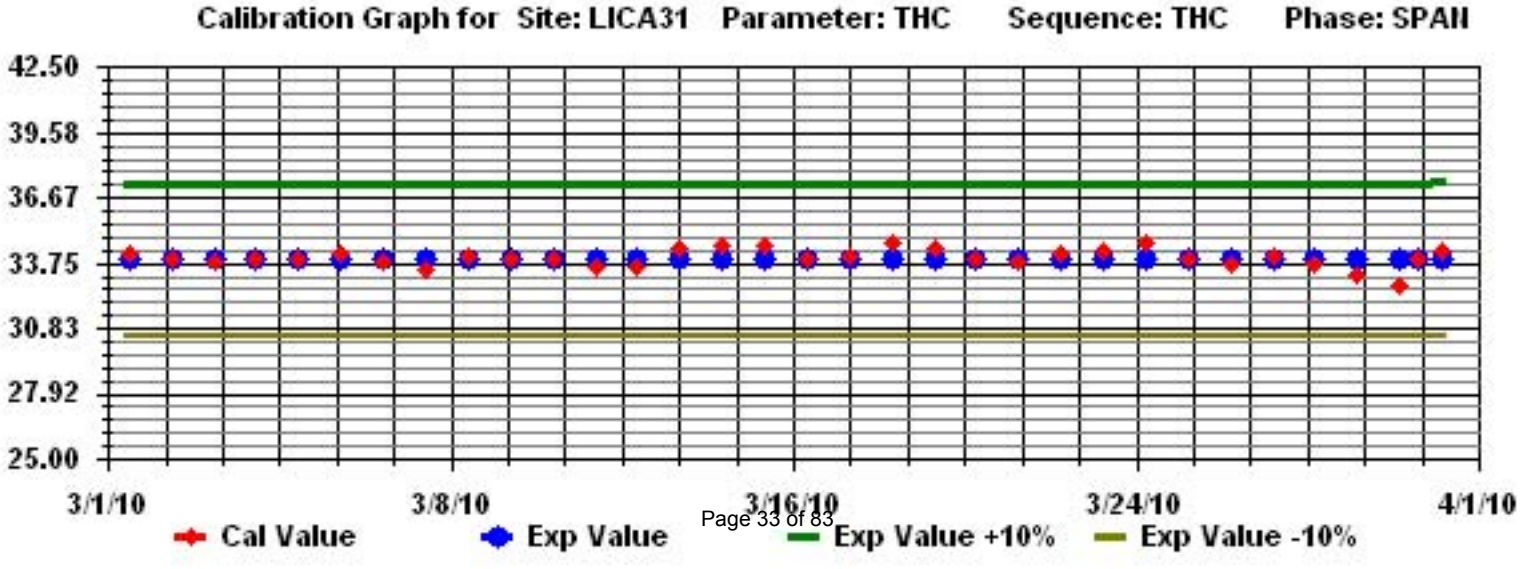
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	17	20	13	30	29	30	67	69	90	65	66	44	25	45	56	37	703
<	10.0							1	2	1								4
<	50.0																	
>=	50.0																	
	Totals	17	20	13	30	29	30	68	71	91	65	66	44	25	45	56	37	

Calm : .00 %

Total # Operational Hours : 707


Logger : 31 Parameter : THC
Class Limits (PPM)
>= 50.0
< 50.0
< 10.0
< 3.0
Site : LICA31
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA31 Parameter: THC Sequence: THC Phase: SPAN
42.50
39.58
36.67
33.75
30.83
27.92
25.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitrogen Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

MARCH 2010

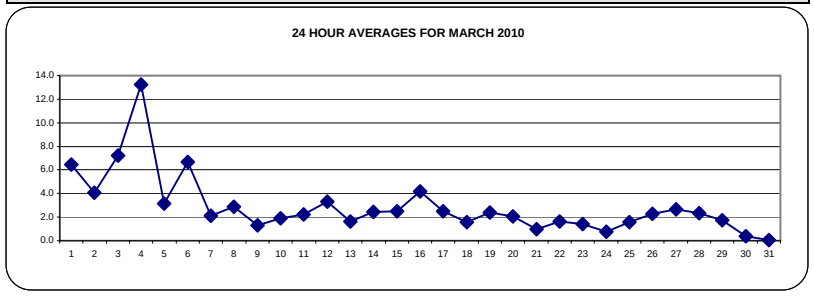
NITROGEN DIOXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	5	5	6	7	7	5	5	5	5	6	10	**IZS**	8	8	8	6	6	7	8	8	8	6	5	5	10	6.5	24
2	5	5	5	5	5	4	4	4	4	3	**IZS**	4	4	4	4	4	4	4	4	3	3	4	4	4	5	4.1	24
3	4	4	4	5	4	4	4	4	4	**IZS**	3	4	4	4	4	5	6	7	8	10	12	17	22	23	23	7.2	24
4	25	23	20	20	20	22	24	**26**	**IZS**	14	7	8	6	5	5	6	10	10	10	10	10	10	8	5	**26**	**13.2**	24
5	3	3	2	2	2	2	1	**IZS**	3	3	3	3	2	2	2	2	2	2	3	5	6	6	6	7	7	3.1	24
6	8	9	11	14	15	16	**IZS**	14	8	7	6	5	4	4	4	3	3	5	5	4	2	2	2	2	16	6.7	24
7	2	2	2	1	1	**IZS**	3	3	3	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	3	2.1	24
8	2	3	3	4	**IZS**	7	9	8	6	5	5	4	2	2	1	1	1	1	1	1	0	0	0	0	9	2.9	24
9	0	0	0	**IZS**	1	1	2	2	2	1	1	1	1	1	2	1	1	1	2	2	2	2	2	2	2	1.3	24
10	2	1	**IZS**	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	3	3	1.9	24
11	3	**IZS**	2	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2.2	24
12	**IZS**	3	3	4	5	5	5	5	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2	**IZS**	5	3.3	24
13	2	2	4	4	3	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	4	1.7	24
14	1	1	3	4	2	3	4	5	4	3	3	2	2	2	2	1	2	2	2	2	2	**IZS**	2	2	5	2.4	24
15	2	1	1	2	1	2	1	1	1	2	2	2	2	2	2	2	3	3	4	4	**IZS**	5	6	6	6	2.5	24
16	6	6	6	5	4	4	4	4	5	5	5	5	4	3	3	3	4	4	4	**IZS**	3	3	3	3	6	4.2	24
17	3	4	4	3	3	4	3	4	4	3	2	2	2	1	1	1	2	2	**IZS**	2	2	2	2	2	4	2.5	24
18	2	2	2	2	1	1	1	1	1	1	1	1	2	2	2	2	2	**IZS**	3	2	2	1	1	1	3	1.6	24
19	1	1	2	2	1	1	1	1	1	0	1	1	1	1	2	3	**IZS**	8	9	7	4	3	2	2	9	2.4	24
20	2	2	2	3	4	4	4	4	3	2	2	1	1	1	1	**IZS**	1	1	1	1	1	2	2	2	4	2.0	24
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1.0	24
22	1	2	3	3	2	3	3	2	2	2	2	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	3	1.6	24
23	1	1	1	1	1	2	2	2	3	2	2	2	**IZS**	2	2	1	1	1	1	1	1	1	1	1	3	1.4	24
24	1	0	0	0	1	1	1	1	1	1	1	**IZS**	0	1	1	1	0	1	1	1	1	1	1	1	1	0.8	24
25	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	2	2	2	2	2	2	2	3	3	3	3	1.6	24
26	3	3	2	2	3	2	2	2	2	**IZS**	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	2.3	24
27	3	3	4	5	4	5	6	6	**IZS**	6	5	3	2	2	1	1	0	1	0	0	1	1	1	1	6	2.7	24
28	2	3	3	2	1	1	1	**IZS**	2	3	2	2	2	3	3	4	4	5	3	1	1	2	2	2	5	2.3	24
29	2	2	2	3	3	2	**IZS**	2	2	2	2	2	2	1	1	1	1	2	2	2	2	1	1	1	3	1.7	24
30	1	1	1	1	1	**IZS**	0	1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	1	0.4	24
31	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.0	24
HOURLY MAX	25	23	20	20	20	22	24	26	8	14	10	8	8	8	8	6	10	10	10	10	12	17	22	23			
HOURLY AVG	3.1	3.1	3.3	3.6	3.5	3.8	3.4	4.0	2.8	3.0	2.8	2.5	2.3	2.2	2.3	2.2	2.2	2.7	2.9	2.7	2.6	2.9	3.0	3.0			

STATUS FLAG CODES

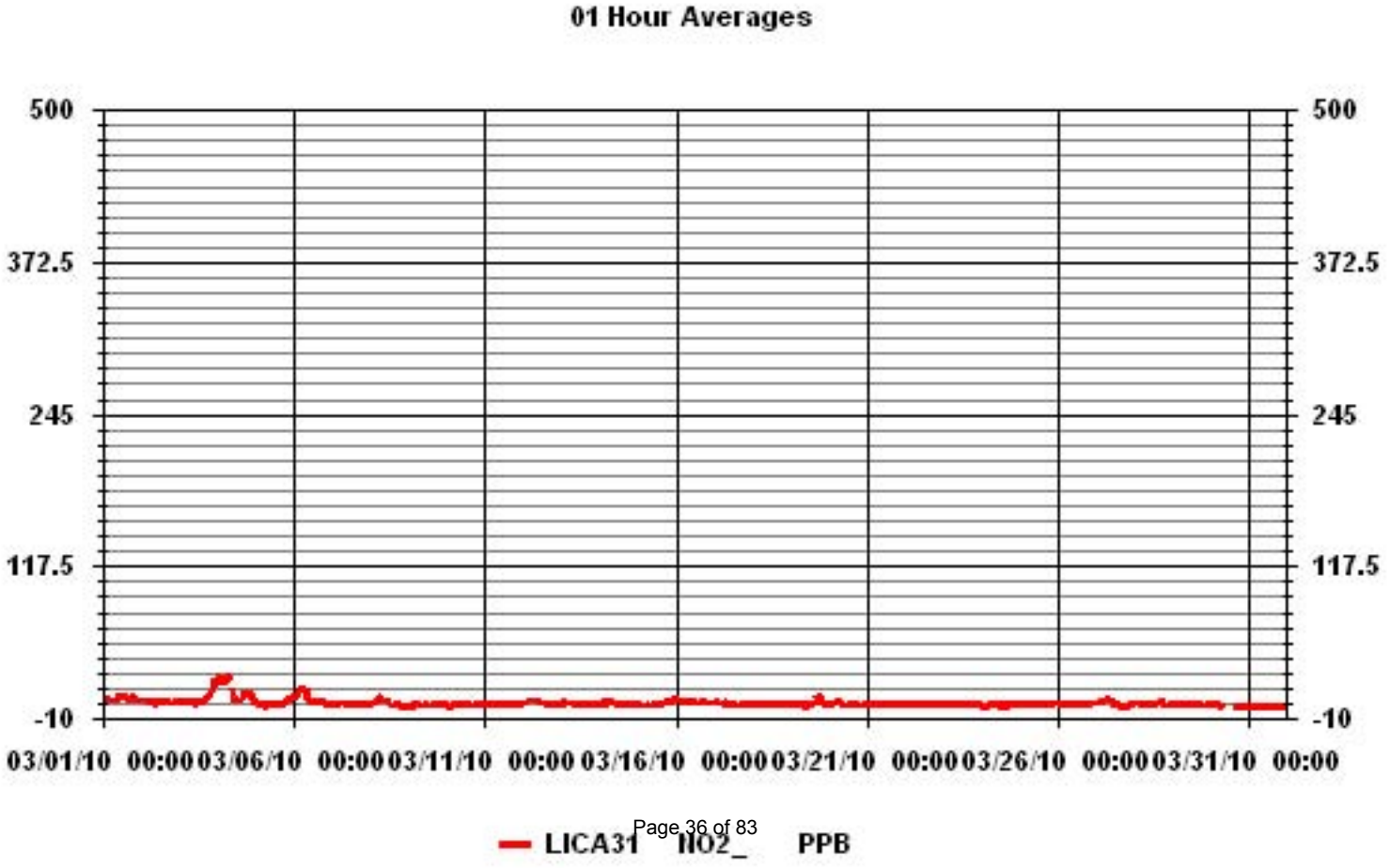
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 212 PPB | 24-HR 106 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	657					
MAXIMUM 1-HR AVERAGE:	26	PPB	@ HOUR(S)	7	ON DAY(S)	4
MAXIMUM 24-HR AVERAGE:	13.2	PPB			ON DAY(S)	4
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	8	HRS	AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	3.29		MONTHLY AVERAGE:		2.92	PPB


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 NO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

MARCH 2010

NITROGEN DIOXIDE MAX instantaneous maximum in ppb

MST

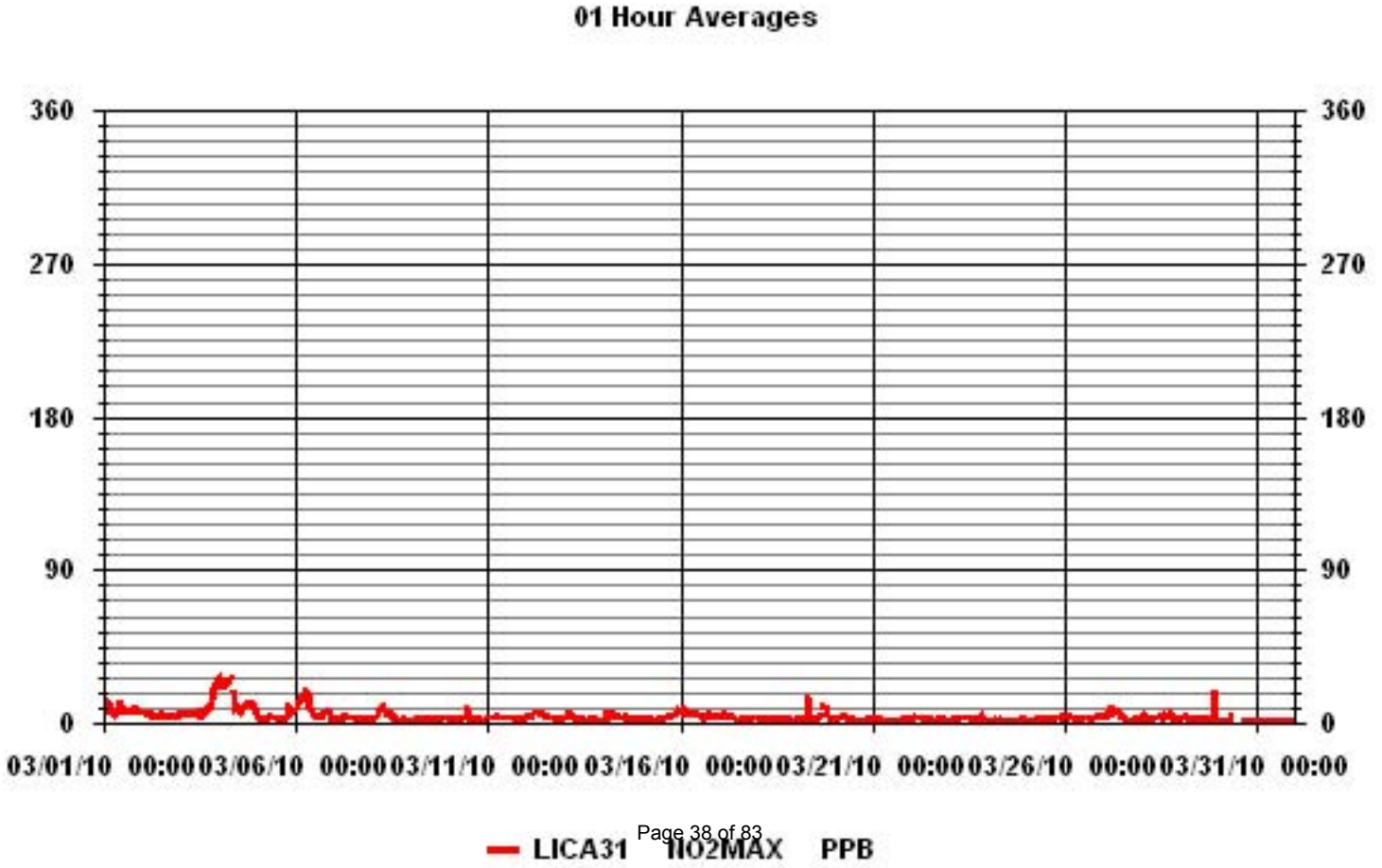
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	6	6	6	12	11	6	6	5	6	9	12	**IZS**	8	9	9	8	7	7	9	9	9	7	6	6	12	7.8	24
2	6	6	6	6	5	5	5	4	4	4	**IZS**	4	5	5	4	5	4	4	4	4	4	4	4	5	6	4.7	24
3	5	5	5	5	5	5	5	5	5	**IZS**	6	4	4	9	5	6	8	8	9	11	14	20	23	25	25	8.6	24
4	27	25	21	21	22	25	25	**27**	**IZS**	18	9	10	8	6	7	9	11	12	11	11	12	12	10	7	**27**	15.0	24
5	4	3	3	2	2	2	2	**IZS**	4	4	3	3	3	3	2	2	2	3	4	12	7	6	7	8	12	4.0	24
6	9	12	14	14	16	19	**IZS**	17	10	8	7	6	5	4	5	4	4	6	6	7	7	2	3	3	19	8.2	24
7	2	2	2	2	1	**IZS**	4	4	4	3	3	3	3	3	2	2	3	3	2	2	3	3	3	2	4	2.7	24
8	2	3	4	6	**IZS**	9	10	9	7	6	5	5	3	3	2	2	1	2	1	2	2	1	1	1	10	3.8	24
9	1	1	0	**IZS**	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	2.1	24
10	2	2	**IZS**	2	3	2	2	3	3	3	3	10	3	3	2	3	2	3	3	3	3	2	3	3	10	3.0	24
11	3	**IZS**	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	2	3	3	2	2	2	3	4	2.9	24
12	**IZS**	4	4	5	6	6	6	6	6	6	5	5	4	4	3	3	3	3	3	2	2	2	3	**IZS**	6	4.1	24
13	3	3	6	6	4	4	4	3	2	2	2	2	2	1	1	2	2	2	2	2	1	1	**IZS**	1	6	2.5	24
14	1	2	5	5	3	4	6	6	4	4	4	3	3	4	2	2	3	3	3	2	2	**IZS**	2	2	6	3.3	24
15	2	2	2	2	2	2	2	2	2	3	2	3	2	3	3	3	4	4	4	5	**IZS**	6	8	7	8	3.3	24
16	7	7	8	6	5	5	5	5	6	6	6	6	5	4	3	4	4	5	5	**IZS**	4	4	4	4	8	5.1	24
17	4	5	6	4	4	5	4	4	4	4	3	3	2	2	2	2	3	3	**IZS**	2	3	3	3	3	6	3.4	24
18	3	3	2	2	2	2	2	2	2	2	2	2	2	3	2	2	3	**IZS**	3	3	2	2	1	1	3	2.2	24
19	2	2	2	2	2	2	2	16	3	1	1	1	2	2	3	5	**IZS**	10	10	9	5	3	3	2	16	3.9	24
20	2	2	3	3	4	4	5	4	4	3	2	2	2	1	1	**IZS**	1	1	1	1	2	3	3	2	5	2.4	24
21	2	2	1	2	2	2	2	1	2	1	1	1	1	1	**IZS**	1	1	1	1	2	2	2	2	2	2	1.5	24
22	2	3	4	3	3	3	3	3	3	2	2	2	2	**IZS**	2	1	2	2	2	3	1	2	1	2	4	2.3	24
23	1	1	2	2	2	3	3	3	3	3	3	3	**IZS**	3	2	2	2	2	2	2	4	2	1	1	4	2.3	24
24	1	1	1	1	2	2	1	2	2	1	1	**IZS**	1	1	1	1	1	1	1	1	1	2	2	2	2	1.3	24
25	1	1	1	1	1	1	2	2	2	2	**IZS**	2	2	2	2	2	2	3	3	3	3	4	3	4	4	2.1	24
26	4	4	3	4	4	3	3	2	2	**IZS**	2	3	3	3	3	3	2	3	3	3	4	5	4	4	5	3.2	24
27	4	4	5	5	5	10	7	7	**IZS**	8	7	4	3	3	3	1	1	1	1	1	3	3	2	2	10	3.9	24
28	3	5	4	2	2	2	2	**IZS**	3	3	3	4	3	5	4	4	5	7	6	2	2	3	2	2	7	3.4	24
29	3	3	3	4	4	3	**IZS**	3	2	2	3	3	3	2	2	2	2	2	2	2	2	19	2	1	19	3.2	24
30	1	1	1	1	1	**IZS**	1	5	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	1	1	1	1	1	1	1	5	1.3	24
31	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1.0	24
HOURLY MAX	27	25	21	21	22	25	25	27	10	18	12	10	8	9	9	9	11	12	11	12	14	20	23	25			
HOURLY AVG	3.8	4.0	4.3	4.5	4.4	4.9	4.3	5.4	3.6	4.1	3.7	3.6	3.1	3.3	2.9	3.0	3.0	3.6	3.6	3.8	3.7	4.3	3.8	3.7			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	703					
MAXIMUM INSTANTANEOUS VALUE:	27	PPB	@ HOUR(S)	7	ON DAY(S)	4
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	8	HRS				
STANDARD DEVIATION	3.67					


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 TIO2MAX PPB

LICA31
NO2_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 31
Site Name : LICA31
Parameter : NO2_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	2.41	2.84	1.84	4.26	4.11	4.26	9.65	10.08	12.92	9.23	9.37	5.96	3.40	6.39	7.95	5.25	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	2.41	2.84	1.84	4.26	4.11	4.26	9.65	10.08	12.92	9.23	9.37	5.96	3.40	6.39	7.95	5.25	

Calm : .00 %

Total # Operational Hours : 704

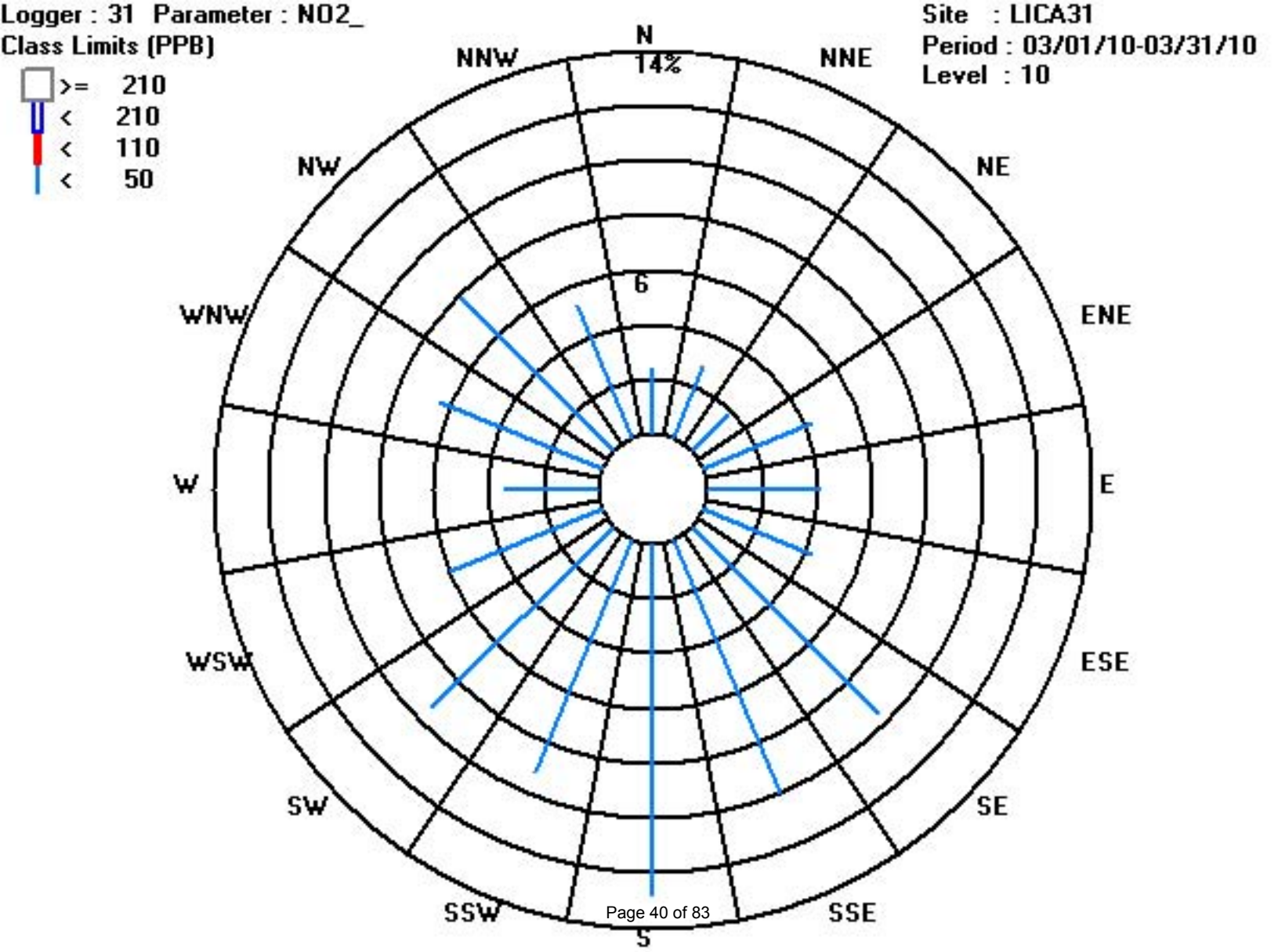
Distribution By Samples

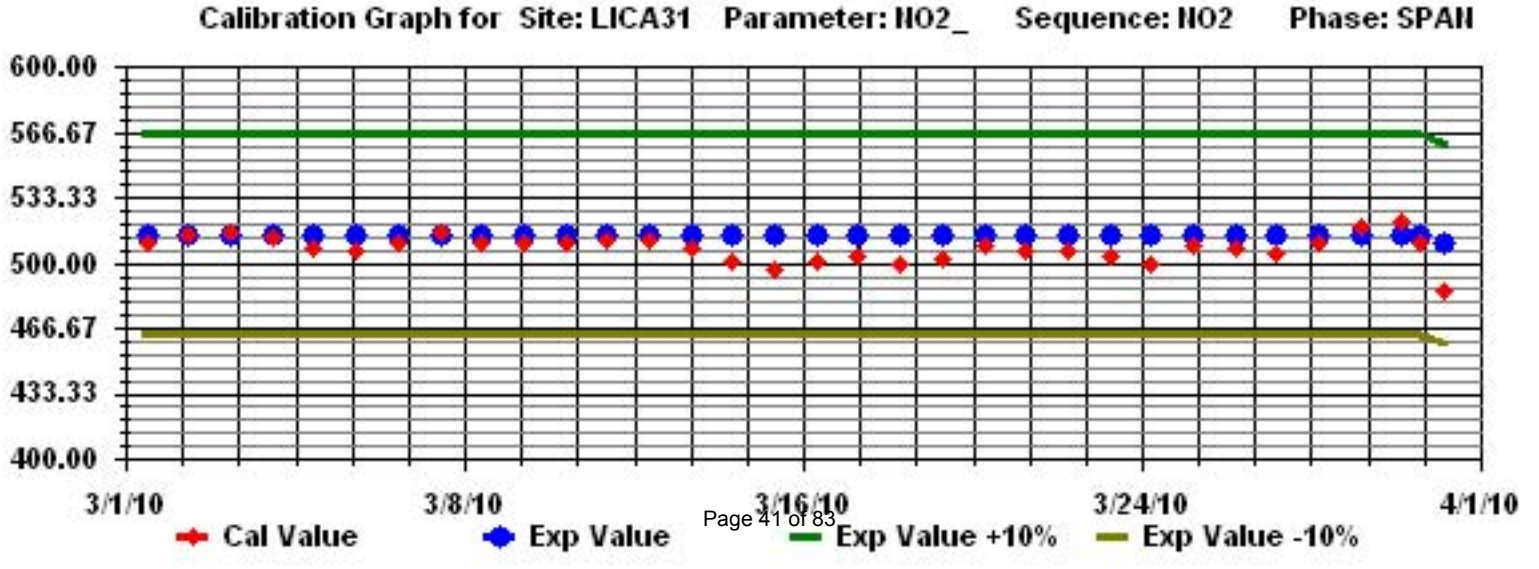
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	17	20	13	30	29	30	68	71	91	65	66	42	24	45	56	37	704
< 110																	
< 210																	
>= 210																	
Totals	17	20	13	30	29	30	68	71	91	65	66	42	24	45	56	37	

Calm : .00 %

Total # Operational Hours : 704


Logger : 31 Parameter : NO2_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA31
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA31 Parameter: NO2_ Sequence: NO2 Phase: SPAN
600.00
566.67
533.33
500.00
466.67
433.33
400.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitric Oxide

LAKELAND INDUSTRY & COMMUNITY ASSCOICATION - ST. LINA

MARCH 2010

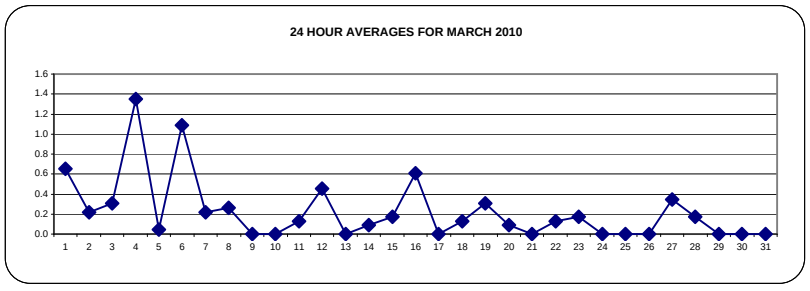
NITRIC OXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	1	5	**IZS**	3	2	2	1	1	0	0	0	0	0	0	0	**5**	0.7	24
2	0	0	0	0	0	0	0	0	1	1	**IZS**	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.2	24
3	0	0	0	0	0	0	0	0	0	**IZS**	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0.3	24
4	0	0	0	0	0	0	1	5	**IZS**	5	3	5	3	2	2	2	2	1	0	0	0	0	0	0	**5**	**1.3**	24
5	0	0	0	0	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
6	0	0	0	0	0	0	**IZS**	2	3	4	4	3	2	2	2	2	1	0	0	0	0	0	0	0	4	1.1	24
7	0	0	0	0	0	**IZS**	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.2	24
8	0	0	0	0	**IZS**	0	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.3	24
9	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
10	0	0	**IZS**	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
11	0	**IZS**	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
12	**IZS**	0	0	0	0	0	0	0	1	2	1	2	1	1	1	1	0	0	0	0	0	0	0	**IZS**	2	0.5	24
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
14	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	1	0.1	24
15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	**IZS**	0	0	0	1	0.2	24
16	0	0	0	0	0	0	0	0	1	2	2	3	2	1	1	1	1	0	0	**IZS**	0	0	0	0	3	0.6	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	**IZS**	0	0	0	0	0	0	1	0.1	24
19	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	**IZS**	2	1	0	0	0	0	0	2	0.3	24
20	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	1	0.1	24
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	0	0	0	0	0	1	1	0	1	**IZS**	0	0	0	0	0	0	0	0	0	0	1	0.1	24
23	0	0	0	0	0	0	0	0	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
24	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
25	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
26	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
27	0	0	0	0	0	0	0	1	**IZS**	3	2	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0.3	24
28	0	0	0	0	0	0	0	**IZS**	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.2	24
29	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
30	0	0	0	0	0	**IZS**	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
HOURLY MAX	0	0	0	0	0	0	1	5	3	5	5	5	3	2	2	2	2	2	1	0	0	0	0	0			
HOURLY AVG	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.9	0.9	0.8	0.6	0.5	0.4	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0			

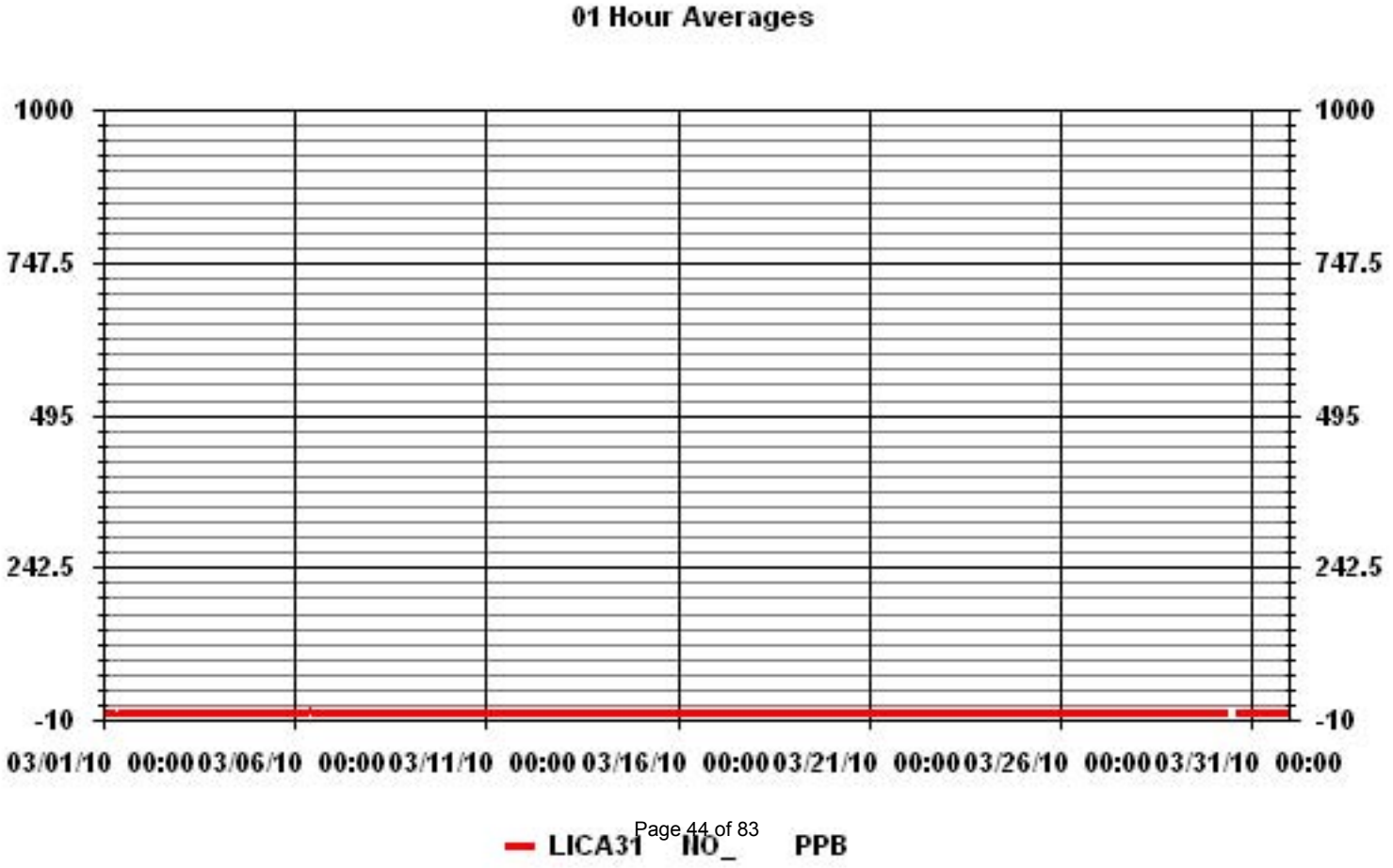
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:		103					
MAXIMUM 1-HR AVERAGE:		5	PPB	@ HOUR(S)	VAR	ON DAY(S)	1, 4
MAXIMUM 24-HR AVERAGE:		1.3	PPB			ON DAY(S)	4
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:			744	HRS
MONTHLY CALIBRATION TIME:	8	HRS	AMD OPERATION UPTIME:			100.0	%
STANDARD DEVIATION:	0.66		MONTHLY AVERAGE:			0.23	PPB


01 Hour Averages
1000
747.5
495
242.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 NO_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

MARCH 2010

NITRIC OXIDE MAX instantaneous maximum in ppb

MST

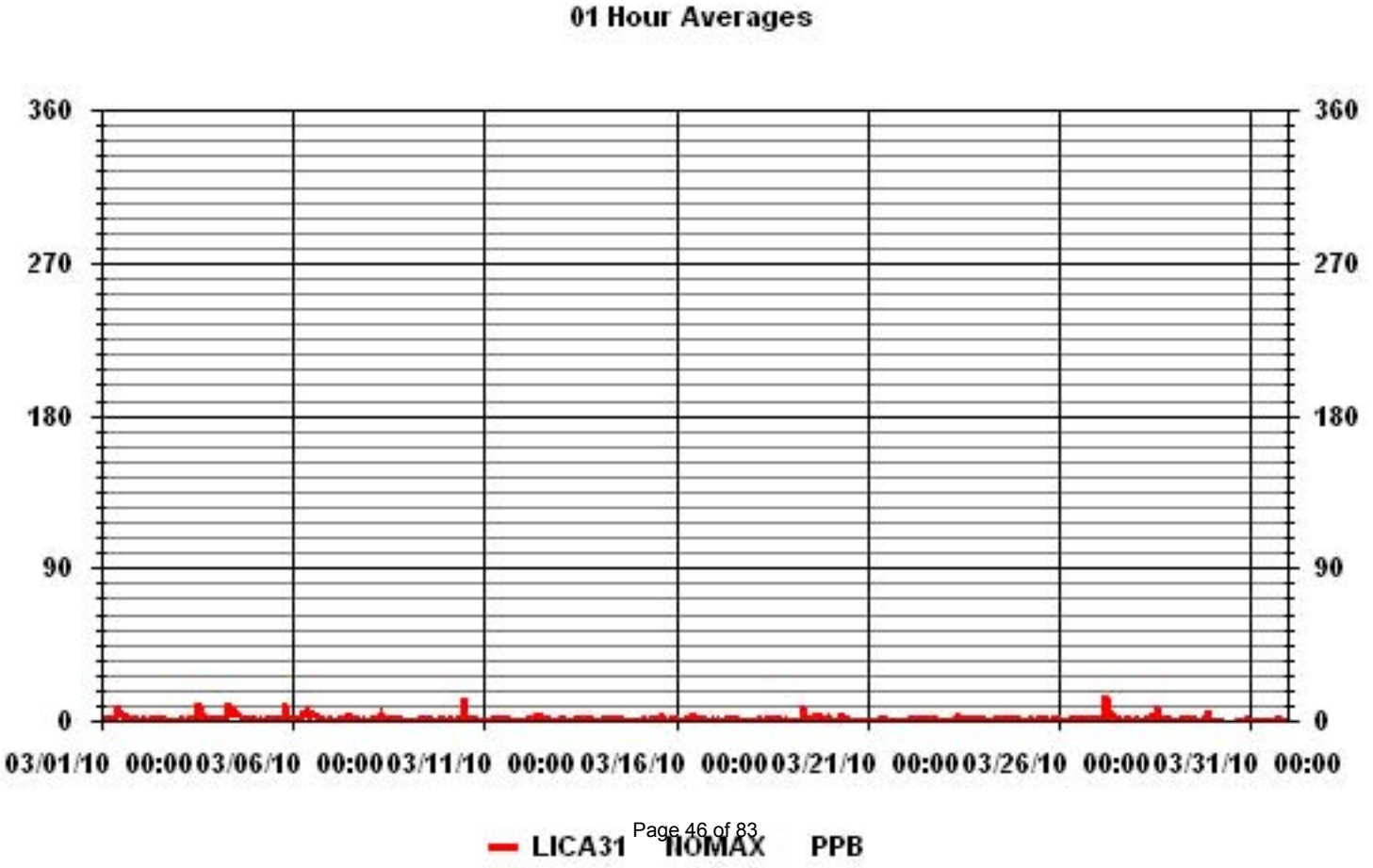
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	1	1	1	1	1	1	1	1	1	3	7	**IZS**	5	3	3	2	2	1	1	1	1	1	1	0	7	1.7	24
2	0	0	1	1	0	0	0	1	1	1	**IZS**	2	1	1	1	1	1	0	0	0	0	0	0	0	2	0.5	24
3	0	0	1	1	0	0	0	1	1	**IZS**	2	1	1	11	2	4	2	1	1	2	1	1	1	1	11	1.5	24
4	1	1	1	1	1	1	2	9	**IZS**	8	4	7	4	4	4	3	3	2	1	1	1	1	1	1	9	2.7	24
5	1	0	0	0	1	0	0	**IZS**	1	1	1	1	1	1	1	1	1	1	1	11	1	1	1	1	11	1.2	24
6	1	1	1	1	1	1	**IZS**	4	4	6	4	3	4	3	3	3	1	1	1	1	1	0	1	1	6	2.0	24
7	1	0	0	0	1	**IZS**	1	1	1	1	2	2	2	2	1	1	1	1	0	0	1	0	0	0	2	0.8	24
8	0	0	1	0	**IZS**	1	1	4	2	3	2	1	1	1	1	1	1	1	1	1	1	0	0	0	4	1.0	24
9	0	0	0	**IZS**	1	0	0	1	1	1	1	1	1	0	1	1	0	0	0	0	1	0	1	0	1	0.5	24
10	0	0	**IZS**	1	1	0	0	1	1	1	1	13	1	1	1	1	0	1	0	1	1	0	0	0	13	1.1	24
11	0	**IZS**	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	0.6	24
12	**IZS**	1	0	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	0	0	0	0	0	**IZS**	2	1.0	24
13	1	1	1	0	0	0	0	0	0	1	1	1	1	1	0	1	1	1	1	1	1	0	**IZS**	1	1	0.7	24
14	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	**IZS**	1	0	1	0.6	24
15	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	2	2	1	1	0	**IZS**	1	2	1	2	0.8	24
16	1	1	0	0	0	0	1	1	2	3	3	3	3	2	1	1	1	1	1	**IZS**	1	0	0	1	3	1.2	24
17	0	0	1	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	**IZS**	0	0	0	0	0	1	0.4	24
18	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	**IZS**	1	0	0	1	0	0	1	0.6	24
19	0	0	0	0	0	0	1	9	2	1	1	1	1	1	2	2	**IZS**	4	2	1	1	0	0	2	9	1.3	24
20	0	0	0	0	0	0	2	1	2	2	1	1	1	1	0	**IZS**	1	0	0	0	0	0	0	0	2	0.5	24
21	0	0	0	0	0	0	0	0	1	0	1	1	1	0	**IZS**	1	0	0	0	0	0	0	0	0	1	0.2	24
22	0	0	0	1	0	0	1	1	1	2	1	1	1	**IZS**	1	1	1	0	1	0	0	0	0	0	2	0.6	24
23	0	0	0	0	0	0	0	1	2	2	2	1	**IZS**	1	1	1	1	1	0	1	2	1	0	0	2	0.7	24
24	1	0	0	0	0	0	0	0	1	1	1	**IZS**	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	24
25	0	0	0	0	0	0	1	0	0	1	**IZS**	1	1	1	1	1	1	0	0	0	1	0	0	1	1	0.4	24
26	1	0	0	0	0	0	0	1	1	**IZS**	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	0.8	24
27	1	1	0	1	0	**15**	1	3	**IZS**	4	4	3	1	1	1	0	0	0	1	0	1	1	0	0	**15**	1.7	24
28	1	0	0	0	0	0	0	**IZS**	1	1	2	2	1	8	1	1	1	1	1	1	1	1	0	0	8	1.0	24
29	0	0	0	0	1	0	**IZS**	1	1	1	1	1	1	1	1	0	0	0	1	0	0	6	0	0	6	0.7	24
30	0	0	0	0	0	**IZS**	1	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	1	0	1	0.1	24
31	0	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	0.2	24
HOURLY MAX	1	1	1	1	1	15	2	9	4	8	7	13	5	11	4	4	3	4	2	11	2	6	2	2			
HOURLY AVG	0.4	0.2	0.3	0.3	0.4	0.8	0.5	1.6	1.2	1.8	1.8	2.0	1.4	1.8	1.2	1.2	0.9	0.7	0.6	0.8	0.6	0.6	0.4	0.4			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	425					
MAXIMUM INSTANTANEOUS VALUE:	15	PPB	@ HOUR(S)	5	ON DAY(S)	27
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	8	HRS				
STANDARD DEVIATION	1.41					


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 HOMAX PPB

LICA31
NO_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 31
Site Name : LICA31
Parameter : NO_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	2.41	2.84	1.84	4.26	4.11	4.26	9.65	10.08	12.92	9.23	9.37	5.96	3.40	6.39	7.95	5.25	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	2.41	2.84	1.84	4.26	4.11	4.26	9.65	10.08	12.92	9.23	9.37	5.96	3.40	6.39	7.95	5.25	

Calm : .00 %

Total # Operational Hours : 704

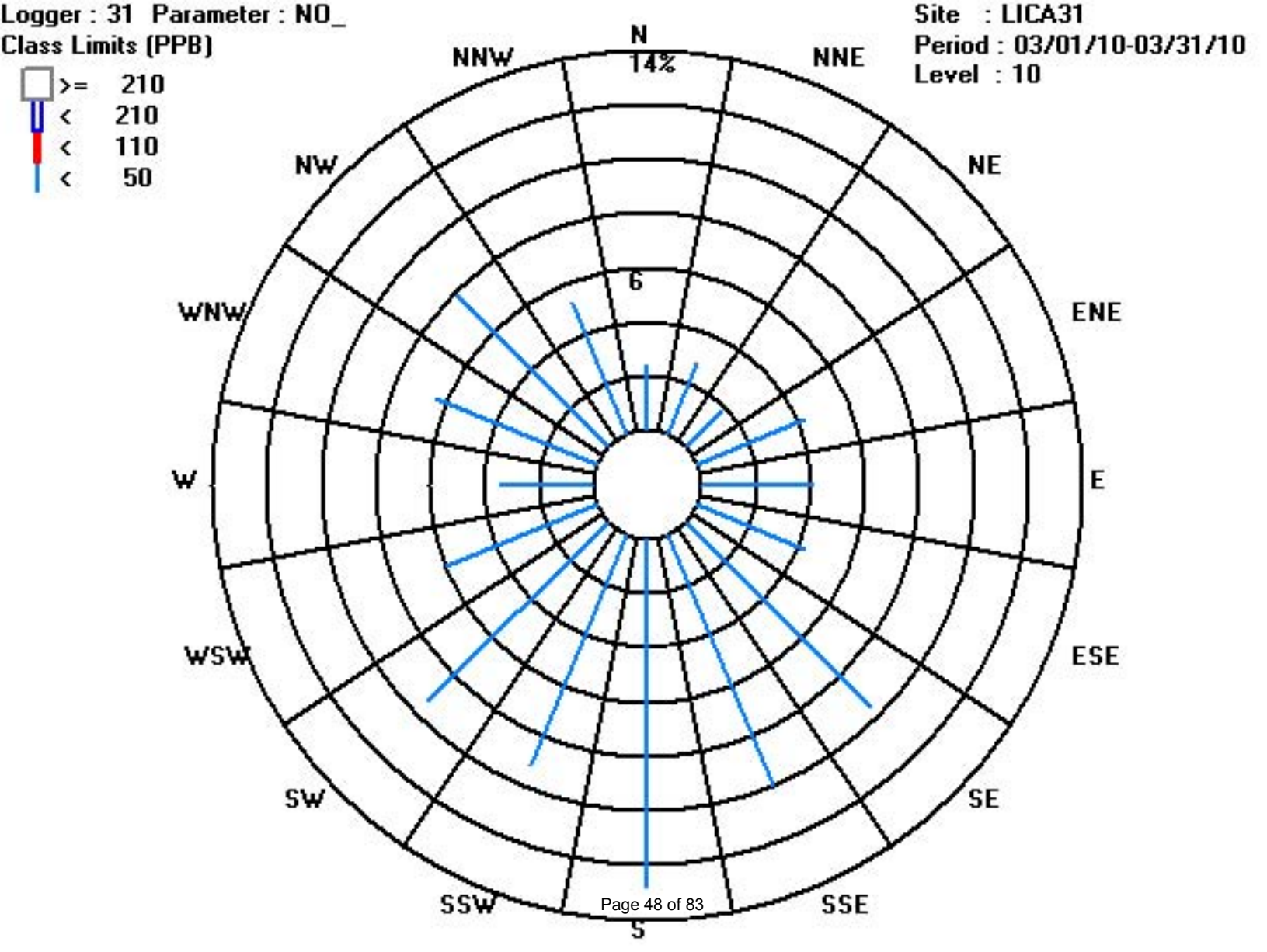
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	17	20	13	30	29	30	68	71	91	65	66	42	24	45	56	37	704
< 110																	
< 210																	
>= 210																	
Totals	17	20	13	30	29	30	68	71	91	65	66	42	24	45	56	37	

Calm : .00 %

Total # Operational Hours : 704


Logger : 31 Parameter : NO_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA31
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6

Oxides of Nitrogen

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

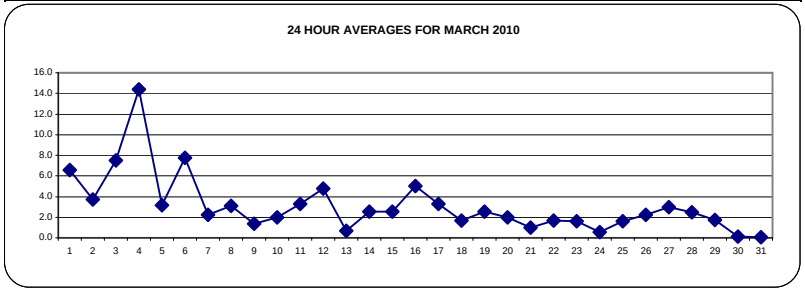
MARCH 2010

OXIDES OF NITROGEN hourly averages in ppb

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	5	5	5	7	7	5	5	5	5	7	14	**IZS**	10	9	9	7	6	6	7	7	7	5	4	4	14	6.6	24
2	4	4	4	4	4	3	3	3	3	3	**IZS**	5	4	5	4	5	4	4	3	3	3	3	4	4	5	3.7	24
3	4	4	4	5	4	4	4	4	4	**IZS**	4	4	4	5	5	6	7	7	8	10	12	18	22	24	24	7.5	24
4	25	23	20	20	20	22	24	**30**	**IZS**	19	10	13	8	7	7	7	12	11	10	10	10	10	8	5	**30**	**14.4**	24
5	3	3	2	2	2	1	1	**IZS**	3	4	3	3	3	2	2	2	2	2	3	5	6	6	6	7	7	3.2	24
6	8	9	11	14	15	17	**IZS**	16	11	11	10	8	7	5	6	5	4	5	5	4	2	2	2	2	17	7.8	24
7	2	1	1	1	0	**IZS**	3	3	3	3	4	4	4	3	2	2	2	2	1	2	2	2	2	2	4	2.2	24
8	2	2	3	4	**IZS**	7	9	9	7	7	6	4	3	2	1	1	1	1	1	1	0	0	0	0	9	3.1	24
9	0	0	0	**IZS**	1	1	2	2	2	2	1	1	1	1	2	1	1	1	2	2	2	2	2	2	2	1.3	24
10	2	1	**IZS**	2	2	2	2	2	2	2	2	3	2	2	2	2	1	2	2	2	2	2	2	2	3	2.0	24
11	2	**IZS**	3	3	3	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	3	4	3.3	24
12	**IZS**	4	4	5	6	6	6	7	7	7	7	7	5	5	4	4	3	3	3	3	3	3	3	**IZS**	7	4.8	24
13	1	1	3	3	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	3	0.7	24
14	1	1	3	4	2	3	4	5	4	4	4	3	2	3	2	1	2	2	2	1	2	**IZS**	2	2	5	2.6	24
15	1	1	1	2	1	1	1	1	1	2	2	2	2	3	3	3	4	3	4	4	**IZS**	5	6	6	6	2.6	24
16	6	6	6	5	4	4	4	5	6	8	7	7	6	4	3	4	5	4	4	**IZS**	5	4	4	4	8	5.0	24
17	4	4	5	4	4	5	4	4	5	4	4	3	3	2	2	2	3	3	**IZS**	2	2	2	2	2	5	3.3	24
18	2	2	2	2	1	1	1	1	1	1	2	2	2	3	2	2	2	**IZS**	3	2	1	1	1	1	3	1.7	24
19	1	1	1	1	1	1	1	2	1	0	0	1	1	1	2	5	**IZS**	11	9	7	4	3	2	2	11	2.5	24
20	2	2	2	3	3	4	4	4	4	3	2	2	1	0	0	**IZS**	1	1	1	1	1	2	2	1	4	2.0	24
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1.0	24
22	1	2	3	3	2	3	3	2	2	2	2	2	2	**IZS**	1	1	1	1	1	1	1	1	1	1	3	1.7	24
23	1	1	1	1	1	2	2	2	3	4	3	3	**IZS**	2	2	1	1	1	1	1	1	1	1	1	4	1.6	24
24	0	0	0	0	1	1	1	1	1	1	1	**IZS**	0	1	0	0	0	0	1	1	0	1	1	1	1	0.6	24
25	1	1	1	1	1	1	1	1	1	1	**IZS**	1	2	2	2	2	2	2	2	2	2	3	2	3	3	1.6	24
26	3	2	2	2	2	2	2	2	2	**IZS**	2	2	3	2	2	2	2	2	2	2	3	3	3	3	3	2.3	24
27	3	3	4	4	4	5	6	8	**IZS**	9	7	4	2	3	2	1	0	0	0	0	1	1	1	1	9	3.0	24
28	2	3	3	2	1	1	1	**IZS**	3	3	3	3	3	4	3	4	4	5	3	1	1	1	1	2	5	2.5	24
29	2	2	2	3	2	2	**IZS**	3	2	2	3	2	2	1	1	1	1	1	2	2	1	1	1	1	3	1.7	24
30	1	1	0	0	0	**IZS**	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	1	0.1	24
31	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.0	24
HOURLY MAX	25	23	20	20	20	22	24	30	11	19	14	13	10	9	9	7	12	11	10	10	12	18	22	24			
HOURLY AVG	3.0	3.0	3.2	3.6	3.3	3.8	3.5	4.4	3.1	4.1	3.9	3.4	3.0	2.8	2.6	2.6	2.5	2.8	2.8	2.7	2.6	2.9	2.9	3.0			

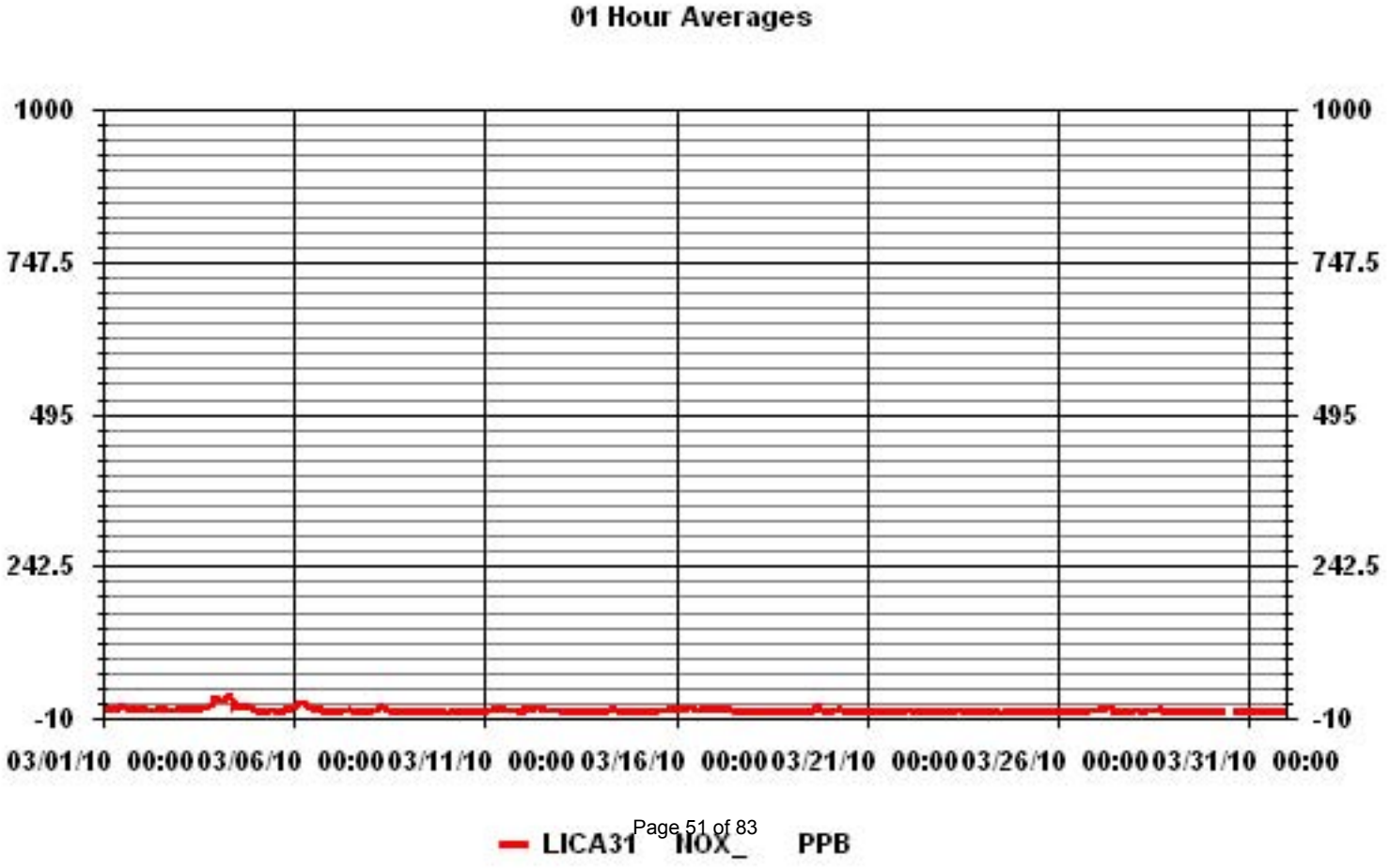
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	629						
MAXIMUM 1-HR AVERAGE:	30	PPB	@ HOUR(S)	10	ON DAY(S)	4	
MAXIMUM 24-HR AVERAGE:	14.4	PPB			ON DAY(S)	4	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS	
MONTHLY CALIBRATION TIME:	8	HRS	AMD OPERATION UPTIME:		100.0	%	
STANDARD DEVIATION:	3.58		MONTHLY AVERAGE:		3.14	PPB	


01 Hour Averages
1000
747.5
495
242.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 NOX_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

MARCH 2010

OXIDES OF NITROGEN MAX instantaneous maximum in ppb

MST

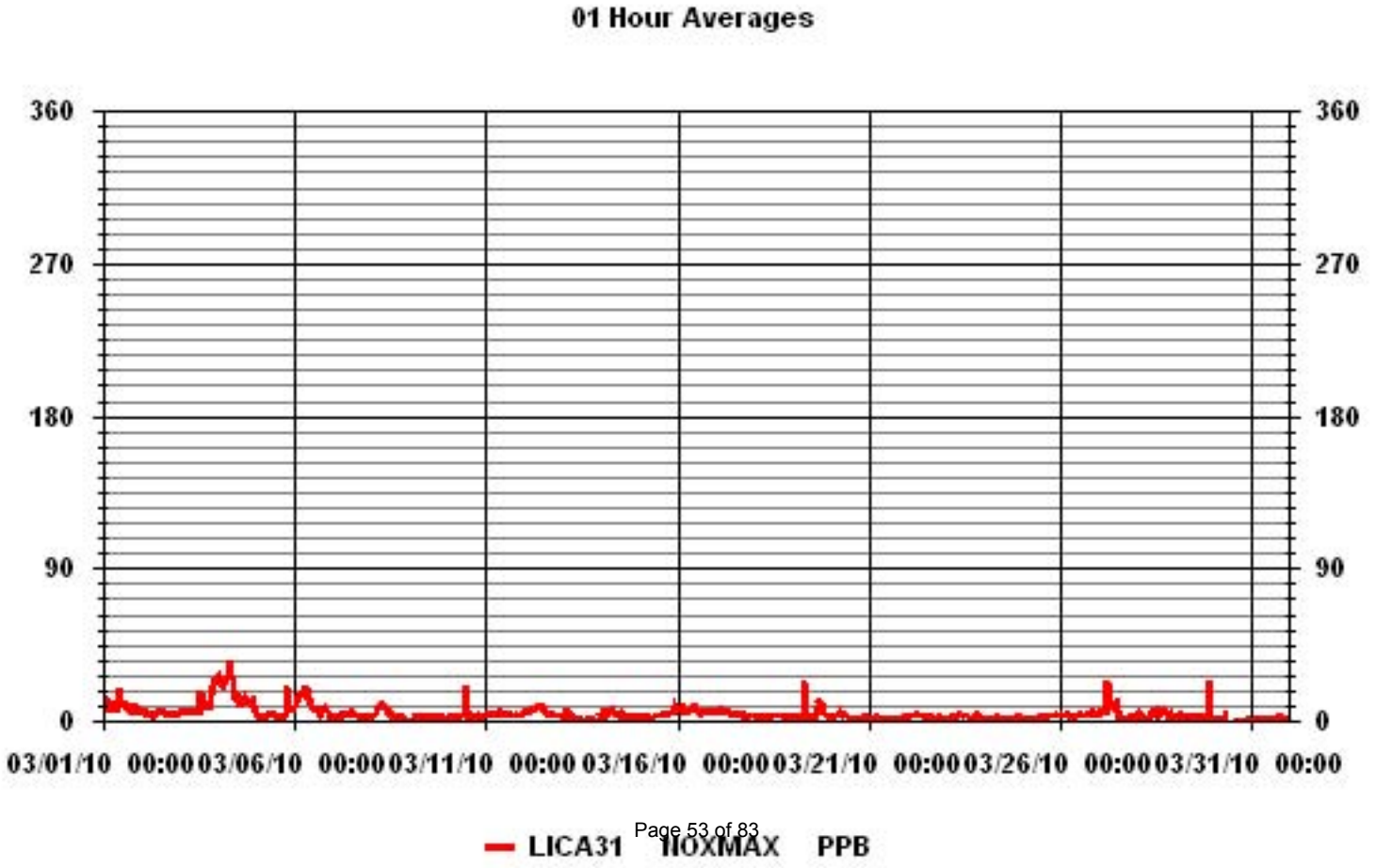
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	6	6	6	12	11	6	6	6	6	11	18	**IZS**	11	10	10	8	7	6	8	8	8	6	5	5	18	8.1	24
2	5	5	5	5	4	4	4	3	4	4	**IZS**	5	5	5	5	5	4	4	4	4	4	4	4	4	5	4.3	24
3	5	5	5	5	5	5	5	5	5	**IZS**	7	5	5	17	7	10	10	8	8	11	15	21	24	25	25	9.5	24
4	27	25	22	21	22	25	26	**34**	**IZS**	25	12	17	12	9	9	11	14	12	12	11	11	12	9	7	**34**	16.7	24
5	4	3	3	2	2	2	2	**IZS**	4	4	4	4	3	3	2	3	2	3	4	21	8	7	7	8	21	4.6	24
6	9	13	13	14	16	19	**IZS**	19	15	14	11	9	8	7	7	7	4	6	6	8	7	2	3	3	19	9.6	24
7	2	2	2	2	1	**IZS**	4	4	4	4	4	5	5	4	3	3	3	3	2	2	3	3	3	2	5	3.0	24
8	2	3	4	6	**IZS**	9	10	12	8	8	7	6	4	3	2	2	2	2	2	2	2	1	0	0	12	4.2	24
9	0	0	1	**IZS**	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	3	2.0	24
10	2	2	**IZS**	2	3	2	2	3	3	3	3	21	3	4	2	3	2	3	3	4	3	2	3	3	21	3.5	24
11	3	**IZS**	4	4	4	5	4	4	5	5	5	4	4	4	4	4	4	3	3	4	3	3	3	4	5	3.9	24
12	**IZS**	5	5	6	7	7	7	8	8	9	8	8	6	6	5	4	4	4	4	3	3	3	3	**IZS**	9	5.6	24
13	2	2	5	5	3	2	2	2	1	1	2	1	1	0	0	1	1	1	1	1	1	0	**IZS**	3	5	1.7	24
14	1	2	5	5	3	4	6	7	5	4	5	4	3	5	3	2	3	3	3	2	2	**IZS**	2	2	7	3.5	24
15	2	2	2	2	2	2	2	2	2	3	3	3	3	3	4	4	5	4	5	4	**IZS**	6	9	7	9	3.5	24
16	7	7	8	5	5	5	5	6	8	9	8	9	8	5	4	5	5	5	5	**IZS**	5	5	5	5	9	6.0	24
17	5	6	7	5	5	6	5	5	6	5	4	5	4	3	3	3	4	4	**IZS**	2	3	3	3	3	7	4.3	24
18	3	3	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	**IZS**	3	3	2	2	2	1	3	2.4	24
19	1	2	2	2	2	2	3	24	4	2	1	2	3	2	4	7	**IZS**	12	11	9	5	3	3	3	24	4.7	24
20	2	2	3	3	4	4	6	4	5	4	3	3	2	1	1	**IZS**	1	1	1	1	1	3	3	2	6	2.6	24
21	2	1	1	2	1	2	2	1	2	1	2	1	2	1	**IZS**	2	1	1	1	1	1	1	2	2	2	1.4	24
22	2	3	3	3	3	3	4	3	3	3	3	2	3	**IZS**	2	2	2	1	2	3	1	2	1	2	4	2.4	24
23	1	1	1	1	2	2	2	3	4	4	4	3	**IZS**	3	3	3	2	2	1	2	6	2	1	1	6	2.3	24
24	1	1	1	1	2	1	1	2	2	2	1	**IZS**	1	1	1	1	1	1	1	1	1	2	2	2	2	1.3	24
25	1	1	1	1	1	1	1	1	1	2	**IZS**	2	2	2	2	2	3	3	3	3	3	4	3	3	4	2.0	24
26	4	4	3	3	4	3	3	2	2	**IZS**	3	3	4	3	3	3	3	4	3	3	5	5	4	4	5	3.4	24
27	4	5	5	5	5	23	7	9	**IZS**	10	11	6	3	4	3	1	1	1	2	1	3	3	1	2	23	5.0	24
28	3	5	4	2	2	1	1	**IZS**	3	4	5	5	4	8	4	5	5	7	6	2	2	4	2	2	8	3.7	24
29	2	2	3	4	4	3	**IZS**	4	2	3	3	3	3	2	2	2	2	2	2	2	1	24	1	1	24	3.3	24
30	1	1	1	1	1	**IZS**	1	5	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	0	0	0	0	1	1	1	5	1.0	24
31	0	0	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	0	2	1	2	2	1	1	1	2	2	1.0	24
HOURLY MAX	27	25	22	21	22	25	26	34	15	25	18	21	12	17	10	11	14	12	12	21	15	24	24	25			
HOURLY AVG	3.6	4.0	4.3	4.4	4.4	5.3	4.3	6.3	4.2	5.3	5.1	5.1	4.1	4.2	3.5	3.7	3.4	3.6	3.7	4.1	3.8	4.6	3.8	3.7			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	690					
MAXIMUM INSTANTANEOUS VALUE:	34	PPB	@ HOUR(S)	7	ON DAY(S)	4
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		744	HRS
MONTHLY CALIBRATION TIME:	8	HRS				
STANDARD DEVIATION:	4.30					


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 NOXMAX PPB

LICA31
NOX_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 31
Site Name : LICA31
Parameter : NOX_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	2.41	2.84	1.84	4.26	4.11	4.26	9.65	10.08	12.92	9.23	9.37	5.96	3.40	6.39	7.95	5.25	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	2.41	2.84	1.84	4.26	4.11	4.26	9.65	10.08	12.92	9.23	9.37	5.96	3.40	6.39	7.95	5.25	

Calm : .00 %

Total # Operational Hours : 704

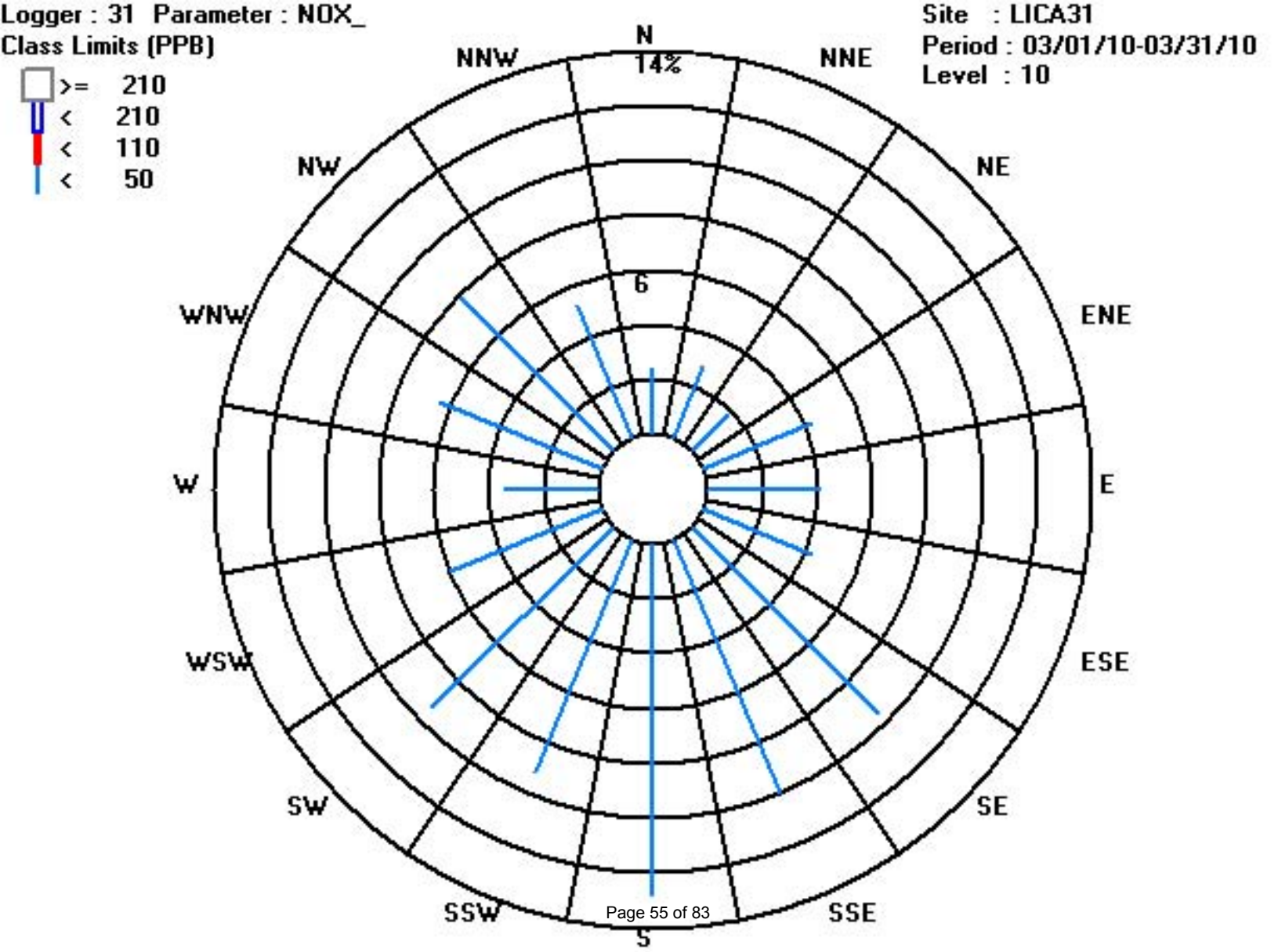
Distribution By Samples

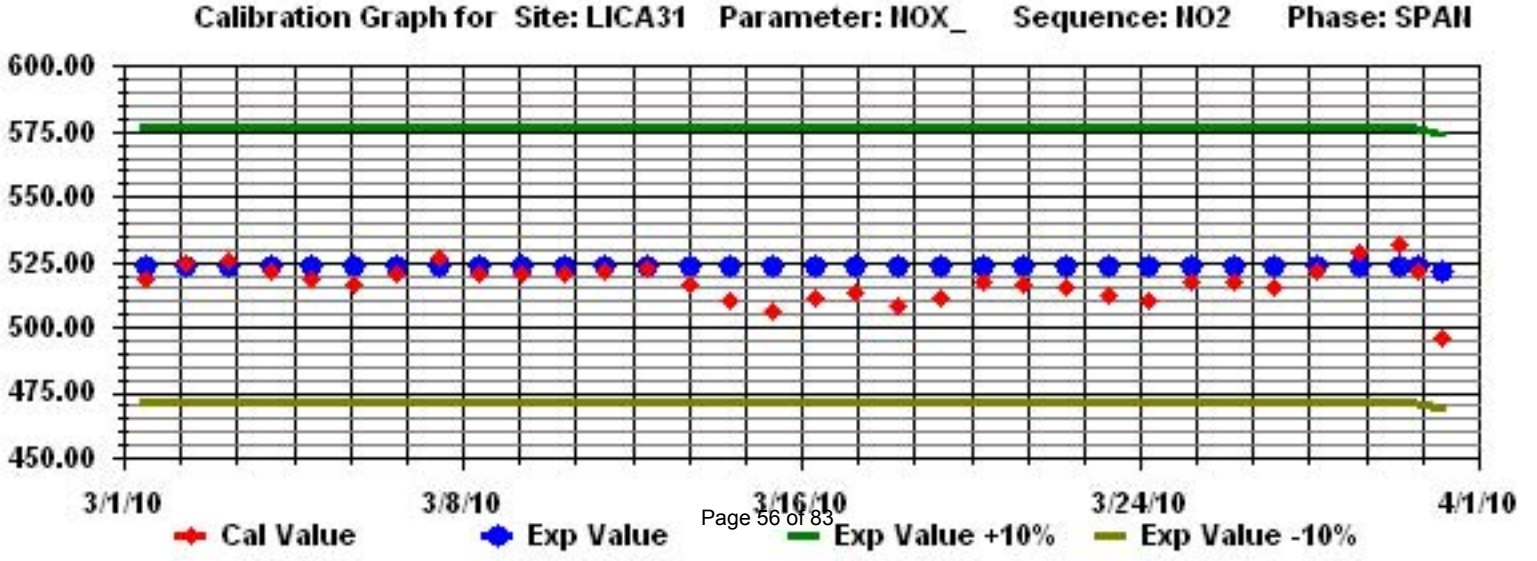
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	17	20	13	30	29	30	68	71	91	65	66	42	24	45	56	37	704
< 110																	
< 210																	
>= 210																	
Totals	17	20	13	30	29	30	68	71	91	65	66	42	24	45	56	37	

Calm : .00 %

Total # Operational Hours : 704


Logger : 31 Parameter : NOX_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA31
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA31 Parameter: NOX_ Sequence: NO2 Phase: SPAN
600.00
575.00
550.00
525.00
500.00
475.00
450.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Vector Wind Speed

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST.LINA

MARCH 2010

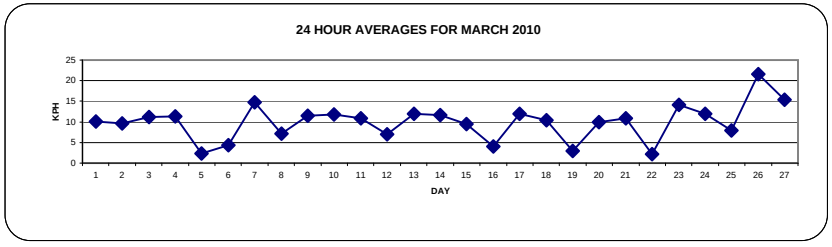
WIND SPEED hourly averages (km/hr)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	9	8.6	8.9	9.6	11.4	12.1	11.5	11.8	12.2	12.8	15.1	14.3	14.8	14	12.8	11.7	11.4	12.5	14.5	14.3	14.9	16	15.9	16.3	16.3	12.4	24
2	15.9	14.9	13.6	12.5	12.2	13.2	13.6	11.4	9.2	9.9	14.3	15.1	14.6	14.4	17.3	16.3	14	13.3	15.1	16	12.3	14.4	13.5	13.7	17.3	12.9	24
3	11.6	10.5	9.8	9.4	9.6	7.3	6.6	7.1	6.2	6.9	7.2	7.3	9.1	8.4	6.2	6.4	8	10.1	11.1	11.3	11.9	12.5	11	9.2	12.5	7	24
4	9.1	8.8	8.9	8.4	6.7	6.2	8.1	9.5	7.2	8.2	7	5.6	9	7.3	6.2	7.2	6.3	7	7.5	8.3	8.1	8.1	10.3	8.5	10.3	6.6	24
5	7.3	9.7	9.1	10.8	12.4	13.4	12.5	12.9	12	11.4	12.2	13.2	12.2	9.4	10.1	9.4	10.4	9.4	12.3	12.3	11.3	12.1	8.8	8.1	13.4	10.1	24
6	8.5	10.1	10.1	8	8.3	9.1	9.4	10.1	11	10	8.9	10.6	11.9	13	11.8	8.7	6.9	8.6	11	11.1	11.8	12.8	11.6	12.7	13	9.7	24
7	12.1	13.4	15.3	15.5	14.9	13.1	12.1	12.9	13.7	15.2	13.5	11.8	12.4	13	11.5	13.1	12.2	9.4	7.8	10.6	9.6	7.5	7.4	6.2	15.5	11.2	24
8	6	8.9	9	9	7.7	8.7	7	3	8.1	9.5	14.3	17.9	18.7	22.4	22	22.3	23.4	18.5	15.3	12.7	12.2	15.5	16.1	15.2	23.4	11.4	24
9	11.9	10.9	9.8	8.6	8.6	8.5	9	7.1	5.2	6.3	7	5.2	6.3	8.5	10	9.8	8.1	4.2	6.2	6.9	6.2	5.2	7.2	12.6	12.6	2.4	24
10	10.2	6.4	7.5	7.4	8.7	8.2	8.1	7.7	8.3	7.1	5.2	4.5	4.4	3.8	3.7	6.2	7.8	7.6	9.3	9.1	12	11.3	8.2	10	12	4.3	24
11	12	13	13.3	11.4	10.8	13.8	16.8	15.7	14.8	17.7	15.7	17.6	18.6	19	19.1	19.1	19.6	15.1	16.2	17.8	17.3	16.5	12.6	11.8	19.6	14.8	24
12	11.5	12.1	11	10.1	8.3	9.9	8.1	9	7.3	5.8	8.8	12.7	13.1	13.9	16	14.5	14.3	12.7	12.2	13.7	13.5	6.9	5.6	7	16	7.2	24
13	7.4	7.8	8.7	9.5	14.2	16.4	16	15.9	17.4	20.5	19.2	19.5	20.8	17.7	14.1	12.3	13.1	7.7	5.4	9.2	9.5	10.7	10.4	10	20.8	11.5	24
14	8.6	7.5	7.4	7.3	8.2	8.9	9.9	9	10.4	11.5	13.9	16.1	17.2	18.1	18.3	19.4	16.4	14.7	12.7	14.3	16.1	15.5	16.2	17.5	19.4	11.8	24
15	16	16.6	14.8	16	15.9	14.6	15.2	12.5	14.1	12.8	12.8	10.2	8.1	6.3	6.5	7.6	7.3	7.7	7.4	9.2	11	11	10.6	10.6	16.6	10.8	24
16	10.8	10.2	10.6	13.3	15.2	15.3	10.7	13.2	10	11.9	11	13.5	12.1	13.9	12.7	11.1	8.5	2.9	5.2	6.2	3.9	3.7	3.9	5.3	15.3	7	24
17	6.4	0.7	1.8	3.6	4.6	9	6.4	12.7	16.2	17.6	11.1	16	16.5	18.5	21.3	19.9	17.5	21.2	19.3	17.5	16.6	16.1	15.8	14.1	21.3	12	24
18	12.9	13.1	10.3	10.2	10.3	13	10.7	13.6	13.9	15.1	17.3	17.4	16.2	16.3	15.8	15.2	13.3	11.1	6.9	6.9	7.8	8.1	8.4	5.6	17.4	11.6	24
19	8.7	10.9	10.5	9.1	4.3	0.4	2.8	3.9	8.7	11.7	22.3	21.9	23	24.1	24.2	23	19.9	19	15.3	11.1	13.4	13.2	14.1	14	24.2	9.5	24
20	13.1	14	15.8	12.9	12.4	10.9	10.9	10	9.5	11.6	12.9	15.4	14.6	15.2	14.8	8.4	7.6	10	2	5.3	7.9	15.5	17.2	17.6	17.6	4	24
21	17.7	16.7	15.7	15.6	16.9	16.4	18.3	18.3	15	13.5	12.2	13.4	14.2	13.9	14.2	15.5	14.1	13.5	9.8	9.7	9.8	9.3	8.7	5.2	18.3	12	24
22	13.1	19.7	19	18.1	16.8	18.3	15.3	13.6	12.6	14.1	12.4	11.1	9.7	12.6	12.5	9.4	8.6	6.7	6.4	5.7	7.7	4.4	3.2	6.2	19.7	10.4	24
23	6.6	6	8.8	7.3	8.4	8.8	6.9	7.3	8.3	8.1	6.1	3.8	6.6	7.8	9.2	10.6	10.5	10.2	7.4	6.2	7	6	6.9	9	10.6	2.9	24
24	10.1	14.8	20.1	17.3	17.3	15.6	15.2	16.6	15.4	15.3	13.4	11.8	12.8	11.6	10.9	11.2	10.8	10	11	15.5	13.4	15.4	14.4	15	20.1	9.9	24
25	15.9	15.1	15.7	14.2	13.9	13.4	14.1	14.7	16.2	15.6	15.3	16.4	13.4	13.7	13.1	10.8	9	8.9	9.3	10.1	10.6	10.8	11.2	12.4	16.4	10.8	24
26	11.3	8.3	7.6	6.7	13.1	11.7	8.2	6.8	6.7	5.1	4.8	5.8	6.6	8.2	6.7	8.2	4.2	7.6	4.5	6.1	8.3	10.7	14.8	16.4	16.4	2.1	24
27	20.2	15.7	10.4	11.1	13.9	**12**	11.7	12.5	11.5	13.2	13.6	18	20	22	22.1	23	23.2	16.4	13.6	11.9	10.3	11.9	10.8	9.3	23.2	14.2	24
28	10.8	11.4	11.8	14.3	14.2	13.9	14.4	13.8	15.4	16.4	18.1	16.2	15.5	16.4	13.9	15.3	14.2	10.9	15.6	18.4	16	8	10.3	9.9	18.4	11.9	24
29	10.6	9.1	6.5	9.1	8	8.8	11.6	11.5	14	15.6	15.4	18.7	17.2	22.5	19.7	18.4	12.8	11.7	10.8	10.7	24.6	2.5	19.9	24.7	24.7	7.9	24
30	23.1	24.4	25.9	26.1	26.6	**N**	**29.5**	19.3	16.8	25.3	22.4	21.4	21.9	22.4	23.9	24.8	28.3	19.6	19.1	20.6	24.4	19.5	21.1	19.4	**29.5**	**21.6**	23
31	13.1	12.1	15.5	9.5	14.9	14.5	13.7	17.7	15.3	20.2	20.4	25.9	24.8	22.8	22.7	22.5	21.5	16.8	11.9	8.3	9.3	7.4	6.3	7.5	25.9	15.3	24
HOURLY MAX	23.1	24.4	25.9	26.1	26.6	18.3	29.5	19.3	17.4	25.3	22.4	25.9	24.8	24.1	24.2	24.8	28.3	21.2	19.3	20.6	24.6	19.5	21.1	24.7			
HOURLY AVG	11.7	11.7	11.7	11.4	11.9	11.5	11.8	11.6	11.7	12.8	13.0	13.8	14.1	14.6	14.3	13.9	13.0	11.5	10.7	11.2	11.9	10.9	11.4	11.6			

STATUS FLAG CODES

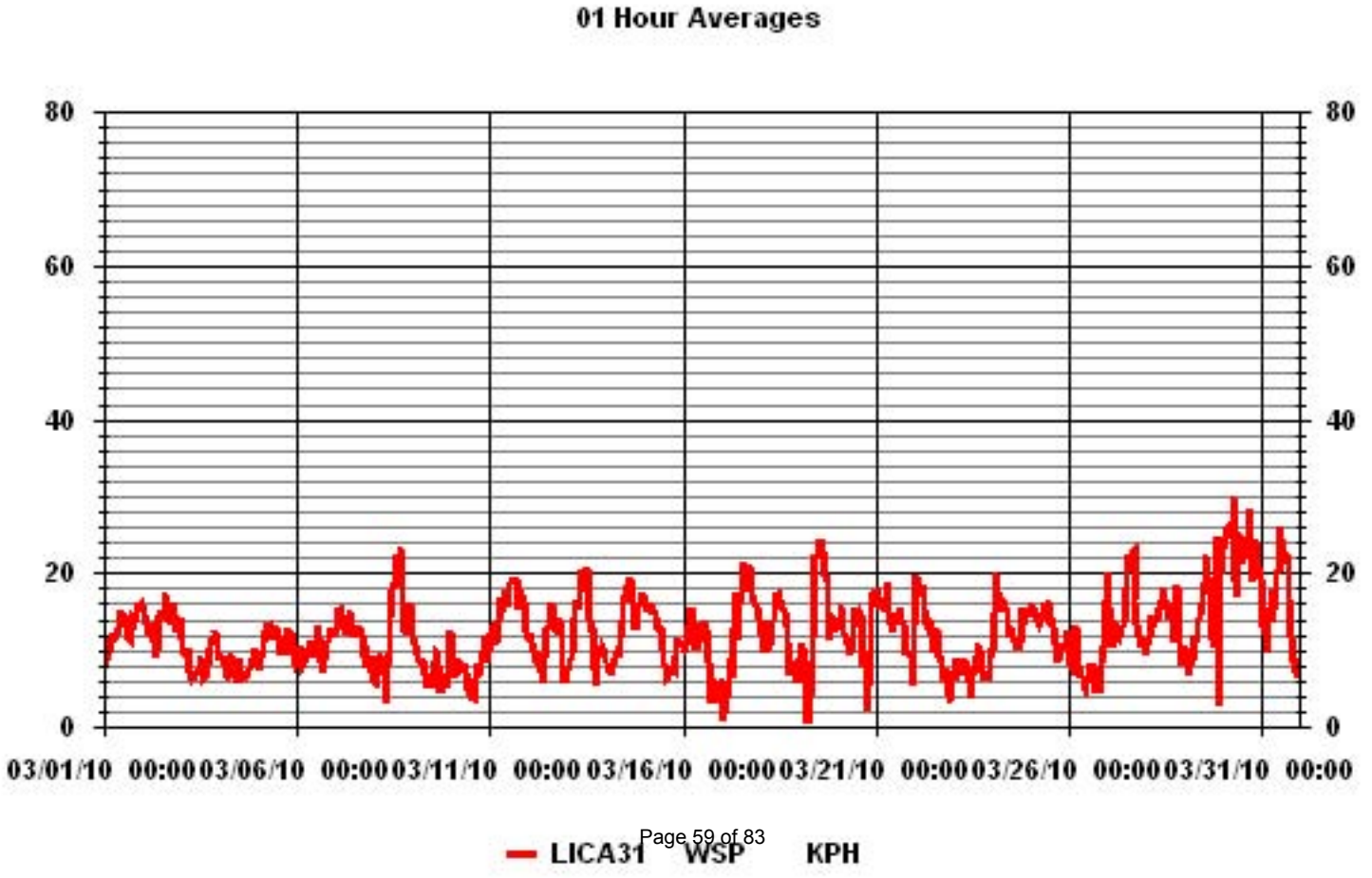
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



LAST CALIBRATION: February 3, 2009

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		29.5	KPH	@ HOUR(S)	6	ON DAY(S)	30
MAXIMUM 24-HR AVERAGE:		21.6	KPH			ON DAY(S)	30
CALMS (≤ 0 KPH)	0.27	%		OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	0	HRS		AMD OPERATION UPTIME		99.9	%
STANDARD DEVIATION	4.76			MONTHLY AVERAGE		12.23	KPH


01 Hour Averages
80
60
40
20
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 WSP KPH

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

MARCH 2010

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

MST

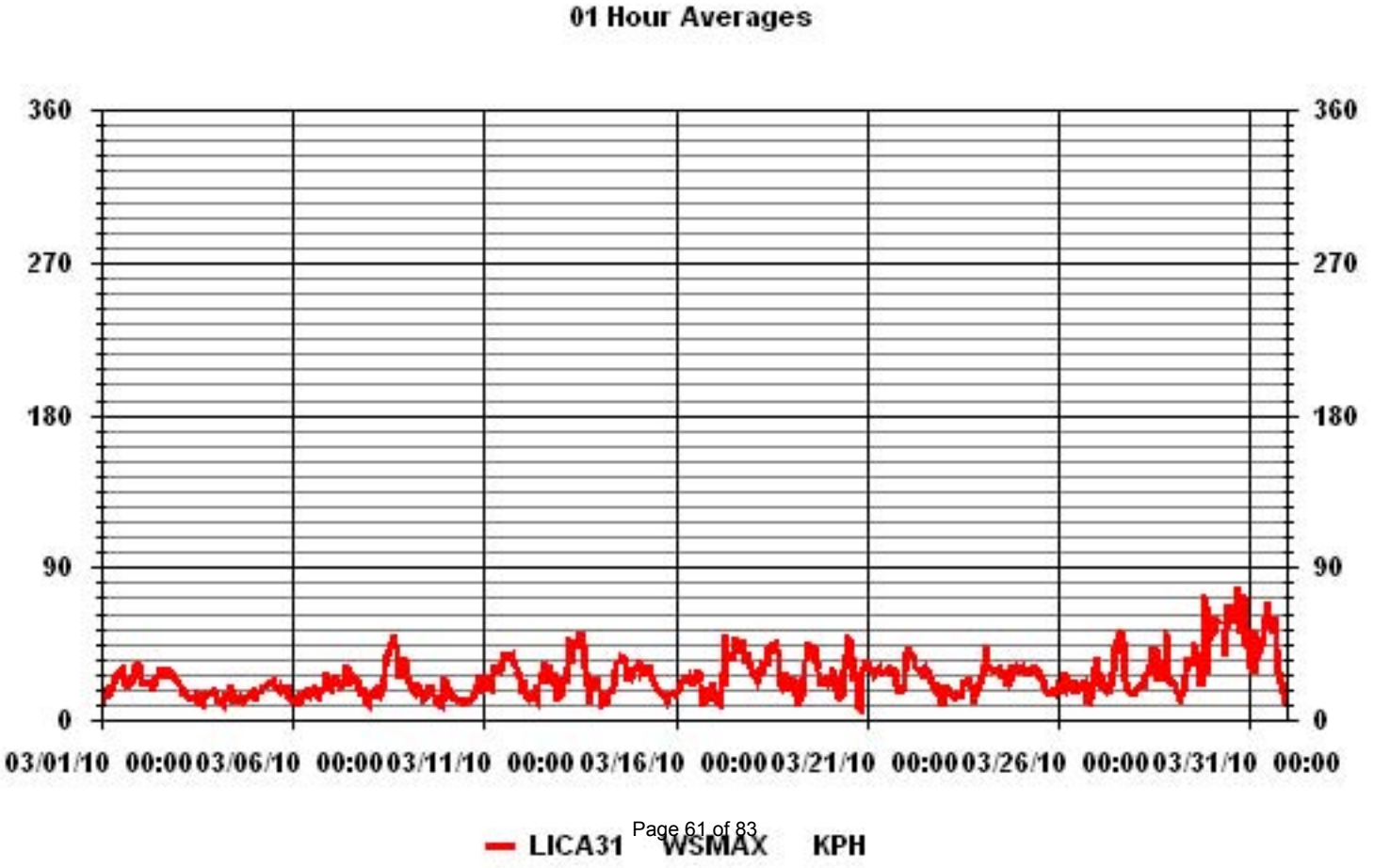
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	12.9	11.4	13.2	13.6	18.4	19.4	17.7	19.7	22	26.3	27.2	26.7	29.4	30.4	24.6	21.8	20.7	20.9	24.6	24.2	26.6	32.4	27.2	34.1	34.1
2	25.5	24.6	21.8	21.2	21.4	22.5	22.7	21.6	17.7	19.9	25.2	27	31.1	24	29.2	30.2	30	24.8	30.7	28.3	27.4	26.8	24.3	24.2	31.1
3	23.3	21.2	18.1	19.4	18.8	15.1	13.4	13.8	13.1	13	13.6	12.7	17.5	13.5	10.6	9.9	13.8	15.5	14.5	14.8	14.9	16.8	14.9	19.2	23.3
4	11.2	11.4	11.4	11.4	9.9	15.5	11.6	13.8	14.5	19.9	17.1	9.7	13.8	11.9	12.2	14	12.9	11.2	12.7	12.9	14.2	14.9	16.8	17.3	19.9
5	11.9	14	15.8	16.6	17.5	19.4	19.6	19.9	20.7	20.9	22.7	23.3	20.9	20.9	19	17.3	19.6	17.3	18.6	19.4	15.8	17.1	12.7	11.2	23.3
6	11	12.7	13.8	10.8	10.3	11	14.5	14.2	16.6	15.5	14.4	17.9	17.5	18.3	20.7	16.2	14.9	17.7	17	17.7	19	27.4	20.1	19.4	27.4
7	18.3	21.2	24.6	26.8	22.2	22.5	20.1	21.4	22.7	27.6	32.4	22.5	22.9	27.9	23.1	23.3	23.1	18.8	13.2	17.4	17.7	11.2	11.2	9.7	32.4
8	14.9	15.3	15.8	16.8	12.7	20.5	18.7	16.1	18.4	25.7	31.1	37.6	41.5	46.4	44.3	49.9	46.2	43	35.9	24.1	29.2	33.1	36.3	31.5	49.9
9	26.6	23.4	19.4	17.1	16.2	20.1	20	18.4	15.8	18.1	12.9	13.8	16.4	18.8	19.2	19.6	15.8	10.6	9.8	9.1	11.4	9.9	17.7	24.6	26.6
10	17.5	14	14.9	16.4	13.6	13	12.9	11.6	12.7	12.1	10.3	9.8	11.2	11.2	11	12.3	12.1	12.9	16.2	20.9	25.3	24.8	15.3	17.5	25.3
11	20.1	24.6	23.7	19.2	18.7	26.8	31.3	30.9	26.8	30.7	29.2	32	34.3	38.4	39.1	37.1	38	39.1	34.8	33.9	31.5	29.5	25.9	22.2	39.1
12	15.5	22.9	16.4	13.8	12.5	14	14	16.2	12.9	11.6	20.7	25.9	25	27.4	34.1	27.4	28.9	23.5	22.9	25.3	26.1	20.7	11.2	12.9	34.1
13	14	23.7	23.3	21.6	30.7	48.2	41.7	33.5	43.4	47.3	44.6	43	50.3	50.5	45.1	32.2	29.4	21.7	8.8	22	17.5	24.8	22.9	22.9	50.5
14	19.4	9.1	9.7	9.9	13.7	12.9	17.7	14.9	18.6	20.3	29.9	33.5	35.2	37.1	35.6	36.9	35.4	29.1	22.4	25.9	30.5	26.6	28.5	31.5	37.1
15	28.9	35.2	28.5	30	30.5	25.4	30	26.6	32.4	28.5	23.7	21.4	18.5	17.7	17.3	16.4	14.2	14.5	11.6	13.5	15.5	15.1	15.8	16	35.2
16	14.9	15.8	16.8	21.6	23.3	27	20.9	23.5	26	23.7	20.1	27.2	23.9	28.9	28.5	22.4	17.6	8.4	10.1	17.5	19.6	14	11.4	21.7	28.9
17	12.7	12.1	12.1	11	15.8	28.3	19.6	50.5	39.7	**N**	**N**	38.7	34.3	39.5	49	42.5	38.9	48	44.1	36.6	33.7	39.5	35.4	32.2	50.5
18	25.5	29.3	26.3	23.1	25.3	30.9	29.3	31.3	32.4	32.8	42.6	43.6	38.9	44.9	45.4	42.1	40.8	28.2	21.2	18.6	19.7	27.4	22.2	16.4	45.4
19	25.3	22.7	24.6	15.9	10.6	10.1	11.6	13.3	24.6	34.1	45.2	44.9	39.7	42.3	36.7	44.9	35	29.6	26.9	19.2	23.5	24.4	23.1	26.6	45.2
20	23.7	25.3	31.1	21.8	17.3	24.4	14.2	13.6	14.5	28.5	29.8	38.2	48.1	47.5	38.9	29.2	22.9	27.8	9.3	8	23.7	31.5	28.3	36.1	48.1
21	34.3	30.7	30.2	29.4	26.8	28.7	30.7	31.6	28.7	27.4	27.9	28.7	29.8	28.9	31.3	31.1	29.1	29.2	20.7	16	19.4	19.2	16.2	20.7	34.3
22	29.1	39.1	43.4	38	38	38.2	32	30	30.3	29.4	29.2	30.7	24.8	30	29.5	25.9	23.3	19.9	19.7	18.2	20.5	19.4	11.9	8.4	43.4
23	10.6	16.2	19.7	17.1	16.4	15.8	14.9	14	16.2	15.3	12.3	16.2	22.2	22.9	22	21.2	24	21.2	14.7	9.9	14.6	16.4	21	22	24
24	25.9	32.6	43.9	35.9	33.5	30.7	29.2	28.8	29.2	30	30.9	27.4	27.9	28.3	25.9	22.5	23.1	21.6	23.1	32.9	27.4	30	27.6	31.1	43.9
25	31.3	26.8	30.3	28.5	29	26.3	29.6	30.7	30.7	30.7	27.9	31.6	25.2	27	24.4	20.3	16.9	15.8	16.9	16.2	17.5	16.2	18.7	20.7	31.6
26	19.4	16.2	20.3	19	28.5	23.1	20.9	19.9	23.7	17.9	17.3	20.3	19	20.3	22.2	20.9	22	13.6	12.1	11	13.1	22.5	25.9	30.7	30.7
27	36.9	29.2	22	20.3	22.5	19.2	17.3	18.1	17.9	20.5	28.5	42.1	41.7	47.5	51.2	53.2	47.6	30.4	24.2	18.4	16.2	17	16.4	15.8	53.2
28	16.6	17.9	19.2	20.7	20.9	20.5	25.9	26.5	27.6	33.1	42.7	33	30.8	42.7	23.3	25.5	25.2	30.9	35.4	49.6	48.6	26.5	22.4	20.1	49.6
29	23.5	20.9	16.2	12.7	11.9	14.2	17.1	25.9	28.3	37.1	31.3	35.6	31.9	46.2	36.7	40.3	28.9	19.6	21.6	74.3	67.6	27.6	51.2	49.2	74.3
30	50.7	51.8	59.3	60	58.7	**N**	**N**	**N**	38.6	54	68.7	61.8	56.8	68.2	65.9	64.3	**78.2**	58.5	50.1	57.9	74.1	45.6	44.2	47.7	**78.2**
31	30.9	27.9	52.9	27.4	50	38	39.1	45.1	43.4	55.9	60.4	69	53.3	61.3	51.2	55.5	61.1	43.2	28.7	23.1	22.4	17.1	11.2	10.6	69
PEAK	50.7	51.8	59.3	60.0	58.7	48.2	41.7	50.5	43.4	55.9	68.7	69.0	56.8	68.2	65.9	64.3	78.2	58.5	50.1	74.3	74.1	45.6	51.2	49.2	

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

MAXIMUM INSTANTANEOUS READING	78.2	KPH	@ HOUR(S)	16
			ON DAY(S)	30


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 WSMAX KPH

LICA31
WSP / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 31
Site Name : LICA31
Parameter : WSP
Units : KPH

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	.53	.13	.13	.26	.40	.00	.40	.13	.26	.26	.40	.26	.53	.80	.26	.53	5.38
<	12.0	1.21	2.15	.94	1.21	2.69	2.15	2.96	2.01	7.40	6.46	5.24	2.69	1.61	1.88	2.55	2.01	45.22
<	20.0	.80	.40	.67	2.42	1.07	1.88	5.78	7.94	5.38	2.01	3.23	1.34	.80	2.15	4.17	2.42	42.53
<	29.0	.00	.13	.00	.00	.00	.00	.13	.00	.00	.13	.53	1.74	.94	1.74	.94	.13	6.46
<	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.00	.00	.00	.13
>=	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	2.55	2.82	1.74	3.90	4.17	4.03	9.28	10.09	13.05	8.88	9.42	6.05	4.03	6.59	7.94	5.11	

Calm : .26 %

Total # Operational Hours : 743

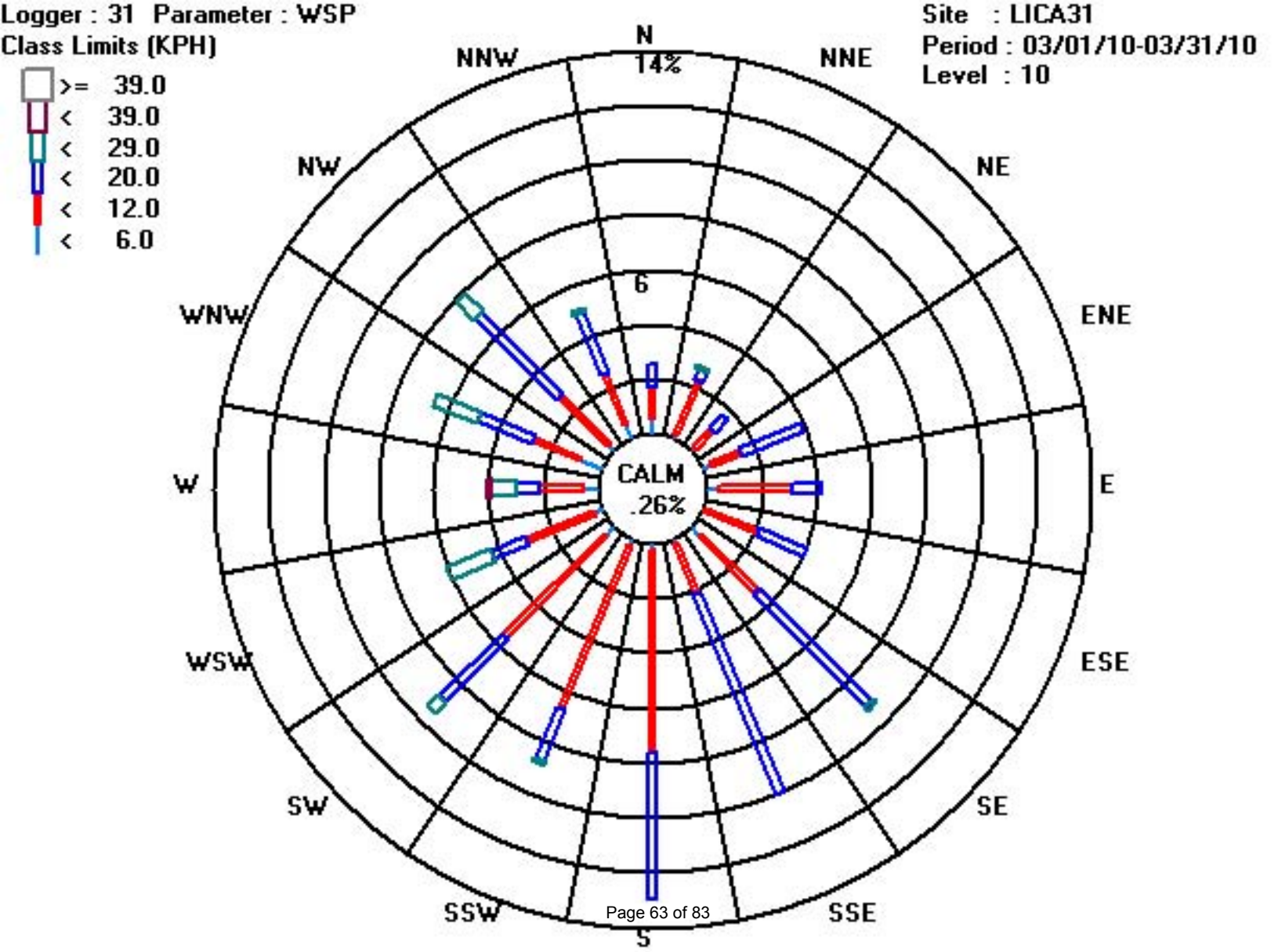
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	4	1	1	2	3		3	1	2	2	3	2	4	6	2	4	40
<	12.0	9	16	7	9	20	16	22	15	55	48	39	20	12	14	19	15	336
<	20.0	6	3	5	18	8	14	43	59	40	15	24	10	6	16	31	18	316
<	29.0		1					1			1	4	13	7	13	7	1	48
<	39.0													1				1
>=	39.0																	
	Totals	19	21	13	29	31	30	69	75	97	66	70	45	30	49	59	38	

Calm : .26 %

Total # Operational Hours : 743


Logger : 31 Parameter : WSP
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA31
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6
CALM
.26%

Vector Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST.LINA

MARCH 2010

WIND DIRECTION hourly averages in degrees

MST

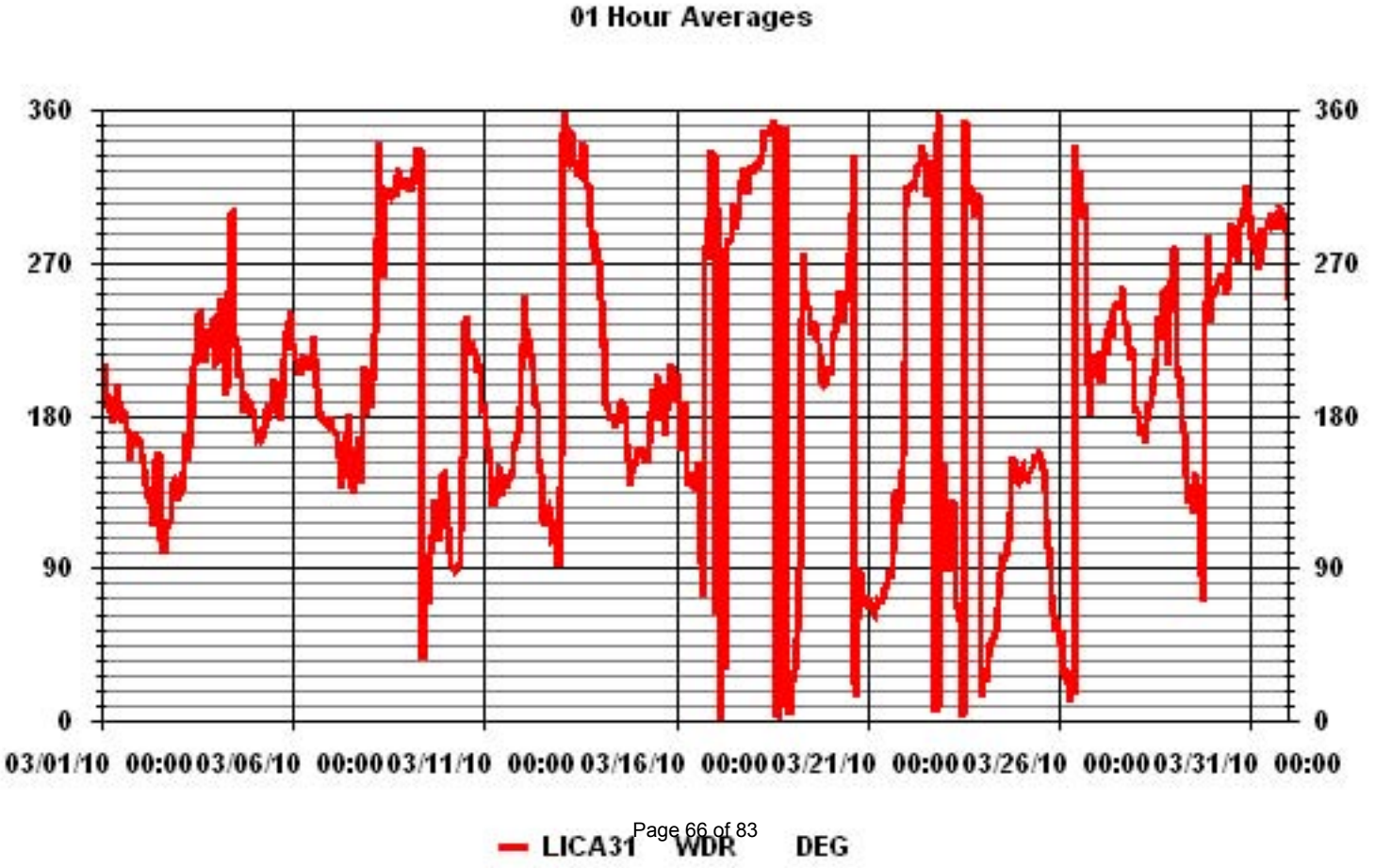
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	206	207	193	185	187	193	182	176	183	190	199	189	178	176	182	181	173	170	153	162	171	169	165	166	179	S	24
2	166	158	153	149	139	131	133	129	115	133	154	156	156	107	100	100	114	117	116	119	140	142	140	142	133	SE	24
3	130	132	136	146	153	169	153	160	197	179	209	216	239	240	228	215	211	216	222	231	220	228	237	238	197	SSW	24
4	212	213	222	249	247	239	192	196	253	298	299	220	227	222	203	206	181	194	193	184	187	190	180	184	212	SSW	24
5	173	166	167	169	166	167	173	183	177	186	184	191	201	183	182	199	176	190	214	219	229	235	242	224	190	S	24
6	220	214	212	212	204	210	216	209	211	206	209	215	222	226	215	197	182	182	179	176	179	176	174	175	200	SSW	24
7	179	173	171	170	166	156	137	143	156	158	169	181	142	138	134	150	160	168	139	148	185	209	180	205	161	SSE	24
8	185	189	200	229	285	305	341	318	261	289	311	313	313	310	312	314	313	321	326	319	314	316	317	319	306	NW	24
9	319	314	312	316	326	333	338	335	338	36	65	96	92	68	98	109	117	130	120	105	113	145	146	136	50	NE	24
10	124	116	100	92	90	88	89	91	94	111	155	187	235	238	215	220	224	220	216	205	211	206	184	185	161	SSE	24
11	185	173	162	153	137	127	130	131	143	151	132	142	138	138	145	142	145	148	159	163	164	170	186	206	151	SSE	24
12	222	251	233	227	214	217	210	199	188	186	155	147	119	114	123	124	126	123	107	108	119	111	90	138	151	SSE	24
13	156	347	359	330	329	348	347	328	330	328	321	323	322	331	341	322	313	317	292	279	289	269	276	278	321	NW	24
14	273	249	220	227	187	185	182	179	178	172	180	175	178	188	190	186	176	164	154	138	151	153	151	154	176	S	24
15	160	161	160	161	160	152	158	182	163	190	195	185	204	177	195	197	199	167	198	183	206	211	200	190	177	S	24
16	189	205	181	161	161	172	188	144	139	143	146	138	136	148	153	112	93	73	280	278	296	271	337	283	159	SSE	24
17	335	63	303	264	0	51	30	278	285	283	284	305	293	289	295	301	310	319	326	318	311	313	322	327	308	NW	24
18	322	329	330	326	328	333	335	349	347	347	344	347	351	355	2	4	3	352	7	24	13	350	18	3	348	NNW	24
19	16	23	30	49	54	89	237	262	275	255	242	245	233	227	233	235	226	224	217	200	198	199	202	205	230	SW	24
20	208	204	224	229	238	252	252	246	234	243	254	247	276	297	299	334	22	14	59	88	87	73	70	69	255	WSW	24
21	72	72	71	65	63	66	72	71	71	74	72	77	82	87	86	83	100	133	136	116	127	148	156	212	86	E	24
22	302	316	314	316	317	316	320	327	328	330	340	336	329	309	323	331	318	325	5	347	359	7	142	152	324	NW	24
23	137	100	88	96	126	131	118	70	67	58	61	2	4	354	329	314	314	307	306	297	301	311	309	13	15	NNE	24
24	24	31	23	31	37	45	48	49	52	66	73	87	98	96	99	99	105	123	150	155	143	144	142	145	81	E	24
25	148	150	147	144	143	146	149	150	155	155	153	160	153	156	149	137	120	103	92	75	64	53	55	59	133	SE	24
26	49	50	29	27	30	27	10	24	20	15	339	325	312	324	302	303	296	236	199	180	216	205	214	215	331	NNW	24
27	202	207	199	215	225	219	216	231	235	226	242	245	247	242	246	257	249	236	234	223	212	220	219	186	229	SW	24
28	183	182	170	168	172	173	163	177	186	186	192	203	214	239	228	224	235	253	254	232	209	240	260	278	207	SSW	24
29	280	257	210	204	192	178	170	145	132	128	139	122	133	146	141	133	119	86	70	245	245	286	234	248	168	SSE	24
30	256	254	256	259	263	**N**	262	258	251	254	269	282	294	276	275	275	271	291	295	295	303	315	309	300	315	NW	23
31	285	278	286	275	283	267	269	291	279	289	293	292	300	292	300	291	291	301	304	299	289	300	289	250	304	WNW	24
HOURLY AVG	335	347	359	330	329	348	347	349	347	347	344	347	351	355	341	334	318	352	326	347	359	350	337	327			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

LAST CALIBRATION:	February 3, 2009
DECLINATION :	19 DEGREES FROM MAGNETIC NORTH

MONTHLY CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	743	HRS
STANDARD DEVIATION	84.88		AMD OPERATION UPTIME	99.9	%
			MONTHLY AVERAGE	204	DEG


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 WDR DEG

Standard Deviation Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST.LINA

MARCH 2010

STANDARD DEVIATION WIND DIRECTION (STDWDIR) hourly averages in degrees

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
DAY																								
1	6	4	6	7	7	7	9	9	11	11	9	12	11	12	12	12	11	9	8	9	8	8	8	8
2	8	8	8	8	9	8	9	10	12	12	12	12	13	12	9	10	12	12	11	10	12	11	10	9
3	10	10	12	13	12	11	12	14	15	14	16	13	12	12	12	8	10	7	4	4	4	5	5	4
4	4	4	2	6	9	15	6	5	11	13	24	11	9	11	14	16	15	9	8	6	7	7	7	8
5	7	5	7	6	5	6	7	7	9	10	11	11	13	17	14	15	13	12	8	8	4	3	5	5
6	5	3	5	6	4	5	4	4	5	7	9	9	7	6	10	14	15	10	6	6	8	7	6	7
7	7	7	7	6	6	7	7	9	10	10	13	14	19	16	19	13	13	11	7	8	10	6	10	9
8	7	6	7	6	9	10	12	45	13	15	13	12	13	13	14	13	12	13	13	11	12	12	12	12
9	12	13	12	10	9	9	13	11	16	17	16	23	24	20	17	16	14	11	6	5	8	16	12	12
10	11	11	8	7	7	8	8	7	8	13	20	19	23	27	41	16	11	8	9	13	12	14	10	9
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13	14	23	12	14	11	16	15	13	13	14	14	12	14	15	17	16	13	13	10	11	10	12	9	8
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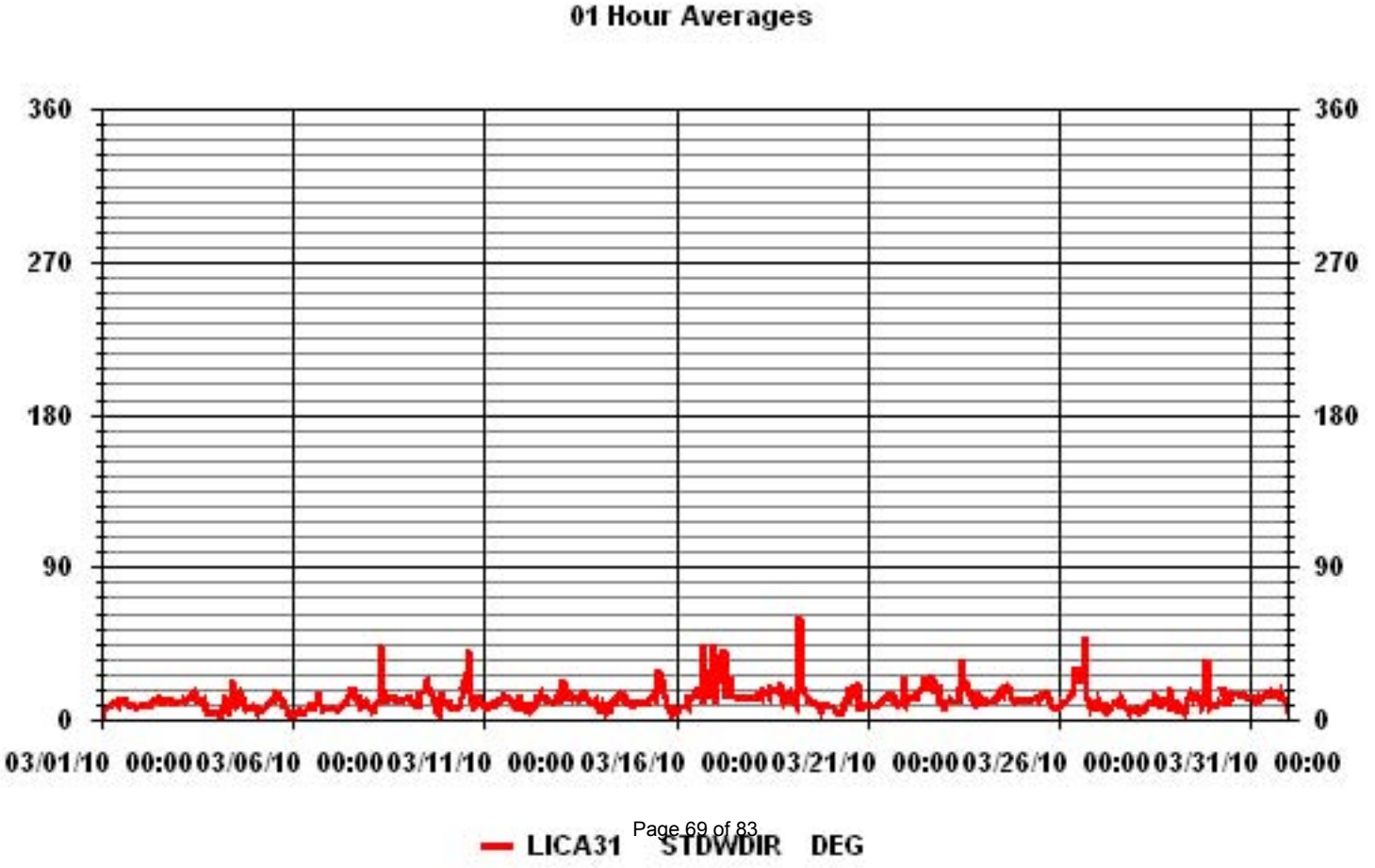
15	10	9	10	10	10	10	10	12	12	13	13	18	20	29	27	24	16	13	9	6	7	4	7	7
16	7	5	6	7	8	8	10	9	15	13	14	14	17	16	19	14	9	44	14	14	29	25	26	45
17	9	38	37	28	22	31	41	15	13	24	26	14	14	14	14	13	13	13	14	13	12	12	12	13
18	13	13	14	13	15	13	18	16	16	16	15	21	18	18	17	17	17	22	16	11	13	16	14	15
19	12	11	10	8	16	60	19	20	18	16	11	11	11	11	10	10	10	8	6	9	9	9	8	8
20	8	8	8	6	5	5	4	4	6	9	12	12	19	15	15	20	16	13	22	6	8	9	9	9
21	9	9	9	8	8	8	9	9	11	12	12	14	15	14	13	12	15	13	10	9	10	11	10	26
22	13	12	13	12	14	12	13	15	16	18	19	23	25	17	21	24	25	24	16	18	10	20	10	6
23	7	11	11	12	11	11	11	12	13	13	20	36	25	23	18	16	18	13	11	10	11	16	14	12
24	9	11	11	11	11	10	11	11	12	14	17	17	15	19	19	15	18	17	12	11	12	11	12	12
25	12	12	11	13	12	12	12	12	13	13	14	12	14	15	14	15	16	14	11	8	8	7	7	7
26	7	10	9	10	10	11	14	15	17	23	30	30	24	21	30	25	50	13	12	7	8	8	7	7
27	12	10	10	7	9	9	5	5	7	8	10	10	11	10	14	13	9	8	6	5	7	6	6	6
28	7	7	5	6	7	6	8	9	11	10	11	12	15	14	10	8	9	11	13	9	12	19	7	8
29	10	8	12	4	6	7	5	9	12	13	15	13	15	15	15	13	13	9	11	20	36	21	7	8
30	9	8	8	10	12	**N**	18	15	10	10	14	16	14	16	15	16	15	15	15	15	15	13	13	14
31	14	13	14	12	14	12	12	14	15	15	16	15	15	17	15	16	16	15	17	13	13	12	10	5

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

LAST CALIBRATION: February 3, 2009

CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 743 HRS


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA31 STDWDIR DEG

Calibration Reports

Sulphur Dioxide

SO_2 Calibration Report

Station Information

Calibration Date	March 30, 2010	Previous Calibration	February 25, 2010
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION		
Plant / Location	ST. LINA		
Start Time (MST)	9:24	End Time (MST)	12:57
Reason:	Monthly Calibration		
Barometric Pressure	678 mmHg	Station Temperature	22 Deg C
Cal Gas	51.4 ppm	Cal Gas Expiry date	08/02/2012
DAS Output Voltage	0 - 1 Volts		

Equipment Information

Analyzer Make / Model:	API 100E	S/N :	468	Method:	Fluorescent
Converter Make / Model:	-	S/N :	-		
Calibrator Make / Model:	Environics 2000	`	1991	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO717		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration		After Calibration	
Concentration Range	0 -1000 ppb			
Sample Flow / Box Temp	532 ccm	30.7 Deg C	529 ccm	33.6 Deg C
HVPS / Lamp Setting	529	2567	529	2562
PMT / RxCell Temp	7.8 Deg C	50 Deg C	7.9 Deg C	50 Deg C
Converter / IZS Temp	NA Deg C	40 Deg C	NA Deg C	40 Deg C
Offset / Slope	58	1.103	61.1	1.092

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
3005	0	0	1	N/A
3005	0	0	0	N/A
2960	44.3	758	766	0.9895
2960	44.3	758	758	0.9999
2992	23.7	404	399	1.0124
2995	11.8	202	199	1.0136
3010	0	0	0	N/A
			Sum of Least Squares	1.0032
			New Correction Factor	0.9999

	Before Calibration	After Calibration
Auto Zero	1.9	-0.3
Auto Span	371	363
Sample Lines Connected		YES
Percent Change from Previous Calibration		1.2%

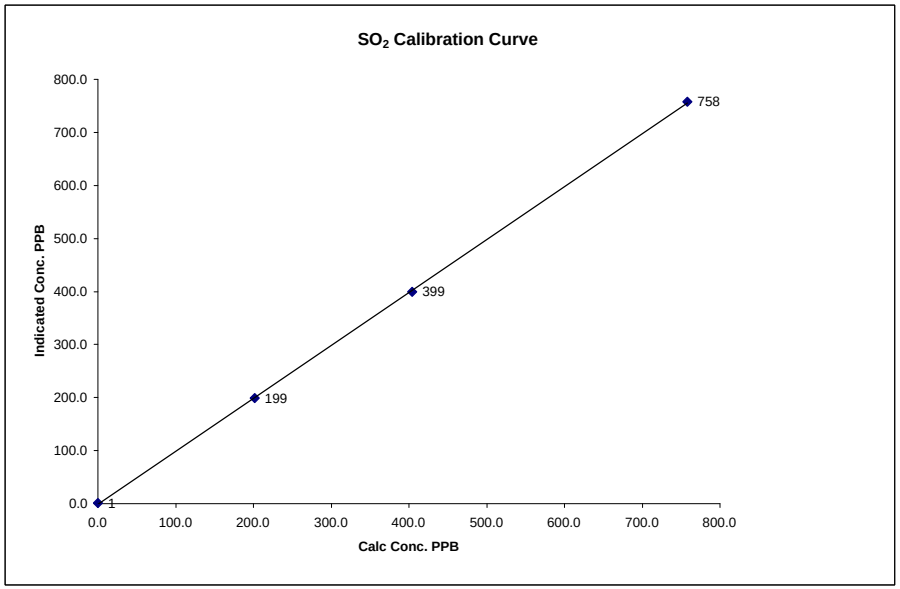
Calibration Performed by: Shea Beaton

SO_2 Calibration Curve

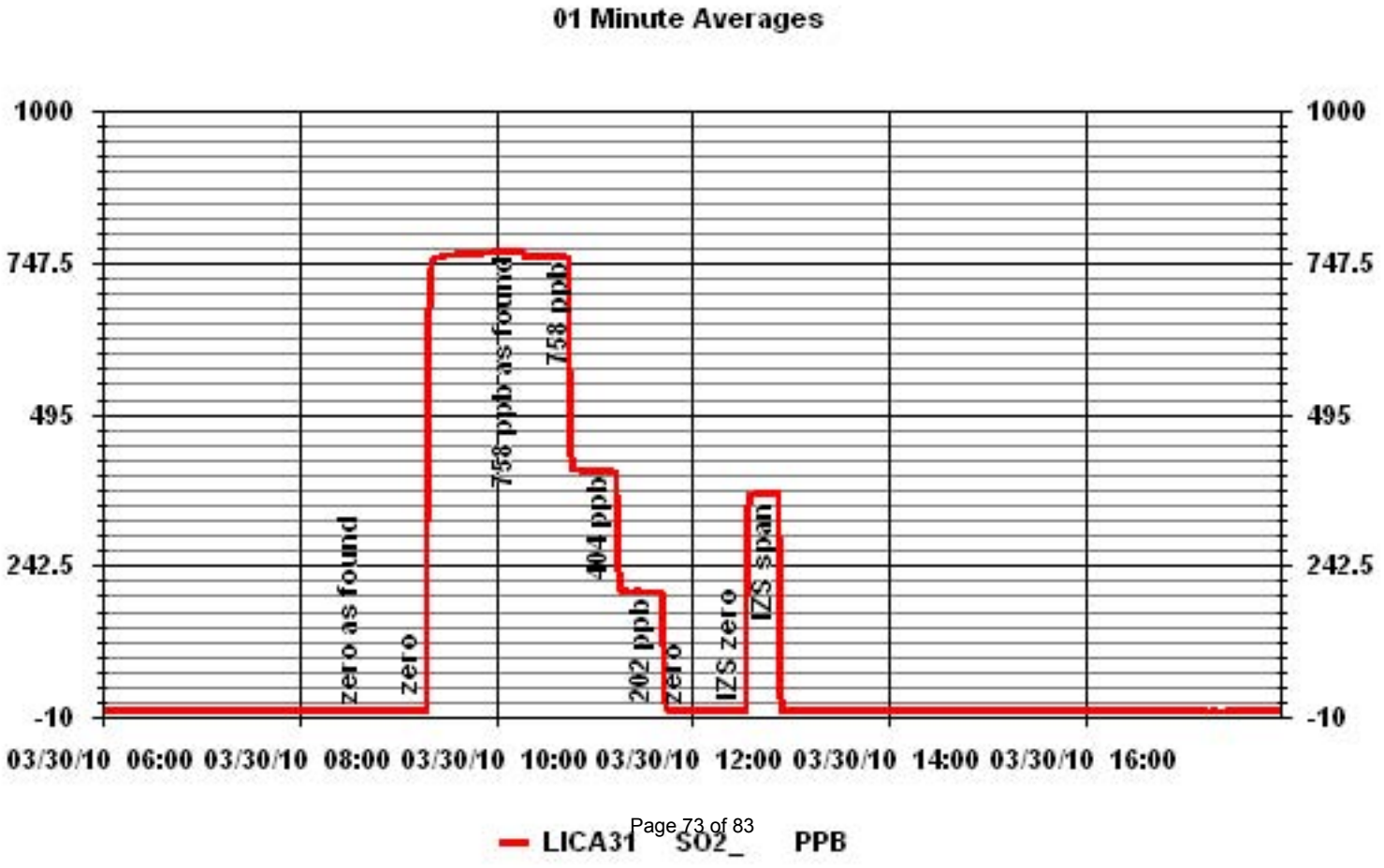
Calibration Date	March 30, 2010		
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION		
Plant / Location	ST. LINA		
Start Time (MST)	9:24	End Time (MST)	12:57

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	1	n/a
202	199	1.0136
404	399	1.0124
758	758	0.9999

Correlation Coefficient	(≥ 0.995)	0.999930
Slope	(0.85 to 1.15)	0.999230
Intercept	(± 3% F.S.)	-1.382993



Notes:


01 Minute Averages
1000
747.5
495
242.5
-10
zero as found
zero
758 ppb as found
758 ppb
404 ppb
202 ppb
zero
IZS zero
IZS span
03/30/10 06:00
03/30/10 08:00
03/30/10 10:00
03/30/10 12:00
03/30/10 14:00
03/30/10 16:00
LICA31 SO2_ PPB

Hydrogen Sulphide

H_2S Calibration Report

Station Information

Calibration Date	March 30, 2010		Previous Calibration	February 25, 2010	
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	ST.LINA				
Start Time (MST)	9:24		End Time (MST)	12:16	
Reason:	Monthly Calibration				
Barometric Pressure	678	mmHg	Station Temperature	22	Deg C
Cal Gas	10.8	ppm	Cal Gas Expiry date	06/22/2010	
DAS Output Voltage	0 - 1	Volts			

Equipment Information

Analyzer Make / Model:	API 101E	S/N :	510	Method:	Fluorescent
Converter Make / Model:	Internal	S/N :	N/A		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO717		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 100	ppb				
Sample Flow / Box Temp	524	ccm	34.6	Deg C	523	ccm	35.3	Deg C
HVPS / Lamp Setting	534		2402		534		2403	
PMT / RxCell Temp	8.4	Deg C	50	Deg C	8.4	Deg C	50	Deg C
Converter / IZS Temp	315.1	Deg C	45	Deg C	314.6	Deg C	45	Deg C
Offset / Slope	55.3		0.912		58		0.899	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4996	0	0	1	N/A
4996	0	0	0	N/A
4960	37	80	83	0.9635
4960	37	80	80	0.9996
4980	18.5	40	40	0.9993
4985	10.6	23	23	0.9964
4996	0	0	0	N/A
			Sum of Least Squares	0.9993
			New Correction Factor	0.9996

	Before Calibration	After Calibration
Auto Zero	2.0	0.5
Auto Span	58.0	55.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		3.8%

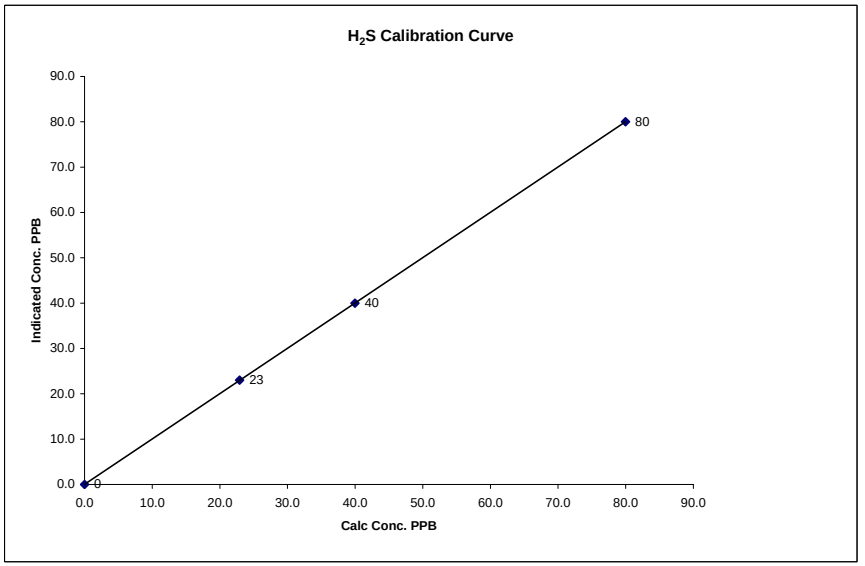
Calibration Performed by: Shea Beaton

H_2S Calibration Curve

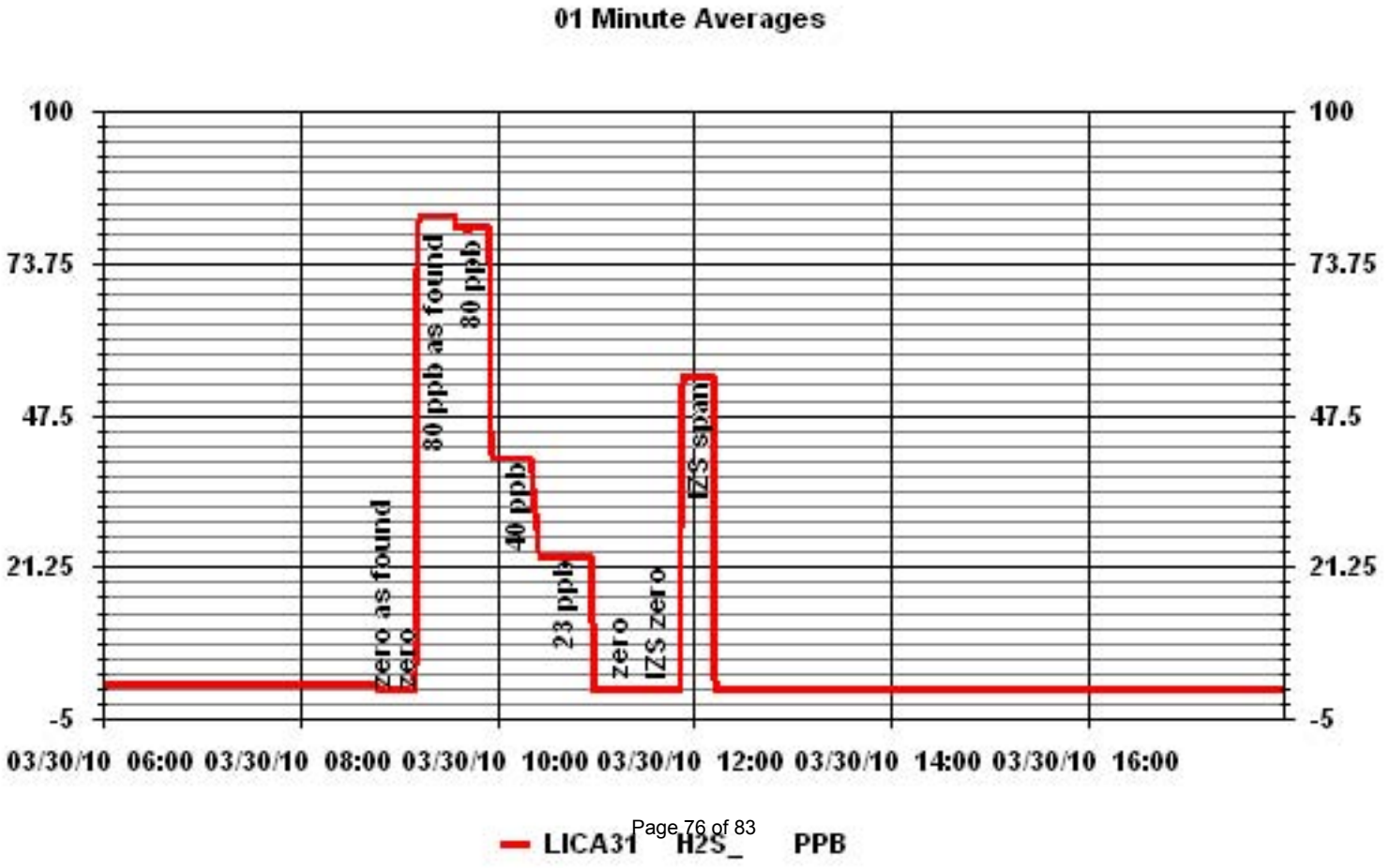
Calibration Date	March 30, 2010				
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	ST.LINA				
Start Time (MST)	9:24		End Time (MST)	12:16	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
23	23	0.9964
40	40	0.9993
80	80	0.9996

Correlation Coefficient	(≥ 0.995)	0.999999
Slope	(0.85 to 1.15)	1.000136
Intercept	(± 3% F.S.)	0.031121



Notes:


01 Minute Averages
100
73.75
47.5
21.25
-5
zero as found
zero
80 ppb as found
80 ppb
40 ppb
23 ppb
zero
IZS zero
IZS span
03/30/10 06:00
03/30/10 08:00
03/30/10 10:00
03/30/10 12:00
03/30/10 14:00
03/30/10 16:00
LICA31 H2S_ PPB

Total Hydrocarbons

THC Calibration Report

Station Information

Calibration Date:	March 30, 2010	Previous Calibration	February 25, 2010		
Company:	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location:	ST. LINA				
: (MST)	11:40	End Time (MST)	15:33		
Reason:	Monthly Calibration				
Barometric Pressure:	678 mmHg	Station Temperature:	23	Deg C	
Calibrator:	API 700	S/N:	831		
Cal Gas Concentration:	207 Prop/ 602 Meth/1171.25 THC	ppm	Cal Gas Expiry Date:	August 21, 2011	
DAS make & Model:	ESC 8832	S/N :	AO717		
Output Voltage Range:	0 - 10 VDC				

Analyzer Information

Make / Model	TECO 51C	S/N :	77021-384	Method	Flame Ionization

Analyzer Settings

	Before Calibration		After Calibration	
Concentration Range	0 -50	ppm	0 - 50	ppm
Sample Pressure	6.9	psi	6.9	psi
Hydrogen Pressure	8.5	psi	8.5	psi
Air Pressure	20	psi	20	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
2001	0	0.0	-0.1	N/A
2001	0.0	0.0	0.0	N/A
2001	70.0	39.6	38.8	1.0203
2001	70.0	39.6	40.0	0.9897
2001	35.0	20.1	19.9	1.0118
2000	20.0	11.6	11.4	1.0172
2001	0	0.0	0.0	N/A
			Correction Factor:	0.9897

Previous Calibration Correction Factor:	0.9897	
Current Correction Factor Before Span Adjust:	1.0203	
Percent Change:	-3.00%	

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	-0.1	0.0
Auto Span	32.8	34.0
Sample Lines Connected		YES

Cylinder Pressures			
Span	1000	psi	
Hydrogen	750	psi	
Zero Air	N/A	psi	Unlimited API 701

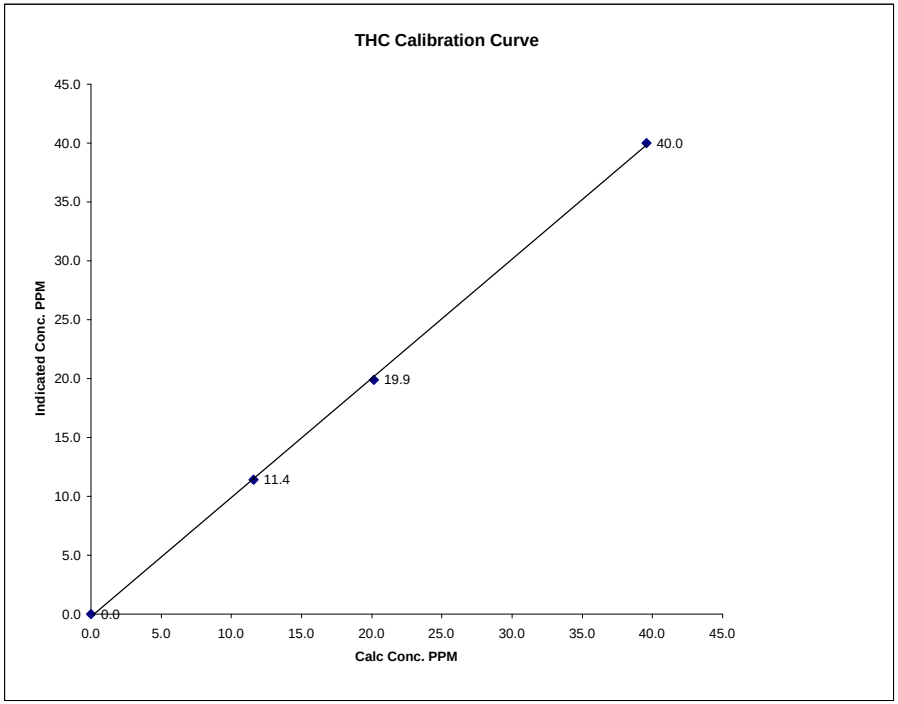
Calibration Performed by: Shea Beaton

THC Calibration Curve

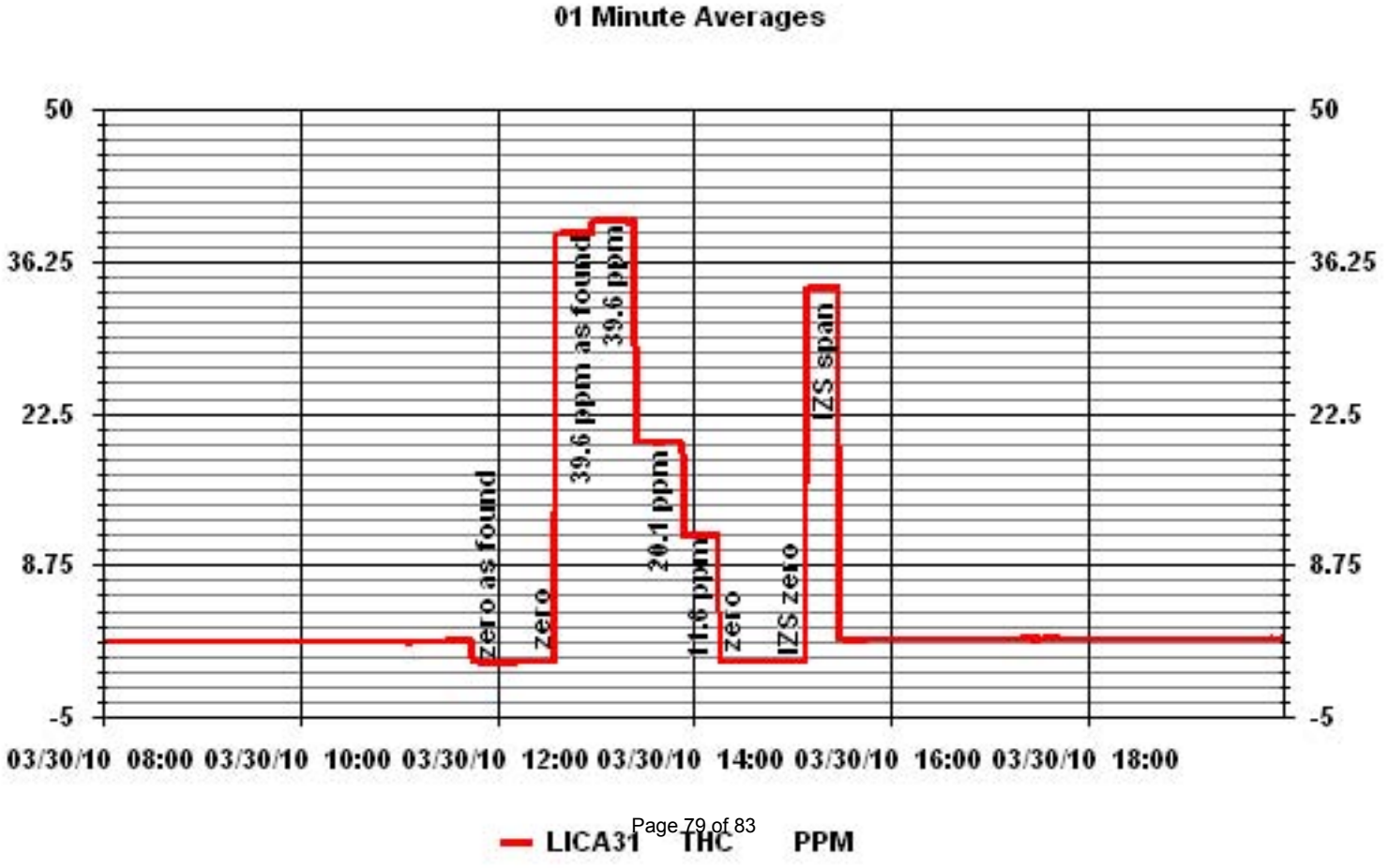
Calibration Date	March 30, 2010		
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION		
Plant / Location	ST. LINA		
Start Time (MST)	11:40	End Time (MST)	15:33

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	0.0	
11.6	11.4	1.0172
20.1	19.9	1.0118
39.6	40.0	0.9897

Correlation Coefficient	(≥ 0.995)	0.999823
Slope	(0.85 to 1.15)	1.011540
Intercept	(± 3% F.S.)	-0.210587



Notes: Flame temp 172.


01 Minute Averages
50
36.25
22.5
8.75
-5
zero as found
zero
39.6 ppm as found
39.6 ppm
20.1 ppm
11.6 ppm
zero
IZS zero
IZS span
03/30/10 08:00
03/30/10 10:00
03/30/10 12:00
03/30/10 14:00
03/30/10 16:00
03/30/10 18:00
LICA31 THC PPM

Nitrogen Dioxide

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	March 30, 2010		Previous Calibration	February 25, 2010	
Company	LICA		Plant/Location	St. Lina	
Start Time (MST)	8:24		End Time (MST)	15:41	
Reason:	Monthly Calibration			Other	
Barometric Pressure	678 mmHg	Station Temperature	22 Deg C	MFCF	1
Cal Gas Concentration	NOx 50.9 ppm	NO 50.8 ppm	Cal Gas Expiry date	02/08/0212	
DAS Output Voltage	0 - 1 Volts		Chart Rec. Output	NA Volts	

Equipment Information

Analyzer Make / Model:	API 100E	S/N :	593	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	SAO 717		
Chart Recorder Make / Model:	NA	S/N:	NA		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration					After Calibration			
Concentration Range				0-1000	ppb				
Sample Flow/Conv. Temp	458	ccm	316.7	Deg C		459	ccm	314.7	Deg C
Ozone Flow / Vacuum	71	ccm	3.8	"Hg-A		71	ccm	3.8	"Hg-A
HVPS / A ZERO	646	Volts	16.0	MV		646	Volts	17.5	MV
Rx/ Temp / PMT Temp	50.0	Deg C	6.7	Deg C		50.0	Deg C	6.9	Deg C
Box Temp / IZS Temp	29.9	Deg C	45.2	Deg C		32.6	Deg C	45.2	Deg C
Offset	1.1	NOx	0.5	NO		1.6	NOx	0.4	NO
Slope	1.053	NOx	1.044	NO		1.077	NOx	1.069	NO
NO_2 COEF / Conv Efficency	NA	NO2	1.000			NA	NO2	1.000	

Dilution Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			Correction Factor	
			NOx	NO	NO2	NOx	NO	NO2	NOx	NO
3010	0.0	-----	0	0	0	0	0	0	-----	-----
3010	0.0	-----	0	0	0	0	0	0	-----	-----
2960	44.3	-----	751	749	-----	788	783	5	0.9525	0.9567
2960	44.3	-----	751	749	-----	806	801	5	0.9312	0.9352
2992	23.7	-----	400	399	-----	397	394	3	1.0076	1.0133
2995	11.8	-----	200	199	-----	198	196	2	1.0089	1.0172
3005	0.0	-----	0	0	0	0	0	0	-----	-----

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			NO_2 Correction Factor	NO2 Conv Efficency
			NOx	NO	NO2	NOx	NO	NO2		
2960	44.3	-----	751	749	-----	755	753	3	-----	-----
2960	44.3	480	751	-----	554	752	202	550	1.0073	99.27%
2960	44.3	240	751	-----	263	755	493	263	1.0000	100.00%
2960	44.3	80	751	-----	128	757	628	129	0.9922	100.80%

Linearity		Sum of Least Squares	NOx=	0.950	NO=	0.955	NO2= 1.005
OK? Yes	No	Correction Factors:	NOx=	0.9312	NO=	0.9352	NO2= 1.0073
					Average Converter Efficiency=		100.02%

	Before Calibration					After Calibration			
Auto Zero	0.6	NOx	0.7	NO2		-0.2	NOx	-0.3	NO2
Auto Span	533	NOx	521	NO2		522	NOx	510	NO2
					Sample Lines Connected	YES			

Notes: No adjustment to the analyzer NO2 CE gain required.
During the initial GPT point, the O3 concentration being generated by the calibrator changed, re-set the O3 concentration and restarted the point.

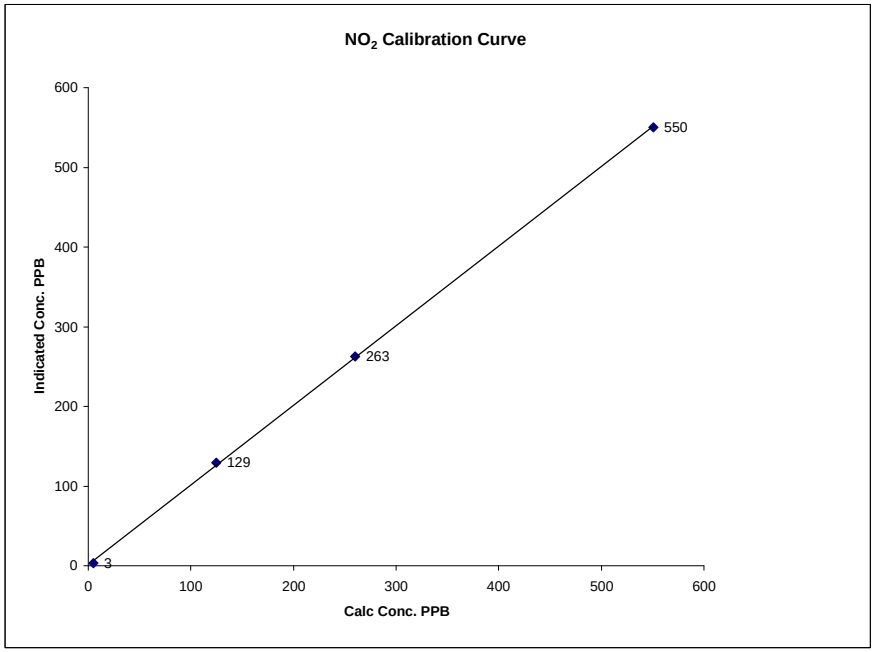
Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	March 30, 2010		
Company	LICA		
Plant / Location	St. Lina		
Start Time (MST)	8:24	End Time (MST)	15:41

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
5	3	N/A
125	129	0.9690
260	263	0.9886
551	550	1.0018

Correlation Coefficient	(≥ 0.995)	0.999844
Slope	(0.85 to 1.15)	0.998658
Intercept	(± 3% F.S.)	1.31560

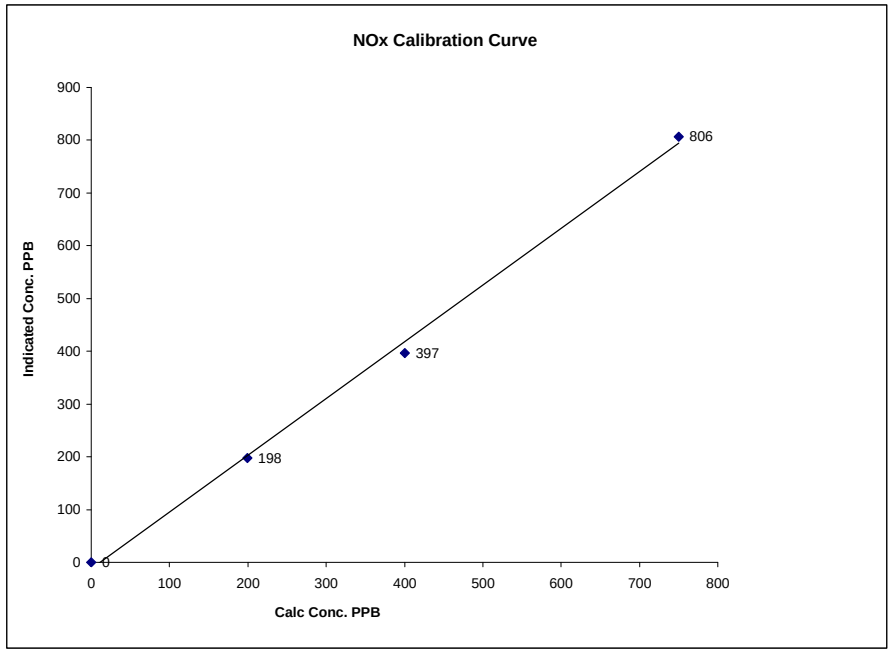


Notes:

NOx Calibration Curve

Calibration Date	March 30, 2010				
Company	LICA				
Plant / Location	St. Lina				
Start Time (MST)	8:24	End Time (MST)	15:41		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.997945
			Slope (0.85 to 1.15)	1.074671
0	0	N/A	Intercept (± 3% F.S.)	-12.53674
200	198	1.0089		
400	397	1.0076		
751	806	0.9312		

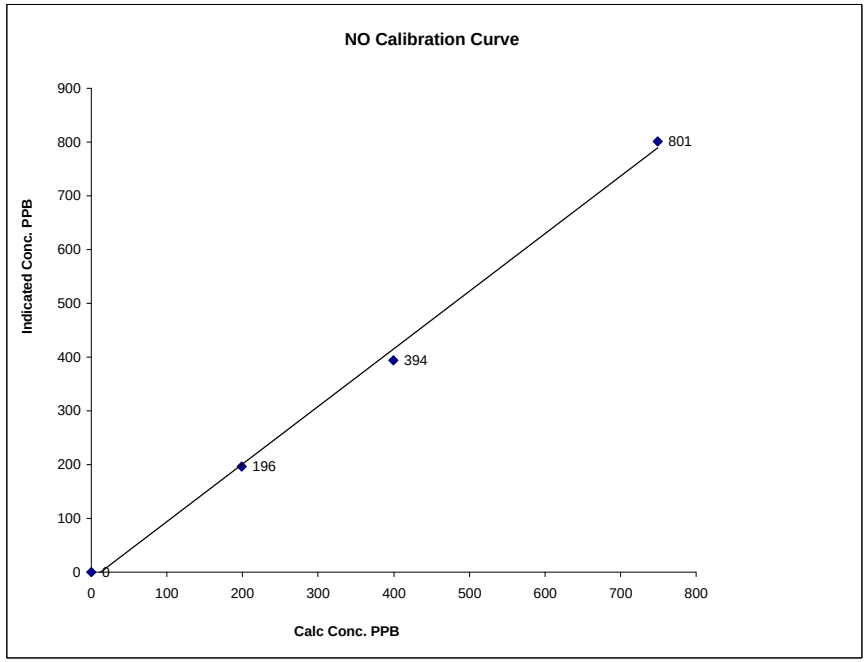


Notes:

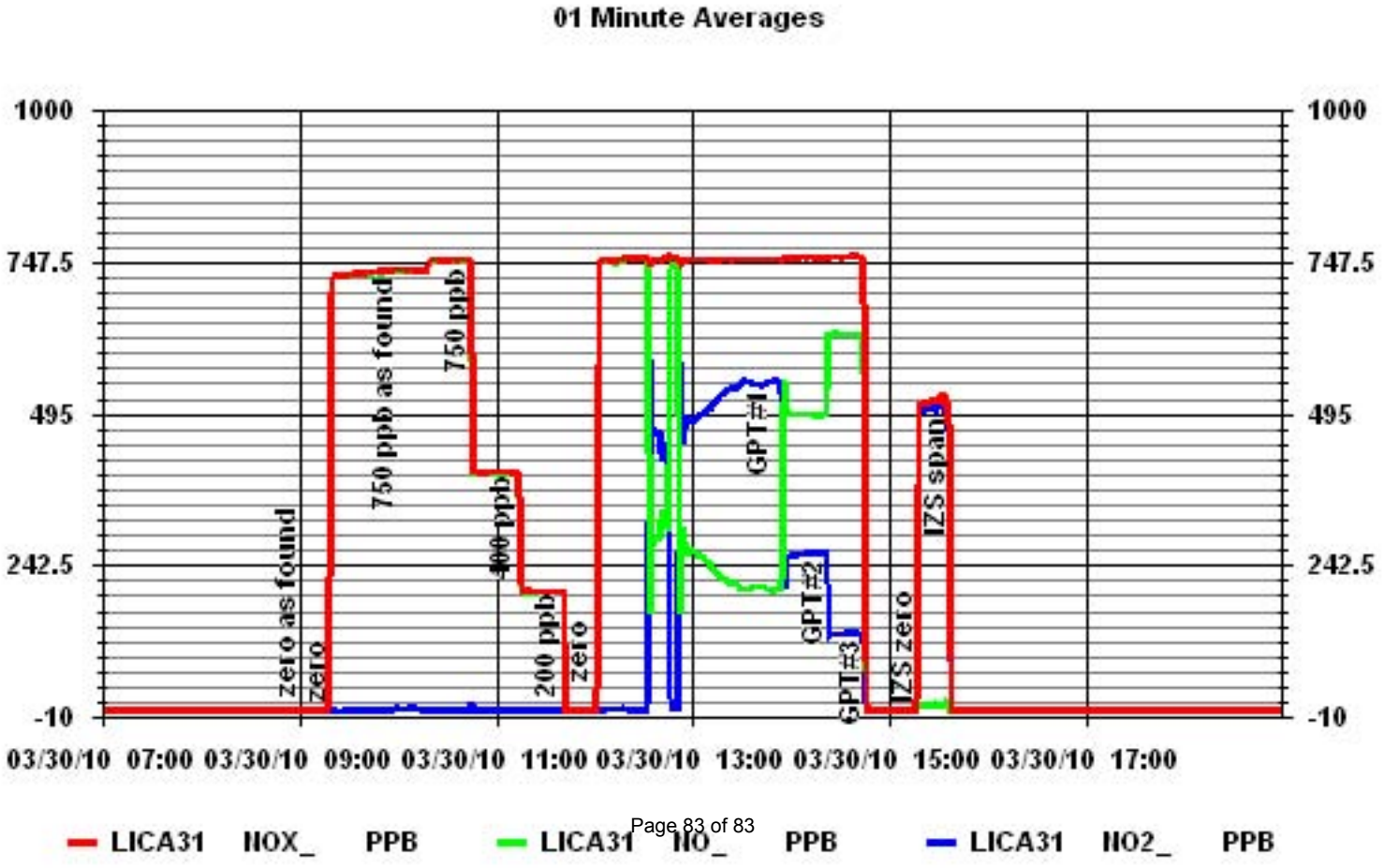
NO Calibration Curve

Calibration Date	March 30, 2010				
Company	LICA				
Plant / Location	St. Lina				
Start Time (MST)	8:24	End Time (MST)	15:41		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.997865
			Slope (0.85 to 1.15)	1.107671
0	0	N/A	Intercept (± 3% F.S.)	-70.4575
199	196	1.0172		
399	394	1.0133		
749	801	0.9352		



Notes:


01 Minute Averages
1000
747.5
495
242.5
-10
zero as found
zero
750 ppb as found
750 ppb
400 ppb
200 ppb
zero
GPT#1
GPT#2
GPT#3
IZS zero
IZS span
03/30/10 07:00
03/30/10 09:00
03/30/10 11:00
03/30/10 13:00
03/30/10 15:00
03/30/10 17:00
LICA31 NOX_ PPB
LICA31 NO_ PPB
LICA31 NO2_ PPB

Lakeland Industry & Community Association

Portable / Devon Wellsite 13-16-62-5 W4M Monitoring Site
Ambient Air Monitoring Data Report
For
March 2010

Prepared By:

Maxxam Analytics

Driven by Service and Science

April 30, 2010

Lakeland Industry & Community Association
Portable / Devon Wellsite 13-16-62-5 W4M
Ambient Air Monitoring

Table of Contents

Introduction

The following Ambient Air Monitoring report was prepared for:

Mr. Mike Bisaga
Lakeland Industry & Community Association
Box 8237
5107W – 50 Street
Bonnyville, Alberta
T9N 2J5

Monitoring Location: Portable / Devon Wellsite 13-16-62-5 W4M
Data Period: March 2010

The monthly ambient data report:

- Prepared by Lily Lin
- Reviewed by Craig Snider

The 6-days analytical report for VOCs and PAHs:
Authorized by Petro Oh

Calibration Procedure

The following calibration procedure applies to all calibrations conducted at the Lakeland Industry & Community Association Air Monitoring Station.

Calibration gas concentrations are generated using a dynamic mass flow controlled calibrator. EPA Protocol one gases are diluted with zero air generated on site. The Mass Flow Controllers in the calibrator are referenced using an NIST traceable flow meter once per month. All listed flows are reported as corrected to Standard Temperature and Pressure (STP).

Generated zero gas is introduced to the analyzer first. Three concentrations of calibration gas are then generated in order to introduce points at approximately 50-80%, 25-40% & 10-20% of the analyzer's full-scale range. An auto zero and span are then performed to validate the daily zero and span values recorded to the next multi-point calibration.

All indicated concentrations are taken from the ESC data logger used to collect the data for monthly reporting.

Conformance of each calibration to Alberta Environment regulations is outlined in the individual calibration reports. The slope and correlation coefficient are derived from the calculated and indicated analyzer responses. The percent change is calculated using the previous calibration correction factor and the current correction factor before adjustment. The calibration conforms to the procedure outlined in the *Air Monitoring Directive, Appendix A-10, Section 1.6.*

MONTHLY CONTINUOUS DATA SUMMARY
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE

Continuous Ambient Monitoring – March 2010

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION PORTABEL / DEVON WELLSITE 13-16-62-5 W4M SITE						MAXIMUM VALUES							OPERATIONAL TIME (PERCENT)
						1-HOUR					24-HOUR		
PARAMETER	OBJECTIVES		EXCEEDENCES		MONTHLY AVERAGE	READING	DAY	HOUR	WIND SPEED (KPH)	WIND DIRECTION (DEGREES)	READING	DAY	
	1-HR	24-HR	1-HR	24-HR									
SO_2 (PPB)	172	57	0	0	0.15	3	1	15, 16	4.6, 5.9	162(SSE), 139(SE)	1.2	4	99.9
H_2S (PPB)	10	3	-	-	0.02	1	12, 29	VAR	VAR	VAR	0.5	29	99.9
THC (PPM)	-	-	-	-	2.52	15.0	13	0	4.7	65(ENE)	3.8	13	99.9
NO_2 (PPB)	212	106	0	0	2.91	19	12	6	7.1	228(SW)	14.2	4	99.9
NO (PPB)	-	-	-	-	0.40	18	12	6	7.1	228(SW)	1.9	12	99.9
NOx (PPB)	-	-	-	-	3.53	37	12	6	7.1	228(SW)	15.9	4	99.9
O_3 (PPB)	82	-	0	-	30.96	50	29	22	10.2	258(WSW)	44.7	30	99.9
PM 2.5 (UG/M^3)	-	30	-	0	3.01	18.3	4	4	6.9	224(SW)	10.1	4	79.2
VECTOR WS (KPH)	-	-	-	-	9.30	31.1	30	14	-	273(W)	23.3	30	99.9
VECTOR WD (DEGREES)	-	-	-	-	222(SW)	-	-	-	-	-	-	-	99.9

VAR-VARIOUS

Volatile Organics Data Summary
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE

Xontech Model 910A – March 03, 2010

Maximum reading (ug/m3)	Volatile Organic
<32.0	Hexachlorobutadiene

Note: Heptane and Cyclohexane data are missing. The result was reported in 2 significant figures because the detection limit was entered in as 2 sig figs by the lab.

Xontech Model 910A – March 09, 2010

Maximum reading (ug/m3)	Volatile Organic
<32.0	Hexachlorobutadiene

Xontech Model 910A – March 15, 2010

Maximum reading (ug/m3)	Volatile Organic
<32.0	Hexachlorobutadiene

Xontech Model 910A – March 21, 2010

Maximum reading (ug/m3)	Volatile Organic
<32.0	Hexachlorobutadiene

Xontech Model 910A – March 27, 2010

Maximum reading (ug/m3)	Volatile Organic
<32.0	Hexachlorobutadiene

Polycyclic Aromatic Hydrocarbons (PAHs) Data Summary
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

PUF cartridge – March 03, 2010

Maximum reading (ng/m3)	Semi-Volatile Organic
<6.055	3-Methylcholanthrene

PUF cartridge – March 09, 2010

Maximum reading (ng/m3)	Semi-Volatile Organic
<6.055	3-Methylcholanthrene

PUF cartridge – March 15, 2010

Maximum reading (ng/m3)	Semi-Volatile Organic
<6.055	3-Methylcholanthrene

PUF cartridge – March 21, 2010

Maximum reading (ng/m3)	Semi-Volatile Organic
<6.055	3-Methylcholanthrene

PUF cartridge – March 27, 2010

Maximum reading (ng/m3)	Semi-Volatile Organic
<6.055	3-Methylcholanthrene

General Monthly Summary

Equipment Operation
The following summary outlines the analyzer performance. Any non-conformances, problems or maintenance performed are detailed at the end of each section.

AQM STATION – LICA – PORTABLE

Sulphur Dioxide (PPB)
- Analyzer make / model – API 100E, S/N: 467

No operational issues observed during the month. The UV lamp was peaked, a factory cal was performed, the analog output was verified and the inlet filter was changed following the as found points on March 4th. A post maintenance calibration was performed on March 5th. One hour of data is missing on March 30th. Data was corrected using daily zero information.

Hydrogen Sulphide (PPB)
- Analyzer make / model –API 101E, S/N: 509
- Converter - Internal

No operational issues observed during the month. After performing the as found points on March 4th, the SO2 scrubber material was replaced. The analyzer was allowed time to stabilize, and then the UV lamp was peaked, a factory was performed, the analog output was verified and the inlet filter was change. A post maintenance calibration was performed on March 5th. One hour of data is missing on March 30th. Data was corrected using daily zero information.

General Monthly Summary

AQM STATION – LICA – PORTABLE

Nitrogen Dioxide (PPB)

- Analyzer make / model – API 200E, S/N: 593

No operational issues observed during the month. During the initial as found points performed on March 4th, the NO2 values were going excessively negative. Halted points, replaced the scrubbing material in zero air supplied and restarted. The second set of as found points were more normal but the NO2 values were sill negative. Allowed a long span point and the values slowly normalized. Suspect a cal gear issue. Performed a single GPT point to verify converter efficiency. Following the as found points, the reaction cell and window were cleaned, the sample orifice and sintered filter, the ozone sintered filter, and the reaction cell o-rings were replaced. Some stabilization time was allowed then a modified factory cal was performed. Prior to this repair, a leak check was done – the reaction cell pressure was 3.5 inHg, and the sample pressure was 3.8 inHg. Following the repair a second leak check was done and the pressure were 3.4 and 3.7 inHg. A post maintenance calibration was performed on March 5th. One hour of data is missing on March 30th. Data was corrected using daily zero information.

Ozone (PPB)

- Analyzer make / model – API 700, S/N: 446

No operational issues observed during the month. It was noticed that the screen on the analyzer was blank and the fault LED was lit up on March 2nd. The O3 concentration value on the data logger display seemed accurate, initiated the zero phase of the daily cal program and the analyzer responded; aborted daily cal. Disconnected the sample line and the O3 concentration on the DAS dropped accordingly; analyzer data an spans appear OK. Cycled the power on the analyzer, the analyzer powered up normally and the screen returned. Ran the daily cal program- OK. It is likely the analyzer has experienced a temporary issue that rendered the screen inoperative; the measurement capabilities of the analyzer do not seem to have been effected. The monthly calibration was performed on March 5th; the as found span took a long time to stabilize due to a wet/dry issue with the zero air supply. The inlet filter was changed before the monthly calibration was started. O3 max data on March 8th at 4:00 was invalidated, as the value was offscale. The analyzer had a “SYSTEM RESET” fault on March 8th; this usually indicates a power failure has occurred, cleared the fault. One hour of data is missing on March 30th.

General Monthly Summary

AQM STATION – LICA – PORTABLE

THC (PPM)

- Analyzer make / model – TECO 51C, S/N: 04366-09739

No operational issues observed during the month. The inlet filter was changed before the monthly calibration was started. One hour of data is missing on March 30th. Thirteen hours of THC max data were overrange this month, reading of 54.1 ppm. The concentration average during these hours is likely higher than 54.1 ppm, and the monthly average is also likely higher than the value we report in the report. Data was corrected using daily zero information.

Particulate Matter 2.5 (ug/m^3)

- Analyzer make / model –TEOM1400A, S/N: 140AB2207400101

The Teom inlet was cleaned on March 4th. A Teom audit attempted to be performed on March 25th. Prior to the leak check, the Teom filter was removed and the top of the tapered element broken off inside the bottom of the filter causing the unit is non-functional anymore. 154 hours of data were invalidated die to the issue. Audit of operating factors was satisfactory prior to incident. One hour of data is missing on March 30th. Data was corrected using Alberta air quality guideline for PM2.5 analyzer. If the data was between 0 to –3, the data was corrected to 0. If the data was below –3, the data was invalidated. No data was invalidated as none of it was below –3.0 ug/m^3.

Vector Wind Speed (KPH) & Vector Wind Direction (DEG)

- System make / model – RM Young 5103VK, S/N: 41334

No operational issues observed during the month. The wind system is reported as vector wind speed and vector wind direction. One hour of data is missing on March 30th.

General Monthly Summary

AQM STATION – LICA – PORTABLE

Datalogger

- System make / model - ESC 8832, S/N: AO717
- Software make / version - ESC v 5.51a

The ESC 8832 is connected to a modem with DSL for continuous connection with the base computer.

Trailer

The trailer is located at N54°22'04.4", W110°42'14.6", Elevation 560m asl.
The manifold and inlet pipe were cleaned on March 4th.

Air Quality Index (AQI)

The AQI data was adjusted to reflect regular monthly and daily calibrations, maintenance, and downtime. All AQI values recorded in March 2010 were within Good range. The highest AQI value for O3 was 24 during various hours on March 2nd, and its hourly concentration was 47 ppb. The highest AQI value for PM2.5 was 15 on March 4th, hour of 4, and its hourly concentration was 18.3 ug/m3.

Volatile Organics (VOCs)

The volatile organics were sampled from March 3rd to March 27th. The sampler was programmed to run for 24 hours, and, every 6 days per sample cycle.
The values for the VOCs in this report were reported as ug/m3 in 3 significant figures.
The results of Heptane and Cyclohexane are missing in the samples collected on March 3rd.The result for March 3rd is reported in 2 significant figures because the detection limit was entered in as 2 sig figs by the lab.

Polycyclic Aromatic Hydrocarbons (PAHs)

The PAHs were sampled from March 3rd to March 27th. The sampler was programmed to run for 24 hours, and, every 6 days per sample cycle.
The values for the PAHs in this report were reported as ng/m3.

Continuous Monitoring

Monthly Summaries, Graphs & Wind Roses

Air Quality Index

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLESITE*

MARCH 2010

AIR QUALITY INDEX (AQI)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	14	16	-	13	12	11	11	8	9	14	15	17	19	20	21	20	19	18	16	17	18	17	17	17	21
	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
2	17	-	13	12	12	12	13	16	17	-	19	20	23	**24**	**24**	**24**	22	22	22	22	22	22	22	21	24
	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	**O3_**	**O3_**	**O3_**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
3	-	19	19	19	20	19	19	19	19	19	19	18	19	19	19	18	18	18	16	16	14	13	12	-	20
	NA	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_
4	12	14	**15**	**15**	**15**	13	11	10	9	10	14	-	-	-	-	-	-	-	15	14	14	11	-	10	15
	PM2	PM2	**PM2**	**PM2**	**PM2**	PM2	PM2	PM2	PM2	O3_	O3_	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	O3_	O3_	O3_	O3_	**NA**	O3_	O3_
5	11	8	6	5	4	6	5	8	-	-	-	-	-	-	-	4	-	-	-	19	19	-	18	16	19
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	PM2	**NA**	**NA**	**NA**	O3_	O3_	O3_	**NA**	O3_	O3_
6	14	13	11	10	8	8	9	8	12	6	11	13	16	19	20	21	21	20	19	15	-	14	14	13	21
	O3_	O3_	O3_	O3_	PM2	PM2	PM2	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_
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8	10	8	9	7	6	6	8	8	8	8	8	9	10	16	17	20	21	20	-	19	19	18	17	18	21
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9	19	19	18	18	16	15	14	13	15	17	19	20	21	21	21	21	21	-	18	16	14	18	19	20	21
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11	18	20	19	16	14	14	14	14	16	19	19	17	17	17	19	-	18	17	16	16	15	13	13	13	20
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12	11	9	8	11	11	10	9	9	11	12	14	16	20	21	-	22	21	21	19	17	15	12	13	12	22
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13	13	12	12	11	10	8	9	12	15	18	20	20	21	-	22	22	21	20	18	12	13	15	14	13	22
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
14	16	13	11	13	13	12	8	8	11	14	18	21	-	21	22	23	23	21	19	18	18	18	18	16	23
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15	17	16	16	15	16	16	16	15	15	15	16	-	16	16	16	16	16	15	13	10	8	7	7	4	17
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16	4	5	3	3	3	4	4	5	6	7	-	10	12	17	18	17	17	16	11	13	14	13	11	12	18
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
17	12	10	8	9	10	9	9	12	11	-	11	13	14	15	15	16	15	14	14	13	12	13	15	18	18
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
18	18	17	16	15	15	16	15	16	-	16	17	17	17	17	18	19	19	19	18	18	18	17	17	16	19
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
19	18	16	16	17	16	15	17	-	16	16	16	17	17	16	16	17	17	15	13	12	12	13	16	17	18
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
20	16	16	15	13	13	11	-	10	13	15	17	18	21	21	21	21	21	21	17	17	17	15	15	15	21
	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
21	15	16	16	17	18	-	18	18	18	18	18	19	19	19	19	19	18	17	15	13	12	12	12	15	19
	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
22	15	14	14	17	-	18	18	16	16	17	18	19	19	20	20	20	21	21	20	18	17	17	19	16	21
	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
23	15	16	17	-	17	17	16	16	17	17	17	18	19	19	19	19	19	19	19	17	16	19	19	19	19
	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
24	20	21	-	20	21	21	21	21	21	21	21	21	21	22	21	21	21	21	21	20	20	20	20	20	22
	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
25	20	-	19	18	18	18	17	17	17	17	17	17	17	-	-	-	-	-	-	-	-	-	-	-	20
	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	O3_
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
PEAK	20	21	19	20	21	21	21	21	21	21	21	21	23	24	24	24	23	22	22	22	22	22	22	21	
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	

STATUS FLAG CODES	NA - NOT APPLICABLE

V - VARIOUS

AQI CLASS	OZONE (O_3)					PARTICULATE MATTER 2.5 (PM2)					NITROGEN DIOXIDE (NO_2)					SULPHUR DIOXIDE (SO_2)					FREQUENCY	
	HRS	%	MAX AQI	HR	DAY	HRS	%	MAX AQI	HR	DAY	HRS	%	MAX AQI	HR	DAY	HRS	%	MAX AQI	HR	DAY	HRS	%
VERY POOR (101-255)	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%
POOR (51-100)	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%
FAIR (26-50)	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	0	0.0%
GOOD (1-25)	526	70.7%	24	13, 14, 15	2	19	2.6%	15	2, 3, 4	4	0	0.0%	-	-	-	0	0.0%	-	-	-	545	73.3%
OVERALL	526	70.7%	-	-	-	19	2.6%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	545	73.3%
UNAVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	199	26.7%

Sulphur Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

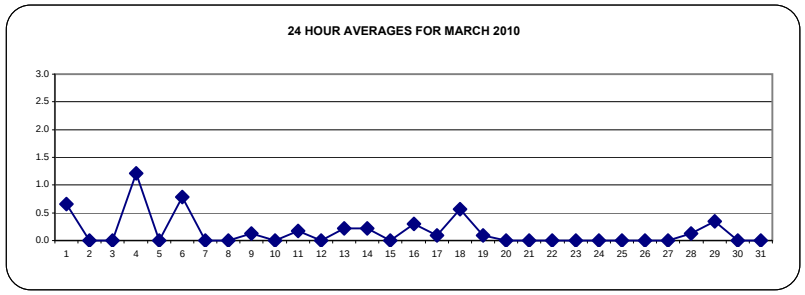
SULPHUR DIOXIDE (SO_2) hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	**IZS**	0	0	0	0	0	0	0	0	1	1	1	1	**3**	**3**	2	1	1	1	0	0	0	**3**	0.7	24
2	0	**IZS**	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
3	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
4	1	1	1	1	2	2	2	2	2	2	1	1	1	**C**	**C**	**C**	**C**	1	1	1	1	0	**IZS**	0	2	**1.2**	24
5	0	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	0	0	**C**	**C**	0	0	0	**IZS**	0	0	0	0.0	24
6	0	0	0	0	0	0	0	0	0	1	2	3	2	2	2	1	1	1	1	1	**IZS**	0	1	0	3	0.8	24
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	**IZS**	0	0	0	1	0	0	1	0.1	24
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
11	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	**IZS**	0	0	0	0	0	0	0	0	1	0.2	24
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0.0	24
13	0	0	0	0	0	0	0	0	1	3	1	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	3	0.2	24
14	0	0	0	0	0	0	0	0	0	0	1	1	**IZS**	2	1	0	0	0	0	0	0	0	0	0	2	0.2	24
15	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	1	2	1	1	1	1	0	0	0	0	0	2	0.3	24
17	0	0	0	0	0	0	1	0	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
18	0	0	0	0	0	0	0	1	**IZS**	0	0	1	1	2	1	1	2	2	2	0	0	0	0	0	2	0.6	24
19	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0.1	24
20	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
23	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	**IZS**	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
25	0	**IZS**	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
26	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	**IZS**	0	0	1	0.1	24
29	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	**IZS**	0	0	0	1	0.3	24
30	0	0	0	0	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	23
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
HOURLY MAX	1	1	1	1	2	2	2	2	2	3	2	3	2	2	2	3	3	2	2	1	1	1	1	0			
HOURLY AVG	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.0			

STATUS FLAG CODES

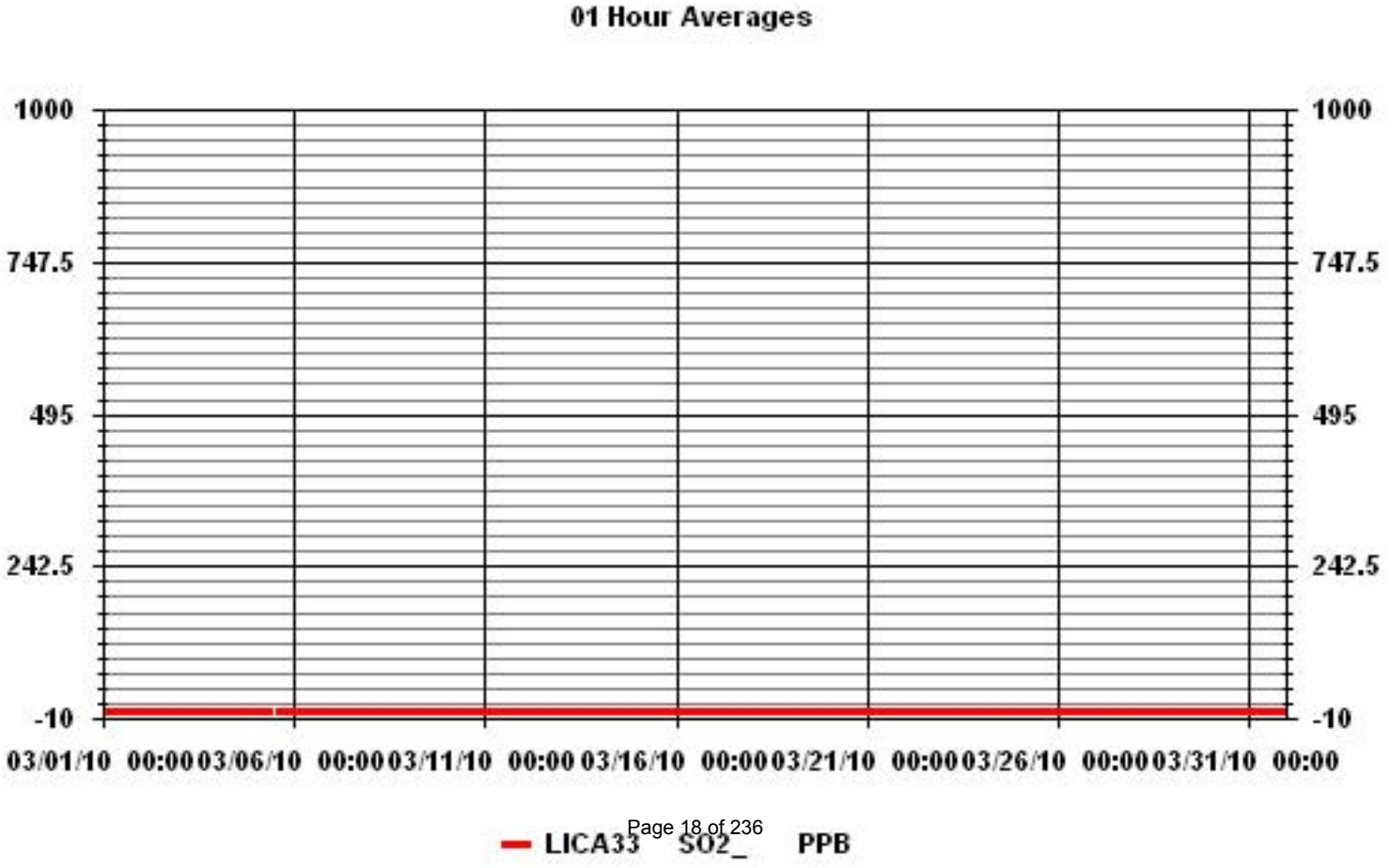
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 172 PPB | 24-HR 57 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	83					
MAXIMUM 1-HR AVERAGE:	3	PPB	@ HOUR(S)	15, 16	ON DAY(S)	1
MAXIMUM 24-HR AVERAGE:	1.2	PPB			ON DAY(S)	4
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	10	HRS	AMD OPERATION UPTIME:		99.9	%
STANDARD DEVIATION:	0.46		MONTHLY AVERAGE:		0.15	PPB


01 Hour Averages
1000
747.5
495
242.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 SO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

MST

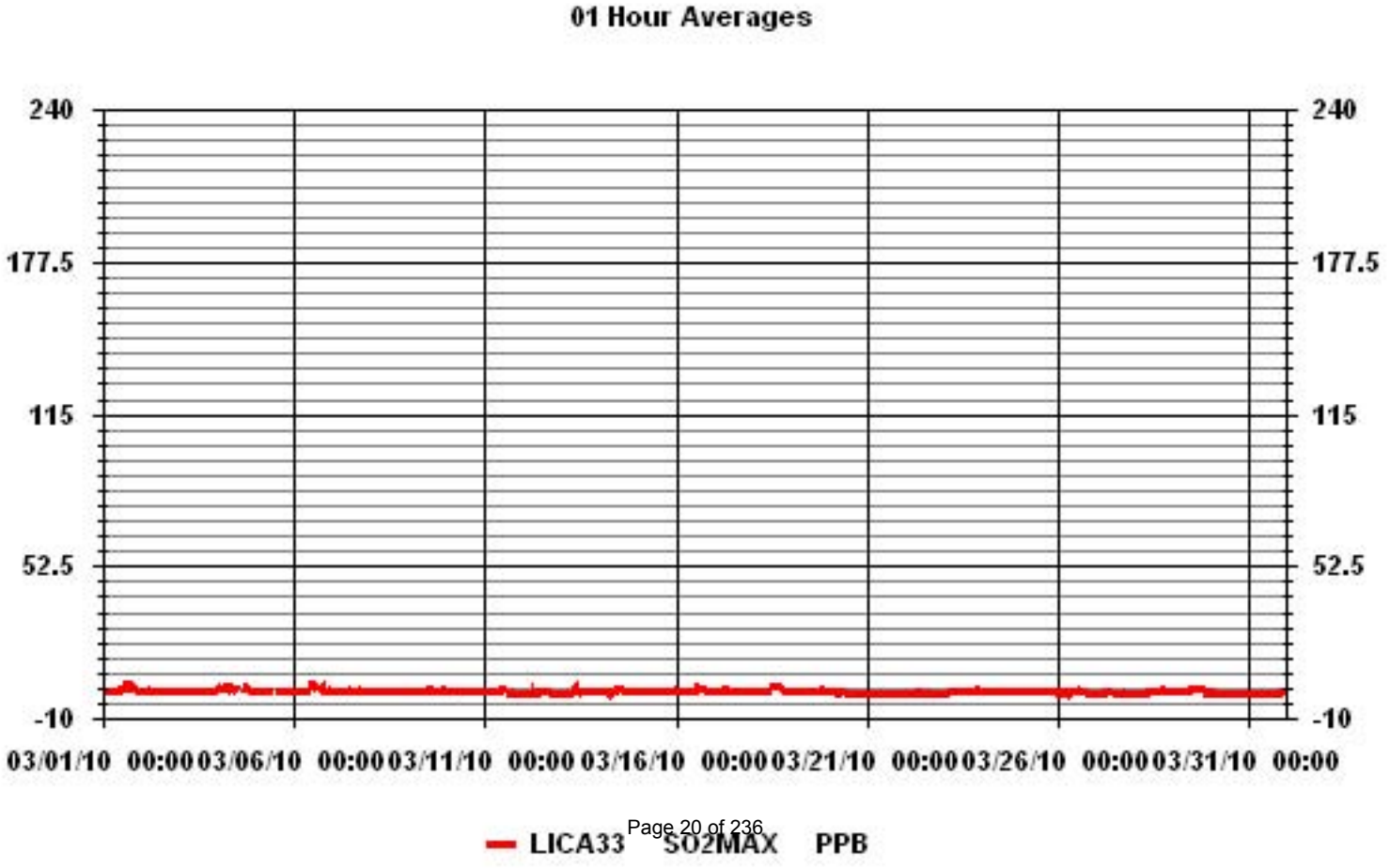
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	1	1	**IZS**	1	1	1	1	1	1	1	1	2	2	2	4	4	4	4	2	2	2	2	1	1	4	1.8	24
2	1	**IZS**	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	24
3	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1.0	24
4	2	3	2	2	3	3	3	2	3	3	2	3	**C**	**C**	**C**	**C**	**C**	2	3	3	2	1	**IZS**	1	3	2.4	24
5	1	1	1	1	1	1	1	1	1	1	**C**	**C**	**C**	**C**	1	1	**C**	**C**	1	1	1	**IZS**	1	1	1	1.0	24
6	1	1	1	1	1	1	1	1	1	2	4	4	3	4	3	3	2	2	3	1	**IZS**	1	2	1	4	1.9	24
7	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	**IZS**	1	1	1	1	2	1.1	24
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1.0	24
9	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	**IZS**	1	1	1	2	2	1	2	1.2	24
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1.0	24
11	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	**IZS**	0	1	0	0	0	0	0	0	2	0.9	24
12	0	0	0	0	0	0	2	1	0	0	1	1	1	1	**IZS**	1	1	1	0	0	0	0	0	0	2	0.4	24
13	0	0	0	0	0	0	0	1	3	4	3	1	2	**IZS**	1	1	1	1	1	1	1	1	1	1	4	1.0	24
14	1	1	1	1	1	1	0	1	1	1	2	2	**IZS**	3	2	1	1	1	1	1	1	1	1	1	3	1.2	24
15	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	2	2	1.0	24
16	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	3	3	2	2	2	2	1	1	1	1	1	3	1.3	24
17	1	1	1	1	1	1	2	2	2	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.1	24
18	1	1	1	1	1	1	1	2	**IZS**	1	1	2	3	3	3	3	3	3	3	2	1	1	1	1	3	1.7	24
19	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	1.1	24
20	1	1	1	1	1	1	**IZS**	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	24
21	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	**IZS**	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.2	24
23	0	0	0	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1.0	24
24	1	2	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	24
25	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24
26	**IZS**	0	0	1	1	1	0	1	1	1	1	1	2	1	1	1	1	1	1	0	0	0	0	**IZS**	2	0.7	24
27	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	1	**IZS**	0	1	0.3	24
28	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	1	**IZS**	1	1	2	0.7	24
29	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	**IZS**	0	0	2	2	1.3	24
30	0	0	1	0	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	0.0	23
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	1	1	1	1	0.2	24
HOURLY MAX	2	3	2	2	3	3	3	2	3	4	4	4	3	4	4	4	4	4	3	3	2	2	2	2			
HOURLY AVG	0.7	0.8	0.7	0.8	0.9	0.9	0.9	0.9	1.0	1.1	1.2	1.2	1.1	1.3	1.2	1.1	1.0	1.2	1.1	1.0	0.8	0.8	0.8	0.8			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	538					
MAXIMUM INSTANTANEOUS VALUE:	4	PPB	@ HOUR(S)	VAR	ON DAY(S)	VAR
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	11	HRS				
STANDARD DEVIATION:	0.75					


01 Hour Averages
240
177.5
115
52.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 SO2MAX PPB

LICA33
SO2_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : SO2_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 20	4.14	2.00	2.14	6.85	11.00	6.71	10.00	8.71	3.42	4.57	10.71	6.71	5.28	8.14	4.57	5.00	100.00
< 60	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 170	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	4.14	2.00	2.14	6.85	11.00	6.71	10.00	8.71	3.42	4.57	10.71	6.71	5.28	8.14	4.57	5.00	

Calm : .00 %

Total # Operational Hours : 700

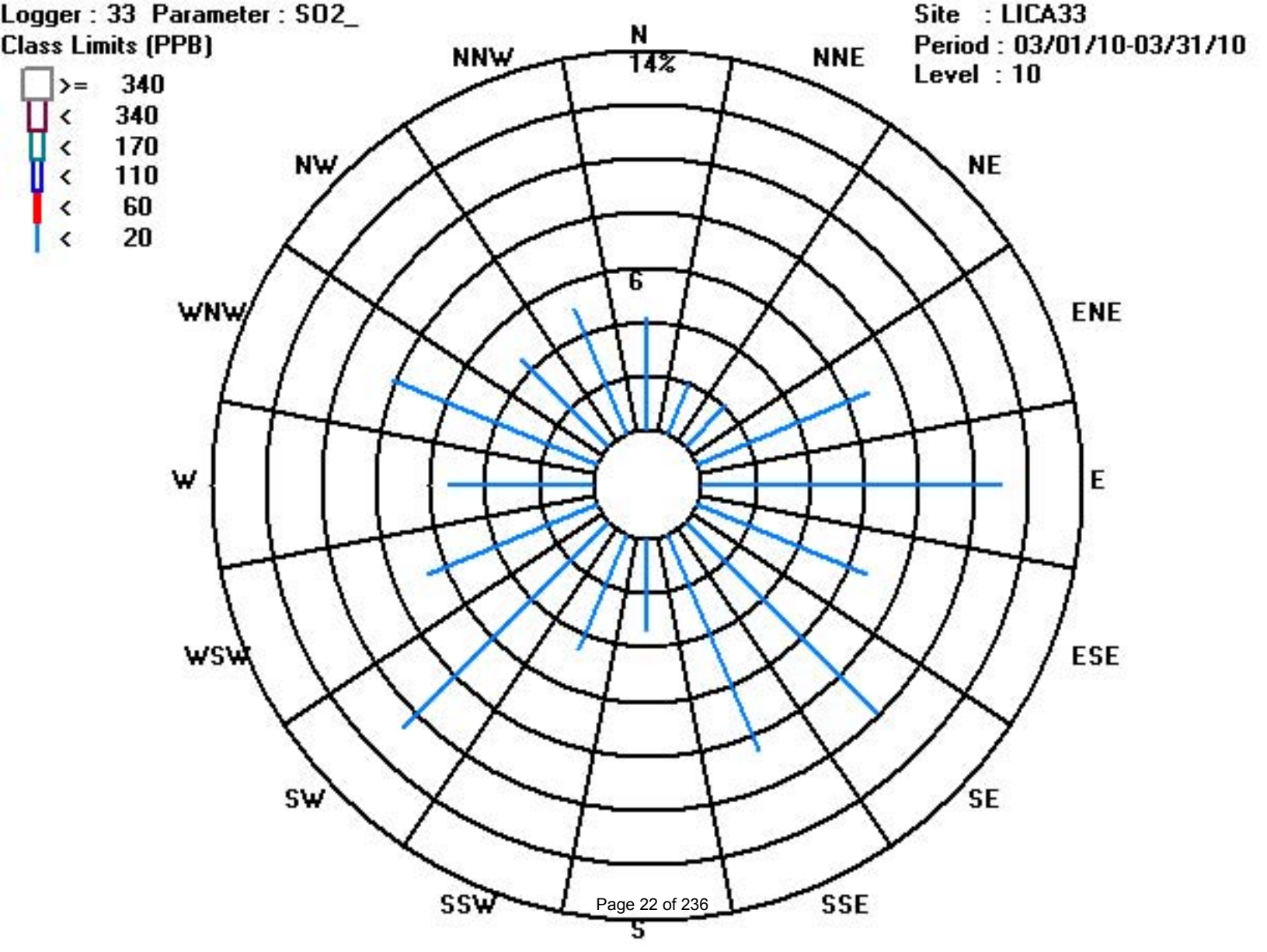
Distribution By Samples

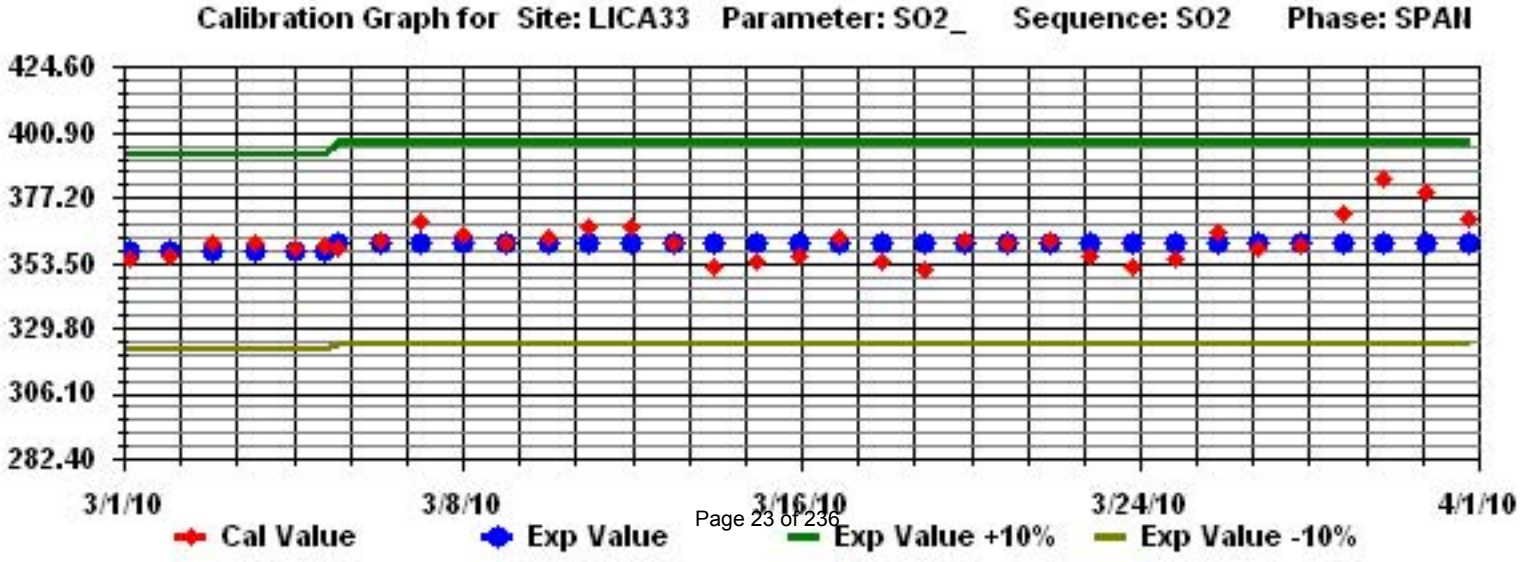
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 20	29	14	15	48	77	47	70	61	24	32	75	47	37	57	32	35	700
< 60																	
< 110																	
< 170																	
< 340																	
>= 340																	
Totals	29	14	15	48	77	47	70	61	24	32	75	47	37	57	32	35	

Calm : .00 %

Total # Operational Hours : 700


Logger : 33 Parameter : SO2_
Class Limits (PPB)
>= 340
< 340
< 170
< 110
< 60
< 20
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA33 Parameter: SO2_ Sequence: SO2 Phase: SPAN
424.60
400.90
377.20
353.50
329.80
306.10
282.40
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Hydrogen Sulphide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE

MARCH 2010

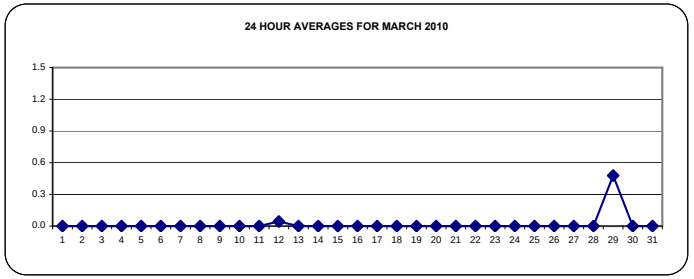
HYDROGEN SULPHIDE (H_2S) hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY 24-HOUR		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	**IZS**	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
2	0	**IZS**	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
3	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
4	0	0	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	**IZS**	0	0	0.0	24
5	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	0	**C**	0	0	**C**	**C**	0	0	0	**IZS**	0	0	0	0.0	24
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0.0	24
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0.0	24
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0.0	24
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
12	0	0	0	0	0	0	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	**1**	0.0	24
13	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0.0	24
14	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
15	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
23	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	**IZS**	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
25	0	**IZS**	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
26	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0.0	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0.0	24
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
29	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	**IZS**	0	0	0	**1**	**0.5**	24
30	0	0	0	0	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	23
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
HOURLY MAX	0	0	0	0	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0			
HOURLY AVG	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

STATUS FLAG CODES

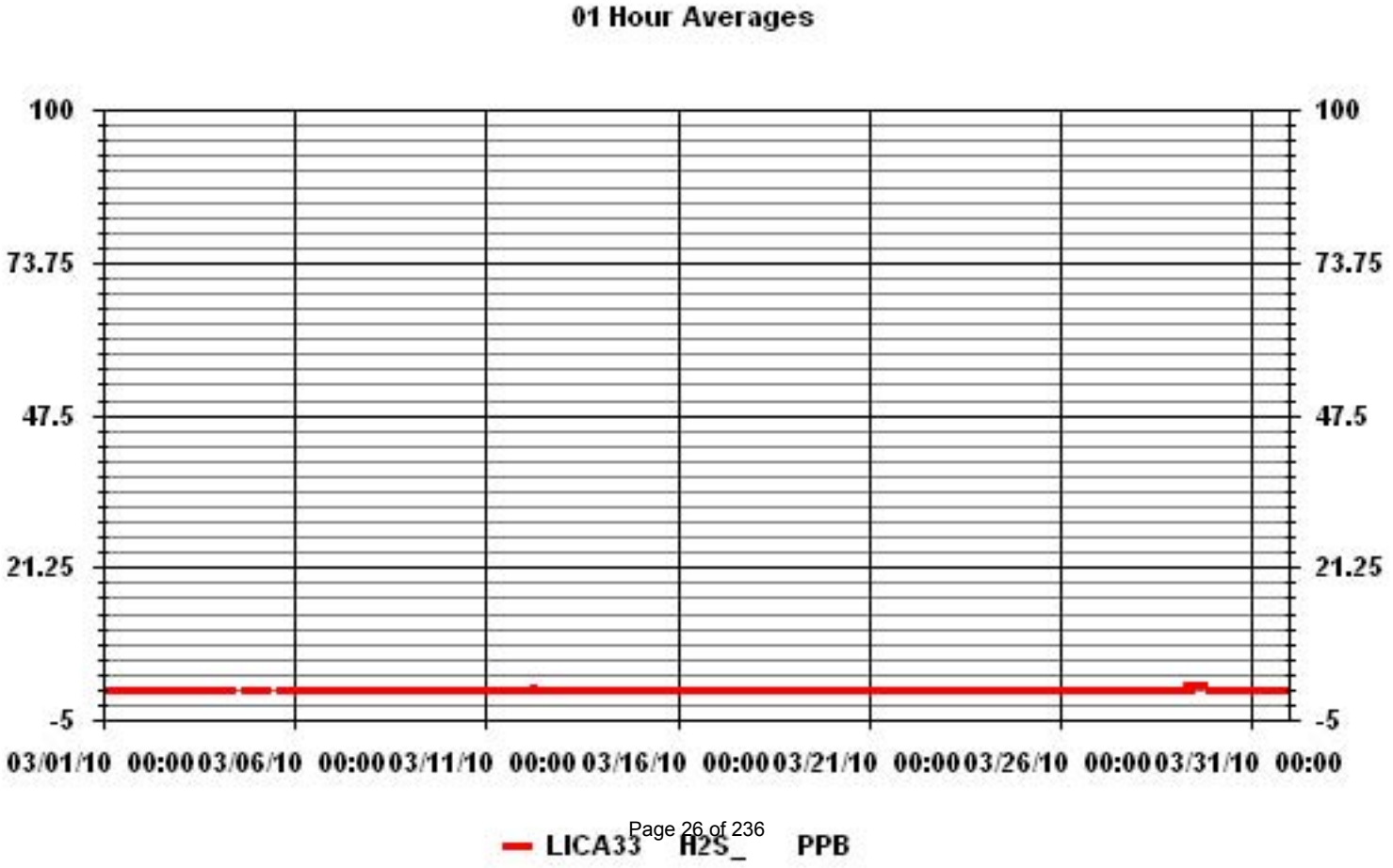
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 10 PPB | 24-HR 3 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	12					
MAXIMUM 1-HR AVERAGE:	1	PPB	@ HOUR(S)	VAR	ON DAY(S)	12, 29
MAXIMUM 24-HR AVERAGE:	0.5	PPB			ON DAY(S)	29
				VAR-VARIOUS		
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	13	HRS	AMD OPERATION UPTIME:		99.9	%
STANDARD DEVIATION:	0.13		MONTHLY AVERAGE:		0.02	PPB


01 Hour Averages
100
73.75
47.5
21.25
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 H2S_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

HYDROGEN SULPHIDE MAX instantaneous maximum in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	IZS	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
2	0	IZS	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
3	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0.0	24
4	0	0	0	0	0	0	0	0	1	1	0	C	C	C	C	C	C	C	1	0	0	0	IZS	0	1	0.2	24
5	0	0	1	0	1	0	0	0	C	C	C	C	0	C	0	0	C	C	0	0	0	IZS	0	0	1	0.1	24
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0.0	24
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0.0	24
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0.0	24
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0.0	24
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0.0	24
12	0	0	0	0	0	0	4	3	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	4	0.3	24
13	0	0	0	0	0	1	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	1	0.0	24
14	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
15	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
16	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
17	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
18	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
19	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
20	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
21	0	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
23	0	0	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
24	0	0	IZS	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
25	0	IZS	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
26	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	IZS	1	0.0	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0.0	24
28	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	IZS	1	1	1	0.3	24
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	0	0	0	1	0.9	24
30	0	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0.0	23
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0.0	24
HOURLY MAX	1	1	1	1	1	1	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1			
HOURLY AVG	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS: 37

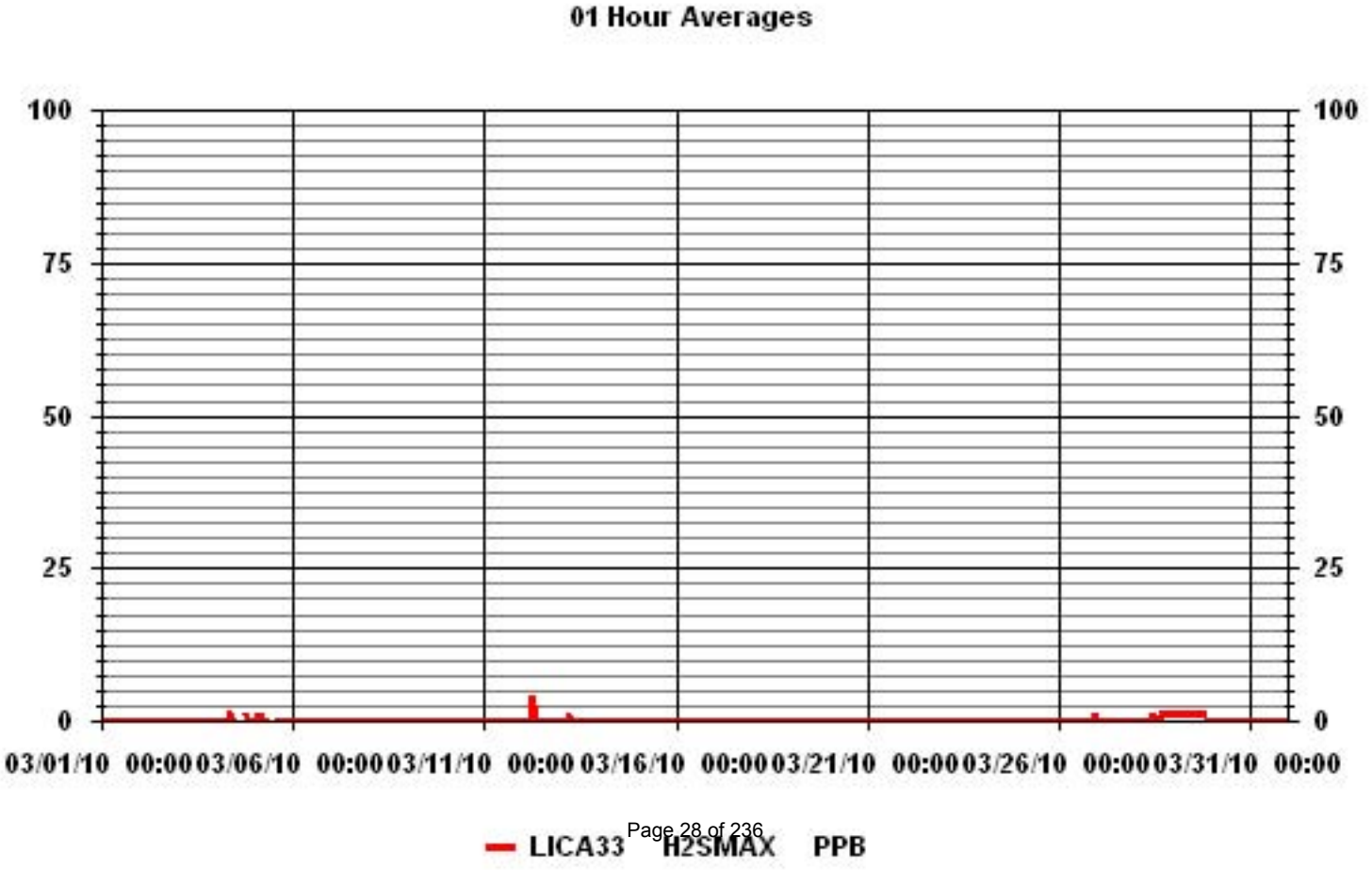
MAXIMUM INSTANTANEOUS VALUE: 4 PPB @ HOUR(S) 6 ON DAY(S) 12

VAR - VARIOUS

IZS CALIBRATION TIME: 33 HRS OPERATIONAL TIME: 743 HRS

MONTHLY CALIBRATION TIME: 14 HRS

STANDARD DEVIATION: 0.29


01 Hour Averages
100
75
50
25
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 H2SMAX PPB

LICA33
H2S_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : H2S_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	4.16	2.00	2.15	6.88	10.76	6.74	10.04	8.89	3.29	4.59	10.76	6.74	5.30	8.03	4.59	5.02	100.00
< 10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	4.16	2.00	2.15	6.88	10.76	6.74	10.04	8.89	3.29	4.59	10.76	6.74	5.30	8.03	4.59	5.02	

Calm : .00 %

Total # Operational Hours : 697

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	29	14	15	48	75	47	70	62	23	32	75	47	37	56	32	35	697
< 10																	
< 50																	
>= 50																	
Totals	29	14	15	48	75	47	70	62	23	32	75	47	37	56	32	35	

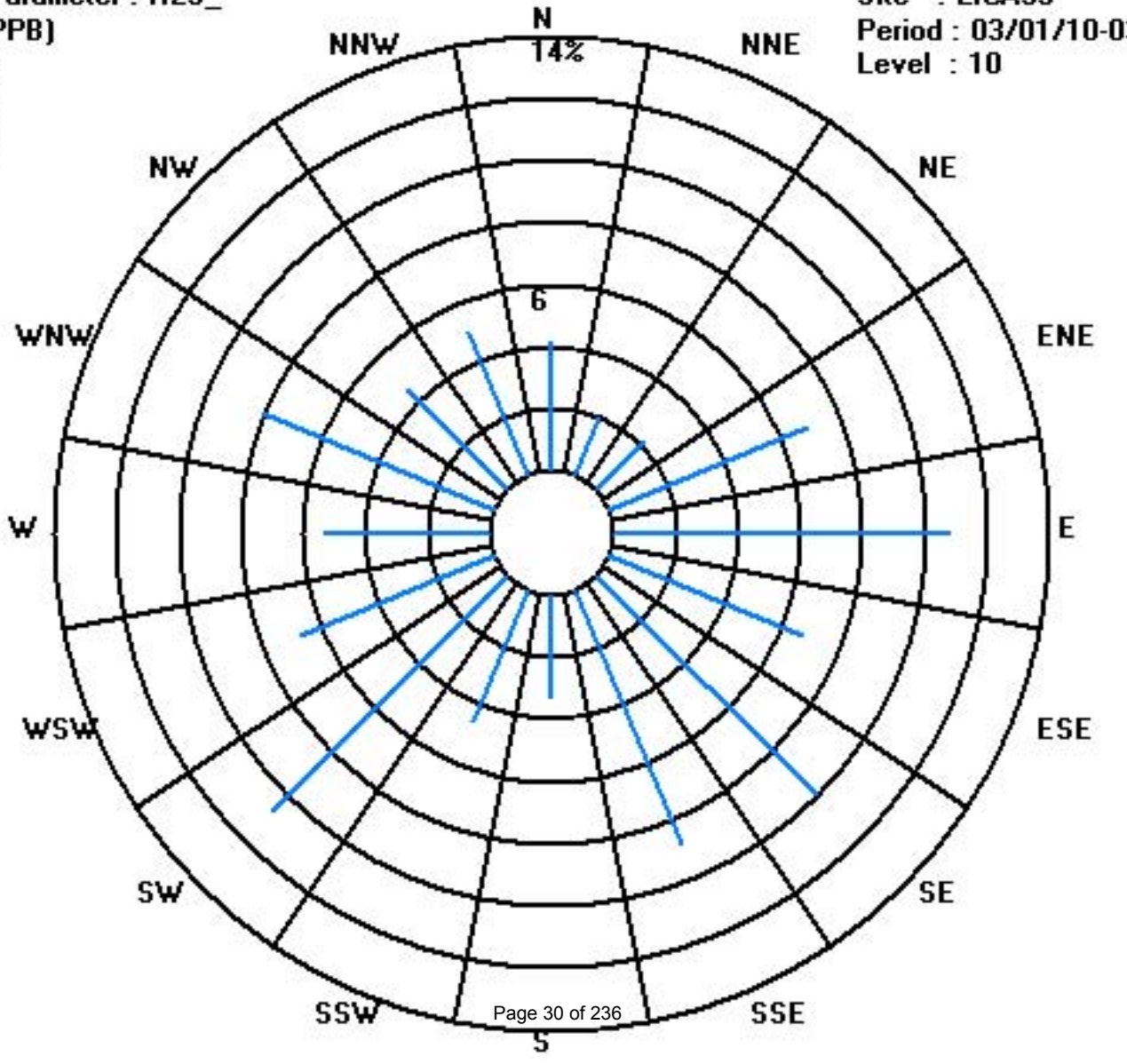
Calm : .00 %

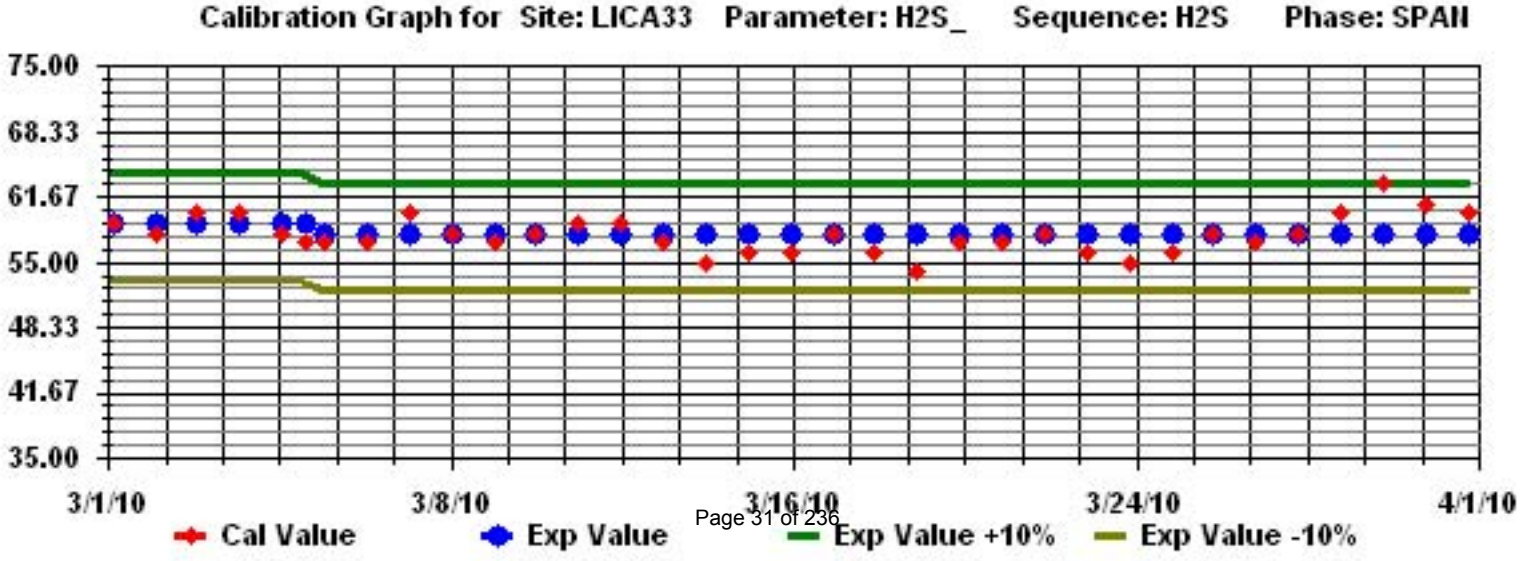
Total # Operational Hours : 697

Logger : 33 Parameter : H2S_
Class Limits (PPB)

>= 50
< 50
< 10
< 3

Site : LICA33
Period : 03/01/10-03/31/10
Level : 10




Calibration Graph for Site: LICA33 Parameter: H2S_ Sequence: H2S Phase: SPAN
75.00
68.33
61.67
55.00
48.33
41.67
35.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Particulate Matter 2.5

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

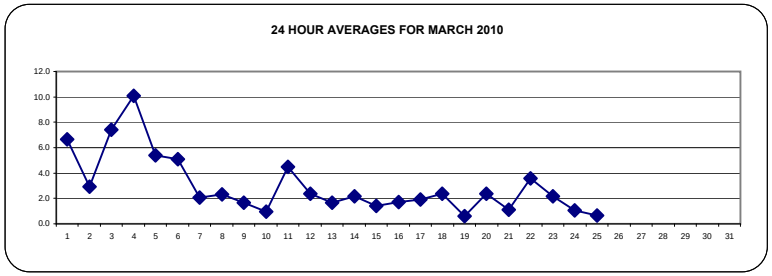
PARTICULATE MATTER 2.5 (PM2.5) hourly averages in ug/m^3

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4.8	3.4	8	6.9	6.7	7.2	3	8	11.3	16.4	11	5.8	5.5	5.1	5.9	5.6	6.6	6.9	4.7	5	5.3	4.9	5.4	5.8	16.4	6.6	24
2	8.4	10.5	3.1	1.5	0.5	0.6	0	4.6	14	4.3	3.8	4.7	4.2	0.4	0	0	1.4	1.8	1.3	0	0.6	0.5	2	2.2	14.0	2.9	24
3	4.2	4.4	4.8	5.8	5.1	6	6.8	7.4	9.1	8.6	9.6	10.1	8	7.1	8	8.1	7.6	7.7	6.9	6.3	5.7	7.8	11.2	11.9	11.9	7.4	24
4	13.9	16.9	17.9	18.2	**18.3**	15.4	12.7	11.8	10.8	10.6	4.9	3.6	4	5.1	6.9	5.9	6.2	9.1	9.7	9.2	8.4	8.1	7.6	6.6	**18.3**	**10.1**	24
5	3.5	6.4	6.1	4.6	3.1	5.7	3.9	9.8	9.5	10	5.8	5.6	3	3.2	3	4.8	**M**	1.3	6.3	6.9	5.5	6.1	4.8	5.7	10.0	5.4	23
6	5.1	7.9	4.7	7.9	9.7	9.5	10.7	9.5	14.8	7.7	6.4	4.5	1.7	0	0	0	0.5	0.5	1.8	4.9	3.7	3.1	4.4	3.7	14.8	5.1	24
7	3.4	4.7	5	4.4	2	1	2.3	5.8	7	2.4	0.2	0	0	0	0	0.2	0.7	1.7	1.9	0	1.6	1.3	2	1.5	7.0	2.0	24
8	1.9	0.1	1.4	2	0	1.4	1.7	2.8	4.7	6.2	6.9	9.7	5.6	0.7	3.9	0.6	0.7	1.3	0.9	0.9	0.3	0.6	1.4	0	9.7	2.3	24
9	0	0	0	0	0	0.1	0	1	1.2	2	0.2	0	0	0	0	0	1	0	0.6	17.2	8.7	0.4	3.7	4	17.2	1.7	24
10	2	0	1	1.3	0.4	0.5	0	0.5	0.6	1.1	0.7	0.2	0	0.5	0.7	0.7	0.3	0.2	1.2	0.6	1.6	1.4	2.9	4.6	4.6	1.0	24
11	3.8	3.4	5	4.6	5	6.5	5.8	7.5	5.1	3	3.4	6.9	8.9	8.1	4.1	3.6	5.7	3.2	3.7	2.2	2.5	1.5	2.2	2.6	8.9	4.5	24
12	2.4	3.6	3.9	4.4	4.1	4.8	6.3	6.5	2.9	5.2	5.5	1.5	0	0	0	1.7	0.3	0.4	0.4	0.7	0	0.4	0.5	1.6	6.5	2.4	24
13	0	0.5	0	1.4	0.9	2.6	1.4	0.6	3.1	3.5	1.5	2.2	1.1	2.3	1.9	0.6	1.3	1.9	2	3	1.4	2.9	1.2	2.7	3.5	1.7	24
14	0.8	2.6	2	1.9	5.9	12.9	3.2	3.5	3.1	2.5	0.2	0	0.1	2.1	1.6	2.5	1.2	1.2	1.2	1.8	0.6	0.4	0.4	0.3	12.9	2.2	24
15	0.4	0.4	0	0.1	0.1	0.1	0.4	2	1.6	1.2	2.3	1.4	1.3	1.8	1.4	1.8	3.8	0.8	2.5	1.2	2.6	1.6	2.7	1.8	3.8	1.4	24
16	1.8	0.7	1.2	1	0.8	1.3	2.3	1.5	2.4	2.6	0.8	1	2.2	0	1.4	2.3	1.6	2.9	5.4	0.3	0.3	2.8	2.4	2.5	5.4	1.7	24
17	2	3	2.3	3.3	2.4	1.9	0.9	3.3	6.7	4.5	1.8	0	0.3	0	0.1	1.1	1.3	1.5	1.9	2.1	1.9	1.4	1.7	0	6.7	1.9	24
18	0	0	0.3	0.5	0.3	1.2	1.6	2.9	3.6	3.1	2.7	2.2	4.7	3.5	3.9	3.6	4	3.6	3.9	3	4	1.6	1.8	1.1	4.7	2.4	24
19	1.1	1.1	0.3	0.4	1	0.4	0.2	1	1.3	1	1.1	0	0	0.8	0.7	0	1	0.8	0.9	1.2	0.4	0	0.3	0	1.3	0.6	24
20	0	0.7	0.3	1.5	1.7	1.5	1.4	1.9	2.6	2.7	2.2	2.2	1.9	3.5	2.9	4.4	2.7	4.6	5.5	4.7	1.9	1.8	2.6	1.6	5.5	2.4	24
21	0.4	0	0.5	0.1	0	1.1	0.5	0	1	2.1	1	1.3	0.5	1.1	1.2	1.3	1.5	1.8	2.7	1.5	1.6	1.7	1.7	2.3	2.7	1.1	24
22	2.8	2.7	1.2	0.4	1.1	0.7	2.1	2.1	2.8	2	1.9	1.2	2.1	5.1	7.2	7.1	10.4	3.8	1	3.8	17.4	6.8	0	0.3	17.4	3.6	24
23	1.1	0	0.3	3.2	2.3	1.9	1.1	1.8	1.3	2.5	1.5	2	2.7	2.7	2.8	2.3	1.9	2.3	3.3	6.3	4.5	0	1.6	2.3	6.3	2.2	24
24	0	2.5	1.9	3.2	1.3	1.8	1.4	1	1.5	0	2.3	1.4	0.1	0	1.3	1.8	0	0.4	0.6	1.6	0.8	0.6	0	0	3.2	1.1	24
25	0	0	0	0.3	0.5	0.2	0	0.9	2.3	1.1	0.4	1.3	1.8	**C**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	2.3	0.7	14
26	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
27	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
28	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
29	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
30	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
31	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
HOURLY MAX	14	17	18	18	18	15	13	12	15	16	11	10	9	8	8	8	10	9	10	17	17	8	11	12			
HOURLY AVG	2.6	3.0	2.8	3.2	2.9	3.5	2.8	3.9	5.0	4.3	3.1	2.8	2.4	2.2	2.5	2.5	2.7	2.5	2.9	3.5	3.4	2.4	2.7	2.7			

STATUS FLAG CODES

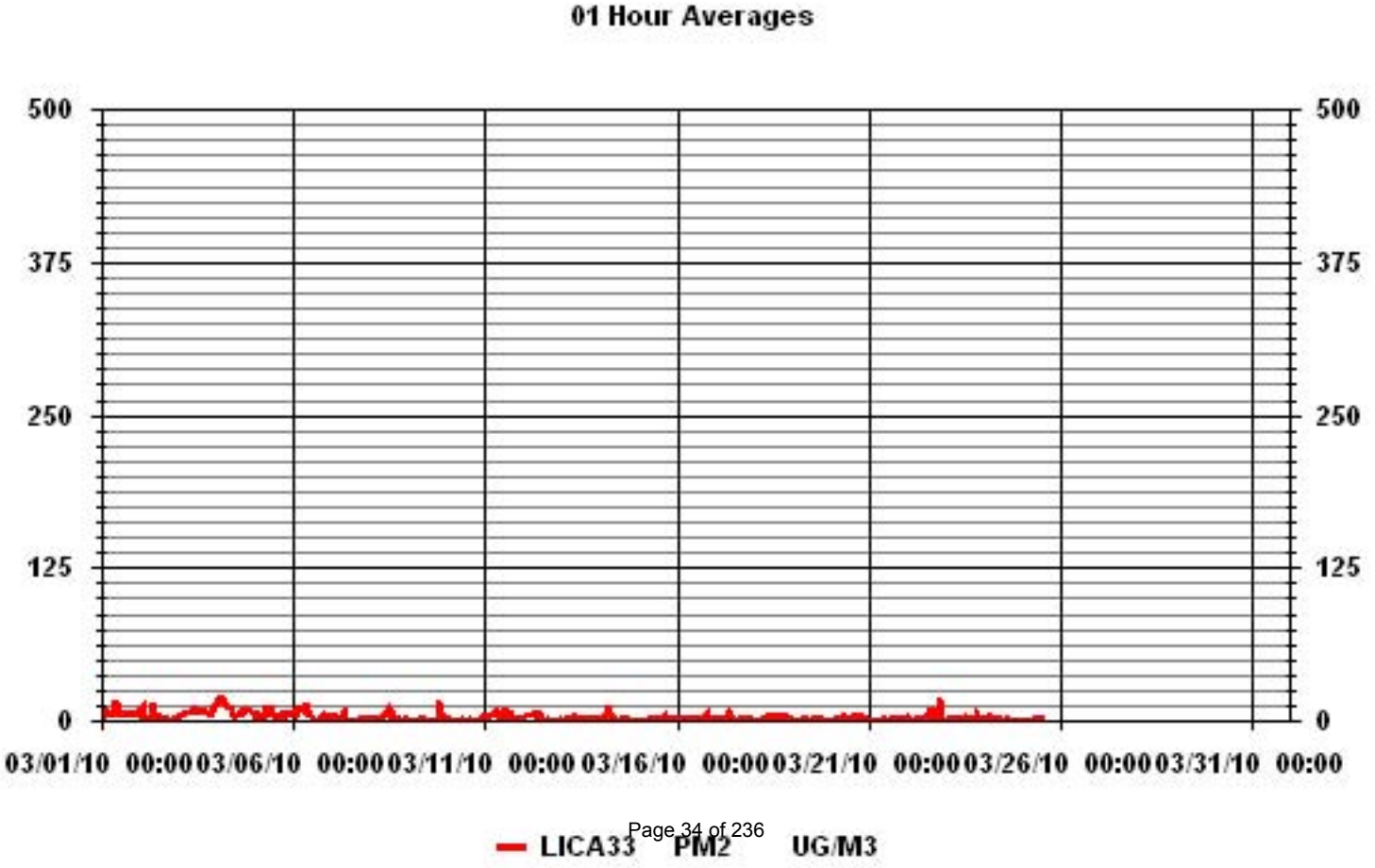
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR - PPB | 24-HR 30 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	-						
NUMBER OF 24-HR EXCEEDENCES:	0	PROPOSED CANADA WIDE GUIDELINE					
NUMBER OF NON-ZERO READINGS:	523						
MAXIMUM 1-HR AVERAGE:	18.3	UG/M^3	@ HOUR(S)	4	ON DAY(S)	4	
MAXIMUM 24-HR AVERAGE:	10.1	UG/M^3			ON DAY(S)	4	
IZS CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:			589	HRS
MONTHLY CALIBRATION TIME:	1	HRS	AMD OPERATION UPTIME:			79.2	%
STANDARD DEVIATION:	3.26		MONTHLY AVERAGE:			3.01	UG/M^3


01 Hour Averages
500
375
250
125
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 PM2 UG/M3

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

PARTICULATE MATTER 2.5 MAX instantaneous maximum in ug/m^3

MST

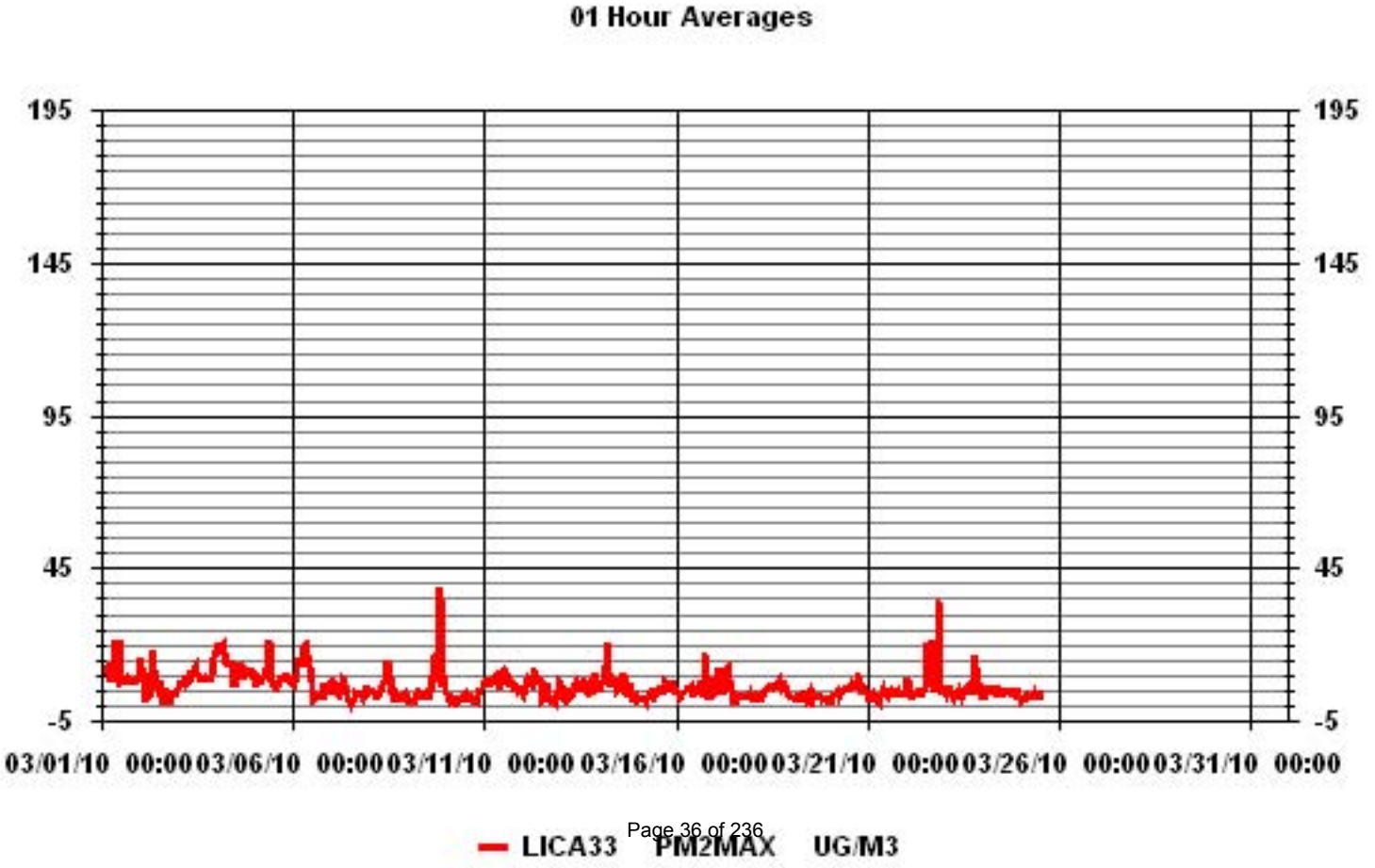
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	12.5	11.6	13.3	10.4	12.5	14.3	7.2	13.6	15	20.1	20.2	20.4	7.7	8	8.1	8	9.4	8.6	7.9	7.8	7.9	7.7	8.6	8.5	20.4	11.2	24
2	15.6	13.3	9.4	3	3.4	2.5	3.1	10.4	17.7	12.2	5.7	7.2	7.4	3.3	1.6	1.4	4.8	4.6	2.6	2.1	2.9	4.1	3.8	5.5	17.7	6.2	24
3	7.2	7.1	7	8	7	7.5	9.1	8.9	11.3	10.1	12.7	13.4	10.1	8.9	9.4	9.6	9.1	9.6	9	8.4	8.6	9.9	15.5	17.3	17.3	9.8	24
4	16.3	20.4	19.5	19.5	20.4	18.3	14.5	13.9	13.4	13.5	9.4	6.3	7.5	13.5	10.5	10.2	8.4	12.6	12.2	11.9	10.2	10.4	11.7	9.4	20.4	13.1	24
5	6.1	9.2	9.2	8.9	7	9.4	8.4	12	12.8	21.3	8.4	7.4	6.4	6	7.4	**M**	**M**	8.7	8.7	8.7	10.4	9	7.8	8.1	21.3	9.2	22
6	7.4	9.9	7.4	13.5	15.7	12.8	16	19.2	19.7	16.9	13	8.7	5.6	2	2.3	2.5	3.1	2.9	2.8	7.4	6.2	4.9	6.1	5.6	19.7	8.8	24
7	8.1	9.1	6.3	6.6	4.1	3.6	5	9.2	8.7	7.5	3.1	2.2	0.5	1.4	1.6	3.9	3.1	3.7	4.2	3.1	4.7	4.1	6.2	4.5	9.2	4.8	24
8	5.1	5.1	5	4.1	1.7	4.1	3.9	4.5	6.6	8	11	15.1	9.1	6	6.8	2.8	3.1	3.1	2.5	3	2.8	2.4	3.5	2	15.1	5.1	24
9	1.9	1.6	1.9	1.4	1.4	2.9	2.8	4.4	4.3	4.5	3	2.6	2.7	5.5	4	9.4	7.5	16.1	17.4	**39**	35.6	5.8	10.4	7.2	**39**	8.1	24
10	4	2.3	3.5	3.4	1.6	1.8	1.3	2.3	2.2	2.6	2.5	3.5	1.2	3	3.2	3	2.3	1.9	2.6	1.9	4.4	4.4	5.2	6.8	6.8	3.0	24
11	6.8	8.4	8.3	6.2	7.8	8.6	9.1	9.7	7.8	5.4	7.7	10.2	11.8	11.1	7.8	6.6	9	6.4	7.9	4.4	6.9	4.6	5.1	5.2	11.8	7.6	24
12	4.2	6.1	8	6.9	7.8	7.2	9.5	12.4	9.2	9.2	7.8	7.8	2.2	2.8	5.4	7	3.6	2.5	1.7	2.6	1.7	4.6	3.6	7.5	12.4	5.9	24
13	6.8	2.9	2.2	4.6	3.9	5.5	3.4	4.3	6.6	7.4	4.4	7.7	5.3	7	8.7	5.2	5.1	4.3	5.2	7.2	6.4	10.2	6.1	8.1	10.2	5.8	24
14	4	7.3	8.1	6.8	12.7	20.5	11.2	6.9	6.8	7.4	4.7	5.1	9	8.1	6.1	10.9	5.8	6.3	2.8	7.1	4	2.3	1.9	3.1	20.5	7.0	24
15	2.2	1.8	1.9	2.2	2.4	1.4	3	4.3	3.5	3	5.5	4.1	5.1	5.6	4.3	4.3	8.5	8	7.3	5.8	5.8	4.5	7.9	4.6	8.5	4.5	24
16	4.8	4.6	2.9	3.7	4.3	4.6	5.8	5.6	5.8	6.4	3.6	3.7	4.8	5.5	5	7.5	7.3	8.3	17.4	3.5	2.5	7.4	8.5	7.8	17.4	5.9	24
17	4.8	5.7	11.8	12.6	4.7	4.7	4.9	11.6	12.2	8.5	4.9	0	4.5	0.6	2.3	3	2.9	3	3.4	3.6	3.1	3	4	1.6	12.6	5.1	24
18	3.6	1.4	3.3	2.5	2.2	4	3.7	5.1	5.2	6.1	6.6	5.1	7.4	6.3	6.8	7.1	8.3	6.6	7.9	5.2	6.3	5	4	3.3	8.3	5.1	24
19	2.6	2.5	2.4	3	2.9	2.5	3.6	3.1	3.8	2.3	3.4	1.6	1.1	5.3	4.7	3.7	3.1	2.8	3	3.1	1.9	2.2	2.4	1.4	5.3	2.9	24
20	1.4	2.6	3	3.5	3.6	4.7	3	4.2	4.7	5.1	6	5.7	5.6	6.9	7.9	7.4	5.6	7	10.2	8.1	3.6	4.7	5.2	3.3	10.2	5.1	24
21	4.9	1.4	2.6	3.5	1.1	3.8	2.1	1.3	3.4	4.1	5.5	4	3.3	4.4	5.2	4.6	3.7	4.1	4.9	3.5	3.7	3.6	4.1	3.9	5.5	3.6	24
22	8.6	8.5	5	2.2	5	3.8	4	5.2	5.1	4.3	3.9	4.4	6.1	19.6	19.5	20.1	21.3	10.5	3.9	14.5	34.9	23.4	3.6	5.8	34.9	10.1	24
23	5	3.4	4.4	6.3	4.7	4	2.8	4	3.8	5	3.5	4.9	5.3	5.8	6.5	5.1	5.6	4.9	5.4	16.6	13	4.5	4.4	7.2	16.6	5.7	24
24	1.4	5.7	6	6.2	3.7	6.7	5.2	3.6	5.5	2.3	6.3	5.2	2.8	4.1	5	5	5	4.9	4.2	4.7	3.9	4.3	1.7	3	6.7	4.4	24
25	1.6	2.2	2.2	3.4	2.4	2.4	2.8	3.2	4.6	3.4	2.6	2.6	4	**C**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	4.6	2.9	13
26	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
27	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
28	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
29	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
30	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
31	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**			0
HOURLY MAX	16	20	20	20	20	21	16	19	20	21	20	20	12	20	20	20	21	16	17	39	36	23	16	17			
HOURLY AVG	5.9	6.2	6.2	6.1	5.8	6.5	5.8	7.3	8.0	7.9	6.6	6.4	5.5	6.3	6.3	6.4	6.3	6.3	6.5	7.6	8.0	6.1	5.9	5.9			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	586					
MAXIMUM INSTANTANEOUS VALUE:	39.0	UG/M^3	@ HOUR(S)	19	ON DAY(S)	9
IZS CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:		587	HRS
MONTHLY CALIBRATION TIME:	1	HRS				
STANDARD DEVIATION	4.64					


01 Hour Averages
195
145
95
45
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 PM2MAX UG/M3

LICA33
PM2 / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : PM2
Units : UG/M3

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	30.0	4.25	2.04	2.38	7.48	12.07	6.97	11.39	9.52	4.93	5.10	10.71	3.57	2.38	6.80	4.76	5.61	100.00
<	60.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	80.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	120.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	240.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	240.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	4.25	2.04	2.38	7.48	12.07	6.97	11.39	9.52	4.93	5.10	10.71	3.57	2.38	6.80	4.76	5.61	

Calm : .00 %

Total # Operational Hours : 588

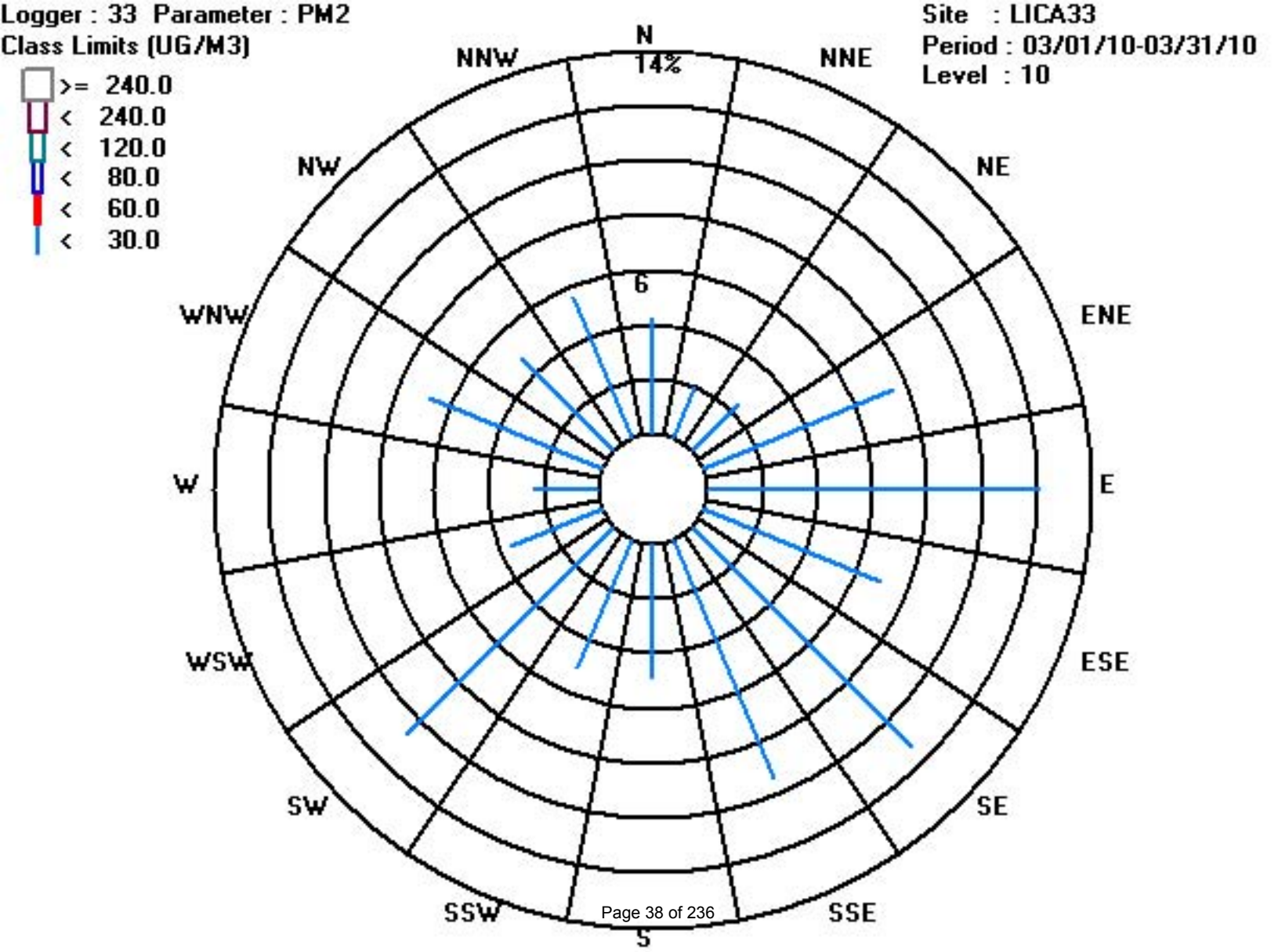
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	30.0	25	12	14	44	71	41	67	56	29	30	63	21	14	40	28	33	588
<	60.0																	
<	80.0																	
<	120.0																	
<	240.0																	
>=	240.0																	
	Totals	25	12	14	44	71	41	67	56	29	30	63	21	14	40	28	33	

Calm : .00 %

Total # Operational Hours : 588


Logger : 33 Parameter : PM2
Class Limits (UG/M3)
>= 240.0
< 240.0
< 120.0
< 80.0
< 60.0
< 30.0
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6

Nitrogen Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

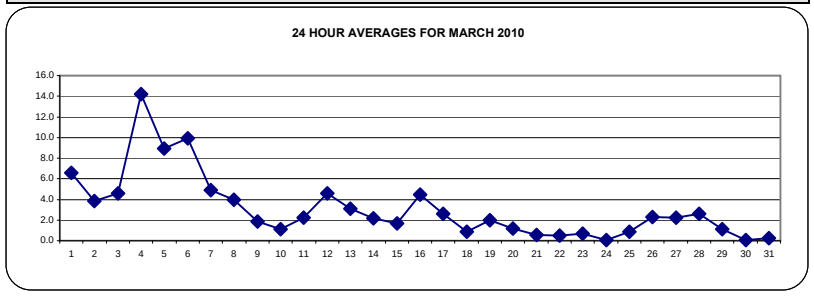
NITROGEN DIOXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4	4	**IZS**	3	4	6	8	11	7	7	7	7	5	5	5	7	8	9	10	9	6	7	6	6	11	6.6	24
2	7	**IZS**	8	11	10	8	6	4	4	4	4	4	3	2	1	1	3	2	1	1	1	1	1	2	11	3.9	24
3	**IZS**	3	3	4	4	4	3	3	4	4	4	5	4	4	4	5	5	4	6	6	8	7	7	**IZS**	8	4.6	24
4	9	10	12	17	17	15	16	17	16	12	9	**C**	**C**	**C**	**C**	**C**	**C**	**C**	16	16	16	16	**IZS**	13	17	**14.2**	24
5	9	11	14	13	15	11	11	8	**C**	**C**	**C**	**C**	**C**	**C**	**C**	3	**C**	**C**	6	8	5	**IZS**	5	6	15	8.9	24
6	6	8	8	10	12	13	13	12	13	14	14	13	11	9	7	6	6	7	8	9	**IZS**	9	10	10	14	9.9	24
7	9	8	7	7	9	9	7	6	6	5	4	3	2	2	2	2	2	2	3	**IZS**	4	4	5	4	9	4.9	24
8	3	3	5	4	7	9	7	6	6	6	7	6	5	3	2	1	1	1	**IZS**	2	2	1	2	2	9	4.0	24
9	1	0	2	2	2	3	5	6	5	4	1	0	1	1	1	0	0	**IZS**	2	2	2	2	1	0	6	1.9	24
10	0	0	2	2	1	1	0	1	1	1	0	0	0	2	2	1	**IZS**	1	1	1	5	2	1	1	5	1.1	24
11	3	2	2	2	2	2	2	2	2	1	2	2	3	3	2	**IZS**	2	3	3	2	2	2	3	3	3	2.3	24
12	5	5	6	6	4	6	**19**	9	7	7	6	5	4	2	**IZS**	2	1	1	1	1	1	2	3	3	**19**	4.6	24
13	2	2	2	3	3	8	8	5	4	2	1	0	0	**IZS**	0	0	0	0	1	9	10	3	3	6	10	3.1	24
14	1	3	7	4	2	2	2	4	5	3	3	1	**IZS**	2	1	1	1	1	1	2	1	1	1	1	7	2.2	24
15	1	1	1	0	0	1	1	2	1	1	1	**IZS**	1	1	1	1	2	2	2	3	3	4	4	4	4	1.7	24
16	4	6	8	6	6	7	8	6	5	4	**IZS**	3	2	2	2	2	2	2	8	5	4	3	4	3	8	4.4	24
17	2	3	4	5	4	6	7	3	5	**IZS**	3	2	1	1	1	0	1	2	3	2	2	2	1	0	7	2.6	24
18	0	0	1	2	1	0	0	0	1	**IZS**	1	0	0	0	1	0	0	0	2	1	2	2	2	4	4	0.9	24
19	1	2	2	0	2	4	2	**IZS**	3	2	1	0	0	0	0	0	1	3	5	6	6	3	1	1	6	2.0	24
20	1	1	1	3	1	2	**IZS**	6	2	1	1	1	0	0	1	1	2	1	1	1	0	0	0	0	6	1.2	24
21	0	1	1	1	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	3	1	0	3	0.6	24
22	0	0	1	0	**IZS**	0	0	1	0	0	0	0	0	0	1	0	1	0	1	2	1	1	0	2	2	0.5	24
23	4	2	1	**IZS**	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	1	2	1	1	0	4	0.7	24
24	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
25	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	3	3	5	2	5	0.9	24
26	**IZS**	1	1	2	4	4	3	3	4	4	2	2	1	1	2	1	1	1	1	1	1	4	6	**IZS**	6	2.3	24
27	1	1	1	3	6	7	6	5	5	4	3	2	1	1	0	0	0	0	1	1	1	1	**IZS**	1	7	2.2	24
28	3	3	6	4	6	4	2	3	3	3	2	2	1	1	1	1	2	3	3	4	2	**IZS**	1	0	6	2.6	24
29	4	3	2	1	1	1	1	4	3	1	0	0	0	0	0	0	0	1	1	2	**IZS**	0	0	0	4	1.1	24
30	0	1	0	0	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	0.0	23
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	2	1	1	2	0.2	24
HOURLY MAX	9	11	14	17	17	15	19	17	16	14	14	13	11	9	7	7	8	9	16	16	16	16	10	13			
HOURLY AVG	2.8	2.9	3.7	3.9	4.1	4.6	4.6	4.3	3.8	3.1	2.6	2.1	1.6	1.6	1.4	1.2	1.5	1.7	3.1	3.4	3.2	3.0	2.6	2.6			

STATUS FLAG CODES

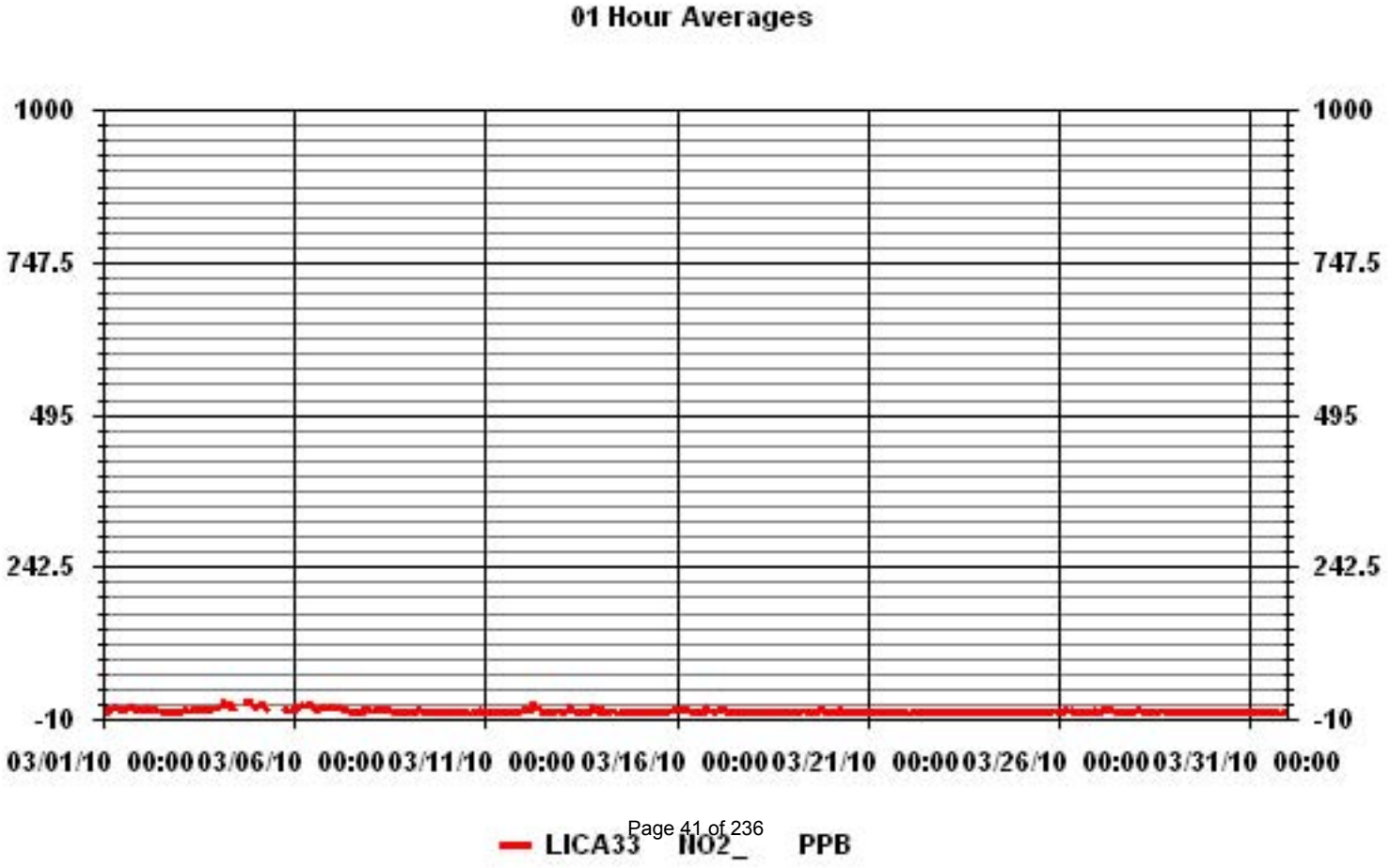
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 212 PPB | 24-HR 106 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	519					
MAXIMUM 1-HR AVERAGE:	19	PPB	@ HOUR(S)	6	ON DAY(S)	12
MAXIMUM 24-HR AVERAGE:	14.2	PPB			ON DAY(S)	4
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	16	HRS	AMD OPERATION UPTIME:		99.9	%
STANDARD DEVIATION:	3.44		MONTHLY AVERAGE:		2.91	PPB


01 Hour Averages
1000
747.5
495
242.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 NO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

NITROGEN DIOXIDE MAX instantaneous maximum in ppb

MST

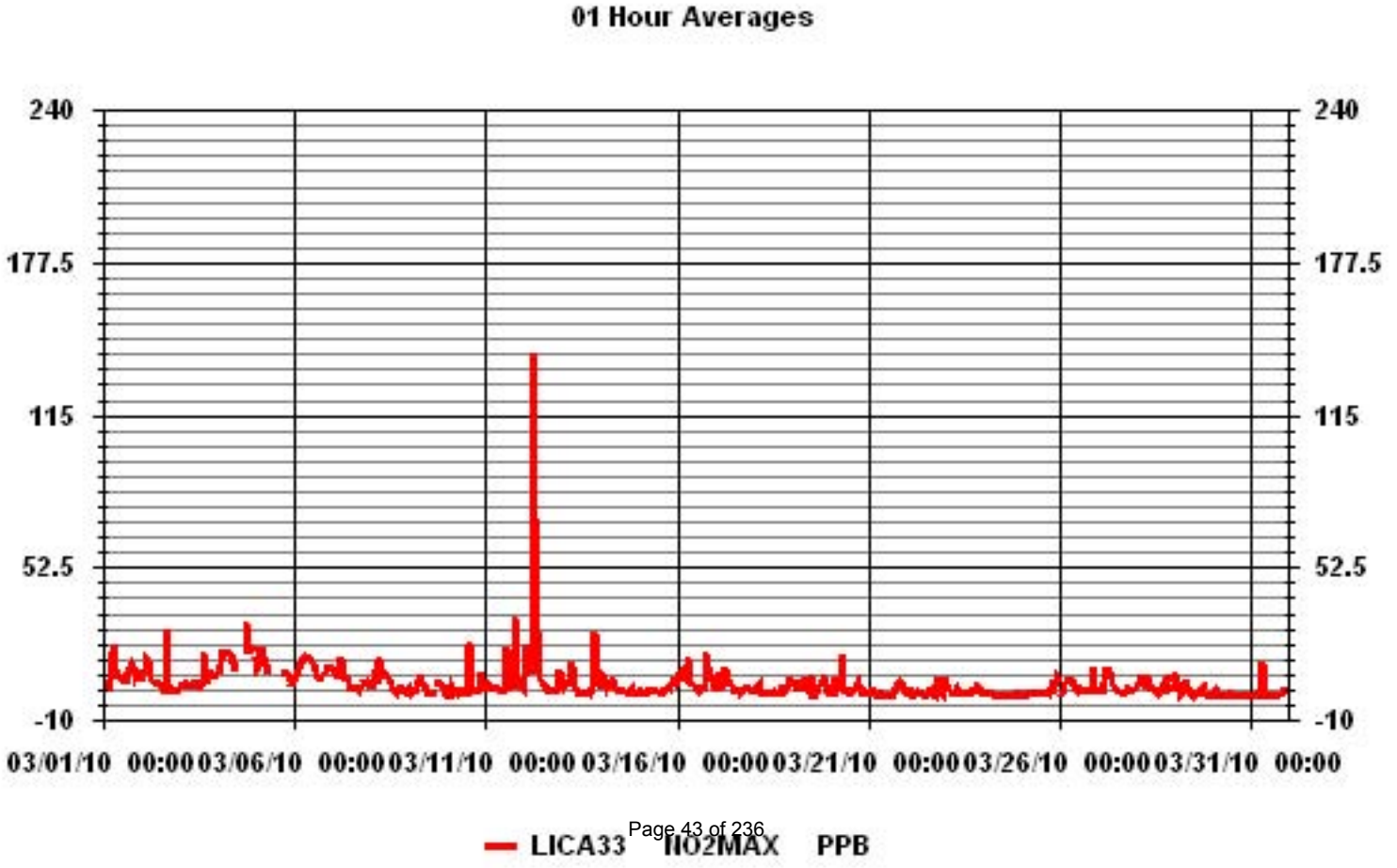
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	5	5	**IZS**	3	6	7	18	21	11	9	8	7	7	6	6	9	10	10	13	12	7	8	7	7	21	8.8	24
2	10	**IZS**	10	15	14	12	7	6	5	5	5	5	4	2	2	2	27	5	2	2	2	2	2	2	27	6.4	24
3	**IZS**	4	4	4	5	5	4	4	5	5	5	5	4	5	5	18	6	6	7	8	10	8	8	**IZS**	18	6.1	24
4	10	12	14	19	17	17	18	18	17	14	11	**C**	**C**	**C**	**C**	**C**	**C**	**C**	29	18	19	20	**IZS**	15	29	16.8	24
5	11	12	20	17	20	17	14	10	**C**	**C**	**C**	**C**	**C**	**C**	**C**	5	**C**	**C**	9	9	7	**IZS**	5	7	20	11.6	24
6	7	9	9	11	13	15	16	14	17	15	15	14	13	11	8	7	7	8	9	10	**IZS**	11	11	11	17	11.3	24
7	11	9	8	8	16	15	9	7	7	7	5	3	3	3	3	3	2	3	4	**IZS**	6	5	6	5	16	6.4	24
8	4	4	11	5	14	16	8	8	10	9	8	7	6	4	3	2	1	2	**IZS**	3	3	2	3	2	16	5.9	24
9	3	1	2	2	3	4	6	8	6	5	3	1	1	1	1	1	1	**IZS**	5	5	4	3	3	1	8	3.0	24
10	0	0	5	4	2	2	1	2	2	2	1	1	1	21	22	2	**IZS**	**2**	2	2	10	5	3	3	22	4.1	24
11	5	5	5	4	3	3	3	3	3	2	2	3	4	20	3	**IZS**	16	12	32	3	4	4	4	3	32	6.3	24
12	8	21	12	11	10	10	**140**	73	9	26	7	6	5	3	**IZS**	2	2	2	2	2	2	6	10	4	**140**	16.2	24
13	3	5	5	5	6	14	12	9	4	3	1	1	1	**IZS**	1	1	2	1	3	24	26	4	6	11	26	6.4	24
14	3	7	8	7	3	4	4	6	6	4	3	2	**IZS**	2	2	2	1	1	2	3	1	1	1	1	8	3.2	24
15	2	2	1	1	1	2	2	2	2	2	2	**IZS**	2	1	1	2	2	3	4	3	5	6	6	5	6	2.6	24
16	6	9	10	7	7	10	11	16	6	5	**IZS**	4	3	2	3	3	3	4	18	12	8	6	8	4	18	7.2	24
17	3	3	9	7	6	9	12	4	6	**IZS**	4	2	2	2	2	1	2	2	3	3	3	3	2	2	12	4.0	24
18	2	2	4	5	2	1	1	2	**IZS**	1	1	1	1	2	1	1	1	1	4	2	3	5	5	7	7	2.4	24
19	5	5	5	2	4	6	3	**IZS**	7	5	2	2	9	0	0	1	2	4	6	7	7	5	2	1	9	3.9	24
20	1	1	1	7	2	4	**IZS**	16	4	2	2	1	1	2	2	3	5	6	3	3	1	1	1	1	16	3.0	24
21	1	2	2	2	1	**IZS**	0	1	1	1	0	0	0	0	0	0	1	3	5	6	5	5	2	1	6	1.7	24
22	1	1	3	0	**IZS**	1	2	1	1	1	0	0	1	2	2	1	2	1	4	7	2	2	1	5	7	1.8	24
23	7	3	3	**IZS**	1	1	2	3	1	1	1	1	1	1	1	1	1	2	2	2	4	4	3	1	7	2.0	24
24	1	2	**IZS**	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	0.4	24
25	0	**IZS**	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	6	4	8	7	8	2.0	24
26	**IZS**	1	2	5	6	6	6	5	6	5	3	2	3	2	2	2	2	2	2	2	2	10	10	**IZS**	10	3.9	24
27	2	2	2	5	12	9	10	8	8	5	4	3	2	2	1	1	1	2	4	2	2	2	**IZS**	3	12	4.0	24
28	4	5	8	6	8	6	3	8	3	3	3	3	2	1	2	2	2	5	4	7	7	**IZS**	3	3	8	4.3	24
29	9	7	6	1	2	2	2	6	4	2	1	0	1	1	1	1	1	3	4	4	**IZS**	0	0	1	9	2.6	24
30	2	3	2	0	0	N	0	0	0	0	0	1	1	0	0	0	0	0	0	**IZS**	0	0	0	0	3	0.4	23
31	0	0	0	0	1	1	1	14	0	0	0	0	0	0	0	0	0	0	**IZS**	1	2	2	2	2	14	1.1	24
HOURLY MAX	11	21	20	19	20	17	140	73	17	26	15	14	13	21	22	18	27	12	32	24	26	20	11	15			
HOURLY AVG	4.3	4.9	5.9	5.5	6.2	6.9	10.5	9.2	5.2	4.8	3.4	2.7	2.8	3.5	2.7	2.6	3.6	3.3	6.3	5.7	5.4	4.7	4.2	4.0			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	629					
MAXIMUM INSTANTANEOUS VALUE:	140	PPB	@ HOUR(S)	6	ON DAY(S)	12
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	16	HRS				
STANDARD DEVIATION	7.54					


01 Hour Averages
240
177.5
115
52.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 IIO2MAX PPB

LICA33
NO2_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : NO2_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	4.17	2.01	2.16	6.91	10.80	6.77	10.08	8.78	3.31	4.61	10.66	6.77	5.18	8.06	4.61	5.04	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	4.17	2.01	2.16	6.91	10.80	6.77	10.08	8.78	3.31	4.61	10.66	6.77	5.18	8.06	4.61	5.04	

Calm : .00 %

Total # Operational Hours : 694

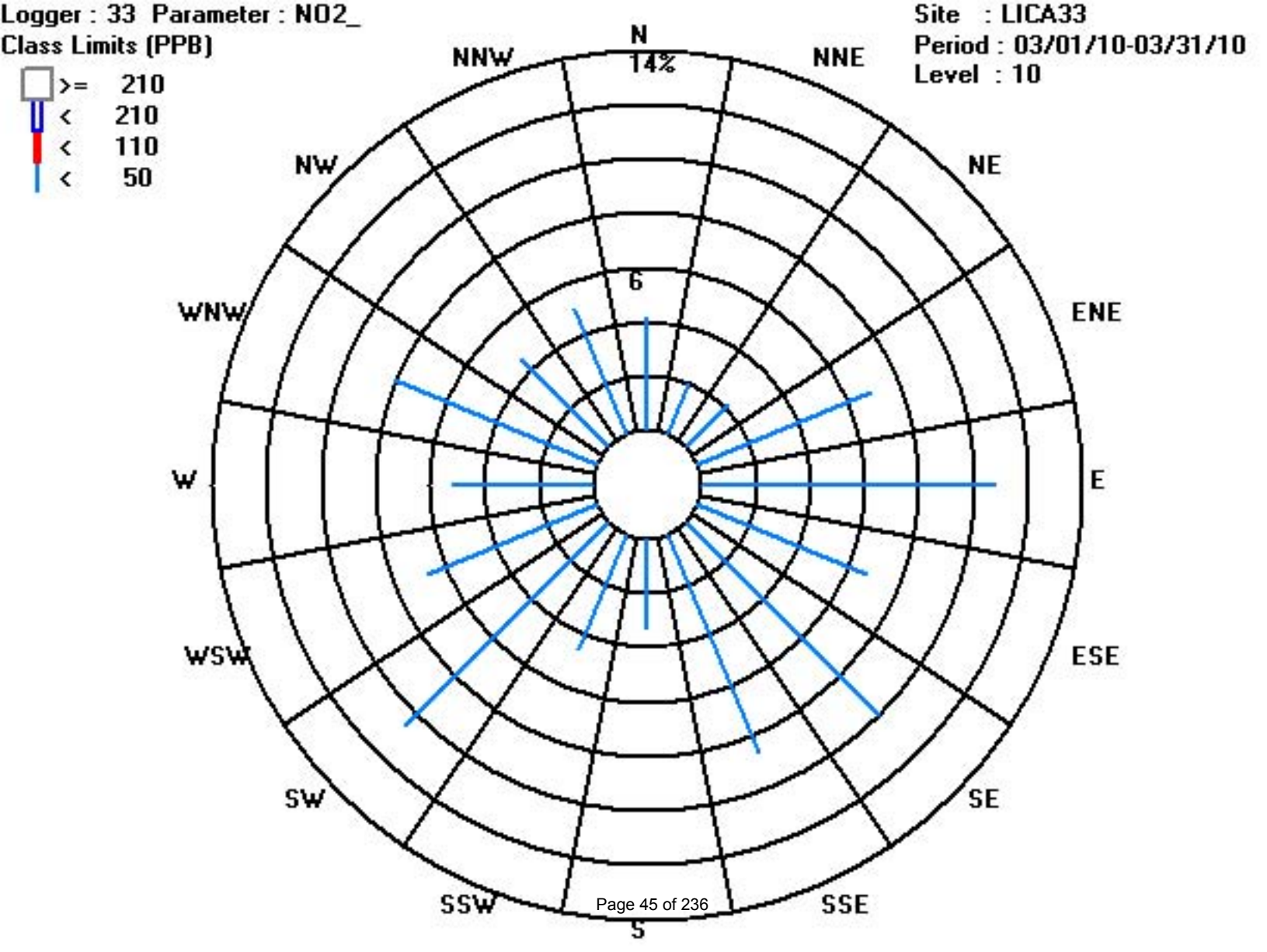
Distribution By Samples

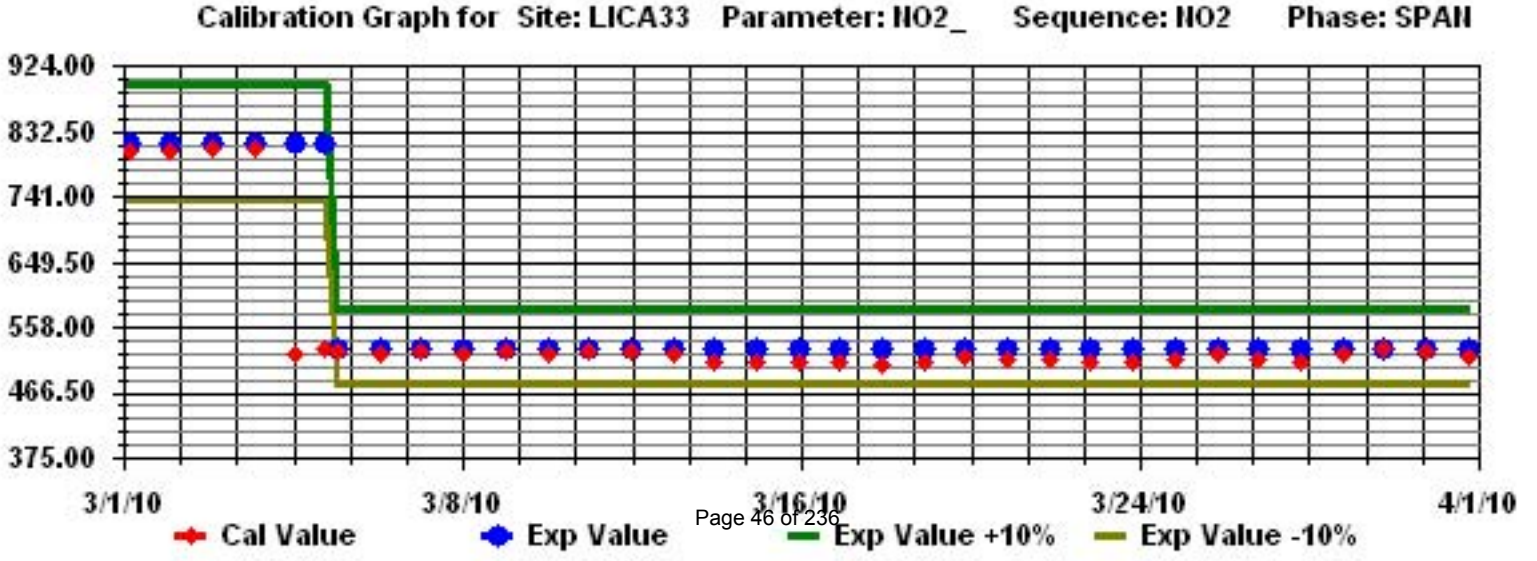
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	29	14	15	48	75	47	70	61	23	32	74	47	36	56	32	35	694
< 110																	
< 210																	
>= 210																	
Totals	29	14	15	48	75	47	70	61	23	32	74	47	36	56	32	35	

Calm : .00 %

Total # Operational Hours : 694


Logger : 33 Parameter : NO2_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA33 Parameter: NO2_ Sequence: NO2 Phase: SPAN
924.00
832.50
741.00
649.50
558.00
466.50
375.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitric Oxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

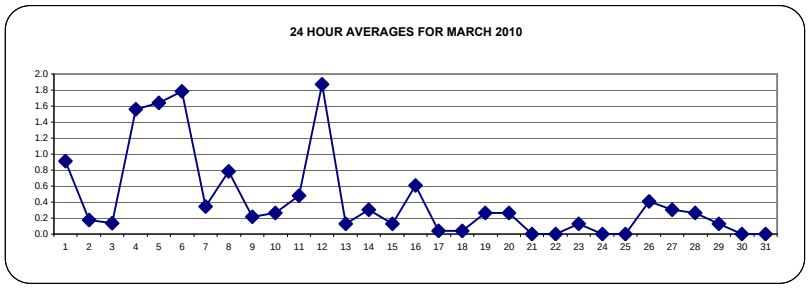
NITRIC OXIDE hourly averages in ppb

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY 24-HOUR		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	**IZS**	0	0	0	0	1	2	4	4	3	2	1	1	2	1	0	0	0	0	0	0	0	4	0.9	24
2	0	**IZS**	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0.2	24
3	**IZS**	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	**IZS**	1	0.1	24
4	0	0	0	0	0	0	0	2	5	6	4	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2	1	1	2	**IZS**	2	6	1.6	24
5	2	2	2	3	4	3	3	4	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	**C**	**C**	0	0	0	**IZS**	0	0	4	1.6	24
6	0	0	0	0	0	0	0	1	6	13	7	5	4	3	1	1	0	0	0	0	**IZS**	0	0	0	13	1.8	24
7	0	0	0	0	0	0	0	0	2	2	2	1	1	0	0	0	0	0	0	**IZS**	0	0	0	0	2	0.3	24
8	0	0	0	0	0	0	0	0	2	3	4	4	3	1	1	0	0	0	**IZS**	0	0	0	0	0	4	0.8	24
9	0	0	0	0	0	0	0	0	1	2	1	0	1	0	0	0	0	**IZS**	0	0	0	0	0	0	2	0.2	24
10	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	**IZS**	0	0	0	1	0	0	0	3	0.3	24
11	1	1	0	0	0	0	0	0	0	0	0	1	1	2	0	**IZS**	1	3	1	0	0	0	0	0	3	0.5	24
12	0	0	2	1	1	1	**18**	8	2	3	3	2	1	1	**IZS**	0	0	0	0	0	0	0	0	0	**18**	**1.9**	24
13	0	0	0	0	0	0	0	1	1	1	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	1	0.1	24
14	0	0	0	0	0	0	0	1	2	2	1	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	2	0.3	24
15	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	1	1	0	0	0	0	0	0	0	0	0	1	0.1	24
16	0	0	0	0	0	0	0	2	3	3	**IZS**	2	2	1	1	0	0	0	0	0	0	0	0	0	3	0.6	24
17	0	0	0	0	0	0	0	0	0	**IZS**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
18	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.0	24
19	0	0	0	0	0	0	0	**IZS**	1	2	1	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0.3	24
20	0	0	0	0	0	0	**IZS**	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.3	24
21	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
22	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
23	0	0	0	**IZS**	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
24	0	0	**IZS**	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
25	0	**IZS**	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
26	**IZS**	0	0	0	0	0	0	0	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	**IZS**	2	0.4	24
27	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	**IZS**	0	2	0.3	24
28	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	**IZS**	0	0	1	0.3	24
29	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	2	0.1	24
30	0	0	0	0	0	N	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	23
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0.0	24
HOURLY MAX	2	2	2	3	4	3	18	8	6	13	7	5	4	3	3	2	1	3	2	1	1	2	0	2			
HOURLY AVG	0.1	0.1	0.1	0.1	0.2	0.1	0.7	0.9	1.2	1.7	1.1	0.9	0.7	0.5	0.4	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1			

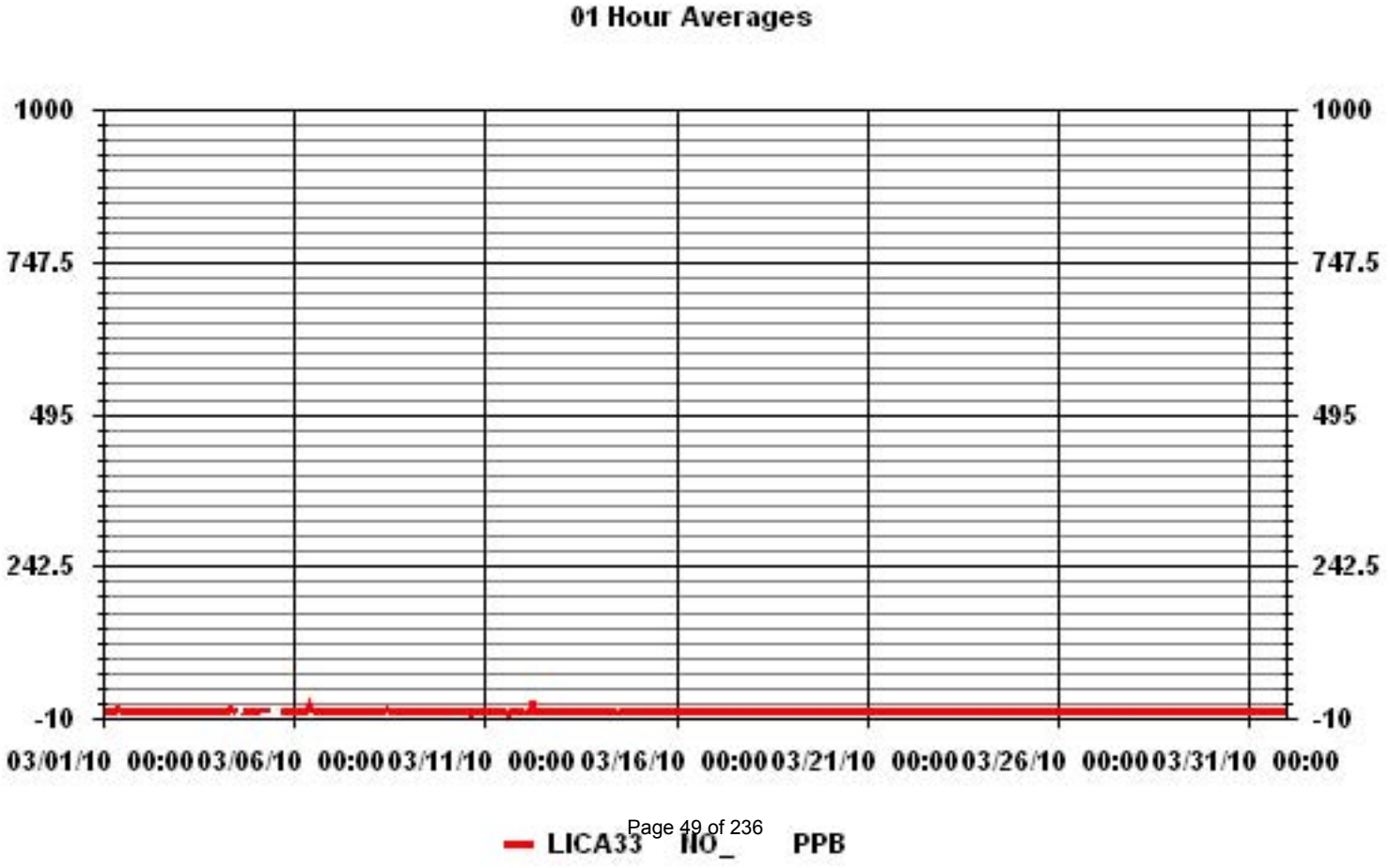
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	136						
MAXIMUM 1-HR AVERAGE:	18	PPB	@ HOUR(S)	6	ON DAY(S)	12	
MAXIMUM 24-HR AVERAGE:	1.9	PPB			ON DAY(S)	12	
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS	
MONTHLY CALIBRATION TIME:	16	HRS	AMD OPERATION UPTIME:		99.9	%	
STANDARD DEVIATION:	1.24		MONTHLY AVERAGE:		0.40	PPB	


01 Hour Averages
1000
747.5
495
242.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 NO_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

NITRIC OXIDE MAX instantaneous maximum in ppb

MST

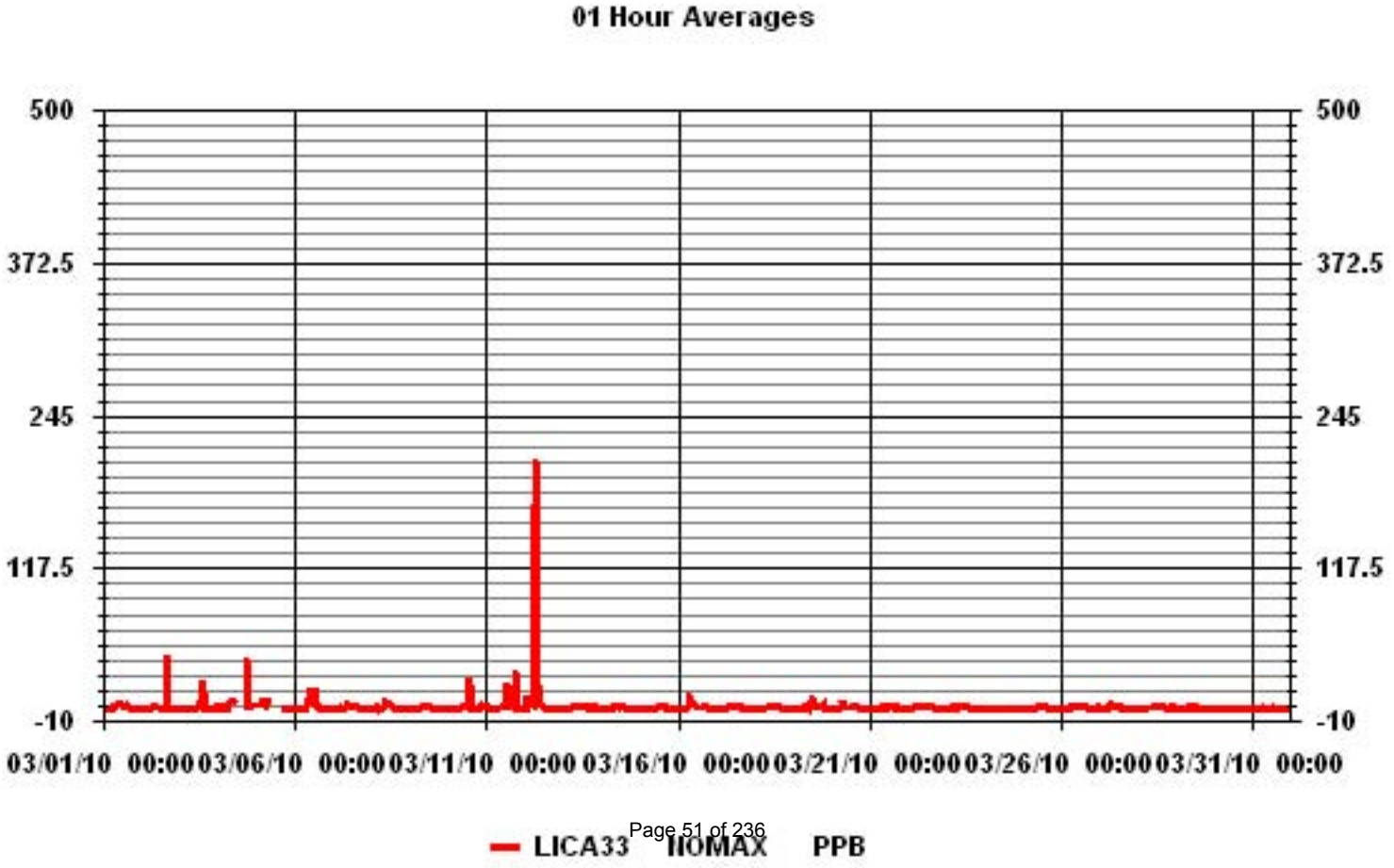
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	**IZS**	0	0	0	0	2	3	5	5	4	3	2	2	4	2	1	0	0	0	0	0	0	5	1.4	24
2	0	**IZS**	1	0	1	0	0	1	1	1	1	2	1	0	0	0	44	0	0	0	0	0	0	0	44	2.3	24
3	**IZS**	0	0	0	0	0	0	0	1	0	1	3	1	1	23	15	1	0	0	0	0	0	0	**IZS**	23	2.1	24
4	1	1	0	1	1	0	1	5	6	7	6	**C**	**C**	**C**	**C**	**C**	**C**	**C**	39	2	2	2	**IZS**	3	39	4.8	24
5	3	3	3	3	8	4	3	7	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	**C**	**C**	0	0	0	**IZS**	0	0	8	2.5	24
6	0	0	0	0	0	0	0	3	9	16	12	7	5	18	2	2	1	1	0	0	**IZS**	0	0	0	18	3.3	24
7	0	0	0	0	1	1	0	2	4	4	3	1	1	1	1	1	1	0	0	**IZS**	0	0	0	0	4	0.9	24
8	0	0	2	0	2	1	0	1	6	6	5	5	4	2	2	1	0	0	**IZS**	0	0	0	0	0	6	1.6	24
9	0	0	0	0	0	0	0	2	2	2	2	1	1	1	1	0	0	**IZS**	1	0	0	0	0	0	2	0.6	24
10	0	0	0	0	0	0	0	0	1	1	1	1	1	25	22	0	**IZS**	1	0	0	3	1	1	2	25	2.6	24
11	3	3	3	1	0	0	0	1	2	1	1	1	3	21	2	**IZS**	18	16	32	1	2	0	0	0	32	4.8	24
12	0	10	6	5	5	4	170	**208**	11	19	4	3	2	1	**IZS**	1	0	0	0	0	0	0	0	0	**208**	19.5	24
13	0	0	0	0	0	2	1	1	1	1	1	1	1	**IZS**	1	1	1	0	0	2	3	0	0	0	3	0.7	24
14	0	0	0	0	0	0	0	3	3	3	2	1	**IZS**	1	1	1	0	0	0	0	0	0	0	0	3	0.7	24
15	0	0	0	0	0	0	0	0	1	2	1	**IZS**	1	1	1	1	1	1	0	0	0	0	1	0	2	0.5	24
16	1	0	0	0	1	0	3	13	4	4	**IZS**	3	2	2	1	1	1	1	1	1	0	0	0	0	13	1.7	24
17	0	0	0	0	0	0	0	1	1	**IZS**	3	1	1	1	1	1	1	0	0	0	0	0	0	0	3	0.5	24
18	0	0	0	0	0	0	0	1	**IZS**	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0.4	24
19	0	0	0	0	0	0	0	**IZS**	3	3	1	6	11	1	1	1	1	1	1	4	0	1	0	0	11	1.5	24
20	0	0	0	0	0	0	**IZS**	5	2	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	5	0.8	24
21	0	0	0	0	0	**IZS**	0	1	1	1	0	1	1	1	1	1	0	1	1	0	0	0	0	0	1	0.4	24
22	0	0	0	0	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0.5	24
23	0	0	0	**IZS**	1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0.5	24
24	0	0	**IZS**	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
25	0	**IZS**	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0.3	24
26	**IZS**	0	0	0	0	0	1	1	2	2	2	1	1	1	1	1	1	1	0	0	0	0	1	**IZS**	2	0.7	24
27	1	1	0	0	0	1	3	4	4	2	1	1	1	1	1	0	0	0	0	0	0	0	**IZS**	1	4	1.0	24
28	0	0	0	0	0	0	1	2	1	1	1	1	1	1	1	1	1	1	0	0	0	**IZS**	1	1	2	0.7	24
29	0	0	0	0	0	0	1	3	2	1	1	0	1	1	0	0	0	0	0	0	**IZS**	1	0	0	3	0.5	24
30	0	0	0	0	0	**N**	0	0	0	0	1	0	1	0	0	0	0	0	0	**IZS**	0	0	0	0	1	0.1	23
31	0	0	0	0	0	0	1	1	0	1	0	0	1	1	0	1	0	0	**IZS**	1	0	0	0	0	1	0.3	24
HOURLY MAX	3	10	6	5	8	4	170	208	11	19	12	7	11	25	23	15	44	16	39	4	3	2	1	3			
HOURLY AVG	0.3	0.6	0.5	0.3	0.7	0.5	6.2	9.0	2.5	3.1	2.1	1.8	1.8	3.2	2.5	1.4	2.8	1.0	2.6	0.4	0.3	0.2	0.1	0.2			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	325					
MAXIMUM INSTANTANEOUS VALUE:	208	PPB	@ HOUR(S)	7	ON DAY(S)	12
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	16	HRS				
STANDARD DEVIATION	10.76					


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 HOMAX PPB

LICA33
NO_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : NO_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	4.17	2.01	2.16	6.91	10.80	6.77	10.08	8.78	3.31	4.61	10.66	6.77	5.18	8.06	4.61	5.04	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	4.17	2.01	2.16	6.91	10.80	6.77	10.08	8.78	3.31	4.61	10.66	6.77	5.18	8.06	4.61	5.04	

Calm : .00 %

Total # Operational Hours : 694

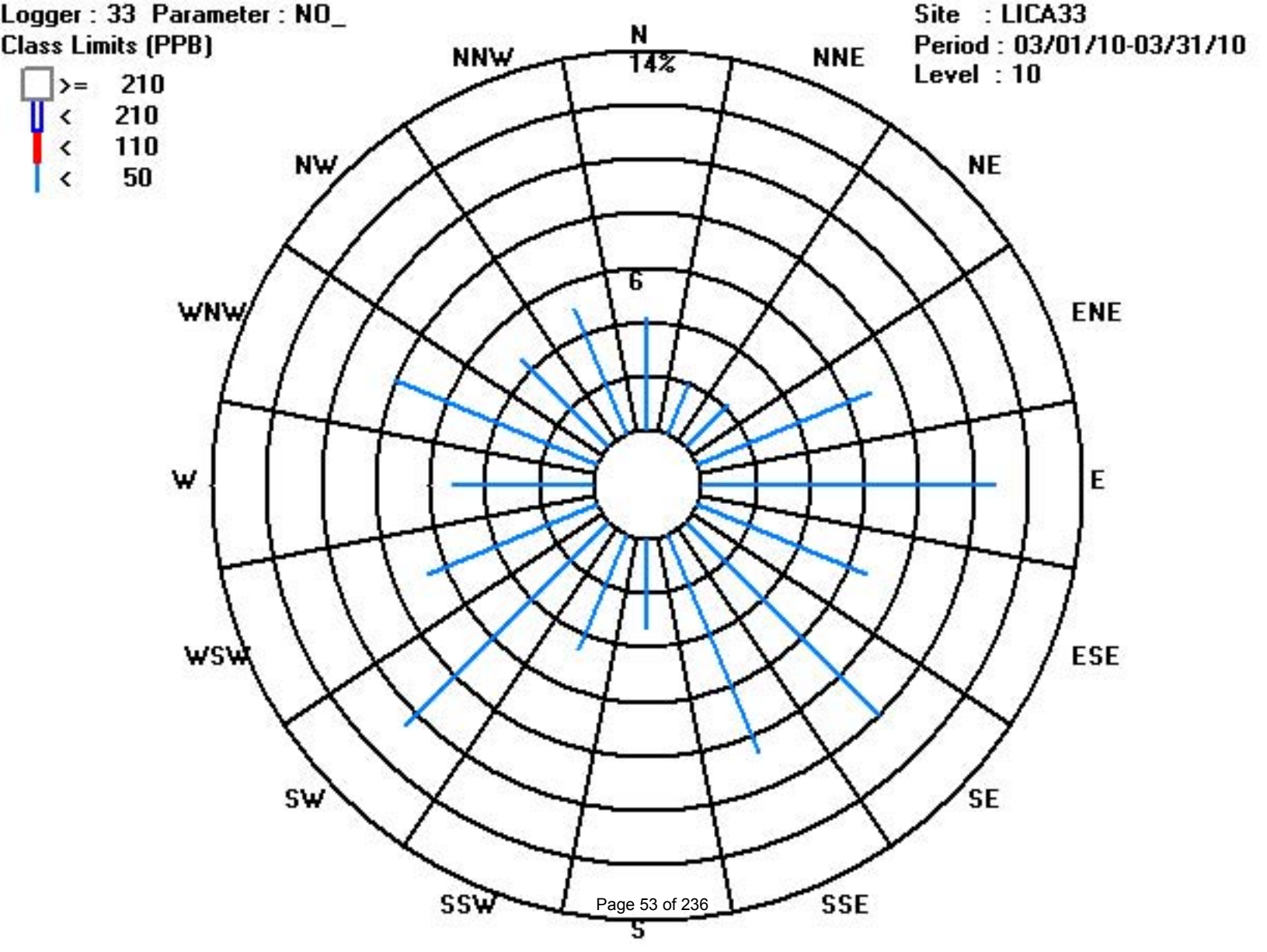
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	29	14	15	48	75	47	70	61	23	32	74	47	36	56	32	35	694
< 110																	
< 210																	
>= 210																	
Totals	29	14	15	48	75	47	70	61	23	32	74	47	36	56	32	35	

Calm : .00 %

Total # Operational Hours : 694


Logger : 33 Parameter : NO_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6

Oxides of Nitrogen

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

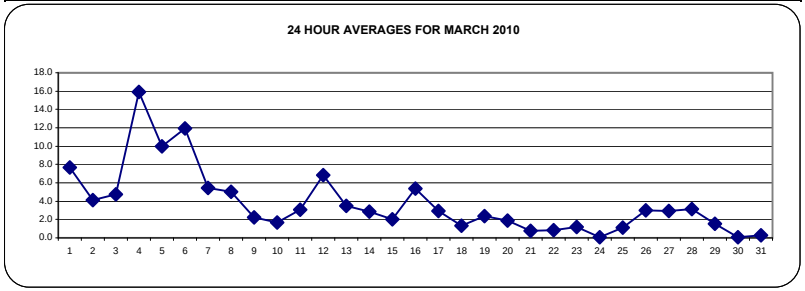
MARCH 2010

OXIDES OF NITROGEN hourly averages in ppb

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4	4	**IZS**	3	4	6	8	13	10	11	12	10	7	6	7	9	10	9	10	9	6	7	6	6	13	7.7	24
2	7	**IZS**	8	11	10	8	6	4	5	5	5	5	3	2	1	2	4	2	1	1	1	1	1	2	11	4.1	24
3	**IZS**	3	3	4	4	4	3	3	4	4	5	6	4	5	5	6	5	4	6	5	8	7	7	**IZS**	8	4.8	24
4	9	11	12	17	17	15	16	19	21	19	13	**C**	**C**	**C**	**C**	**C**	**C**	**C**	19	17	18	18	**IZS**	14	21	**15.9**	24
5	9	11	15	14	17	12	12	10	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	6	8	5	**IZS**	5	6	17	10.0	24
6	6	8	8	10	12	13	13	14	19	27	21	19	15	12	9	7	7	8	8	9	**IZS**	9	10	10	27	11.9	24
7	9	8	7	7	9	9	7	7	9	7	6	4	3	3	3	2	2	3	3	**IZS**	4	4	5	4	9	5.4	24
8	4	3	5	4	7	9	8	7	9	9	12	10	8	4	3	1	1	1	**IZS**	2	2	1	3	2	12	5.0	24
9	2	0	2	2	2	3	5	7	6	6	3	1	2	1	1	0	0	**IZS**	2	2	2	2	1	0	7	2.3	24
10	0	0	2	2	1	1	1	1	2	1	0	1	1	5	5	1	**IZS**	1	1	1	6	3	1	1	6	1.7	24
11	4	4	2	2	2	2	2	3	3	2	2	3	5	5	2	**IZS**	3	7	4	2	2	3	3	3	7	3.0	24
12	5	5	8	8	6	8	**37**	17	10	11	9	8	5	3	**IZS**	2	2	1	1	1	1	2	4	3	**37**	6.8	24
13	2	2	2	3	3	8	9	6	5	3	1	1	0	**IZS**	0	0	0	1	2	9	11	3	4	6	11	3.5	24
14	2	4	7	4	2	3	3	5	7	5	5	2	**IZS**	3	2	2	1	1	1	2	1	1	1	1	7	2.8	24
15	1	1	1	0	1	1	1	2	2	2	2	**IZS**	2	2	2	2	2	2	2	3	4	4	4	4	4	2.0	24
16	4	6	8	7	6	8	9	8	9	7	**IZS**	5	4	3	3	3	3	2	8	5	4	4	4	3	9	5.3	24
17	3	3	4	6	5	6	7	3	5	**IZS**	3	2	2	2	1	1	1	2	3	2	3	2	1	1	7	3.0	24
18	0	1	1	3	1	0	0	1	**IZS**	1	1	1	1	2	1	1	1	1	2	1	2	2	2	4	4	1.3	24
19	1	3	2	1	2	4	2	**IZS**	5	4	2	0	0	0	0	1	1	3	5	7	6	3	1	1	7	2.3	24
20	1	1	1	4	2	2	**IZS**	8	4	3	2	2	1	1	1	2	2	1	2	1	0	0	1	1	8	1.9	24
21	0	1	1	1	1	**IZS**	0	0	1	0	0	0	0	0	0	0	0	1	2	2	2	3	1	1	3	0.7	24
22	1	1	1	0	**IZS**	0	1	1	1	1	1	1	0	1	1	1	1	0	1	2	1	1	0	2	2	0.9	24
23	4	3	2	**IZS**	0	0	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	0	4	1.2	24
24	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
25	0	**IZS**	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	3	3	5	2	5	1.1	24
26	**IZS**	1	1	3	5	4	3	4	6	6	3	2	2	2	2	2	2	2	2	2	2	4	6	**IZS**	6	3.0	24
27	1	2	2	4	7	8	7	6	7	5	4	3	1	1	1	0	1	1	1	1	1	1	**IZS**	2	8	2.9	24
28	3	3	6	4	6	5	3	4	3	4	3	3	2	1	2	2	2	3	3	4	3	**IZS**	2	1	6	3.1	24
29	4	3	2	1	1	1	1	6	5	2	1	0	1	1	1	1	1	1	1	2	**IZS**	0	0	0	6	1.6	24
30	0	1	1	0	0	**N**	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	0.1	23
31	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	2	1	1	2	0.3	24
HOURLY MAX	9	11	15	17	17	15	37	19	21	27	21	19	15	12	9	9	10	9	19	17	18	18	10	14			
HOURLY AVG	3.0	3.2	3.9	4.2	4.4	4.8	5.5	5.4	5.5	5.1	4.1	3.3	2.5	2.4	2.0	1.8	1.9	2.1	3.4	3.5	3.5	3.1	2.8	2.8			

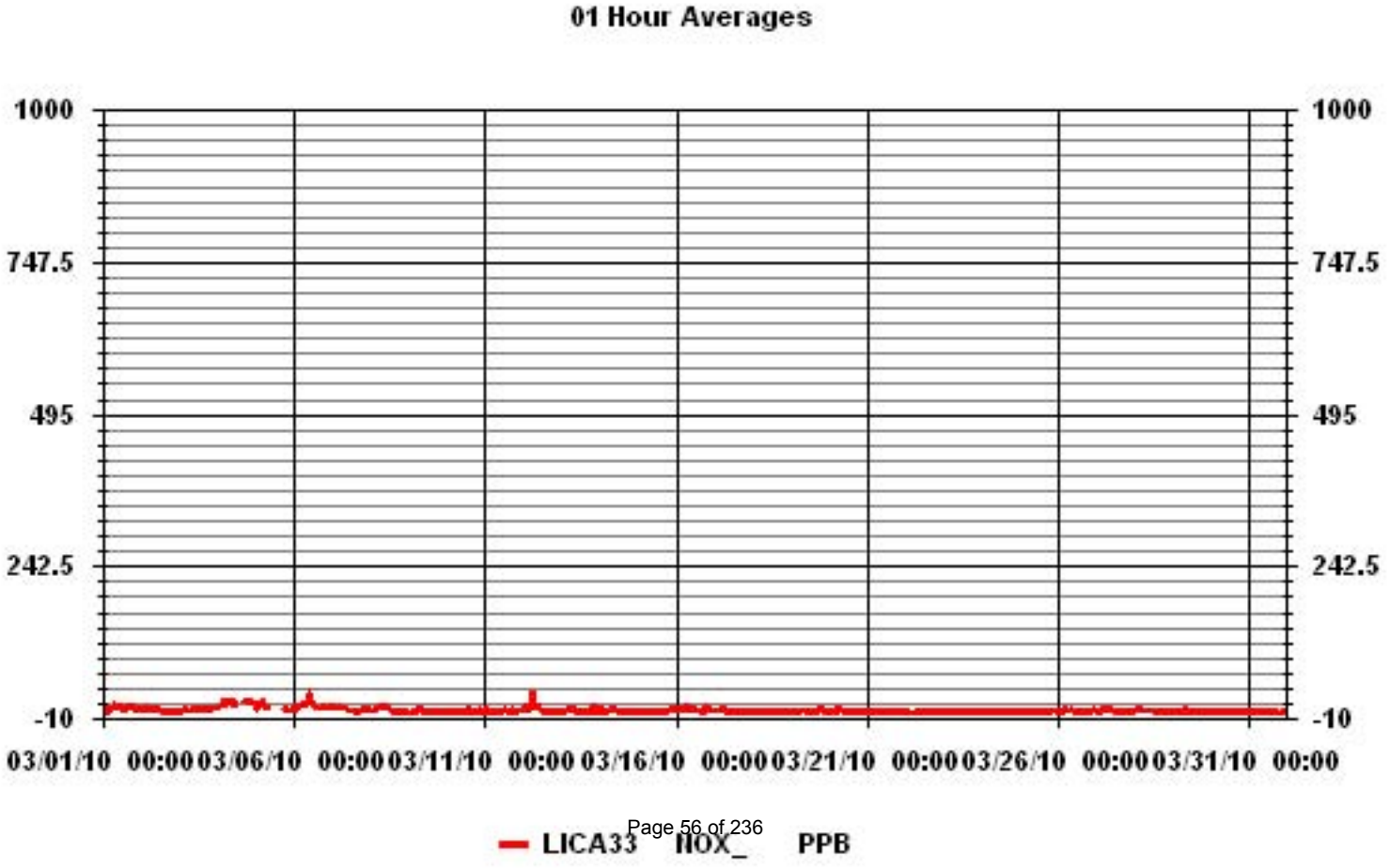
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:		582					
MAXIMUM 1-HR AVERAGE:		37	PPB	@ HOUR(S)	6	ON DAY(S)	12
MAXIMUM 24-HR AVERAGE:		15.9	PPB			ON DAY(S)	4
IZS CALIBRATION TIME:	33	HRS		OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	17	HRS		AMD OPERATION UPTIME:		99.9	%
STANDARD DEVIATION:	4.11			MONTHLY AVERAGE:		3.53	PPB


01 Hour Averages
1000
747.5
495
242.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 NOX_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

OXIDES OF NITROGEN MAX instantaneous maximum in ppb

MST

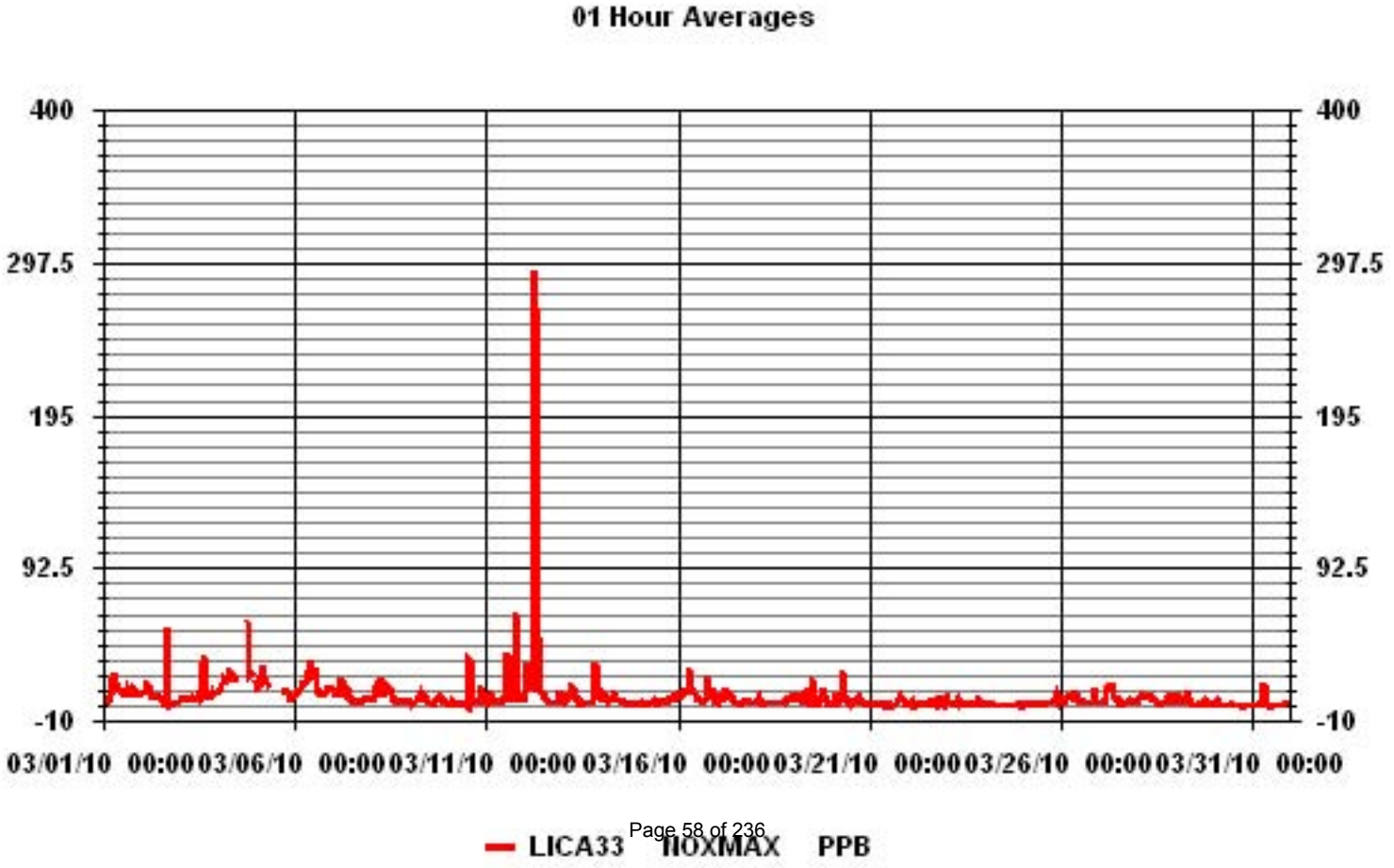
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4	5	**IZS**	4	5	7	18	22	13	14	13	11	10	8	8	13	11	10	13	12	7	7	7	7	22	10.0	24
2	9	**IZS**	9	15	14	12	7	6	6	6	6	6	5	2	3	2	53	5	2	1	1	2	2	2	53	7.7	24
3	**IZS**	4	4	4	4	4	4	4	6	5	6	8	5	6	28	34	7	6	7	7	10	8	9	**IZS**	34	8.2	24
4	10	12	15	19	18	17	18	23	22	21	18	**C**	**C**	**C**	**C**	**C**	**C**	**C**	56	20	21	22	**IZS**	15	56	20.4	24
5	12	13	20	18	27	19	16	14	**C**	**C**	**C**	**C**	**C**	**C**	**C**	6	**C**	**C**	9	9	7	**IZS**	5	7	27	13.0	24
6	7	9	9	11	13	15	16	17	24	31	27	22	18	26	10	9	9	8	9	10	**IZS**	11	11	11	31	14.5	24
7	11	9	8	8	16	16	9	8	11	11	8	4	4	3	3	3	3	3	4	**IZS**	6	5	6	5	16	7.1	24
8	4	4	13	5	16	18	8	8	16	15	13	12	10	6	5	3	2	2	**IZS**	3	3	3	3	3	18	7.6	24
9	3	1	2	2	3	4	6	10	8	7	5	2	2	2	2	1	1	**IZS**	5	6	4	3	3	1	10	3.6	24
10	1	1	5	4	2	2	1	2	3	2	1	2	1	33	32	2	**IZS**	3	2	2	14	6	4	3	33	5.6	24
11	7	8	8	5	3	3	3	3	4	3	4	4	7	35	4	**IZS**	29	26	63	3	6	4	4	4	63	10.4	24
12	9	29	17	14	15	14	**292**	269	17	45	11	9	6	5	**IZS**	3	2	2	2	2	2	6	10	5	**292**	34.2	24
13	3	5	5	6	6	15	13	10	6	5	2	1	1	**IZS**	2	2	2	2	3	27	29	4	7	11	29	7.3	24
14	3	8	8	7	3	4	4	8	8	6	5	4	**IZS**	4	3	3	2	1	2	3	2	1	1	1	8	4.0	24
15	2	3	1	1	1	2	2	2	2	4	2	**IZS**	3	2	2	3	3	3	4	4	5	6	6	5	6	3.0	24
16	6	9	10	7	8	10	12	26	10	10	**IZS**	7	5	4	4	3	3	4	20	13	9	6	8	5	26	8.7	24
17	4	3	9	7	6	9	12	4	7	**IZS**	5	3	3	2	2	1	2	3	3	3	3	3	2	2	12	4.3	24
18	2	2	4	6	2	1	1	2	**IZS**	2	2	2	2	3	2	2	2	2	4	2	3	5	6	7	7	2.9	24
19	5	6	6	2	5	6	3	**IZS**	10	8	3	4	18	1	1	1	3	5	6	11	7	5	2	1	18	5.2	24
20	1	1	1	8	2	4	**IZS**	21	6	4	5	3	1	3	3	4	6	7	3	3	1	1	1	1	21	3.9	24
21	1	2	2	2	1	**IZS**	1	1	2	1	0	1	1	1	1	0	1	3	5	7	5	5	2	1	7	2.0	24
22	1	1	3	0	**IZS**	2	2	2	1	1	1	1	1	3	3	2	2	1	4	7	2	2	1	6	7	2.1	24
23	7	4	3	**IZS**	1	1	2	4	1	2	2	2	1	1	2	2	1	2	3	2	4	4	3	1	7	2.4	24
24	1	2	**IZS**	2	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	2	0.5	24
25	0	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	6	4	9	7	9	2.2	24
26	**IZS**	2	2	5	6	6	7	6	8	8	5	3	3	3	3	3	2	2	2	2	3	10	10	**IZS**	10	4.6	24
27	2	2	2	5	13	9	13	12	13	7	6	5	2	3	1	1	2	2	4	2	2	2	**IZS**	3	13	4.9	24
28	4	6	8	7	8	7	4	9	5	4	4	4	3	2	3	2	3	5	4	7	7	**IZS**	3	3	9	4.9	24
29	9	7	7	2	2	2	3	10	7	3	1	1	1	2	2	1	1	3	5	4	**IZS**	1	1	1	10	3.3	24
30	2	4	2	0	0	**N**	0	0	0	0	1	1	1	0	0	0	0	1	0	**IZS**	0	0	0	0	4	0.5	23
31	0	0	0	1	1	1	2	15	1	1	1	0	1	0	0	1	0	0	**IZS**	1	2	3	2	2	15	1.5	24
HOURLY MAX	12	29	20	19	27	19	292	269	24	45	27	22	18	35	32	34	53	26	63	27	29	22	11	15			
HOURLY AVG	4.5	5.6	6.3	5.9	6.8	7.3	16.0	17.3	7.5	7.8	5.4	4.4	4.1	5.8	4.7	3.8	5.5	4.0	8.5	6.0	5.9	4.8	4.4	4.2			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	654					
MAXIMUM INSTANTANEOUS VALUE:	292	PPB	@ HOUR(S)	6	ON DAY(S)	12
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	16	HRS				
STANDARD DEVIATION	16.28					


01 Hour Averages
400
297.5
195
92.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 NOXMAX PPB

LICA33
NOX_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : NOX_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	4.17	2.01	2.16	6.91	10.80	6.77	10.08	8.78	3.31	4.61	10.66	6.77	5.18	8.06	4.61	5.04	100.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	4.17	2.01	2.16	6.91	10.80	6.77	10.08	8.78	3.31	4.61	10.66	6.77	5.18	8.06	4.61	5.04	

Calm : .00 %

Total # Operational Hours : 694

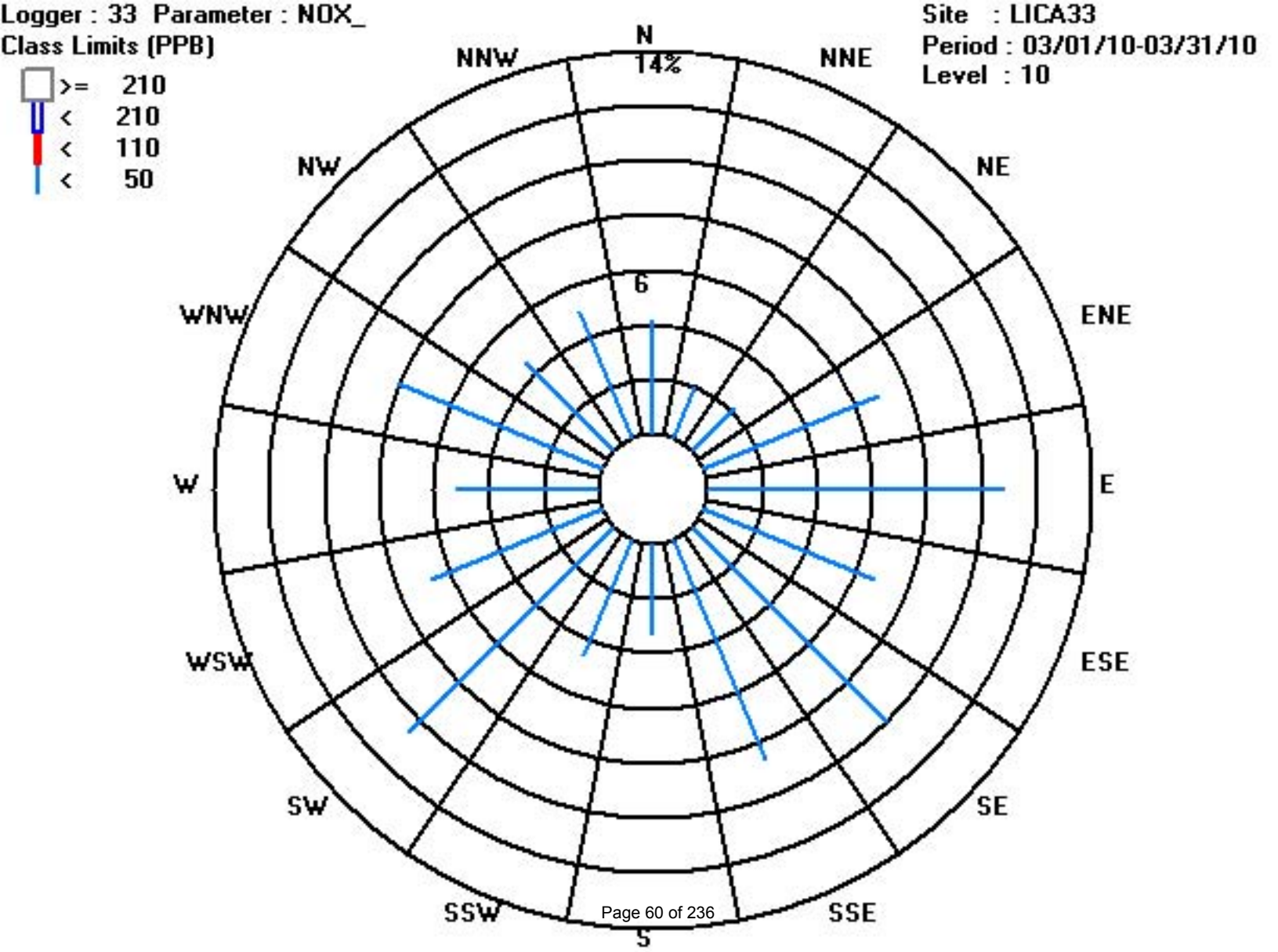
Distribution By Samples

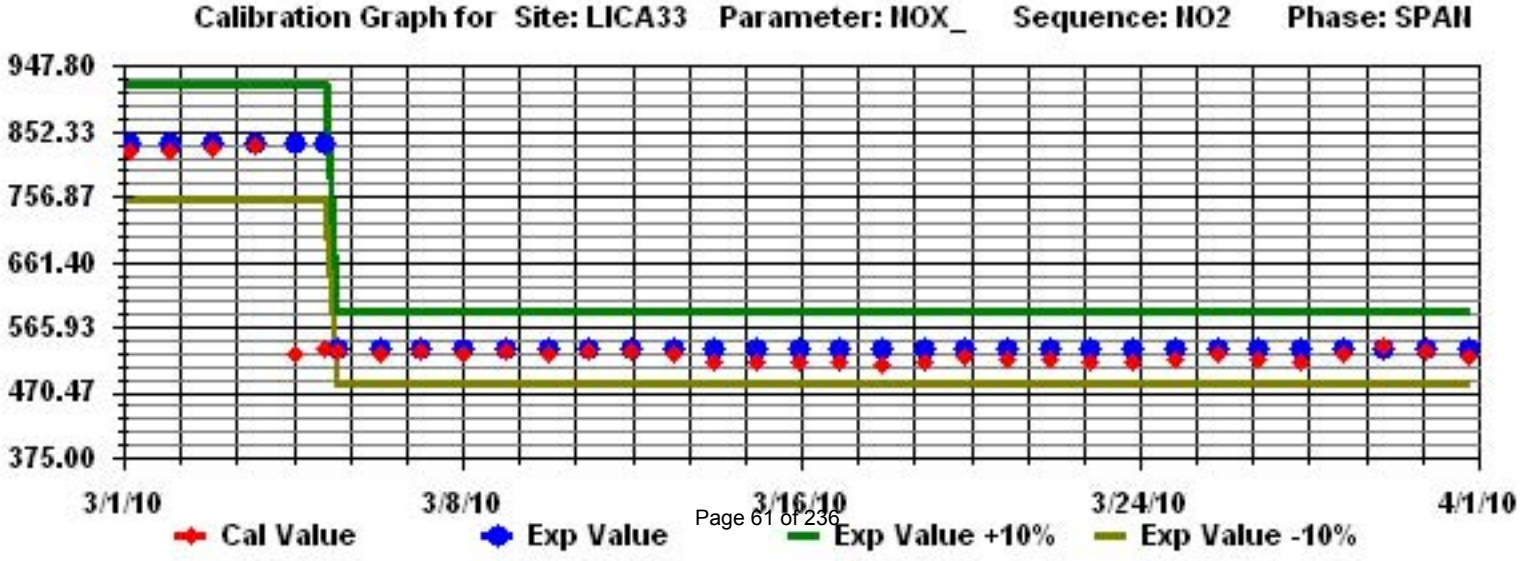
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	29	14	15	48	75	47	70	61	23	32	74	47	36	56	32	35	694
< 110																	
< 210																	
>= 210																	
Totals	29	14	15	48	75	47	70	61	23	32	74	47	36	56	32	35	

Calm : .00 %

Total # Operational Hours : 694


Logger : 33 Parameter : NOX_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA33 Parameter: NOX_ Sequence: NO2 Phase: SPAN
947.80
852.33
756.87
661.40
565.93
470.47
375.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Ozone

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

OZONE (O_3) hourly averages in ppb

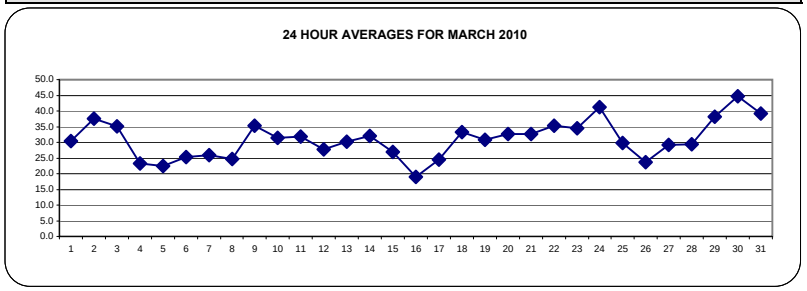
MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	28	32	**IZS**	25	24	22	21	15	18	22	29	33	38	40	41	40	37	35	32	33	36	33	33	34	41	30.5	24
2	33	**IZS**	26	24	24	23	26	31	33	**C**	38	40	45	47	47	47	44	43	43	43	43	43	43	41	47	37.6	24
3	**IZS**	38	38	38	39	38	38	38	37	37	37	36	37	37	37	36	36	35	32	31	27	26	24	**IZS**	39	35.1	24
4	19	16	14	10	10	13	13	13	15	20	27	31	34	37	36	37	37	30	30	28	27	21	**IZS**	19	37	23.3	24
5	22	15	11	9	8	11	10	10	11	18	28	32	37	41	**C**	**C**	**C**	**C**	**C**	38	37	**IZS**	35	32	41	22.5	24
6	28	26	22	19	14	12	8	9	10	12	22	26	31	37	40	41	41	39	37	29	**IZS**	28	27	25	41	25.3	24
7	23	22	20	20	15	14	15	16	16	20	27	33	36	37	38	39	39	37	34	**IZS**	26	25	24	22	39	26.0	24
8	20	16	18	14	11	11	15	16	15	16	16	17	20	31	33	39	41	40	**IZS**	38	38	35	34	35	41	24.7	24
9	37	37	35	35	32	29	27	26	29	34	37	40	41	42	42	42	41	**IZS**	35	31	27	35	38	40	42	35.3	24
10	40	32	32	34	34	33	32	32	31	33	33	34	34	33	33	32	**IZS**	28	25	20	19	28	34	35	40	31.3	24
11	36	39	37	31	27	28	28	28	32	37	37	33	33	33	37	**IZS**	36	34	32	31	29	25	26	25	39	31.9	24
12	21	17	15	21	22	20	17	18	21	24	27	32	40	42	**IZS**	43	42	41	37	34	30	24	26	24	43	27.7	24
13	25	24	23	22	20	16	18	23	30	35	39	40	42	**IZS**	43	43	42	40	36	24	26	29	28	25	43	30.1	24
14	31	25	21	25	26	23	15	16	21	28	35	42	**IZS**	42	44	45	45	42	38	35	35	35	35	32	45	32.0	24
15	33	31	31	30	31	32	32	30	30	30	31	**IZS**	31	31	31	31	31	29	25	20	15	14	13	8	33	27.0	24
16	7	9	6	6	6	8	7	9	11	14	**IZS**	20	23	33	35	34	33	31	22	26	27	25	21	23	35	19.0	24
17	24	20	16	17	20	17	17	24	21	**IZS**	22	26	27	29	29	32	29	28	27	26	24	25	30	35	35	24.6	24
18	35	34	31	29	30	32	29	31	**IZS**	32	33	34	33	33	35	37	37	37	35	36	35	34	34	31	37	33.3	24
19	35	32	32	34	32	30	33	**IZS**	31	31	32	33	33	32	32	33	33	30	26	24	23	25	32	33	35	30.9	24
20	32	32	30	25	25	22	**IZS**	20	26	29	33	35	41	42	42	42	42	41	34	34	33	30	30	29	42	32.6	24
21	30	32	32	34	35	**IZS**	36	36	36	35	36	37	37	37	37	37	36	34	29	25	24	23	24	30	37	32.7	24
22	30	28	28	33	**IZS**	36	35	31	32	34	35	37	38	39	40	40	41	41	40	36	34	34	37	31	41	35.2	24
23	29	32	33	**IZS**	33	33	32	31	33	33	34	36	37	37	37	37	37	38	37	33	31	37	37	38	38	34.6	24
24	40	42	**IZS**	40	41	41	42	42	42	42	41	41	42	43	42	42	42	42	41	40	40	39	39	40	43	41.1	24
25	40	**IZS**	38	36	35	35	34	34	34	34	34	33	33	31	30	29	27	27	27	24	18	18	15	19	40	29.8	24
26	**IZS**	25	24	23	21	20	20	20	21	22	24	26	30	30	29	30	28	28	25	19	19	18	18	IZS	30	23.6	24
27	25	23	24	19	14	11	12	13	16	22	27	33	43	40	46	46	44	44	38	35	35	36	IZS	25	46	29.2	24
28	19	15	15	14	12	10	19	22	29	31	32	34	37	40	41	41	37	35	35	33	41	IZS	42	41	42	29.3	24
29	33	32	32	26	29	24	22	17	31	42	46	50	50	50	48	47	44	40	37	35	IZS	47	**50**	46	**50**	38.2	24
30	42	40	39	43	45	**N**	47	48	47	45	41	44	47	48	48	47	47	46	49	IZS	43	43	43	42	49	**44.7**	23
31	40	40	40	37	36	37	37	38	39	40	41	44	44	45	45	45	44	43	IZS	37	33	34	34	30	45	39.3	24
HOURLY MAX	42	42	40	43	45	41	47	48	47	45	46	50	50	50	48	47	47	46	49	43	43	47	50	46			
HOURLY AVG	29.6	27.8	26.3	25.8	25.0	23.5	24.6	24.6	26.6	29.4	32.5	34.4	36.5	38.0	38.6	39.1	38.4	36.5	33.5	31.0	30.2	30.0	31.2	30.7			

STATUS FLAG CODES

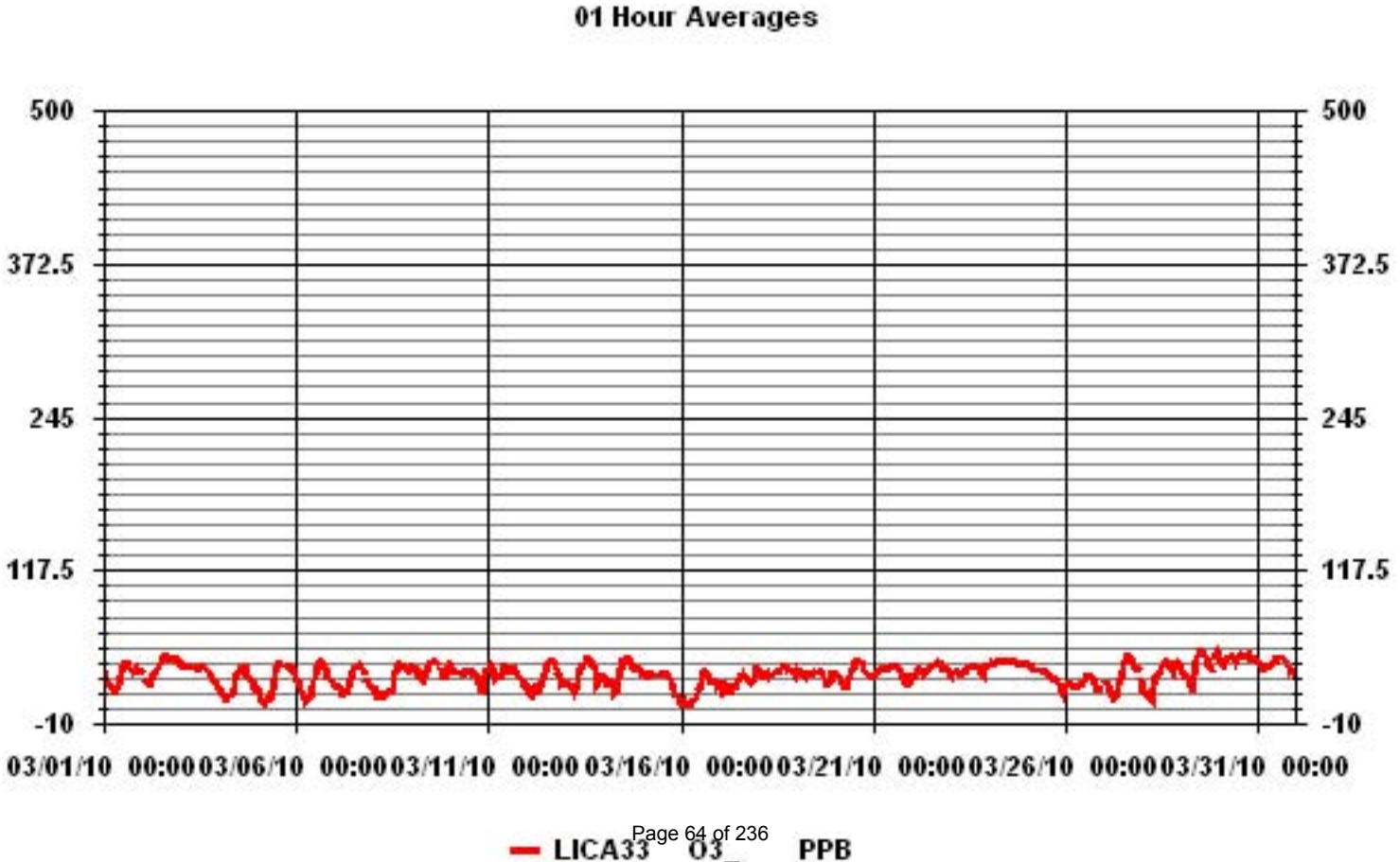
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 82 PPB



MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	704					
MAXIMUM 1-HR AVERAGE:	50	PPB	@ HOUR(S)	22	ON DAY(S)	29
MAXIMUM 24-HR AVERAGE:	44.7	PPB			ON DAY(S)	30
					VAR-VARIOUS	
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	6	HRS	AMD OPERATION UPTIME		99.9	%
STANDARD DEVIATION	9.32		MONTHLY AVERAGE		30.96	PPB


01 Hour Averages
500
372.5
245
117.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 O3_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

OZONE MAX instantaneous maximum in ppb

MST

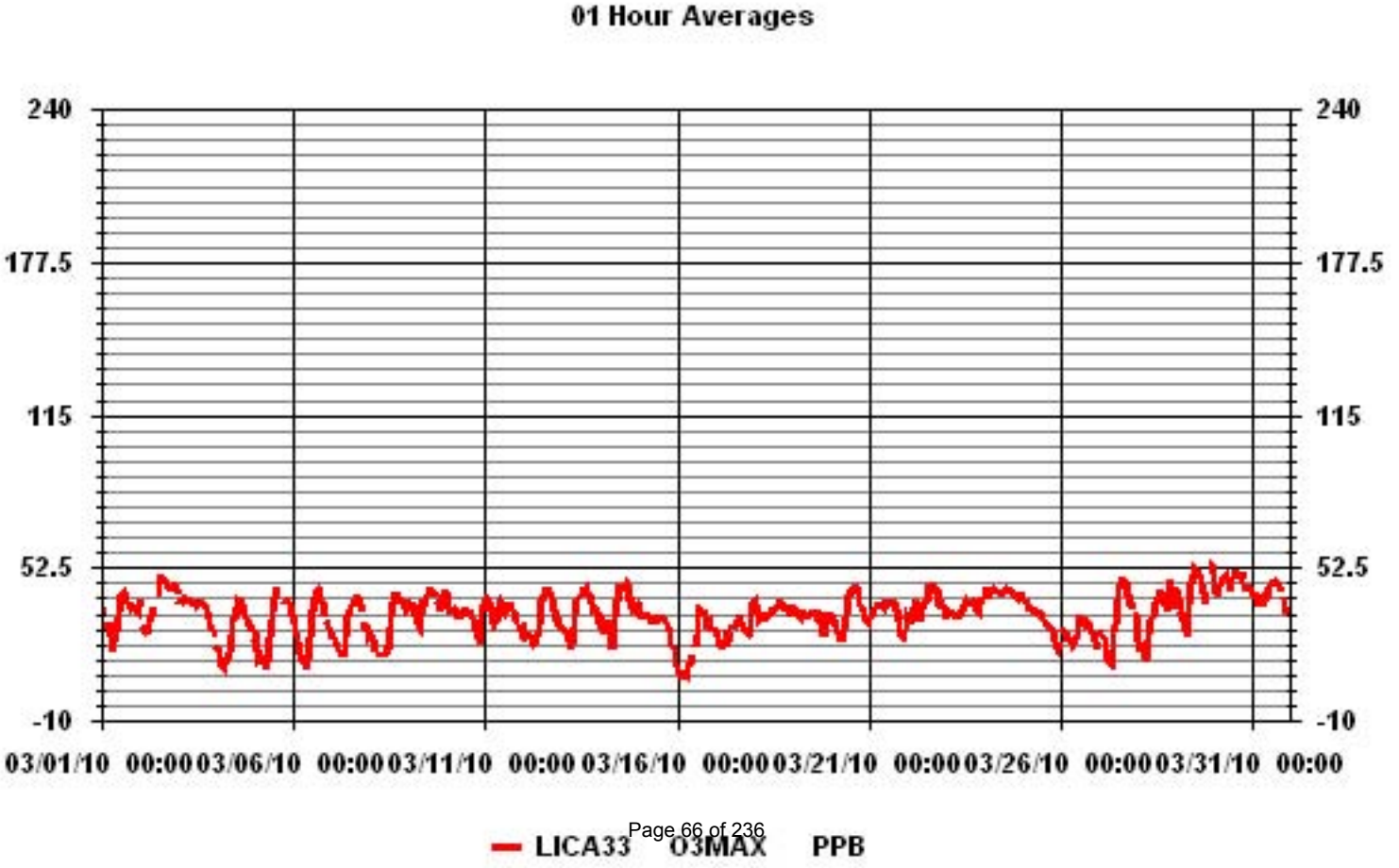
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	35	35	**IZS**	29	27	28	26	18	22	26	32	35	41	42	43	41	39	37	36	37	36	36	35	38	43	33.7	24
2	38	**IZS**	28	27	28	26	30	33	35	**C**	**C**	42	48	48	48	48	47	45	44	44	44	45	45	43	48	39.8	24
3	**IZS**	39	40	39	40	39	39	39	38	38	38	37	38	38	38	38	37	37	35	33	29	28	26	**IZS**	40	36.5	24
4	20	19	16	13	12	14	14	15	18	25	31	32	36	39	38	39	38	35	33	32	30	28	**IZS**	24	39	26.1	24
5	27	19	15	16	13	15	15	11	14	24	31	35	40	44	**C**	**C**	**C**	**C**	**C**	39	40	**IZS**	37	34	44	26.1	24
6	30	27	25	23	18	15	14	12	12	15	24	28	35	40	43	44	43	40	39	34	**IZS**	30	29	27	44	28.1	24
7	24	24	22	21	19	17	17	17	18	24	33	35	37	38	39	40	40	38	36	**IZS**	29	29	27	24	40	28.2	24
8	25	23	23	19	**N**	17	17	17	17	19	18	19	28	32	38	41	41	41	**IZS**	40	39	37	35	36	41	28.3	23
9	38	38	37	37	34	31	29	28	33	38	38	41	43	43	43	43	42	**IZS**	39	40	35	41	42	42	43	38.0	24
10	42	37	35	35	36	35	33	33	33	34	34	35	35	35	34	34	**IZS**	31	27	24	21	31	36	36	42	33.3	24
11	39	41	39	36	31	29	30	31	36	39	38	35	34	36	38	**IZS**	38	36	35	32	30	27	27	28	41	34.1	24
12	25	24	25	25	25	22	21	22	24	26	29	39	41	43	**IZS**	44	43	42	40	36	32	30	31	30	44	31.3	24
13	28	27	27	25	26	19	21	28	33	39	40	41	44	**IZS**	44	45	43	42	39	34	36	36	32	30	45	33.9	24
14	34	28	26	30	30	30	20	20	27	32	39	44	**IZS**	44	45	46	47	46	40	37	38	36	37	35	47	35.3	24
15	36	33	33	33	33	33	33	31	31	31	32	**IZS**	31	32	32	32	32	31	29	27	21	21	20	13	36	29.6	24
16	10	10	7	9	9	10	9	12	13	16	**IZS**	22	25	36	36	35	34	34	28	30	31	28	27	27	36	21.7	24
17	27	25	21	19	23	21	21	27	24	**IZS**	28	28	30	30	31	33	30	29	28	27	26	27	33	38	38	27.2	24
18	39	36	36	32	33	33	31	33	**IZS**	33	34	35	35	36	37	38	38	38	37	36	36	36	36	33	39	35.3	24
19	37	35	35	35	33	32	34	**IZS**	33	33	33	34	34	34	33	34	34	31	29	25	25	29	33	33	37	32.5	24
20	33	33	32	29	26	24	**IZS**	24	27	32	34	41	43	44	43	43	45	43	38	36	36	32	31	30	45	34.7	24
21	32	34	34	36	37	**IZS**	37	37	37	36	38	38	38	38	38	38	38	36	31	28	26	25	27	33	38	34.4	24
22	32	30	32	35	**IZS**	38	38	31	34	36	37	38	39	45	43	45	45	43	43	38	36	39	38	37	45	37.9	24
23	32	34	34	**IZS**	35	34	33	33	34	34	35	37	39	38	38	38	38	39	38	36	35	39	39	40	40	36.2	24
24	43	43	**IZS**	41	43	43	44	43	43	42	42	42	43	44	43	43	43	43	42	41	41	40	41	41	44	42.3	24
25	41	**IZS**	39	38	36	36	35	35	35	35	34	34	33	32	31	30	28	28	28	27	23	20	19	21	41	31.2	24
26	**IZS**	27	26	26	24	23	23	21	22	24	25	28	33	31	31	31	29	29	29	26	26	23	21	**IZS**	33	26.3	24
27	26	25	25	24	19	15	15	14	19	26	29	39	46	44	47	47	46	46	42	38	37	37	**IZS**	33	47	32.1	24
28	23	19	19	20	16	15	23	25	31	32	33	38	40	42	42	42	41	38	36	35	46	**IZS**	44	43	46	32.3	24
29	43	36	37	35	32	31	27	24	38	46	49	52	51	51	50	49	46	43	39	39	**IZS**	51	**54**	53	**54**	42.4	24
30	44	43	41	45	47	**N**	49	50	49	47	43	48	50	50	50	49	49	48	50	**IZS**	44	44	44	43	50	46.7	23
31	42	41	41	38	38	38	38	39	41	41	44	45	46	46	47	46	46	44	**IZS**	39	35	35	35	34	47	40.8	24
HOURLY MAX	44	43	41	45	47	43	49	50	49	47	49	52	51	51	50	49	49	48	50	44	46	51	54	53			
HOURLY AVG	32.6	30.5	29.3	29.0	28.4	26.3	27.2	26.8	29.0	31.8	34.3	36.6	38.5	39.8	40.1	40.6	40.0	38.4	36.1	34.1	33.2	33.1	33.8	33.8			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	702					
MAXIMUM INSTANTANEOUS VALUE:	54	PPB	@ HOUR(S)	22	ON DAY(S)	29
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		742	HRS
MONTHLY CALIBRATION TIME:	7	HRS				
STANDARD DEVIATION	8.74					


01 Hour Averages
240
177.5
115
52.5
-10
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 O3MAX PPB

LICA33
O3_ / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : O3_
Units : PPB

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	4.11	1.98	2.13	6.81	10.79	6.67	9.94	8.52	3.69	4.68	10.65	6.53	5.11	8.23	4.54	4.97	99.43
< 110	.00	.00	.00	.00	.00	.00	.14	.28	.00	.00	.00	.14	.00	.00	.00	.00	.56
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	4.11	1.98	2.13	6.81	10.79	6.67	10.08	8.80	3.69	4.68	10.65	6.67	5.11	8.23	4.54	4.97	

Calm : .00 %

Total # Operational Hours : 704

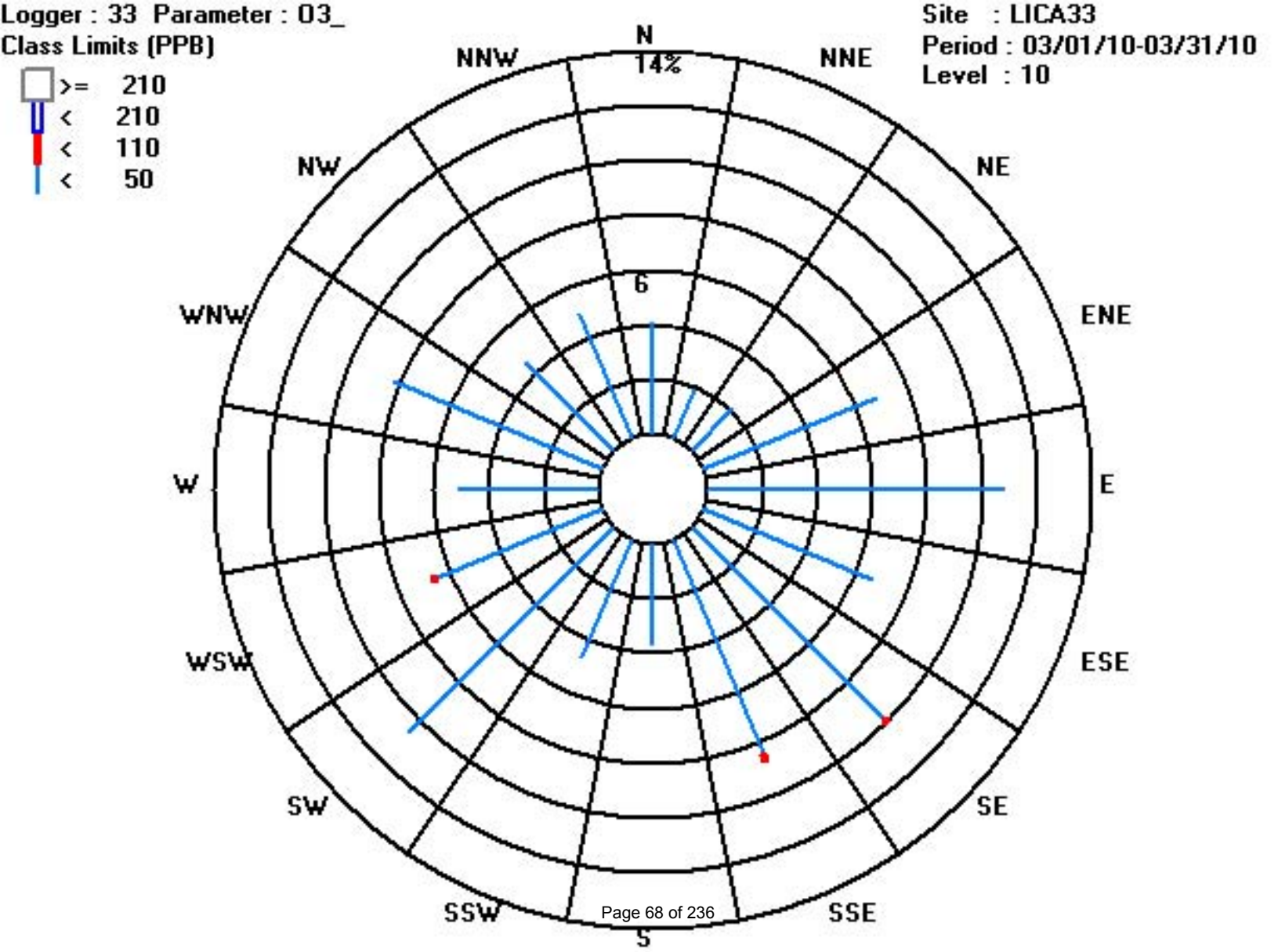
Distribution By Samples

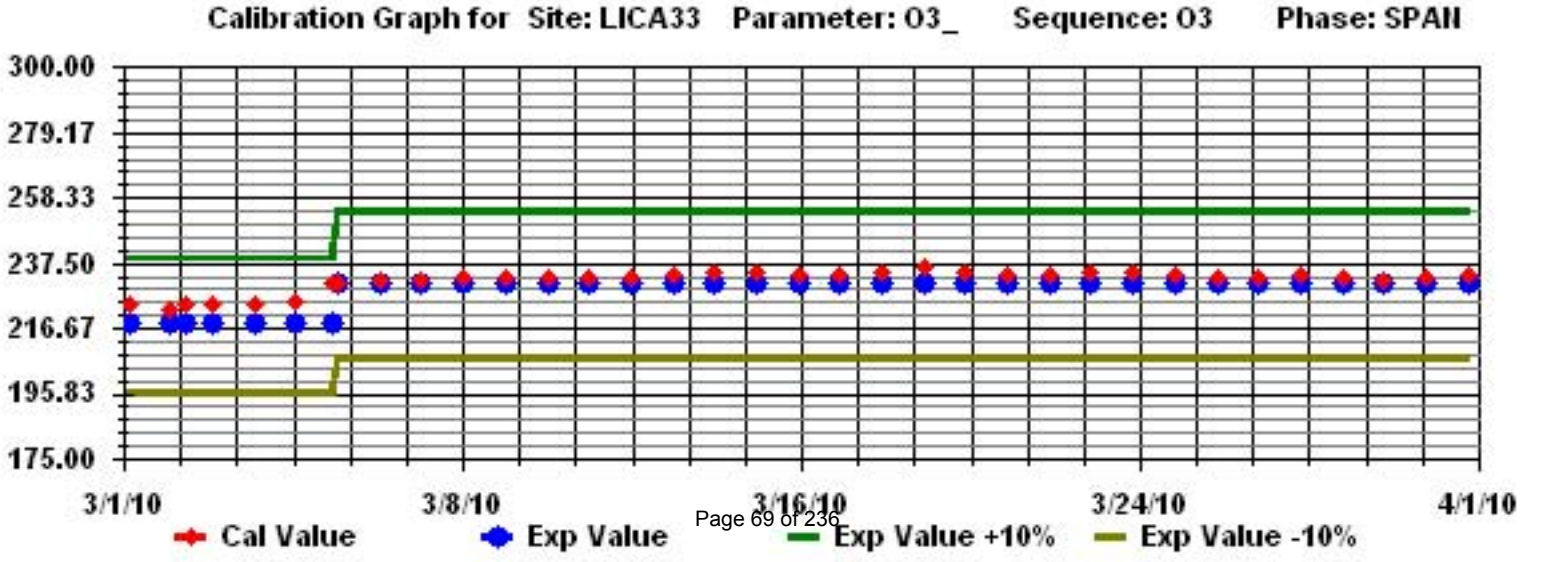
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	29	14	15	48	76	47	70	60	26	33	75	46	36	58	32	35	700
< 110							1	2				1					4
< 210																	
>= 210																	
Totals	29	14	15	48	76	47	71	62	26	33	75	47	36	58	32	35	

Calm : .00 %

Total # Operational Hours : 704


Logger : 33 Parameter : 03_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA33 Parameter: O3_ Sequence: O3 Phase: SPAN
300.00
279.17
258.33
237.50
216.67
195.83
175.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Hydrocarbons

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

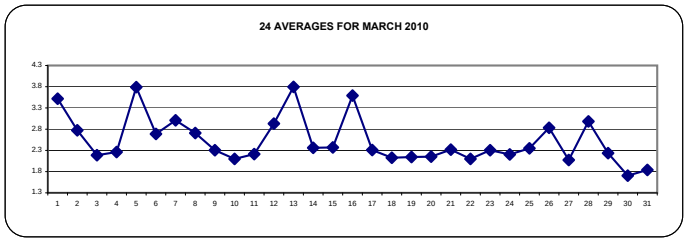
TOTAL HYDROCARBONS (THC) hourly averages in ppm

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	3.2	2.3	**IZS**	3	2.8	7.7	4.4	4.9	4.1	3.9	4	3.5	3.5	2.9	2.8	2.6	2.7	2.8	3.2	3.4	3.2	3.2	3.4	3.4	7.7	3.5	24
2	3.7	**IZS**	4.7	4.2	3.8	3.7	3.6	2.9	3.4	2.4	2.4	4.5	2.2	2	1.9	1.9	2	2.1	2	1.9	2.2	2.3	2	2	4.7	2.8	24
3	**IZS**	2	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	**IZS**	2.3	2.2	24
4	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.2	2.1	2	2	2.1	2.1	2.3	2.2	2.4	**IZS**	2.5	2.5	2.3	24
5	3	4.4	4.3	4.3	5.5	5.1	6.4	4.3	4.5	4.2	3.4	3.2	3	2.9	**C**	**C**	**C**	**C**	3.1	2.9	2.5	**IZS**	2.5	2.5	6.4	3.8	24
6	2.5	2.3	2.6	2.5	2.5	2.8	2.8	4.5	3.7	5.2	2.4	2.4	2.3	2.1	2.1	2	2	2.1	2.1	2.3	**IZS**	2.8	2.9	2.9	5.2	2.7	24
7	3.6	3.6	3.6	4.4	5.3	4.5	4.2	3.4	3.3	3	2.7	2.4	2.2	2.2	2.2	2.1	2.2	2.2	2.2	**IZS**	2.3	2.6	2.6	2.4	5.3	3.0	24
8	2.7	3.5	3.5	3.1	3.9	4.6	3.5	3	3	2.9	3.1	2.9	2.6	2.1	2	1.9	1.9	1.9	**IZS**	1.9	2	2	2.2	2.1	4.6	2.7	24
9	2	2	2.1	2.2	2.4	2.6	2.8	3.6	2.9	2.4	2.1	2.1	2.1	2	1.9	1.9	1.9	**IZS**	2	2.7	2.9	2.3	2.1	2	3.6	2.3	24
10	1.9	2	2.2	2.1	2	2	2.2	2	2	1.9	1.9	2.2	2.7	2.6	2.2	2	**IZS**	2	2	2	2.3	2.1	2	2	2.7	2.1	24
11	2	2	2	2.1	2.1	2.1	2.1	2.1	2.1	2.6	2.5	2.2	2.2	2.2	2	**IZS**	2	2	2	2	2.1	3	3	2.5	3.0	2.2	24
12	2.9	2.7	2.6	2.1	2	2	2.1	2.1	2.1	2.1	2.2	2.3	2.2	2	**IZS**	2	2	2	2	2	2.2	8.3	6.8	8.7	8.7	2.9	24
13	**15**	4.9	11	7.9	7.9	4.1	2.5	2.3	2.1	2.1	2	2	2	**IZS**	1.9	1.9	2	2	2.1	2.2	2.3	2.2	2.4	2.5	**15.0**	**3.8**	24
14	2.1	2.2	2.5	2.3	2.2	2.3	3.1	3.7	2.9	2.6	2.4	2.1	**IZS**	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	3.7	2.4	24
15	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	**IZS**	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.5	2.9	3.3	3.2	3.3	2.4	24
16	3.5	3.7	4.4	6	5	4.4	6.8	4.9	3.5	3.3	**IZS**	3	3	2.5	2.2	2.2	2.2	3.5	3.6	3.4	2.5	2.9	3.1	3	6.8	3.6	24
17	2.4	2.8	3.1	3.5	3.3	2.6	2.6	2.4	2.3	**IZS**	2.1	2	2	2	2	2	2	2	2	2	2	2	2	2	3.5	2.3	24
18	2	2	2.1	2.2	2.1	2.1	2.3	2.1	**IZS**	2.1	2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.5	2.5	2.1	24
19	2.4	2.2	2.4	2.6	2.4	2.5	2.5	**IZS**	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2	2	2	2.6	2.1	24
20	2	1.9	1.9	2	2	2	**IZS**	2.1	2	2	2	1.9	1.9	2.1	2.1	2.2	2	2.4	2.4	2.4	2.4	2.5	2.6	2.7	2.7	2.2	24
21	2.1	2.1	2.4	2.9	2.5	**IZS**	2	2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2	2	2	2.6	2.2	3.3	3	3.4	2	3.4	2.3	24
22	2.1	2.1	2.1	1.9	**IZS**	1.9	2	2	2	2	2	2	2	2	2	2	2	2	2	2.1	2.2	2.5	2.3	3.1	3.1	2.1	24
23	3.1	2.6	2.3	**IZS**	2.3	2.4	2.5	2.8	2.5	2.5	2.5	2.2	2.1	2.1	2.1	2	2	2	2.1	2.1	2.2	2.2	2.2	2.2	3.1	2.3	24
24	2.1	2.1	**IZS**	2.1	2.1	2.3	2.1	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.2	24
25	2.1	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2	2	2	2.2	2.9	3.1	3.8	2.9	3.9	3.9	2.3	24
26	**IZS**	2.6	2.7	3.1	2.5	2.3	2.5	2.3	2.2	2.3	2.2	2.1	2	2.5	3.5	2	2	2.5	3.4	7.4	5.9	2.2	2.1	**IZS**	7.4	2.8	24
27	2	2	2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	3.9	3.9	2.1	24
28	4.6	4.1	3.8	4.1	5.5	6.5	6.2	3.4	3	2.5	2.4	2.2	2	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	**IZS**	1.9	1.8	6.5	3.0	24
29	2.2	1.9	2	2.4	1.9	3.3	3	4.2	2.5	2.2	2.1	1.8	1.8	1.8	1.9	1.8	1.9	2.7	2.5	2.3	**IZS**	1.7	1.8	1.7	4.2	2.2	24
30	1.7	1.7	1.7	1.7	1.7	**N**	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	**IZS**	1.7	1.7	1.7	1.8	1.8	1.7	23
31	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	**IZS**	1.8	1.9	2.1	2.1	2	2.1	1.8	24
HOURLY MAX	15.0	4.9	11.0	7.9	7.9	7.7	6.8	4.9	4.5	5.2	4.0	4.5	3.5	2.9	3.5	2.6	2.7	3.5	3.6	7.4	5.9	8.3	6.8	8.7			
HOURLY AVG	2.9	2.6	2.9	2.9	3.0	3.1	3.0	2.8	2.6	2.5	2.3	2.3	2.2	2.2	2.1	2.0	2.0	2.1	2.3	2.4	2.4	2.6	2.6	2.7			

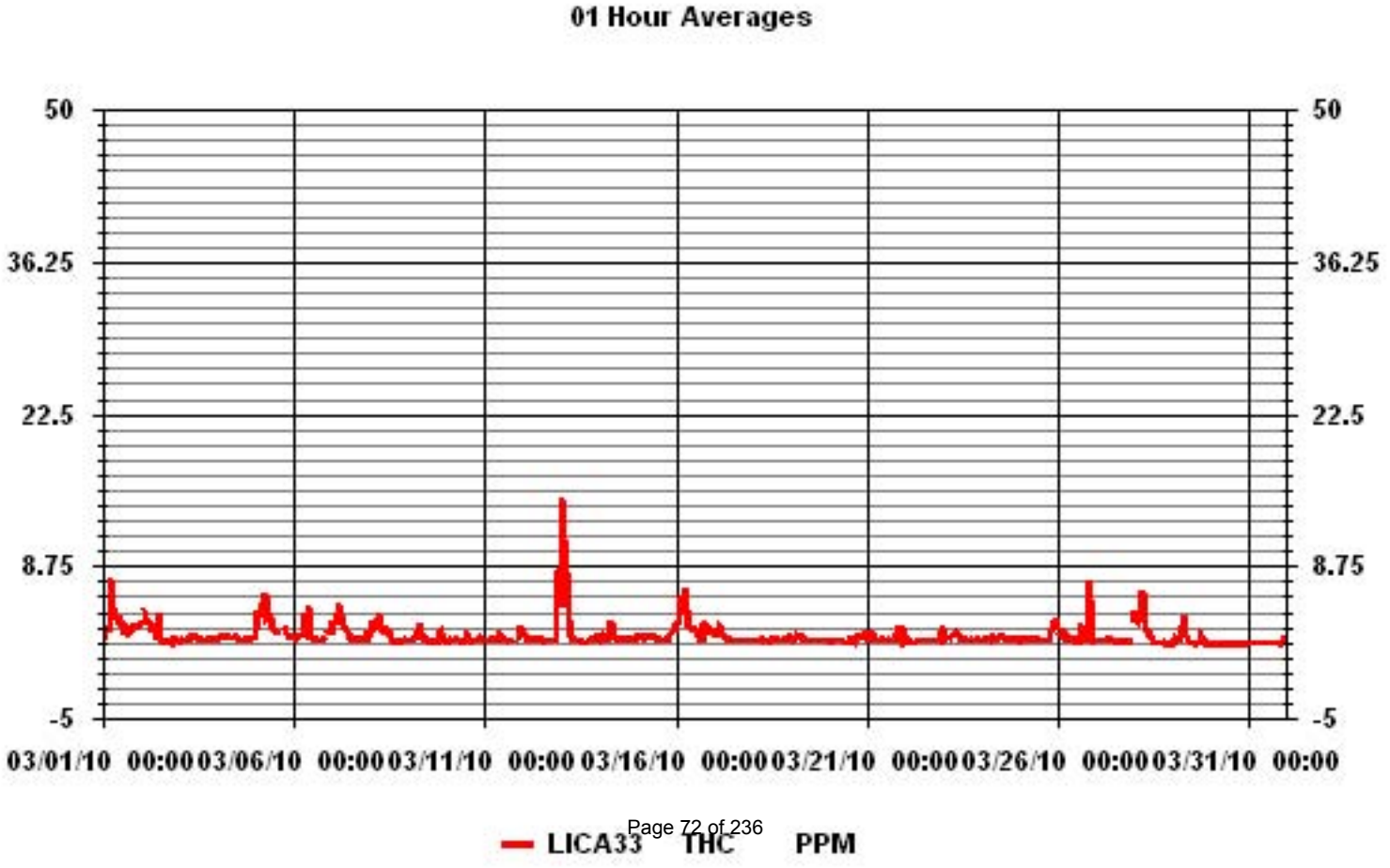
STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE
BB	- BELOW BACKGROUND OF 1.5 PPM		



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	706						
MAXIMUM 1-HR AVERAGE:	15.0	PPM	@ HOUR(S)	0	ON DAY(S)	13	
MAXIMUM 24-HR AVERAGE:	3.8	PPM			ON DAY(S)	13	
IZS CALIBRATION TIME:	33	HRS	OPERATIONAL TIME:		743	HRS	
MONTHLY CALIBRATION TIME:	4	HRS	AMD OPERATION UPTIME:		99.9	%	
STANDARD DEVIATION:	1.08		MONTHLY AVERAGE:		2.52	PPM	


01 Hour Averages
50
36.25
22.5
8.75
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 THC PPM

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	34.1	2.3	**IZS**	14	6.3	54.1	35.7	26	12.9	4.1	11	5.2	11	7.1	3	2.6	2.8	2.9	3.4	3.5	3.3	3.3	3.5	3.6	54.1	11.1	24
2	4.3	**IZS**	8.7	14	7.6	4.8	4.4	12.7	14	2.9	5.7	9.7	7	2	2	2.5	2.8	2.2	2.3	2	8.2	22.2	2	2.1	22.2	6.4	24
3	**IZS**	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.3	3.2	2.3	**IZS**	3.2	2.3	24
4	2.3	2.3	2.3	2.4	2.4	2.3	2.4	2.3	2.4	2.4	2.6	2.5	2.5	2.3	2.1	2.1	2	2.1	2.1	2.6	6.9	4.4	**IZS**	11.5	11.5	3.0	24
5	23.6	18.6	11.3	21.6	13.2	9.1	40.2	9.7	17.5	9.1	3.8	3.3	3.1	4.7	**C**	**C**	**C**	**C**	3.4	3.3	2.7	**IZS**	2.5	2.6	40.2	10.7	24
6	2.7	2.4	6.5	7.6	9.5	7.2	7.6	40.1	5.6	13.6	3.4	2.5	2.3	2.3	2.1	2.1	2	2.1	3.2	3.6	**IZS**	11.1	11.8	3.1	40.1	6.7	24
7	22.8	9.3	10.3	19.6	17.8	30.4	16.4	7.8	3.9	3.3	3.7	2.5	2.3	2.3	2.3	2.2	2.2	2.3	2.3	**IZS**	3.9	11.6	9.3	2.6	30.4	8.3	24
8	4.6	23.3	16.6	4.3	9.7	11.1	10.1	3.4	3.2	3.1	3.2	3	2.8	2.2	2.1	2	1.9	2	**IZS**	2	2	2.1	2.3	2.1	23.3	5.2	24
9	2	2	2.2	2.2	2.5	2.7	3	4.6	3.9	2.6	2.4	4.3	6.3	3.8	2.4	2	2	**IZS**	3.8	10.9	11.3	4.2	2.4	2.1	11.3	3.7	24
10	2	2	2.3	5.2	2.9	2.3	5	2.9	2	2	1.9	5.7	8	7.8	6.9	4.4	**IZS**	2.3	2.3	2	2.4	2.3	2.1	2	8	3.4	24
11	2.1	2	2	2.2	2.2	2.2	2.2	2.2	2.1	54.1	54.1	2.3	2.3	2.3	2	**IZS**	2.1	2.1	2	2.1	2.2	8	5.9	6.3	54.1	7.3	24
12	4.1	6.6	6.7	2.4	3.7	2.1	2.3	2.2	2.2	3.5	2.3	2.6	2.4	2.2	**IZS**	2	2	2	2	2.1	4.1	54.1	54.1	54.1	54.1	9.6	24
13	54.1	54.1	54.1	54.1	54.1	46.3	2.9	2.7	2.2	7.6	2	2	2	**IZS**	2.1	2	2.2	2.1	2.1	2.3	2.4	2.4	2.7	2.6	54.1	15.7	24
14	2.2	2.3	5.9	5.3	7.8	6.6	26.3	23	4.5	4	2.5	2.3	**IZS**	2.3	2.1	2.1	2.1	2.1	2.5	2.2	2.2	2.3	2.3	2.3	26.3	5.1	24
15	2.4	2.4	2.4	2.3	2.3	2.3	2.4	2.3	2.4	2.4	2.3	**IZS**	2.2	2.2	3.3	2.2	2.2	2.1	2.7	3.2	6.8	31.2	9.8	13.7	31.2	4.7	24
16	16.3	18	54.1	24.9	10.9	15.4	54.1	54.1	13.7	7.4	**IZS**	5.8	5.4	5.2	2.4	2.2	2.3	20.7	9.1	11.2	5.8	39.3	9.5	8.6	54.1	17.2	24
17	9.6	10	16	13.3	9	4.9	6.2	6.4	2.4	**IZS**	2.3	2.1	2.1	2	2	2.3	2	2	2	2	2	2	2	2.1	16	4.6	24
18	2.2	2.1	2.5	2.4	2.6	4.6	4.2	3.6	**IZS**	3.1	2.5	2.4	3.2	2.5	2.7	3.5	3.4	3.7	2.4	2.2	2.1	2.2	2.2	6.2	6.2	3.0	24
19	4.2	2.4	5	5.5	8.4	6.5	7.1	**IZS**	2.2	2.1	2.1	2.1	2	2	2	2	2	2	2.1	2.1	2	2	2	2	8.4	3.1	24
20	2	2	2	2	2	2.2	**IZS**	2.2	2.1	2	2	2	2	3.7	3.4	9.2	3.2	12	6.3	5.2	4.5	4.3	4.4	5.2	12	3.7	24
21	3.8	3.4	5.2	6	4.5	**IZS**	3.9	2.9	2.9	3.7	3.5	2.9	4.1	3.2	2.8	3.3	2.9	3	5.2	5.5	9.3	9.8	19.9	2.1	19.9	4.9	24
22	2.1	2.2	2.4	2	**IZS**	2	2.1	2	2	2	2	2.1	2.3	2.2	2.1	2.1	2.2	2.1	2.3	2.4	2.3	5.4	4.9	7.5	7.5	2.6	24
23	7.6	4.3	3.5	**IZS**	4	4.5	5.8	6.5	4.7	6.1	7.5	4.3	4.8	5.6	2.2	2.6	3.4	3	3.1	2.3	2.4	3.9	3.2	2.9	7.6	4.3	24
24	3.2	2.8	**IZS**	2.6	3	3.3	3.2	3.7	3.3	3.3	4.2	3.7	3.4	4.3	3.9	4	3.6	4.3	3.9	3.3	2.1	2.2	2.2	2.2	4.3	3.3	24
25	2.1	**IZS**	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2.1	2	3	4.9	10.4	9	8.8	8.8	8.6	10.4	3.8	24
26	**IZS**	8.8	8.7	10.1	5.9	4.6	7.1	5.6	3.6	4.3	5.1	9.6	2.1	24.2	34.2	2	2.1	31.4	54.1	54.1	51.2	2.8	2.2	**IZS**	54.1	15.2	24
27	2	2	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2	2	2	1.9	1.9	1.9	1.9	2	2	2	2.4	**IZS**	32.4	32.4	3.4	24
28	54.1	12	5.8	11	26.5	23	17.8	10.3	8	2.6	2.5	2.4	2.1	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	**IZS**	2.1	1.9	54.1	8.6	24
29	14.8	2	2.2	13.7	2.6	47	18.1	23.3	9.5	4.8	4.7	3.2	1.8	1.9	2	1.9	2.9	6.8	8.3	7.2	**IZS**	1.7	6.8	1.7	47	8.2	24
30	1.7	1.7	1.7	1.7	1.7	**N**	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.7	**IZS**	1.8	1.8	1.8	1.8	1.8	1.7	23
31	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	**IZS**	1.9	2.1	2.2	2.1	2.1	2.2	1.9	24
HOURLY MAX	54	54	54	54	54	54	54	54	18	54	54	10	11	24	34	9	4	31	54	54	51	54	54	54			
HOURLY AVG	10.0	7.1	8.6	8.7	7.7	10.7	10.0	9.1	4.8	5.5	5.0	3.3	3.3	3.7	3.6	2.6	2.3	4.5	5.0	5.4	5.6	8.7	6.5	6.8			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

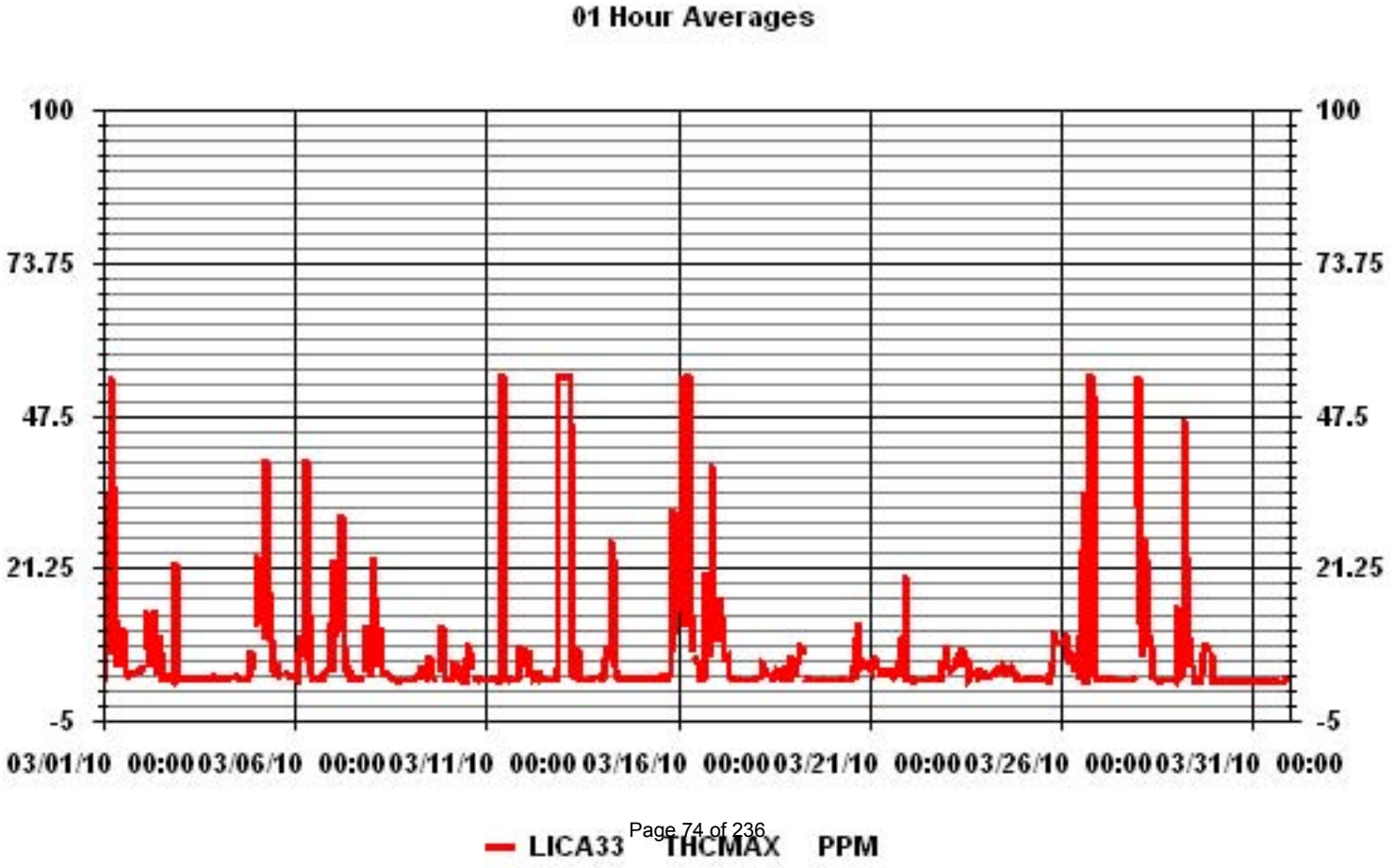
NUMBER OF NON-ZERO READINGS: 706

MAXIMUM INSTANTANEOUS VALUE: 54.1 PPB @ HOUR(S) VAR ON DAY(S) VAR

IZS CALIBRATION TIME: 33 HRS OPERATIONAL TIME: 743 HRS

MONTHLY CALIBRATION TIME: 4 HRS

STANDARD DEVIATION 9.78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100
73.75
47.5
21.25
-5
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 THCMAX PPM

LICA33
THC / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : THC
Units : PPM

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	3.68	1.41	1.13	3.68	5.80	4.24	8.92	7.79	3.25	4.39	10.19	6.51	4.81	7.93	4.53	4.39	82.71
<	10.0	.28	.56	.99	2.97	5.09	2.40	1.13	.99	.42	.42	.42	.14	.28	.28	.00	.56	16.99
<	50.0	.14	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.28
>=	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	4.10	1.98	2.12	6.79	10.90	6.65	10.05	8.78	3.68	4.81	10.62	6.65	5.09	8.21	4.53	4.95	

Calm : .00 %

Total # Operational Hours : 706

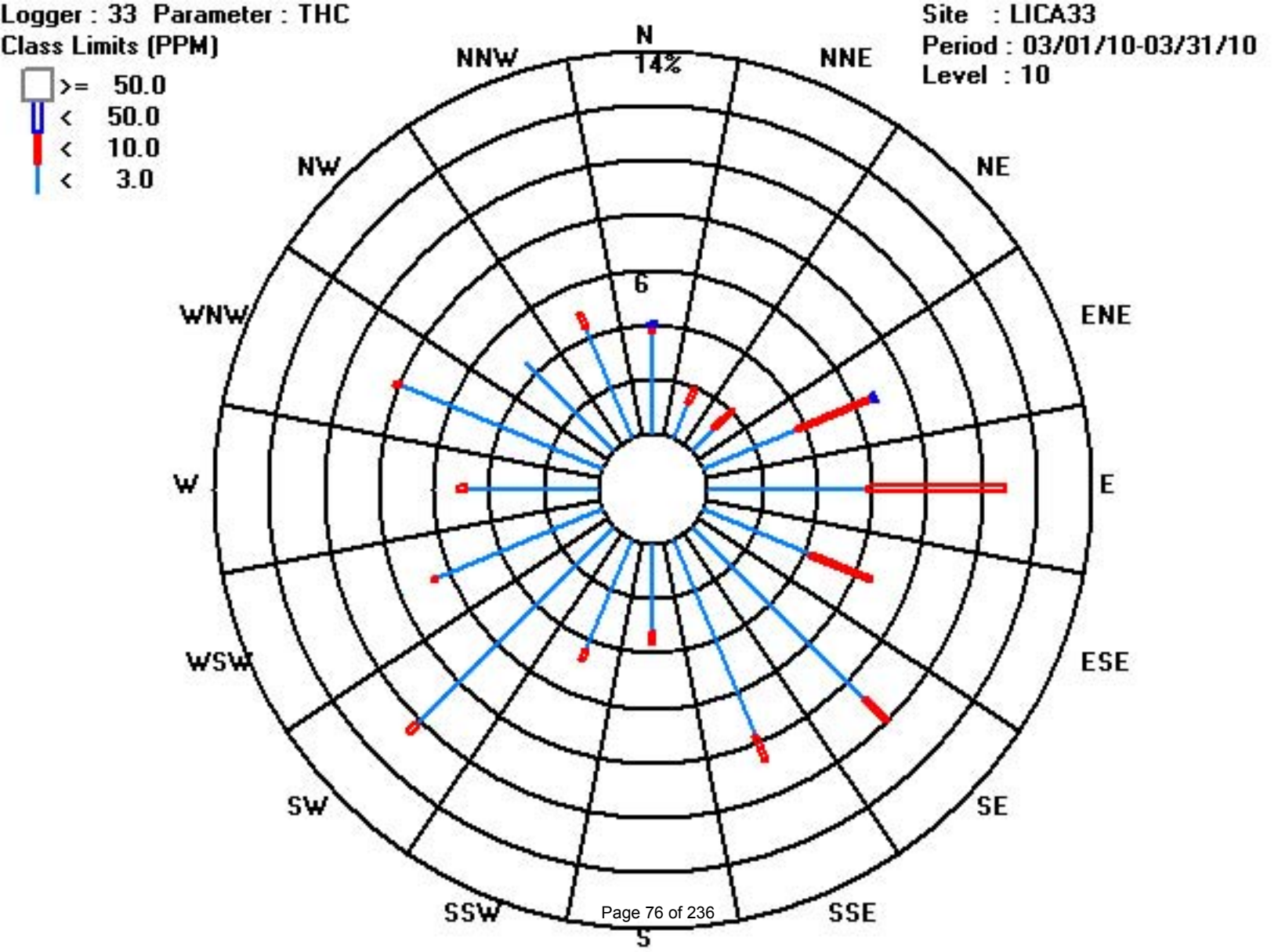
Distribution By Samples

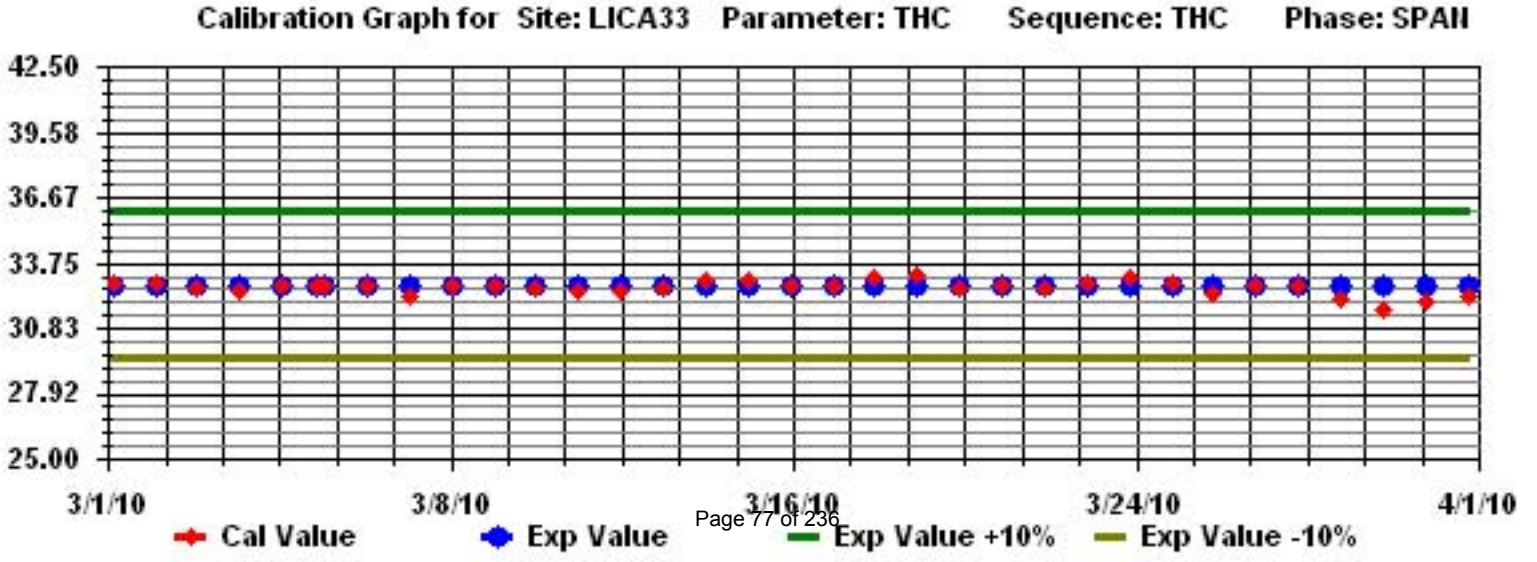
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	26	10	8	26	41	30	63	55	23	31	72	46	34	56	32	31	584
<	10.0	2	4	7	21	36	17	8	7	3	3	3	1	2	2		4	120
<	50.0	1			1													2
>=	50.0																	
	Totals	29	14	15	48	77	47	71	62	26	34	75	47	36	58	32	35	

Calm : .00 %

Total # Operational Hours : 706


Logger : 33 Parameter : THC
Class Limits (PPM)
>= 50.0
< 50.0
< 10.0
< 3.0
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6


Calibration Graph for Site: LICA33 Parameter: THC Sequence: THC Phase: SPAN
42.50
39.58
36.67
33.75
30.83
27.92
25.00
3/1/10
3/8/10
3/16/10
3/24/10
4/1/10
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Vector Wind Speed

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - PORTABLE SITE

MARCH 2010

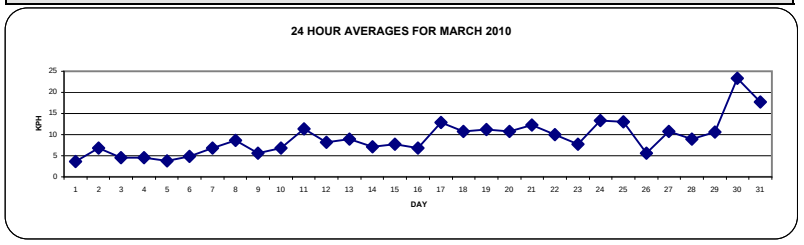
VECTOR WIND SPEED (WS) hourly averages (km/hr)

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.6	3.6	5.1	2.4	4.1	1.7	3	0.9	1.1	2.6	1.6	1.6	3.5	4.7	5.1	4.6	5.9	6.8	7.5	9.1	10.1	7	9.1	10.6	10.6	3.7	24
2	7.9	6.4	5	4.6	5.4	4.9	4.7	4.1	3.7	5.6	6	4.9	11.2	11	9.3	7.6	7.3	12.2	11	14.7	8.3	7.8	10.3	10.8	14.7	6.8	24
3	10	10.8	7.6	6.3	9	7.7	5.9	7.6	6.3	5.4	3.3	3.9	5.7	5.7	5.6	6.3	6.3	3.2	3.9	2.9	4.5	4.4	3.7	4	10.8	4.6	24
4	7.4	7	6.1	4.8	6.9	8.5	9.2	8.1	6.7	6.3	8.1	5.8	0.4	3.2	4.3	4.6	3.3	7	4.9	3.7	2.4	3	3	1.3	9.2	4.5	24
5	1.4	3.3	3.1	2.7	3.8	2.4	2.5	2.1	2.5	3.6	2.8	2.9	2	0.6	1	2.3	5.7	7.3	4.6	4.9	8.3	7.3	7.6	7.4	8.3	3.8	24
6	8.4	8.5	2.7	3.3	4.9	2.5	3.9	1.6	0.9	0.1	3.8	3.9	4.4	7.6	9.3	12	10.7	6.2	3.7	5.2	4.8	3.7	2.3	3.1	12.0	4.9	24
7	5.3	6	4.1	4.1	6	7	6.8	5.6	6.2	7.6	9.3	8.8	11.1	10.3	8.1	7.8	11.1	5.1	7.8	5.5	6.8	5.3	4.7	3.5	11.1	6.8	24
8	3.1	2.9	1.2	1.5	1.4	3.3	1.4	0.5	3.4	5.3	6.1	4.1	6.8	16.9	18.2	21.7	22.7	19.5	15.6	12.8	9.8	7.7	11.9	10	22.7	8.7	24
9	8.4	9.7	9.1	7.8	6	5.4	6.6	6.7	6.6	6.2	6.4	3.6	4.9	5.1	3.1	6	5.2	2.5	0.1	2.3	1.6	5.3	6.2	10.4	10.4	5.6	24
10	7	5.4	7.7	8.4	9.1	8.6	7.4	9.2	10.4	10.2	8.1	4.4	5	4	4	5.7	5.5	5.3	4	3.7	3.3	8.5	10.7	8.1	10.7	6.8	24
11	8.9	6.2	4.5	6	8	10.3	10.4	9.4	11.5	15.7	17.3	13.8	13	11.9	14.3	19.2	17.6	15.2	14	14.7	11.4	8.8	8	3.2	19.2	11.4	24
12	2	2.5	4.2	4.3	4.8	6.7	7.1	6.1	3.7	1.9	4.6	7.8	13.1	11.1	17.4	17.7	16.9	15.1	13.9	13.9	10.2	6	3.2	3.4	17.7	8.2	24
13	4.7	3.7	4.3	4.1	5.6	6	7.8	8.7	10	12.1	15.1	15.8	19.3	18	14.6	14.9	10	6	4.1	5.6	6.1	6.3	6.4	6.2	19.3	9.0	24
14	7.5	4.3	3.6	5.5	2.2	3.2	1.7	1.1	4.1	2.7	5.2	8.1	8.9	10.3	11.2	8.8	11.6	7.9	8.7	10.5	11.9	11.4	10.3	11.4	11.9	7.2	24
15	8.2	9.4	11	12.6	13.4	12.4	10.9	8.9	9.3	13.2	10.8	9.4	8.1	8.2	5.5	5.7	6.4	4.8	3.6	4	3.9	2	0.2	2.9	13.4	7.7	24
16	3.7	4.4	1.7	1.8	6.2	6.8	3.4	5.9	6.1	8.4	10.4	12.8	11.7	7.9	12.2	10.7	8.6	4.9	8.4	7.5	4.9	2.6	4.1	6.8	12.8	6.7	24
17	2.7	0.7	2.2	4.5	3.8	4.4	9.6	4.1	10.6	11.7	19.2	18.2	14.3	18.9	20.9	22.5	24.3	20.7	19	17.6	15.6	14.5	13.1	14.7	24.3	12.8	24
18	14.2	12.2	6.3	5.2	6.6	7.1	9.4	12.9	10.4	12.3	13.3	15.1	13.6	14.1	16.1	16.8	13.8	9.4	6.3	9.9	10.3	8.2	6.5	6.6	16.8	10.7	24
19	9.3	9.6	7.8	7.5	4.5	1.7	2.1	2.3	5.1	6.7	11.5	18.1	18.5	19.1	19.4	16.5	17.7	13.6	11.7	12.8	10.8	7.8	15.4	17.9	19.4	11.1	24
20	17.8	18.7	15.2	10.1	7.7	5.4	5.5	9	9.3	8.1	10.8	8.7	10.5	10.5	10	7.4	9.5	6.5	7.9	12.3	15.4	16.1	14.2	12.4	18.7	10.8	24
21	11.2	11.9	10.8	11	13.7	14	14.4	15	17.3	15.3	15.9	15.2	15.3	15.9	16.3	15.2	15.3	14.5	9.5	7.1	6.1	4.6	4.5	6.1	17.3	12.3	24
22	4.1	8.3	14.3	17	16.7	15.4	13.1	13.6	12.3	13.5	13.2	12.4	10.1	10.5	12.4	8.7	8.3	5.7	4.9	3.6	4	1.6	8.1	7.1	17.0	10.0	24
23	7.3	9.5	11.7	11.3	10.8	6.6	7.6	9.6	11.2	9.4	5.6	3.2	1.3	3.3	7.6	9.2	7.2	6.4	4.6	5.8	4.4	10.1	11.2	11.8	11.8	7.8	24
24	14.1	17.9	19.6	18.3	16.8	13.9	18.5	17.2	16.5	16.1	11.2	10.8	12.1	10.4	7	5.3	7.5	9.1	11.8	12.2	10.7	13.9	14	13.4	19.6	13.3	24
25	15.2	15.7	14.1	15.8	15.9	15	17.9	18.8	15.8	17	16.7	17.1	13.1	12.4	12.6	13.1	10.9	10.8	9.4	6.9	7.1	7	7	5.7	18.8	13.0	24
26	6.5	3.7	6.1	6.8	11.2	6.2	3.1	2.9	4.7	4.7	4.5	5.6	9.6	8.6	7.1	7.1	6.3	2.3	0.6	0.5	2.8	4.9	6.4	11.8	11.8	5.6	24
27	13.1	9.4	10.5	6.9	5.7	7.5	9.3	8.2	10	10.9	12.2	16.8	17.9	17.4	18	15.4	10.8	11.3	9.7	11.3	11.7	9.9	3.4	0.4	18.0	10.7	24
28	2	3.4	4.5	3.8	3.7	3.9	7	8.4	8.9	9.9	10	9.1	12.2	10.1	14.9	13.8	12.2	10.4	11.2	10.7	13.5	9.6	12.2	8.7	14.9	8.9	24
29	6.5	9.1	4.4	2.4	6.8	2.4	2.8	2.5	6.9	14.3	14.3	15.8	14.8	16	18.4	23	17.8	12	10.7	7.3	7.4	11.4	10.2	16.2	23.0	10.6	24
30	18.4	15.3	16.4	18.5	20.6	**N**	23.5	26.2	26.2	19.6	18.7	29.4	29.9	30.7	**31.1**	26.9	30.5	22.2	25.9	19.8	20.6	23.6	22.3	19.2	**31.1**	**23.3**	23
31	19.5	20.6	19.4	15.2	16.5	17.2	17.2	20	20.5	21.6	24.7	25	25.4	28	26.8	21.5	16.1	14.2	10.9	8.3	8.7	10.4	10	8.7	28.0	17.8	24
HOURLY MAX	19.5	20.6	19.6	18.5	20.6	17.2	23.5	26.2	26.2	21.6	24.7	29.4	29.9	30.7	31.1	26.9	30.5	22.2	25.9	19.8	20.6	23.6	22.3	19.2			
HOURLY AVG	8.3	8.4	7.9	7.6	8.3	7.3	8.2	8.3	9.0	9.6	10.3	10.7	11.2	11.7	12.3	12.2	11.7	9.6	8.7	8.6	8.3	8.1	8.4	8.5			

STATUS FLAG CODES

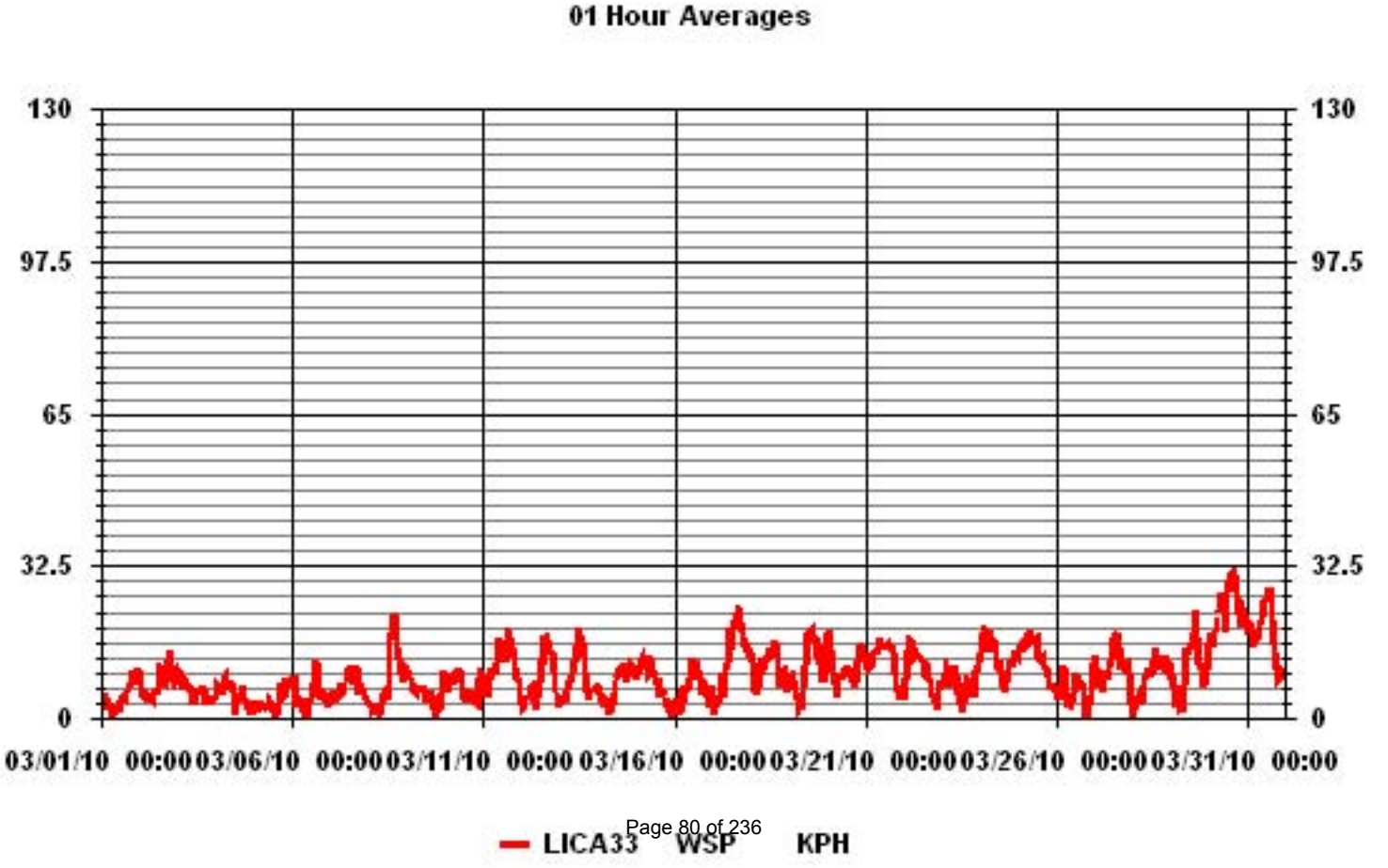
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



LAST CALIBRATION: September 24, 2009

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		31.1	KPH	@ HOUR(S)	14	ON DAY(S)	30
MAXIMUM 24-HR AVERAGE:		23.3	KPH			ON DAY(S)	30
CALMS (≤ 0 KPH)	0.40	%		OPERATIONAL TIME:		743	HRS
MONTHLY CALIBRATION TIME:	0	HRS		AMD OPERATION UPTIME		99.9	%
STANDARD DEVIATION:	5.68			MONTHLY AVERAGE:		9.30	KPH


01 Hour Averages
130
97.5
65
32.5
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 WSP KPH

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

MST

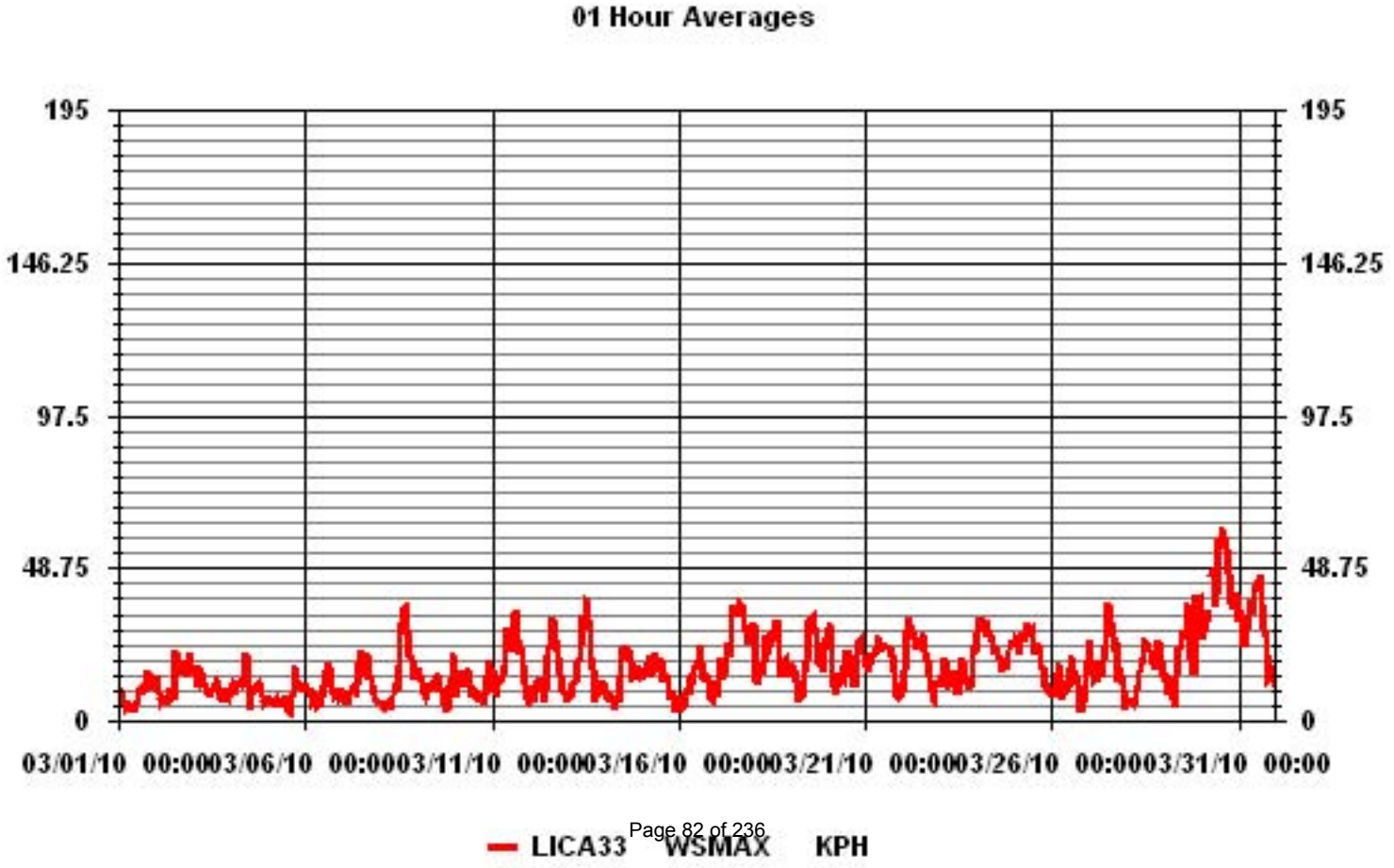
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	5.2	8.5	10.6	5.2	6.6	4	4.7	3.2	3.2	4.2	3.9	5.1	6.3	8.8	10	10.8	10	10.7	12.9	16	14.5	10.7	10.7	13.6	16
2	13.8	10	9.1	6.5	7.3	7	6.3	6.8	5.6	10	8.7	8.4	21.3	21.4	19.8	18.7	14.5	17	15.5	18.9	13.5	20.7	20.7	14.5	21.4
3	17	17.1	13.8	10.6	17.7	15.8	12	12.5	11.3	9.1	7.4	9	9.5	11.3	11.5	12.7	11.4	7.9	8	6	10.2	7.4	8.9	8	17.7
4	10	11.6	10.4	7.9	13	11.5	12.6	12.1	13.8	13.4	21.3	11.2	3.7	9.8	9.5	10.8	9.1	11.6	12.3	10.5	8.4	5.7	6.3	6.4	21.3
5	7.9	6.5	6.1	6.2	6.9	4.5	5.6	5.8	5.6	6.5	7.1	7	5.7	3.7	3.3	7.8	9.1	17.3	12.6	10.5	12.9	9.9	11.1	9.2	17.3
6	11.9	10.8	9.9	8.8	10.2	6.3	7	4.3	4.8	4.9	9	7.8	11	16.4	15.5	18.5	17.2	11.4	9	9.9	9.5	8	9.2	5.9	18.5
7	10.6	8.6	6.6	6.4	8.6	9.6	10.6	9.8	9.4	11.6	18.1	14.5	22.5	19.8	15.1	14.8	21.9	13.2	14.4	9.7	10	7.2	6.4	6.1	22.5
8	6.3	5.9	5	4.4	5.3	6.1	5.7	3.3	7.9	10.9	10.4	9.4	17.3	27.8	31.4	35.5	36.2	33	29.6	21.3	19.8	12.7	19	17.4	36.2
9	15.3	15.9	14.8	13	8.9	7.6	8.6	9.4	11.4	11.1	11.8	13.1	11.8	15.5	8.8	11.1	9.6	5.7	2.6	3.7	11.1	13.2	13	21.3	21.3
10	11.6	7.1	11.1	12.1	14.9	14.9	10.8	14	15.6	15.6	12.1	8.6	8.3	7.8	7.4	9	8.4	8.1	7.3	4.7	7.9	14.8	18.8	14.8	18.8
11	15.9	15.8	10.3	9.6	11.8	13.2	13.3	15	17.7	24.4	29.9	24.1	23.8	22.2	25.4	34.2	35.7	26.1	21.6	23.3	18.5	12.3	11.8	7.7	35.7
12	5.9	6.3	9.2	8.5	12.4	10.2	10.1	13.8	10.7	5.7	10	20.6	23.9	22.6	30.4	32.9	31	26.6	22.5	20.8	15.1	9.8	9.1	7.9	32.9
13	8.6	7.3	7.4	7.9	11.5	12.3	12.7	18.7	20	24	34	32.9	38.5	37.9	28.8	32.3	20.7	17.1	5.9	8.3	8.5	12.5	9.7	10.8	38.5
14	12.6	8.2	8	9.4	6.1	7.2	4.9	3.9	7.5	7.3	14.6	19.2	23.4	22.6	24.1	22	22.1	19.5	14.1	14.6	16.6	15.6	17.8	15	24.1
15	14.7	14.3	15.7	18.2	18.8	19.2	20.5	15.3	15.6	21.3	19.7	16.6	16.6	19.9	12	14.5	14.5	13.8	8.3	8	8.5	5.2	2.4	5	21.3
16	7.3	7.5	4.5	4.8	8.6	10.6	8.3	13.4	13.1	15.1	17.6	18.5	18	19.9	24.2	19.6	14	12.4	15	13.6	7.5	7.1	10.1	10.5	24.2
17	12.6	7.1	19.1	20.3	13.3	14.8	18.4	21.6	24.9	20	36	37.2	33.9	34	34	38	37.6	34.1	31.5	29.1	26	25.8	29.9	30.8	38
18	30.7	23.9	12.8	11.3	18.4	14.4	17.6	27.1	18.6	21.4	23.8	28.4	25.2	28.6	31.4	31.5	25.5	17.7	13.7	19.8	18.8	19.5	15.5	13.9	31.5
19	17.7	17.4	16.4	13.3	10.2	5.8	6.8	7.5	12.4	15.3	19.3	32.4	30.5	32.3	33	28.7	28.9	25.6	19	17.8	16.9	15.6	23.8	26.1	33
20	29.7	31.4	23.1	16.3	11.4	8.2	10.6	13.2	14.4	13.6	17.2	14	21.8	21.9	17.9	15.3	20.5	10.9	17.2	20.8	25.3	26	21.8	18.3	31.4
21	18.6	18.3	15.9	17.7	20.9	21	21.3	23.1	26.9	22.4	24	23.7	23.9	24.3	23.6	22.6	23.7	21.2	16.1	10.3	8.7	7.3	7.8	11.9	26.9
22	8.9	16.1	29.1	31.5	33.1	28.4	29.1	26.6	22.6	24.7	24.2	23.1	26.2	28.2	22.5	19.4	20.3	14.8	9.5	6.9	6.5	12.5	11.5	11.9	33.1
23	11.8	14.3	16.9	20.2	15.3	11.6	12	12.7	15.5	15.4	9.9	8.7	11	15.9	20	18.8	14	12.5	9.9	11.1	11.6	21.7	24	21.5	24
24	28	32.2	31.9	33.2	29.8	26.9	32.1	29.3	26.4	26.5	24.3	21.5	23.7	20.8	20.4	15.8	19.8	17.2	17.3	19.5	22.5	24.9	24.7	24.8	33.2
25	26.8	26.4	21	24.8	28.2	25.3	27.9	31.1	26.8	29.4	28.6	29.2	23.3	21.4	23.5	23.5	22.1	17.1	16.9	10.7	11.7	10.2	9	7.4	31.1
26	10.5	7.8	9.4	15	18.3	13.3	6.8	8.1	9.7	9.9	11.1	16.5	19.7	19.4	16.6	15.2	12.5	9.1	4	3.9	5.7	11.2	14.6	19.4	19.7
27	25.7	17.6	18.1	13.1	13.8	12.3	16	15.6	18.6	19.6	24.3	28.6	37.8	30	32.1	27.6	21.7	25.8	12.4	14	14.9	12.5	10.2	3.3	37.8
28	5.2	6.5	6.9	6.5	5.7	6.7	10.6	11.5	15.6	19.1	18.9	26.3	25.5	21.8	23	22.4	19	18.4	16.5	24	25.5	18	20.1	14.4	26.3
29	12	15.3	8.8	9.6	13.7	7.1	5.6	4.8	14.8	23.2	24.4	29.1	25.9	27.5	36.5	36.1	32.1	20	16.3	16	39.9	28.3	38.4	39	39.9
30	31.4	25.9	28.1	31.5	34.8	**N**	47.1	48.1	47.4	36	40.5	57.5	58.2	**62**	59.3	55.7	55.1	47.8	47.1	38.3	35.4	39.4	40.6	33	**62**
31	33.1	34.6	34.1	23.4	26.1	30.6	29	34.7	38.7	34.1	43.2	41	44.5	45.3	45.4	38	29.8	27.7	21.4	13.9	14.6	16.9	16.4	12	45.4
PEAK	33.1	34.6	34.1	33.2	34.8	30.6	47.1	48.1	47.4	36.0	43.2	57.5	58.2	62.0	59.3	55.7	55.1	47.8	47.1	38.3	39.9	39.4	40.6	39.0	

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

MAXIMUM INSTANTANEOUS READING	62	KPH	@ HOUR(S)	13
			ON DAY(S)	30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146.25
97.5
48.75
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 WSMAX KPH

LICA33
WSP / WDR Joint Frequency Distribution (Percent)

March 2010

Distribution By % Of Samples

Logger Id : 33
Site Name : LICA33
Parameter : WSP
Units : KPH

Wind Parameter : WDR
Instrument Height : 10 Meters

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	1.21	.94	1.48	2.82	3.36	2.69	2.82	2.28	2.55	3.90	3.23	1.07	.67	1.07	.94	.80	31.89
<	12.0	1.88	.67	.13	2.42	5.51	3.09	4.17	3.49	1.34	.80	5.92	3.49	1.34	2.96	1.61	1.88	40.78
<	20.0	.94	.40	.40	1.34	2.01	.53	3.09	2.82	.26	.00	1.88	1.88	1.88	1.48	2.01	2.01	23.01
<	29.0	.00	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00	.13	.80	2.42	.13	.00	3.63
<	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.53	.13	.00	.00	.67
>=	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	4.03	2.01	2.01	6.59	10.90	6.32	10.22	8.61	4.17	4.71	11.03	6.59	5.24	8.07	4.71	4.71	

Calm : .00 %

Total # Operational Hours : 743

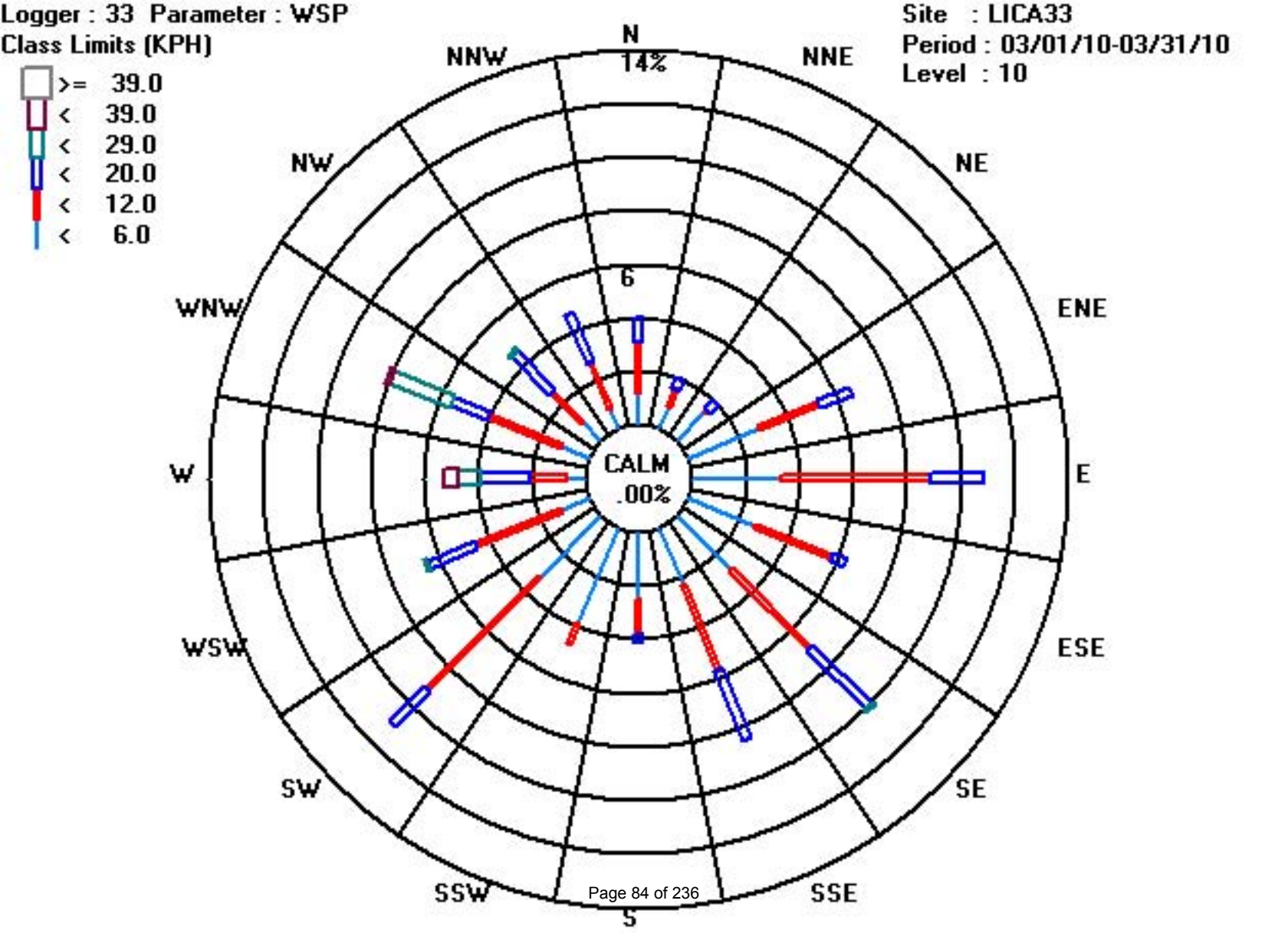
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	9	7	11	21	25	20	21	17	19	29	24	8	5	8	7	6	237
<	12.0	14	5	1	18	41	23	31	26	10	6	44	26	10	22	12	14	303
<	20.0	7	3	3	10	15	4	23	21	2		14	14	14	11	15	15	171
<	29.0							1					1	6	18	1		27
<	39.0													4	1			5
>=	39.0																	
	Totals	30	15	15	49	81	47	76	64	31	35	82	49	39	60	35	35	

Calm : .00 %

Total # Operational Hours : 743


Logger : 33 Parameter : WSP
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA33
Period : 03/01/10-03/31/10
Level : 10
N
14%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
6
CALM
.00%

Vector Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

VECTOR WIND DIRECTION (WD) hourly averages in degrees

MST

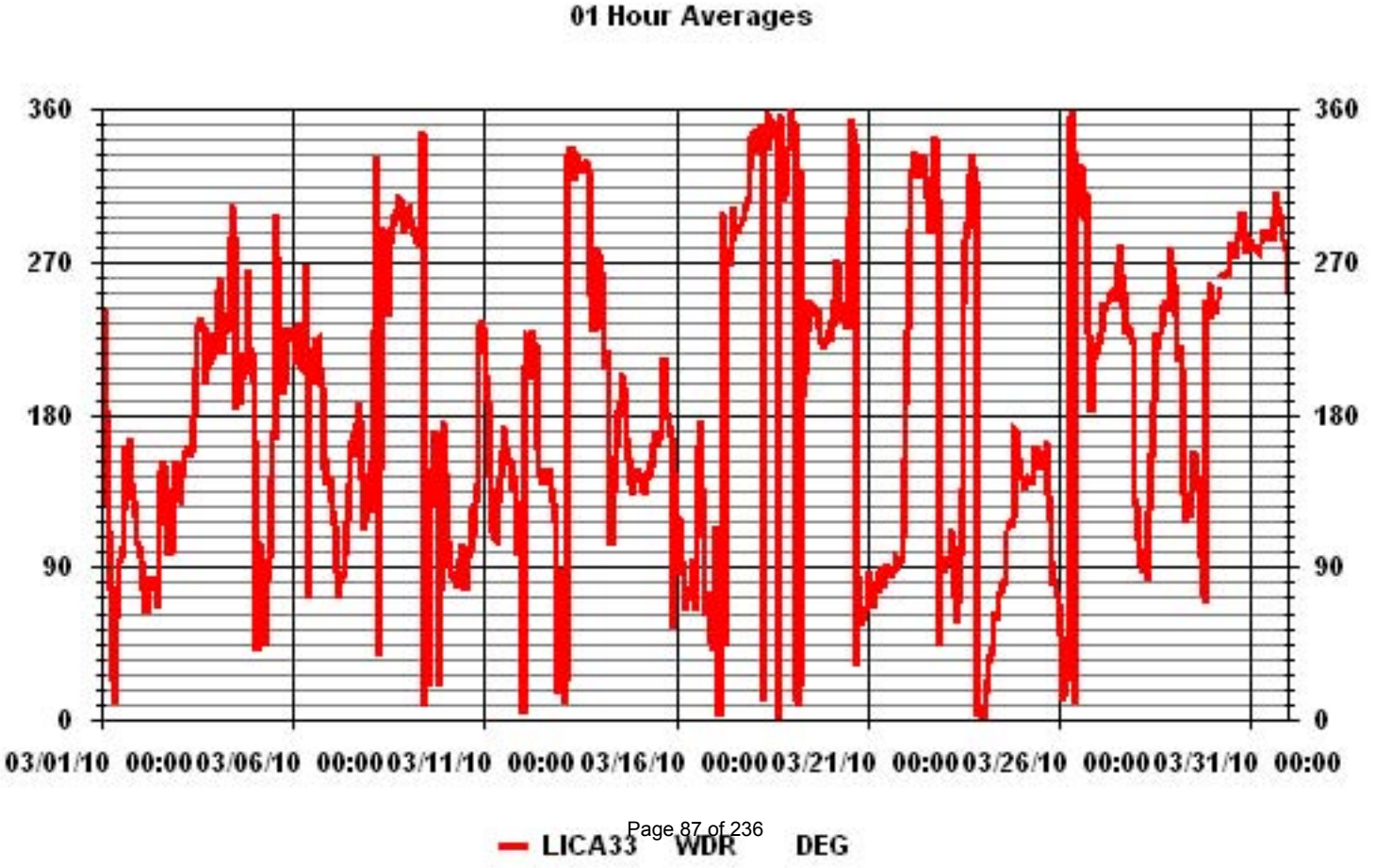
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	237	238	211	184	128	113	77	24	9	79	60	92	95	103	123	162	139	132	166	140	131	121	106	104	128	SE	24
2	97	94	78	70	63	80	81	84	81	83	85	65	116	146	153	151	116	99	99	114	98	136	153	141	110	ESE	24
3	132	131	143	151	156	158	162	154	158	170	179	208	231	232	237	228	233	197	210	207	210	229	213	220	180	S	24
4	221	254	261	216	224	227	231	229	240	284	304	286	183	193	186	188	200	216	213	204	265	221	218	200	233	SW	24
5	166	40	97	105	78	54	64	43	82	95	142	171	165	298	275	191	232	214	192	198	222	229	229	231	190	S	24
6	224	222	210	220	234	209	208	227	268	71	219	213	197	216	217	224	225	209	197	147	155	138	142	144	208	SSW	24
7	129	125	116	87	72	81	87	85	87	97	117	140	165	154	166	165	175	187	178	143	112	118	124	141	131	SE	24
8	145	153	122	230	332	37	66	147	290	285	274	251	237	281	291	296	296	301	310	305	305	287	290	300	292	WNW	24
9	301	296	292	291	287	283	282	288	294	347	7	39	22	22	148	124	143	170	155	20	76	159	177	146	297	WNW	24
10	137	106	91	84	87	84	77	87	95	101	104	93	76	82	95	99	124	109	128	139	215	232	236	233	109	ESE	24
11	221	205	189	144	111	108	108	107	133	132	142	159	174	161	156	152	152	140	141	136	131	97	107	127	142	SE	24
12	3	209	226	225	200	230	228	222	221	160	150	144	140	140	140	147	147	147	137	129	117	90	15	89	150	SSE	24
13	65	52	9	22	333	331	338	336	317	335	329	323	325	322	329	324	331	324	251	231	231	247	278	252	321	NW	24
14	275	265	231	217	207	218	157	102	115	134	156	161	182	188	205	197	179	167	155	139	133	140	146	139	170	SSE	24
15	148	146	142	135	132	142	146	143	153	149	163	170	161	165	170	183	214	211	179	179	174	167	54	147	155	SSE	24
16	105	108	120	85	93	79	64	70	79	74	95	79	64	107	161	177	138	110	63	61	70	44	75	40	91	E	24
17	60	114	58	2	58	299	109	43	278	267	278	282	302	289	288	288	291	295	295	300	304	308	325	344	298	WNW	24
18	346	348	343	334	338	351	10	348	351	359	335	349	347	343	351	350	0	357	340	307	309	335	336	359	345	NNW	24
19	358	341	353	12	8	325	20	191	195	204	228	248	241	239	239	243	242	232	225	223	219	222	225	228	242	WSW	24
20	227	235	232	247	263	271	238	235	244	243	235	230	297	326	355	349	341	31	86	68	56	59	67	65	283	W	24
21	83	87	75	66	68	79	78	87	90	85	78	90	90	83	90	84	87	88	97	96	94	95	107	154	85	E	24
22	186	230	289	320	324	335	330	321	319	333	329	334	322	309	290	289	287	309	344	321	308	43	87	97	318	NW	24
23	87	94	91	97	112	104	73	64	57	69	97	137	245	283	294	298	322	334	328	289	319	2	6	6	44	NE	24
24	0	8	15	24	33	38	43	62	62	59	74	75	80	80	83	111	115	114	114	119	172	171	156	148	69	ENE	24
25	144	143	136	141	143	142	138	142	147	161	149	149	151	154	157	159	165	133	119	95	79	83	72	76	140	SE	24
26	69	50	11	14	22	32	351	355	359	9	335	326	297	326	328	311	293	312	228	195	181	195	213	220	334	NNW	24
27	219	222	228	244	244	243	245	249	252	254	246	255	270	247	280	264	242	252	227	230	232	227	222	132	246	WSW	24
28	128	107	99	93	86	93	101	81	123	157	154	187	229	218	223	228	231	244	247	242	242	278	268	258	213	SSW	24
29	238	256	211	214	221	207	133	116	134	121	121	137	156	156	145	137	129	97	74	69	247	237	258	236	155	SSE	24
30	247	240	243	248	253	**N**	263	262	263	263	265	281	275	273	273	282	288	299	290	299	289	275	277	284	272	W	23
31	277	279	278	279	277	276	280	287	287	287	286	283	287	286	296	305	311	304	299	292	284	278	278	253	286	WNW	24
HOURLY AVG	358	348	353	334	338	351	351	355	359	359	335	349	347	343	355	350	341	357	344	321	319	335	336	359			

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

LAST CALIBRATION:	September 24, 2009
DECLINATION :	19 DEGREES FROM MAGNETIC NORTH

MONTHLY CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	743	HRS
STANDARD DEVIATION	91.51		AMD OPERATION UPTIME	99.9	%
			MONTHLY AVERAGE	222	DEG


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 WDR DEG

Standard Deviation Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *PORTABLE SITE*

MARCH 2010

STANDARD DEVIATION WIND DIRECTION (STDWDIR) hourly averages in degrees

MST

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
DAY																								
1	14	13	15	17	14	37	6	37	44	12	21	27	12	14	12	18	12	5	12	10	4	6	4	3
2	5	8	7	8	4	5	6	8	6	8	5	6	11	12	13	14	10	5	5	5	8	18	12	6
3	7	5	9	11	14	14	13	12	13	12	22	22	11	13	17	16	10	21	22	23	16	15	22	16
4	8	6	10	14	10	5	4	5	13	8	11	14	40	17	20	20	28	13	20	20	23	11	26	37
5	20	11	13	14	11	14	22	47	27	11	18	22	29	78	51	30	9	23	25	21	11	7	5	4
6	7	6	22	20	14	21	12	13	22	66	18	19	19	17	11	6	6	17	17	13	13	11	26	13
7	12	6	9	10	8	9	7	6	8	8	13	11	14	13	14	13	12	19	11	11	5	6	7	5
8	12	9	30	25	31	22	48	49	41	16	14	20	16	10	10	10	9	9	10	10	10	6	8	9
9	9	8	7	6	5	6	4	6	10	14	18	38	27	42	32	14	11	15	26	6	45	35	18	10
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11	14	22	17	11	5	4	4	6	9	10	12	13	14	15	13	13	12	9	8	6	5	5	5	21
12	38	21	14	19	22	8	7	13	17	23	16	16	12	14	9	12	11	11	5	6	5	10	34	45
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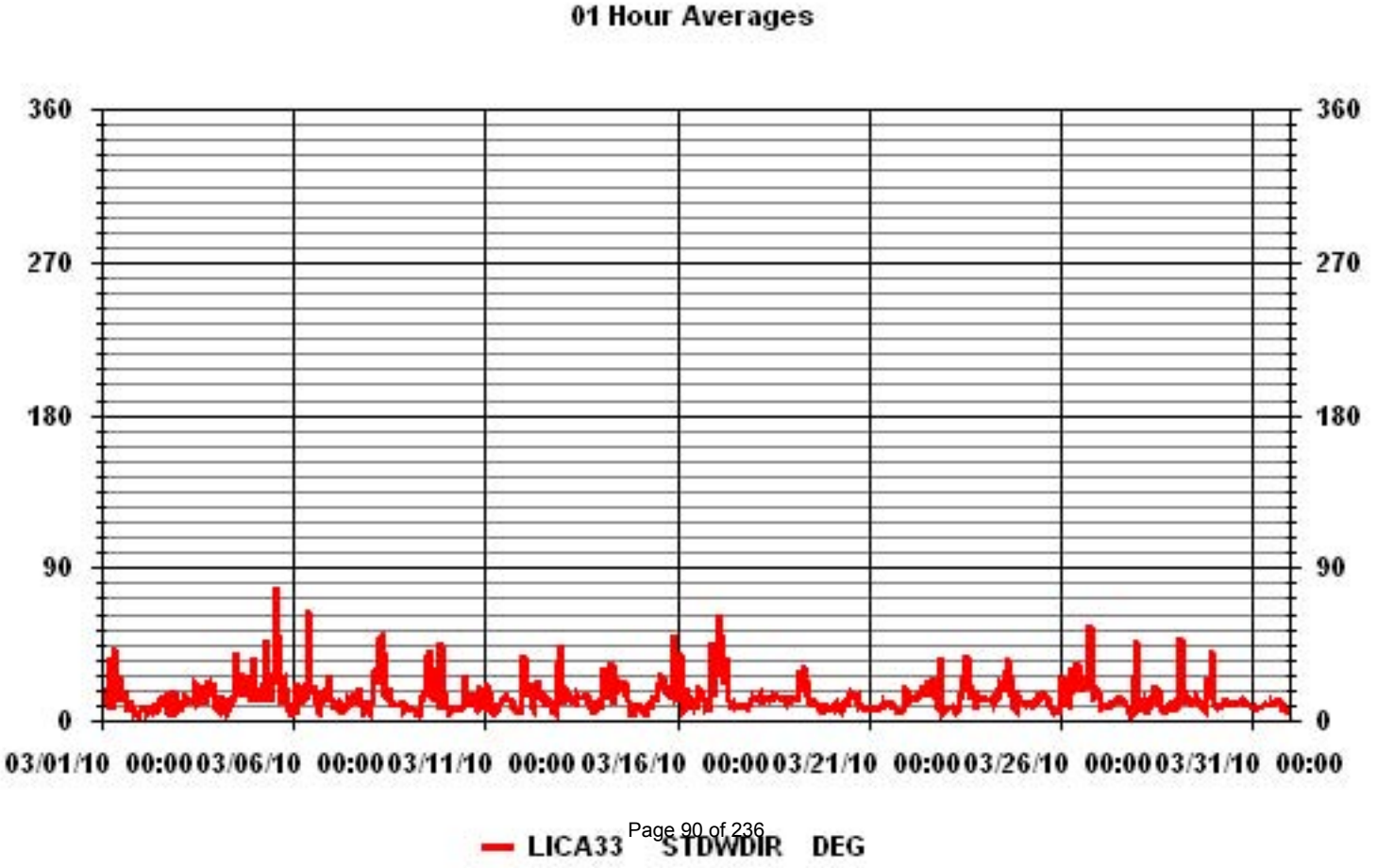
14	7	14	31	13	22	21	23	34	10	21	17	18	23	22	21	24	15	13	12	4	4	4	8	5
15	10	8	6	5	5	9	10	9	13	12	14	13	18	22	27	26	20	18	18	15	14	21	51	12
16	13	11	41	15	6	7	19	11	15	11	9	10	10	21	14	15	11	13	8	9	5	28	46	14
17	45	39	62	26	51	27	21	37	13	9	10	8	10	8	8	8	8	9	8	9	8	9	12	15
18	13	13	13	14	16	12	12	14	14	12	14	13	16	14	15	13	13	13	13	13	11	13	14	12
19	11	13	13	11	17	28	28	32	21	22	15	12	11	11	12	11	9	7	5	5	9	9	6	6
20	7	8	7	8	10	7	7	5	8	10	8	12	16	15	13	16	13	14	8	9	7	7	8	7
21	7	7	7	7	7	8	7	8	8	11	9	10	11	11	11	9	8	7	5	5	6	8	21	14
22	19	11	12	12	14	15	13	14	15	18	17	19	20	23	13	20	24	24	14	8	6	38	6	7
23	6	7	8	8	8	8	6	8	7	13	16	26	34	39	26	16	18	13	15	7	12	14	12	12
24	13	13	13	12	12	14	9	11	15	13	21	20	17	24	30	36	28	15	9	7	17	13	13	12
25	11	10	9	10	11	11	9	9	12	14	13	13	15	16	16	15	14	10	8	6	5	6	5	5
26	15	26	11	11	10	10	15	32	23	28	33	33	17	21	26	19	22	22	56	37	14	14	21	12
27	17	8	9	8	8	8	8	9	10	11	12	12	13	12	13	12	12	10	5	3	3	4	27	47
28	12	12	8	9	13	11	5	6	9	15	14	20	13	19	10	7	6	7	6	7	9	10	7	5
29	9	7	16	50	11	17	10	13	12	10	10	13	15	14	12	10	8	7	7	24	24	18	41	13
30	9	8	9	8	9	**N**	11	11	11	10	11	10	10	11	10	11	11	12	11	11	10	10	9	9
31	8	8	8	7	8	8	9	9	10	10	10	12	10	10	10	12	12	11	11	6	6	6	6	5

STATUS FLAG CODES

S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	-MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

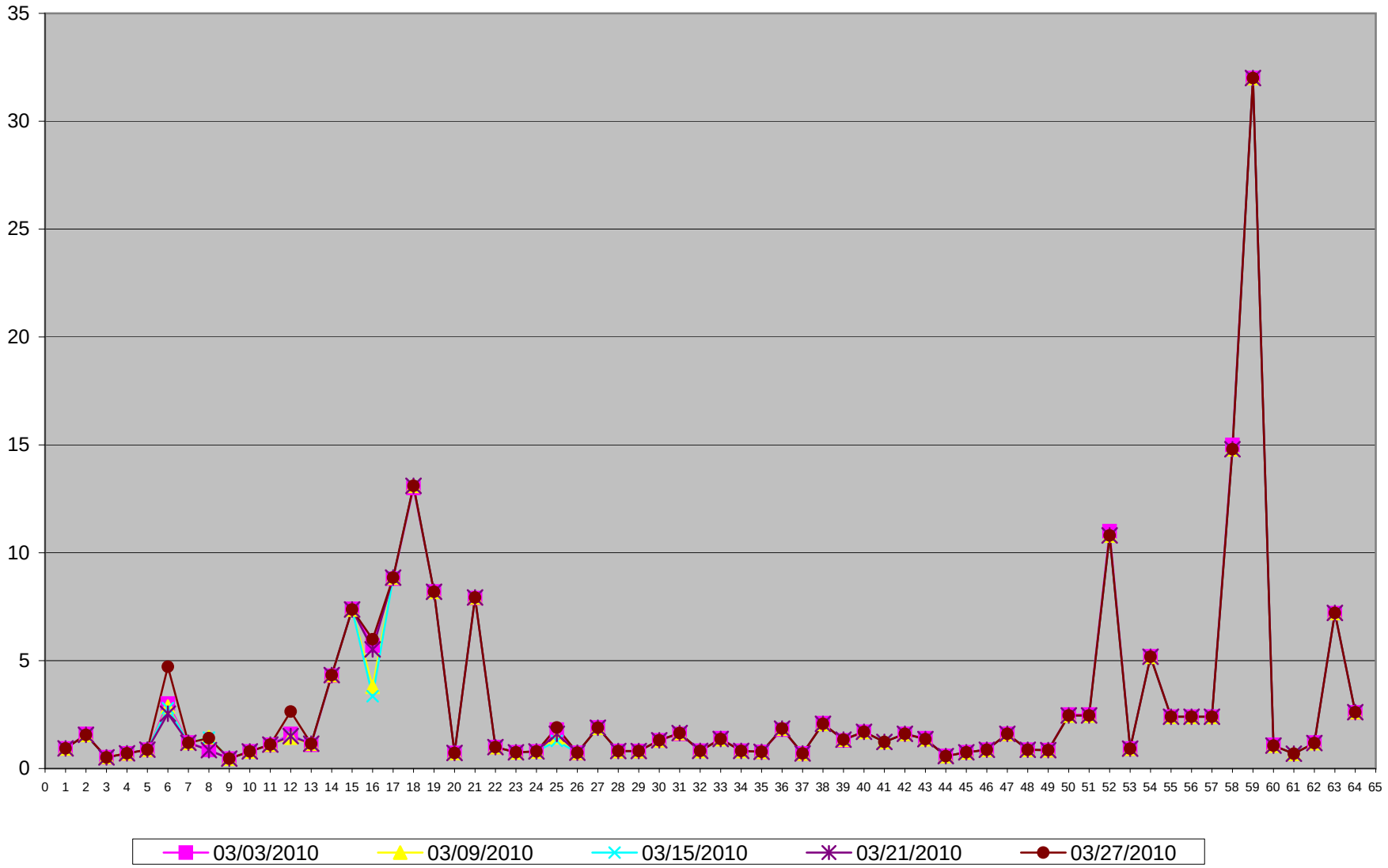
LAST CALIBRATION: September 24, 2009

CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 743 HRS


01 Hour Averages
360
270
180
90
0
03/01/10 00:00
03/06/10 00:00
03/11/10 00:00
03/16/10 00:00
03/21/10 00:00
03/26/10 00:00
03/31/10 00:00
LICA33 STDWDIR DEG

Volatile Organics

Volatile Organics in ug/m3 Site: LICA - Portable Site



1	2,2,4-Trimethylpentane	33	1,1,2,2-Tetrachloroethane
2	Carbon Disulfide	34	cis-1,3-Dichloropropene
3	Propene	35	trans-1,3-Dichloropropene
4	Vinyl Acetate	36	1,2-Dichloropropane
5	Vinyl Bromide	37	Bromomethane
6	Dichlorodifluoromethane (FREON 12)	38	Bromoform
7	1,2-Dichlorotetrafluoroethane	39	Bromodichloromethane
8	Chloromethane	40	Dibromochloromethane
9	Vinyl Chloride	41	Heptane
10	Chloroethane	42	Trichloroethylene
11	1,3-Butadiene	43	Tetrachloroethylene
12	Trichlorofluoromethane (FREON 11)	44	Benzne
13	Trichlorotrifluoroethane	45	Toluene
14	Ethanol	46	Ethylbenzeze
15	2-Propanol	47	p+m-Xylene
16	2-Propanone	48	o-Xylene
17	Wethyl Ethyl Ketone (2-Butanone)	49	Styrene
18	Methyl Isobutyl Ketone	50	1,3,5-Trimethylbenzene
19	Methyl Butyl Ketone (2-Hexanone)	51	1,2,4-Trimethylbenzene
20	Methyl t-butyl ether (MTBE)	52	4-ethyltoluene
21	Ethyl Acetate	53	Chlorobenzene
22	1,1-Dichloroethylene	54	Benzyl chloride
23	cis-1,2-Dichloroethylene	55	1,3-Dichlorobenzene
24	trans-1,2-Dichloroethylene	56	1,4-Dichlorobenzene
25	Methylene Chloride (Dichloromethane)	57	1,2-Dichlorobenzene
26	Chloroform	58	1,2,4-Trichlorobenzene
27	Carbon Tetrachloride	59	Hexachlorobutadiene
28	1,1-Dichloroethane	60	Hexane
29	1,2-Dichloroethane	61	Cyclohexane
30	Ethylene Dibromide	62	Tetrahydrofuran
31	1,1,1-Trichloroethane	63	1,4-Dioxane
32	1,1,2-Trichloroethane	64	Xylene (Total)

Polycyclic Aromatic Hydrocarbons

Polycyclic Aromatic Hydrocarbons (PAHs) Results for March 2010

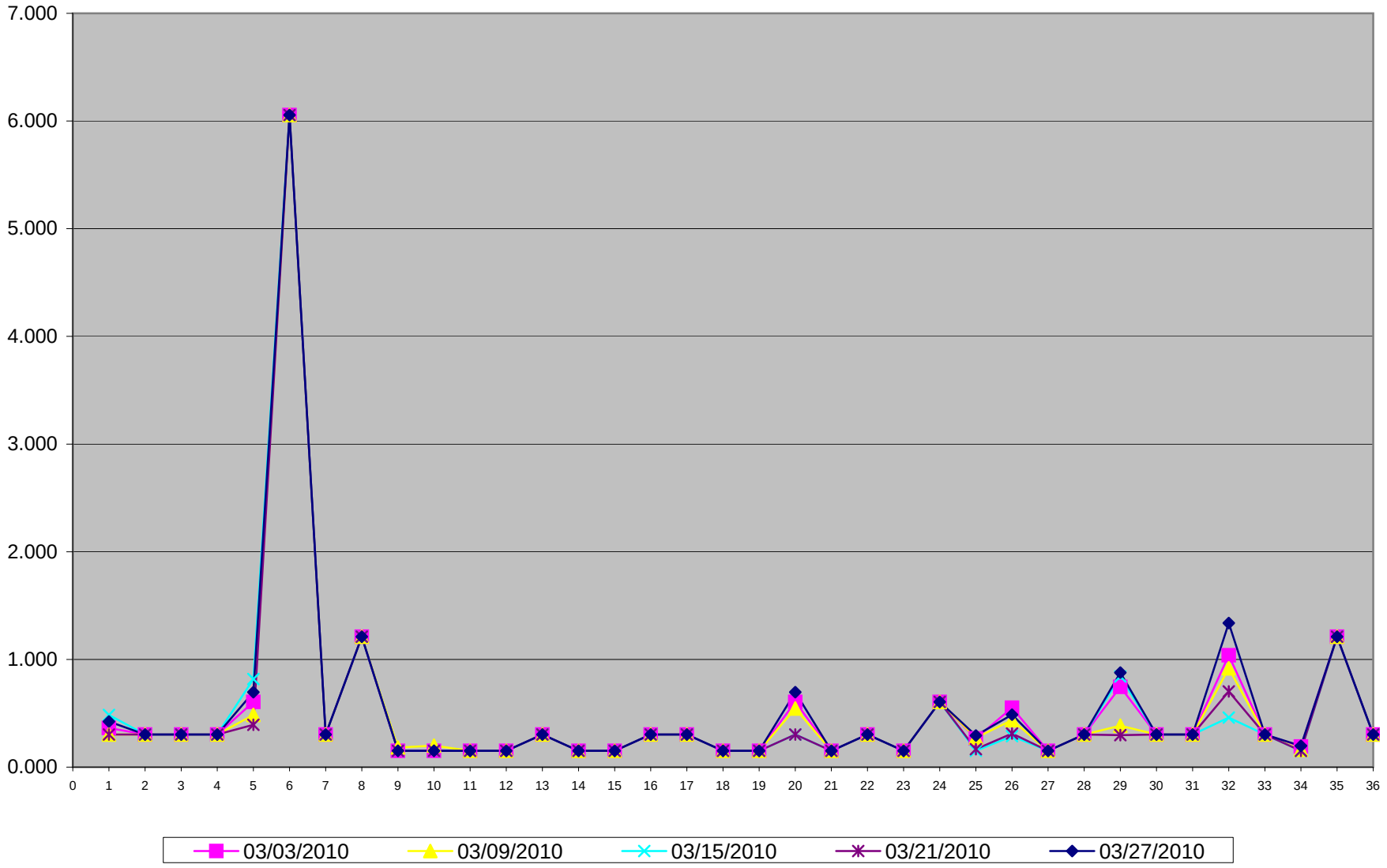
LICA- Portable Site

Unit: ng/m3

	PAHs	03/03/2010	03/09/2010	03/15/2010	03/21/2010	03/27/2010
	Sample Volume (unit: m3)	330.29	330.30	330.29	330.30	330.29
1	1-Methylnaphthalene	0.363	0.303	0.484	0.303	0.424
2	1-Methylphenanthrene	0.303	0.303	0.303	0.303	0.303
3	2-Chloronaphthalene	0.303	0.303	0.303	0.303	0.303
4	2-Methlyanthracene	0.303	0.303	0.303	0.303	0.303
5	2-Methylnaphthalene	0.606	0.484	0.817	0.394	0.696
6	3-Methylcholanthrene	6.055	6.055	6.055	6.055	6.055
7	7,12-Dimethylbenzo(a)anthracene	0.303	0.303	0.303	0.303	0.303
8	9,10-Dimethylanthracene	1.211	1.211	1.211	1.211	1.211
9	Acenaphthene	0.151	0.182	0.151	0.151	0.151
10	Acenaphthylene	0.151	0.200	0.151	0.151	0.151
11	Anthracene	0.151	0.151	0.151	0.151	0.151
12	Benzo(a)anthracene	0.151	0.151	0.151	0.151	0.151
13	Benzo(a)fluorene	0.303	0.303	0.303	0.303	0.303
14	Benzo(a)pyrene	0.151	0.151	0.151	0.151	0.151
15	Benzo(b)fluoranthene	0.151	0.151	0.151	0.151	0.151
16	Benzo(b)fluorene	0.303	0.303	0.303	0.303	0.303
17	Benzo(e)pyrene	0.303	0.303	0.303	0.303	0.303
18	Benzo(g,h,I)perylene	0.151	0.151	0.151	0.151	0.151
19	Benzo(k)fluoranthene	0.151	0.151	0.151	0.151	0.151
20	Biphenyl	0.606	0.545	0.303	0.303	0.696
21	Chrysene	0.151	0.151	0.151	0.151	0.151
22	Coronene	0.303	0.303	0.303	0.303	0.303
23	Dibenz(a,h)anthracene	0.151	0.151	0.151	0.151	0.151
24	Dibenzo(a,e)pyrene	0.606	0.606	0.606	0.606	0.606
25	Fluoranthene	0.266	0.272	0.151	0.167	0.294
26	Fluorene	0.551	0.436	0.288	0.312	0.487
27	Indeno(1,2,3-cd)pyrene	0.151	0.151	0.151	0.151	0.151
28	m-Terphenyl	0.303	0.303	0.303	0.303	0.303
29	Naphthalene	0.745	0.384	0.842	0.297	0.878
30	o-Terphenyl	0.303	0.303	0.303	0.303	0.303
31	Perylene	0.303	0.303	0.303	0.303	0.303
32	Phenanthrene	1.038	0.917	0.460	0.702	1.338
33	p-Terphenyl	0.303	0.303	0.303	0.303	0.303
34	Pyrene	0.191	0.160	0.151	0.151	0.197
35	Quinoline	1.211	1.211	1.211	1.211	1.211
36	Tetralin	0.303	0.303	0.303	0.303	0.303

Note: - values were calculated by the formula of [reading (ug) x 1000 / sample volume (m3)].
- Where the analytical results are less than the minimum detection limit (MDL), the MDL has been used in calculations.
- See analytical for details.

PAHs in ng/m3 Site: LICA - Portable Site



1	1-Methylnaphthalene
2	1-Methylphenanthrene
3	2-Chloronaphthalene
4	2-Methlyanthracene
5	2-Methylnaphthalene
6	3-Methylcholanthrene
7	7,12-Dimethylbenzo(a)anthracene
8	9,10-Dimethylanthracene
9	Acenaphthene
10	Acenaphthylene
11	Anthracene
12	Benzo(a)anthracene
13	Benzo(a)fluorene
14	Benzo(a)pyrene
15	Benzo(b)fluoranthene
16	Benzo(b)fluorene
17	Benzo(e)pyrene
18	Benzo(g,h,I)perylene
19	Benzo(k)fluoranthene
20	Biphenyl
21	Chrysene
22	Coronene
23	Dibenz(a,h)anthracene
24	Dibenzo(a,e)pyrene
25	Fluoranthene
26	Fluorene
27	Indeno(1,2,3-cd)pyrene
28	m-Terphenyl
29	Naphthalene
30	o-Terphenyl
31	Perylene
32	Phenanthrene
33	p-Terphenyl
34	Pyrene
35	Quinoline
36	Tetralin

Calibration Reports

Sulphur Dioxide

SO_2 Calibration Report

Station Information

Calibration Date	March 4, 2010		Previous Calibration	February 3, 2010	
Company	**Lakeland Community and Industry Association**				
Plant / Location	**Portable / Devon Wellsite 13-16-62-5 W4M**				
Start Time (MST)	11:50		End Time (MST)	16:51	
Reason:	As Found/ Pre Maintenance				
Barometric Pressure	710	mmHg	Station Temperature	23	Deg C
Cal Gas	52.2	ppm	Cal Gas Expiry date	12/19/2010	
DAS Output Voltage	0 - 10	Volts			

Equipment Information

Analyzer Make / Model:	API 100E	S/N :	467	Method:	UV absorbtion
Converter Make / Model:	-	S/N :	-		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO 717		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range				0 - 500	ppb			
Sample Flow / Box Temp	585	ccm	32.9	Deg C	584	ccm	33.3	Deg C
HVPS / Lamp Setting	560		2741		580		3532	
PMT / RxCell Temp	8.1	Deg C	50.0	Deg C	8.1	Deg C	50.0	Deg C
Converter / IZS Temp	NA	Deg C	45.0	Deg C	NA	Deg C	45.0	Deg C
Offset / Slope	42.9		1.052		48		1.003	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4997	0	0	2	N/A
4924	76.6	800	793	1.0083
		Sum of Least Squares		#DIV/0!
		New Correction Factor		0.0000

	Before Calibration	After Calibration
Auto Zero	-	-
Auto Span	-	-
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		-1.0%

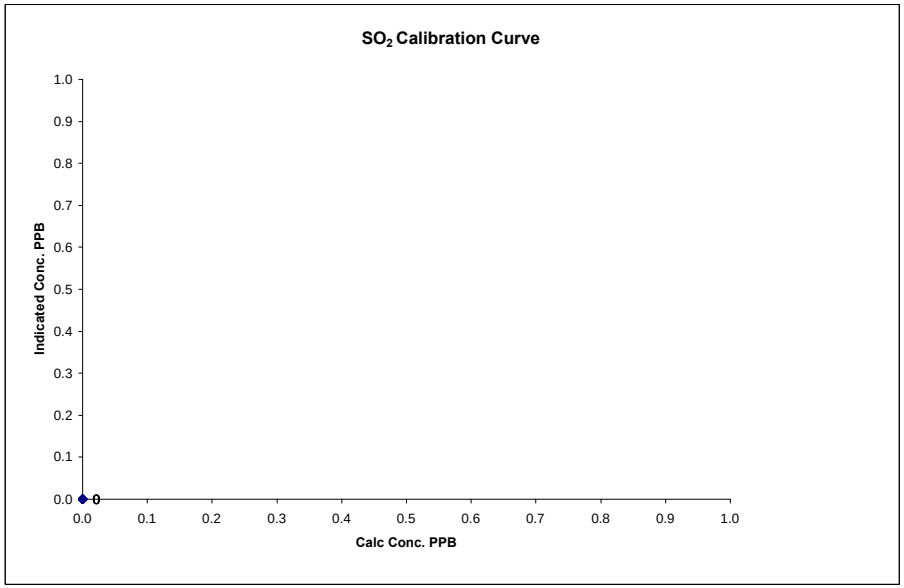
Calibration Performed by: Shea Beaton

SO_2 Calibration Curve

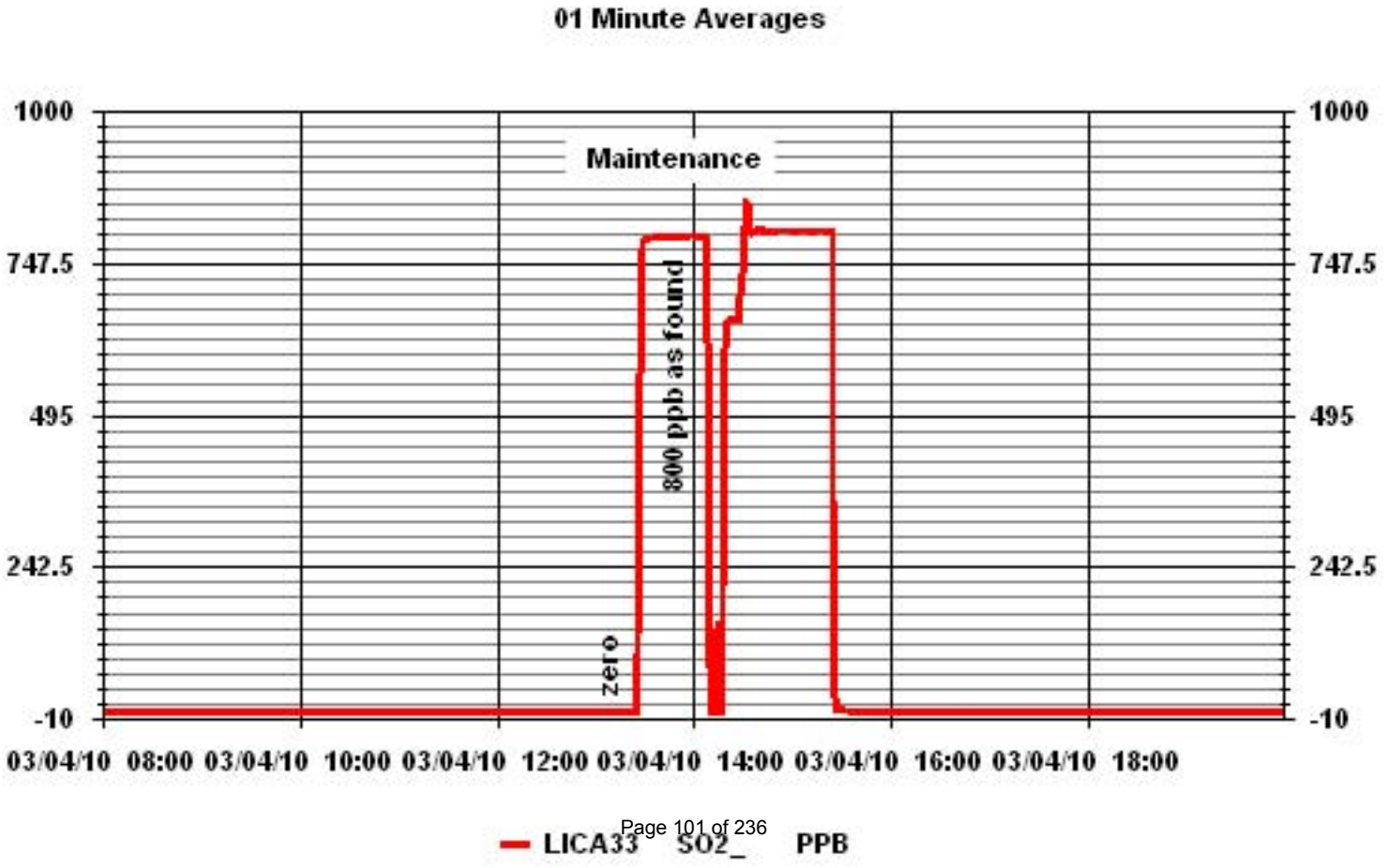
Calibration Date	March 4, 2010		
Company	**Lakeland Community and Industry Association**		
Plant / Location	**Portable / Devon Wellsite 13-16-62-5 W4M**		
Start Time (MST)	11:50	End Time (MST)	16:51

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
0	0	#DIV/0!
0	0	#DIV/0!
0	0	#DIV/0!

Correlation Coefficient	(≥ 0.995)	#DIV/0!
Slope	(0.85 to 1.15)	#DIV/0!
Intercept	(± 3% F.S.)	#DIV/0!



Notes: Following the as found points. The lamp was peaked and a factory cal was performed. The zero and span values were adjusted; full cal to be performed tomorrow.


01 Minute Averages
1000
747.5
495
242.5
-10
Maintenance
800 ppb as found
zero
03/04/10 08:00
03/04/10 10:00
03/04/10 12:00
03/04/10 14:00
03/04/10 16:00
03/04/10 18:00
LICA33 SO2_ PPB

SO_2 Calibration Report

Station Information

Calibration Date	March 5, 2010		Previous Calibration	February 3, 2010	
Company	**Lakeland Community and Industry Association**				
Plant / Location	**Portable / Devon Wellsite 13-16-62-5 W4M**				
Start Time (MST)	10:35		End Time (MST)	13:54	
Reason:	Monthly Calibration				
Barometric Pressure	713	mmHg	Station Temperature	24	Deg C
Cal Gas	52.2	ppm	Cal Gas Expiry date	12/19/2010	
DAS Output Voltage	0 - 10	Volts			

Equipment Information

Analyzer Make / Model:	API 100E	S/N :	467	Method:	UV absorbtion
Converter Make / Model:	-	S/N :	-		
Calibrator Make / Model:	api 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO 717		
Flow Meter:	api 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 500	ppb				
Sample Flow / Box Temp	589	ccm	32.4	Deg C	587	ccm	32.6	Deg C
HVPS / Lamp Setting	580		3539		580		3535	
PMT / RxCell Temp	8.1	Deg C	50.0	Deg C	8.1	Deg C	50.0	Deg C
Converter / IZS Temp	NA	Deg C	45.0	Deg C	NA	Deg C	45.0	Deg C
Offset / Slope	48		1.003		48		1.003	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4996	0	0	0	N/A
4923	76.6	800	798	1.0022
4960	38.3	400	396	1.0101
4981	19.2	200	199	1.0072
4998	0	0	0	N/A
			Sum of Least Squares	0.2393
			New Correction Factor	1.0022

	Before Calibration	After Calibration
Auto Zero	0.5	0.2
Auto Span	360	361
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		-

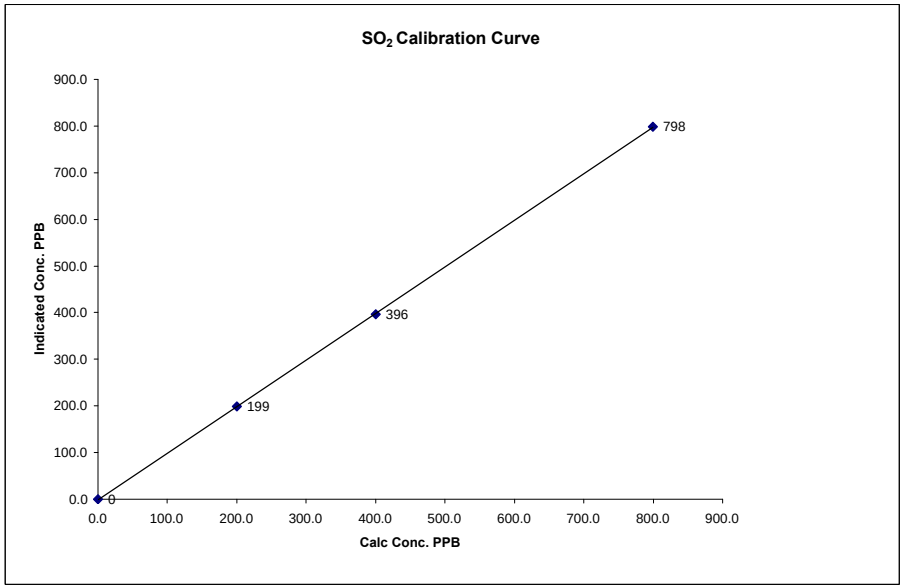
Calibration Performed by: Shea Beaton

SO_2 Calibration Curve

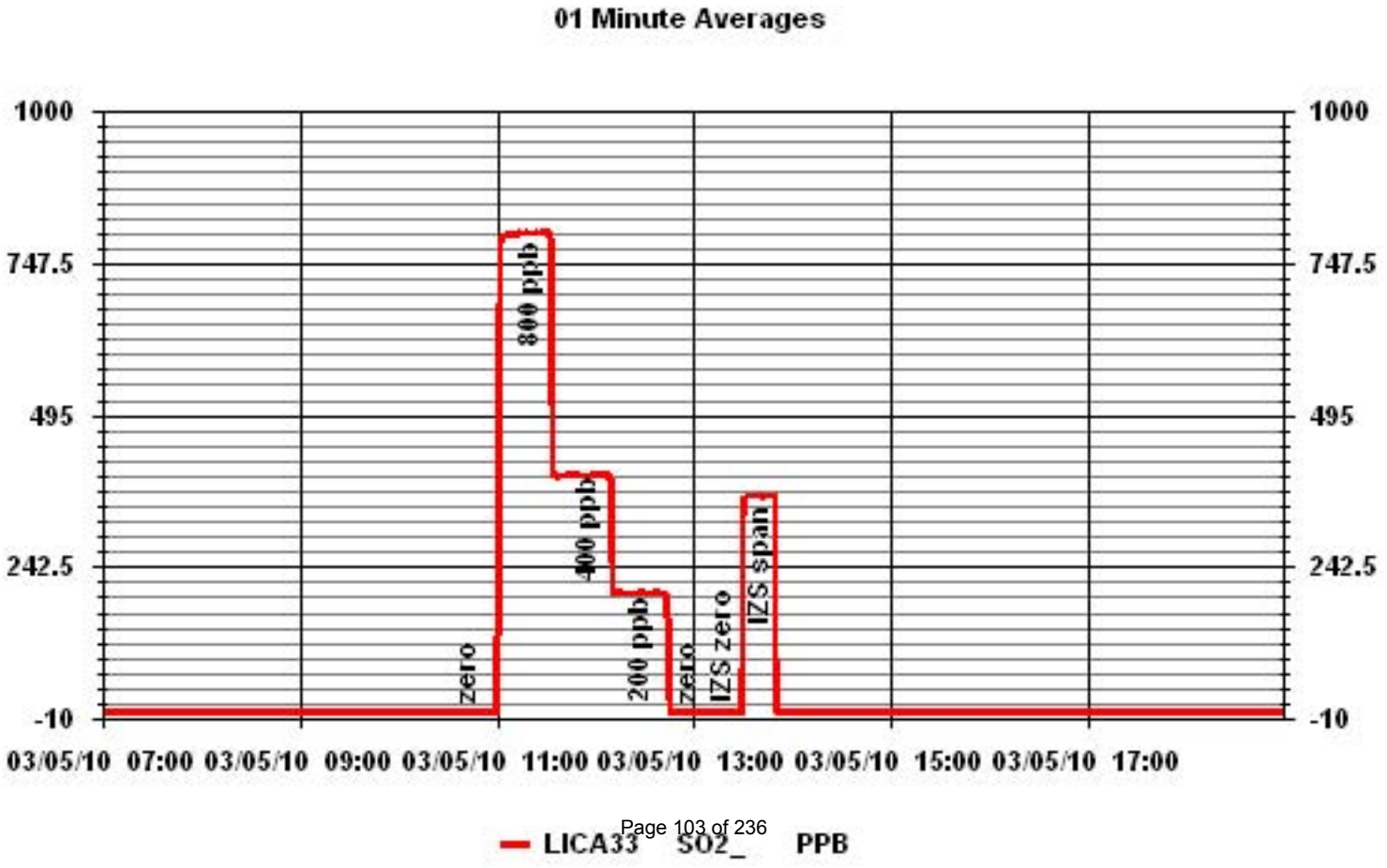
Calibration Date	March 5, 2010				
Company	**Lakeland Community and Industry Association**				
Plant / Location	**Portable / Devon Wellsite 13-16-62-5 W4M**				
Start Time (MST)	10:35		End Time (MST)	13:54	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
200	199	1.0072
400	396	1.0101
800	798	1.0022

Correlation Coefficient	(≥ 0.995)	0.999982
Slope	(0.85 to 1.15)	0.997773
Intercept	(± 3% F.S.)	-1.019303



Notes:


01 Minute Averages
1000
747.5
495
242.5
-10
zero
800 ppb
400 ppb
200 ppb
zero
IZS zero
IZS span
03/05/10 07:00
03/05/10 09:00
03/05/10 11:00
03/05/10 13:00
03/05/10 15:00
03/05/10 17:00
LICA33 SO2_ PPB

Hydrogen Sulphide

H_2S Calibration Report

Station Information

Calibration Date	March 4, 2010		Previous Calibration	February 3, 2010	
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	Portable/ Devon Wellsite 13-16-62-5-W4M				
Start Time (MST)	11:20		End Time (MST)	17:08	
Reason:	As Found/ Pre Maintenance				
Barometric Pressure	710	mmHg	Station Temperature	23	Deg C
Cal Gas	10.8	ppm	Cal Gas Expiry date	06/22/2010	
DAS Output Voltage	0 - 1	Volts			

Equipment Information

Analyzer Make / Model:	API 101E	S/N :	509	Method:	Fluorescent
Converter Make / Model:	Internal	S/N :	N/A		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO717		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range				0 - 100 ppb				
Sample Flow / Box Temp	548	ccm	31.8	Deg C	547	ccm	32.5	Deg C
HVPS / Lamp Setting	516		2679		528		2742	
PMT / RxCell Temp	7.9	Deg C	50	Deg C	7.9	Deg C	50	Deg C
Converter / IZS Temp	315.9	Deg C	45	Deg C	315.8	Deg C	45	Deg C
Offset / Slope	42.1		1.044		45.3		0.0961	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4997	0	0	0	N/A
4961	37	80	81	0.9871
			Sum of Least Squares	0.9871
			New Correction Factor	0.9871

	Before Calibration	After Calibration
Auto Zero	0.7	-
Auto Span	61	-
Sample Lines Connected		YES
Percent Change from Previous Calibration		1.3%

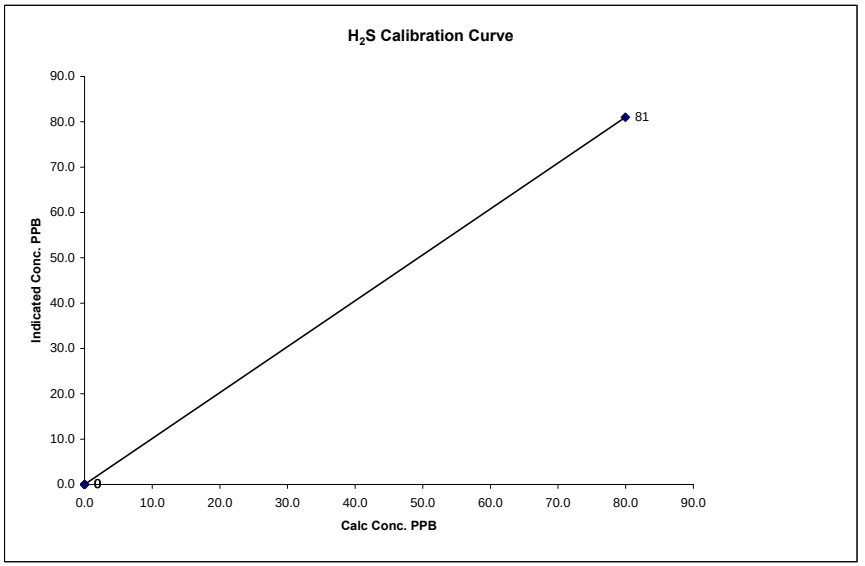
Calibration Performed by: Shea Beaton

H_2S Calibration Curve

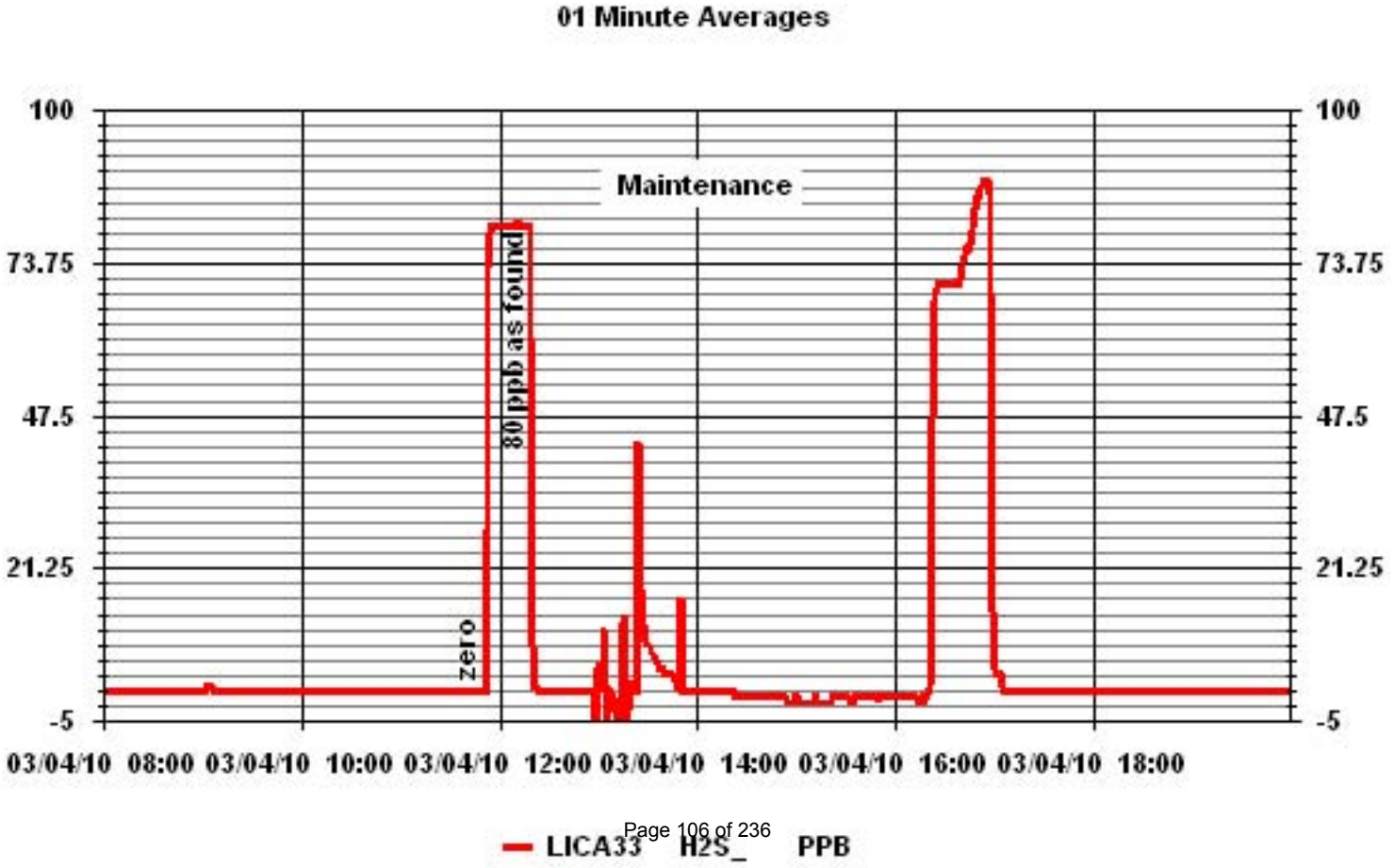
Calibration Date	March 4, 2010		
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION		
Plant / Location	Portable/ Devon Wellsite 13-16-62-5-W4M		
Start Time (MST)	11:20	End Time (MST)	17:08

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
0	0	#DIV/0!
0	0	#DIV/0!
80	81	0.9871

Correlation Coefficient	(≥ 0.995)	1.000000
Slope	(0.85 to 1.15)	1.013108
Intercept	(± 3% F.S.)	0.000000



Notes: Following the A/F points, the SO2 scrubber material was replaced, the lamp was peaked and a factory cal was done. The span and offset were adjusted, full cal will be done tomorrow.


01 Minute Averages
100
73.75
47.5
21.25
-5
Maintenance
80 ppb as found
zero
03/04/10 08:00
03/04/10 10:00
03/04/10 12:00
03/04/10 14:00
03/04/10 16:00
03/04/10 18:00
LICA33 H2S_ PPB

H_2S Calibration Report

Station Information

Calibration Date	March 5, 2010		Previous Calibration	February 3, 2010	
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	Portable/ Devon Wellsite 13-16-62-5-W4M				
Start Time (MST)	8:10		End Time (MST)	11:20	
Reason:	Monthly Calibration				
Barometric Pressure	713	mmHg	Station Temperature	23	Deg C
Cal Gas	10.8	ppm	Cal Gas Expiry date	06/22/2010	
DAS Output Voltage	0 - 1	Volts			

Equipment Information

Analyzer Make / Model:	API 101E	S/N :	509	Method:	Fluorescent
Converter Make / Model:	Internal	S/N :	N/A		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO717		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 100	ppb				
Sample Flow / Box Temp	553	ccm	32.3	Deg C	550	ccm	32.4	Deg C
HVPS / Lamp Setting	528		2742		528		2740	
PMT / RxCell Temp	7.9	Deg C	50	Deg C	7.9	Deg C	50	Deg C
Converter / IZS Temp	315.8	Deg C	45	Deg C	313.9	Deg C	45	Deg C
Offset / Slope	45.3		0.961		45.3		0.966	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4997	0	0	0	N/A
4960	37	80	79	N/A
4960	37	80	80	0.9996
4976	20.8	45	45	0.9990
4985	11.6	25	25	1.0029
4998	0	0	0	N/A
			Sum of Least Squares	0.9997
			New Correction Factor	0.9996

	Before Calibration	After Calibration
Auto Zero	0.4	0.2
Auto Span	58	58
Sample Lines Connected		YES
Percent Change from Previous Calibration		-

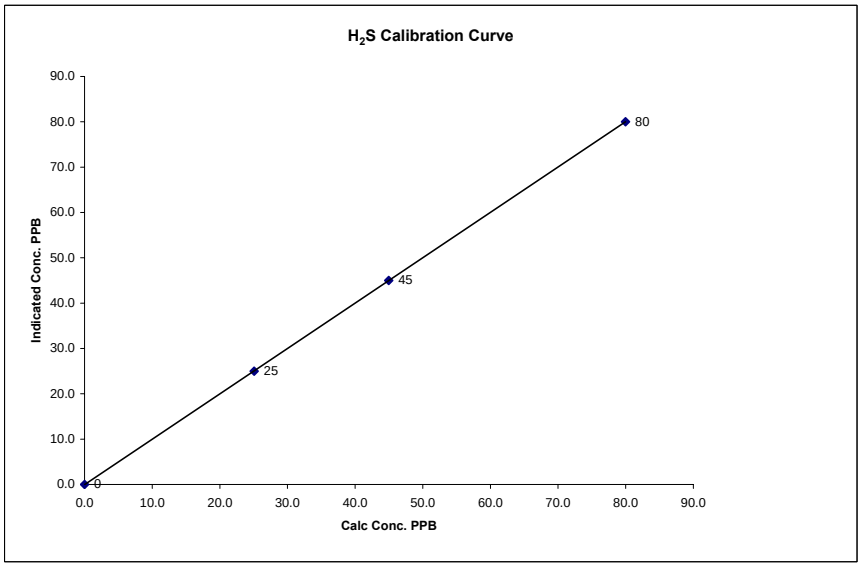
Calibration Performed by: Shea Beaton

H_2S Calibration Curve

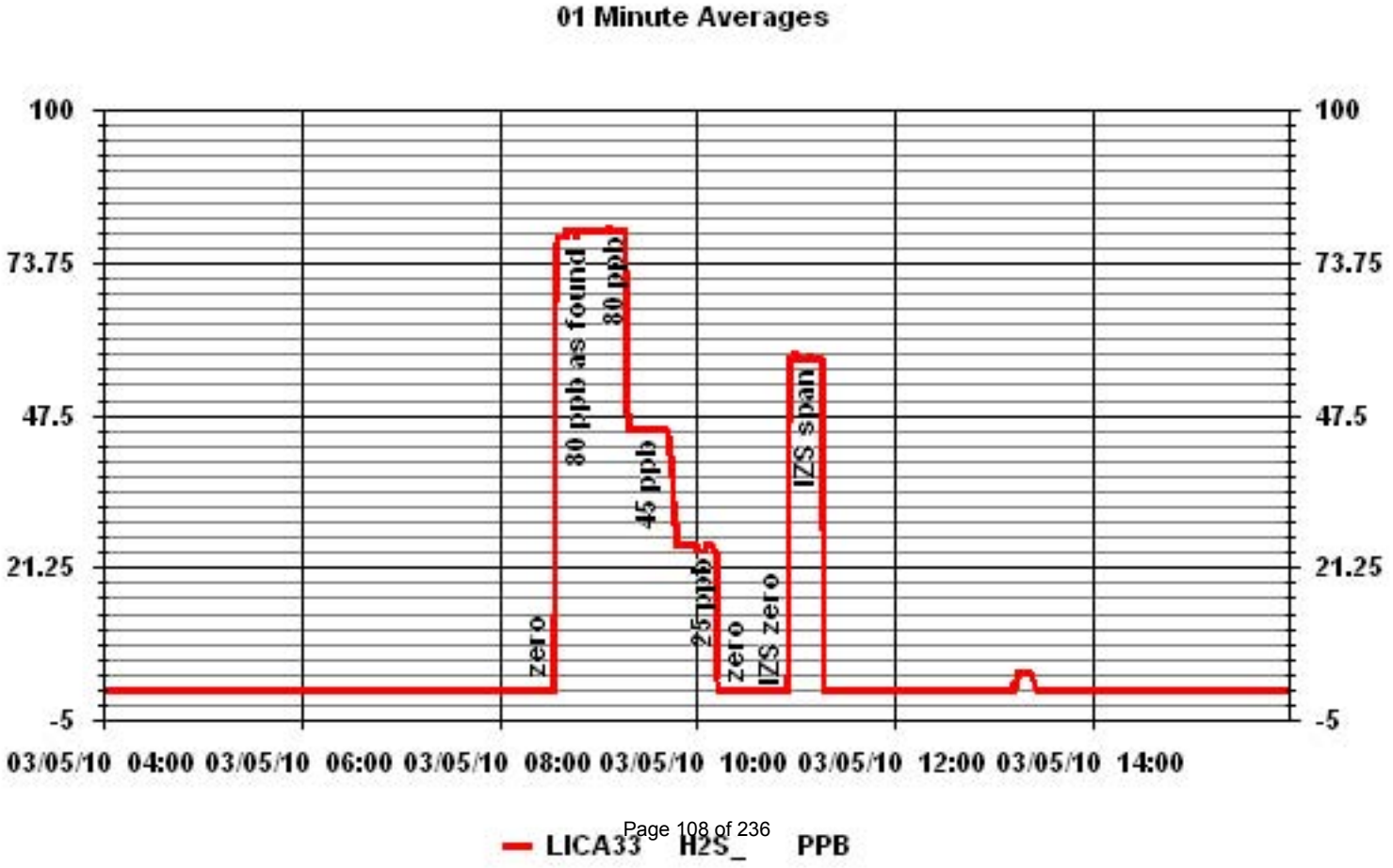
Calibration Date	March 5, 2010		
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION		
Plant / Location	Portable/ Devon Wellsite 13-16-62-5-W4M		
Start Time (MST)	8:10	End Time (MST)	11:20

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
25	25	1.0029
45	45	0.9990
80	80	0.9996

Correlation Coefficient	(≥ 0.995)	0.999998
Slope	(0.85 to 1.15)	1.000757
Intercept	(± 3% F.S.)	-0.027850



Notes:


01 Minute Averages
100
73.75
47.5
21.25
-5
03/05/10 04:00
03/05/10 06:00
03/05/10 08:00
03/05/10 10:00
03/05/10 12:00
03/05/10 14:00
zero
80 ppb as found
80 ppb
45 ppb
25 ppb
zero
IZS zero
IZS span
LICA33 H2S_ PPB

Particulate Matter 2.5

TEOMÒ Audit

Station		Audit Transfer Standard	
Date:	March 25, 2010	Make/Model:	Bios DC-2
Station Name:	Lica Portable	Serial Number:	1193
Location:	Devon Wellsite 13-16-62-5 W4M	Cell s/n:	2272
Operator:	LICA	Thermometer s/n:	VWR

Sampler		Set-up and current Sampler readings	
Make/Model	R+P Series 1400a Teom	F-Main Set Pt (l/min)	3.00
Unit #	NA	F-Aux Set Pt (l/min)	13.67
Control unit s/n	140AB220740001	Filter Load (%)	58%
Transducer s/n	140AB220740001	K_o Factor	13043
Parameter	PM 2.5	Temp (^oC)	-4.1
		Press (ATM)	0.930

Conversion from mmHg or "Hg to ATM (Atmospheres)

ATM = (mmHg) X (1.316 X 10 -3) or ATM = ("Hg) X (3.34207 X 10 -2)

Note: Tolerances are noted as BOLD in Brackets

Audit

Zero flow

	Pump Off		Pump On (Time to reach set points)	
F-Main (l/min)	0.07		**(45-60 Sec)**	41
F-Aux (l/min)	0.16		**(45-60 Sec)**	63

Temperature/Pressure

Measured Temp **(± 1 °C)**	-3.3	**D °C**	-0.8
Measured Press **(± 1.5% ATM)**	0.929	**D % ATM**	0.1%

Flow Audit

			D % from Set-pt	
Indicated Main/Aux Flow (l/min)	3.00 / 13.66		**(± 2%)**	0.0% / -0.1%
Total Flow = Main + Aux (l/min)	16.66		**(± 2%)**	-0.1%
Measured Total Flow (l/min)	17.03		**(± 1.0 l/min. (5.65%))**	0.37
Measured Main Flow (l/min)	3.14		**(± 0.2 l/min. (6.25%))**	0.14

Leak Check

		Actual leakage = Pump On - Pump Off
Main **(< 0.15 l/min)**	NA	NA
Aux **(< 0.15 l/min)**	NA	NA

K_o Factor

Measured	NA
K_o Difference **(± 2.5%)**	NA

Start Time: 13:00 **Finish Time:** -

Sample Inlet Cleaned: YES **Sample Inlet Connected:** YES

Comments: Prior to the leak check, the Teom filter was removed and the top of the tapered element broke off inside the bottom of the filter. Unit now non-functional, audit of operating factors satisfactory prior to incident.

Auditor/s: Shea Beaton

Nitrogen Dioxide

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	March 4, 2010	Previous Calibration	February 3, 2010
Company	**Lakeland Ind & Comm. Assoc.**	Plant/Location	**Portable/ 13-16-62-5W4M**
Start Time (MST)	11:20	End Time (MST)	17:48
Reason:	As Found/ Pre Maintenance		
Barometric Pressure	710 mmHg	Station Temperature	23 Deg C
Cal Gas Concentration	NOx 51.8 ppm NO 51.6 ppm	Cal Gas Expiry date	12/19/2010
DAS Output Voltage	0 - 1 Volts	Chart Rec. Output	0 - 1 Volts

Equipment Information

Analyzer Make / Model:	API 200E	S/N :	593	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	AO717		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 1000	ppb				
Sample Flow/Conv. Temp	465	ccm	315.3	Deg C	481	ccm	314.1	Deg C
Ozone Flow / Vacuum	78	ccm	4.1	mmHg	79	ccm	4.6	mmHg
HVPS	686	Volts			634	Volts		
Rx/ Temp / PMT Temp	50.0	Deg C	6.7	Deg C	50.0	Deg C	6.7	Deg C
Box Temp / IZS Temp	31.6	Deg C	45.0	Deg C	32.6	Deg C	45.2	Deg C
Offset	0.7	NOx	0.2	NO	-6.0	NOx	-7.7	NO
Slope	1.14	NOx	1.13	NO	0.991	NOx	0.983	NO

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration NOx	Calculated Concentration NO	Indicated Concentration NOx	Indicated Concentration NO	Indicated Concentration NO2	Correction Factor NOx	Correction Factor NO
3001.0	0.0	N/A	0	0	4	0	3	N/A	N/A
2961	43.6	N/A	752	749	735	736	-1	1.0227	1.0174
								Converter Efficiency	
2961	43.6	N/A	752	749	735	736	-1	N/A	
2961	43.6	600	752	749	728	216	514	99%	
								0%	
								0%	
								N/A	
								N/A	N/A
Linearity OK?			**Yes**	No	Sum of Least Squares			#DIV/0!	#DIV/0!
Flows Checked on-site?			Yes	**No**	New Correction Factor			0.0000	0.0000
					Average Converter Efficiency			33%	

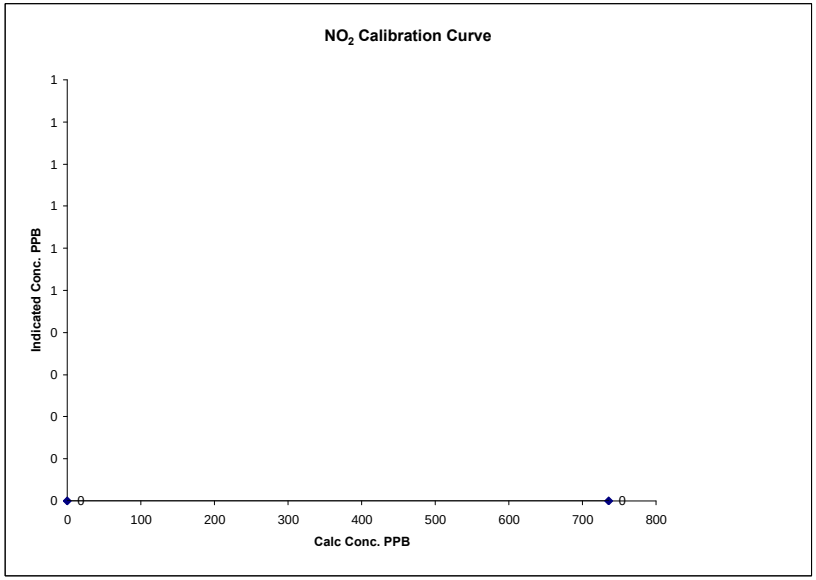
	Before Calibration				After Calibration			
Auto Zero	1.6	NOx	1.6	NO2	-	NOx	-	NO2
Auto Span	830	NOx	810	NO2	-	NOx	-	NO2
Sample Lines Connected					YES			
Percent Change from Previous Calibration					*NOx*	-2.4%	*NO*	-1.9%

Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	March 4, 2010		
Company	**Lakeland Ind & Comm. Assoc.**		
Plant / Location	**Portable/ 13-16-62-5W4M**		
Start Time (MST)	11:20	End Time (MST)	17:48

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	#DIV/0!
0	0	N/A	Slope (0.85 to 1.15)	0.000000
736	0	#DIV/0!	Intercept (± 3% F.S.)	0.00000

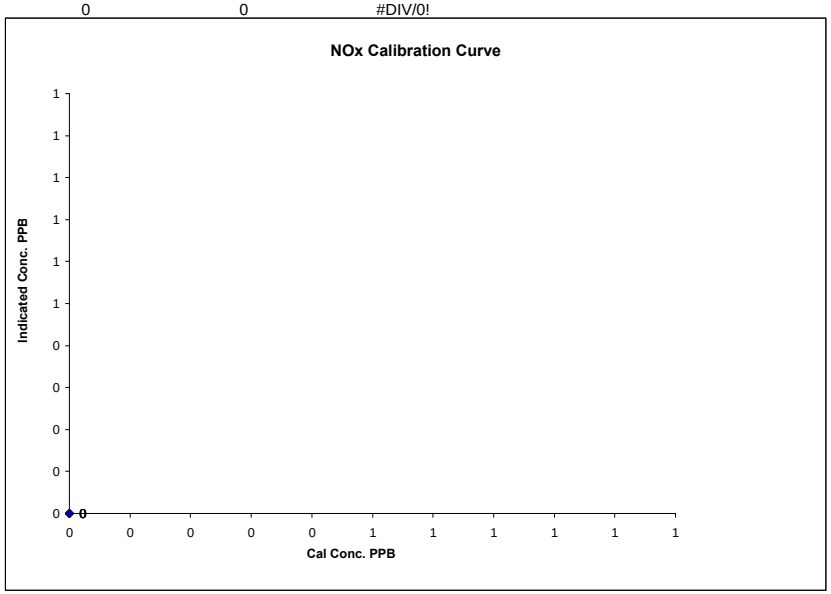


Notes: A zero 7.3 before cal- issue found with zero air supply, points restarted at 12:53. Following the as found points, the RXN cell was cleaned, orings and orifices replaced. Adjusted PMT, zero and span. Will perform full cal tomorrow.

NOx Calibration Curve

Calibration Date	March 4, 2010				
Company	**Lakeland Ind & Comm. Assoc.**				
Plant / Location	**Portable/ 13-16-62-5W4M**				
Start Time (MST)	11:20	End Time	(MST)	17:48	

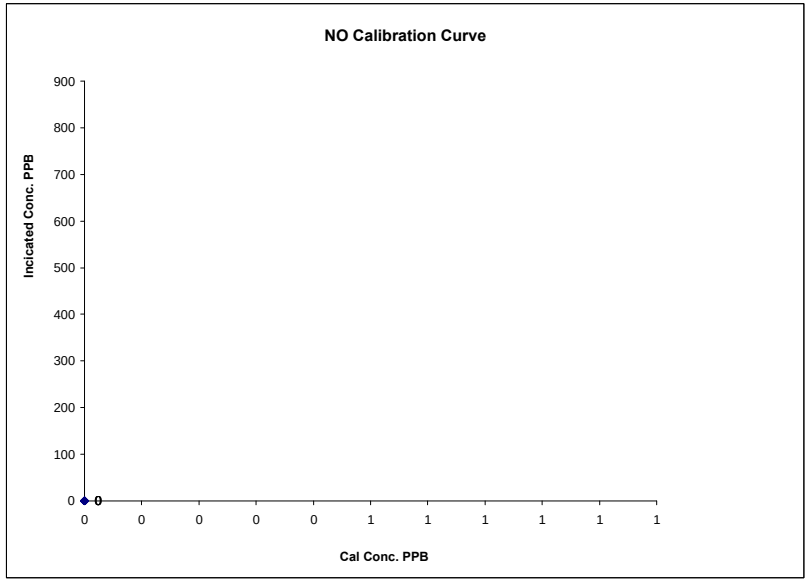
Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995)	#DIV/0!
0	0	N/A	Slope	(0.85 to 1.15)	#DIV/0!
0	0	#DIV/0!	Intercept	(± 3% F.S.)	#DIV/0!
0	0	#DIV/0!			
0	0	#DIV/0!			

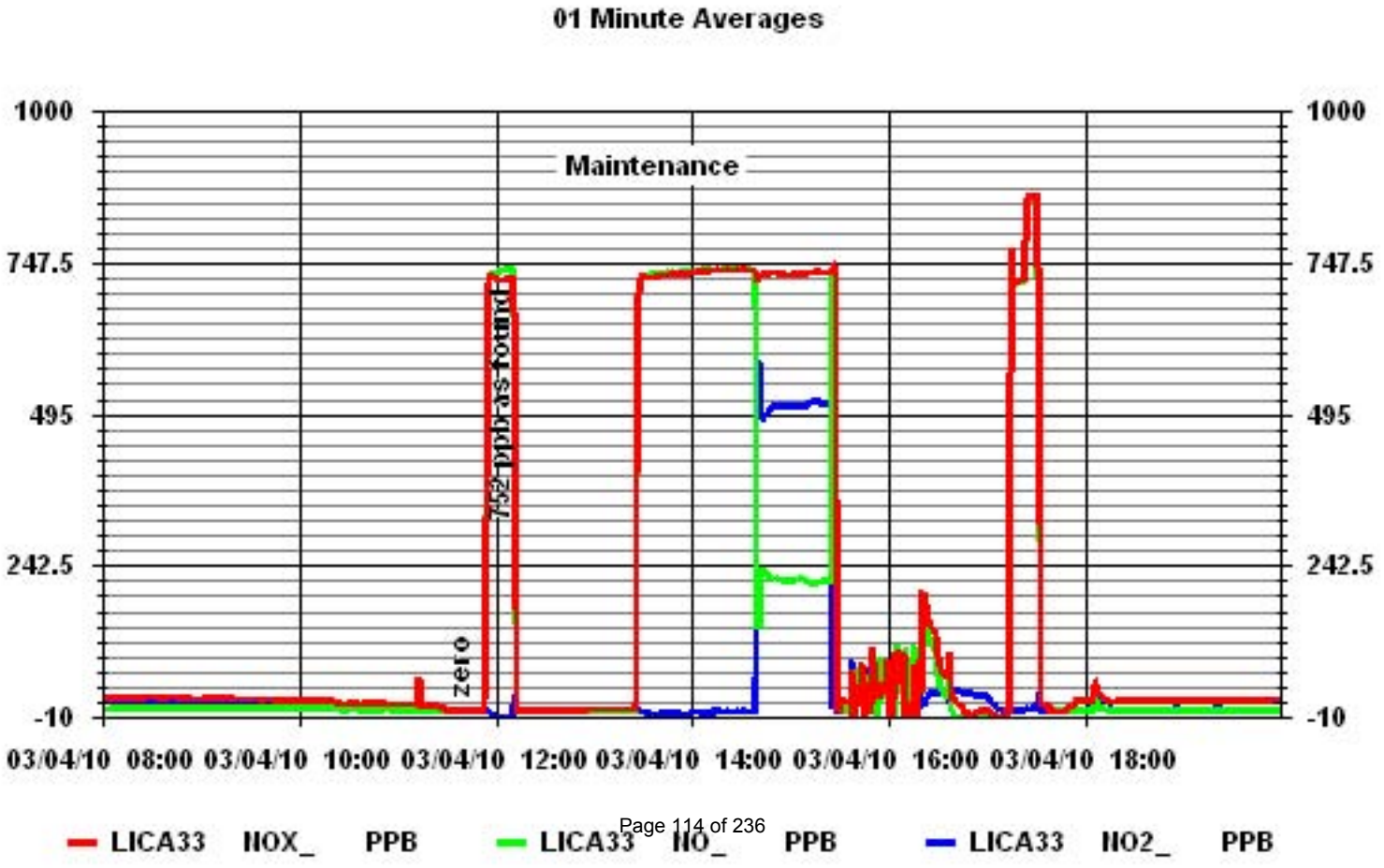


NO Calibration Curve

Calibration Date	March 4, 2010				
Company	**Lakeland Ind & Comm. Assoc.**				
Plant / Location	**Portable/ 13-16-62-5W4M**				
Start Time (MST)	11:20	End Time	(MST)	17:48	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995)	#DIV/0!
0	0	N/A	Slope	(0.85 to 1.15)	#DIV/0!
0	0	#DIV/0!	Intercept	(± 3% F.S.)	#DIV/0!
0	0	#DIV/0!			
0	0	#DIV/0!			




01 Minute Averages
1000
747.5
495
242.5
-10
Maintenance
752 ppb as found
zero
03/04/10 08:00
03/04/10 10:00
03/04/10 12:00
03/04/10 14:00
03/04/10 16:00
03/04/10 18:00
LICA33 NOX_ PPB
LICA33 NO_ PPB
LICA33 NO2_ PPB

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	March 5, 2010	Previous Calibration	February 3, 2010		
Company	LICA	Plant/Location	Maskwa		
Start Time (MST)	8:10	End Time (MST)	14:47		
Reason:	Post Maintenance		Other		
Barometric Pressure	713 mmHg	Station Temperature	22 Deg C	MFCF	1
Cal Gas Concentration	NOx 51.8 ppm	NO 51.6 ppm	Cal Gas Expiry date	19-Dec-10	
DAS Output Voltage	0 - 1 Volts	Chart Rec. Output	NA Volts		

Equipment Information

Analyzer Make / Model:	API 200E	S/N :	593	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	AO 797		
Chart Recorder Make / Model:	NA	S/N:	NA		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration					After Calibration			
Concentration Range					0-1000		ppb		
Sample Flow/Conv. Temp	479	ccm	315.5	Deg C		478	ccm	314.7	Deg C
Ozone Flow / Vacuum	79	ccm	4.6	"Hg-A		79	ccm	4.6	"Hg-A
HVPS / A ZERO	634	Volts	7.8	MV		634	Volts	7.3	MV
Rx/ Temp / PMT Temp	50.0	Deg C	6.7	Deg C		50.0	Deg C	6.7	Deg C
Box Temp / IZS Temp	31.7	Deg C	45.2	Deg C		33.2	Deg C	45.1	Deg C
Offset	-6	NOx	-7.7	NO		0.7	NOx	-0.9	NO
Slope	0.991	NOx	0.983	NO		1.012	NOx	1.000	NO
NO_2 COEF / Conv Efficency	NA	NO2	1.000			NA	NO2	1.000	

Dilution Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			Correction Factor	
			NOx	NO	NO2	NOx	NO	NO2	NOx	NO
3004	0.0	-----	0	0	0	3	3	0	-----	-----
3004	0.0		0	0	1	-1	0	0		
2961	43.6	-----	752	749	-----	738	739	-1	1.0227	1.0174
2961	43.6	-----	752	749	-----	753	750	3	1.0022	1.0024
2983	23.3	-----	401	400	-----	399	396	3	1.0138	1.0176
2992	11.6	-----	200	199	-----	198	198	1	1.0259	1.0220
3001	0.0	-----	0	0	0	0	1	0	-----	-----

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration			Indicated Concentration			NO_2 Correction Factor	NO2 Conv Efficency
			NOx	NO	NO2	NOx	NO	NO2		
2961	43.6	-----	752	749	-----	753	749	3	-----	-----
2961	43.6	550	752	-----	488	749	264	485	1.0062	99.38%
2961	43.6	400	752	-----	358	750	394	356	1.0056	99.44%
2961	43.6	250	752	-----	230	752	522	229	1.0044	99.56%
2961	43.6	100	752	-----	87	752	665	87	1.0000	100.00%

Linearity			Sum of Least Squares	NOx=	1.001	NO=	1.001	NO2= 1.005
OK?	Yes	No	Correction Factors:	NOx=	1.0022	NO=	1.0024	NO2= 1.0056
						Average Converter Efficiency=		99.59%

	Before Calibration					After Calibration			
Auto Zero	3.3	NOx	1.0	NO2		-0.4	NOx	-0.4	NO2
Auto Span	530	NOx	521	NO2		536	NOx	530	NO2
					Sample Lines Connected	YES			

Notes: RXN cell was cleaned and orifices serviced yesterday. No adjustment to the analyzer NO2 CE gain required. Second GPT point (O3 sep pt.400) done for O3 cal.

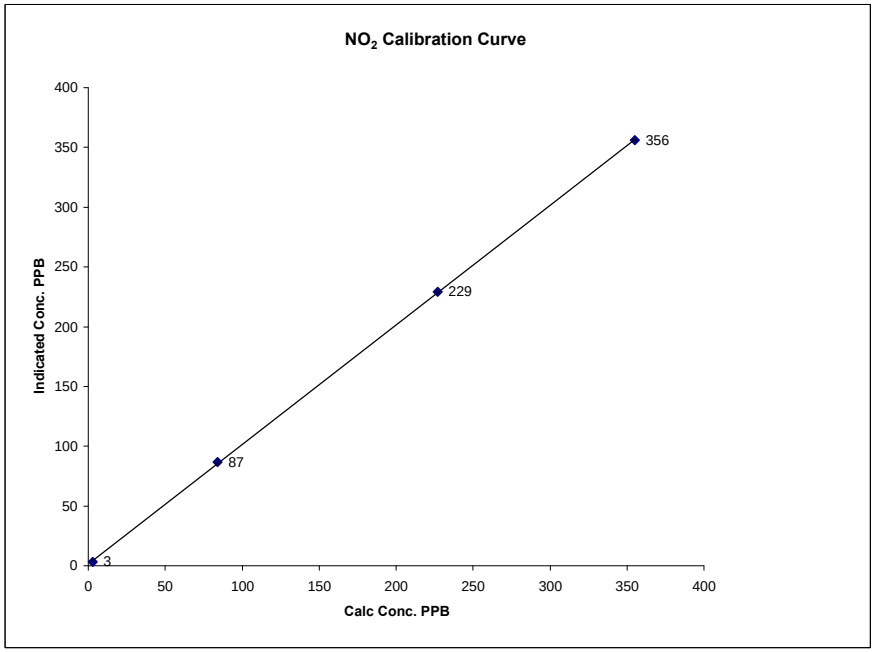
Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	March 5, 2010		
Company	LICA		
Plant / Location	Maskwa		
Start Time (MST)	8:10	End Time (MST)	14:47

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
3	3	N/A
84	87	0.9655
227	229	0.9913
355	356	0.9972

Correlation Coefficient	(≥ 0.995)	0.999932
Slope	(0.85 to 1.15)	1.000791
Intercept	(± 3% F.S.)	1.36777

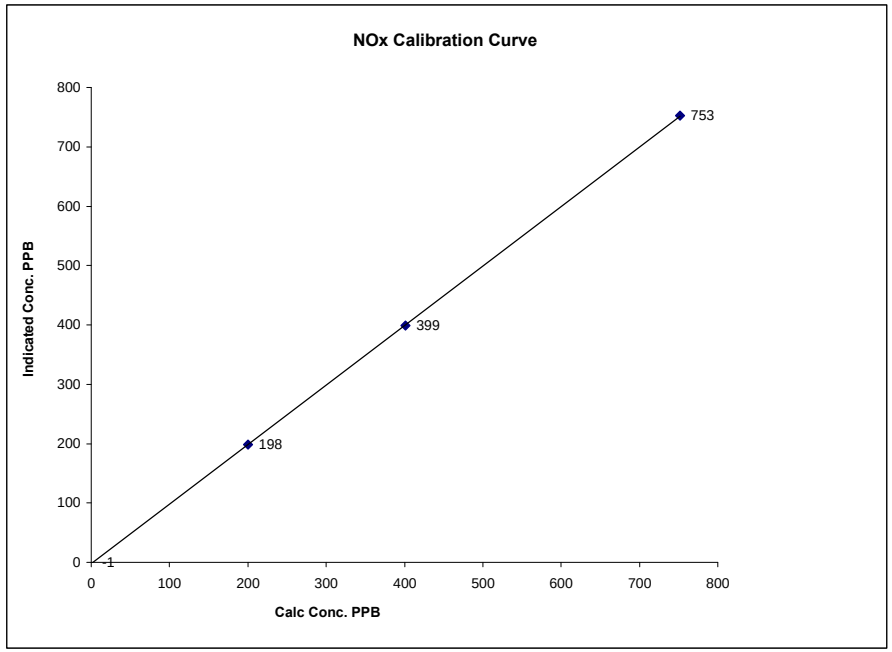


Notes:

NOx Calibration Curve

Calibration Date	March 5, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	8:10	End Time (MST)	14:47		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995)	0.999983
			Slope	(0.85 to 1.15)	1.003288
0	-1	N/A	Intercept	(± 3% F.S.)	-2.16183
200	198	1.0104			
401	399	1.0062			
752	753	0.9982			

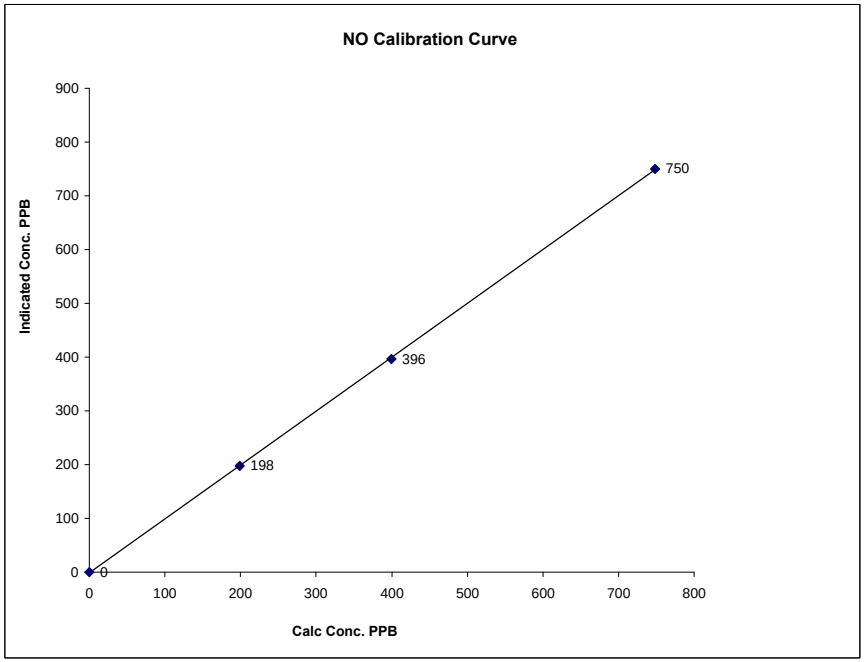


Notes:

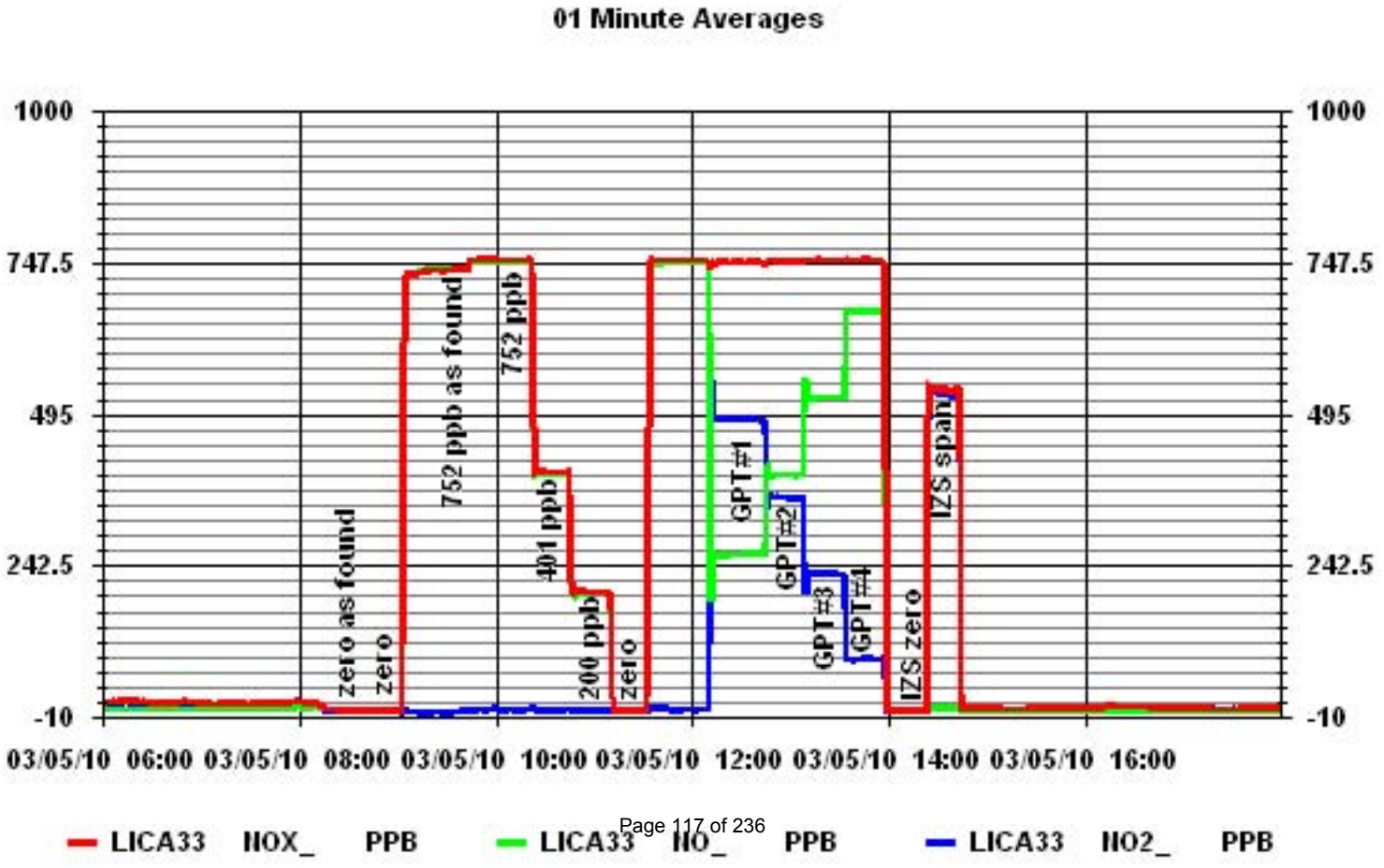
NO Calibration Curve

Calibration Date	March 5, 2010				
Company	LICA				
Plant / Location	Maskwa				
Start Time (MST)	8:10	End Time (MST)	14:47		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995)	0.999955
			Slope	(0.85 to 1.15)	1.005702
0	0	N/A	Intercept	(± 3% F.S.)	-9.8221
199	198	1.0065			
400	396	1.0099			
749	750	0.9984			



Notes:


01 Minute Averages
1000
747.5
495
242.5
-10
zero as found
zero
752 ppb as found
752 ppb
401 ppb
200 ppb
zero
GPT#1
GPT#2
GPT#3
GPT#4
IZS zero
IZS span
03/05/10 06:00
03/05/10 08:00
03/05/10 10:00
03/05/10 12:00
03/05/10 14:00
03/05/10 16:00
LICA33 NOX_ PPB
LICA33 NO_ PPB
LICA33 NO2_ PPB

Ozone

O_3 Calibration Report

Station Information

Calibration Date	March 5, 2010		Previous Calibration	February 3, 2010	
Company	**Lakeland Industry & Community Association**				
Plant / Location	**Portable / Devon Wellsite 13-16-62-5 W4M**				
Start Time (MST)	14:05		End Time (MST)	18:25	
Reason:			Monthly Calibration		
Barometric Pressure	713	mm Hg	Station Temperature	24	Deg C
DAS Output Voltage	0 - 10	Volts			

Equipment Information

Analyzer Make / Model:	API 700	S/N :	446	Method:	Photometric
Calibrator Make / Model:	Environics 2000	S/N :	1991	Method:	GPT
DAS Make / Model:	ESC 8832	S/N :	263		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 500	ppb				
Sample Flow / Box Temp	817	ccm	28.2	Deg C	814	ccm	27.3	Deg C
VAC / PRES	11	IN-HG-A	26.3	IN-HG-A	10.9	IN-HG-A	26.3	IN-HG-A
Sample Temp/ Photo Temp	36.5	Deg C	52	Deg C	35.8	Deg C	52	Deg C
O3 Gen Temp/Orific Temp	48.3	Deg C	48.5	Deg C	48.2	Deg C	48.8	Deg C
Offset/Slop	-3.7		0.932		-3.7		0.966	

Calibration Data

Dilution Flow Rate	Ozone Set Point	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
3003	0	0	0	N/A
300	400	355	341	1.0411
3004	400	355	356	0.9972
3004	200	227	225	1.0089
3004	100	84	81	1.0370
3004	0	0	0	N/A
			Sum of Least Squares	N/A
			New Correction Factor	0.9972

	Before Calibration	After Calibration
Auto Zero	0.5	0.4
Auto Span	225	231
Sample Lines Connected		YES
Percent Change from Previous Calibration		-3.9%

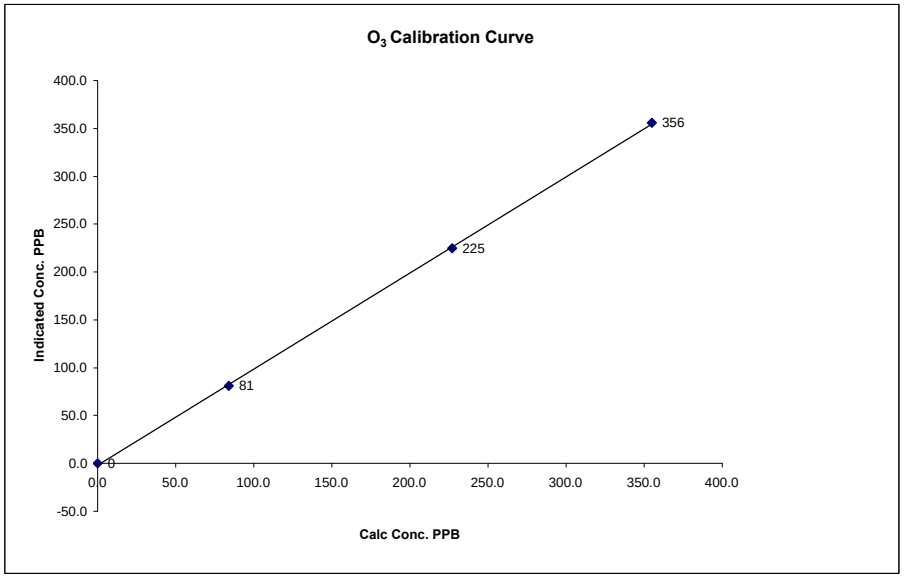
Calibration Performed by: Shea Beaton

O_3 Calibration Curve

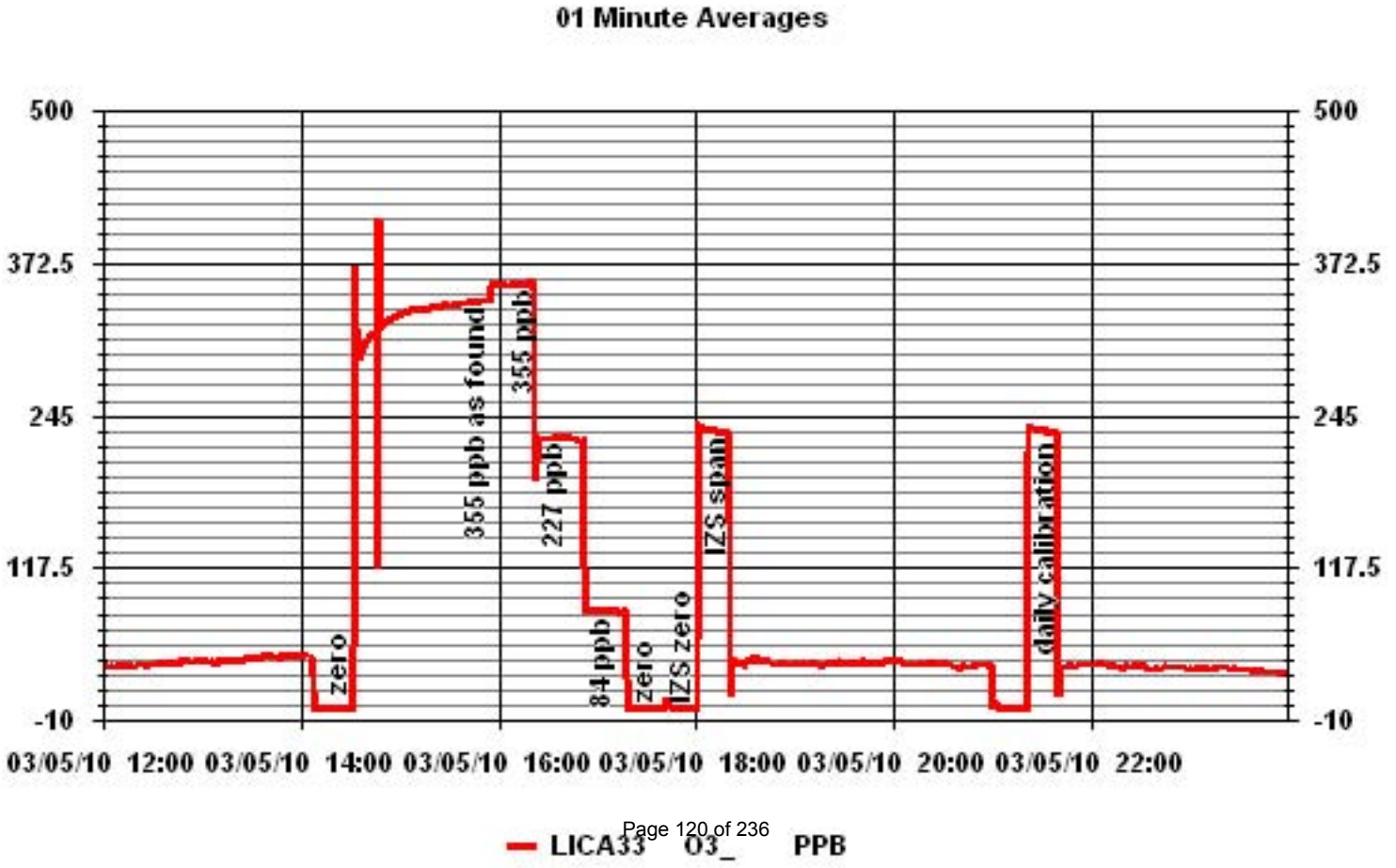
Calibration Date	March 5, 2010		
Company	**Lakeland Industry & Community Association**		
Plant / Location	**Portable / Devon Wellsite 13-16-62-5 W4M**		
Start Time (MST)	14:05	End Time (MST)	18:25

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
84	81	1.0370
227	225	1.0089
355	356	0.9972

Correlation Coefficient	(≥ 0.995)	0.999884
Slope	(0.85 to 1.15)	1.004273
Intercept	(± 3% F.S.)	-1.711432



Notes:


01 Minute Averages
500
372.5
245
117.5
-10
zero
355 ppb as found
355 ppb
227 ppb
84 ppb
zero
IZS zero
IZS span
daily calibration
03/05/10 12:00
03/05/10 14:00
03/05/10 16:00
03/05/10 18:00
03/05/10 20:00
03/05/10 22:00
LICA33 O3_ PPB

Total Hydrocarbons

THC Calibration Report

Station Information

Calibration Date:	March 5, 2010		Previous Calibration	February 3, 2010	
Company:	**Lakeland Industry and Community Association**				
Plant / Location:	**LICA1/Cold Lake**				
Start Time (MST)	14:30		End Time (MST)	17:56	
Reason:	Monthly Calibration				
Barometric Pressure:	713	mmHg	Station Temperature:	25	Deg C
Calibrator:	API 700		S/N:	813	
Cal Gas Concentration:	207Prop/602Meth	ppm	Cal Gas Expiry Date:	9/21/2011	
DAS make & Model:	ESC 8832		S/N :	717	
Output Voltage Range:	0 - 10	VDC			

Analyzer Information

Make / Model	S/N :	Method
TECO 51C	04366-09739	Flame Ionization

Analyzer Settings

	Before Calibration		After Calibration	
Concentration Range	0 - 50	ppm	0 - 50	ppm
Sample Pressure	6.8	psi	6.8	psi
Hydrogen Pressure	7.5	psi	7.5	psi
Air Pressure	21	psi	21	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
2000	0	0.0	-0.1	N/A
2001	0.0	0.0	0.0	N/A
2001	70.0	39.6	40.0	0.9897
2001	35.0	20.1	19.9	1.0118
2001	20.0	11.6	11.4	1.0167
2001	0	0.0	0.0	N/A
			Correction Factor:	0.9897

Percent Change

Previous Calibration Correction Factor:	0.9947
Current Correction Factor Before Span Adjust:	0.9897
Percent Change:	0.5%

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	0.0	0.0
Auto Span	32.8	32.8
Sample Lines Connected		**YES**

Cylinder Pressures			
Span	950	psi	
Hydrogen	1600	psi	
Zero Air	unlimited	psi	Using API 700

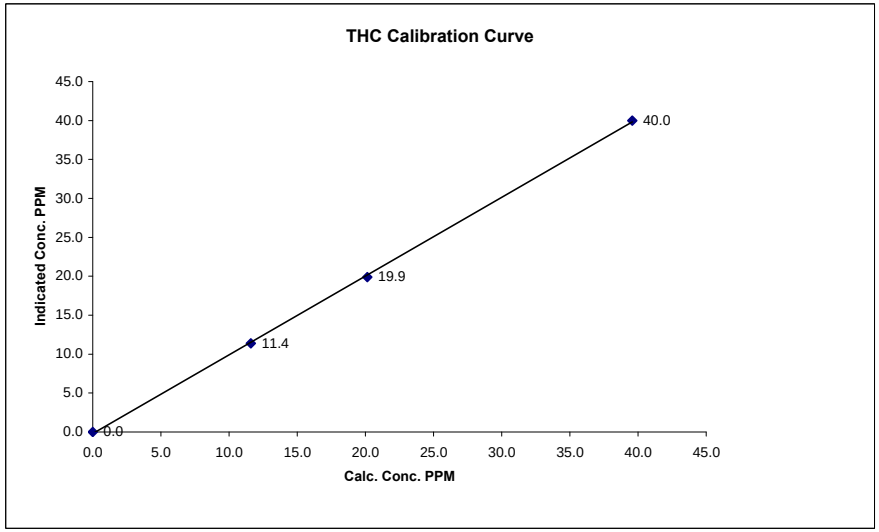
Calibration Performed by: Shea Beaton

THC Calibration Curve

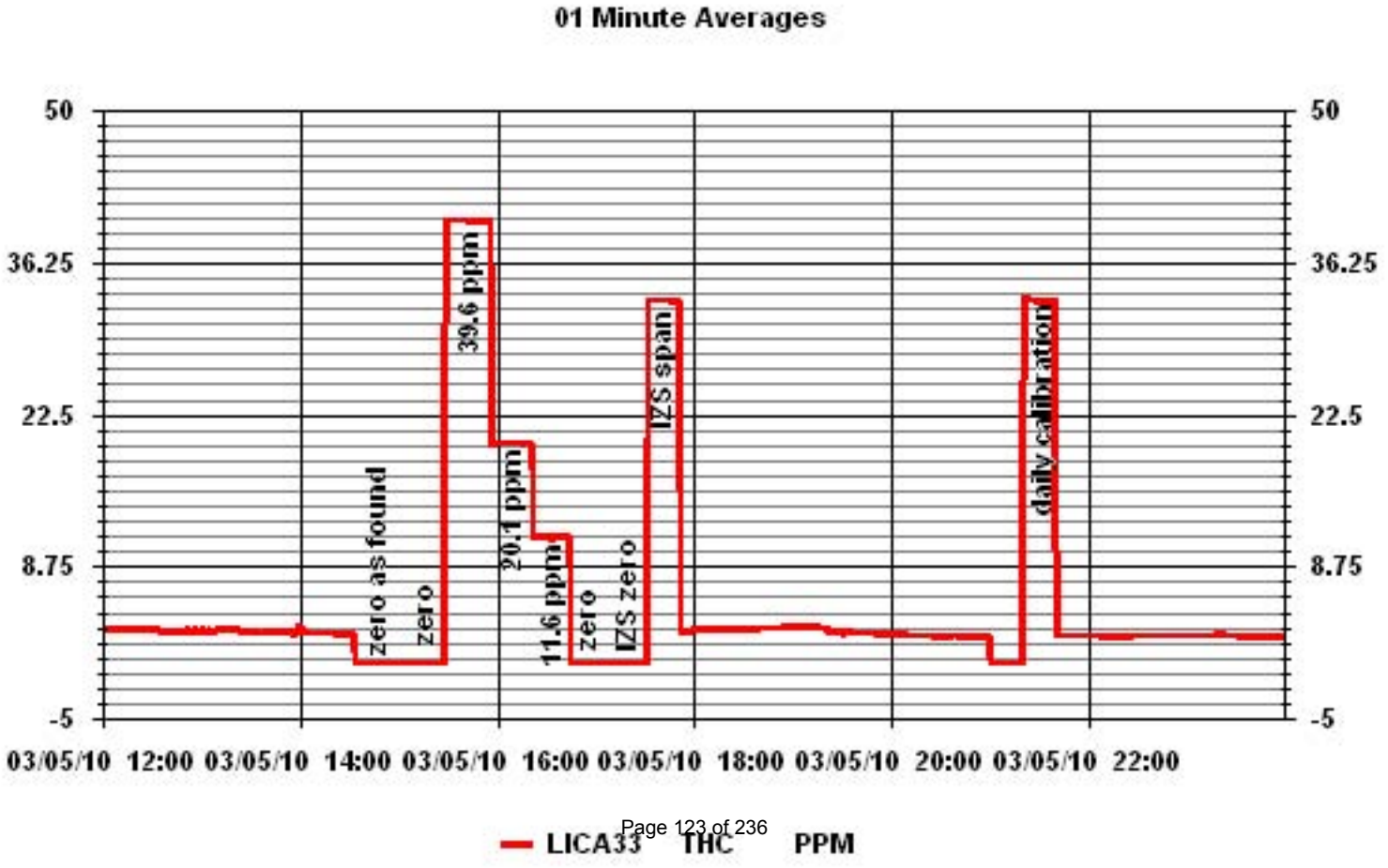
Calibration Date	March 5, 2010		
Company	**Lakeland Industry and Community Association**		
Plant / Location	**LICA1/Cold Lake**		
Start Time (MST)	14:30	End Time (MST)	17:56

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	0.0	
11.6	11.4	1.0167
20.1	19.9	1.0118
39.6	40.0	0.9897

Correlation Coefficient	(≥ 0.995)	0.999824
Slope	(0.85 to 1.15)	1.011497
Intercept	(± 3% F.S.)	-0.208378



Notes: Cal gas THC concentration = 1171.25 ppm THC


01 Minute Averages
50
36.25
22.5
8.75
-5
zero as found
zero
39.6 ppm
20.1 ppm
11.6 ppm
zero
IZS zero
IZS span
daily calibration
03/05/10 12:00
03/05/10 14:00
03/05/10 16:00
03/05/10 18:00
03/05/10 20:00
03/05/10 22:00
LICA33 THC PPM

Volatile Organics Laboratory Analysis

Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA VOC/PORT/ Mar 3, 10

Sampler s/n: 6200
Canister ID: 7816 (Maxxam Supplied)
Canister Installation Date/Time: Mar 2, 10 @ 09:55 mst
Canister Removal Date/Time: Mar 4, 10 @ 09:00 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
03-Mar-10	03/03/2010 0:00	03/04/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	1478	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	21

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC# 2476

Technician Signiture: Shea Beaton

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/28
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B027268
Received: 2010/03/08, 08:39

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/16	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (ug/m3)	2	N/A	2010/04/28	BRL SOP-00304	

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

RESULTS OF ANALYSES OF AIR

Maxxam ID		FG6744	FG6745	
Sampling Date		2010/03/03 00:00	2010/03/05 00:00	
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	19.0	20.0	2102505

QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

CALCULATED VOLATILE ORGANICS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
Calculated Parameters					
2,2,4-Trimethylpentane	ug/m3	<0.93	<0.93	0.93	2136522
Carbon Disulfide	ug/m3	<1.6	<1.6	1.6	2136522
Propene	ug/m3	<0.52	<0.52	0.52	2136522
Vinyl Acetate	ug/m3	<0.70	<0.70	0.70	2136522
Vinyl Bromide	ug/m3	<0.87	<0.87	0.87	2136522
Dichlorodifluoromethane (FREON 12)	ug/m3	2.96	3.01	0.99	2136522
1,2-Dichlorotetrafluoroethane	ug/m3	<1.2	<1.2	1.2	2136522
Chloromethane	ug/m3	0.92	0.86	0.62	2136522
Vinyl Chloride	ug/m3	<0.46	<0.46	0.46	2136522
Chloroethane	ug/m3	<0.79	<0.79	0.79	2136522
1,3-Butadiene	ug/m3	<1.1	<1.1	1.1	2136522
Trichlorofluoromethane (FREON 11)	ug/m3	1.6	1.6	1.1	2136522
Ethanol	ug/m3	<4.3	<4.3	4.3	2136522
Trichlorotrifluoroethane	ug/m3	<1.1	<1.1	1.1	2136522
2-propanol	ug/m3	<7.4	<7.4	7.4	2136522
2-Propanone	ug/m3	4.8	5.7	1.9	2136522
Methyl Ethyl Ketone (2-Butanone)	ug/m3	<8.8	<8.8	8.8	2136522
Methyl Isobutyl Ketone	ug/m3	<13	<13	13	2136522
Methyl Butyl Ketone (2-Hexanone)	ug/m3	<8.2	<8.2	8.2	2136522
Methyl t-butyl ether (MTBE)	ug/m3	<0.72	<0.72	0.72	2136522
Ethyl Acetate	ug/m3	<7.9	<7.9	7.9	2136522
1,1-Dichloroethylene	ug/m3	<0.99	<0.99	0.99	2136522
cis-1,2-Dichloroethylene	ug/m3	<0.75	<0.75	0.75	2136522
trans-1,2-Dichloroethylene	ug/m3	<0.79	<0.79	0.79	2136522
Methylene Chloride(Dichloromethane)	ug/m3	1.9	1.8	1.0	2136522
Chloroform	ug/m3	<0.73	<0.73	0.73	2136522
Carbon Tetrachloride	ug/m3	<1.9	<1.9	1.9	2136522
1,1-Dichloroethane	ug/m3	<0.81	<0.81	0.81	2136522
1,2-Dichloroethane	ug/m3	<0.81	<0.81	0.81	2136522
Ethylene Dibromide	ug/m3	<1.3	<1.3	1.3	2136522
1,1,1-Trichloroethane	ug/m3	<1.6	<1.6	1.6	2136522
1,1,2-Trichloroethane	ug/m3	<0.82	<0.82	0.82	2136522

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

CALCULATED VOLATILE ORGANICS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
1,1,2,2-Tetrachloroethane	ug/m3	<1.4	<1.4	1.4	2136522
cis-1,3-Dichloropropene	ug/m3	<0.82	<0.82	0.82	2136522
trans-1,3-Dichloropropene	ug/m3	<0.77	<0.77	0.77	2136522
1,2-Dichloropropane	ug/m3	<1.8	<1.8	1.8	2136522
Bromomethane	ug/m3	<0.70	<0.70	0.70	2136522
Bromoform	ug/m3	<2.1	<2.1	2.1	2136522
Bromodichloromethane	ug/m3	<1.3	<1.3	1.3	2136522
Dibromochloromethane	ug/m3	<1.7	<1.7	1.7	2136522
Trichloroethylene	ug/m3	<1.6	<1.6	1.6	2136522
Tetrachloroethylene	ug/m3	<1.4	<1.4	1.4	2136522
Benzene	ug/m3	<0.58	<0.58	0.58	2136522
Toluene	ug/m3	<0.75	<0.75	0.75	2136522
Ethylbenzene	ug/m3	<0.87	<0.87	0.87	2136522
p+m-Xylene	ug/m3	<1.6	<1.6	1.6	2136522
o-Xylene	ug/m3	<0.87	<0.87	0.87	2136522
Styrene	ug/m3	<0.85	<0.85	0.85	2136522
4-ethyltoluene	ug/m3	<11	<11	11	2136522
1,3,5-Trimethylbenzene	ug/m3	<2.5	<2.5	2.5	2136522
1,2,4-Trimethylbenzene	ug/m3	<2.5	<2.5	2.5	2136522
Chlorobenzene	ug/m3	<0.92	<0.92	0.92	2136522
Benzyl chloride	ug/m3	<5.2	<5.2	5.2	2136522
1,3-Dichlorobenzene	ug/m3	<2.4	<2.4	2.4	2136522
1,4-Dichlorobenzene	ug/m3	<2.4	<2.4	2.4	2136522
1,2-Dichlorobenzene	ug/m3	<2.4	<2.4	2.4	2136522
1,2,4-Trichlorobenzene	ug/m3	<15	<15	15	2136522
Hexachlorobutadiene	ug/m3	<32	<32	32	2136522
Hexane	ug/m3	<1.1	<1.1	1.1	2136522
Tetrahydrofuran	ug/m3	<1.2	<1.2	1.2	2136522
1,4-Dioxane	ug/m3	<7.2	<7.2	7.2	2136522
Xylene (Total)	ug/m3	<2.6	<2.6	2.6	2136522

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/04/28

GENERAL COMMENTS

VOCTO15M-A
Benzyl Chloride and 1,2,4-trichlorobenzene are above 40% RSD in initial calibration.
No positives found for these compounds.

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation. No positives found for this compound.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA VOC/PORT/ Mar 9, 10

Sampler s/n: 6200
Canister ID: 7859
Canister Installation Date/Time: Mar 8, 10 @ 08:45 mst
Canister Removal Date/Time: Mar 10, 10 @ 09:05 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
09-Mar-10	03/09/2010 0:00	03/10/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	1478	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	21

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC# 2803

Technician Signiture: Shea Beaton

Your C.O.C. #: 2803

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B029945
Received: 2010/03/12, 14:04

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/19	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/03/19	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

RESULTS OF ANALYSES OF AIR

Maxxam ID		FH8486	FH8487	
Sampling Date		2010/03/09 00:00	2010/03/09 00:00	
COC Number		2803	2803	
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**LICA VOC/PORT/MAR9,10 / 7859**	**QC Batch**

Volatile Organics				
Pressure on Receipt	psig	19	20	2104789

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8486				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2105655
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2105655
Propene	ppbv	1.27	0.30	2.18	0.516	2105655
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2105655
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2105655
Dichlorodifluoromethane (FREON 12)	ppbv	0.75	0.20	3.72	0.989	2105655
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2105655
Chloromethane	ppbv	0.71	0.30	1.47	0.620	2105655
Vinyl Chloride	ppbv	0.22	0.18	0.556	0.460	2105655
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2105655
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2105655
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.52	1.12	2105655
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2105655
Ethanol	ppbv	2.4	2.3	4.47	4.33	2105655
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2105655
2-Propanone	ppbv	1.73	0.80	4.10	1.90	2105655
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2105655
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2105655
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2105655
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2105655
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2105655
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2105655
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2105655
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2105655
Methylene Chloride(Dichloromethane)	ppbv	0.58	0.30	2.00	1.04	2105655
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2105655
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2105655
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2105655

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8486				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2105655
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2105655
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2105655
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2105655
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2105655
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2105655
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2105655
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2105655
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2105655
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2105655
Heptane	ppbv	0.51	0.30	2.09	1.23	2105655
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2105655
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2105655
Benzene	ppbv	0.27	0.18	0.876	0.575	2105655
Toluene	ppbv	3.53	0.20	13.3	0.753	2105655
Ethylbenzene	ppbv	2.08	0.20	9.04	0.868	2105655
p+m-Xylene	ppbv	3.86	0.37	16.8	1.61	2105655
o-Xylene	ppbv	0.83	0.20	3.61	0.868	2105655
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2105655
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2105655
1,2,4-Trimethylbenzene	ppbv	0.54	0.50	2.66	2.46	2105655
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2105655
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2105655
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2105655
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2105655
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2105655
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2105655
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2105655
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2105655

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8486				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/CLS/MAR9,10 / 7791**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2105655
Xylene (Total)	ppbv	4.69	0.60	20.4	2.61	2105655
Surrogate Recovery (%)						
Bromochloromethane	%	91		N/A	N/A	2105655
D5-Chlorobenzene	%	94		N/A	N/A	2105655
Difluorobenzene	%	92		N/A	N/A	2105655

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8487				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/PORT/MAR9,10 / 7859**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2105655
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2105655
Propene	ppbv	0.31	0.30	0.542	0.516	2105655
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2105655
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2105655
Dichlorodifluoromethane (FREON 12)	ppbv	0.58	0.20	2.87	0.989	2105655
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2105655
Chloromethane	ppbv	0.70	0.30	1.45	0.620	2105655
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2105655
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2105655
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2105655
Trichlorofluoromethane (FREON 11)	ppbv	0.25	0.20	1.43	1.12	2105655
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2105655
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2105655
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2105655
2-Propanone	ppbv	1.59	0.80	3.79	1.90	2105655
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2105655
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2105655
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2105655
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2105655
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2105655
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2105655
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2105655
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2105655
Methylene Chloride(Dichloromethane)	ppbv	0.42	0.30	1.45	1.04	2105655
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2105655
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2105655
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2105655
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2105655

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8487				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/PORT/MAR9,10 / 7859**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2105655
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2105655
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2105655
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2105655
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2105655
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2105655
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2105655
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2105655
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2105655
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2105655
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2105655
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2105655
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2105655
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2105655
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2105655
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2105655
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2105655
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2105655
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2105655
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2105655
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2105655
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2105655
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2105655
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2105655
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2105655
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2105655
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2105655
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2105655
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2105655
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2105655

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FH8487				
Sampling Date		2010/03/09 00:00				
COC Number		2803				
	Units	**LICA VOC/PORT/MAR9,10 / 7859**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2105655
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2105655
Surrogate Recovery (%)						
Bromochloromethane	%	89		N/A	N/A	2105655
D5-Chlorobenzene	%	88		N/A	N/A	2105655
Difluorobenzene	%	89		N/A	N/A	2105655

N/A = Not Applicable
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

Test Summary

Maxxam ID FH8486 **Collected** 2010/03/09
Sample ID LICA VOC/CLS/MAR9,10 / 7791 **Shipped**
Matrix AIR **Received** 2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2104789	N/A	2010/03/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	2105655	N/A	2010/03/19	S_S

Maxxam ID FH8487 **Collected** 2010/03/09
Sample ID LICA VOC/PORT/MAR9,10 / 7859 **Shipped**
Matrix AIR **Received** 2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2104789	N/A	2010/03/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	2105655	N/A	2010/03/19	S_S

Maxxam ID FH8487 Dup **Collected** 2010/03/09
Sample ID LICA VOC/PORT/MAR9,10 / 7859 **Shipped**
Matrix AIR **Received** 2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Volatile Organics in Air (TO-15)	GC/MS	2105655	N/A	2010/03/19	S_S

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029945
Report Date: 2010/03/23

GENERAL COMMENTS

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	Spiked Blank	Bromochloromethane	2010/03/19		95	%	60 - 140
			D5-Chlorobenzene	2010/03/19		97	%	60 - 140
			Difluorobenzene	2010/03/19		98	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/19		109	%	70 - 130
			Carbon Disulfide	2010/03/19		124	%	70 - 130
			Propene	2010/03/19		106	%	70 - 130
			Vinyl Acetate	2010/03/19		122	%	70 - 130
			Vinyl Bromide	2010/03/19		107	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/03/19		114	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/03/19		91	%	70 - 130
			Chloromethane	2010/03/19		109	%	70 - 130
			Vinyl Chloride	2010/03/19		110	%	70 - 130
			Chloroethane	2010/03/19		109	%	70 - 130
			1,3-Butadiene	2010/03/19		92	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/03/19		109	%	70 - 130
			Trichlorotrifluoroethane	2010/03/19		99	%	70 - 130
			Ethanol	2010/03/19		105	%	70 - 130
			2-propanol	2010/03/19		105	%	70 - 130
			2-Propanone	2010/03/19		98	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/03/19		122	%	70 - 130
			Methyl Isobutyl Ketone	2010/03/19		112	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/03/19		116	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/03/19		105	%	70 - 130
			Ethyl Acetate	2010/03/19		108	%	70 - 130
			1,1-Dichloroethylene	2010/03/19		111	%	70 - 130
			cis-1,2-Dichloroethylene	2010/03/19		110	%	70 - 130
			trans-1,2-Dichloroethylene	2010/03/19		110	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/03/19		104	%	70 - 130
			Chloroform	2010/03/19		108	%	70 - 130
			Carbon Tetrachloride	2010/03/19		118	%	70 - 130
			1,1-Dichloroethane	2010/03/19		107	%	70 - 130
			1,2-Dichloroethane	2010/03/19		107	%	70 - 130
			Ethylene Dibromide	2010/03/19		110	%	70 - 130
			1,1,1-Trichloroethane	2010/03/19		111	%	70 - 130
			1,1,2-Trichloroethane	2010/03/19		112	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/03/19		101	%	70 - 130
			cis-1,3-Dichloropropene	2010/03/19		126	%	70 - 130
			trans-1,3-Dichloropropene	2010/03/19		127	%	70 - 130
			1,2-Dichloropropane	2010/03/19		108	%	70 - 130
			Bromomethane	2010/03/19		101	%	70 - 130
			Bromoform	2010/03/19		120	%	70 - 130
			Bromodichloromethane	2010/03/19		118	%	70 - 130
			Dibromochloromethane	2010/03/19		123	%	70 - 130
			Heptane	2010/03/19		111	%	70 - 130
			Trichloroethylene	2010/03/19		106	%	70 - 130
			Tetrachloroethylene	2010/03/19		110	%	70 - 130
			Benzene	2010/03/19		101	%	70 - 130
			Toluene	2010/03/19		104	%	70 - 130
			Ethylbenzene	2010/03/19		89	%	70 - 130
			p+m-Xylene	2010/03/19		87	%	70 - 130
			o-Xylene	2010/03/19		86	%	70 - 130
			Styrene	2010/03/19		99	%	70 - 130
			1,3,5-Trimethylbenzene	2010/03/19		99	%	70 - 130
			1,2,4-Trimethylbenzene	2010/03/19		99	%	70 - 130
			4-ethyltoluene	2010/03/19		99	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	Spiked Blank	Chlorobenzene	2010/03/19		98	%	70 - 130
			Benzyl chloride	2010/03/19		114	%	70 - 130
			1,3-Dichlorobenzene	2010/03/19		92	%	70 - 130
			1,4-Dichlorobenzene	2010/03/19		87	%	70 - 130
			1,2-Dichlorobenzene	2010/03/19		92	%	70 - 130
			1,2,4-Trichlorobenzene	2010/03/19		72	%	70 - 130
			Hexachlorobutadiene	2010/03/19		90	%	70 - 130
			Hexane	2010/03/19		106	%	70 - 130
			Cyclohexane	2010/03/19		112	%	70 - 130
			Tetrahydrofuran	2010/03/19		110	%	70 - 130
			1,4-Dioxane	2010/03/19		104	%	70 - 130
		Method Blank	Bromochloromethane	2010/03/19		92	%	60 - 140
			D5-Chlorobenzene	2010/03/19		92	%	60 - 140
			Difluorobenzene	2010/03/19		98	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/19	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/03/19	ND, RDL=0.50		ppbv	
			Propene	2010/03/19	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/03/19	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/03/19	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/03/19	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/03/19	ND, RDL=0.17		ppbv	
			Chloromethane	2010/03/19	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/03/19	ND, RDL=0.18		ppbv	
			Chloroethane	2010/03/19	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/03/19	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/03/19	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/03/19	ND, RDL=0.15		ppbv	
			Ethanol	2010/03/19	ND, RDL=2.3		ppbv	
			2-propanol	2010/03/19	ND, RDL=3.0		ppbv	
			2-Propanone	2010/03/19	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/03/19	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/03/19	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/03/19	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/03/19	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/03/19	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/03/19	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/03/19	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/03/19	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/03/19	ND, RDL=0.30		ppbv	
			Chloroform	2010/03/19	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/03/19	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/03/19	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/03/19	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/03/19	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/03/19	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/03/19	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/03/19	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/03/19	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/03/19	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/03/19	ND, RDL=0.40		ppbv	
			Bromomethane	2010/03/19	ND, RDL=0.18		ppbv	
			Bromoform	2010/03/19	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/03/19	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/03/19	ND, RDL=0.20		ppbv	
			Heptane	2010/03/19	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	Method Blank	Trichloroethylene	2010/03/19	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/03/19	ND, RDL=0.20		ppbv	
			Benzene	2010/03/19	ND, RDL=0.18		ppbv	
			Toluene	2010/03/19	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/03/19	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/03/19	ND, RDL=0.37		ppbv	
			o-Xylene	2010/03/19	ND, RDL=0.20		ppbv	
			Styrene	2010/03/19	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/03/19	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/03/19	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/03/19	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/03/19	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/03/19	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/03/19	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/03/19	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/03/19	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/03/19	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/03/19	ND, RDL=3.0		ppbv	
			Hexane	2010/03/19	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/03/19	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/03/19	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/03/19	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/03/19	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	2,2,4-Trimethylpentane	2010/03/19	NC		%	25
			Carbon Disulfide	2010/03/19	NC		%	25
			Propene	2010/03/19	NC		%	25
			Vinyl Acetate	2010/03/19	NC		%	25
			Vinyl Bromide	2010/03/19	NC		%	25
			Dichlorodifluoromethane (FREON 12)	2010/03/19	NC		%	25
			1,2-Dichlorotetrafluoroethane	2010/03/19	NC		%	25
			Chloromethane	2010/03/19	NC		%	25
			Vinyl Chloride	2010/03/19	NC		%	25
			Chloroethane	2010/03/19	NC		%	25
			1,3-Butadiene	2010/03/19	NC		%	25
			Trichlorofluoromethane (FREON 11)	2010/03/19	NC		%	25
			Trichlorotrifluoroethane	2010/03/19	NC		%	25
			Ethanol	2010/03/19	NC		%	25
			2-propanol	2010/03/19	NC		%	25
			2-Propanone	2010/03/19	NC		%	25
			Methyl Ethyl Ketone (2-Butanone)	2010/03/19	NC		%	25
			Methyl Isobutyl Ketone	2010/03/19	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2010/03/19	NC		%	25
			Methyl t-butyl ether (MTBE)	2010/03/19	NC		%	25
			Ethyl Acetate	2010/03/19	NC		%	25
			1,1-Dichloroethylene	2010/03/19	NC		%	25
			cis-1,2-Dichloroethylene	2010/03/19	NC		%	25
			trans-1,2-Dichloroethylene	2010/03/19	NC		%	25
			Methylene Chloride(Dichloromethane)	2010/03/19	NC		%	25
			Chloroform	2010/03/19	NC		%	25
			Carbon Tetrachloride	2010/03/19	NC		%	25
			1,1-Dichloroethane	2010/03/19	NC		%	25
			1,2-Dichloroethane	2010/03/19	NC		%	25
			Ethylene Dibromide	2010/03/19	NC		%	25

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029945

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2105655	S_S	RPD - Sample/Sample Dup	1,1,1-Trichloroethane	2010/03/19	NC		%	25
			1,1,2-Trichloroethane	2010/03/19	NC		%	25
			1,1,2,2-Tetrachloroethane	2010/03/19	NC		%	25
			cis-1,3-Dichloropropene	2010/03/19	NC		%	25
			trans-1,3-Dichloropropene	2010/03/19	NC		%	25
			1,2-Dichloropropane	2010/03/19	NC		%	25
			Bromomethane	2010/03/19	NC		%	25
			Bromoform	2010/03/19	NC		%	25
			Bromodichloromethane	2010/03/19	NC		%	25
			Dibromochloromethane	2010/03/19	NC		%	25
			Heptane	2010/03/19	NC		%	25
			Trichloroethylene	2010/03/19	NC		%	25
			Tetrachloroethylene	2010/03/19	NC		%	25
			Benzene	2010/03/19	NC		%	25
			Toluene	2010/03/19	NC		%	25
			Ethylbenzene	2010/03/19	NC		%	25
			p+m-Xylene	2010/03/19	NC		%	25
			o-Xylene	2010/03/19	NC		%	25
			Styrene	2010/03/19	NC		%	25
			1,3,5-Trimethylbenzene	2010/03/19	NC		%	25
			1,2,4-Trimethylbenzene	2010/03/19	NC		%	25
			4-ethyltoluene	2010/03/19	NC		%	25
			Chlorobenzene	2010/03/19	NC		%	25
			Benzyl chloride	2010/03/19	NC		%	25
			1,3-Dichlorobenzene	2010/03/19	NC		%	25
			1,4-Dichlorobenzene	2010/03/19	NC		%	25
			1,2-Dichlorobenzene	2010/03/19	NC		%	25
			1,2,4-Trichlorobenzene	2010/03/19	NC		%	25
			Hexachlorobutadiene	2010/03/19	NC		%	25
			Hexane	2010/03/19	NC		%	25
			Cyclohexane	2010/03/19	NC		%	25
			Tetrahydrofuran	2010/03/19	NC		%	25
			1,4-Dioxane	2010/03/19	NC		%	25
			Xylene (Total)	2010/03/19	NC		%	25

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA VOC/PORT/ Mar 15, 10

Sampler s/n: 6200
Canister ID: 7795
Canister Installation Date/Time: Mar 12, 10 @ 08:35 mst
Canister Removal Date/Time: Mar 16,10 @ 09:00 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
15-Mar-10	03/15/2010 0:00	03/16/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	1478	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	21

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC# 2303

Technician Signiture: Shea Beaton

Your C.O.C. #: 2303

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B032308
Received: 2010/03/18, 10:59

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/22	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/03/22	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

RESULTS OF ANALYSES OF AIR

Maxxam ID		FJ0439	FJ0440	
Sampling Date		2010/03/15	2010/03/15	
COC Number		2303	2303	
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**LICA VOC/ PORT/MAR 15/10 - 7795**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	19	20	2106119

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0439				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2106127
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2106127
Propene	ppbv	<0.30	0.30	<0.516	0.516	2106127
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2106127
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2106127
Dichlorodifluoromethane (FREON 12)	ppbv	0.59	0.20	2.90	0.989	2106127
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2106127
Chloromethane	ppbv	0.63	0.30	1.31	0.620	2106127
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2106127
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2106127
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2106127
Trichlorofluoromethane (FREON 11)	ppbv	0.26	0.20	1.48	1.12	2106127
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2106127
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2106127
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2106127
2-Propanone	ppbv	1.40	0.80	3.33	1.90	2106127
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2106127
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2106127
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2106127
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2106127
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2106127
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2106127
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2106127
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2106127
Methylene Chloride(Dichloromethane)	ppbv	0.37	0.30	1.28	1.04	2106127
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2106127
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2106127
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2106127
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2106127

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0439				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2106127
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2106127
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2106127
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2106127
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2106127
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2106127
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2106127
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2106127
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2106127
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2106127
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2106127
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2106127
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2106127
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2106127
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2106127
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2106127
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2106127
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2106127
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2106127
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2106127
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2106127
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2106127
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2106127
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2106127
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2106127
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2106127
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2106127
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2106127

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0439				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/CLS/MAR 15/10 - 7852**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	86		N/A	N/A	2106127
D5-Chlorobenzene	%	83		N/A	N/A	2106127
Difluorobenzene	%	83		N/A	N/A	2106127

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0440				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/ PORT/MAR 15/10 - 7795**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2106127
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2106127
Propene	ppbv	<0.30	0.30	<0.516	0.516	2106127
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2106127
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2106127
Dichlorodifluoromethane (FREON 12)	ppbv	0.57	0.20	2.80	0.989	2106127
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2106127
Chloromethane	ppbv	0.69	0.30	1.43	0.620	2106127
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2106127
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2106127
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2106127
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.52	1.12	2106127
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2106127
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2106127
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2106127
2-Propanone	ppbv	1.41	0.80	3.35	1.90	2106127
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2106127
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2106127
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2106127
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2106127
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2106127
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2106127
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2106127
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2106127
Methylene Chloride(Dichloromethane)	ppbv	0.37	0.30	1.28	1.04	2106127
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2106127
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2106127
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2106127
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2106127
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2106127

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0440				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/ PORT/MAR 15/10 - 7795**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2106127
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2106127
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2106127
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2106127
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2106127
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2106127
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2106127
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2106127
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2106127
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2106127
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2106127
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2106127
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2106127
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2106127
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2106127
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2106127
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2106127
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2106127
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2106127
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2106127
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2106127
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2106127
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2106127
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2106127
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2106127
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2106127
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2106127
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2106127
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2106127
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2106127

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FJ0440				
Sampling Date		2010/03/15				
COC Number		2303				
	Units	**LICA VOC/ PORT/MAR 15/10 - 7795**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	83		N/A	N/A	2106127
D5-Chlorobenzene	%	80		N/A	N/A	2106127
Difluorobenzene	%	79		N/A	N/A	2106127

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

Test Summary

Maxxam ID FJ0439 **Collected** 2010/03/15
Sample ID LICA VOC/CLS/MAR 15/10 - 7852 **Shipped**
Matrix AIR **Received** 2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2106119	N/A	2010/03/22	S_S
Volatile Organics in Air (TO-15)	GC/MS	2106127	N/A	2010/03/22	S_S

Maxxam ID FJ0440 **Collected** 2010/03/15
Sample ID LICA VOC/ PORT/MAR 15/10 - 7795 **Shipped**
Matrix AIR **Received** 2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2106119	N/A	2010/03/22	S_S
Volatile Organics in Air (TO-15)	GC/MS	2106127	N/A	2010/03/22	S_S

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032308
Report Date: 2010/03/24

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB032308

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2106127	S_S	Spiked Blank	Bromochloromethane	2010/03/22		98	%	60 - 140
			D5-Chlorobenzene	2010/03/22		99	%	60 - 140
			Difluorobenzene	2010/03/22		100	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/22		105	%	70 - 130
			Carbon Disulfide	2010/03/22		117	%	70 - 130
			Propene	2010/03/22		102	%	70 - 130
			Vinyl Acetate	2010/03/22		117	%	70 - 130
			Vinyl Bromide	2010/03/22		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/03/22		107	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/03/22		86	%	70 - 130
			Chloromethane	2010/03/22		108	%	70 - 130
			Vinyl Chloride	2010/03/22		103	%	70 - 130
			Chloroethane	2010/03/22		103	%	70 - 130
			1,3-Butadiene	2010/03/22		89	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/03/22		101	%	70 - 130
			Trichlorotrifluoroethane	2010/03/22		93	%	70 - 130
			Ethanol	2010/03/22		100	%	70 - 130
			2-propanol	2010/03/22		97	%	70 - 130
			2-Propanone	2010/03/22		95	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/03/22		116	%	70 - 130
			Methyl Isobutyl Ketone	2010/03/22		107	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/03/22		111	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/03/22		98	%	70 - 130
			Ethyl Acetate	2010/03/22		103	%	70 - 130
			1,1-Dichloroethylene	2010/03/22		104	%	70 - 130
			cis-1,2-Dichloroethylene	2010/03/22		103	%	70 - 130
			trans-1,2-Dichloroethylene	2010/03/22		104	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/03/22		100	%	70 - 130
			Chloroform	2010/03/22		101	%	70 - 130
			Carbon Tetrachloride	2010/03/22		112	%	70 - 130
			1,1-Dichloroethane	2010/03/22		102	%	70 - 130
			1,2-Dichloroethane	2010/03/22		100	%	70 - 130
			Ethylene Dibromide	2010/03/22		103	%	70 - 130
			1,1,1-Trichloroethane	2010/03/22		105	%	70 - 130
			1,1,2-Trichloroethane	2010/03/22		105	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/03/22		94	%	70 - 130
			cis-1,3-Dichloropropene	2010/03/22		119	%	70 - 130
			trans-1,3-Dichloropropene	2010/03/22		119	%	70 - 130
			1,2-Dichloropropane	2010/03/22		103	%	70 - 130
			Bromomethane	2010/03/22		95	%	70 - 130
			Bromoform	2010/03/22		111	%	70 - 130
			Bromodichloromethane	2010/03/22		112	%	70 - 130
			Dibromochloromethane	2010/03/22		116	%	70 - 130
			Heptane	2010/03/22		108	%	70 - 130
			Trichloroethylene	2010/03/22		100	%	70 - 130
			Tetrachloroethylene	2010/03/22		103	%	70 - 130
			Benzene	2010/03/22		95	%	70 - 130
			Toluene	2010/03/22		99	%	70 - 130
			Ethylbenzene	2010/03/22		81	%	70 - 130
			p+m-Xylene	2010/03/22		80	%	70 - 130
			o-Xylene	2010/03/22		80	%	70 - 130
			Styrene	2010/03/22		87	%	70 - 130
			1,3,5-Trimethylbenzene	2010/03/22		92	%	70 - 130
			1,2,4-Trimethylbenzene	2010/03/22		91	%	70 - 130
			4-ethyltoluene	2010/03/22		91	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB032308

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2106127	S_S	Spiked Blank	Chlorobenzene	2010/03/22		90	%	70 - 130
			Benzyl chloride	2010/03/22		108	%	70 - 130
			1,3-Dichlorobenzene	2010/03/22		85	%	70 - 130
			1,4-Dichlorobenzene	2010/03/22		81	%	70 - 130
			1,2-Dichlorobenzene	2010/03/22		85	%	70 - 130
			1,2,4-Trichlorobenzene	2010/03/22		66 (1)	%	70 - 130
			Hexachlorobutadiene	2010/03/22		83	%	70 - 130
			Hexane	2010/03/22		102	%	70 - 130
			Cyclohexane	2010/03/22		109	%	70 - 130
			Tetrahydrofuran	2010/03/22		106	%	70 - 130
			1,4-Dioxane	2010/03/22		97	%	70 - 130
		Method Blank	Bromochloromethane	2010/03/22		87	%	60 - 140
			D5-Chlorobenzene	2010/03/22		86	%	60 - 140
			Difluorobenzene	2010/03/22		91	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/22	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/03/22	ND, RDL=0.50		ppbv	
			Propene	2010/03/22	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/03/22	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/03/22	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/03/22	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/03/22	ND, RDL=0.17		ppbv	
			Chloromethane	2010/03/22	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/03/22	ND, RDL=0.18		ppbv	
			Chloroethane	2010/03/22	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/03/22	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/03/22	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/03/22	ND, RDL=0.15		ppbv	
			Ethanol	2010/03/22	ND, RDL=2.3		ppbv	
			2-propanol	2010/03/22	ND, RDL=3.0		ppbv	
			2-Propanone	2010/03/22	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/03/22	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/03/22	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/03/22	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/03/22	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/03/22	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/03/22	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/03/22	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/03/22	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/03/22	ND, RDL=0.30		ppbv	
			Chloroform	2010/03/22	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/03/22	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/03/22	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/03/22	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/03/22	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/03/22	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/03/22	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/03/22	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/03/22	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/03/22	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/03/22	ND, RDL=0.40		ppbv	
			Bromomethane	2010/03/22	ND, RDL=0.18		ppbv	
			Bromoform	2010/03/22	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/03/22	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/03/22	ND, RDL=0.20		ppbv	
			Heptane	2010/03/22	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB032308

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2106127	S_S	Method Blank	Trichloroethylene	2010/03/22	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/03/22	ND, RDL=0.20		ppbv	
			Benzene	2010/03/22	ND, RDL=0.18		ppbv	
			Toluene	2010/03/22	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/03/22	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/03/22	ND, RDL=0.37		ppbv	
			o-Xylene	2010/03/22	ND, RDL=0.20		ppbv	
			Styrene	2010/03/22	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/03/22	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/03/22	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/03/22	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/03/22	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/03/22	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/03/22	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/03/22	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/03/22	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/03/22	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/03/22	ND, RDL=3.0		ppbv	
			Hexane	2010/03/22	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/03/22	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/03/22	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/03/22	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/03/22	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	Tetrachloroethylene	2010/03/22	0.4		%	25

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA VOC/PORT/ Mar 21, 10

Sampler s/n: 6200
Canister ID: 7799
Canister Installation Date/Time: Mar 19, 10 @ 12:35 mst
Canister Removal Date/Time: Mar 25, 10 @ 14:10 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
21-Mar-10	03/21/2010 0:00	03/22/2010 0:00	12.08

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	1478	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	3

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC# 2304
- Came to check the station on March 21, 10; noticed that the cylinder pressure and flow on the Xontech gauges were at zero.
Checked the cylinder valve - was closed. Opened valve at 11:55mst, sample ran for 12 hours and 5 minutes.

Technician Signiture: Shea Beaton

Your C.O.C. #: 2304

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/08

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B037966
Received: 2010/03/30, 17:16

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

RESULTS OF ANALYSES OF AIR

Maxxam ID		FL6560	FL6561	
Sampling Date		2010/03/21	2010/03/21	
COC Number		2304	2304	
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**LICA VOC/PORT/MAR2110 - 7799**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	18	3.0	2116656

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6560				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.86	0.20	4.26	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.65	0.30	1.34	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.42	0.20	2.38	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	3.83	0.80	9.10	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.48	0.30	1.67	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6560				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	0.36	0.18	1.16	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6560				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/CLS/MAR 2110 - 7822**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	70		N/A	N/A	2116653
D5-Chlorobenzene	%	69		N/A	N/A	2116653
Difluorobenzene	%	72		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6561				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/PORT/MAR2110 - 7799**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.51	0.20	2.54	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.41	0.30	0.851	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.50	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	2.32	0.80	5.52	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.46	0.30	1.61	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6561				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/PORT/MAR2110 - 7799**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL6561				
Sampling Date		2010/03/21				
COC Number		2304				
	Units	**LICA VOC/PORT/MAR2110 - 7799**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	65		N/A	N/A	2116653
D5-Chlorobenzene	%	63		N/A	N/A	2116653
Difluorobenzene	%	69		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

Test Summary

Maxxam ID	FL6560	**Collected**	2010/03/21
Sample ID	LICA VOC/CLS/MAR 2110 - 7822	**Shipped**	
Matrix	AIR	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

Maxxam ID	FL6561	**Collected**	2010/03/21
Sample ID	LICA VOC/PORT/MAR2110 - 7799	**Shipped**	
Matrix	AIR	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037966
Report Date: 2010/04/08

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB037966

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Bromochloromethane	2010/04/01		99	%	60 - 140
			D5-Chlorobenzene	2010/04/01		101	%	60 - 140
			Difluorobenzene	2010/04/01		102	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01		98	%	70 - 130
			Carbon Disulfide	2010/04/01		94	%	70 - 130
			Propene	2010/04/01		97	%	70 - 130
			Vinyl Acetate	2010/04/01		108	%	70 - 130
			Vinyl Bromide	2010/04/01		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/04/01		91	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/04/01		80	%	70 - 130
			Chloromethane	2010/04/01		88	%	70 - 130
			Vinyl Chloride	2010/04/01		93	%	70 - 130
			Chloroethane	2010/04/01		93	%	70 - 130
			1,3-Butadiene	2010/04/01		99	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/04/01		92	%	70 - 130
			Trichlorotrifluoroethane	2010/04/01		95	%	70 - 130
			Ethanol	2010/04/01		109	%	70 - 130
			2-propanol	2010/04/01		95	%	70 - 130
			2-Propanone	2010/04/01		98	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01		95	%	70 - 130
			Methyl Isobutyl Ketone	2010/04/01		100	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01		100	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/04/01		102	%	70 - 130
			Ethyl Acetate	2010/04/01		98	%	70 - 130
			1,1-Dichloroethylene	2010/04/01		90	%	70 - 130
			cis-1,2-Dichloroethylene	2010/04/01		99	%	70 - 130
			trans-1,2-Dichloroethylene	2010/04/01		98	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/04/01		79	%	70 - 130
			Chloroform	2010/04/01		92	%	70 - 130
			Carbon Tetrachloride	2010/04/01		95	%	70 - 130
			1,1-Dichloroethane	2010/04/01		91	%	70 - 130
			1,2-Dichloroethane	2010/04/01		92	%	70 - 130
			Ethylene Dibromide	2010/04/01		90	%	70 - 130
			1,1,1-Trichloroethane	2010/04/01		92	%	70 - 130
			1,1,2-Trichloroethane	2010/04/01		93	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/04/01		87	%	70 - 130
			cis-1,3-Dichloropropene	2010/04/01		97	%	70 - 130
			trans-1,3-Dichloropropene	2010/04/01		96	%	70 - 130
			1,2-Dichloropropane	2010/04/01		93	%	70 - 130
			Bromomethane	2010/04/01		96	%	70 - 130
			Bromoform	2010/04/01		98	%	70 - 130
			Bromodichloromethane	2010/04/01		96	%	70 - 130
			Dibromochloromethane	2010/04/01		99	%	70 - 130
			Heptane	2010/04/01		95	%	70 - 130
			Trichloroethylene	2010/04/01		94	%	70 - 130
			Tetrachloroethylene	2010/04/01		96	%	70 - 130
			Benzene	2010/04/01		93	%	70 - 130
			Toluene	2010/04/01		95	%	70 - 130
			Ethylbenzene	2010/04/01		92	%	70 - 130
			p+m-Xylene	2010/04/01		88	%	70 - 130
			o-Xylene	2010/04/01		88	%	70 - 130
			Styrene	2010/04/01		67 (1)	%	70 - 130
			1,3,5-Trimethylbenzene	2010/04/01		82	%	70 - 130
			1,2,4-Trimethylbenzene	2010/04/01		84	%	70 - 130
			4-ethyltoluene	2010/04/01		88	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB037966

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Chlorobenzene	2010/04/01		84	%	70 - 130
			Benzyl chloride	2010/04/01		84	%	70 - 130
			1,3-Dichlorobenzene	2010/04/01		80	%	70 - 130
			1,4-Dichlorobenzene	2010/04/01		73	%	70 - 130
			1,2-Dichlorobenzene	2010/04/01		84	%	70 - 130
			1,2,4-Trichlorobenzene	2010/04/01		74	%	70 - 130
			Hexachlorobutadiene	2010/04/01		97	%	70 - 130
			Hexane	2010/04/01		98	%	70 - 130
			Cyclohexane	2010/04/01		96	%	70 - 130
			Tetrahydrofuran	2010/04/01		102	%	70 - 130
			1,4-Dioxane	2010/04/01		82	%	70 - 130
		Method Blank	Bromochloromethane	2010/04/01		73	%	60 - 140
			D5-Chlorobenzene	2010/04/01		69	%	60 - 140
			Difluorobenzene	2010/04/01		77	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/04/01	ND, RDL=0.50		ppbv	
			Propene	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/04/01	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/04/01	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/04/01	ND, RDL=0.17		ppbv	
			Chloromethane	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/04/01	ND, RDL=0.18		ppbv	
			Chloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/04/01	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/04/01	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/04/01	ND, RDL=0.15		ppbv	
			Ethanol	2010/04/01	ND, RDL=2.3		ppbv	
			2-propanol	2010/04/01	ND, RDL=3.0		ppbv	
			2-Propanone	2010/04/01	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/04/01	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/04/01	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/04/01	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/04/01	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/04/01	0.41, RDL=0.30		ppbv	
			Chloroform	2010/04/01	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/04/01	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/04/01	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/04/01	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/04/01	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/04/01	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/04/01	ND, RDL=0.40		ppbv	
			Bromomethane	2010/04/01	ND, RDL=0.18		ppbv	
			Bromoform	2010/04/01	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Heptane	2010/04/01	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB037966

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Method Blank	Trichloroethylene	2010/04/01	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzene	2010/04/01	ND, RDL=0.18		ppbv	
			Toluene	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/04/01	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/04/01	ND, RDL=0.37		ppbv	
			o-Xylene	2010/04/01	ND, RDL=0.20		ppbv	
			Styrene	2010/04/01	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/04/01	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/04/01	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/04/01	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/04/01	ND, RDL=3.0		ppbv	
			Hexane	2010/04/01	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/04/01	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/04/01	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/04/01	ND, RDL=0.60		ppbv	

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Maxxam Analytics Inc.

Xontech Model 910A VOC Sample Collection Data Sheet

Client: LICA
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA VOC/PORT/ Mar 27, 10

Sampler s/n: 6200
Canister ID: 7815
Canister Installation Date/Time: Mar 25, 10 @ 14:30 mst
Canister Removal Date/Time: Mar 29, 10 @ 08:40 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
27-Mar-10	03/27/2010 0:00	03/28/2010 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	1478	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	21

Canister valve open prior to sampling?: YES / NO
Timer set to 0.00 minutes prior to sampling? YES / NO
Canister valve closed prior to disconnection?: YES / NO

Comments: System leak check prior to sampling. COC# 0902

Technician Signiture: Shea Beaton

Your C.O.C. #: 0902

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/08

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B038644
Received: 2010/03/31, 18:52

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/04/01	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

RESULTS OF ANALYSES OF AIR

Maxxam ID		FL9752	FL9753	
Sampling Date		2010/03/27	2010/03/27	
COC Number		0902	0902	
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**LICA/VOC/CLS/MAR27/10 - 7837**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	20	18	2116656

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9752				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.95	0.20	4.72	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.68	0.30	1.41	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.47	0.20	2.64	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	2.52	0.80	5.99	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.55	0.30	1.90	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9752				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653
Surrogate Recovery (%)						
Bromochloromethane	%	66		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9752				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/PORT/MAR27/10 - 7815**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	66		N/A	N/A	2116653
Difluorobenzene	%	70		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9753				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/CLS/MAR27/10 - 7837**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	2116653
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	2116653
Propene	ppbv	<0.30	0.30	<0.516	0.516	2116653
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	2116653
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	2116653
Dichlorodifluoromethane (FREON 12)	ppbv	0.91	0.20	4.51	0.989	2116653
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	2116653
Chloromethane	ppbv	0.62	0.30	1.29	0.620	2116653
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	2116653
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	2116653
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	2116653
Trichlorofluoromethane (FREON 11)	ppbv	0.47	0.20	2.66	1.12	2116653
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	2116653
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	2116653
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	2116653
2-Propanone	ppbv	2.54	0.80	6.04	1.90	2116653
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	2116653
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	2116653
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	2116653
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	2116653
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	2116653
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	2116653
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	2116653
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	2116653
Methylene Chloride(Dichloromethane)	ppbv	0.51	0.30	1.79	1.04	2116653
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	2116653
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	2116653
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	2116653
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	2116653
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	2116653
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	2116653

RDL = Reportable Detection Limit
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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9753				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/CLS/MAR27/10 - 7837**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	2116653
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	2116653
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	2116653
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	2116653
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	2116653
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	2116653
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	2116653
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	2116653
Heptane	ppbv	<0.30	0.30	<1.23	1.23	2116653
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	2116653
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	2116653
Benzene	ppbv	<0.18	0.18	<0.575	0.575	2116653
Toluene	ppbv	<0.20	0.20	<0.753	0.753	2116653
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	2116653
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	2116653
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	2116653
Styrene	ppbv	<0.20	0.20	<0.852	0.852	2116653
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	2116653
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	2116653
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	2116653
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	2116653
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	2116653
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	2116653
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	2116653
Hexane	ppbv	<0.30	0.30	<1.06	1.06	2116653
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	2116653
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	2116653
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	2116653
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	2116653
Surrogate Recovery (%)						
Bromochloromethane	%	65		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FL9753				
Sampling Date		2010/03/27				
COC Number		0902				
	Units	**LICA/VOC/CLS/MAR27/10 - 7837**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	64		N/A	N/A	2116653
Difluorobenzene	%	69		N/A	N/A	2116653

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

Test Summary

Maxxam ID	FL9752	**Collected**	2010/03/27
Sample ID	LICA/VOC/PORT/MAR27/10 - 7815	**Shipped**	
Matrix	AIR	**Received**	2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

Maxxam ID	FL9753	**Collected**	2010/03/27
Sample ID	LICA/VOC/CLS/MAR27/10 - 7837	**Shipped**	
Matrix	AIR	**Received**	2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2116656	N/A	2010/04/01	MM2
Volatile Organics in Air (TO-15)	GC/MS	2116653	N/A	2010/04/01	MM2

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038644
Report Date: 2010/04/08

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB038644

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Bromochloromethane	2010/04/01		99	%	60 - 140
			D5-Chlorobenzene	2010/04/01		101	%	60 - 140
			Difluorobenzene	2010/04/01		102	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01		98	%	70 - 130
			Carbon Disulfide	2010/04/01		94	%	70 - 130
			Propene	2010/04/01		97	%	70 - 130
			Vinyl Acetate	2010/04/01		108	%	70 - 130
			Vinyl Bromide	2010/04/01		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/04/01		91	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/04/01		80	%	70 - 130
			Chloromethane	2010/04/01		88	%	70 - 130
			Vinyl Chloride	2010/04/01		93	%	70 - 130
			Chloroethane	2010/04/01		93	%	70 - 130
			1,3-Butadiene	2010/04/01		99	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2010/04/01		92	%	70 - 130
			Trichlorotrifluoroethane	2010/04/01		95	%	70 - 130
			Ethanol	2010/04/01		109	%	70 - 130
			2-propanol	2010/04/01		95	%	70 - 130
			2-Propanone	2010/04/01		98	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01		95	%	70 - 130
			Methyl Isobutyl Ketone	2010/04/01		100	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01		100	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/04/01		102	%	70 - 130
			Ethyl Acetate	2010/04/01		98	%	70 - 130
			1,1-Dichloroethylene	2010/04/01		90	%	70 - 130
			cis-1,2-Dichloroethylene	2010/04/01		99	%	70 - 130
			trans-1,2-Dichloroethylene	2010/04/01		98	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/04/01		79	%	70 - 130
			Chloroform	2010/04/01		92	%	70 - 130
			Carbon Tetrachloride	2010/04/01		95	%	70 - 130
			1,1-Dichloroethane	2010/04/01		91	%	70 - 130
			1,2-Dichloroethane	2010/04/01		92	%	70 - 130
			Ethylene Dibromide	2010/04/01		90	%	70 - 130
			1,1,1-Trichloroethane	2010/04/01		92	%	70 - 130
			1,1,2-Trichloroethane	2010/04/01		93	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/04/01		87	%	70 - 130
			cis-1,3-Dichloropropene	2010/04/01		97	%	70 - 130
			trans-1,3-Dichloropropene	2010/04/01		96	%	70 - 130
			1,2-Dichloropropane	2010/04/01		93	%	70 - 130
			Bromomethane	2010/04/01		96	%	70 - 130
			Bromoform	2010/04/01		98	%	70 - 130
			Bromodichloromethane	2010/04/01		96	%	70 - 130
			Dibromochloromethane	2010/04/01		99	%	70 - 130
			Heptane	2010/04/01		95	%	70 - 130
			Trichloroethylene	2010/04/01		94	%	70 - 130
			Tetrachloroethylene	2010/04/01		96	%	70 - 130
			Benzene	2010/04/01		93	%	70 - 130
			Toluene	2010/04/01		95	%	70 - 130
			Ethylbenzene	2010/04/01		92	%	70 - 130
			p+m-Xylene	2010/04/01		88	%	70 - 130
			o-Xylene	2010/04/01		88	%	70 - 130
			Styrene	2010/04/01		67 (1)	%	70 - 130
			1,3,5-Trimethylbenzene	2010/04/01		82	%	70 - 130
			1,2,4-Trimethylbenzene	2010/04/01		84	%	70 - 130
			4-ethyltoluene	2010/04/01		88	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB038644

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Spiked Blank	Chlorobenzene	2010/04/01		84	%	70 - 130
			Benzyl chloride	2010/04/01		84	%	70 - 130
			1,3-Dichlorobenzene	2010/04/01		80	%	70 - 130
			1,4-Dichlorobenzene	2010/04/01		73	%	70 - 130
			1,2-Dichlorobenzene	2010/04/01		84	%	70 - 130
			1,2,4-Trichlorobenzene	2010/04/01		74	%	70 - 130
			Hexachlorobutadiene	2010/04/01		97	%	70 - 130
			Hexane	2010/04/01		98	%	70 - 130
			Cyclohexane	2010/04/01		96	%	70 - 130
			Tetrahydrofuran	2010/04/01		102	%	70 - 130
			1,4-Dioxane	2010/04/01		82	%	70 - 130
		Method Blank	Bromochloromethane	2010/04/01		73	%	60 - 140
			D5-Chlorobenzene	2010/04/01		69	%	60 - 140
			Difluorobenzene	2010/04/01		77	%	60 - 140
			2,2,4-Trimethylpentane	2010/04/01	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/04/01	ND, RDL=0.50		ppbv	
			Propene	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/04/01	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/04/01	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/04/01	ND, RDL=0.17		ppbv	
			Chloromethane	2010/04/01	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/04/01	ND, RDL=0.18		ppbv	
			Chloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/04/01	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/04/01	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/04/01	ND, RDL=0.15		ppbv	
			Ethanol	2010/04/01	ND, RDL=2.3		ppbv	
			2-propanol	2010/04/01	ND, RDL=3.0		ppbv	
			2-Propanone	2010/04/01	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/04/01	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/04/01	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/04/01	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/04/01	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/04/01	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/04/01	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/04/01	0.41, RDL=0.30		ppbv	
			Chloroform	2010/04/01	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/04/01	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/04/01	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/04/01	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/04/01	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/04/01	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/04/01	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/04/01	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/04/01	ND, RDL=0.40		ppbv	
			Bromomethane	2010/04/01	ND, RDL=0.18		ppbv	
			Bromoform	2010/04/01	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/04/01	ND, RDL=0.20		ppbv	
			Heptane	2010/04/01	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB038644

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2116653	MM2	Method Blank	Trichloroethylene	2010/04/01	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzene	2010/04/01	ND, RDL=0.18		ppbv	
			Toluene	2010/04/01	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/04/01	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/04/01	ND, RDL=0.37		ppbv	
			o-Xylene	2010/04/01	ND, RDL=0.20		ppbv	
			Styrene	2010/04/01	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/04/01	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/04/01	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/04/01	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/04/01	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/04/01	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/04/01	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/04/01	ND, RDL=3.0		ppbv	
			Hexane	2010/04/01	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/04/01	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/04/01	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/04/01	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/04/01	ND, RDL=0.60		ppbv	

Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Polycyclic Aromatic Hydrocarbons Laboratory Analysis

Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA PUF/PORT/Mar 3, 10

Puf+ s/n: 100-1015
Motor s/n: 1139
Installation Date/Time: Mar 2, 10 @ 10:15 mst
Removal Date/Time: Mar 4, 10 @ 09:10 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
03-Mar-10	03/03/2010 0:00	03/04/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
26-Feb-10	04-Mar-10	10-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 02-Oct-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
711	229	-3.9	330.29

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC # 2476 (out of source COC forms, had to use a Summa COC form)
GB011418 PUFF#2
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/PORT/Mar 3, 10

Technician Signiture: _____

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/19

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B027268
Received: 2010/03/08, 08:39

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2010/03/16	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2010/03/16	BRL SOP-00304	EPA TO-15

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/03/09	2010/03/15	BRL SOP-00201	CARB429(ARBM1,M2)mod

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/19

CERTIFICATE OF ANALYSIS

-2-

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CALA have approved this reporting process and electronic report format.

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Total cover pages: 2

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

RESULTS OF ANALYSES OF AIR

Maxxam ID		FG6744	FG6745	
Sampling Date		2010/03/03 00:00	2010/03/05 00:00	
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	19	20	2102505

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FG6746	FG6747		
Sampling Date		2010/03/03 00:00	2010/03/03 00:00		
	Units	**LICA PUF/CLS/MAR3,10**	**LICA PUF/PORT/MAR3,10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.23	0.12	0.10	2097995
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2097995
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2097995
2-Methylanthracene	ug	<0.10	<0.10	0.10	2097995
2-Methylnaphthalene	ug	0.41	0.20	0.10	2097995
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2097995
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2097995
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2097995
Acenaphthene	ug	<0.050	<0.050	0.050	2097995
Acenaphthylene	ug	<0.050	<0.050	0.050	2097995
Anthracene	ug	<0.050	<0.050	0.050	2097995
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2097995
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2097995
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2097995
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2097995
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2097995
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2097995
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2097995
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2097995
Biphenyl	ug	0.17	0.20	0.10	2097995
Chrysene	ug	<0.050	<0.050	0.050	2097995
Coronene	ug	<0.10	<0.10	0.10	2097995
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2097995
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2097995
Fluoranthene	ug	0.055	0.088	0.050	2097995
Fluorene	ug	0.146	0.182	0.050	2097995
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2097995
m-Terphenyl	ug	<0.10	<0.10	0.10	2097995
Naphthalene	ug	0.287	0.246	0.072	2097995
o-Terphenyl	ug	<0.10	<0.10	0.10	2097995
Perylene	ug	<0.10	<0.10	0.10	2097995
Phenanthrene	ug	0.233	0.343	0.050	2097995

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FG6746	FG6747		
Sampling Date		2010/03/03 00:00	2010/03/03 00:00		
	Units	**LICA PUF/CLS/MAR3,10**	**LICA PUF/PORT/MAR3,10**	**RDL**	**QC Batch**
p-Terphenyl	ug	<0.10	<0.10	0.10	2097995
Pyrene	ug	<0.050	0.063	0.050	2097995
Quinoline	ug	<0.40	<0.40	0.40	2097995
Tetralin	ug	<0.10	<0.10	0.10	2097995
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	64	72		2097995
D10-Fluoranthene	%	101	95		2097995
D10-Fluorene (FS)	%	63	66		2097995
D10-Phenanthrene	%	89	84		2097995
D12-Benzo(a)anthracene	%	96	94		2097995
D12-Benzo(a)pyrene	%	96	91		2097995
D12-Benzo(b)fluoranthene	%	91	88		2097995
D12-Benzo(ghi)perylene	%	96	91		2097995
D12-Benzo(k)fluoranthene	%	94	89		2097995
D12-Chrysene	%	89	86		2097995
D12-Indeno(1,2,3-cd)pyrene	%	89	82		2097995
D12-Perylene	%	100	95		2097995
D14-Dibenzo(a,h)anthracene	%	81	73		2097995
D14-Terphenyl (FS)	%	88	86		2097995
D8-Acenaphthylene	%	81	87		2097995
D8-Naphthalene	%	59	68		2097995

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
Volatile Organics					
2,2,4-Trimethylpentane	ppbv	<0.20	<0.20	0.20	2102500
Carbon Disulfide	ppbv	<0.50	<0.50	0.50	2102500
Propene	ppbv	<0.30	<0.30	0.30	2102500
Vinyl Acetate	ppbv	<0.20	<0.20	0.20	2102500
Vinyl Bromide	ppbv	<0.20	<0.20	0.20	2102500
Dichlorodifluoromethane (FREON 12)	ppbv	0.60	0.61	0.20	2102500
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	<0.17	0.17	2102500
Chloromethane	ppbv	0.44	0.42	0.30	2102500
Vinyl Chloride	ppbv	<0.18	<0.18	0.18	2102500
Chloroethane	ppbv	<0.30	<0.30	0.30	2102500
1,3-Butadiene	ppbv	<0.50	<0.50	0.50	2102500
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.29	0.20	2102500
Trichlorotrifluoroethane	ppbv	<0.15	<0.15	0.15	2102500
Ethanol	ppbv	<2.3	<2.3	2.3	2102500
2-propanol	ppbv	<3.0	<3.0	3.0	2102500
2-Propanone	ppbv	2.04	2.38	0.80	2102500
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	<3.0	3.0	2102500
Methyl Isobutyl Ketone	ppbv	<3.2	<3.2	3.2	2102500
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	<2.0	2.0	2102500
Methyl t-butyl ether (MTBE)	ppbv	<0.20	<0.20	0.20	2102500
Ethyl Acetate	ppbv	<2.2	<2.2	2.2	2102500
1,1-Dichloroethylene	ppbv	<0.25	<0.25	0.25	2102500
cis-1,2-Dichloroethylene	ppbv	<0.19	<0.19	0.19	2102500
trans-1,2-Dichloroethylene	ppbv	<0.20	<0.20	0.20	2102500
Methylene Chloride(Dichloromethane)	ppbv	0.53	0.52	0.30	2102500
Chloroform	ppbv	<0.15	<0.15	0.15	2102500
Carbon Tetrachloride	ppbv	<0.30	<0.30	0.30	2102500
1,1-Dichloroethane	ppbv	<0.20	<0.20	0.20	2102500
1,2-Dichloroethane	ppbv	<0.20	<0.20	0.20	2102500
Ethylene Dibromide	ppbv	<0.17	<0.17	0.17	2102500
1,1,1-Trichloroethane	ppbv	<0.30	<0.30	0.30	2102500
1,1,2-Trichloroethane	ppbv	<0.15	<0.15	0.15	2102500

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	<0.20	0.20	2102500
cis-1,3-Dichloropropene	ppbv	<0.18	<0.18	0.18	2102500
trans-1,3-Dichloropropene	ppbv	<0.17	<0.17	0.17	2102500
1,2-Dichloropropane	ppbv	<0.40	<0.40	0.40	2102500
Bromomethane	ppbv	<0.18	<0.18	0.18	2102500
Bromoform	ppbv	<0.20	<0.20	0.20	2102500
Bromodichloromethane	ppbv	<0.20	<0.20	0.20	2102500
Dibromochloromethane	ppbv	<0.20	<0.20	0.20	2102500
Heptane	ppbv	<0.30	<0.30	0.30	2102500
Trichloroethylene	ppbv	<0.30	<0.30	0.30	2102500
Tetrachloroethylene	ppbv	<0.20	<0.20	0.20	2102500
Benzene	ppbv	<0.18	<0.18	0.18	2102500
Toluene	ppbv	<0.20	<0.20	0.20	2102500
Ethylbenzene	ppbv	<0.20	<0.20	0.20	2102500
p+m-Xylene	ppbv	<0.37	<0.37	0.37	2102500
o-Xylene	ppbv	<0.20	<0.20	0.20	2102500
Styrene	ppbv	<0.20	<0.20	0.20	2102500
1,3,5-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	2102500
1,2,4-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	2102500
4-ethyltoluene	ppbv	<2.2	<2.2	2.2	2102500
Chlorobenzene	ppbv	<0.20	<0.20	0.20	2102500
Benzyl chloride	ppbv	<1.0	<1.0	1.0	2102500
1,3-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	2102500
1,4-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	2102500
1,2-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	2102500
1,2,4-Trichlorobenzene	ppbv	<2.0	<2.0	2.0	2102500
Hexachlorobutadiene	ppbv	<3.0	<3.0	3.0	2102500
Hexane	ppbv	<0.30	<0.30	0.30	2102500
Cyclohexane	ppbv	<0.20	<0.20	0.20	2102500
Tetrahydrofuran	ppbv	<0.40	<0.40	0.40	2102500
1,4-Dioxane	ppbv	<2.0	<2.0	2.0	2102500
Xylene (Total)	ppbv	<0.60	<0.60	0.60	2102500
Surrogate Recovery (%)					
Bromochloromethane	%	86	85		2102500

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		FG6744	FG6745		
Sampling Date		2010/03/03 00:00	2010/03/05 00:00		
	Units	**LICA VOC/CLS/MAR3,10**	**LICA VOC/PORT/MAR3,10**	**RDL**	**QC Batch**
D5-Chlorobenzene	%	91	90		2102500
Difluorobenzene	%	88	87		2102500

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

Test Summary

Maxxam ID FG6744 **Collected** 2010/03/03
Sample ID LICA VOC/CLS/MAR3,10 **Shipped**
Matrix AIR **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2102505	N/A	2010/03/16	VEA
Volatile Organics in Air (TO-15)	GC/MS	2102500	N/A	2010/03/16	VEA

Maxxam ID FG6745 **Collected** 2010/03/05
Sample ID LICA VOC/PORT/MAR3,10 **Shipped**
Matrix AIR **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	2102505	N/A	2010/03/16	VEA
Volatile Organics in Air (TO-15)	GC/MS	2102500	N/A	2010/03/16	VEA

Maxxam ID FG6746 **Collected** 2010/03/03
Sample ID LICA PUF/CLS/MAR3,10 **Shipped**
Matrix Filter **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2097995	2010/03/09	2010/03/15	WZ

Maxxam ID FG6747 **Collected** 2010/03/03
Sample ID LICA PUF/PORT/MAR3,10 **Shipped**
Matrix Filter **Received** 2010/03/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2097995	2010/03/09	2010/03/15	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: B027268
Report Date: 2010/03/19

GENERAL COMMENTS

VOCTO15M-A
Benzyl Chloride and 1,2,4-trichlorobenzene are above 40% RSD in initial calibration.
No positives found for these compounds.

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation. No positives found for this compound.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2097995	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/03/15		78	%	50 - 150
			D10-Fluoranthene	2010/03/15		99	%	50 - 150
			D10-Phenanthrene	2010/03/15		90	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/15		96	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/15		99	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/15		91	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/15		99	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/15		97	%	50 - 150
			D12-Chrysene	2010/03/15		87	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/03/15		90	%	50 - 150
			D12-Perylene	2010/03/15		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/15		82	%	50 - 150
			D8-Acenaphthylene	2010/03/15		93	%	50 - 150
			D8-Naphthalene	2010/03/15		77	%	50 - 150
			Acenaphthene	2010/03/15		81	%	60 - 130
		RPD	Acenaphthene	2010/03/15	7.4		%	50
		Spiked Blank	Acenaphthylene	2010/03/15		89	%	60 - 130
		RPD	Acenaphthylene	2010/03/15	9.1		%	50
		Spiked Blank	Anthracene	2010/03/15		86	%	60 - 130
		RPD	Anthracene	2010/03/15	4.4		%	50
		Spiked Blank	Benzo(a)anthracene	2010/03/15		78	%	60 - 130
		RPD	Benzo(a)anthracene	2010/03/15	1.5		%	50
		Spiked Blank	Benzo(a)pyrene	2010/03/15		84	%	60 - 130
		RPD	Benzo(a)pyrene	2010/03/15	1.7		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/03/15		85	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/03/15	1.9		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/03/15		85	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/03/15	1.6		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/03/15		84	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/03/15	2.2		%	50
		Spiked Blank	Chrysene	2010/03/15		87	%	60 - 130
		RPD	Chrysene	2010/03/15	1.0		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/03/15		71	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/03/15	6.8		%	50
		Spiked Blank	Fluoranthene	2010/03/15		100	%	60 - 130
		RPD	Fluoranthene	2010/03/15	0.8		%	50
		Spiked Blank	Fluorene	2010/03/15		81	%	60 - 130
		RPD	Fluorene	2010/03/15	7.7		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/03/15		78	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/03/15	3.1		%	50
		Spiked Blank	Naphthalene	2010/03/15		75	%	60 - 130
		RPD	Naphthalene	2010/03/15	5.3		%	50
		Spiked Blank	Phenanthrene	2010/03/15		80	%	60 - 130
		RPD	Phenanthrene	2010/03/15	4.2		%	50
		Spiked Blank	Pyrene	2010/03/15		91	%	60 - 130
		RPD	Pyrene	2010/03/15	0.9		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/03/15		89	%	50 - 150
			D10-Fluoranthene	2010/03/15		105	%	50 - 150
			D10-Phenanthrene	2010/03/15		95	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/15		98	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/15		98	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/15		92	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/15		99	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/15		96	%	50 - 150
			D12-Chrysene	2010/03/15		87	%	50 - 150

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Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2097995	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/03/15		89	%	50 - 150
			D12-Perylene	2010/03/15		103	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/15		80	%	50 - 150
			D8-Acenaphthylene	2010/03/15		106	%	50 - 150
			D8-Naphthalene	2010/03/15		87	%	50 - 150
			1-Methylnaphthalene	2010/03/15	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/03/15	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/03/15	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/03/15	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/03/15	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/03/15	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/03/15	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/03/15	ND, RDL=0.40		ug	
			Acenaphthene	2010/03/15	ND, RDL=0.050		ug	
			Acenaphthylene	2010/03/15	ND, RDL=0.050		ug	
			Anthracene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/03/15	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/03/15	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/03/15	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/03/15	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/03/15	ND, RDL=0.050		ug	
			Biphenyl	2010/03/15	ND, RDL=0.10		ug	
			Chrysene	2010/03/15	ND, RDL=0.050		ug	
			Coronene	2010/03/15	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/03/15	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/03/15	ND, RDL=0.20		ug	
			Fluoranthene	2010/03/15	ND, RDL=0.050		ug	
			Fluorene	2010/03/15	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/03/15	ND, RDL=0.050		ug	
			m-Terphenyl	2010/03/15	ND, RDL=0.10		ug	
			Naphthalene	2010/03/15	ND, RDL=0.072		ug	
			o-Terphenyl	2010/03/15	ND, RDL=0.10		ug	
			Perylene	2010/03/15	ND, RDL=0.10		ug	
			Phenanthrene	2010/03/15	ND, RDL=0.050		ug	
			p-Terphenyl	2010/03/15	ND, RDL=0.10		ug	
			Pyrene	2010/03/15	ND, RDL=0.050		ug	
			Quinoline	2010/03/15	ND, RDL=0.40		ug	
			Tetralin	2010/03/15	ND, RDL=0.10		ug	
2102500	VEA	Spiked Blank	Bromochloromethane	2010/03/16		102	%	60 - 140
			D5-Chlorobenzene	2010/03/16		110	%	60 - 140
			Difluorobenzene	2010/03/16		105	%	60 - 140
			2,2,4-Trimethylpentane	2010/03/16		106	%	70 - 130
			Carbon Disulfide	2010/03/16		97	%	70 - 130
			Propene	2010/03/16		100	%	70 - 130
			Vinyl Acetate	2010/03/16		112	%	70 - 130
			Vinyl Bromide	2010/03/16		103	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2010/03/16		97	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2010/03/16		87	%	70 - 130
			Chloromethane	2010/03/16		93	%	70 - 130
			Vinyl Chloride	2010/03/16		104	%	70 - 130
			Chloroethane	2010/03/16		102	%	70 - 130
			1,3-Butadiene	2010/03/16		83	%	70 - 130

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Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2102500	VEA	Spiked Blank	Trichlorofluoromethane (FREON 11)	2010/03/16		94	%	70 - 130
			Trichlorotrifluoroethane	2010/03/16		99	%	70 - 130
			Ethanol	2010/03/16		101	%	70 - 130
			2-propanol	2010/03/16		97	%	70 - 130
			2-Propanone	2010/03/16		101	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2010/03/16		107	%	70 - 130
			Methyl Isobutyl Ketone	2010/03/16		100	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2010/03/16		105	%	70 - 130
			Methyl t-butyl ether (MTBE)	2010/03/16		103	%	70 - 130
			Ethyl Acetate	2010/03/16		101	%	70 - 130
			1,1-Dichloroethylene	2010/03/16		102	%	70 - 130
			cis-1,2-Dichloroethylene	2010/03/16		105	%	70 - 130
			trans-1,2-Dichloroethylene	2010/03/16		93	%	70 - 130
			Methylene Chloride(Dichloromethane)	2010/03/16		87	%	70 - 130
			Chloroform	2010/03/16		98	%	70 - 130
			Carbon Tetrachloride	2010/03/16		101	%	70 - 130
			1,1-Dichloroethane	2010/03/16		99	%	70 - 130
			1,2-Dichloroethane	2010/03/16		97	%	70 - 130
			Ethylene Dibromide	2010/03/16		101	%	70 - 130
			1,1,1-Trichloroethane	2010/03/16		99	%	70 - 130
			1,1,2-Trichloroethane	2010/03/16		99	%	70 - 130
			1,1,2,2-Tetrachloroethane	2010/03/16		101	%	70 - 130
			cis-1,3-Dichloropropene	2010/03/16		116	%	70 - 130
			trans-1,3-Dichloropropene	2010/03/16		120	%	70 - 130
			1,2-Dichloropropane	2010/03/16		99	%	70 - 130
			Bromomethane	2010/03/16		96	%	70 - 130
			Bromoform	2010/03/16		103	%	70 - 130
			Bromodichloromethane	2010/03/16		100	%	70 - 130
			Dibromochloromethane	2010/03/16		101	%	70 - 130
			Heptane	2010/03/16		104	%	70 - 130
			Trichloroethylene	2010/03/16		100	%	70 - 130
			Tetrachloroethylene	2010/03/16		101	%	70 - 130
			Benzene	2010/03/16		103	%	70 - 130
			Toluene	2010/03/16		109	%	70 - 130
			Ethylbenzene	2010/03/16		113	%	70 - 130
			p+m-Xylene	2010/03/16		110	%	70 - 130
			o-Xylene	2010/03/16		107	%	70 - 130
			Styrene	2010/03/16		105	%	70 - 130
			1,3,5-Trimethylbenzene	2010/03/16		104	%	70 - 130
			1,2,4-Trimethylbenzene	2010/03/16		110	%	70 - 130
			4-ethyltoluene	2010/03/16		110	%	70 - 130
			Chlorobenzene	2010/03/16		99	%	70 - 130
			Benzyl chloride	2010/03/16		136 (1)	%	70 - 130
			1,3-Dichlorobenzene	2010/03/16		108	%	70 - 130
			1,4-Dichlorobenzene	2010/03/16		103	%	70 - 130
			1,2-Dichlorobenzene	2010/03/16		105	%	70 - 130
			1,2,4-Trichlorobenzene	2010/03/16		110	%	70 - 130
			Hexachlorobutadiene	2010/03/16		90	%	70 - 130
			Hexane	2010/03/16		99	%	70 - 130
			Cyclohexane	2010/03/16		105	%	70 - 130
			Tetrahydrofuran	2010/03/16		106	%	70 - 130
			1,4-Dioxane	2010/03/16		107	%	70 - 130
		Method Blank	Bromochloromethane	2010/03/16		92	%	60 - 140
			D5-Chlorobenzene	2010/03/16		96	%	60 - 140
			Difluorobenzene	2010/03/16		93	%	60 - 140

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Attention: Michael Bisaga
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Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2102500	VEA	Method Blank	2,2,4-Trimethylpentane	2010/03/16	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2010/03/16	ND, RDL=0.50		ppbv	
			Propene	2010/03/16	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2010/03/16	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2010/03/16	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2010/03/16	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2010/03/16	ND, RDL=0.17		ppbv	
			Chloromethane	2010/03/16	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2010/03/16	ND, RDL=0.18		ppbv	
			Chloroethane	2010/03/16	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2010/03/16	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2010/03/16	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2010/03/16	ND, RDL=0.15		ppbv	
			Ethanol	2010/03/16	ND, RDL=2.3		ppbv	
			2-propanol	2010/03/16	ND, RDL=3.0		ppbv	
			2-Propanone	2010/03/16	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2010/03/16	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2010/03/16	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2010/03/16	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2010/03/16	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2010/03/16	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2010/03/16	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2010/03/16	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2010/03/16	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2010/03/16	0.47, RDL=0.30		ppbv	
			Chloroform	2010/03/16	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2010/03/16	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2010/03/16	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2010/03/16	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2010/03/16	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2010/03/16	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2010/03/16	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2010/03/16	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2010/03/16	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2010/03/16	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2010/03/16	ND, RDL=0.40		ppbv	
			Bromomethane	2010/03/16	ND, RDL=0.18		ppbv	
			Bromoform	2010/03/16	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2010/03/16	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2010/03/16	ND, RDL=0.20		ppbv	
			Heptane	2010/03/16	ND, RDL=0.30		ppbv	
			Trichloroethylene	2010/03/16	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2010/03/16	ND, RDL=0.20		ppbv	
			Benzene	2010/03/16	ND, RDL=0.18		ppbv	
			Toluene	2010/03/16	ND, RDL=0.20		ppbv	
			Ethylbenzene	2010/03/16	ND, RDL=0.20		ppbv	
			p+m-Xylene	2010/03/16	ND, RDL=0.37		ppbv	
			o-Xylene	2010/03/16	ND, RDL=0.20		ppbv	
			Styrene	2010/03/16	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2010/03/16	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2010/03/16	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2010/03/16	ND, RDL=2.2		ppbv	
			Chlorobenzene	2010/03/16	ND, RDL=0.20		ppbv	
			Benzyl chloride	2010/03/16	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2010/03/16	ND, RDL=0.40		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
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P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB027268

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2102500	VEA	Method Blank	1,4-Dichlorobenzene	2010/03/16	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2010/03/16	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2010/03/16	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2010/03/16	ND, RDL=3.0		ppbv	
			Hexane	2010/03/16	ND, RDL=0.30		ppbv	
			Cyclohexane	2010/03/16	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2010/03/16	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2010/03/16	ND, RDL=2.0		ppbv	
			Xylene (Total)	2010/03/16	ND, RDL=0.60		ppbv	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Your C.O.C. #: n/A, N/A

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B029627
Received: 2010/03/12, 08:55

Sample Matrix: PUF AND FILTER
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/03/12	2010/03/19	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA PUF/PORT/Mar 9, 10

Puf+ s/n: 100-1015
Motor s/n: 1139
Installation Date/Time: Mar 8, 10 @ 08:55 mst
Removal Date/Time: Mar 10, 10 @ 09:10 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
09-Mar-10	03/09/2010 0:00	03/10/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
05-Mar-10	10-Mar-10	17-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 02-Oct-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
714	229	0.0	330.30

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC # Source Form, no number
GB024218 PUFF#2
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/PORT/Mar 9, 10

Technician Signiture: _____

Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

SEMI-VOLATILE ORGANICS BY GC-MS (PUF AND FILTER)

Maxxam ID		FH7025	FH7026		
Sampling Date		2010/03/09 00:00	2010/03/09 00:00		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.9/10**	**LICA PUF/QFF/PORT/MAR.9/10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.21	<0.10	0.10	2099147
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2099147
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2099147
2-Methylanthracene	ug	<0.10	<0.10	0.10	2099147
2-Methylnaphthalene	ug	0.41	0.16	0.10	2099147
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2099147
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2099147
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2099147
Acenaphthene	ug	<0.050	0.060	0.050	2099147
Acenaphthylene	ug	0.137	0.066	0.050	2099147
Anthracene	ug	<0.050	<0.050	0.050	2099147
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2099147
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2099147
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2099147
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2099147
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2099147
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2099147
Benzo(g,h,i)perylene	ug	0.078	<0.050	0.050	2099147
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2099147
Biphenyl	ug	0.25	0.18	0.10	2099147
Chrysene	ug	<0.050	<0.050	0.050	2099147
Coronene	ug	<0.10	<0.10	0.10	2099147
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2099147
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2099147
Fluoranthene	ug	0.133	0.090	0.050	2099147
Fluorene	ug	0.197	0.144	0.050	2099147
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2099147
m-Terphenyl	ug	<0.10	<0.10	0.10	2099147
Naphthalene	ug	0.267	0.127	0.072	2099147
o-Terphenyl	ug	<0.10	<0.10	0.10	2099147

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

SEMI-VOLATILE ORGANICS BY GC-MS (PUF AND FILTER)

Maxxam ID		FH7025	FH7026		
Sampling Date		2010/03/09 00:00	2010/03/09 00:00		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.9/10**	**LICA PUF/QFF/PORT/MAR.9/10**	**RDL**	**QC Batch**
Perylene	ug	<0.10	<0.10	0.10	2099147
Phenanthrene	ug	0.324	0.303	0.050	2099147
p-Terphenyl	ug	<0.10	<0.10	0.10	2099147
Pyrene	ug	0.121	0.053	0.050	2099147
Quinoline	ug	<0.40	<0.40	0.40	2099147
Tetralin	ug	<0.10	<0.10	0.10	2099147
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	68	77		2099147
D10-Fluoranthene	%	99	92		2099147
D10-Fluorene (FS)	%	58	68		2099147
D10-Phenanthrene	%	88	87		2099147
D12-Benzo(a)anthracene	%	98	112		2099147
D12-Benzo(a)pyrene	%	102	98		2099147
D12-Benzo(b)fluoranthene	%	99	97		2099147
D12-Benzo(ghi)perylene	%	106	104		2099147
D12-Benzo(k)fluoranthene	%	89	90		2099147
D12-Chrysene	%	93	87		2099147
D12-Indeno(1,2,3-cd)pyrene	%	108	106		2099147
D12-Perylene	%	100	98		2099147
D14-Dibenzo(a,h)anthracene	%	107	106		2099147
D14-Terphenyl (FS)	%	82	85		2099147
D8-Acenaphthylene	%	89	98		2099147
D8-Naphthalene	%	67	76		2099147

N/A = Not Applicable
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

Test Summary

Maxxam ID	FH7025	**Collected**	2010/03/09
Sample ID	LICA PUF/QFF/CLS/MAR.9/10	**Shipped**	
Matrix	PUF AND FILTER	**Received**	2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2099147	2010/03/12	2010/03/19	WZ

Maxxam ID	FH7026	**Collected**	2010/03/09
Sample ID	LICA PUF/QFF/PORT/MAR.9/10	**Shipped**	
Matrix	PUF AND FILTER	**Received**	2010/03/12

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2099147	2010/03/12	2010/03/19	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: B029627
Report Date: 2010/03/24

GENERAL COMMENTS

PAHMS-F
9.10-Dimethylanthracene and 7,12-Dimethylbenzo(a)anthracene are above 25% RSD in initial calibation. No positives found for these 2 compounds.

Sample FH7025-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug. Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FH7026-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug. Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB029627

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2099147	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/03/19		80	%	50 - 150
			D10-Fluoranthene	2010/03/19		103	%	50 - 150
			D10-Phenanthrene	2010/03/19		91	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/19		106	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/19		107	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/19		101	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/19		105	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/19		89	%	50 - 150
			D12-Chrysene	2010/03/19		98	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/03/19		111	%	50 - 150
			D12-Perylene	2010/03/19		103	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/19		111	%	50 - 150
			D8-Acenaphthylene	2010/03/19		101	%	50 - 150
			D8-Naphthalene	2010/03/19		82	%	50 - 150
			Acenaphthene	2010/03/19		81	%	60 - 130
		RPD	Acenaphthene	2010/03/19	3.1		%	50
		Spiked Blank	Acenaphthylene	2010/03/19		95	%	60 - 130
		RPD	Acenaphthylene	2010/03/19	1.2		%	50
		Spiked Blank	Anthracene	2010/03/19		87	%	60 - 130
		RPD	Anthracene	2010/03/19	4.1		%	50
		Spiked Blank	Benzo(a)anthracene	2010/03/19		93	%	60 - 130
		RPD	Benzo(a)anthracene	2010/03/19	1.2		%	50
		Spiked Blank	Benzo(a)pyrene	2010/03/19		89	%	60 - 130
		RPD	Benzo(a)pyrene	2010/03/19	2.8		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/03/19		88	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/03/19	0.6		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/03/19		92	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/03/19	2.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/03/19		82	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/03/19	4.3		%	50
		Spiked Blank	Chrysene	2010/03/19		84	%	60 - 130
		RPD	Chrysene	2010/03/19	2.8		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/03/19		93	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/03/19	4.0		%	50
		Spiked Blank	Fluoranthene	2010/03/19		99	%	60 - 130
		RPD	Fluoranthene	2010/03/19	0.3		%	50
		Spiked Blank	Fluorene	2010/03/19		82	%	60 - 130
		RPD	Fluorene	2010/03/19	0.07		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/03/19		92	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/03/19	2.6		%	50
		Spiked Blank	Naphthalene	2010/03/19		79	%	60 - 130
		RPD	Naphthalene	2010/03/19	1.9		%	50
		Spiked Blank	Phenanthrene	2010/03/19		82	%	60 - 130
		RPD	Phenanthrene	2010/03/19	3.2		%	50
		Spiked Blank	Pyrene	2010/03/19		89	%	60 - 130
		RPD	Pyrene	2010/03/19	2.4		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/03/19		83	%	50 - 150
			D10-Fluoranthene	2010/03/19		105	%	50 - 150
			D10-Phenanthrene	2010/03/19		94	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/19		121	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/19		110	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/19		102	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/19		110	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/19		91	%	50 - 150
			D12-Chrysene	2010/03/19		87	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB029627

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2099147	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/03/19		115	%	50 - 150
			D12-Perylene	2010/03/19		107	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/19		115	%	50 - 150
			D8-Acenaphthylene	2010/03/19		107	%	50 - 150
			D8-Naphthalene	2010/03/19		84	%	50 - 150
			1-Methylnaphthalene	2010/03/19	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/03/19	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/03/19	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/03/19	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/03/19	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/03/19	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/03/19	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/03/19	ND, RDL=0.40		ug	
			Acenaphthene	2010/03/19	ND, RDL=0.050		ug	
			Acenaphthylene	2010/03/19	ND, RDL=0.050		ug	
			Anthracene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/03/19	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/03/19	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/03/19	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/03/19	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/03/19	ND, RDL=0.050		ug	
			Biphenyl	2010/03/19	ND, RDL=0.10		ug	
			Chrysene	2010/03/19	ND, RDL=0.050		ug	
			Coronene	2010/03/19	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/03/19	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/03/19	ND, RDL=0.20		ug	
			Fluoranthene	2010/03/19	ND, RDL=0.050		ug	
			Fluorene	2010/03/19	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/03/19	ND, RDL=0.050		ug	
			m-Terphenyl	2010/03/19	ND, RDL=0.10		ug	
			Naphthalene	2010/03/19	ND, RDL=0.072		ug	
			o-Terphenyl	2010/03/19	ND, RDL=0.10		ug	
			Perylene	2010/03/19	ND, RDL=0.10		ug	
			Phenanthrene	2010/03/19	ND, RDL=0.050		ug	
			p-Terphenyl	2010/03/19	ND, RDL=0.10		ug	
			Pyrene	2010/03/19	ND, RDL=0.050		ug	
			Quinoline	2010/03/19	ND, RDL=0.40		ug	
			Tetralin	2010/03/19	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA PUF/PORT/Mar 15, 10

Puf+ s/n: 100-1015
Motor s/n: 1139
Installation Date/Time: Mar 12, 10 @ 08:50 mst
Removal Date/Time: Mar 16, 10 @ 09:15 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
15-Mar-10	03/15/2010 0:00	03/16/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
11-Mar-10	16-Mar-10	23-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 02-Oct-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
722	229	2.3	330.29

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC # Source Form, no number
GB024220 PUFF#2
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/PORT/Mar 15, 10

Technician Signiture: _____

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/03/26

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B032488
Received: 2010/03/18, 09:20

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/03/19	2010/03/25	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FJ1135	FJ1136		
Sampling Date		2010/03/15 00:00	2010/03/15 00:00		
	Units	**LICA PUF/CLS/MAR15,10**	**LICA PUF/PORT/MAR15,10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.51	0.16	0.10	2104630
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2104630
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2104630
2-Methylanthracene	ug	<0.10	<0.10	0.10	2104630
2-Methylnaphthalene	ug	0.98	0.27	0.10	2104630
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2104630
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2104630
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2104630
Acenaphthene	ug	0.087	<0.050	0.050	2104630
Acenaphthylene	ug	0.096	<0.050	0.050	2104630
Anthracene	ug	<0.050	<0.050	0.050	2104630
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2104630
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2104630
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2104630
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2104630
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2104630
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2104630
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2104630
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2104630
Biphenyl	ug	0.15	<0.10	0.10	2104630
Chrysene	ug	<0.050	<0.050	0.050	2104630
Coronene	ug	<0.10	<0.10	0.10	2104630
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2104630
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2104630
Fluoranthene	ug	0.058	<0.050	0.050	2104630
Fluorene	ug	0.155	0.095	0.050	2104630
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2104630
m-Terphenyl	ug	<0.10	<0.10	0.10	2104630
Naphthalene	ug	1.46	0.278	0.072	2104630
o-Terphenyl	ug	<0.10	<0.10	0.10	2104630
Perylene	ug	<0.10	<0.10	0.10	2104630
Phenanthrene	ug	0.233	0.152	0.050	2104630

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FJ1135	FJ1136		
Sampling Date		2010/03/15 00:00	2010/03/15 00:00		
	Units	**LICA PUF/CLS/MAR15,10**	**LICA PUF/PORT/MAR15,10**	**RDL**	**QC Batch**
p-Terphenyl	ug	<0.10	<0.10	0.10	2104630
Pyrene	ug	<0.050	<0.050	0.050	2104630
Quinoline	ug	<0.40	<0.40	0.40	2104630
Tetralin	ug	<0.10	<0.10	0.10	2104630
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	72	75		2104630
D10-Fluoranthene	%	106	91		2104630
D10-Fluorene (FS)	%	48 (1)	59		2104630
D10-Phenanthrene	%	92	83		2104630
D12-Benzo(a)anthracene	%	104	100		2104630
D12-Benzo(a)pyrene	%	106	98		2104630
D12-Benzo(b)fluoranthene	%	96	104		2104630
D12-Benzo(ghi)perylene	%	108	102		2104630
D12-Benzo(k)fluoranthene	%	93	80		2104630
D12-Chrysene	%	89	91		2104630
D12-Indeno(1,2,3-cd)pyrene	%	114	105		2104630
D12-Perylene	%	106	101		2104630
D14-Dibenzo(a,h)anthracene	%	115	105		2104630
D14-Terphenyl (FS)	%	79	82		2104630
D8-Acenaphthylene	%	92	89		2104630
D8-Naphthalene	%	69	76		2104630

QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

Test Summary

Maxxam ID	FJ1135	**Collected**	2010/03/15
Sample ID	LICA PUF/CLS/MAR15,10	**Shipped**	
Matrix	Filter	**Received**	2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2104630	2010/03/19	2010/03/25	WZ

Maxxam ID	FJ1136	**Collected**	2010/03/15
Sample ID	LICA PUF/PORT/MAR15,10	**Shipped**	
Matrix	Filter	**Received**	2010/03/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2104630	2010/03/19	2010/03/25	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: B032488
Report Date: 2010/03/26

GENERAL COMMENTS

PAHMS-F
9.10-Dimethylanthracene and 7,12-Dimethylbenzo(a)anthracene are above 25% RSD in initial calibation. No positives found for these 2 compounds.

Sample FJ1135-01: PAHMS-F
Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FJ1136-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB032488

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2104630	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/03/25		88	%	50 - 150
			D10-Fluoranthene	2010/03/25		91	%	50 - 150
			D10-Phenanthrene	2010/03/25		85	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/25		103	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/25		98	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/25		108	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/25		98	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/25		84	%	50 - 150
			D12-Chrysene	2010/03/25		100	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/03/25		100	%	50 - 150
			D12-Perylene	2010/03/25		102	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/25		99	%	50 - 150
			D8-Acenaphthylene	2010/03/25		88	%	50 - 150
			D8-Naphthalene	2010/03/25		90	%	50 - 150
			Acenaphthene	2010/03/25		83	%	60 - 130
		RPD	Acenaphthene	2010/03/25	0.4		%	50
		Spiked Blank	Acenaphthylene	2010/03/25		89	%	60 - 130
		RPD	Acenaphthylene	2010/03/25	1.2		%	50
		Spiked Blank	Anthracene	2010/03/25		78	%	60 - 130
		RPD	Anthracene	2010/03/25	1.8		%	50
		Spiked Blank	Benzo(a)anthracene	2010/03/25		94	%	60 - 130
		RPD	Benzo(a)anthracene	2010/03/25	5.1		%	50
		Spiked Blank	Benzo(a)pyrene	2010/03/25		84	%	60 - 130
		RPD	Benzo(a)pyrene	2010/03/25	0.7		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/03/25		83	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/03/25	3.1		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/03/25		89	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/03/25	4.6		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/03/25		93	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/03/25	0.9		%	50
		Spiked Blank	Chrysene	2010/03/25		88	%	60 - 130
		RPD	Chrysene	2010/03/25	2.6		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/03/25		88	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/03/25	3.9		%	50
		Spiked Blank	Fluoranthene	2010/03/25		86	%	60 - 130
		RPD	Fluoranthene	2010/03/25	2.7		%	50
		Spiked Blank	Fluorene	2010/03/25		79	%	60 - 130
		RPD	Fluorene	2010/03/25	2.0		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/03/25		88	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/03/25	5.5		%	50
		Spiked Blank	Naphthalene	2010/03/25		88	%	60 - 130
		RPD	Naphthalene	2010/03/25	0.5		%	50
		Spiked Blank	Phenanthrene	2010/03/25		78	%	60 - 130
		RPD	Phenanthrene	2010/03/25	1.2		%	50
		Spiked Blank	Pyrene	2010/03/25		79	%	60 - 130
		RPD	Pyrene	2010/03/25	1.0		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/03/25		91	%	50 - 150
			D10-Fluoranthene	2010/03/25		95	%	50 - 150
			D10-Phenanthrene	2010/03/25		89	%	50 - 150
			D12-Benzo(a)anthracene	2010/03/25		114	%	50 - 150
			D12-Benzo(a)pyrene	2010/03/25		97	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/03/25		107	%	50 - 150
			D12-Benzo(ghi)perylene	2010/03/25		98	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/03/25		81	%	50 - 150
			D12-Chrysene	2010/03/25		86	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB032488

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2104630	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/03/25		100	%	50 - 150
			D12-Perylene	2010/03/25		100	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/03/25		99	%	50 - 150
			D8-Acenaphthylene	2010/03/25		95	%	50 - 150
			D8-Naphthalene	2010/03/25		93	%	50 - 150
			1-Methylnaphthalene	2010/03/25	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/03/25	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/03/25	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/03/25	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/03/25	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/03/25	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/03/25	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/03/25	ND, RDL=0.40		ug	
			Acenaphthene	2010/03/25	ND, RDL=0.050		ug	
			Acenaphthylene	2010/03/25	ND, RDL=0.050		ug	
			Anthracene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/03/25	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/03/25	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/03/25	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/03/25	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/03/25	ND, RDL=0.050		ug	
			Biphenyl	2010/03/25	ND, RDL=0.10		ug	
			Chrysene	2010/03/25	ND, RDL=0.050		ug	
			Coronene	2010/03/25	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/03/25	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/03/25	ND, RDL=0.20		ug	
			Fluoranthene	2010/03/25	ND, RDL=0.050		ug	
			Fluorene	2010/03/25	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/03/25	ND, RDL=0.050		ug	
			m-Terphenyl	2010/03/25	ND, RDL=0.10		ug	
			Naphthalene	2010/03/25	ND, RDL=0.072		ug	
			o-Terphenyl	2010/03/25	ND, RDL=0.10		ug	
			Perylene	2010/03/25	ND, RDL=0.10		ug	
			Phenanthrene	2010/03/25	ND, RDL=0.050		ug	
			p-Terphenyl	2010/03/25	ND, RDL=0.10		ug	
			Pyrene	2010/03/25	ND, RDL=0.050		ug	
			Quinoline	2010/03/25	ND, RDL=0.40		ug	
			Tetralin	2010/03/25	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA PUF/PORT/Mar 21, 10

Puf+ s/n: 100-1015
Motor s/n: 1139
Installation Date/Time: Mar 19, 10 @ 12:45 mst
Removal Date/Time: Mar 25, 10 @ 14:35 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
21-Mar-10	03/21/2010 0:00	03/22/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
18-Mar-10	26-Mar-10	30-Mar-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 02-Oct-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
712	229	-0.1	330.30

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC # Source Form, no number
GB024228 PUFF#2
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/PORT/Mar 21, 10

Technician Signiture: _____

Your C.O.C. #: N/A

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/22

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B037513
Received: 2010/03/30, 08:52

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/04/01	2010/04/14	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL4573	FL4574		
Sampling Date		2010/03/21	2010/03/21		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.21/10**	**LICA PUF/QFF/PORT/MAR.21/10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	<0.10	<0.10	0.10	2115111
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2115111
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2115111
2-Methylanthracene	ug	<0.10	<0.10	0.10	2115111
2-Methylnaphthalene	ug	0.18	0.13	0.10	2115111
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2115111
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2115111
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2115111
Acenaphthene	ug	<0.050	<0.050	0.050	2115111
Acenaphthylene	ug	<0.050	<0.050	0.050	2115111
Anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2115111
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2115111
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Biphenyl	ug	<0.10	<0.10	0.10	2115111
Chrysene	ug	<0.050	<0.050	0.050	2115111
Coronene	ug	<0.10	<0.10	0.10	2115111
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2115111
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2115111
Fluoranthene	ug	0.089	0.055	0.050	2115111
Fluorene	ug	0.124	0.103	0.050	2115111
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2115111
m-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Naphthalene	ug	0.192	0.098	0.072	2115111
o-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Perylene	ug	<0.10	<0.10	0.10	2115111

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL4573	FL4574		
Sampling Date		2010/03/21	2010/03/21		
COC Number		N/A	N/A		
	Units	**LICA PUF/QFF/CLS/MAR.21/10**	**LICA PUF/QFF/PORT/MAR.21/10**	**RDL**	**QC Batch**
Phenanthrene	ug	0.305	0.232	0.050	2115111
p-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Pyrene	ug	0.070	<0.050	0.050	2115111
Quinoline	ug	<0.40	<0.40	0.40	2115111
Tetralin	ug	<0.10	<0.10	0.10	2115111
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	74	70		2115111
D10-Fluoranthene	%	108	108		2115111
D10-Fluorene (FS)	%	50	47 (1)		2115111
D10-Phenanthrene	%	103	99		2115111
D12-Benzo(a)anthracene	%	111	109		2115111
D12-Benzo(a)pyrene	%	104	102		2115111
D12-Benzo(b)fluoranthene	%	105	102		2115111
D12-Benzo(ghi)perylene	%	108	105		2115111
D12-Benzo(k)fluoranthene	%	87	85		2115111
D12-Chrysene	%	89	85		2115111
D12-Indeno(1,2,3-cd)pyrene	%	112	109		2115111
D12-Perylene	%	100	97		2115111
D14-Dibenzo(a,h)anthracene	%	113	111		2115111
D14-Terphenyl (FS)	%	83	78		2115111
D8-Acenaphthylene	%	93	89		2115111
D8-Naphthalene	%	69	66		2115111

N/A = Not Applicable
QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

Test Summary

Maxxam ID	FL4573	**Collected**	2010/03/21
Sample ID	LICA PUF/QFF/CLS/MAR.21/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

Maxxam ID	FL4574	**Collected**	2010/03/21
Sample ID	LICA PUF/QFF/PORT/MAR.21/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/30

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.

Maxxam Job #: B037513
Report Date: 2010/04/22

GENERAL COMMENTS

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation and 3-Methylcholanthrene ,Dibenzo(a,e)pyrene are above 25% in continuing. No positives found for this compounds.

Sample FL4573-01: PAHMS-F

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FL4574-01: PAHMS-F

Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB037513

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/04/14		85	%	50 - 150
			D10-Fluoranthene	2010/04/14		109	%	50 - 150
			D10-Phenanthrene	2010/04/14		105	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		106	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		105	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		93	%	50 - 150
			D12-Chrysene	2010/04/14		96	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/04/14		112	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		113	%	50 - 150
			D8-Acenaphthylene	2010/04/14		96	%	50 - 150
			D8-Naphthalene	2010/04/14		84	%	50 - 150
			Acenaphthene	2010/04/14		91	%	60 - 130
		RPD	Acenaphthene	2010/04/14	2.9		%	50
		Spiked Blank	Acenaphthylene	2010/04/14		96	%	60 - 130
		RPD	Acenaphthylene	2010/04/14	1.2		%	50
		Spiked Blank	Anthracene	2010/04/14		92	%	60 - 130
		RPD	Anthracene	2010/04/14	3.6		%	50
		Spiked Blank	Benzo(a)anthracene	2010/04/14		102	%	60 - 130
		RPD	Benzo(a)anthracene	2010/04/14	7.4		%	50
		Spiked Blank	Benzo(a)pyrene	2010/04/14		97	%	60 - 130
		RPD	Benzo(a)pyrene	2010/04/14	2.8		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/04/14		101	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/04/14	3.2		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/04/14		102	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/04/14	1.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/04/14		89	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/04/14	0.3		%	50
		Spiked Blank	Chrysene	2010/04/14		90	%	60 - 130
		RPD	Chrysene	2010/04/14	7.5		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/04/14		105	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/04/14	2.8		%	50
		Spiked Blank	Fluoranthene	2010/04/14		106	%	60 - 130
		RPD	Fluoranthene	2010/04/14	7.3		%	50
		Spiked Blank	Fluorene	2010/04/14		90	%	60 - 130
		RPD	Fluorene	2010/04/14	0.9		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/04/14		103	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/04/14	1.8		%	50
		Spiked Blank	Naphthalene	2010/04/14		82	%	60 - 130
		RPD	Naphthalene	2010/04/14	5.2		%	50
		Spiked Blank	Phenanthrene	2010/04/14		93	%	60 - 130
		RPD	Phenanthrene	2010/04/14	3.4		%	50
		Spiked Blank	Pyrene	2010/04/14		100	%	60 - 130
		RPD	Pyrene	2010/04/14	1.6		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/04/14		76	%	50 - 150
			D10-Fluoranthene	2010/04/14		107	%	50 - 150
			D10-Phenanthrene	2010/04/14		104	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		105	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		104	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		91	%	50 - 150
			D12-Chrysene	2010/04/14		91	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB037513

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/04/14		114	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		116	%	50 - 150
			D8-Acenaphthylene	2010/04/14		90	%	50 - 150
			D8-Naphthalene	2010/04/14		74	%	50 - 150
			1-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/04/14	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/04/14	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/04/14	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/04/14	ND, RDL=0.40		ug	
			Acenaphthene	2010/04/14	ND, RDL=0.050		ug	
			Acenaphthylene	2010/04/14	ND, RDL=0.050		ug	
			Anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Biphenyl	2010/04/14	ND, RDL=0.10		ug	
			Chrysene	2010/04/14	ND, RDL=0.050		ug	
			Coronene	2010/04/14	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/04/14	ND, RDL=0.20		ug	
			Fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Fluorene	2010/04/14	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/04/14	ND, RDL=0.050		ug	
			m-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Naphthalene	2010/04/14	ND, RDL=0.072		ug	
			o-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Perylene	2010/04/14	ND, RDL=0.10		ug	
			Phenanthrene	2010/04/14	ND, RDL=0.050		ug	
			p-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Pyrene	2010/04/14	ND, RDL=0.050		ug	
			Quinoline	2010/04/14	ND, RDL=0.40		ug	
			Tetralin	2010/04/14	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: 13-16-62-5 W4M
Station ID: Lica 33 (Portable)
Field Sample ID: LICA PUF/PORT/Mar 27, 10

Puf+ s/n: 100-1015
Motor s/n: 1139
Installation Date/Time: Mar 25, 10 @ 14:50 mst
Removal Date/Time: Mar 29, 10 @ 08:50 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
27-Mar-10	03/27/2010 0:00	03/28/2010 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
25-Mar-10	29-Mar-10	06-Apr-10	????

Set Flow Rate (slpm): 230

Date of Last Calibration: 02-Oct-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
713	229	4.8	330.29

Time set correctly prior to sampling? YES
Timer set correctly prior to sampling? YES
Sampling data saved to memory card after sampling? YES

Comments: COC # Source Form, no number
GB024235 PUFF#2
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/PORT/Mar 27, 10

Technician Signiture: _____

Your C.O.C. #: N/A

Attention: Shea Beaton
Lakeland Industry & Community Assoc.
P.O. Box 8237
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2010/04/22

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B038130
Received: 2010/03/31, 09:12

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2010/04/01	2010/04/14	BRL SOP-00201	CARB429(ARBM1,M2)mod

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

THERESA STEPHENSON, Project Manager
Email: Theresa.Stephenson@MaxxamAnalytics.com
Phone# (905) 817-5763

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL7415	FL7416		
Sampling Date		2010/03/27	2010/03/27		
COC Number		N/A	N/A		
	Units	**LICA/PUF/QFF/CLS/MAR.27/10**	**LICA/PUF/QFF/PORT/MAR.27/10**	**RDL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	0.48	0.14	0.10	2115111
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	2115111
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	2115111
2-Methylanthracene	ug	<0.10	<0.10	0.10	2115111
2-Methylnaphthalene	ug	1.02	0.23	0.10	2115111
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	2115111
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	2115111
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	2115111
Acenaphthene	ug	0.077	<0.050	0.050	2115111
Acenaphthylene	ug	0.063	<0.050	0.050	2115111
Anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	2115111
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	2115111
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	2115111
Benzo(g,h,i)perylene	ug	<0.050	<0.050	0.050	2115111
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	2115111
Biphenyl	ug	0.15	0.23	0.10	2115111
Chrysene	ug	<0.050	<0.050	0.050	2115111
Coronene	ug	<0.10	<0.10	0.10	2115111
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	2115111
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	2115111
Fluoranthene	ug	0.072	0.097	0.050	2115111
Fluorene	ug	0.187	0.161	0.050	2115111
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	2115111
m-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Naphthalene	ug	1.12	0.290	0.072	2115111
o-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Perylene	ug	<0.10	<0.10	0.10	2115111
Phenanthrene	ug	0.354	0.442	0.050	2115111

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		FL7415	FL7416		
Sampling Date		2010/03/27	2010/03/27		
COC Number		N/A	N/A		
	Units	**LICA/PUF/QFF/CLS/MAR.27/10**	**LICA/PUF/QFF/PORT/MAR.27/10**	**RDL**	**QC Batch**
p-Terphenyl	ug	<0.10	<0.10	0.10	2115111
Pyrene	ug	<0.050	0.065	0.050	2115111
Quinoline	ug	<0.40	<0.40	0.40	2115111
Tetralin	ug	<0.10	<0.10	0.10	2115111
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	75	77		2115111
D10-Fluoranthene	%	110	105		2115111
D10-Fluorene (FS)	%	49 (1)	49 (1)		2115111
D10-Phenanthrene	%	106	105		2115111
D12-Benzo(a)anthracene	%	113	106		2115111
D12-Benzo(a)pyrene	%	109	102		2115111
D12-Benzo(b)fluoranthene	%	108	101		2115111
D12-Benzo(ghi)perylene	%	114	107		2115111
D12-Benzo(k)fluoranthene	%	93	92		2115111
D12-Chrysene	%	95	94		2115111
D12-Indeno(1,2,3-cd)pyrene	%	118	108		2115111
D12-Perylene	%	104	98		2115111
D14-Dibenzo(a,h)anthracene	%	119	108		2115111
D14-Terphenyl (FS)	%	84	85		2115111
D8-Acenaphthylene	%	98	97		2115111
D8-Naphthalene	%	70	75		2115111

N/A = Not Applicable
QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

Test Summary

Maxxam ID	FL7415	**Collected**	2010/03/27
Sample ID	LICA/PUF/QFF/CLS/MAR.27/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

Maxxam ID	FL7416	**Collected**	2010/03/27
Sample ID	LICA/PUF/QFF/PORT/MAR.27/10	**Shipped**	
Matrix	Filter	**Received**	2010/03/31

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	2115111	2010/04/01	2010/04/14	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: B038130
Report Date: 2010/04/22

GENERAL COMMENTS

PAHMS-F
7,12-Dimethylbenzo(a)anthracene is above 25% RSD in initial calibation and 3-Methylcholanthrene ,Dibenzo(a,e)pyrene are above 25% in continuing. No positives found for this compounds.

Sample FL7415-01: PAHMS-F

Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Sample FL7416-01: PAHMS-F

Low d10-fluorene field spike recovery. Suspect sample matrix as cause due to acceptable recovery of d14-terphenyl field spike.

Not calibrated for Benzo(b)Anthracene, Picene, Dibenzo(a,c) anthracene or Triphenylene. An estimated mdl for each of these compounds is 0.1ug .
Since Dibenzo(a,c) anthracene co-elutes with Dibenzo(a,h) anthracene and Triphenylene with Chrysene each would have a value below estimated mdl.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to these 2 compounds in the appropriate retention time range with no possible positives detected.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GB038130

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Spiked Blank	D10-2-Methylnaphthalene	2010/04/14		85	%	50 - 150
			D10-Fluoranthene	2010/04/14		109	%	50 - 150
			D10-Phenanthrene	2010/04/14		105	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		106	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		105	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		93	%	50 - 150
			D12-Chrysene	2010/04/14		96	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2010/04/14		112	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		113	%	50 - 150
			D8-Acenaphthylene	2010/04/14		96	%	50 - 150
			D8-Naphthalene	2010/04/14		84	%	50 - 150
			Acenaphthene	2010/04/14		91	%	60 - 130
		RPD	Acenaphthene	2010/04/14	2.9		%	50
		Spiked Blank	Acenaphthylene	2010/04/14		96	%	60 - 130
		RPD	Acenaphthylene	2010/04/14	1.2		%	50
		Spiked Blank	Anthracene	2010/04/14		92	%	60 - 130
		RPD	Anthracene	2010/04/14	3.6		%	50
		Spiked Blank	Benzo(a)anthracene	2010/04/14		102	%	60 - 130
		RPD	Benzo(a)anthracene	2010/04/14	7.4		%	50
		Spiked Blank	Benzo(a)pyrene	2010/04/14		97	%	60 - 130
		RPD	Benzo(a)pyrene	2010/04/14	2.8		%	50
		Spiked Blank	Benzo(b)fluoranthene	2010/04/14		101	%	60 - 130
		RPD	Benzo(b)fluoranthene	2010/04/14	3.2		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2010/04/14		102	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2010/04/14	1.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2010/04/14		89	%	60 - 130
		RPD	Benzo(k)fluoranthene	2010/04/14	0.3		%	50
		Spiked Blank	Chrysene	2010/04/14		90	%	60 - 130
		RPD	Chrysene	2010/04/14	7.5		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2010/04/14		105	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2010/04/14	2.8		%	50
		Spiked Blank	Fluoranthene	2010/04/14		106	%	60 - 130
		RPD	Fluoranthene	2010/04/14	7.3		%	50
		Spiked Blank	Fluorene	2010/04/14		90	%	60 - 130
		RPD	Fluorene	2010/04/14	0.9		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2010/04/14		103	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2010/04/14	1.8		%	50
		Spiked Blank	Naphthalene	2010/04/14		82	%	60 - 130
		RPD	Naphthalene	2010/04/14	5.2		%	50
		Spiked Blank	Phenanthrene	2010/04/14		93	%	60 - 130
		RPD	Phenanthrene	2010/04/14	3.4		%	50
		Spiked Blank	Pyrene	2010/04/14		100	%	60 - 130
		RPD	Pyrene	2010/04/14	1.6		%	50
		Method Blank	D10-2-Methylnaphthalene	2010/04/14		76	%	50 - 150
			D10-Fluoranthene	2010/04/14		107	%	50 - 150
			D10-Phenanthrene	2010/04/14		104	%	50 - 150
			D12-Benzo(a)anthracene	2010/04/14		110	%	50 - 150
			D12-Benzo(a)pyrene	2010/04/14		105	%	50 - 150
			D12-Benzo(b)fluoranthene	2010/04/14		104	%	50 - 150
			D12-Benzo(ghi)perylene	2010/04/14		108	%	50 - 150
			D12-Benzo(k)fluoranthene	2010/04/14		91	%	50 - 150
			D12-Chrysene	2010/04/14		91	%	50 - 150

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Lakeland Industry & Community Assoc.
Attention: Shea Beaton
Client Project #:
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: GB038130

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
2115111	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2010/04/14		114	%	50 - 150
			D12-Perylene	2010/04/14		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2010/04/14		116	%	50 - 150
			D8-Acenaphthylene	2010/04/14		90	%	50 - 150
			D8-Naphthalene	2010/04/14		74	%	50 - 150
			1-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2010/04/14	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylanthracene	2010/04/14	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2010/04/14	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2010/04/14	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2010/04/14	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2010/04/14	ND, RDL=0.40		ug	
			Acenaphthene	2010/04/14	ND, RDL=0.050		ug	
			Acenaphthylene	2010/04/14	ND, RDL=0.050		ug	
			Anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2010/04/14	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2010/04/14	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Biphenyl	2010/04/14	ND, RDL=0.10		ug	
			Chrysene	2010/04/14	ND, RDL=0.050		ug	
			Coronene	2010/04/14	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2010/04/14	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2010/04/14	ND, RDL=0.20		ug	
			Fluoranthene	2010/04/14	ND, RDL=0.050		ug	
			Fluorene	2010/04/14	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2010/04/14	ND, RDL=0.050		ug	
			m-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Naphthalene	2010/04/14	ND, RDL=0.072		ug	
			o-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Perylene	2010/04/14	ND, RDL=0.10		ug	
			Phenanthrene	2010/04/14	ND, RDL=0.050		ug	
			p-Terphenyl	2010/04/14	ND, RDL=0.10		ug	
			Pyrene	2010/04/14	ND, RDL=0.050		ug	
			Quinoline	2010/04/14	ND, RDL=0.40		ug	
			Tetralin	2010/04/14	ND, RDL=0.10		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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