Lakeland Industry & Community Association

Cold Lake Monitoring Site
Ambient Air Monitoring
Data Report
For
September 2009

Prepared By:

Maxxam Analytics

Driven by Service and Science

October 27, 2009

Lakeland Industry & Community Association
Ambient Air Monitoring

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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: Cold Lake
Data Period: September 2009

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-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 - COLD LAKE

Continuous Ambient Monitoring – September 2009

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	0.01	1	4, 19	VAR	VAR	VAR	0.2	4	99.7
TRS (PPB)	-	-	-	-	0.02	6	3	5	0.2	196(SSW)	0.6	3	99.7
NO_2 (PPB)	212	106	0	0	1.89	12	16	17	5.2	93(E)	3.6	16	99.7
NO (PPB)	-	-	-	-	0.53	25	23	7	0.2	2(N)	3.1	16	99.7
NOx (PPB)	-	-	-	-	2.64	31	23	7	0.2	2(N)	7.0	16	99.7
O_3 (PPB)	82	-	0	-	21.71	50	3	VAR	VAR	VAR	32.0	3	99.7
THC (PPM)	-	-	-	-	2.03	3.1	16	7	51.4	62(ENE)	2.8	16	94.6
PM 2.5 (UG/M^3)	-	30	-	0	4.27	23.0	16	11	3.1	41(NE)	9.7	3	95.6
TEMPERATURE (DEG C)	-	-	-	-	14.25	29.4	3	16	9.1	101(E)	21.9	3	99.7
RELATIVE HUMIDITY (%)	-	-	-	-	68.40	99.0	15	VAR	VAR	VAR	83.0	10	99.7
VECTOR WS (KPH)	-	-	-	-	6.32	21.1	29	11	-	128(SE)	11.2	27	99.7
VECTOR WD (DEGREES)	-	-	-	-	209(SSW)	-	-	-	-	-	-	-	99.7

VAR-VARIOUS

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

Passive Ambient Monitoring Network – September 2009

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION PASSIVE NETWORK			
NETWORK MAXIMUM			NETWORK AVERAGE
PARAMETER	STATION	READING (PPB)	READING (PPB)
SO_2	#14	0.9	0.3
H_2S	#5	0.49	0.23
NO_2	#28	3.4	1.4
O_3	#32	32.0	22.3

Note: The network averages include samples and duplicates.

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

Xontech Model 910A – May 25, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

Xontech Model 910A – May 31, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

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

Xontech Model 910A – June 6, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

Xontech Model 910A – June 12, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

Xontech Model 910A – June 18, 2009

Maximum reading (ppb)	Volatile Organic
8.39	Carbon Disulfide

Xontech Model 910A – June 24, 2009

Maximum reading (ppb)	Volatile Organic
7.46	2-Propanone

Xontech Model 910A – June 30, 2009

Maximum reading (ppb)	Volatile Organic
3.40	2-Propanone

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

Xontech Model 910A – July 6, 2009

Maximum reading (ppb)	Volatile Organic
4.53	2-Propanone

Xontech Model 910A – July 12, 2009

Maximum reading (ppb)	Volatile Organic
4.10	2-Propanone

Xontech Model 910A – July 18, 2009

Maximum reading (ppb)	Volatile Organic
9.65	2-Propanone

Xontech Model 910A – July 24, 2009

Maximum reading (ppb)	Volatile Organic
5.07	2-Propanone

Xontech Model 910A – July 30, 2009

Maximum reading (ppb)	Volatile Organic
6.21	2-Propanone

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

Xontech Model 910A – August 5, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

Xontech Model 910A – August 11, 2009

Maximum reading (ppb)	Volatile Organic
4.3	Ethanol

Xontech Model 910A – August 17, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

Xontech Model 910A – August 23, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

Xontech Model 910A – August 29, 2009

Maximum reading (ppb)	Volatile Organic
3.75	2-Propanone

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

Xontech Model 910A – September 04, 2009

Maximum reading (ppb)	Volatile Organic
3.36	2-Propanone

Xontech Model 910A – September 10, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

Xontech Model 910A – September 16, 2009

Maximum reading (ppb)	Volatile Organic
4.10	2-Propanone

Xontech Model 910A – September 22, 2009

Maximum reading (ppb)	Volatile Organic
5.83	Methylene Chloride (Dichloromethane)

Xontech Model 910A – September 28, 2009

Maximum reading (ppb)	Volatile Organic
<3.2	Methyl Isobuty Ketone

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

PUF cartridge– August 05, 2009

Maximum reading (ug)	PAH
<2	3-Methylcholanthrene

PUF cartridge – August 11, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

PUF cartridge – August 17, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

PUF cartridge – August 23, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

PUF cartridge – August 29, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

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

PUF cartridge – September 04, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

PUF cartridge – September 10, 2009

Maximum reading (ug)	Volatile Organic
NA	NA

PS: No sample was collected during this time as the PUF sampler was received late.

PUF cartridge – September 16, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

PUF cartridge – September 22, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

PUF cartridge – September 28, 2009

Maximum reading (ug)	Volatile Organic
<2	3-Methylcholanthrene

PUF cartridge – October 4, 2009

Maximum reading (ug)	Volatile Organic
<2	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

No operational issues observed during the month. The inlet filter was changed before the monthly calibration was started on September 8th. Two hours of data on September 16th were invalidated due to a power failure event. Data was corrected using daily zero information.

Total Reduced Sulphur (PPB)
- Analyzer make / model –TEI 450i
- Converter - CD NOVA CDN 101

No operational issues observed during the month. The inlet filter was changed before the monthly calibration was started on September 8th. Two hours of data on September 16th were invalidated due to a power failure event. Data was corrected using daily zero information.

Nitrogen Dioxide (PPB)
- Analyzer make / model - TECO 42C

No operational issues observed during the month. The inlet filter was changed before the monthly calibration was started on September 8th. Two hours of data on September 16th were invalidated due to a power failure event. Data was corrected using daily zero information.

General Monthly Summary - Cold Lake

AQM STATION – LICA – COLD LAKE

Total HydroCarbon (PPM)

- Analyzer make / model -TECO 51C-LT

No operational issues observed during the month. Two hours of data on September 16th were invalidated due to a power failure event. After the power failure, the analyzer flamed-out, it was re-lit manually on September 17th. A total of 33 hours of data was invalidated due to this issue. The inlet filter was changed before the monthly calibration was started on September 25. The Hydrogen cylinder was replaced on September 25th. Data was corrected using daily zero information.

Ozone (PPB)

- Analyzer make / model - TECO 49i

No operational issues observed during the month. The inlet filter was changed before the monthly calibration was started on September 8th. Two hours of data on September 16th were invalidated due to a power failure event.

Particulate Matter 2.5 (ug/m^3)

- Analyzer make / model –TEOM1405F

No operational issues observed during the month. A TEOM audit was performed on September 25th. After the audit, the main and bypass inline filters were replaced, the TEOM filters were changed, a leak check was performed, the ambient BP sensor was adjusted, and the firmware was updated to version 1.28. Another TEOM audit was perform following the maintenance and update. The flows were then adjusted to the measured values. Two hours of data on September 16th were invalidated due to a power failure event. 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. There were 30 hours of data invalidated as the readings were below –3 during this month.

General Monthly Summary - Cold Lake

AQM STATION – LICA – COLD LAKE

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

- System make / model – Met One 50.5

No operational issues observed during the month. The wind system is reported as vector wind speed and vector wind direction. . Two hours of data on September 16th were invalidated due to a power failure event.

Relative Humidity (PERCENT)

- System make / model - Rotronic Hygroclip-S3

No operational issues observed during the month. . Two hours of data on September 16th were invalidated due to a power failure event.

Ambient Temperature (DEGC)

- System make / model - Rotronic Hygroclip-S3

No operational issues observed during the month. . Two hours of data on September 16th were invalidated due to a power failure event.

Trailer Temperature (DEGC)

- System make / model - R&R 61

No operational issues observed during the month. . Two hours of data on September 16th were invalidated due to a power failure event.

Datalogger

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

The ESC 8832 is connected to a modem with DSL for continuous connection with the base computer.
A hardware modification and software upgrade were performed on September 17th.

General Monthly Summary - Cold Lake

AQM STATION – LICA – COLD LAKE

Trailer
No issue was observed during this month. The manifold and inlet were cleaned on September 8th. The manifold blower motor was replaced on September 25th; the old one will save as spare.

Air Quality Index (AQI)
The AQI data was adjusted to reflect regular monthly and daily calibrations, maintenance, and downtime. 37 hours of fair AQI values recorded in September 2009, and 35 hours of fair AQI were due to Ozone, and 2 hours of fair AQI were due to PM2.5. The highest hourly concentration of PM2.5 was 62 UG/M3 and an AQI value of 38 on September 10th, hour 16. The highest hourly concentration of Ozone was 62 ppb and an AQI value of 35 on September 16th, hour 17.

Passive Network
No issue was observed during this month.

Volatile Organics (VOCs)
The volatile organics were sampled on May 25th to September 28th. The sampler was programmed to run for 24 hours, and, every 6 days per sample cycle.
The flow on the Xontech was checked and calibrated on September 25th.

Polycyclic Aromatic Hydrocarbons (PAHs)
The Hi-Volume PUF sampler was installed on August 4th.
The PAHs were sampled on August 05th to Oct 4th. The sampler was programmed to run for 24 hours, and, every 6 days per sample cycle. No sample was collected on September 10th as the PUF sampler was received late.

Continuous Monitoring

Cold Lake

Monthly Summaries, Graphs & Wind Roses

Air Quality Index

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

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	10	10	5	8	9	5	7	10	10	10	10	10	10	11	12	14	15	12	8	-	4	1	6	6	15
	PM2	PM2	PM2	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	PM2	O3_	PM2	PM2	O3_
2	8	5	4	6	5	3	2	5	8	11	12	12	15	16	17	18	20	13	-	12	12	13	16	16	20
	PM2	PM2	PM2	PM2	PM2	O3_	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_
3	13	11	7	5	5	4	6	8	12	15	20	25	25	25	25	25	25	-	21	22	21	21	20	19	25
	O3_	O3_	PM2	PM2	O3_	O3_	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_
4	18	17	16	15	15	14	15	14	13	14	-	-	-	22	24	-	-	15	13	11	10	10	10	11	24
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	**NA**	O3_	O3_	**NA**	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
5	10	10	9	9	9	9	9	8	9	11	12	13	14	15	16	-	18	18	12	8	5	7	5	4	18
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	PM2	O3_	O3_	O3_
6	4	9	9	10	9	8	8	9	9	10	12	10	12	14	-	14	14	13	12	12	12	11	10	10	14
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	PM2	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
7	12	14	18	18	17	16	14	13	16	17	18	20	20	-	17	14	13	14	9	9	12	9	9	9	20
	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_
8	8	6	6	-	6	5	3	-	-	-	-	-	-	-	-	-	-	10	10	-	-	10	10	10	14
	O3_	O3_	PM2	**NA**	O3_	O3_	PM2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	O3_	O3_	**NA**	**NA**	O3_	O3_	O3_	O3_
9	10	11	11	11	10	9	8	9	10	11	13	-	14	14	15	14	13	12	9	2	4	5	7	4	15
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	PM2	O3_	O3_	O3_	O3_	O3_	O3_
10	6	6	6	5	3	2	1	1	6	9	-	11	11	10	11	12	13	11	8	7	3	1	2	2	13
	O3_	O3_	O3_	PM2	PM2	O3_	O3_	PM2	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	PM2	O3_
11	4	-	1	-	1	4	1	-	5	-	11	13	15	17	18	20	20	20	15	12	12	12	11	12	20
	PM2	**NA**	PM2	**NA**	PM2	PM2	PM2	**NA**	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
12	13	11	10	4	4	8	2	8	-	12	15	18	20	20	19	19	20	20	17	-	16	15	-	14	20
	O3_	O3_	O3_	PM2	O3_	PM2	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	**NA**	O3_	O3_
13	13	13	10	6	7	8	8	-	10	12	16	17	18	21	22	22	21	20	15	13	16	15	15	15	22
	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_
14	15	15	14	14	11	7	-	10	13	15	18	20	21	20	18	21	21	19	17	18	16	13	9	6	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_
15	4	3	11	8	5	-	3	8	11	12	14	18	21	22	23	24	22	20	13	11	12	8	2	5	24
	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	PM2	PM2	PM2	PM2	O3_
16	3	6	9	9	-	-	2	2	5	-	-	**19**	19	20	19	19	17	14	15	10	8	8	8	7	20
	O3_	PM2	PM2	PM2	**NA**	**NA**	PM2	O3_	O3_	**NA**	**NA**	**PM2**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2	O3_
17	8	9	10	-	9	9	10	11	14	15	15	17	19	21	18	20	18	12	10	12	12	12	14	13	21
	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_
18	9	7	-	6	2	5	2	-	5	7	10	16	21	22	-	-	-	-	15	11	11	12	12	12	24
	O3_	O3_	**NA**	O3_	PM2	O3_	O3_	**NA**	O3_	O3_	PM2	O3_	O3_	O3_	**NA**	**NA**	**NA**	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_
19	10	-	11	11	11	12	13	12	12	13	15	18	21	22	22	-	24	-	18	16	16	16	17	17	24
	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_
20	-	16	16	15	15	14	12	12	12	12	-	12	12	13	14	15	15	16	15	14	13	12	10	-	16
	NA	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_
21	7	4	4	5	4	7	5	-	9	11	12	14	15	16	-	-	18	18	12	9	8	5	-	4	18
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	PM2	O3_
22	4	3	5	8	7	8	8	7	9	9	11	16	17	18	18	17	18	16	9	7	4	-	4	3	18
	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	PM2	O3_
23	2	2	2	3	2	2	-	2	5	10	13	16	18	17	19	19	18	16	9	9	-	10	10	6	19
	PM2	PM2	PM2	PM2	PM2	PM2	**NA**	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_
24	5	5	2	1	2	1	-	2	6	13	18	22	23	23	23	22	22	20	19	-	19	17	13	8	23
	PM2	PM2	O3_	O3_	PM2	PM2	**NA**	PM2	O3_	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_
25	8	5	5	4	5	6	7	6	9	-	-	-	-	-	-	20	20	18	-	15	16	16	13	10	20
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_
26	10	9	11	10	12	14	14	14	15	16	16	16	16	16	17	17	17	-	-	17	16	16	14	13	17
	PM2	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	O3_	O3_	O3_	O3_	O3_	O3_
27	13	12	13	13	13	13	13	12	12	12	13	13	12	12	12	12	-	10	8	4	3	1	2	2	13
	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	PM2	PM2	O3_	O3_
28	2	1	3	-	1	3	5	5	6	7	7	8	9	10	11	-	-	11	10	11	11	11	10	10	11
	PM2	O3_	PM2	**NA**	PM2	PM2	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_
29	10	10	10	10	10	-	-	-	10	-	10	11	11	11	-	12	12	10	8	6	5	5	10	6	12
	O3_	O3_	O3_	O3_	O3_	**NA**	**NA**	**NA**	O3_	**NA**	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	PM2	PM2	PM2	PM2	PM2	O3_	O3_
30	5	4	7	11	6	6	6	10	5	5	6	6	6	-	7	7	7	6	6	6	5	4	4	3	11
	O3_	O3_	PM2	PM2	O3_	O3_	PM2	PM2	O3_	O3_	O3_	O3_	O3_	**NA**	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	O3_	PM2
PEAK	18	17	18	18	17	16	15	14	16	17	20	25	25	25	25	25	25	20	21	22	21	21	20	19	
	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)	554	76.9%	25	VAR	3	85	11.8%	19	11	16	0	0.0%	-	-	-	0	0.0%	-	-	-	639	88.8%
OVERALL	554	76.9%	-	-	-	85	11.8%	-	-	-	0	0.0%	-	-	-	0	0.0%	-	-	-	639	88.8%
UNAVAILABLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81	11.3%

Sulphur Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

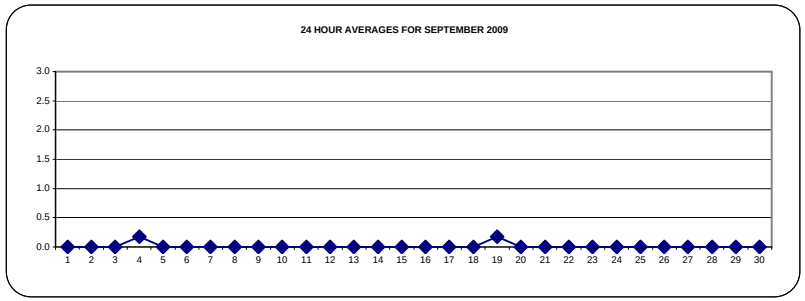
SULPHUR DIOXIDE (SO_2) hourly averages in ppb

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	0	0	0	0	0	**IZS**	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	**IZS**	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	**IZS**	0	0	0	0	0	0	0	0.0	24
4	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	**1**	**0.2**	24
5	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
6	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
7	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
8	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	0	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0.0	24
9	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
10	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
11	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
12	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
13	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
14	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
15	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
16	0	0	0	0	**IZS**	0	0	0	0	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	22
17	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
18	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
19	0	**IZS**	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**1**	0.2	24
20	**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
21	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
22	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
23	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
24	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
25	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
26	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
27	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
28	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
29	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
30	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
HOURLY MAX	0	0	0	0	0	1	NA	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0			
HOURLY AVG	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.1	0.0	0.1	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			

STATUS FLAG CODES

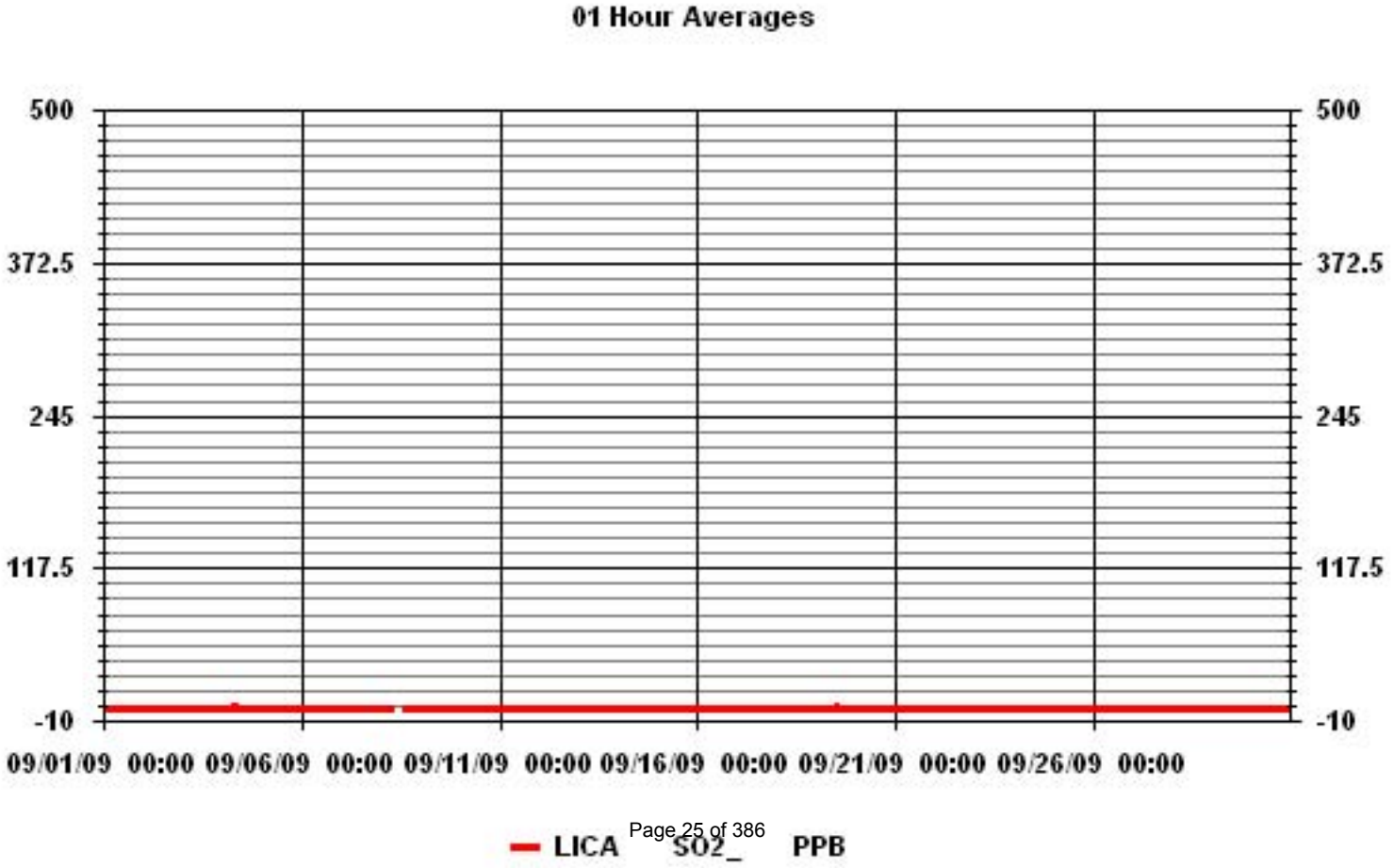
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



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:	8					
MAXIMUM 1-HR AVERAGE:	1	PPB	@ HOUR(S)	VAR	ON DAY(S)	4, 19
MAXIMUM 24-HR AVERAGE:	0.2	PPB			ON DAY(S)	4
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	8	HRS	AMD OPERATION UPTIME:		99.7	%
STANDARD DEVIATION:	0.11		MONTHLY AVERAGE:		0.01	PPB


01 Hour Averages
500
372.5
245
117.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA SO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

MST

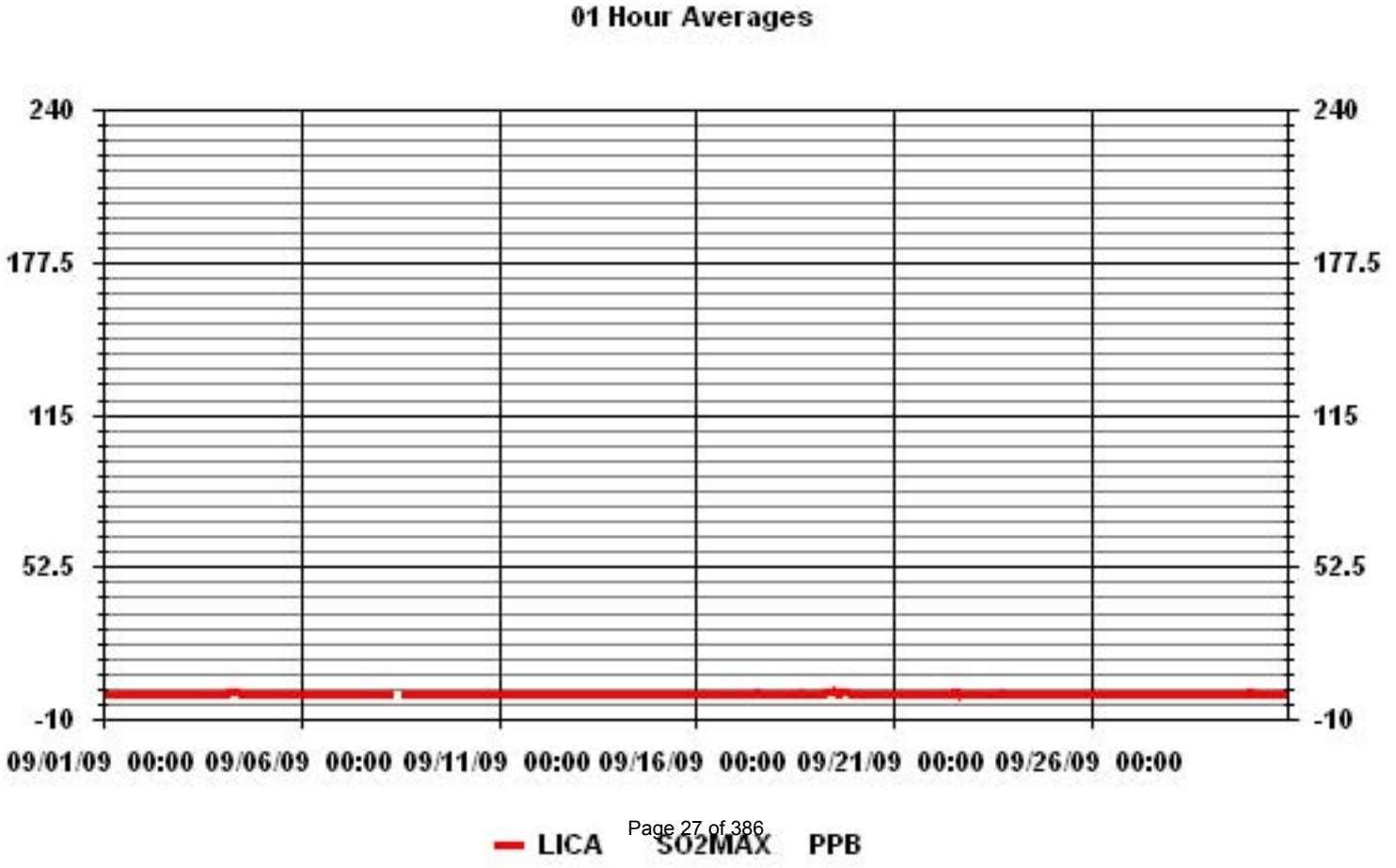
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	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	**IZS**	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	**IZS**	0	0	0	0	0	0	0	0.0	24
4	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	1	0.3	24
5	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
6	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
7	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
8	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0.0	24
9	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
10	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
11	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
12	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
13	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
14	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
15	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
16	0	0	0	0	**IZS**	0	0	0	0	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	22
17	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0.1	24
18	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.0	24
19	0	**IZS**	0	0	0	0	1	1	1	1	1	1	**2**	1	0	0	1	1	1	1	1	1	0	0	**2**	0.7	24
20	**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
21	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
22	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	**IZS**	0	0	1	0.2	24
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	**IZS**	0	0	0	1	0.0	24
24	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
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**C**	0	0	0	**IZS**	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	**IZS**	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	**IZS**	1	0	0	0	0	0	0	1	0.0	24
28	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
29	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
30	1	1	1	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	1	0.1	24
HOURLY MAX	1	1	1	0	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	0			
HOURLY AVG	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	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	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	33					
MAXIMUM INSTANTANEOUS VALUE:	2	PPB	@ HOUR(S)	12	ON DAY(S)	19
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	10	HRS				
STANDARD DEVIATION:	0.22					


01 Hour Averages
240
177.5
115
52.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA SO2MAX PPB

LICA
SO2_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	.73	2.35	2.35	3.38	8.82	10.73	13.67	3.82	3.52	5.29	12.64	10.14	9.26	9.11	3.82	.29	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	.73	2.35	2.35	3.38	8.82	10.73	13.67	3.82	3.52	5.29	12.64	10.14	9.26	9.11	3.82	.29	

Calm : .00 %

Total # Operational Hours : 680

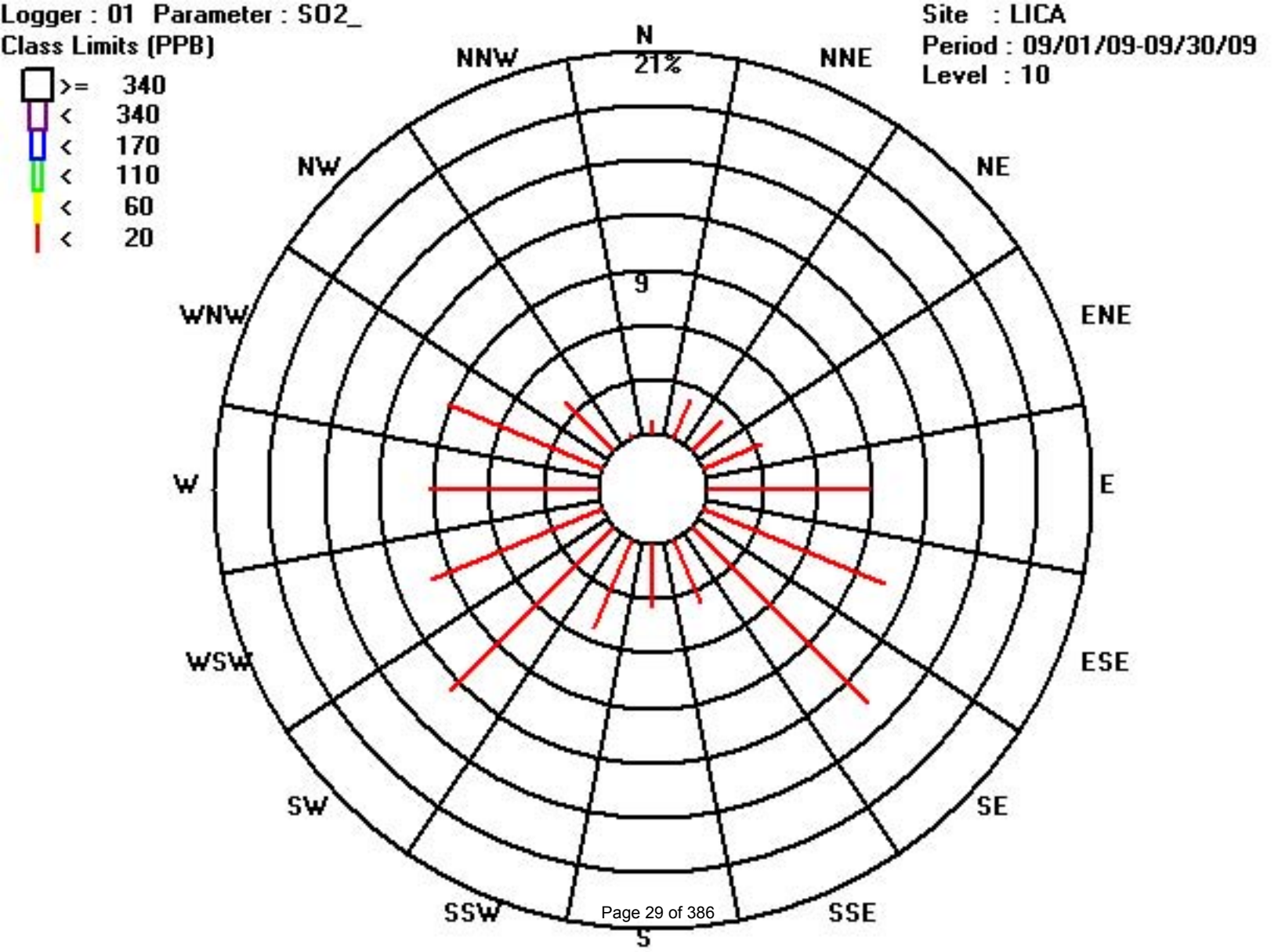
Distribution By Samples

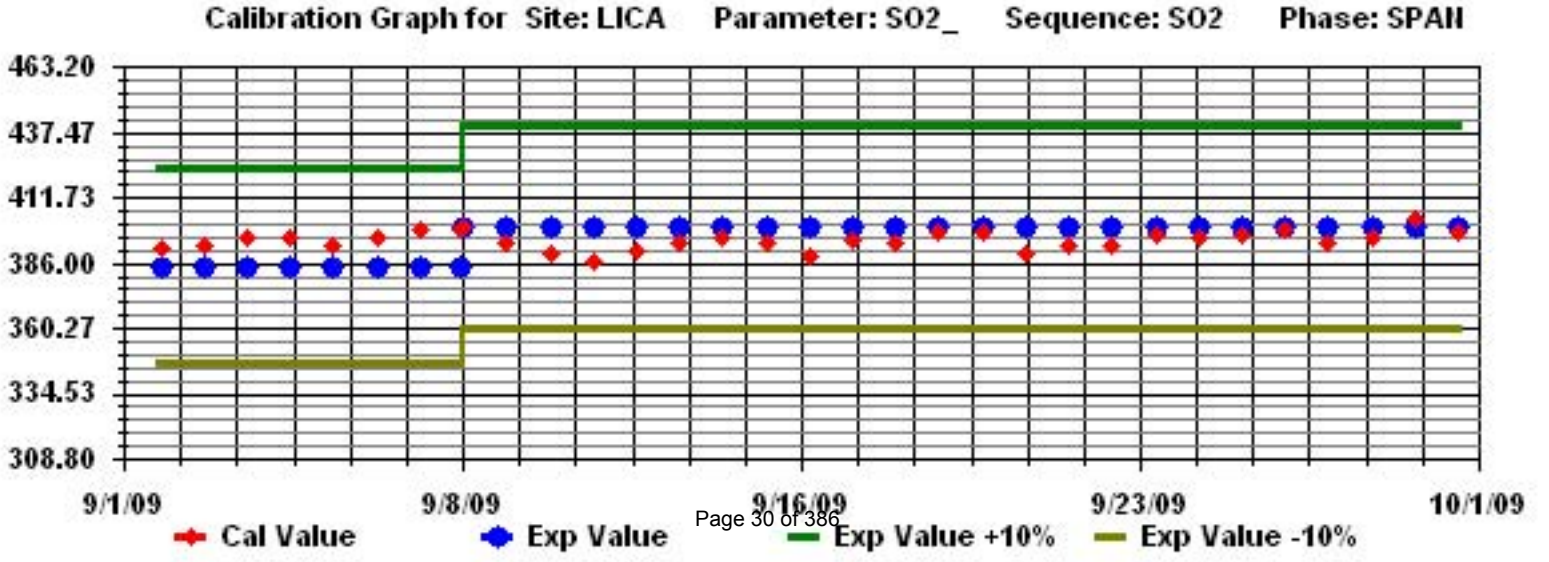
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	20	5	16	16	23	60	73	93	26	24	36	86	69	63	62	26	2	680
<	60																	
<	110																	
<	170																	
<	340																	
>=	340																	
	Totals	5	16	16	23	60	73	93	26	24	36	86	69	63	62	26	2	

Calm : .00 %

Total # Operational Hours : 680


Logger : 01 Parameter : SO2_
Class Limits (PPB)
>= 340
< 340
< 170
< 110
< 60
< 20
Site : LICA
Period : 09/01/09-09/30/09
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
463.20
437.47
411.73
386.00
360.27
334.53
308.80
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Reduced Sulphur

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

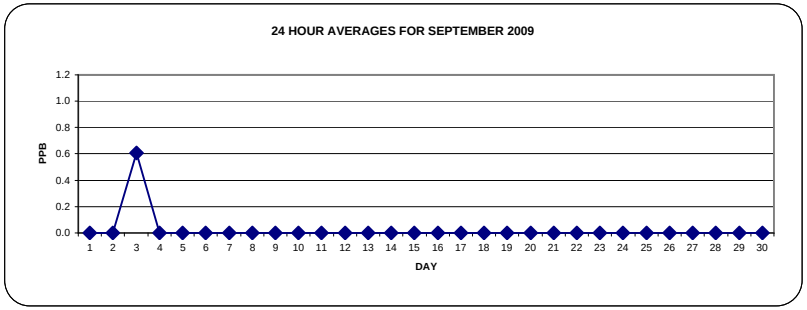
TOTAL REDUCED SULPHUR (TRS) hourly averages in ppb

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	**IZS**	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	**IZS**	0	0	0	0	0	0	0.0	24
3	0	0	0	0	0	**6**	4	4	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	**6**	**0.6**	24
4	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
5	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
6	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
7	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
8	0	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0	0.0	24
9	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
10	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
11	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
12	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
13	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
14	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
15	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
16	0	0	0	0	**IZS**	0	0	0	0	**P**	**P**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	22
17	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
18	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
19	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
20	**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
21	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
22	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
23	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
24	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
25	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
26	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
27	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
28	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
29	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
30	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
HOURLY MAX	0	0	0	0	0	6	4	4	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	0.2	0.1	0.1	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	0.0	0.0			

STATUS FLAG CODES

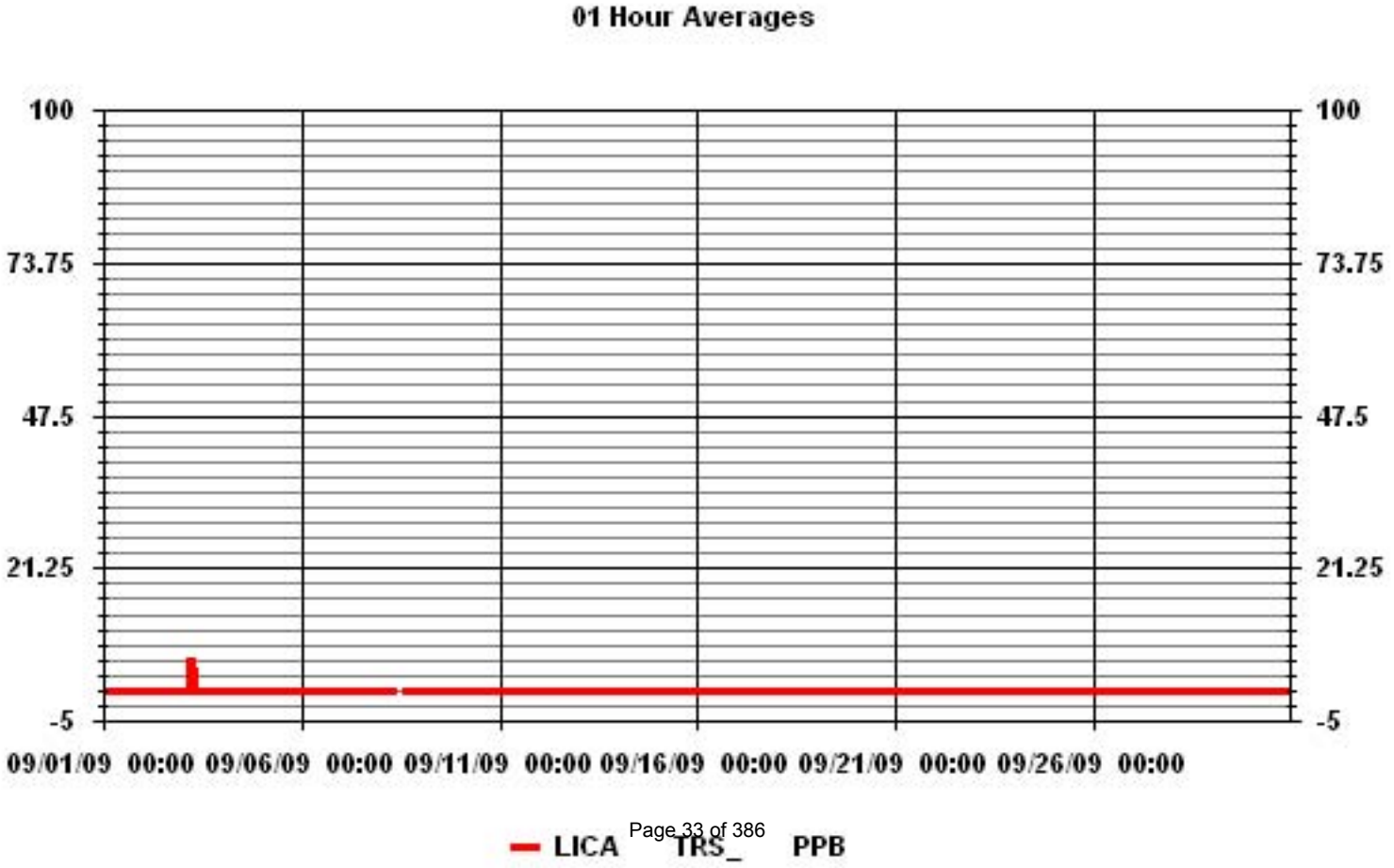
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



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:	3						
MAXIMUM 1-HR AVERAGE:	6	PPB	@ HOUR(S)	5	ON DAY(S)	3	
MAXIMUM 24-HR AVERAGE:	0.6	PPB			ON DAY(S)	3	
					VAR-VARIOUS		
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:			718	HRS
MONTHLY CALIBRATION TIME:	6	HRS	AMD OPERATION UPTIME			99.7	%
STANDARD DEVIATION	0.32		MONTHLY AVERAGE			0.02	PPB


01 Hour Averages
100
73.75
47.5
21.25
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA TRS_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

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	IZS	0	0	0	0	0	0.0	24
2	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	4	0.2	24
3	0	0	0	0	0	**46**	31	34	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	**46**	4.8	24
4	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
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	5	2	5	0.3	24
6	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
7	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
8	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0.0	24
9	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
10	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
11	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
12	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
13	0	0	0	0	0	4	0	IZS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.2	24
14	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
15	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
16	0	0	0	0	IZS	0	0	0	0	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	22
17	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
18	0	0	IZS	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
19	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
20	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
21	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
22	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
23	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
24	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
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	IZS	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	IZS	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	IZS	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	IZS	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	IZS	0	0	0	0	0	0	0	0	0	0	0.0	24
30	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
HOURLY MAX	0	0	0	0	0	46	31	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2			
HOURLY AVG	0.0	0.0	0.0	0.0	0.0	1.7	1.2	1.2	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	0.2	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: 9

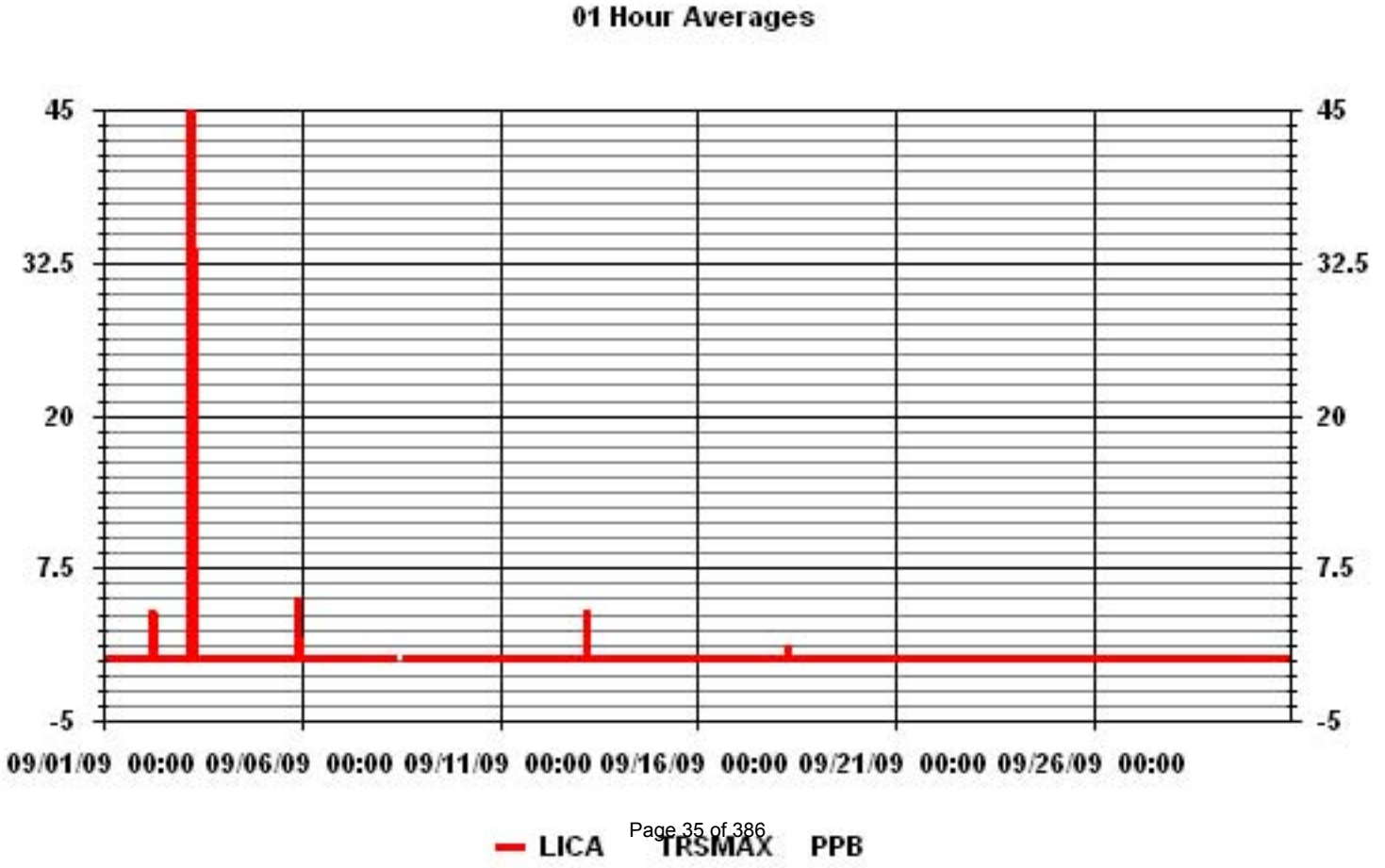
MAXIMUM INSTANTANEOUS VALUE: 46 PPB @ HOUR(S) 5 ON DAY(S) 3

VAR - VARIOUS

IZS CALIBRATION TIME: 30 HRS OPERATIONAL TIME: 718 HRS

MONTHLY CALIBRATION TIME: 7 HRS

STANDARD DEVIATION: 2.50


01 Hour Averages
45
32.5
20
7.5
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA TRSMAX PPB

LICA
TRS_ / WD Joint Frequency Distribution (Percent)

September 2009

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	.73	2.34	2.34	3.37	8.79	10.70	13.63	3.66	3.66	5.13	12.60	10.11	9.23	9.09	3.81	.29	99.56
< 10	.00	.00	.00	.00	.00	.00	.00	.14	.00	.29	.00	.00	.00	.00	.00	.00	.43
< 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	.73	2.34	2.34	3.37	8.79	10.70	13.63	3.81	3.66	5.42	12.60	10.11	9.23	9.09	3.81	.29	

Calm : .00 %

Total # Operational Hours : 682

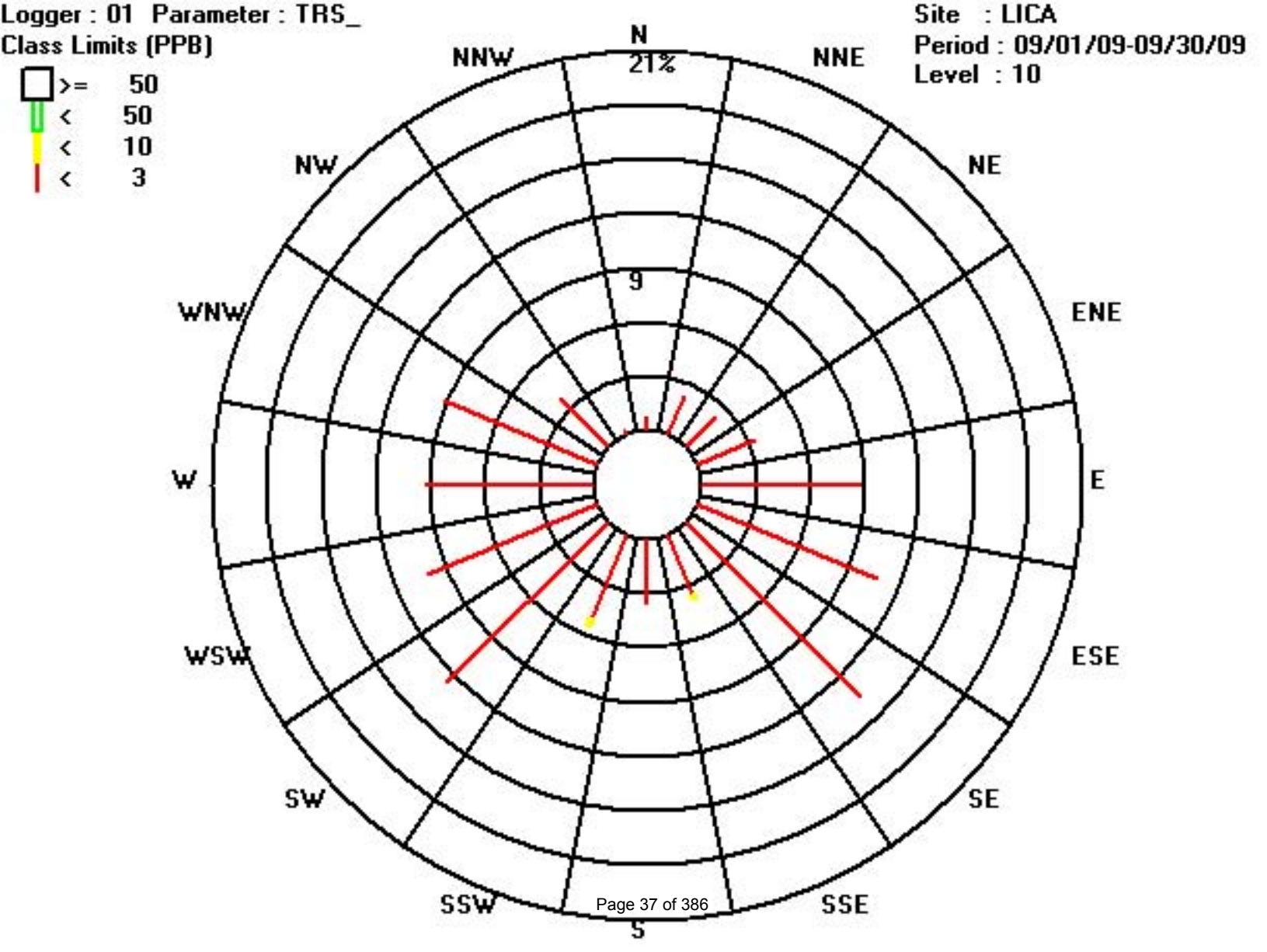
Distribution By Samples

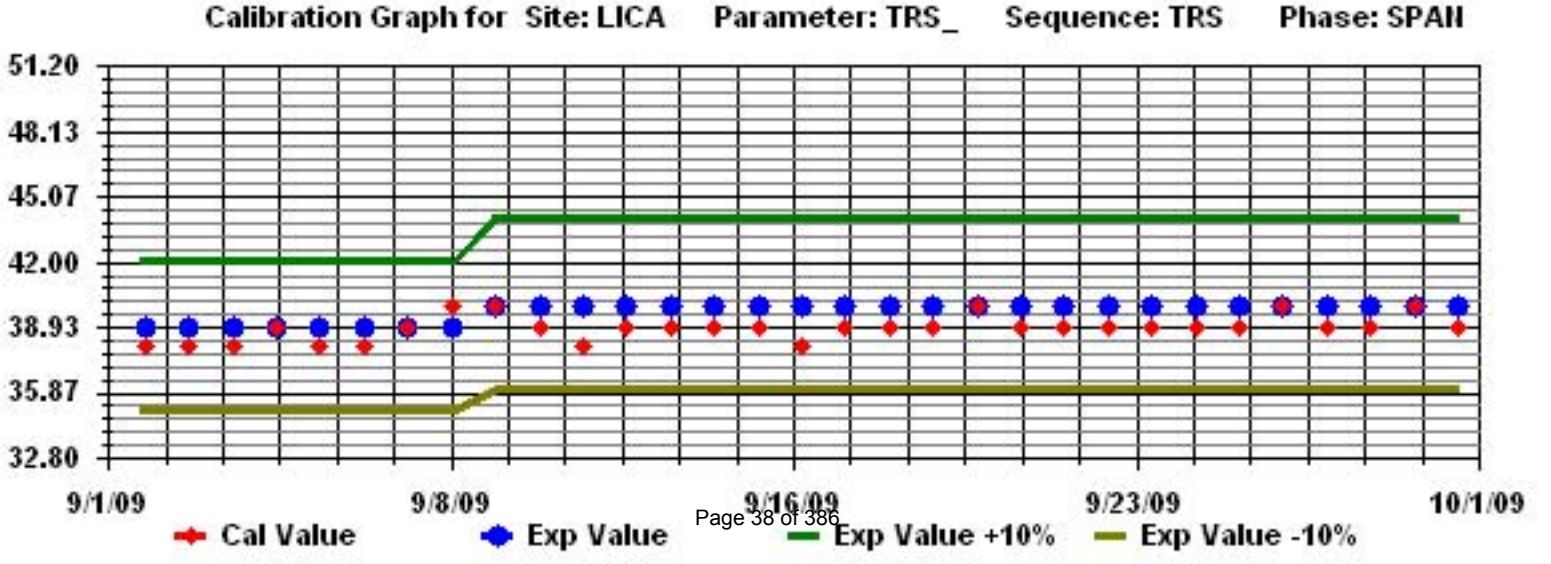
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	5	16	16	23	60	73	93	25	25	35	86	69	63	62	26	2	679
< 10								1		2							3
< 50																	
>= 50																	
Totals	5	16	16	23	60	73	93	26	25	37	86	69	63	62	26	2	

Calm : .00 %

Total # Operational Hours : 682


Logger : 01 Parameter : TRS_
Class Limits (PPB)
>= 50
< 50
< 10
< 3
Site : LICA
Period : 09/01/09-09/30/09
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: TRS_ Sequence: TRS Phase: SPAN
51.20
48.13
45.07
42.00
38.93
35.87
32.80
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Hydrocarbons

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

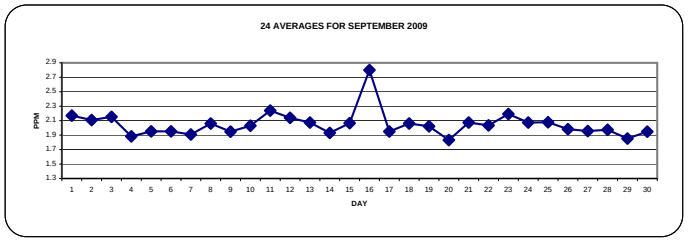
TOTAL HYDROCARBONS (THC) hourly averages in ppm

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	2.4	2.5	2.5	2.7	2.7	2.4	2	2	1.9	1.9	2	2	1.9	1.9	2	2	2	2	**IZS**	2.1	2.2	2.2	2.2	2.7	2.2	24
2	2.3	2.3	2.3	2.4	2.4	2.2	2.5	2.1	2	2	2	2	2	2	2	2	2	2	**IZS**	2	2	2	2	2	2.5	2.1	24
3	2	2.1	2.1	2.2	2.2	2.2	2.3	2.5	2.5	2.4	2.4	2.3	2.2	2.1	2.1	2.1	2	**IZS**	2	2	2	1.9	2	1.9	2.5	2.2	24
4	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	1.8	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	24
5	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	**IZS**	1.9	1.9	1.9	2	2.1	2.2	2.1	2.2	2.2	2.0	24
6	2.2	2	2	2	2	2	2	2	2	1.9	2	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	2.0	24
7	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	1.8	1.9	1.8	1.9	1.9	1.9	2	2	2.1	2.1	2.1	1.9	24
8	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.2	1.9	1.9	1.9	**IZS**	**M**	**M**	**M**	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.1	21
9	1.9	1.9	1.9	1.9	1.9	2	2	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2.1	2.1	2.1	2.1	1.9	24
10	2.1	2.1	2	2	2	2.1	2.2	2.2	2	2	**IZS**	2	1.9	2	1.9	1.9	1.9	1.9	2	2.1	2.1	2	2.1	2.2	2.2	2.0	24
11	2.2	2.4	2.6	2.7	2.7	2.8	2.8	2.7	2.3	**IZS**	2.1	2	2	2	2	1.9	1.9	2	2	2	2	2.1	2.1	2.2	2.8	2.2	24
12	2.2	2.2	2.2	2.3	2.4	2.5	2.5	2.4	**IZS**	2.2	2.2	2.1	2	1.9	1.9	1.9	2	2	2	2	2	2.1	2.1	2.1	2.5	2.1	24
13	2.1	2.1	2.2	2.5	2.3	2.2	2.3	**IZS**	2.2	2.2	2.1	2	2	2	2	1.9	1.9	2	2	2	2	1.9	1.9	1.9	2.5	2.1	24
14	1.9	2	2	2	2	2	**IZS**	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	2	2.0	1.9	24
15	2	2	1.9	1.9	2	**IZS**	2.3	2.4	2	2	2	2	2	2	2	2	1.9	2	2	2	2.1	2.2	2.3	2.5	2.5	2.1	24
16	2.6	2.6	2.7	2.7	**IZS**	2.9	2.9	**3.1**	2.9	**P**	**P**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**3.1**	**2.8**	9
17	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	2	1.9	2.0	2.0	3
18	2	2.2	**IZS**	2	2.1	2.3	2.4	2.2	2.1	2.1	2	2	1.9	2	2.1	2	1.9	1.9	2	2	2.1	2	2	2.1	2.4	2.1	24
19	2.1	**IZS**	2.3	2.5	2.5	2.4	2.3	2.2	2.1	2.1	2.1	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.5	2.0	24
20	**IZS**	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	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2	**IZS**	2.0	1.8	24
21	2.1	2.2	2.4	2.5	2.4	2.1	2.2	2.2	2.1	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	2.2	**IZS**	2.1	2.5	2.1	24
22	2.3	2.4	2.4	2.1	2.1	2.1	2.1	2	2	2	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.1	**IZS**	2.3	2.4	2.4	2.0	24
23	2.4	2.4	2.4	2.4	2.5	2.6	2.6	2.9	2.5	2.1	2	2	2	2	2	2	2	2	2.1	2	**IZS**	1.8	1.8	1.9	2.9	2.2	24
24	2	1.9	2.1	2.2	2.5	2.7	2.7	2.6	2.6	2.3	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	**IZS**	1.8	1.9	2	2	2.7	2.1	24
25	1.9	2	2	2.3	2.4	2.4	2.4	2.4	2.2	**C**	**C**	**C**	**C**	**C**	1.8	1.8	1.9	1.9	**IZS**	1.9	1.9	2	2.1	2.1	2.4	2.1	24
26	2.3	2.5	2.4	2.3	2.4	2.1	2	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	2.5	2.0	24
27	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	**IZS**	1.9	1.9	2	2.1	2.1	2.1	2.1	2.1	2.0	24
28	2.2	2.3	2.4	2.4	2.5	2.3	2	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	**IZS**	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.5	2.0	24
29	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	1.9	2	2	2	2.1	2	2.1	1.9	24
30	2	2	2	2	2.1	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	2	2	2	1.9	1.9	2	2.1	1.9	24
HOURLY MAX	2.6	2.6	2.7	2.7	2.7	2.9	2.9	3.1	2.9	2.4	2.4	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.5			
HOURLY AVG	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0			

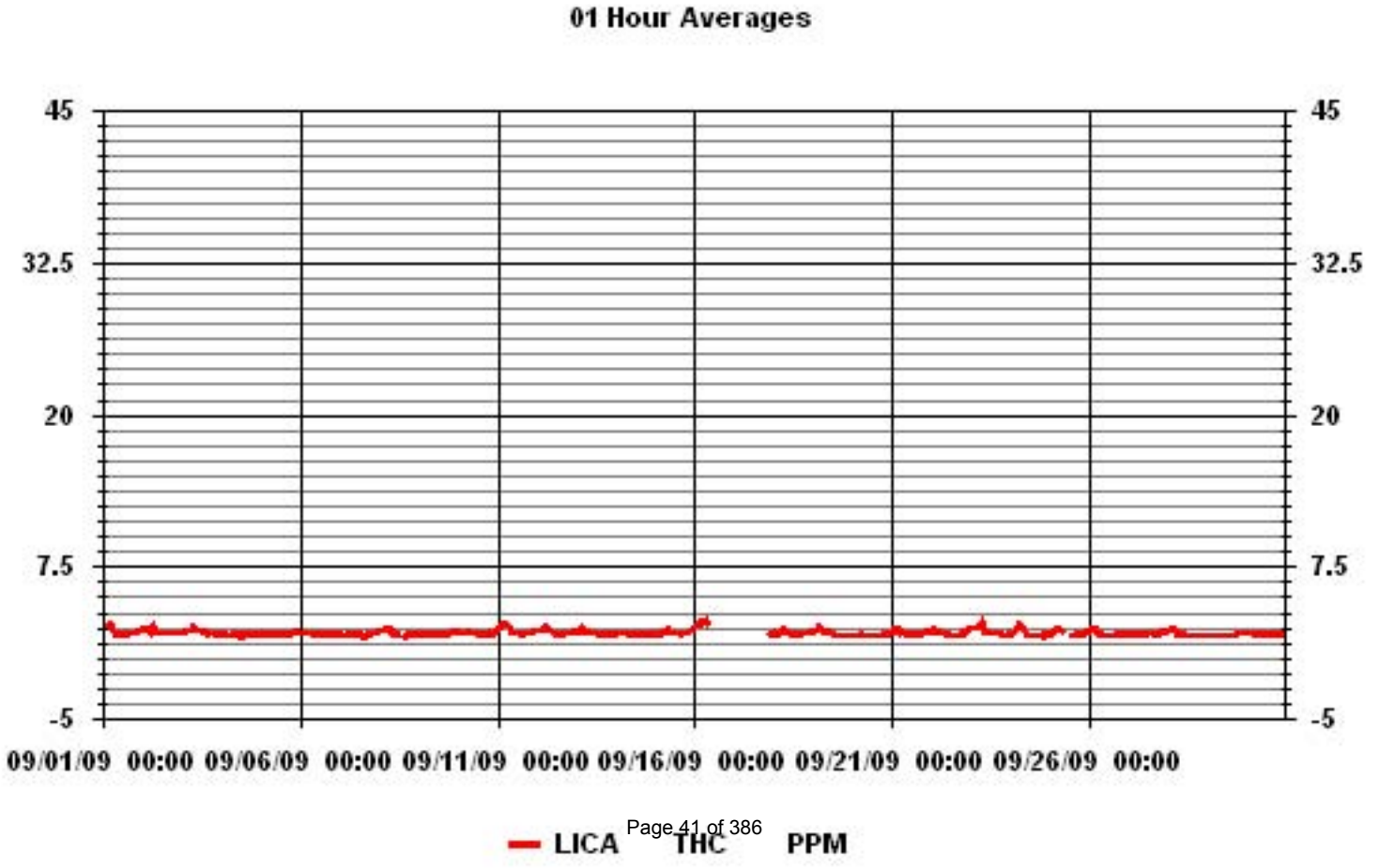
STATUS FLAG CODES

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
BB	- BELOW BACKGROUND OF 1.5 PPM		



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	645						
MAXIMUM 1-HR AVERAGE:	3.1	PPM	@ HOUR(S)	7	ON DAY(S)	16	
MAXIMUM 24-HR AVERAGE:	2.8	PPM			ON DAY(S)	16	
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		681	HRS	
MONTHLY CALIBRATION TIME:	6	HRS	AMD OPERATION UPTIME:		94.6	%	
STANDARD DEVIATION:	0.22		MONTHLY AVERAGE:		2.03	PPM	


01 Hour Averages
45
32.5
20
7.5
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA THC PPM

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

MST

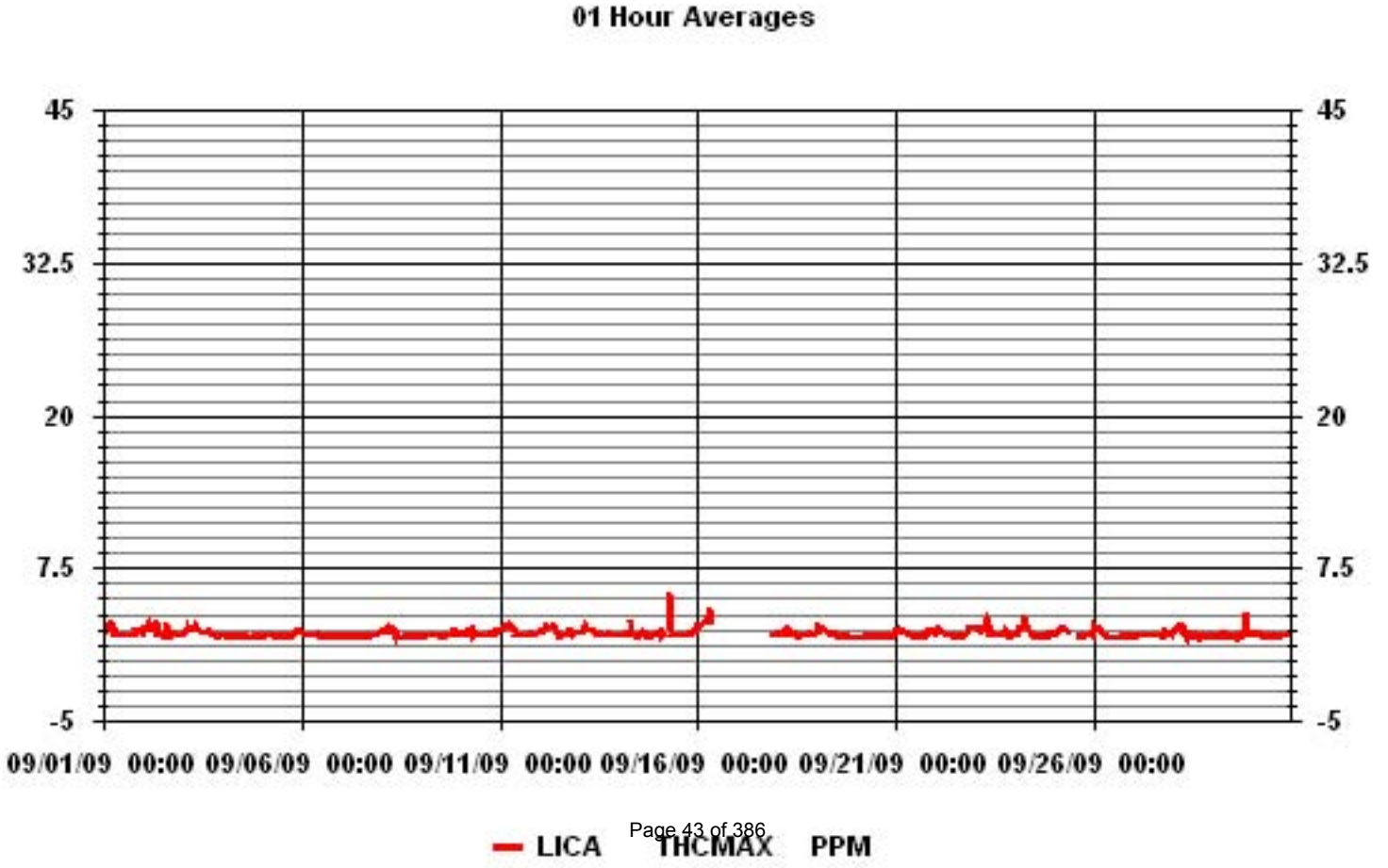
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.5	2.4	2.8	2.7	2.8	3	2.8	2.1	2	2	2	2	2	2	2	2	2	2	2.1	**IZS**	2.5	2.3	2.4	2.3	3	2.3	24
2	2.6	2.5	2.5	2.9	2.6	2.7	2.7	2.3	3.3	2	2	2	2.1	2	2.9	2.1	2	2.1	**IZS**	2.1	2.1	2	2	2	3.3	2.3	24
3	2.1	2.2	2.3	2.7	2.4	2.4	2.4	2.8	2.6	2.5	2.4	2.4	2.2	2.2	2.2	2.2	2.4	**IZS**	2	2	2.1	2	2.1	2	2.8	2.3	24
4	2	2	2	2	1.9	1.9	1.9	2	1.9	2	2	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	2	2	1.9	1.9	1.9	1.9	2	1.9	24
5	1.9	1.9	2	2	2	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	2	1.9	2	2.1	2.2	2.3	2.3	2.3	2.3	2.0	24
6	2.3	2.1	2.1	2	2	2	2	2	2	2	2.2	2	1.9	1.9	**IZS**	2	1.9	2.1	2	1.9	1.9	1.9	1.9	2	2.3	2.0	24
7	2	2	1.9	1.9	1.9	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	1.9	2	2	2	2.1	2.2	2.2	2.2	2.0	24
8	2.3	2.3	2.3	2.3	2.6	2.4	2.5	2.6	2.5	1.9	2.1	1.9	**IZS**	**M**	**M**	**M**	1.9	1.9	1.9	1.9	1.9	2	2	2	2.6	2.2	21
9	2	1.9	1.9	1.9	2	2	2	2	2	2	2	**IZS**	2	1.9	1.9	1.9	2	2	2	2.1	2.3	2.3	2.1	2.2	2.3	2.0	24
10	2.2	2.2	2.1	2.1	2.1	2.4	2.4	2.5	2	2.2	**IZS**	2.1	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2.3	2.3	2.5	2.1	24
11	2.4	2.5	2.7	2.9	2.8	2.8	3	2.8	2.6	**IZS**	2.1	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2.2	2.2	3	2.3	24
12	2.2	2.3	2.3	2.4	3	2.6	2.6	2.6	**IZS**	2.8	2.3	2.1	2.1	2	2.1	2	2	2	2.1	2.5	2.1	2.2	2.2	2.2	3	2.3	24
13	2.2	2.2	2.4	2.8	2.6	2.4	2.4	**IZS**	2.4	2.4	2.1	2.1	2.1	2.1	2	2	2	2	2.2	2.1	2	2	2	2	2.8	2.2	24
14	2	2	2	2	2.1	2.3	**IZS**	3.1	2	2	2	1.9	1.9	2.1	2.3	2	2	2.4	2	1.9	1.9	2	2	2.1	3.1	2.1	24
15	2.1	2.3	1.9	2	2.1	**IZS**	2.7	**5.4**	2.1	2.1	2	2	2.1	2	2	2	2	2	2.1	2.1	2.2	2.5	2.4	2.7	**5.4**	2.3	24
16	2.7	2.8	2.9	3	**IZS**	3.2	3.7	4.3	3.1	**P**	**P**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	4.3	3.2	9
17	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**M**	**C**	2	2	2	2.0	3
18	2.2	2.2	**IZS**	2.1	2.1	2.4	2.6	2.4	2.2	2.1	2.1	2.1	2.1	2	2.1	2	2	2	2	2	2.2	2.1	2.1	2.2	2.6	2.1	24
19	2.9	**IZS**	2.4	2.5	2.5	2.5	2.4	2.3	2.2	2.1	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	2.9	2.1	24
20	**IZS**	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	1.9	1.9	1.9	1.9	1.9	1.9	2.1	**IZS**	2.1	1.9	24
21	2.3	2.3	2.6	2.6	2.5	2.2	2.2	2.2	2.2	2	2	1.9	1.9	1.9	1.9	1.9	2	1.9	2	2.3	2.5	2.4	**IZS**	2.2	2.6	2.2	24
22	2.4	2.6	2.6	2.3	2.2	2.2	2.2	2.1	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	2.6	**IZS**	2.6	2.6	2.6	2.2	24
23	2.6	2.6	2.6	2.5	2.7	2.8	2.7	3.2	2.9	2.2	2.1	2.1	2.1	2	2	2	2.1	2.1	2.4	2.2	**IZS**	1.9	1.9	2	3.2	2.3	24
24	2.1	2.1	2.3	2.6	2.6	3.3	3.3	2.8	2.7	2.5	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	1.9	2.1	2.1	2.2	3.3	2.3	24
25	2	2	2.1	2.4	2.5	2.5	2.5	2.5	2.3	**C**	**C**	**C**	**C**	**C**	**C**	1.9	1.9	1.9	**IZS**	2	2	2.1	2.3	2.1	2.5	2.2	24
26	2.9	2.8	2.6	2.5	2.5	2.3	2.1	2	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	**IZS**	1.9	1.9	2	1.9	1.9	1.9	2.9	2.1	24
27	1.9	1.9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	**IZS**	1.9	2	2.4	2.3	2.2	2.3	2.1	2.4	2.0	24
28	2.3	2.4	2.5	2.5	2.6	2.9	2.3	2.1	1.9	2.3	1.9	1.9	1.9	2	2.2	**IZS**	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.1	24
29	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	1.9	1.9	1.9	1.9	1.9	1.9	**IZS**	1.8	2	1.9	2	2.3	3.8	2.3	2.3	2.2	3.8	2.1	24
30	2.1	2.1	2.1	2.1	2.1	2.1	2	1.9	2	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	1.9	2	2	2	2	2	2	2.1	2.1	2.0	24
HOURLY MAX	3	3	3	3	3	3	4	5	3	3	2	2	2	2	3	2	2	2	2	3	4	3	3	3			
HOURLY AVG	2.3	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.1			

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
BB	- BELOW BACKGROUND OF 1.5 PPM		

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:		644					
MAXIMUM INSTANTANEOUS VALUE:		5.4	PPM	@ HOUR(S)	7	ON DAY(S)	15
IZS CALIBRATION TIME:	30	HRS		OPERATIONAL TIME:		681	HRS
MONTHLY CALIBRATION TIME:	7	HRS					
STANDARD DEVIATION:	0.33						


01 Hour Averages
45
32.5
20
7.5
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA THCMAX PPM

LICA
THC / WD Joint Frequency Distribution (Percent)

September 2009

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	.77	2.01	2.17	3.25	7.28	10.85	13.95	4.03	3.72	5.73	13.02	10.23	9.30	9.14	4.03	.31	99.84
<	10.0	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15
<	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	.77	2.01	2.17	3.41	7.28	10.85	13.95	4.03	3.72	5.73	13.02	10.23	9.30	9.14	4.03	.31	

Calm : .00 %

Total # Operational Hours : 645

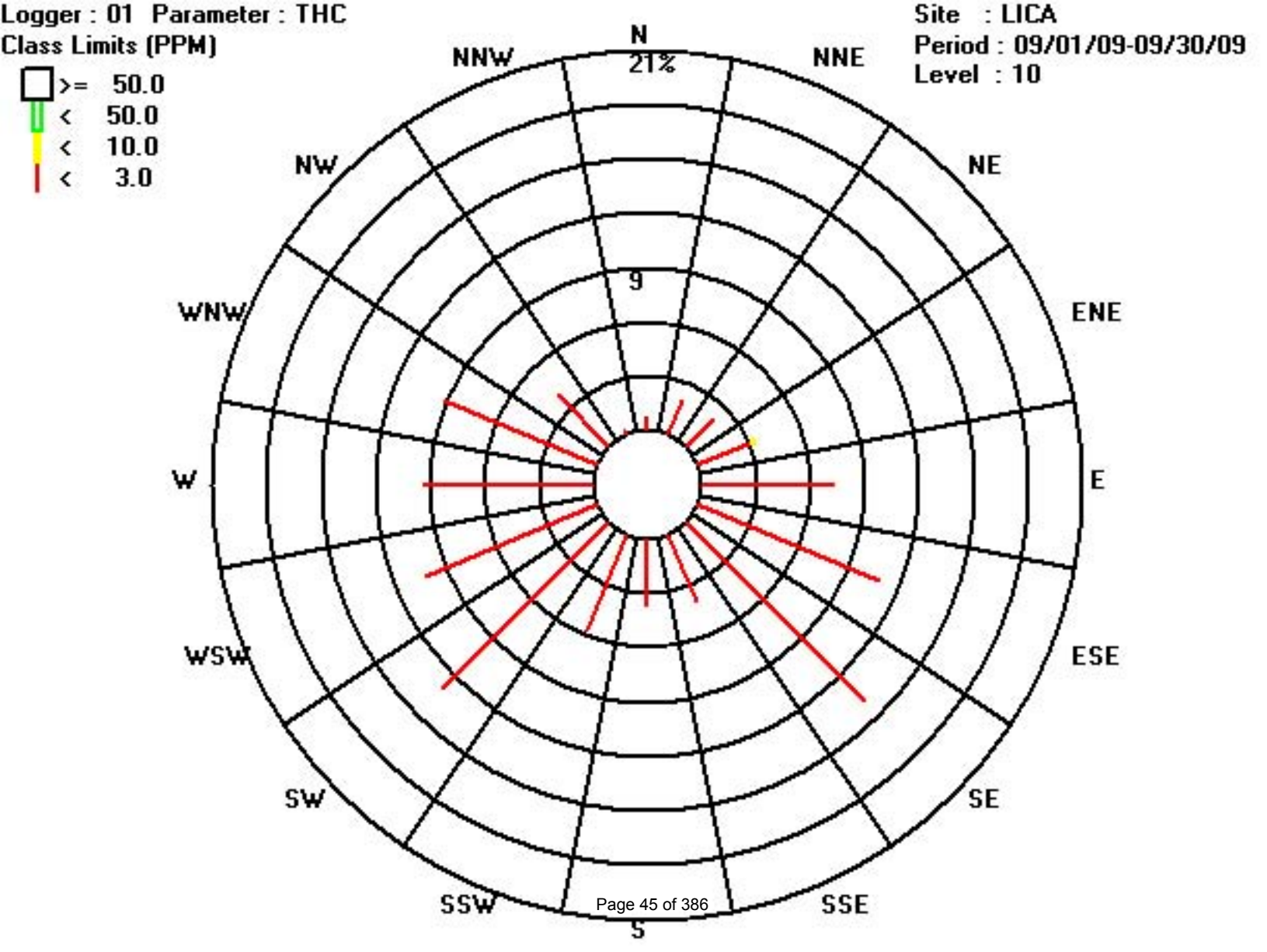
Distribution By Samples

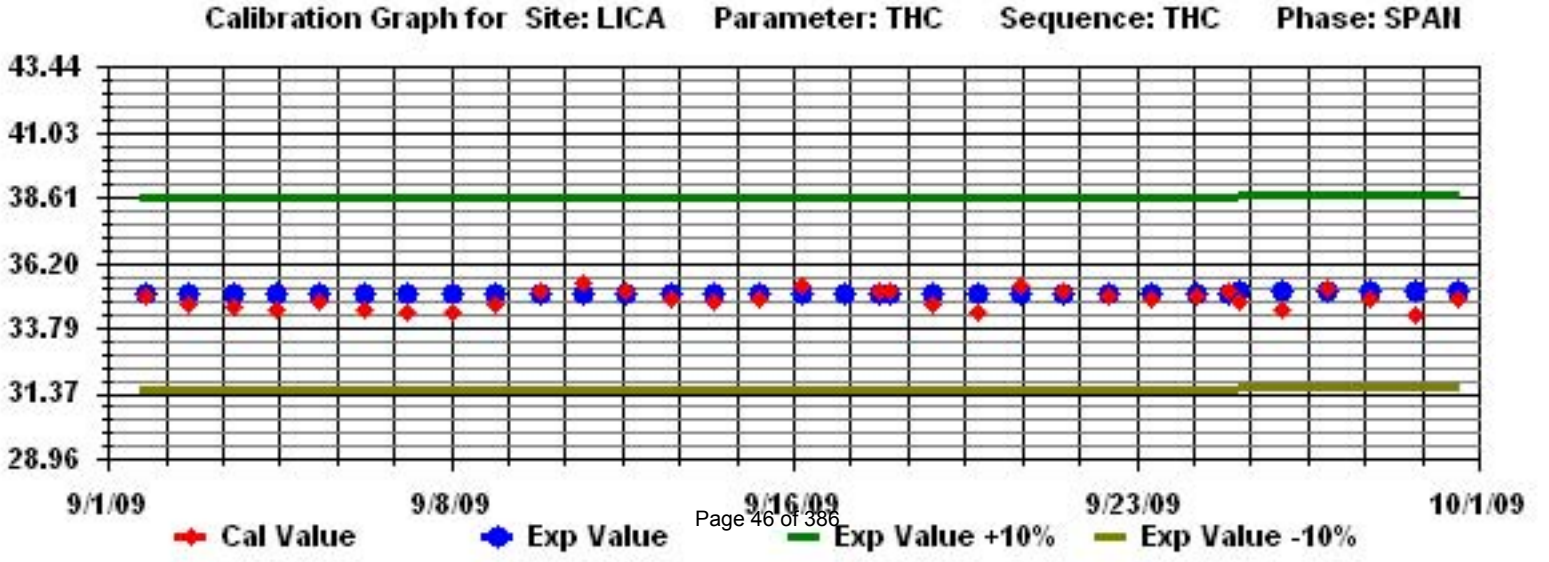
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	5	13	14	21	47	70	90	26	24	37	84	66	60	59	26	2	644
<	10.0				1													1
<	50.0																	
>=	50.0																	
	Totals	5	13	14	22	47	70	90	26	24	37	84	66	60	59	26	2	

Calm : .00 %

Total # Operational Hours : 645


Logger : 01 Parameter : THC
Class Limits (PPM)
>= 50.0
< 50.0
< 10.0
< 3.0
Site : LICA
Period : 09/01/09-09/30/09
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
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Particulate Matter 2.5

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

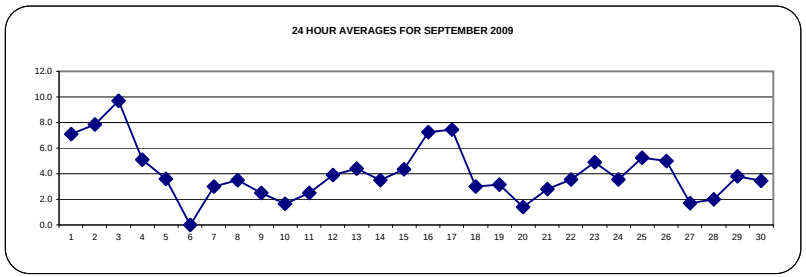
PARTICULATE MATTER 2.5 (PM2.5) hourly averages in ug/m^3

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	11.6	11.5	5.5	9.4	10.7	5.4	0.9	6	4.4	5.5	10.6	5.5	10.8	5.2	11.4	9	4.5	10.7	8.4	5.4	4.2	0	7.3	7	11.6	7.1	24
2	9.1	6.5	5.1	7.3	5.4	1.8	2.6	4.9	7.4	7.2	5.3	6.6	10.8	6.9	3.3	11.2	10.9	13.3	18.8	7	12	12.5	5.1	7.2	18.8	7.8	24
3	7.4	7.3	8.3	5.4	3.2	3.9	7	9.3	9.9	14.4	8.9	11.4	16.5	11.6	15.7	8.1	5.3	5.3	7.3	13.1	13.1	13.6	13.7	12.8	16.5	**9.7**	24
4	14.4	9.5	6.8	6.7	4.1	5.2	0	3.7	2.8	2.5	**N**	**N**	**N**	0	0	**N**	0	14.5	1	6.1	6.7	8.7	6.6	3	14.5	5.1	20
5	2.2	7.5	4.4	0	0.3	3.2	4.1	4.8	2.9	0	4.7	4.4	8.1	4.5	3.3	2.1	3.3	0	1	2.6	5.2	8.6	5	4	8.6	3.6	24
6	4	2.4	6	4.4	4	3.4	6.5	5.3	5.3	3.8	14.5	11.6	10.4	9.5	4.9	12.6	5.9	6.6	5	4.4	9.6	7.8	6	2.6	14.5	0.0	24
7	3.4	2.9	0	1.8	0	0.5	0.2	0	2.5	0	3.1	5.9	2.1	6.5	19.3	4.5	6	3.3	2.5	1.3	0	3.4	0.4	2.7	19.3	3.0	24
8	3.2	1	7.6	**N**	0.6	5.5	4	9	**N**	**N**	5.9	3.8	2.7	4	0	2.8	6.6	8.8	0	**N**	**N**	0	1.2	0	9.0	3.5	19
9	0	4.6	0.5	6.3	7.3	3.8	1.4	4.7	1.5	2.3	0	**N**	0	0.1	2.5	0.5	0	4	11.1	1	1.5	3.1	0	1.8	11.1	2.5	23
10	1.3	0	2.6	6	4.1	0	0.3	0.7	5	1.2	0	0	1.8	1.1	0	0	1.2	2	0.1	4.2	2.9	0.8	2.3	2	6.0	1.7	24
11	4.3	0	0.9	0	0.6	4.8	1.1	**N**	0	0	2.8	1.5	3	2.5	2.4	6	4.1	3.7	0.9	4.2	4.1	2.1	5.2	3.8	6.0	2.5	23
12	10.2	4.2	6.5	5	3.3	9.5	1	3.5	2	6.4	1.5	1.8	3.7	2.7	6.8	8	4.3	4.8	0	**N**	0	0	**N**	0.3	10.2	3.9	22
13	2.3	2.8	3.5	4.9	1.6	2.6	6.2	3.1	4.4	4.7	6	2.9	6.7	6.8	6.1	8	3.4	4.2	1.3	0.9	8.7	4.7	2.3	7.2	8.7	4.4	24
14	5.9	6.2	2.6	6.3	5.1	2.7	1.1	2.6	6.7	7.1	1.8	0	0	4.6	2.6	2.1	4.8	5.5	5.6	4.4	3	2.6	0.8	0.3	7.1	3.5	24
15	0.1	0.6	3.4	0.3	1.5	2.1	0.5	0.1	1.9	4.3	2.4	5	2.9	0.8	6.2	2.7	8.3	6.5	8.9	13.7	14.6	9.2	2.9	5.7	14.6	4.4	24
16	1.5	7.2	10.2	11	16.2	0	2.7	0	5.1	**P**	**P**	**23**	7.2	7.3	6.6	5.4	6.3	8.6	4.6	7.1	6.4	7	9.1	6.7	**23.0**	7.2	22
17	8.7	6.3	11	10.7	7.7	10.2	11.2	8.2	6.6	4.5	11.3	10.7	7.6	5.2	6.7	8.1	6.2	12.5	10.1	4.2	2.6	3.3	0	4.7	12.5	7.4	24
18	1.6	0	0	0	2.9	3.2	0	**N**	0	7.2	11.6	3.9	0	1.9	**N**	**N**	**N**	**N**	5.4	1.8	4.9	6.3	1.7	4.3	11.6	3.0	19
19	5.8	6.7	0	3.7	2.1	3.8	6.6	1.1	5.7	3.4	4.2	4.4	5.9	6.2	0	**N**	0.2	**N**	0.5	3.7	0	1.3	4	0	6.7	3.2	22
20	0	0	1.3	2.2	3.4	3.9	1.2	0	0	5.2	**N**	0	0.2	0	1.9	1.7	1.5	0	1.8	0.8	0	3.6	0.6	3.2	5.2	1.4	23
21	3.6	2.4	0.6	0	0.3	3.9	1.6	**N**	1.1	1.7	3.1	4.7	3.5	0.9	**N**	**N**	3.2	7.3	5.7	4.2	2.9	1.3	2.8	4.5	7.3	2.8	21
22	4.5	4	2.2	3.3	2.4	3.7	3	5.7	2.7	5.2	2.1	2.8	2.8	0	5.6	8.2	5.3	0	1.5	5.1	3.6	4.4	3.2	3.8	8.2	3.5	24
23	2.8	1.9	2.4	3.7	2.8	2.3	0	2.7	4.5	3.3	6.6	6.7	7.6	4.9	6.8	5.4	7.6	8.9	4.8	8	10.3	5.6	4.8	3.5	10.3	4.9	24
24	6.3	5.8	0.7	0	1.9	1.4	0	1.9	0.9	15	8.1	1.8	0.6	2.2	7.6	5.1	3.5	0	3	2.1	1.7	5.4	6.4	3.4	15.0	3.5	24
25	5.5	4.8	0	0	0.9	5.9	0.4	4.9	4.3	**C**	**C**	**C**	**C**	**C**	**C**	2.9	5.2	6.9	8.6	9.1	8.2	9.3	9	8.8	9.3	5.3	24
26	11.5	10.3	12.8	10.1	9.1	8	5.1	0.8	3.3	1.3	2.7	4	1.3	1.3	3.8	9.9	5.8	4.3	**N**	0	3.1	2.6	3.8	0.6	12.8	5.0	23
27	0.2	0	0.6	0.1	0	1	1.4	1.4	0	0	0.7	6.6	11.1	3	1.8	3.8	0	0	0.7	1.1	2	1.6	2.7	1.5	11.1	1.7	24
28	2.1	0	3.6	0	1.3	3.7	3.3	0	1.3	2.9	4.3	0	4.7	4.8	0.6	3	**N**	1.4	1.6	4.7	1.7	0	0	0.8	4.8	2.0	23
29	0.9	2	0.5	2.1	3.8	**N**	**N**	**N**	0	**N**	5.5	4.3	0	0	3.7	2.3	3.2	3.8	9	7.6	5.7	5.9	11.5	3.8	11.5	3.8	20
30	0.7	2.3	7.9	13.7	4.7	4.9	7.6	11.9	3.8	0.7	3.2	1.3	4	2.4	2.2	1.9	1.8	3.7	0	0	2.2	1.8	0	0	13.7	3.4	24
HOURLY MAX	14	12	13	14	16	10	11	12	10	15	15	23	17	12	19	13	11	15	19	14	15	14	14	13			
HOURLY AVG	4.5	4.0	3.9	4.3	3.7	3.8	2.8	3.7	3.3	4.2	5.0	5.0	4.9	3.7	4.9	5.2	4.2	5.4	4.5	4.6	4.9	4.6	4.1	3.7			

STATUS FLAG CODES

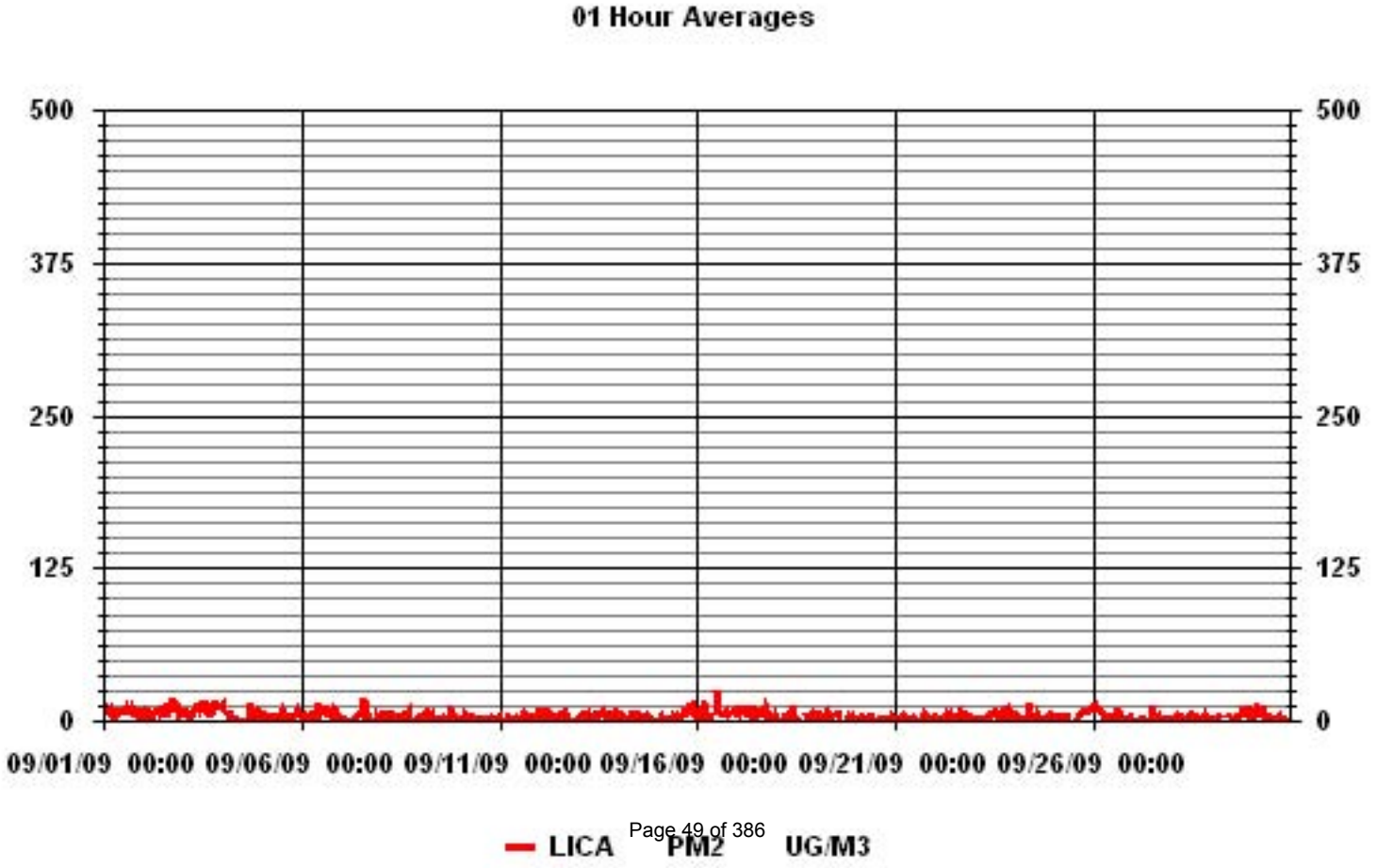
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



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:	595						
MAXIMUM 1-HR AVERAGE:	23.0	UG/M^3	@ HOUR(S)	11	ON DAY(S)	16	
MAXIMUM 24-HR AVERAGE:	9.7	UG/M^3			ON DAY(S)	3	
IZS CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:		688	HRS	
MONTHLY CALIBRATION TIME:	6	HRS	AMD OPERATION UPTIME:		95.6	%	
STANDARD DEVIATION:	3.64		MONTHLY AVERAGE:		4.27	UG/M^3	


01 Hour Averages
500
375
250
125
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA PM2 UG/M3

LICA
PM2 / WD Joint Frequency Distribution (Percent)

September 2009

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	.72	2.45	2.45	3.46	9.24	10.26	13.58	3.75	3.46	5.34	12.42	10.26	9.24	9.24	3.75	.28	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	.72	2.45	2.45	3.46	9.24	10.26	13.58	3.75	3.46	5.34	12.42	10.26	9.24	9.24	3.75	.28	

Calm : .00 %

Total # Operational Hours : 692

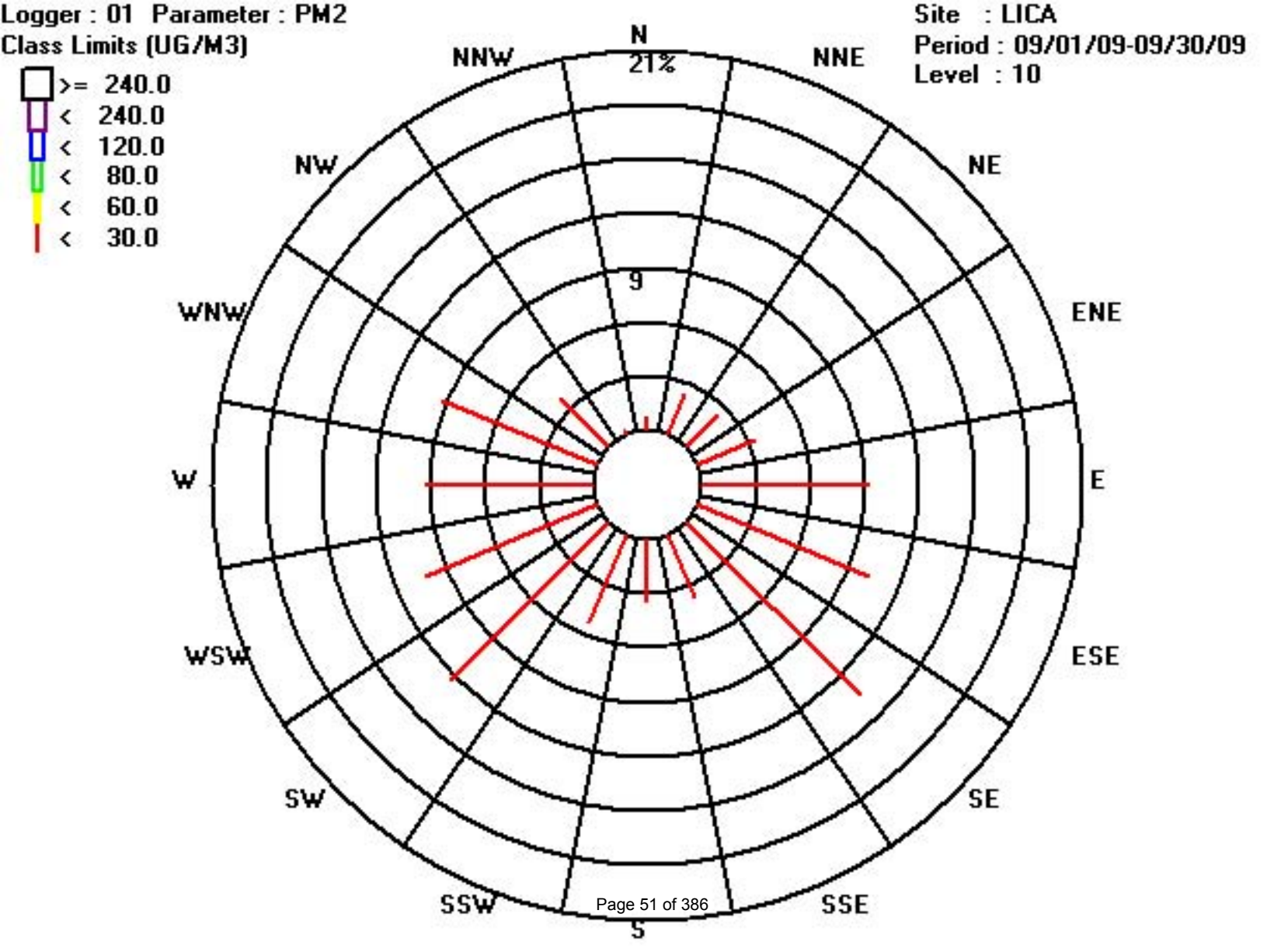
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	30.0	5	17	17	24	64	71	94	26	24	37	86	71	64	64	26	2	692
<	60.0																	
<	80.0																	
<	120.0																	
<	240.0																	
>=	240.0																	
	Totals	5	17	17	24	64	71	94	26	24	37	86	71	64	64	26	2	

Calm : .00 %

Total # Operational Hours : 692


Logger : 01 Parameter : PM2
Class Limits (UG/M3)
>= 240.0
< 240.0
< 120.0
< 80.0
< 60.0
< 30.0
Site : LICA
Period : 09/01/09-09/30/09
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*

SEPTEMBER 2009

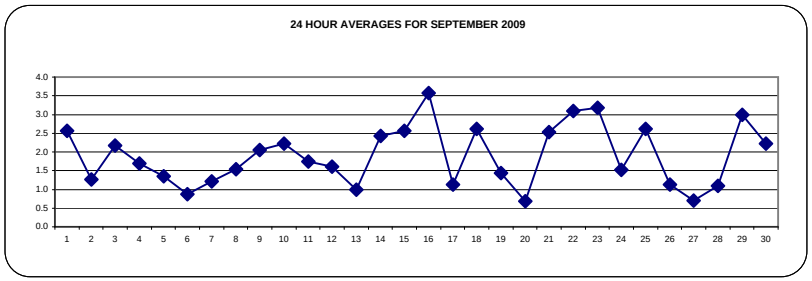
NITROGEN DIOXIDE hourly averages in ppb

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	2	2	1	2	4	5	6	2	0	0	0	0	0	1	0	1	1	4	4	**IZS**	8	7	6	3	8	2.6	24
2	2	1	1	0	1	3	4	3	0	1	0	1	0	0	1	1	3	2	**IZS**	1	1	1	1	1	4	1.3	24
3	1	1	1	1	1	2	5	4	3	3	3	3	2	1	2	2	2	**IZS**	6	3	1	1	1	1	6	2.2	24
4	1	1	1	1	3	4	4	3	3	2	1	1	1	1	1	1	**IZS**	2	2	2	1	1	1	1	4	1.7	24
5	1	1	2	1	1	1	1	1	1	0	0	0	0	0	0	**IZS**	1	1	2	3	6	4	2	2	6	1.3	24
6	4	2	1	1	1	1	1	1	0	0	1	1	0	0	**IZS**	1	1	1	1	1	1	0	0	0	4	0.9	24
7	1	1	1	1	1	1	2	2	1	1	0	0	0	**IZS**	1	1	1	1	2	2	2	2	2	2	2	1.2	24
8	2	2	2	2	2	2	4	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	1	1	0	1	1	1	1	4	1.5	24
9	1	1	1	1	2	2	3	2	1	1	1	**IZS**	1	0	0	0	1	1	4	6	7	4	3	4	7	2.0	24
10	3	2	1	1	1	2	2	5	4	6	**IZS**	2	1	1	1	1	1	1	2	3	5	3	2	1	6	2.2	24
11	1	1	1	1	1	2	3	3	4	**IZS**	1	0	0	1	1	1	1	1	3	4	2	2	3	3	4	1.7	24
12	2	2	2	2	3	6	4	2	**IZS**	1	1	1	1	0	0	0	1	1	2	2	1	1	1	1	6	1.6	24
13	1	1	1	1	1	1	2	**IZS**	1	1	1	0	0	0	0	0	1	1	3	3	1	1	1	1	3	1.0	24
14	1	1	1	1	2	2	**IZS**	6	5	3	1	1	2	4	9	2	2	4	2	2	1	1	2	1	9	2.4	24
15	1	1	1	1	1	**IZS**	5	6	4	3	2	2	2	1	1	1	0	1	5	5	5	5	3	3	6	2.6	24
16	3	2	2	1	**IZS**	3	4	10	11	**P**	**P**	4	2	2	2	2	7	**12**	5	1	1	1	0	0	**12**	**3.6**	22
17	0	0	0	**IZS**	1	1	1	2	1	1	1	1	1	1	3	2	1	1	2	1	2	1	1	1	3	1.1	24
18	2	2	**IZS**	2	1	2	7	6	4	3	3	2	1	1	1	1	1	2	5	4	4	2	2	2	7	2.6	24
19	1	**IZS**	2	2	2	2	2	2	1	1	1	1	2	1	1	1	1	1	2	1	1	2	1	2	2	1.4	24
20	**IZS**	1	1	1	1	1	1	2	0	0	0	1	1	1	1	0	0	0	0	0	0	1	2	**IZS**	2	0.7	24
21	3	3	3	3	3	3	4	4	2	1	1	1	1	1	1	1	2	2	4	4	4	4	**IZS**	3	4	2.5	24
22	2	2	3	3	4	3	4	5	4	4	3	1	1	1	1	1	1	1	6	5	6	**IZS**	4	6	6	3.1	24
23	6	3	2	2	2	3	3	5	5	3	2	2	2	2	3	3	2	3	9	7	**IZS**	2	1	1	9	3.2	24
24	2	1	2	1	1	1	2	4	6	5	2	0	0	0	0	0	0	0	1	**IZS**	1	2	2	2	6	1.5	24
25	2	2	1	2	3	3	5	7	7	5	3	1	1	1	1	0	1	2	**IZS**	4	2	2	3	2	7	2.6	24
26	2	3	4	4	4	3	3	1	1	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	4	1.1	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	2	3	3	4	2	1	4	0.7	24
28	1	2	3	3	2	5	2	2	1	0	0	0	0	1	0	**IZS**	0	1	1	1	0	0	0	0	5	1.1	24
29	0	0	0	0	1	1	2	2	1	1	1	1	1	1	**IZS**	1	2	4	11	10	10	9	7	3	11	3.0	24
30	7	8	4	2	2	3	3	3	1	0	0	0	0	**IZS**	0	0	1	1	2	2	3	3	2	4	8	2.2	24
HOURLY MAX	7	8	4	4	4	6	7	10	11	6	3	4	2	4	9	3	7	12	11	10	10	9	7	6			
HOURLY AVG	1.9	1.7	1.6	1.5	1.8	2.3	3.1	3.4	2.6	1.7	1.1	1.0	0.8	0.9	1.1	0.9	1.3	1.9	3.2	2.9	2.8	2.3	1.9	1.8			

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

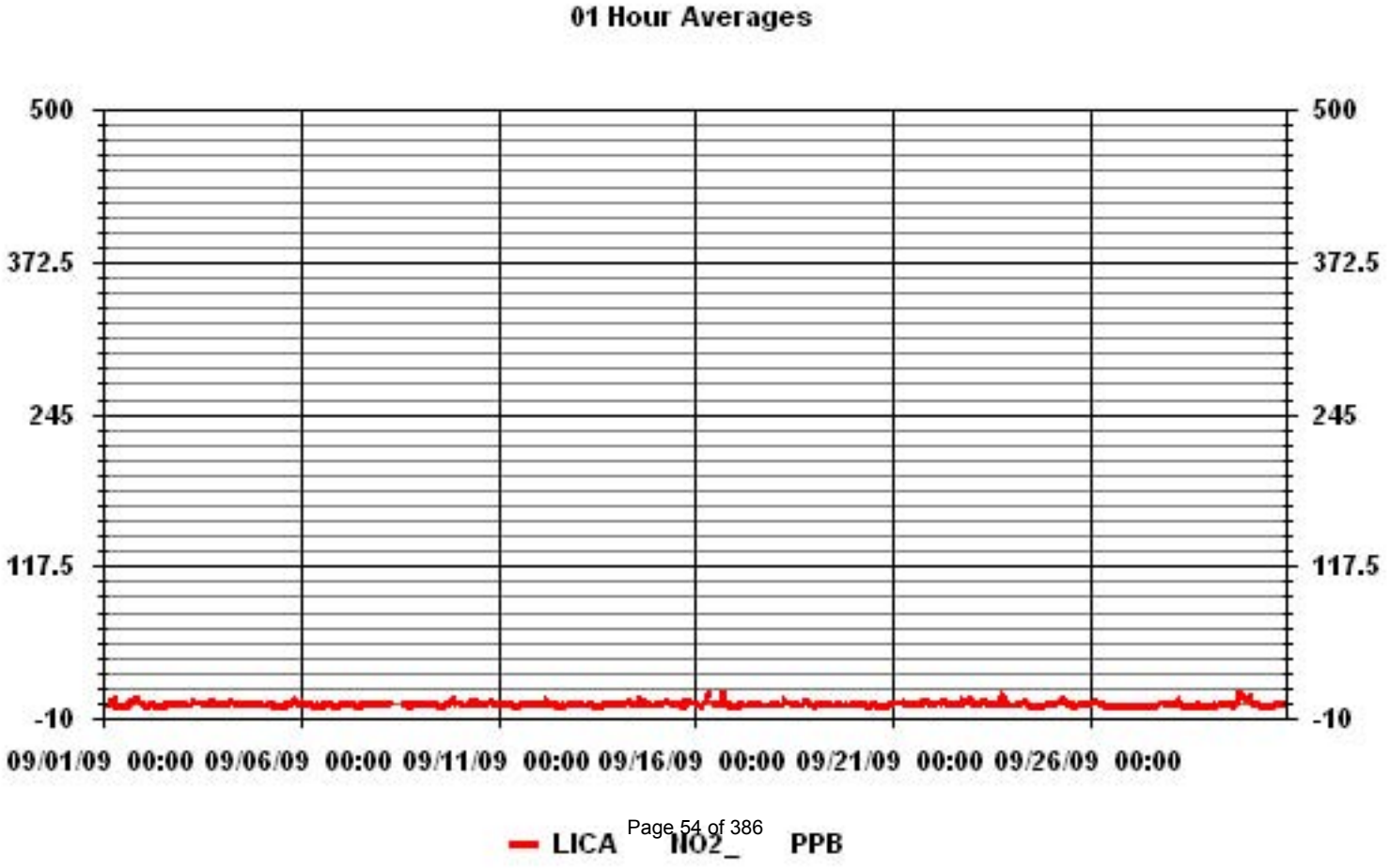


OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 212 PPB | 24-HR 106 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	566					
MAXIMUM 1-HR AVERAGE:	12	PPB	@ HOUR(S)	17	ON DAY(S)	16
MAXIMUM 24-HR AVERAGE:	3.6	PPB			ON DAY(S)	16

IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:	718	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME	99.7	%
STANDARD DEVIATION	1.83		MONTHLY AVERAGE	1.89	PPB


01 Hour Averages
500
372.5
245
117.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA NO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

NITROGEN DIOXIDE MAX instantaneous maximum in ppb

MST

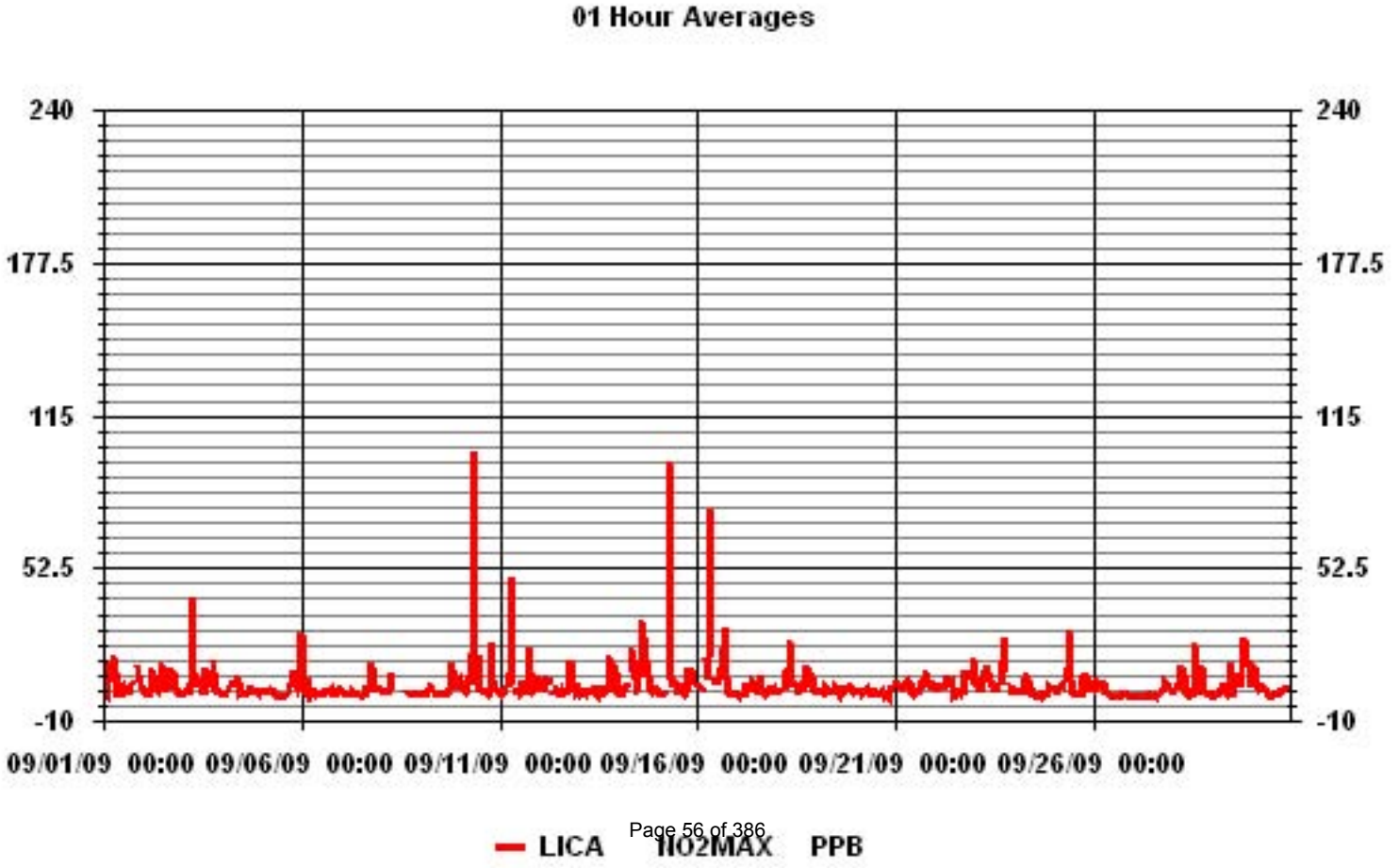
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	3	2	1	6	14	13	17	11	1	1	1	3	4	2	3	1	4	5	6	**IZS**	12	9	8	5	17	5.7	24
2	4	2	1	1	3	12	6	8	3	2	4	14	2	5	4	3	12	6	**IZS**	9	4	2	1	1	14	4.7	24
3	1	2	3	2	2	5	40	10	4	6	6	5	2	2	12	4	5	**IZS**	14	10	3	2	2	1	40	6.2	24
4	1	1	1	2	4	5	5	5	7	7	2	3	1	1	1	2	**IZS**	3	3	2	2	2	1	2	7	2.7	24
5	2	2	2	2	3	2	2	1	2	1	1	0	0	0	1	**IZS**	2	4	5	9	9	8	3	4	9	2.8	24
6	26	3	2	1	7	1	2	1	3	1	1	1	1	1	**IZS**	2	2	2	3	1	1	3	1	3	26	3.0	24
7	3	2	1	1	1	2	3	2	1	1	1	1	0	**IZS**	1	3	3	3	14	12	3	3	3	3	14	2.9	24
8	3	2	2	2	2	3	8	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2	1	1	1	1	1	1	1	8	2.1	24
9	1	1	1	1	2	3	4	4	3	1	1	**IZS**	2	1	1	1	2	2	10	13	11	7	3	6	13	3.5	24
10	7	4	3	2	3	6	5	18	10	**99**	**IZS**	16	2	3	2	2	2	1	2	22	7	4	3	2	**99**	9.8	24
11	2	1	2	2	4	7	C	4	47	**IZS**	2	2	1	2	6	2	2	2	20	10	9	3	4	8	47	6.5	24
12	3	3	3	3	7	7	6	6	**IZS**	2	3	3	1	1	3	2	2	2	13	15	2	6	2	3	15	4.3	24
13	1	2	2	2	1	2	3	**IZS**	2	4	2	1	4	1	2	4	2	3	17	7	2	14	1	11	17	3.9	24
14	2	1	1	2	4	5	**IZS**	13	20	11	8	1	13	15	31	8	24	16	9	3	2	3	3	3	31	8.6	24
15	2	1	1	1	2	**IZS**	9	96	8	5	5	5	2	2	5	2	1	2	12	9	12	7	6	5	96	8.7	24
16	4	4	4	3	**IZS**	15	7	16	75	**P**	**P**	6	6	9	8	8	20	28	8	2	1	1	1	1	75	10.8	22
17	1	0	1	**IZS**	1	5	2	4	2	6	5	4	2	2	8	4	2	1	2	2	3	3	1	3	8	2.8	24
18	2	2	**IZS**	3	4	4	10	12	23	5	5	5	2	2	4	3	3	4	13	9	10	8	3	2	23	6.0	24
19	2	**IZS**	2	3	2	4	3	2	2	2	3	5	4	2	1	4	2	3	3	3	4	4	2	3	5	2.8	24
20	**IZS**	3	2	1	2	2	2	3	1	1	1	2	2	1	1	1	2	0	1	1	0	3	3	**IZS**	3	1.6	24
21	5	5	5	4	5	4	5	6	3	6	2	1	2	2	2	3	6	7	10	6	5	6	**IZS**	4	10	4.5	24
22	3	3	4	4	4	4	5	8	6	5	6	1	2	1	2	1	2	2	11	9	8	**IZS**	6	16	16	4.9	24
23	8	5	4	2	4	10	7	13	10	7	4	6	3	3	5	6	5	15	24	11	**IZS**	4	1	3	24	7.0	24
24	3	2	2	2	2	2	7	8	8	7	4	1	1	0	0	1	0	1	1	**IZS**	1	4	3	3	8	2.7	24
25	3	2	2	4	5	4	6	10	10	27	7	2	1	1	**C**	1	1	7	**IZS**	8	2	4	6	4	27	5.3	24
26	3	4	7	5	5	4	6	2	2	1	0	0	0	0	0	0	0	**IZS**	1	1	1	0	0	0	7	1.8	24
27	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	**IZS**	2	3	6	5	5	4	2	6	1.3	24
28	2	3	4	4	3	13	5	6	2	1	3	1	1	22	2	**IZS**	3	13	2	2	1	1	1	0	22	4.1	24
29	0	1	1	1	2	2	3	5	2	1	2	14	7	1	**IZS**	8	4	9	17	24	14	13	13	4	24	6.4	24
30	11	13	6	4	3	4	4	3	3	1	1	0	0	**IZS**	1	1	1	2	2	3	3	3	3	4	13	3.3	24
HOURLY MAX	26	13	7	6	14	15	40	96	75	99	8	16	13	22	31	8	24	28	24	24	14	14	13	16			
HOURLY AVG	3.7	2.6	2.4	2.4	3.5	5.2	6.5	9.9	9.3	7.9	3.0	3.7	2.3	3.1	4.1	2.9	4.1	5.2	8.1	7.5	4.8	4.6	3.1	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:	641					
MAXIMUM INSTANTANEOUS VALUE:	99	PPB	@ HOUR(S)	9	ON DAY(S)	10
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	11	HRS				
STANDARD DEVIATION:	7.57					


01 Hour Averages
240
177.5
115
52.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA NO2MAX PPB

LICA
NO2_ / WD Joint Frequency Distribution (Percent)

September 2009

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	.73	2.35	2.35	3.38	8.83	10.75	13.69	3.82	3.53	5.30	12.51	10.16	9.27	9.13	3.82	.29	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	.73	2.35	2.35	3.38	8.83	10.75	13.69	3.82	3.53	5.30	12.51	10.16	9.27	9.13	3.82	.29	

Calm : .00 %

Total # Operational Hours : 679

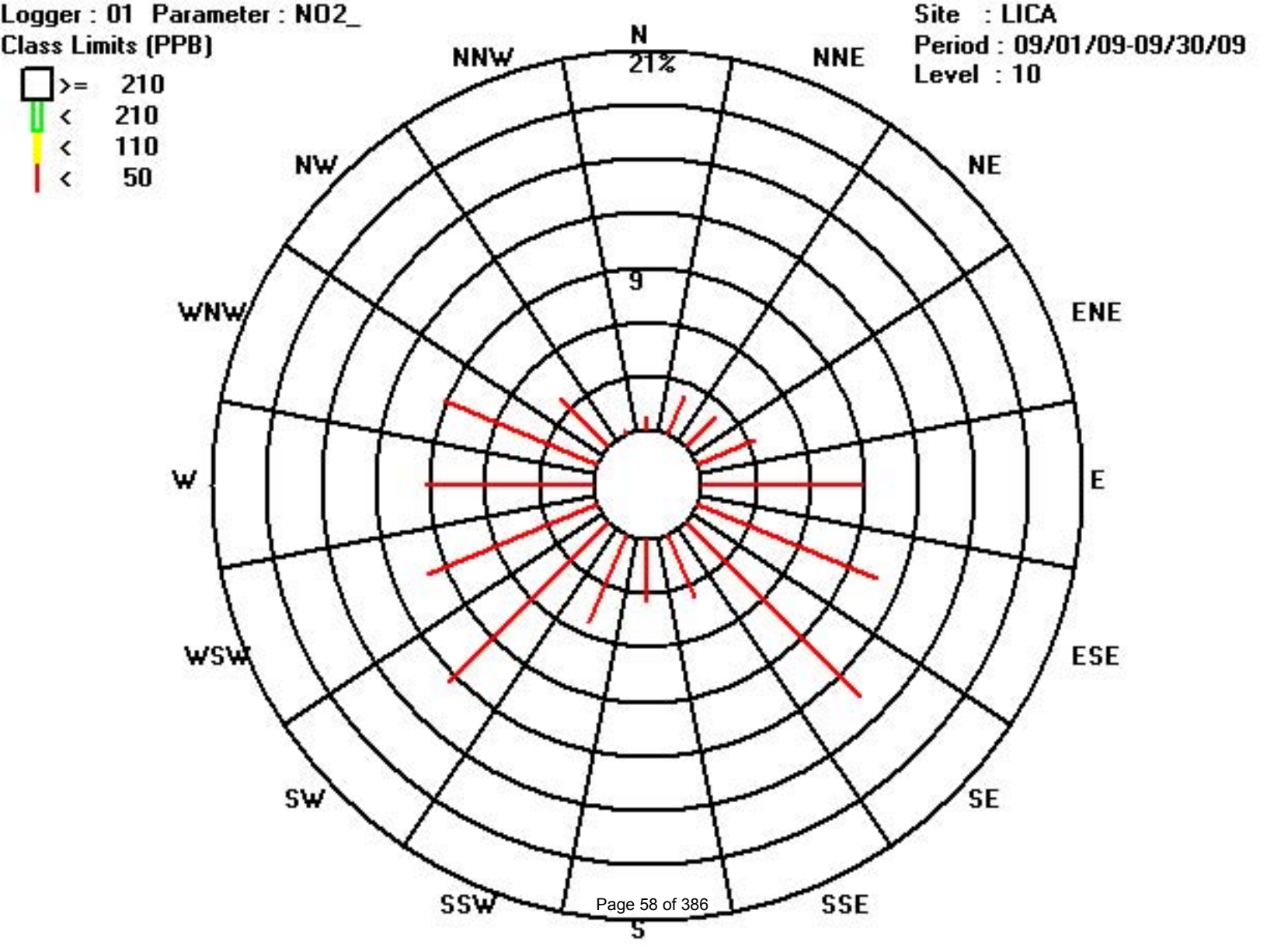
Distribution By Samples

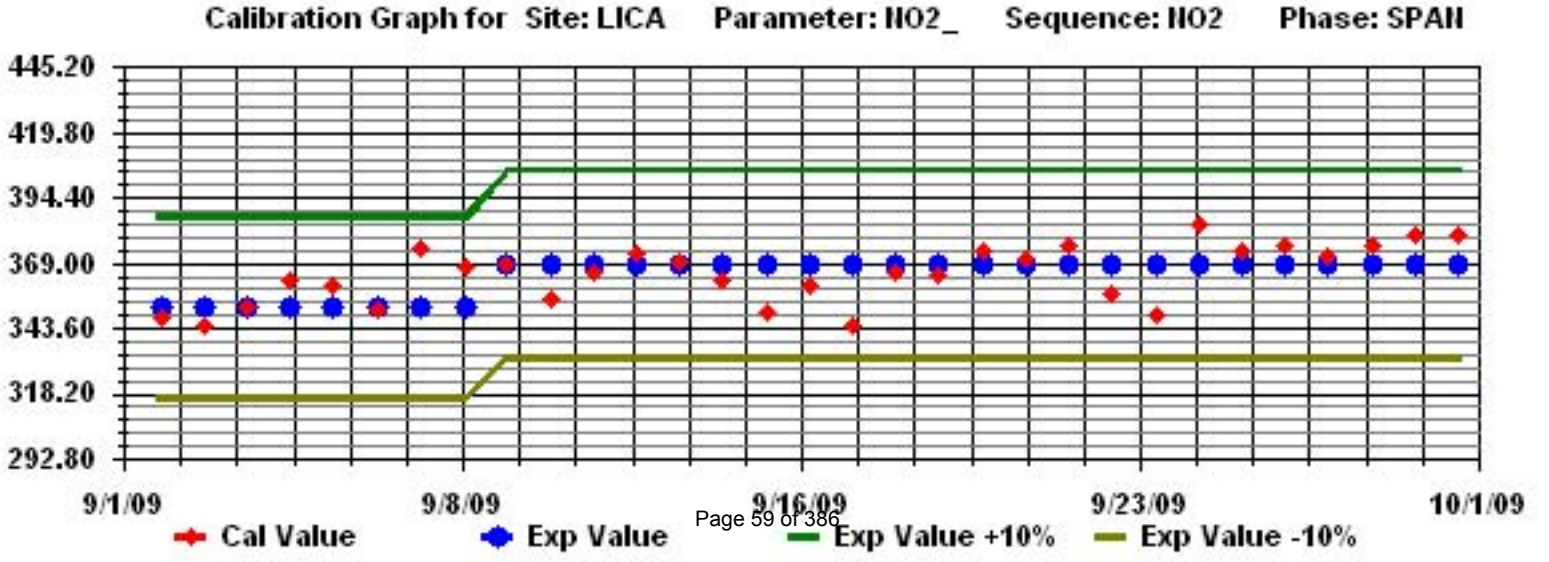
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	5	16	16	23	60	73	93	26	24	36	85	69	63	62	26	2	679
< 110																	
< 210																	
>= 210																	
Totals	5	16	16	23	60	73	93	26	24	36	85	69	63	62	26	2	

Calm : .00 %

Total # Operational Hours : 679


Logger : 01 Parameter : NO2_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 09/01/09-09/30/09
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: NO2_ Sequence: NO2 Phase: SPAN
445.20
419.80
394.40
369.00
343.60
318.20
292.80
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitric Oxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

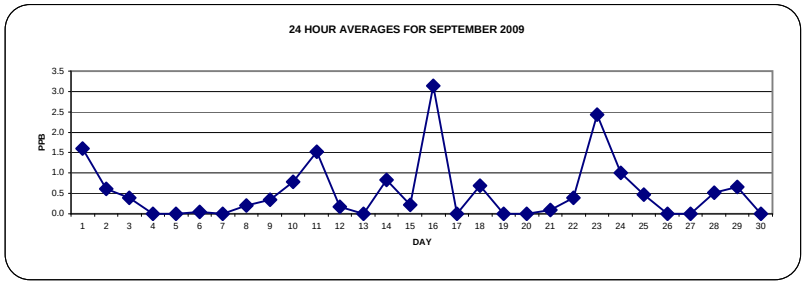
NITRIC OXIDE hourly averages in ppb

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	1	13	13	4	1	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	2	2	0	13	1.6	24
2	0	0	0	0	0	1	8	3	0	0	0	0	0	0	0	0	0	0	**IZS**	2	0	0	0	0	8	0.6	24
3	0	0	0	0	0	0	4	4	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	4	0.4	24
4	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
5	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
6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	1	0.0	24
7	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
8	0	0	0	0	0	0	3	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	3	0.2	24
9	0	0	0	0	0	0	0	1	0	0	0	**IZS**	0	0	0	0	0	0	0	7	0	0	0	0	7	0.3	24
10	0	0	0	0	0	1	1	11	2	1	**IZS**	1	0	0	0	0	0	0	0	1	0	0	0	0	11	0.8	24
11	0	0	0	1	1	5	12	10	6	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1.5	24
12	0	0	0	0	0	1	2	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	24
13	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
14	0	0	0	0	0	0	**IZS**	3	3	2	0	0	1	3	6	0	0	1	0	0	0	0	0	0	6	0.8	24
15	0	0	0	0	0	**IZS**	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.2	24
16	0	0	0	0	**IZS**	8	10	16	19	**P**	**P**	1	0	1	0	0	4	7	0	0	0	0	0	0	19	**3.1**	22
17	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
18	0	0	**IZS**	0	0	0	4	4	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.7	24
19	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
20	**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
21	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	0.1	24
22	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	**IZS**	0	5	5	0.4	24
23	2	0	0	0	2	6	10	**25**	8	1	0	0	0	0	0	0	0	0	2	0	**IZS**	0	0	0	**25**	2.4	24
24	0	0	0	0	0	0	7	11	3	2	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	11	1.0	24
25	0	0	0	0	0	0	0	3	4	3	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	4	0.5	24
26	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
27	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
28	0	0	0	1	1	7	1	2	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	7	0.5	24
29	0	0	0	0	0	0	0	0	0	0	0	1	0	0	**IZS**	0	0	0	2	4	2	4	2	0	4	0.7	24
30	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
HOURLY MAX	2	0	0	1	13	13	12	25	19	3	2	1	1	3	6	0	4	7	2	7	2	4	2	5			
HOURLY AVG	0.1	0.0	0.0	0.1	0.6	1.4	2.3	3.6	1.8	0.5	0.1	0.1	0.0	0.1	0.2	0.0	0.1	0.3	0.1	0.5	0.1	0.2	0.1	0.2			

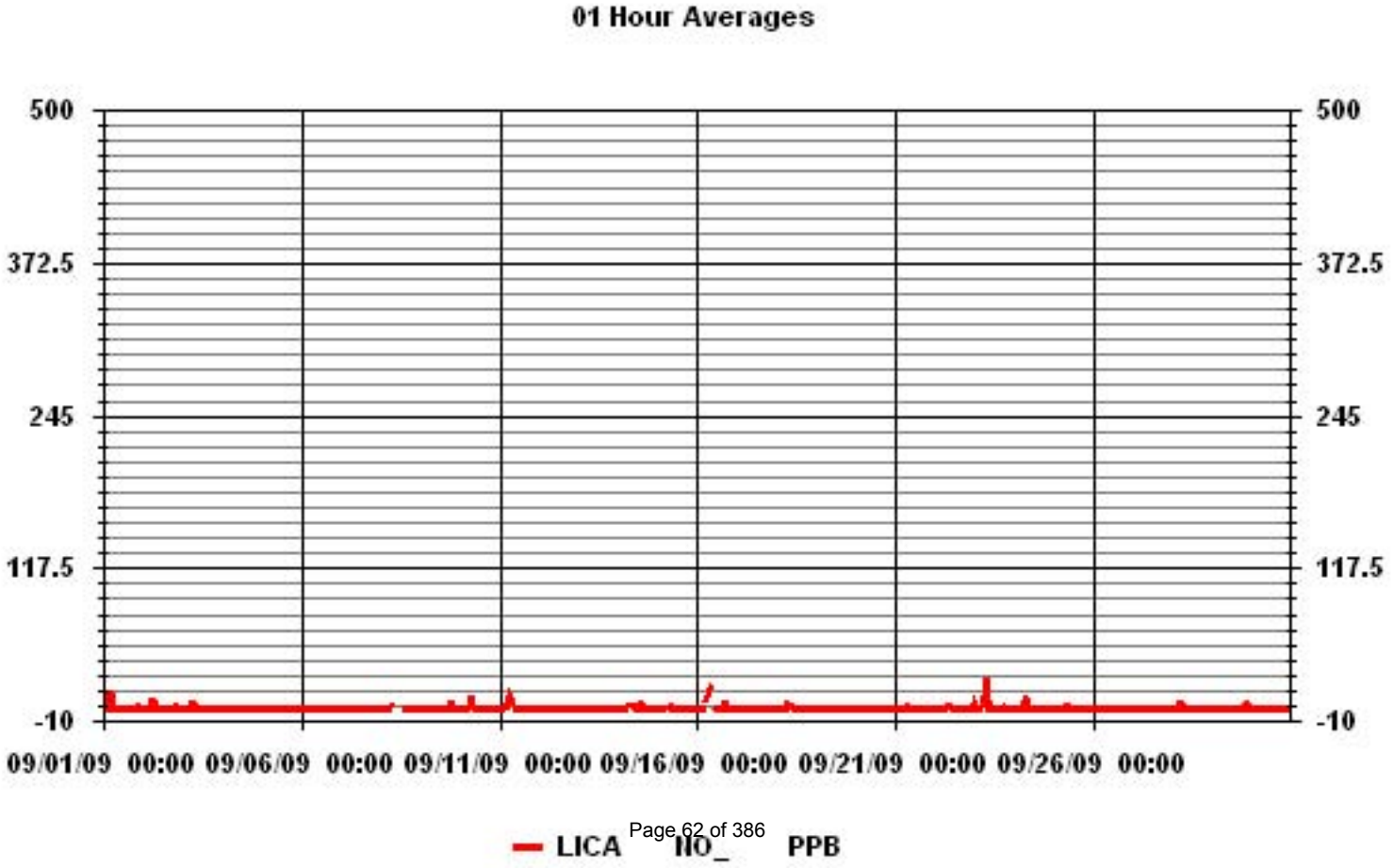
STATUS FLAG CODES

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:		91					
MAXIMUM 1-HR AVERAGE:		25	PPB	@ HOUR(S)	7	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:		3.1	PPB			ON DAY(S)	16
IZS CALIBRATION TIME:	30	HRS		OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	9	HRS		AMD OPERATION UPTIME		99.7	%
STANDARD DEVIATION	2.09			MONTHLY AVERAGE		0.53	PPB


01 Hour Averages
500
372.5
245
117.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA NO_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

NITRIC OXIDE MAX instantaneous maximum in ppb

MST

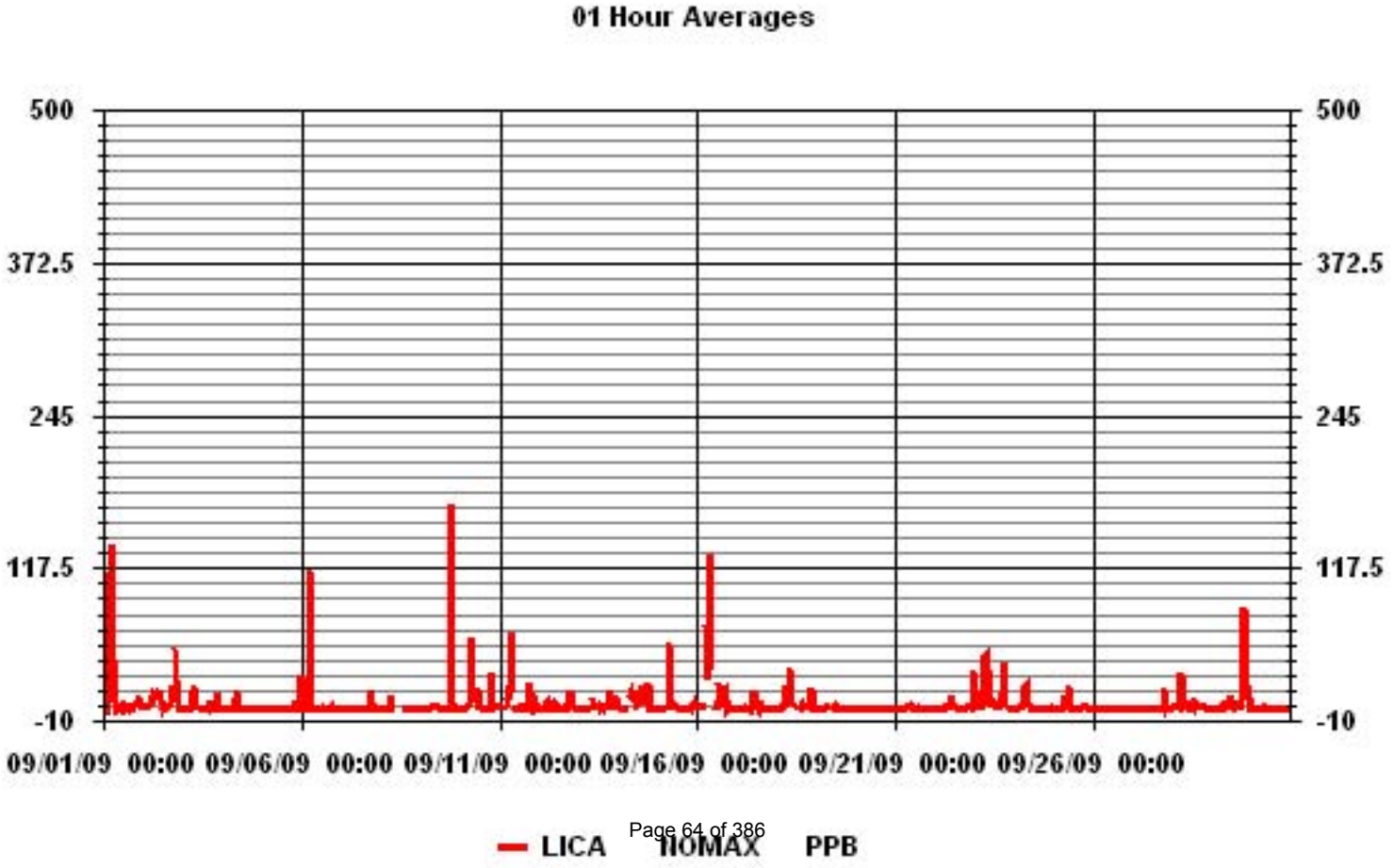
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	1	0	19	114	137	42	7	0	1	1	0	7	1	2	0	2	1	4	**IZS**	5	9	8	1	137	15.7	24
2	1	1	1	1	3	8	12	9	12	8	14	5	0	3	1	3	3	16	**IZS**	48	26	7	0	0	48	7.9	24
3	0	0	0	0	0	2	14	19	1	1	2	1	0	0	2	0	5	**IZS**	0	0	0	13	2	0	19	2.7	24
4	0	0	0	0	0	0	0	3	8	14	1	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	14	1.1	24
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	4	4	0	0	0	4	0.3	24
6	27	0	0	0	3	116	1	0	0	0	1	0	0	2	**IZS**	1	0	0	3	0	0	0	0	0	116	6.7	24
7	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	1	15	7	1	0	0	0	15	1.0	24
8	0	0	0	0	0	0	9	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	9	0.6	24
9	0	0	0	0	0	0	1	1	1	1	1	**IZS**	1	0	0	0	0	0	7	**171**	2	3	0	1	**171**	8.3	24
10	0	0	0	0	1	3	5	60	13	16	**IZS**	14	1	1	1	0	1	0	0	29	1	1	1	1	60	6.5	24
11	1	1	1	1	2	8	20	13	61	**IZS**	1	0	0	0	5	0	0	2	22	7	12	0	1	2	61	7.0	24
12	0	0	0	0	6	3	6	3	**IZS**	0	5	3	0	1	1	2	0	0	12	12	6	2	0	1	12	2.7	24
13	0	0	0	0	0	0	0	**IZS**	7	4	0	5	1	4	2	0	3	2	3	16	0	3	0	10	16	2.6	24
14	2	0	0	0	0	0	**IZS**	12	15	10	7	0	12	15	20	3	10	7	21	0	0	1	0	0	21	5.9	24
15	0	0	0	0	0	**IZS**	16	55	3	2	6	2	0	0	0	0	0	0	0	2	0	2	5	1	55	4.1	24
16	1	1	1	1	**IZS**	67	25	33	126	P	P	2	6	21	3	4	18	19	1	3	0	0	0	0	126	15.8	22
17	0	0	0	**IZS**	0	2	0	1	0	7	14	4	2	0	6	0	0	0	0	0	0	0	0	0	14	1.6	24
18	0	0	**IZS**	1	4	1	20	15	35	5	4	3	2	1	2	1	4	1	2	2	9	17	0	0	35	5.6	24
19	0	**IZS**	0	1	0	2	1	1	1	1	2	4	1	0	0	1	0	0	0	0	0	0	0	0	4	0.7	24
20	**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
21	0	0	0	0	1	0	1	2	2	4	1	0	1	0	1	1	2	1	0	1	0	0	**IZS**	0	4	0.8	24
22	0	0	0	0	0	0	0	2	3	5	10	1	1	1	0	0	0	0	0	3	2	**IZS**	0	33	33	2.7	24
23	7	2	1	1	14	22	43	45	34	5	2	8	3	1	1	1	13	3	39	4	**IZS**	1	0	0	45	10.9	24
24	0	0	0	1	1	2	19	21	7	3	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	2	21	2.5	24
25	0	0	0	0	0	0	1	10	6	20	4	0	0	0	**C**	1	0	2	**IZS**	2	0	0	0	0	20	2.1	24
26	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	1	0.0	24
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	**IZS**	0	2	18	0	2	1	0	18	1.0	24
28	1	1	2	3	2	29	12	4	2	6	2	4	2	9	2	**IZS**	4	3	3	1	1	0	0	0	29	4.0	24
29	0	0	0	0	0	2	1	4	4	1	1	11	4	0	**IZS**	5	1	1	18	84	13	22	10	1	84	8.0	24
30	0	0	0	0	0	0	0	1	3	1	0	0	1	**IZS**	0	0	0	0	0	0	0	0	0	0	3	0.3	24
HOURLY MAX	27	2	2	19	114	137	43	60	126	20	14	14	12	21	20	5	18	19	39	171	26	22	10	33			
HOURLY AVG	1.4	0.2	0.2	1.0	5.2	13.9	8.6	11.5	12.3	4.3	3.0	2.4	1.6	2.2	1.9	0.9	2.4	2.1	5.4	14.8	2.8	2.9	1.0	1.8			

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

NUMBER OF NON-ZERO READINGS:	321					
MAXIMUM INSTANTANEOUS VALUE:	171	PPB	@ HOUR(S)	19	ON DAY(S)	9
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	10	HRS				
STANDARD DEVIATION:	14.01					


01 Hour Averages
500
372.5
245
117.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA
NOMAX
PPB

LICA
NO_ / WD Joint Frequency Distribution (Percent)

September 2009

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	.73	2.35	2.35	3.38	8.83	10.75	13.69	3.82	3.53	5.30	12.51	10.16	9.27	9.13	3.82	.29	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	.73	2.35	2.35	3.38	8.83	10.75	13.69	3.82	3.53	5.30	12.51	10.16	9.27	9.13	3.82	.29	

Calm : .00 %

Total # Operational Hours : 679

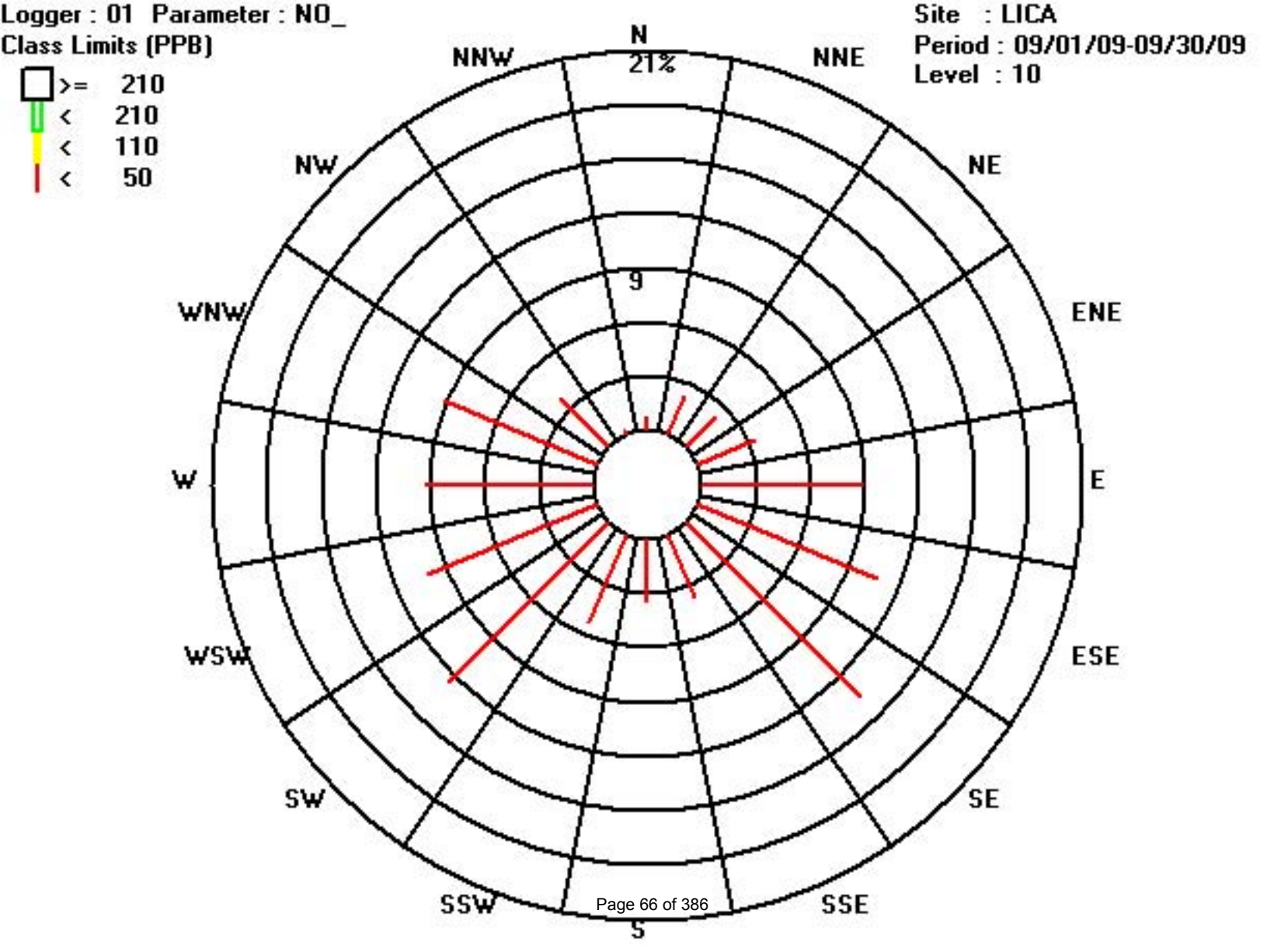
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	5	16	16	23	60	73	93	26	24	36	85	69	63	62	26	2	679
<	110																	
<	210																	
>=	210																	
	Totals	5	16	16	23	60	73	93	26	24	36	85	69	63	62	26	2	

Calm : .00 %

Total # Operational Hours : 679


Logger : 01 Parameter : NO_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 09/01/09-09/30/09
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*

SEPTEMBER 2009

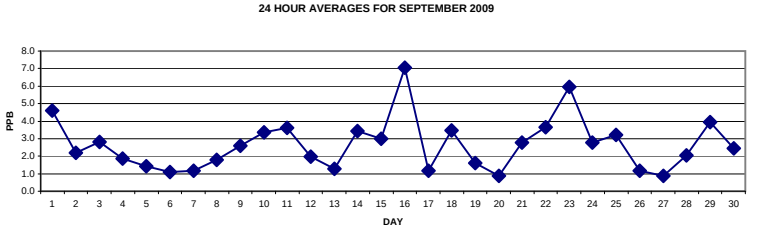
OXIDES OF NITROGEN hourly averages in ppb

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	2	2	1	4	17	19	11	4	0	0	0	1	1	1	1	1	2	4	4	**IZS**	9	10	8	4	19	4.6	24
2	2	1	1	1	1	5	12	6	1	1	1	2	1	1	1	1	3	2	**IZS**	3	1	1	1	1	12	2.2	24
3	1	1	2	1	1	3	10	9	4	4	3	3	2	1	2	2	2	**IZS**	7	3	1	1	1	1	10	2.8	24
4	1	1	1	1	3	4	4	4	4	3	2	1	1	1	1	1	**IZS**	2	2	2	1	1	1	1	4	1.9	24
5	1	1	2	1	1	1	1	1	1	1	1	0	0	0	0	**IZS**	1	1	2	3	6	4	2	2	6	1.4	24
6	5	2	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	0	0	0	5	1.1	24
7	1	1	0	0	1	1	2	2	1	1	0	0	0	**IZS**	1	1	1	1	3	2	2	2	2	2	3	1.2	24
8	2	2	2	2	2	2	8	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	1	1	0	1	1	1	1	8	1.8	24
9	1	1	1	1	2	2	4	3	2	1	1	**IZS**	1	1	0	0	1	1	5	14	7	4	3	4	14	2.6	24
10	3	2	1	1	1	3	4	16	7	7	**IZS**	4	2	2	1	1	1	1	2	5	5	4	2	2	16	3.3	24
11	2	1	2	2	3	7	16	14	10	**IZS**	1	1	0	1	1	1	1	1	4	4	3	2	3	3	16	3.6	24
12	2	2	2	2	4	7	7	3	**IZS**	2	1	1	1	0	0	0	1	1	3	2	1	1	1	1	7	2.0	24
13	1	1	1	1	1	1	2	**IZS**	2	2	1	1	1	1	0	0	1	1	3	4	1	1	1	1	4	1.3	24
14	1	1	1	1	2	2	**IZS**	9	8	5	2	1	3	7	16	2	3	5	3	2	1	1	2	1	16	3.4	24
15	1	1	1	1	1	**IZS**	8	10	4	3	3	3	2	1	1	1	0	1	5	5	5	5	4	3	10	3.0	24
16	3	3	3	2	**IZS**	12	14	26	29	**P**	**P**	5	3	3	2	2	12	19	5	2	1	1	1	0	29	**7.0**	22
17	0	0	0	**IZS**	1	2	1	2	1	1	1	1	1	2	3	2	1	1	2	1	2	1	0	1	3	1.2	24
18	2	2	**IZS**	2	2	2	11	10	7	6	6	2	1	1	2	1	1	2	5	4	4	3	2	2	11	3.5	24
19	1	**IZS**	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	1	1	2	1	2	2	1.6	24
20	**IZS**	1	1	1	1	1	2	2	1	0	1	1	1	1	1	1	0	0	0	0	0	1	2	**IZS**	2	0.9	24
21	3	3	3	3	3	3	4	6	3	2	2	1	1	1	1	1	2	2	5	4	4	4	**IZS**	3	6	2.8	24
22	2	2	3	3	4	3	5	7	6	5	5	1	1	1	1	1	1	1	6	5	6	**IZS**	4	11	11	3.7	24
23	8	4	3	2	5	9	13	**31**	14	4	3	3	2	2	3	4	2	3	11	7	**IZS**	2	1	1	**31**	6.0	24
24	2	1	2	2	2	2	10	15	9	8	2	1	0	0	0	0	0	0	1	**IZS**	1	2	2	2	15	2.8	24
25	2	2	1	2	3	3	6	11	11	8	4	1	1	1	1	1	1	2	**IZS**	4	2	2	3	2	11	3.2	24
26	2	3	4	4	4	3	3	2	1	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	4	1.2	24
27	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	**IZS**	1	2	4	3	5	2	2	5	0.9	24
28	2	3	3	4	3	13	3	4	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	0	0	0	13	2.0	24
29	0	0	0	1	1	1	2	3	1	1	1	2	2	1	**IZS**	2	2	5	13	14	11	14	10	4	14	4.0	24
30	7	8	4	2	3	3	3	3	2	1	1	0	0	**IZS**	1	1	1	1	2	2	2	3	2	4	8	2.4	24
HOURLY MAX	8	8	4	4	17	19	16	31	29	8	6	5	3	7	16	4	12	19	13	14	11	14	10	11			
HOURLY AVG	2.1	1.8	1.7	1.7	2.6	4.0	5.8	7.4	4.8	2.6	1.7	1.4	1.1	1.2	1.6	1.1	1.6	2.2	3.6	3.5	2.9	2.7	2.1	2.1			

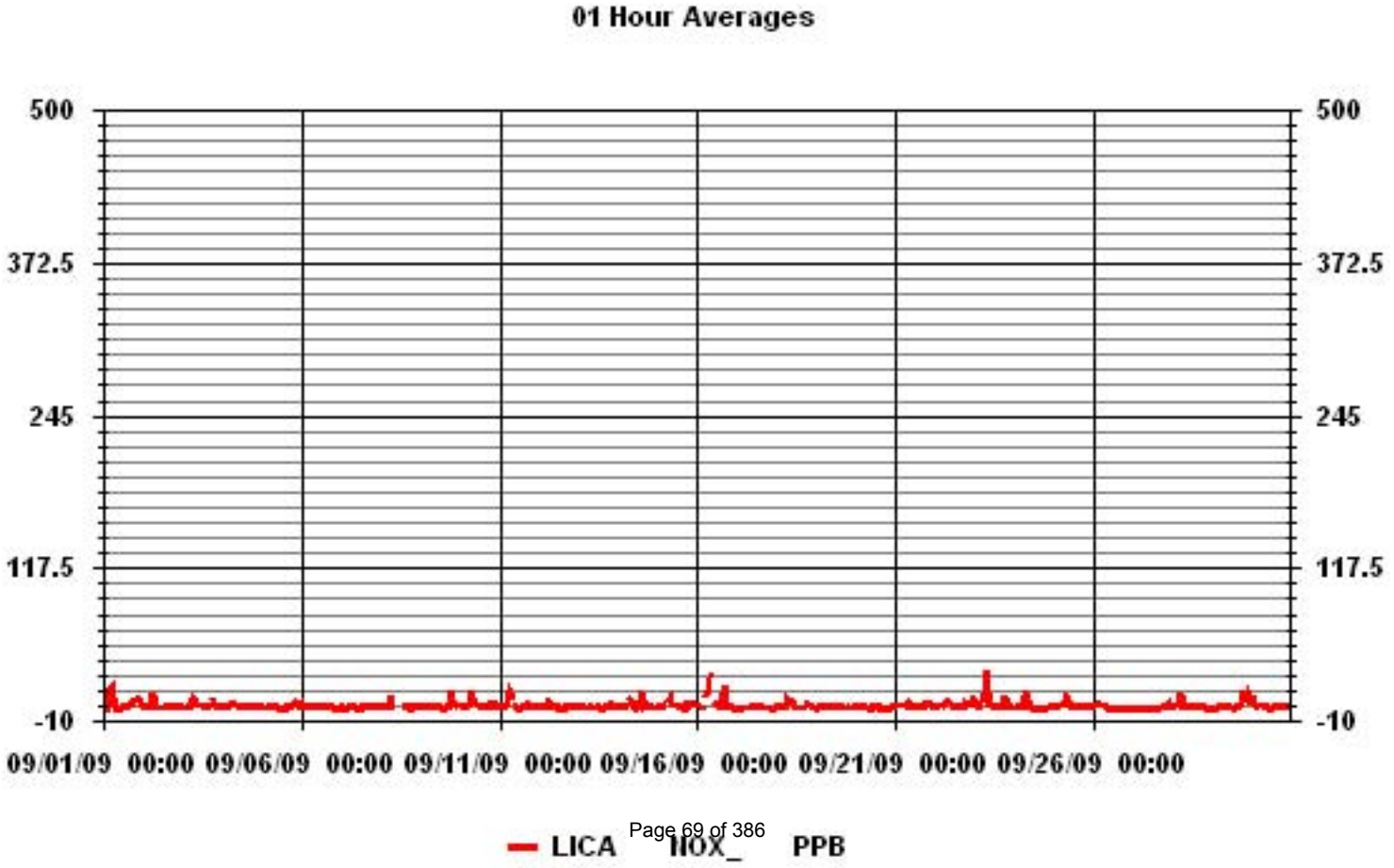
STATUS FLAG CODES

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:	601					
MAXIMUM 1-HR AVERAGE:	31	PPB	@ HOUR(S)	7	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:	7.0	PPB			ON DAY(S)	16
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME		99.7	%
STANDARD DEVIATION	3.42		MONTHLY AVERAGE		2.64	PPB


01 Hour Averages
500
372.5
245
117.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA NOX_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

OXIDES OF NITROGEN MAX instantaneous maximum in ppb

MST

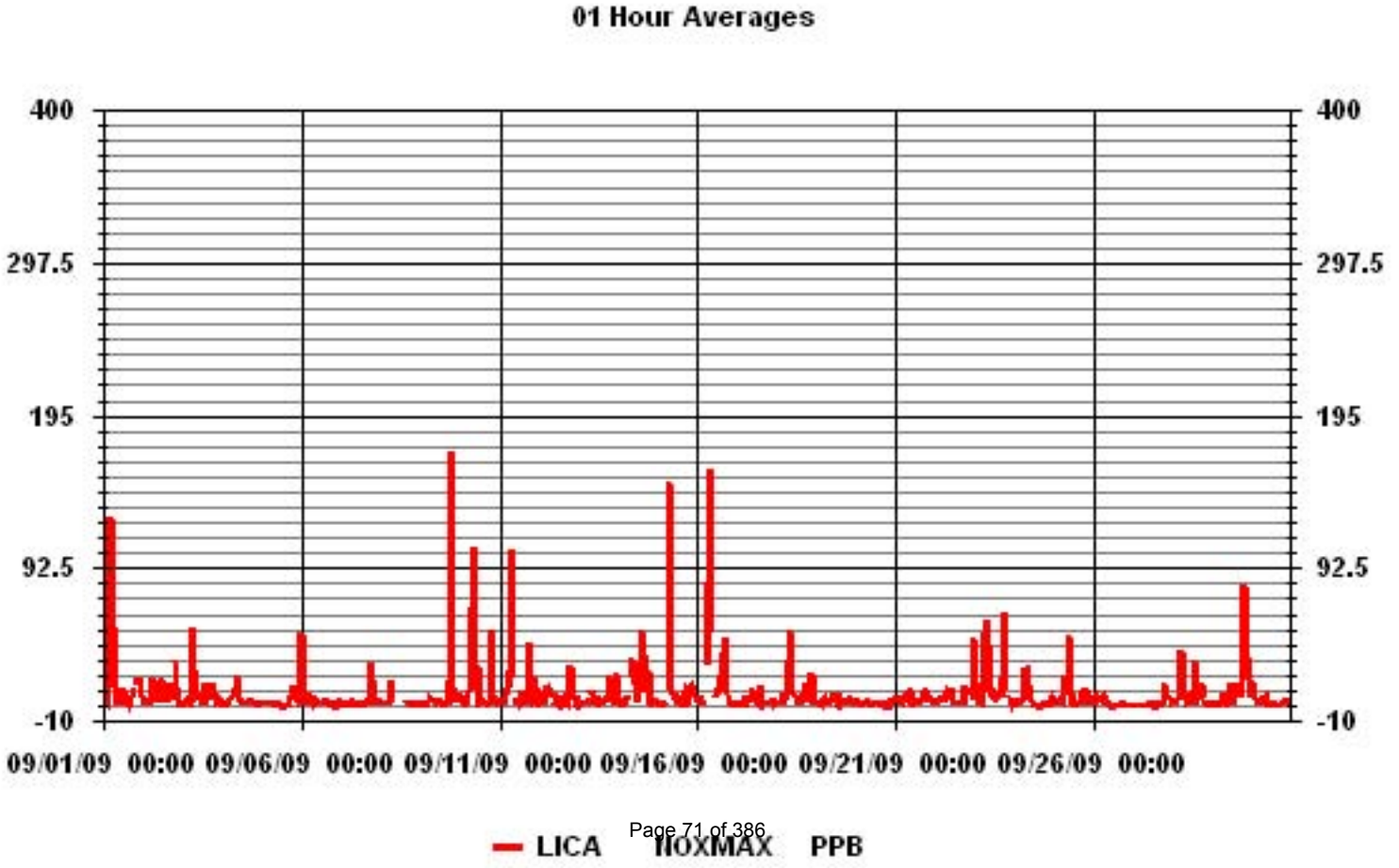
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	3	3	2	22	126	115	54	14	3	3	3	3	11	2	5	2	5	7	10	**IZS**	16	16	16	7	126	19.5	24
2	5	3	2	2	5	19	17	15	6	3	7	19	3	7	5	3	15	10	**IZS**	29	14	5	1	1	29	8.5	24
3	1	2	3	3	2	7	53	25	6	7	7	6	3	3	15	5	8	**IZS**	14	10	3	4	4	1	53	8.3	24
4	1	1	1	2	4	5	6	8	12	20	4	4	2	2	2	3	**IZS**	3	3	2	2	2	1	2	20	4.0	24
5	2	2	2	2	3	2	2	2	2	1	2	1	1	0	1	**IZS**	2	5	6	14	10	8	3	4	14	3.3	24
6	49	3	2	2	9	2	4	2	4	2	3	2	2	2	**IZS**	3	3	2	3	2	1	3	1	3	49	4.7	24
7	3	2	1	1	1	2	3	3	1	1	1	1	1	**IZS**	1	3	3	4	29	19	3	3	3	3	29	4.0	24
8	3	2	2	2	2	3	15	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	3	1	1	1	1	1	1	1	15	2.6	24
9	1	1	1	1	2	3	6	5	4	2	3	**IZS**	3	2	1	1	2	2	17	**170**	13	8	3	7	**170**	11.2	24
10	7	4	3	2	4	9	11	66	23	104	**IZS**	25	3	4	2	2	3	2	3	51	8	6	3	4	104	15.2	24
11	3	2	2	4	7	12	23	18	103	**IZS**	3	3	1	2	10	3	3	3	43	18	18	4	5	11	103	13.1	24
12	3	4	3	3	13	10	12	9	**IZS**	3	8	5	2	1	3	5	3	2	25	25	4	8	3	4	25	6.9	24
13	1	2	2	2	2	2	3	**IZS**	9	7	3	2	4	4	3	5	4	4	20	13	2	17	1	22	22	5.8	24
14	4	1	1	2	4	6	**IZS**	23	32	21	16	2	20	29	51	9	34	21	21	3	2	4	3	4	51	13.6	24
15	2	2	1	1	2	**IZS**	25	151	12	8	9	8	3	2	5	2	1	2	12	11	13	10	8	5	151	12.8	24
16	5	4	5	3	**IZS**	81	28	49	157	**P**	**P**	8	11	21	10	11	35	45	9	3	2	1	1	1	157	23.3	22
17	1	1	1	**IZS**	2	7	2	5	2	12	8	6	3	2	13	4	3	2	2	2	3	3	1	3	13	3.8	24
18	2	2	**IZS**	3	8	4	28	27	51	10	9	7	3	3	5	3	4	4	16	10	20	22	3	2	51	10.7	24
19	2	**IZS**	2	4	2	5	3	3	4	3	4	9	5	2	1	5	3	3	3	3	4	4	2	3	9	3.4	24
20	**IZS**	3	2	1	2	2	3	3	1	1	1	2	2	2	2	1	2	0	1	1	0	3	3	**IZS**	3	1.7	24
21	5	5	5	4	6	4	6	8	5	11	3	2	3	3	3	4	8	8	11	7	5	6	**IZS**	4	11	5.5	24
22	3	3	4	4	4	4	6	10	8	10	10	2	2	2	3	2	2	2	11	11	10	**IZS**	6	45	45	7.1	24
23	14	6	4	3	15	27	49	57	43	11	6	12	6	5	6	8	8	19	63	12	**IZS**	5	1	3	63	16.7	24
24	3	2	3	3	3	4	24	25	15	10	5	1	1	0	0	1	0	1	1	**IZS**	1	4	3	6	25	5.0	24
25	3	2	2	4	6	4	7	21	16	47	10	2	2	1	**C**	2	2	9	**IZS**	10	2	4	6	5	47	7.6	24
26	3	4	7	5	5	4	6	3	3	1	1	0	1	0	0	0	0	**IZS**	1	1	1	0	0	1	7	2.0	24
27	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	3	**IZS**	2	4	16	5	7	6	2	16	2.2	24
28	3	3	5	7	5	37	12	8	4	6	3	3	3	31	2	**IZS**	6	16	5	2	2	1	1	1	37	7.2	24
29	1	1	1	1	2	4	4	9	3	2	3	16	10	2	**IZS**	13	6	9	34	81	22	33	19	5	81	12.2	24
30	12	13	6	4	3	4	5	4	6	1	1	1	1	**IZS**	1	1	1	2	2	3	3	3	3	4	13	3.7	24
HOURLY MAX	49	13	7	22	126	115	54	151	157	104	16	25	20	31	51	13	35	45	63	170	22	33	19	45			
HOURLY AVG	5.0	2.9	2.6	3.3	8.6	13.4	14.4	20.5	19.1	11.4	5.0	5.5	3.9	5.0	5.8	3.9	6.0	6.8	13.2	18.9	6.6	6.7	3.8	5.7			

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:	655					
MAXIMUM INSTANTANEOUS VALUE:	170	PPB	@ HOUR(S)	19	ON DAY(S)	9
IZS CALIBRATION TIME:	30	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	10	HRS				
STANDARD DEVIATION:	16.45					


01 Hour Averages
400
297.5
195
92.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA
NOXMAX
PPB

LICA
NOX_ / WD Joint Frequency Distribution (Percent)

September 2009

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	.73	2.35	2.35	3.38	8.83	10.75	13.69	3.82	3.53	5.30	12.51	10.16	9.27	9.13	3.82	.29	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	.73	2.35	2.35	3.38	8.83	10.75	13.69	3.82	3.53	5.30	12.51	10.16	9.27	9.13	3.82	.29	

Calm : .00 %

Total # Operational Hours : 679

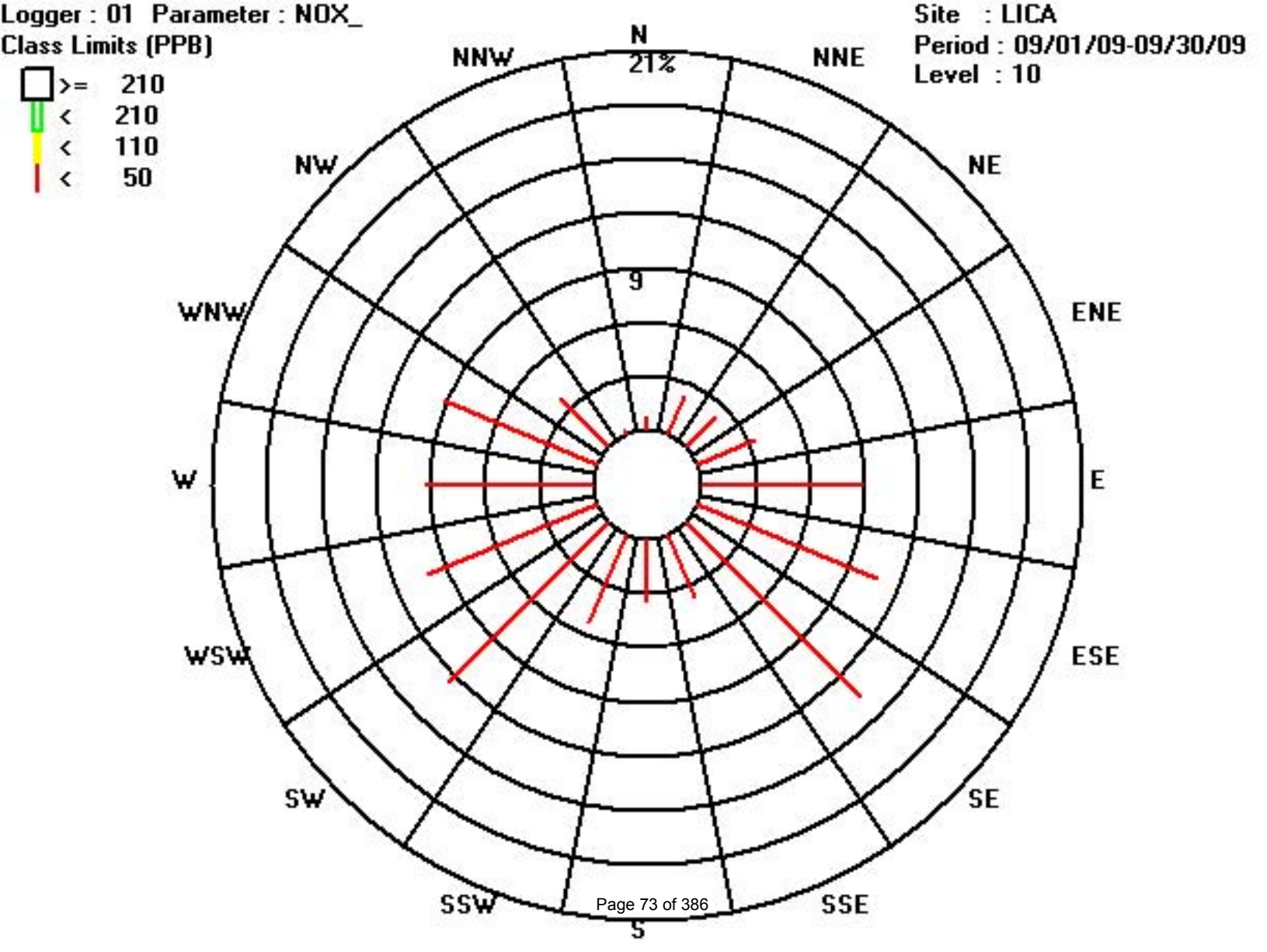
Distribution By Samples

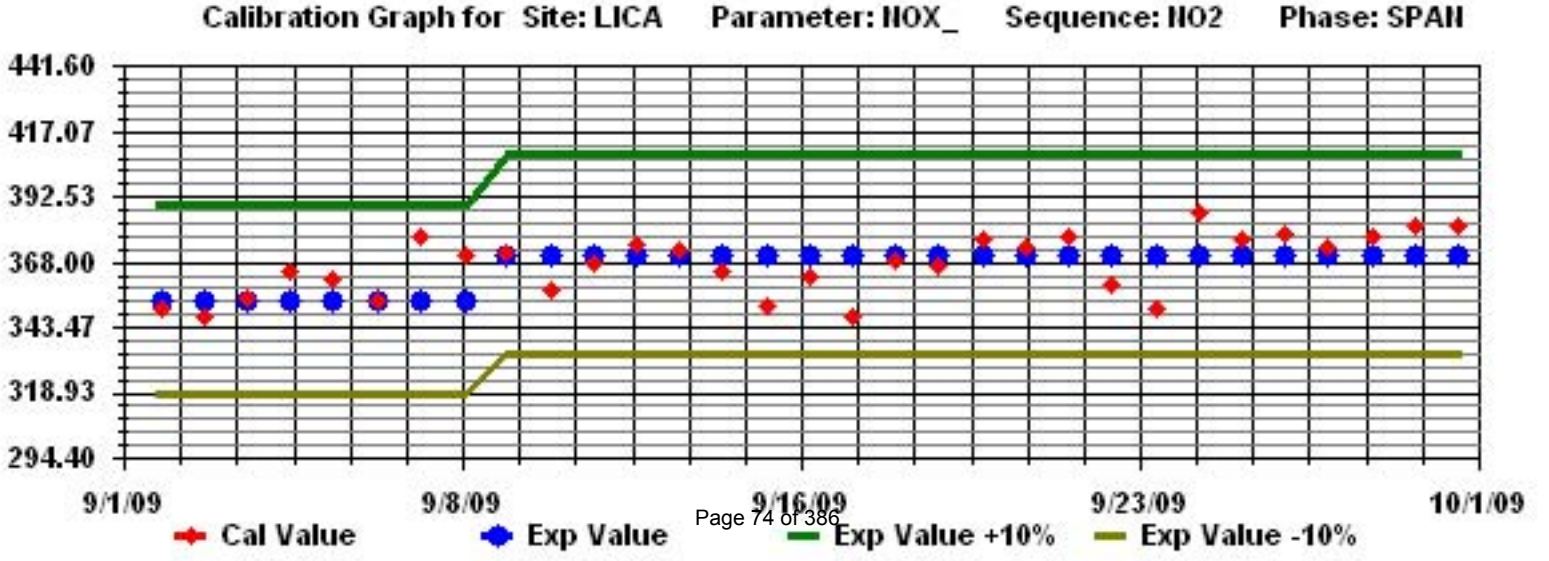
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	5	16	16	23	60	73	93	26	24	36	85	69	63	62	26	2	679
<	110																	
<	210																	
>=	210																	
	Totals	5	16	16	23	60	73	93	26	24	36	85	69	63	62	26	2	

Calm : .00 %

Total # Operational Hours : 679


Logger : 01 Parameter : NOX_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 09/01/09-09/30/09
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
441.60
417.07
392.53
368.00
343.47
318.93
294.40
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Ozone

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

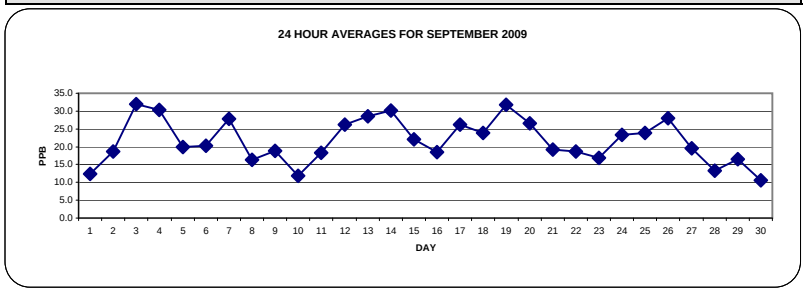
OZONE (O_3) hourly averages in ppb

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	3	3	1	1	0	2	13	19	20	19	19	19	19	21	23	27	30	24	15	**IZS**	3	1	1	1	30	12.3	24
2	1	1	1	0	1	5	1	10	15	21	23	24	29	32	33	36	39	26	**IZS**	23	23	25	31	31	39	18.7	24
3	26	22	11	6	9	7	4	12	24	30	39	50	50	50	50	50	50	**IZS**	42	43	41	42	40	37	**50**	**32.0**	24
4	35	34	32	30	30	28	29	28	26	27	33	38	40	43	47	41	**IZS**	29	26	21	20	19	19	21	47	30.3	24
5	19	19	18	18	17	17	17	16	17	21	23	25	28	29	32	**IZS**	36	35	23	16	9	7	9	7	36	19.9	24
6	7	18	18	20	18	16	16	17	18	20	19	19	23	27	**IZS**	28	27	25	23	24	23	21	20	19	28	20.3	24
7	23	28	35	35	33	31	28	26	31	33	36	39	39	**IZS**	34	27	26	27	18	17	23	17	17	17	39	27.8	24
8	15	11	12	13	11	10	4	10	13	22	25	27	**IZS**	**C**	**C**	**C**	**C**	20	19	20	20	19	20	20	27	16.4	24
9	20	22	21	21	19	17	15	17	20	22	25	**IZS**	28	28	29	28	25	23	11	4	8	10	13	8	29	18.9	24
10	11	12	11	7	5	3	1	1	11	17	**IZS**	21	21	20	21	24	25	21	16	14	5	2	1	1	25	11.8	24
11	0	0	0	0	0	0	0	2	10	**IZS**	22	26	30	33	36	39	40	39	30	23	23	23	22	23	40	18.3	24
12	25	21	19	8	7	2	3	16	**IZS**	24	29	36	39	39	38	38	40	39	33	31	31	29	28	27	40	26.2	24
13	25	25	19	12	13	16	16	**IZS**	20	23	31	34	35	41	44	44	42	39	30	25	32	30	30	29	44	28.5	24
14	30	30	28	27	22	14	**IZS**	19	26	30	35	39	41	40	36	41	41	38	34	35	32	25	17	12	41	30.1	24
15	8	6	21	16	9	**IZS**	5	15	22	23	27	35	41	43	45	47	44	40	26	14	8	4	3	6	47	22.1	24
16	6	5	2	2	**IZS**	0	1	4	9	**P**	**P**	38	38	39	37	37	33	28	30	20	15	15	14	14	39	18.4	22
17	16	17	19	**IZS**	18	17	19	21	27	29	30	33	38	42	35	40	36	24	20	23	23	23	28	25	42	26.2	24
18	18	14	**IZS**	12	3	9	3	7	10	14	19	31	41	43	44	46	47	44	29	22	21	23	24	24	47	23.8	24
19	19	**IZS**	21	22	22	24	25	24	24	26	30	35	41	44	44	45	47	42	35	31	31	31	34	33	47	31.7	24
20	**IZS**	32	31	30	29	27	24	23	24	24	24	23	24	25	27	30	30	31	30	27	26	24	20	**IZS**	32	26.6	24
21	14	7	8	10	7	13	10	14	17	21	24	28	30	31	33	34	35	35	24	17	15	9	**IZS**	6	35	19.2	24
22	5	4	9	15	14	16	15	14	17	17	21	31	34	35	35	33	36	31	18	13	8	**IZS**	7	2	36	18.7	24
23	1	2	1	2	0	0	0	1	10	20	26	31	36	34	37	38	36	31	17	18	**IZS**	19	19	11	38	17.0	24
24	5	3	3	2	1	0	0	1	11	18	36	44	45	45	45	44	43	40	38	**IZS**	37	33	25	16	45	23.3	24
25	15	10	9	7	10	12	14	11	17	22	28	33	35	37	38	39	40	36	**IZS**	30	32	31	25	20	40	24.0	24
26	15	14	14	20	23	28	27	28	30	31	32	32	32	32	33	33	34	**IZS**	34	33	32	31	28	26	34	27.9	24
27	25	24	25	25	25	25	25	24	24	24	26	25	24	24	23	24	**IZS**	20	15	8	5	2	4	3	26	19.5	24
28	2	1	1	0	0	3	10	10	11	13	14	16	17	19	21	**IZS**	22	21	20	21	22	22	20	20	22	13.3	24
29	20	19	19	19	19	19	18	18	19	20	20	21	21	22	**IZS**	23	23	19	10	7	6	5	2	11	23	16.5	24
30	10	8	12	13	12	11	10	9	9	10	11	12	12	**IZS**	13	14	13	12	12	12	9	7	7	5	14	10.6	24
HOURLY MAX	35	34	35	35	33	31	29	28	31	33	39	50	50	50	50	50	50	44	42	43	41	42	40	37			
HOURLY AVG	14.4	14.2	14.5	13.6	13.0	12.8	12.2	14.4	18.3	22.2	26.0	29.8	32.1	34.0	34.6	35.2	34.8	30.0	24.2	21.1	20.1	18.9	18.2	16.4			

STATUS FLAG CODES

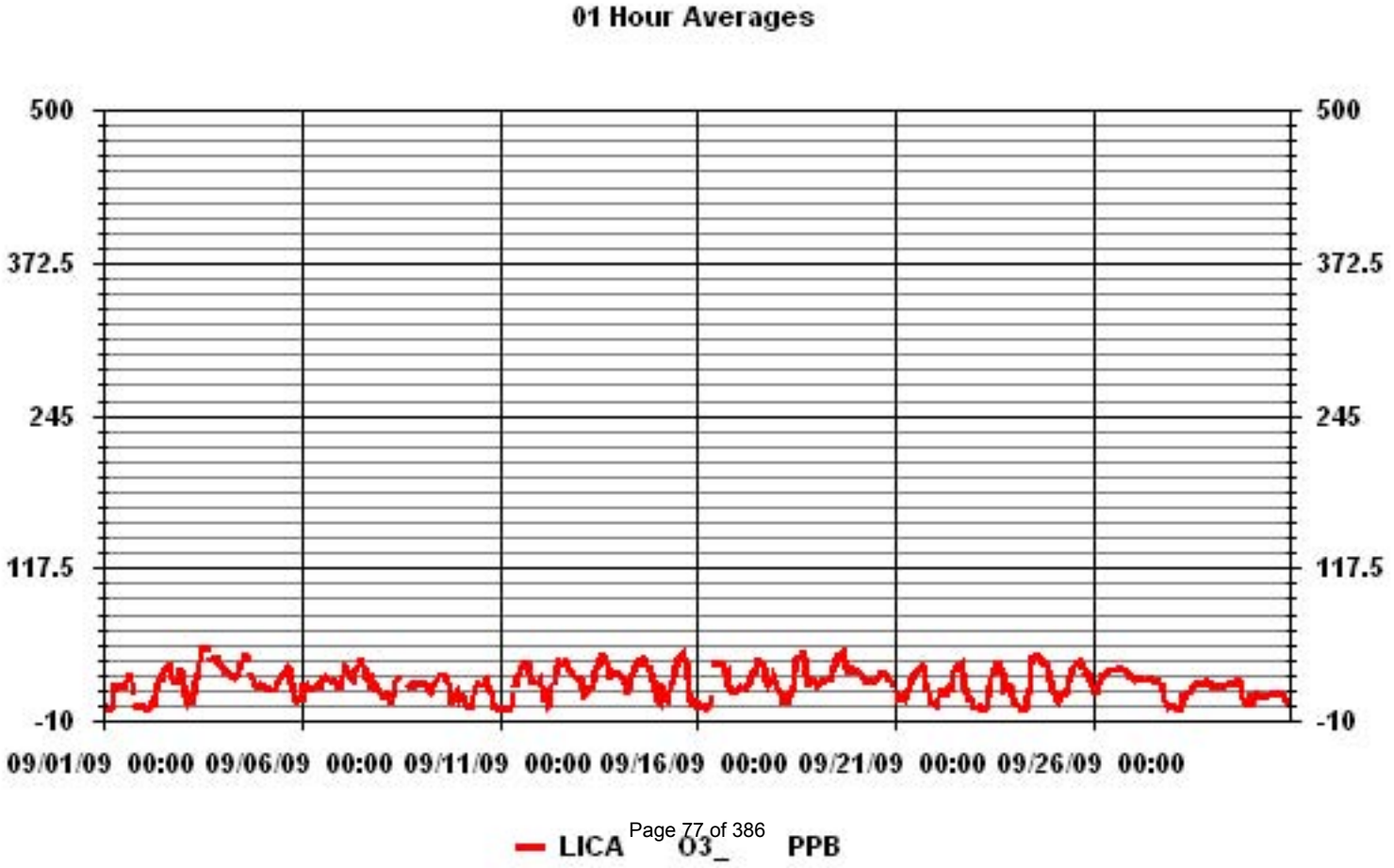
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



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

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0						
NUMBER OF NON-ZERO READINGS:	666						
MAXIMUM 1-HR AVERAGE:	50	PPB	@ HOUR(S)	VAR	ON DAY(S)	3	
MAXIMUM 24-HR AVERAGE:	32.0	PPB			ON DAY(S)	3	
					VAR-VARIOUS		
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		718	HRS	
MONTHLY CALIBRATION TIME:	4	HRS	AMD OPERATION UPTIME		99.7	%	
STANDARD DEVIATION	12.01		MONTHLY AVERAGE		21.71	PPB	


01 Hour Averages
500
372.5
245
117.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA O3_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

OZONE MAX instantaneous maximum in ppb

MST

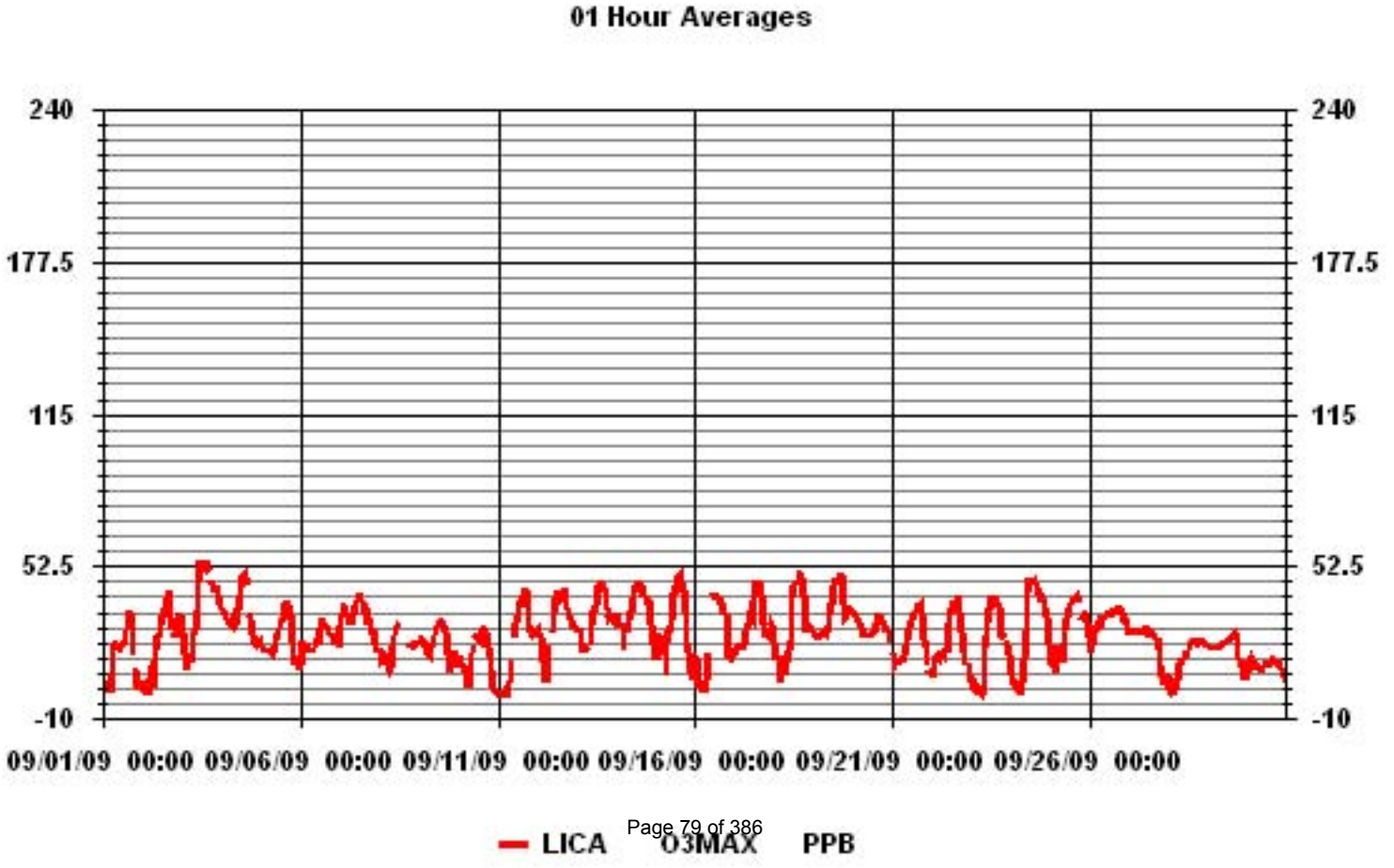
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	6	5	2	2	2	9	21	20	21	20	19	20	21	22	26	30	33	33	17	**IZS**	9	4	2	5	33	15.2	24
2	3	4	1	1	4	12	2	14	18	24	25	28	32	34	34	39	42	28	**IZS**	24	24	31	32	32	42	21.2	24
3	30	26	17	10	17	14	13	24	26	34	46	**55**	53	52	**55**	53	52	**IZS**	46	45	42	44	41	38	**55**	36.2	24
4	36	35	34	32	30	29	31	30	28	29	35	40	44	48	49	46	**IZS**	32	31	25	21	20	21	22	49	32.5	24
5	20	20	19	18	18	18	18	17	20	22	25	27	30	31	36	**IZS**	38	37	33	22	15	12	16	10	38	22.7	24
6	12	21	21	21	20	18	18	18	19	22	22	20	27	30	**IZS**	28	28	26	24	24	24	22	21	19	30	22.0	24
7	28	33	36	36	34	33	30	30	33	36	38	40	40	**IZS**	37	32	36	30	30	24	27	21	19	19	40	31.4	24
8	18	14	15	16	15	13	10	11	20	24	28	29	**IZS**	**C**	**C**	**C**	**C**	**C**	20	20	21	20	21	21	29	18.7	24
9	21	23	23	22	20	17	16	19	21	24	27	**IZS**	29	29	30	29	27	26	17	9	15	16	16	11	30	21.2	24
10	13	15	13	12	9	11	3	5	17	19	**IZS**	24	23	22	24	26	27	26	20	16	11	4	2	1	27	14.9	24
11	1	0	0	0	0	0	3	5	13	**IZS**	25	29	32	36	38	40	42	42	36	27	27	25	26	26	42	20.6	24
12	27	25	24	14	12	5	8	19	**IZS**	27	33	39	41	41	39	40	42	42	36	32	32	30	29	27	42	28.9	24
13	27	26	26	18	19	20	19	**IZS**	21	28	34	36	37	44	45	45	43	43	36	32	33	32	31	30	45	31.5	24
14	32	32	29	28	28	19	**IZS**	27	30	34	39	42	44	45	43	44	44	41	38	38	39	29	21	18	45	34.1	24
15	15	15	25	23	17	**IZS**	9	21	26	28	30	41	44	45	48	49	46	43	34	22	18	10	6	17	49	27.5	24
16	14	14	4	4	**IZS**	2	2	6	16	**P**	**P**	41	40	40	39	39	38	35	34	33	16	16	15	16	41	22.1	22
17	17	18	20	**IZS**	20	18	20	26	29	32	31	38	41	45	45	47	41	29	23	26	25	27	30	29	47	29.4	24
18	22	15	**IZS**	15	5	13	8	10	13	18	22	40	44	45	46	49	49	48	41	26	26	28	28	27	49	27.7	24
19	25	**IZS**	23	23	24	25	26	26	25	28	33	37	44	46	46	47	49	50	38	32	33	35	35	34	50	34.1	24
20	**IZS**	33	31	31	30	28	25	24	24	24	24	24	25	26	29	32	32	32	31	29	26	26	23	**IZS**	33	27.7	24
21	16	11	12	13	13	14	14	16	20	22	27	30	31	33	34	36	36	37	33	23	20	13	**IZS**	9	37	22.3	24
22	7	10	15	16	15	17	17	16	18	18	29	33	35	37	37	36	40	34	26	18	13	**IZS**	12	6	40	22.0	24
23	6	3	2	4	1	1	0	2	19	24	29	35	40	36	38	39	38	36	25	24	**IZS**	21	20	17	40	20.0	24
24	9	5	5	3	2	1	1	5	15	26	42	46	46	46	47	46	44	42	39	**IZS**	39	36	32	21	47	26.0	24
25	20	13	12	9	16	19	19	13	21	26	31	35	37	38	**C**	40	41	39	**IZS**	32	33	33	30	24	41	26.4	24
26	20	17	20	25	28	30	29	30	31	32	33	33	33	33	34	34	34	**IZS**	35	35	34	31	30	27	35	29.9	24
27	26	25	25	26	26	26	26	25	25	26	27	27	25	24	24	25	**IZS**	22	19	13	8	4	7	7	27	21.2	24
28	3	1	2	0	2	6	12	13	13	14	16	17	34	21	22	**IZS**	22	22	21	22	22	22	21	20	34	15.1	24
29	20	20	19	19	19	19	19	19	20	21	21	22	22	22	**IZS**	24	25	23	15	12	12	14	6	14	25	18.6	24
30	13	12	15	14	12	11	11	10	10	11	12	12	13	**IZS**	13	14	14	13	12	13	11	8	8	6	15	11.7	24
HOURLY MAX	36	35	36	36	34	33	31	30	33	36	46	55	53	52	55	53	52	50	46	45	42	44	41	38			
HOURLY AVG	17.5	16.9	16.9	15.7	15.8	15.4	14.8	17.3	21.1	24.8	28.7	32.4	34.7	36.0	36.8	37.4	37.1	33.7	28.9	24.9	23.3	21.9	20.7	19.1			

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:	674						
MAXIMUM INSTANTANEOUS VALUE:	55	PPB	@ HOUR(S)	11, 14	ON DAY(S)	3	
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:			718	HRS
MONTHLY CALIBRATION TIME:	6	HRS					
STANDARD DEVIATION:	11.94						


01 Hour Averages
240
177.5
115
52.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA O3MAX PPB

LICA
O3_ / WD Joint Frequency Distribution (Percent)

September 2009

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	.73	2.34	2.34	3.22	8.49	10.24	13.61	3.80	3.66	5.41	12.59	10.24	9.22	9.07	3.80	.29	99.12
<	110	.00	.00	.00	.14	.29	.43	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.87
<	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	.73	2.34	2.34	3.36	8.78	10.68	13.61	3.80	3.66	5.41	12.59	10.24	9.22	9.07	3.80	.29	

Calm : .00 %

Total # Operational Hours : 683

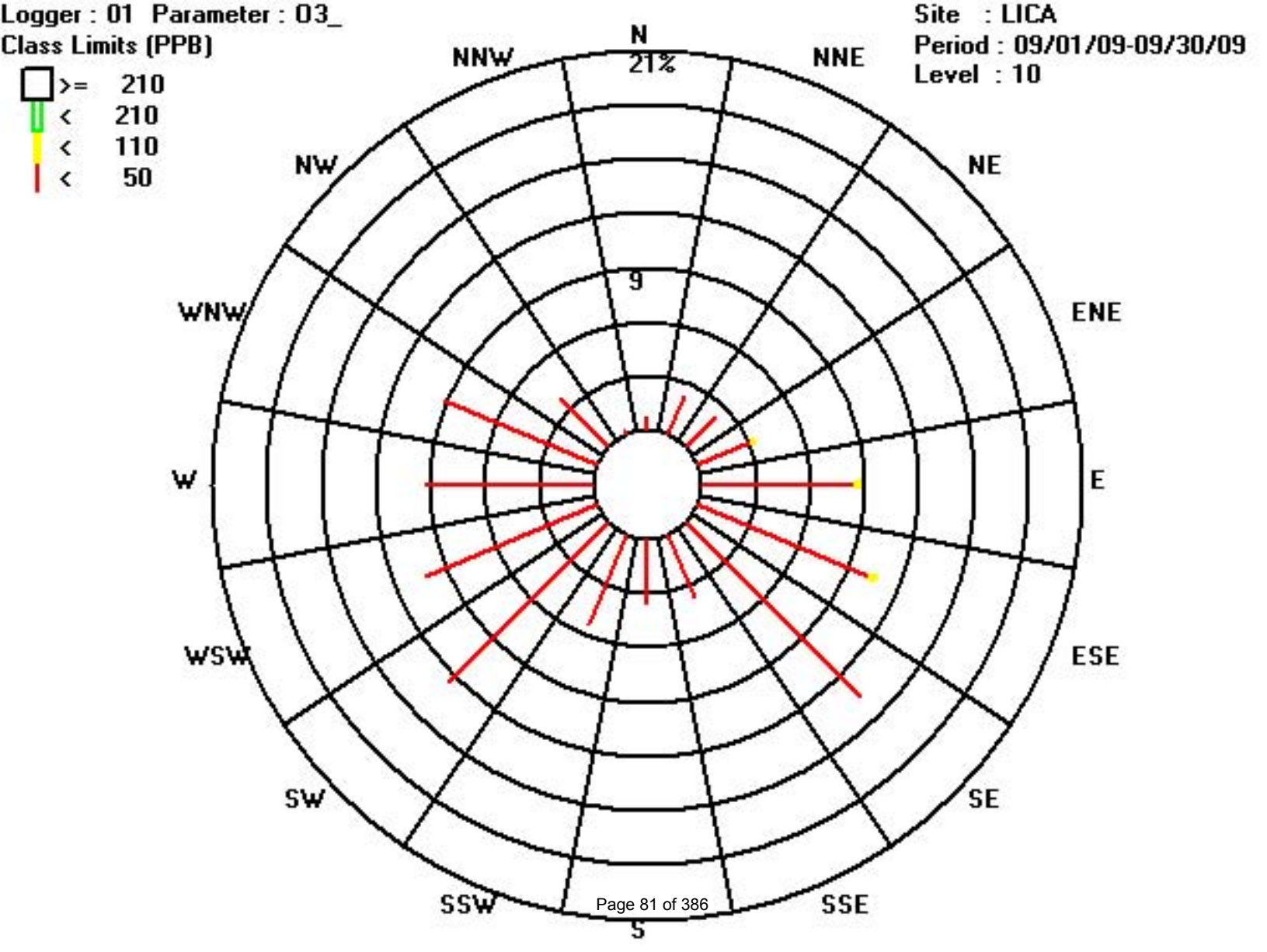
Distribution By Samples

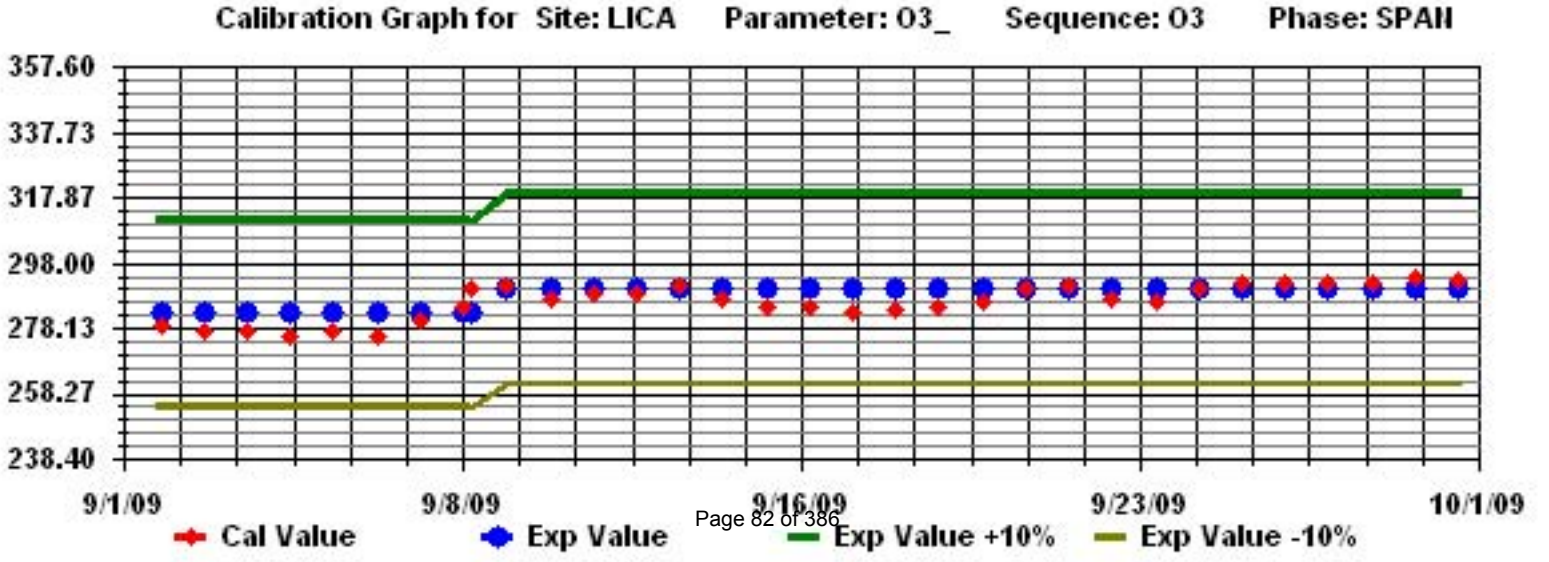
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	5	16	16	22	58	70	93	26	25	37	86	70	63	62	26	2	677
<	110				1	2	3											6
<	210																	
>=	210																	
	Totals	5	16	16	23	60	73	93	26	25	37	86	70	63	62	26	2	

Calm : .00 %

Total # Operational Hours : 683


Logger : 01 Parameter : 03_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 09/01/09-09/30/09
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
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Ambient Temperature

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

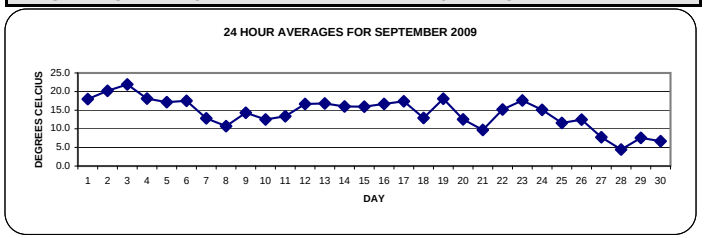
AMBIENT TEMPERATURE hourly averages (Degrees C)

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	10.9	10.1	9.3	9.3	9.2	10	14.1	17.6	18.7	20	21.3	22.9	24.3	25	26	26.5	26.3	25.3	23.3	20.3	17.4	15.8	14.7	13.3	26.5	18.0	24
2	12.3	11.7	11.2	10.5	10.6	12.2	12.1	16.3	18.6	20.6	22.9	24.8	26.5	27.5	28.3	28.4	27.6	26.9	25.4	24	22.6	21.6	21.5	20.7	28.4	20.2	24
3	18.8	17.3	15.1	13.6	13.5	12.9	13.7	17.5	19.6	21.5	24.3	25.9	27.2	28.4	29.2	29.3	**29.4**	28.5	26.2	24.6	23.4	22.7	21.9	21.5	**29.4**	**21.9**	24
4	21.3	20.8	20.1	18.6	16.5	14.8	14.6	15.6	15.7	16	18.4	19.5	20	20.7	20.8	19.7	19.7	18.8	17.7	17.5	17.6	16.5	17	17	21.3	18.1	24
5	15.7	15.6	15.2	15.1	15.3	14.7	14.3	14.9	15.9	17.3	19	20.4	20.6	21.9	22.7	23.2	23.2	22.7	19.6	15.3	13.5	12.2	11.8	11.9	23.2	17.2	24
6	11.8	13.4	13.9	15.1	14.5	14.2	14.4	14.9	15.8	15.6	15.9	18	21	22.2	22.1	22.4	22.3	21.5	20.5	19.6	18.9	18.2	17.4	17	22.4	17.5	24
7	16.9	15.8	13.5	12.5	12	10.8	10.3	11.5	13.3	15.1	16.8	17.9	19.1	19.3	12.8	11.8	11.5	11.8	11	9.1	9.1	8.6	8.3	8.9	19.3	12.8	24
8	8.2	6.9	6.2	6.2	5.5	5.1	5.4	8.4	10.6	13.1	14.2	14.6	14.8	14.5	14	13.7	13.4	12.5	11.8	11.6	11.5	11.2	11.6	12.1	14.8	10.7	24
9	12.5	13	12.8	12	10.5	9.3	9.3	11.2	12.9	14.5	15.8	17.1	18.4	19	19	18.3	18.2	17.4	15.5	14	13.6	13.2	13.4	12.7	19.0	14.3	24
10	12.4	12.4	12	11.6	10.5	10.2	10.5	11.8	13.4	14.6	15.6	15.6	15	14.5	13.6	14.8	15.7	16	14.3	13.3	10.6	8.5	7.2	6.2	16.0	12.5	24
11	5.7	5	4.3	4.2	3.9	3.8	4.5	8.2	12.1	15.1	17.5	19.3	20.2	21.2	22.1	22.6	22.6	21.8	18.6	15.5	14.5	13.6	12.5	12.2	22.6	13.4	24
12	11.7	10.6	9.9	7.6	6.9	6.3	7.4	11.5	14.4	17.5	20.5	22.7	23.8	25.1	25.8	26	25.6	24.3	21.1	18.5	17.5	16.5	15.1	13.8	26.0	16.7	24
13	12.6	12.5	10.3	8	7.9	8.5	9.8	12.1	14.6	17.7	20.6	22.5	23.5	24.5	25.1	25	24.7	23.6	20.4	17.3	17.3	16	14.9	14.1	25.1	16.8	24
14	14	13.6	12.6	12.4	11.5	9.7	10.1	14.4	16.7	18.6	20.2	21.3	22.2	22.6	21.2	19.8	19	17.9	16.2	15.7	14.4	14	13.4	12.6	22.6	16.0	24
15	11.8	11	11.9	11.7	11.8	11.4	11.6	12	12.7	13.8	15.7	18.6	21.1	22.5	24.2	24.8	24.6	23.8	20.1	16.5	14.2	13.1	12.1	11.7	24.8	15.9	24
16	11.1	10.4	9.6	8.7	8.1	7.5	7.7	11.4	15.9	**P**	**P**	22.9	23.6	24	24.4	25	25.5	24.8	22	20	18.1	16.4	15.1	14.9	25.5	16.7	22
17	14.7	14.5	14.8	14.7	14.5	14.2	14.8	16.2	17.6	19.5	20.2	22.2	24.3	25.1	21.8	23.8	20.9	17.9	16.8	15.9	15.3	13.9	12.6	11.2	25.1	17.4	24
18	9.9	8.8	7.7	6.8	4.8	4.9	4.7	5.9	7.3	10	14.4	17.2	19.5	20.9	21.4	21.3	21.6	20.8	16.9	14.2	13.2	12.8	12.7	12.1	21.6	12.9	24
19	11	10.3	11.1	11.4	10.9	11.2	12.2	13.5	15.8	18.4	21.1	23.3	25.4	27.2	27.5	28.3	26.8	23.3	21	19.4	17.6	16.7	15.7	14.7	28.3	18.1	24
20	14	13.7	13	12.9	11.8	10.3	9.7	10.3	11.2	11.6	12.4	13.1	14.1	14.9	15.8	16.7	16.7	16.1	14.1	12.6	11.1	10.4	8.5	5.8	16.7	12.5	24
21	5.1	3.5	3.1	3.7	2.5	3.8	3.6	6.1	8.7	11.3	13.2	14.5	15.2	16.1	16.8	17.9	19.2	18.5	13.6	9.9	8.8	6.8	5.7	5	19.2	9.7	24
22	4.2	4.6	7	9	9.2	9.7	9.8	10.9	13.2	14.5	17.6	21.5	22.8	24.3	25.7	26.5	26.1	25.3	19.1	15.3	13.4	12.9	11.6	10.3	26.5	15.2	24
23	9.1	8.6	8	7.5	7	6.6	7	11.9	16.9	20	22.1	25	27	25.9	26.8	27.8	28.4	26.3	21.5	19.7	19.8	18.6	17.4	13.9	28.4	17.6	24
24	11.5	10.2	9.5	8.7	7.9	6.9	6.5	8.9	13.1	17.1	21.7	23.8	24.7	24.8	24.4	23.9	21.9	19.3	17.6	16.5	15.5	12.7	8.9	6.5	24.8	15.1	24
25	4.5	3.6	2.9	2	1.7	2.2	3.8	5.7	9.5	12.6	15.7	17.6	19.2	20.1	20.7	20.9	20.3	17.8	14.6	13.2	13.1	13.1	12	11.1	20.9	11.6	24
26	10.5	10.5	10.5	11.1	11.3	11	9.7	10.8	12.7	13.8	15	16.1	17	17	17.4	17.1	15.7	14	12.9	11.6	9.4	8.4	7.6	8	17.4	12.5	24
27	8.3	7.6	7.9	8	8	7.6	7.6	7.5	7.8	8.9	9.7	10.3	10.6	11.3	10.7	10.9	10.7	9.7	8	4.6	3.1	2.1	2.6	2.1	11.3	7.7	24
28	0.3	-0.7	-1.1	-1.4	**-1.7**	0.1	2.4	3.2	3	4.1	5.8	6.8	8	8.4	8.8	9.1	8.7	8	7	6.8	6.4	5.7	4.7	4.2	9.1	4.4	24
29	4.3	4.4	4.2	3.9	3.8	4.3	4.9	5.6	7	8.4	9.6	10.7	10.6	11.4	12	13	12.8	11.9	9.2	7.4	6.4	5.5	4.4	5.8	13.0	7.6	24
30	6.2	6.5	6.4	6.5	6.2	6	6	5.9	5.8	5.5	6	7.4	8.4	9	8.9	8.4	7.9	7.5	7	6.5	6	5.7	5.5	5	9.0	6.7	24
HOURLY MAX	21.3	20.8	20.1	18.6	16.5	14.8	14.8	17.6	19.6	21.5	24.3	25.9	27.2	28.4	29.2	29.3	29.4	28.5	26.2	24.6	23.4	22.7	21.9	21.5			
HOURLY AVG	10.7	10.2	9.8	9.4	8.9	8.7	9.1	11.1	13.0	14.7	16.7	18.5	19.6	20.3	20.3	20.6	20.2	19.1	16.8	14.9	13.8	12.8	11.9	11.2			

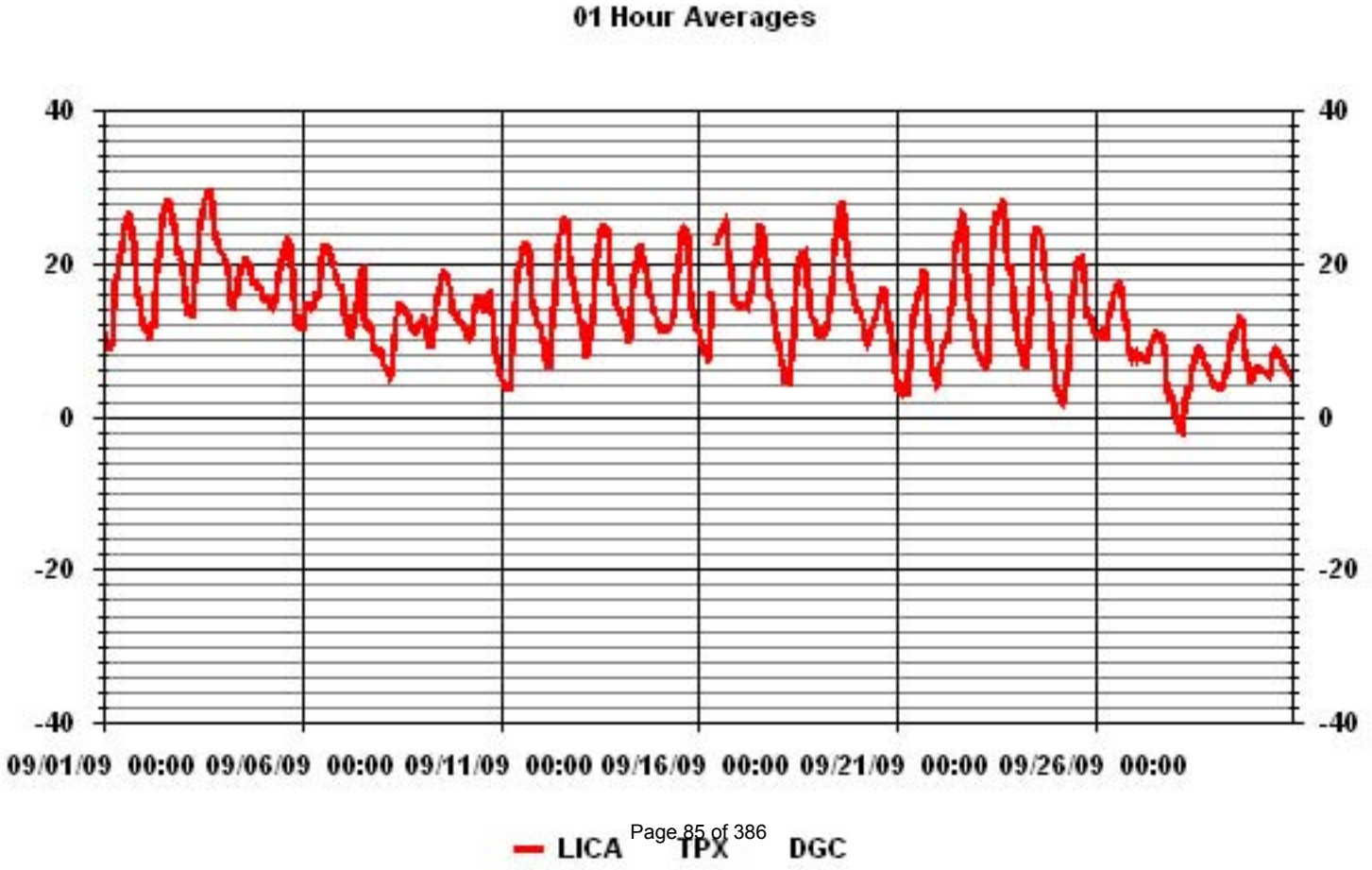
STATUS FLAG CODES

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:	-1.7	^{O}C	@ HOUR(S)	4	ON DAY(S)	28	
MAXIMUM 1-HR AVERAGE:	29.4	^{O}C	@ HOUR(S)	16	ON DAY(S)	3	
MAXIMUM 24-HR AVERAGE:	21.9	^{O}C			ON DAY(S)	3	
					VAR-VARIOUS		
CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:		718	HRS	
			AMD OPERATION UPTIME:		99.7	%	
STANDARD DEVIATION:	6.39		MONTHLY AVERAGE:		14.25	^{O}C	


01 Hour Averages
40
20
0
-20
-40
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA
TPX
DGC

Relative Humidity

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

RELATIVE HUMIDITY hourly averages (%)

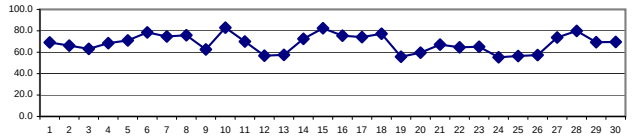
MST

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	89.0	91.0	93.0	92.0	92.0	92.0	86.0	69.0	62.0	59.0	55.0	51.0	49.0	47.0	44.0	41.0	39.0	44.0	56.0	69.0	80.0	84.0	86.0	90.0	93.0	69.2	24
2	92.0	93.0	92.0	93.0	94.0	87.0	88.0	74.0	67.0	61.0	56.0	51.0	46.0	45.0	44.0	43.0	42.0	50.0	56.0	59.0	63.0	66.0	63.0	64.0	94.0	66.2	24
3	73.0	79.0	87.0	92.0	92.0	93.0	90.0	77.0	70.0	65.0	57.0	51.0	47.0	41.0	40.0	39.0	34.0	39.0	46.0	54.0	60.0	61.0	64.0	64.0	93.0	63.1	24
4	65.0	67.0	69.0	73.0	74.0	75.0	74.0	69.0	66.0	64.0	57.0	55.0	54.0	52.0	52.0	61.0	65.0	71.0	76.0	80.0	80.0	84.0	81.0	79.0	84.0	68.5	24
5	82.0	82.0	84.0	86.0	86.0	85.0	84.0	82.0	80.0	74.0	66.0	59.0	54.0	48.0	45.0	43.0	42.0	45.0	62.0	77.0	82.0	85.0	86.0	86.0	86.0	71.0	24
6	87.0	87.0	89.0	86.0	88.0	89.0	89.0	87.0	85.0	89.0	88.0	81.0	67.0	59.0	58.0	58.0	61.0	65.0	71.0	74.0	76.0	80.0	84.0	86.0	89.0	78.5	24
7	72.0	63.0	72.0	75.0	76.0	80.0	82.0	79.0	70.0	62.0	55.0	49.0	45.0	43.0	77.0	86.0	87.0	84.0	88.0	92.0	87.0	90.0	90.0	89.0	92.0	74.7	24
8	90.0	93.0	94.0	93.0	94.0	93.0	93.0	83.0	76.0	61.0	57.0	56.0	55.0	57.0	63.0	65.0	69.0	78.0	79.0	77.0	76.0	76.0	73.0	70.0	94.0	75.9	24
9	68.0	63.0	63.0	65.0	70.0	74.0	74.0	66.0	61.0	59.0	55.0	50.0	46.0	42.0	40.0	45.0	49.0	52.0	69.0	78.0	76.0	77.0	78.0	82.0	82.0	62.6	24
10	80.0	79.0	83.0	87.0	92.0	92.0	93.0	90.0	81.0	74.0	69.0	72.0	76.0	81.0	88.0	79.0	72.0	74.0	78.0	79.0	90.0	93.0	94.0	95.0	95.0	**83.0**	24
11	94.0	94.0	94.0	95.0	96.0	96.0	97.0	96.0	85.0	74.0	63.0	52.0	46.0	42.0	38.0	36.0	36.0	40.0	53.0	67.0	70.0	72.0	73.0	71.0	97.0	70.0	24
12	71.0	77.0	79.0	87.0	88.0	88.0	84.0	73.0	64.0	56.0	47.0	39.0	34.0	30.0	29.0	28.0	29.0	34.0	45.0	52.0	53.0	55.0	59.0	62.0	88.0	56.8	24
13	66.0	65.0	75.0	86.0	83.0	80.0	74.0	67.0	60.0	54.0	45.0	40.0	39.0	37.0	34.0	32.0	30.0	36.0	50.0	61.0	59.0	65.0	70.0	73.0	86.0	57.5	24
14	72.0	73.0	77.0	77.0	81.0	87.0	85.0	71.0	64.0	59.0	55.0	52.0	48.0	47.0	51.0	57.0	61.0	71.0	84.0	85.0	94.0	96.0	96.0	97.0	97.0	72.5	24
15	97.0	98.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	89.0	75.0	64.0	57.0	50.0	44.0	44.0	50.0	67.0	82.0	90.0	92.0	94.0	93.0	**99.0**	82.4	24
16	93.0	94.0	93.0	95.0	94.0	94.0	93.0	87.0	78.0	**P**	**P**	57.0	57.0	55.0	52.0	49.0	44.0	47.0	57.0	74.0	81.0	85.0	89.0	92.0	95.0	75.5	22
17	92.0	93.0	90.0	89.0	89.0	89.0	84.0	76.0	68.0	61.0	61.0	55.0	48.0	46.0	70.0	54.0	62.0	78.0	77.0	77.0	76.0	80.0	79.0	85.0	93.0	74.1	24
18	92.0	95.0	96.0	96.0	95.0	96.0	96.0	97.0	98.0	93.0	73.0	59.0	49.0	47.0	48.0	48.0	47.0	51.0	69.0	79.0	83.0	84.0	82.0	81.0	98.0	77.3	24
19	84.0	85.0	81.0	80.0	81.0	79.0	75.0	71.0	64.0	58.0	47.0	40.0	33.0	27.0	28.0	27.0	33.0	43.0	51.0	46.0	49.0	52.0	52.0	53.0	85.0	55.8	24
20	55.0	56.0	60.0	55.0	59.0	67.0	69.0	66.0	61.0	60.0	59.0	59.0	57.0	56.0	53.0	49.0	48.0	48.0	50.0	56.0	62.0	65.0	74.0	86.0	86.0	59.6	24
21	88.0	91.0	92.0	92.0	93.0	93.0	92.0	83.0	72.0	59.0	51.0	45.0	41.0	38.0	35.0	33.0	28.0	31.0	53.0	70.0	75.0	83.0	86.0	87.0	93.0	67.1	24
22	89.0	88.0	86.0	82.0	82.0	80.0	79.0	75.0	68.0	66.0	56.0	42.0	39.0	35.0	32.0	31.0	31.0	35.0	58.0	73.0	79.0	78.0	82.0	85.0	89.0	64.6	24
23	88.0	89.0	90.0	90.0	91.0	91.0	88.0	71.0	62.0	52.0	49.0	39.0	36.0	44.0	41.0	39.0	34.0	42.0	60.0	65.0	67.0	72.0	76.0	87.0	91.0	65.1	24
24	90.0	91.0	92.0	92.0	93.0	93.0	94.0	88.0	74.0	60.0	36.0	23.0	20.0	21.0	19.0	18.0	20.0	26.0	31.0	33.0	35.0	45.0	61.0	72.0	94.0	55.3	24
25	79.0	82.0	83.0	85.0	86.0	87.0	81.0	76.0	64.0	53.0	45.0	37.0	32.0	29.0	27.0	26.0	28.0	36.0	45.0	50.0	50.0	51.0	58.0	65.0	87.0	56.5	24
26	72.0	72.0	70.0	65.0	65.0	65.0	69.0	66.0	60.0	55.0	48.0	44.0	39.0	39.0	34.0	33.0	36.0	42.0	42.0	50.0	68.0	77.0	85.0	81.0	85.0	57.4	24
27	76.0	76.0	71.0	71.0	71.0	75.0	76.0	79.0	76.0	70.0	64.0	62.0	63.0	60.0	62.0	60.0	61.0	67.0	76.0	88.0	90.0	92.0	92.0	92.0	92.0	73.8	24
28	92.0	92.0	93.0	92.0	92.0	94.0	96.0	96.0	95.0	93.0	84.0	77.0	74.0	70.0	65.0	63.0	63.0	66.0	68.0	67.0	66.0	68.0	74.0	78.0	96.0	79.9	24
29	79.0	79.0	79.0	80.0	80.0	77.0	75.0	73.0	69.0	63.0	59.0	56.0	56.0	54.0	52.0	49.0	51.0	56.0	67.0	75.0	79.0	84.0	86.0	87.0	87.0	69.4	24
30	83.0	80.0	79.0	79.0	83.0	85.0	83.0	81.0	76.0	68.0	65.0	57.0	53.0	52.0	54.0	55.0	57.0	59.0	62.0	65.0	70.0	72.0	74.0	78.0	85.0	69.6	24
HOURLY MAX	97.0	98.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	89.0	81.0	76.0	81.0	88.0	86.0	87.0	84.0	88.0	92.0	94.0	96.0	96.0	97.0			
HOURLY AVG	81.7	82.2	83.5	84.3	85.3	85.8	84.7	78.9	72.5	66.2	59.0	52.8	48.9	46.7	47.5	46.4	46.8	52.0	61.5	68.5	72.2	75.5	78.0	80.3			

STATUS FLAG CODES

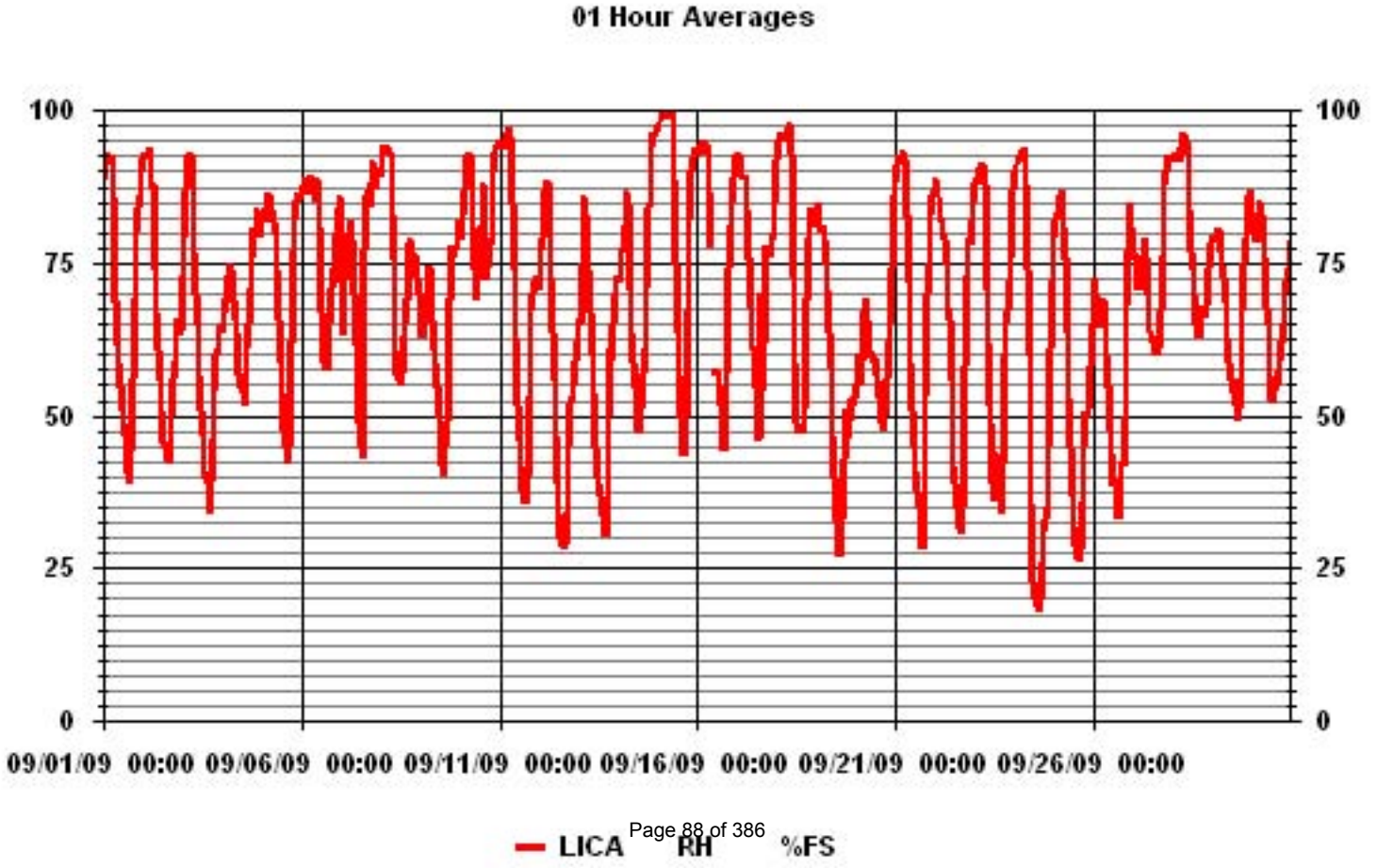
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

24 HOUR AVERAGES FOR SEPTEMBER 2009



MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		99.0	%	@ HOUR(S)	VAR	ON DAY(S)	15
MAXIMUM 24-HR AVERAGE:		83.0	%			ON DAY(S)	10
CALIBRATION TIME:	0	HRS		OPERATIONAL TIME:		718	HRS
				AMD OPERATION UPTIME:		99.7	%
STANDARD DEVIATION:	18.97			MONTHLY AVERAGE:		68.40	%


01 Hour Averages
100
75
50
25
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA RH %FS

Vector Wind Speed

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

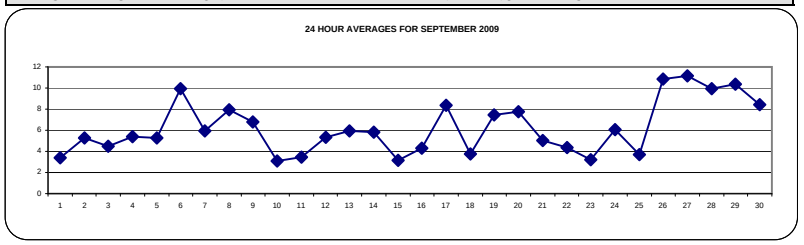
VECTOR WIND SPEED (WS) hourly averages (km/hr)

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	0.6	0.7	0.8	1.4	1.1	1.9	4.5	6.7	9.5	7.4	8.1	5.8	5.8	7.6	5.2	5.1	5.6	4.4	3	2.1	0.8	1.1	0.7	0.3	9.5	3.4	24
2	0.5	0.3	0.1	0.5	0.9	1	0.7	4.9	6.7	6.8	5.4	5.8	9.6	11.1	10.3	9.4	6.7	7.6	7.6	8.1	7.5	6.8	9.6	7.2	11.1	5.3	24
3	1.9	2.5	0.5	0.3	1.8	0.2	0.8	0.7	1.4	4.5	0.7	1.7	4	4.9	5.9	8	9.1	8.7	6.9	9.8	9.2	13.3	10	9.7	13.3	4.5	24
4	10.2	9	9.2	7.4	10.5	7.7	4.5	4.1	5.4	5.6	8	9.2	7.6	5.9	6.9	7.2	6.7	4.8	5.7	9.8	9.9	6.4	10.3	13.4	13.4	5.4	24
5	14.2	13.3	11.7	7.8	8.6	7.7	8.7	6.8	5.5	5.9	5	3.4	3.6	3.6	4.5	3.3	4.9	2.9	1	1.1	0.7	1.1	0.9	1	14.2	5.3	24
6	2.2	3.4	2	4.3	5.7	3.7	5.1	9.2	11.5	17.4	15.7	14.3	13.2	14.2	14.4	14.7	10.8	6.6	10.9	13.3	11.1	12	12.1	11.2	17.4	10.0	24
7	6.5	5.9	10.5	8.9	9.4	6.9	6.1	7.4	9.8	7.3	5.8	7.6	7.4	6	7.3	2.3	3.8	2.9	1.2	2.6	3.1	2.3	5.2	6.1	10.5	5.9	24
8	2.5	0.3	1	0.3	1.4	2.2	1.8	2.3	4.6	10.9	15.3	12.8	15	15	17.4	14.6	11.3	10.7	10.6	9.7	7.8	7.2	8	8.5	17.4	8.0	24
9	7.4	9.7	10.2	7.2	6.8	5.3	5.8	7.9	10.4	10.4	12.1	11.6	13.4	11.5	11.1	7.8	4.5	3	0.8	0.8	0.6	1.1	1.6	1.7	13.4	6.8	24
10	2.6	2.5	2.1	0.6	0.3	1	1	1.1	2.7	2.9	4.3	6.9	9	7.5	7.7	6.3	3.6	2.3	3	2.5	1.3	1.2	0.8	0.4	9.0	3.1	24
11	0.8	0.4	0.1	0.1	0.5	0.3	0.8	1	3.5	4	4.3	6.4	8.4	7.9	7.1	7.7	5.7	3	4.4	4.6	3.8	3.5	2.4	2.1	8.4	3.5	24
12	1.1	1	1.2	1.5	2.1	1.1	1.4	6.1	6	6.7	6.8	6.5	6.9	7.9	8.6	8	8.8	7.1	5.3	6.4	7	7.3	7.1	6.1	8.8	5.3	24
13	4.8	4.6	0.1	0.8	3.1	1.4	2.8	5.9	5.8	6.5	8	7.4	11.2	8.7	9.4	12.4	9.5	6.9	2.6	4.7	7	6.7	6.4	5.8	12.4	5.9	24
14	6.5	8	6.8	7.3	2	1.9	1.3	5.2	5.4	5.4	6.7	7	9	8	10	9.5	8.5	5.8	4.7	7.2	8.8	3.8	1.1	0.3	10.0	5.8	24
15	0.8	2.1	1	0.6	1	0.2	4.7	4.8	3.4	3.2	5.7	3.7	4.4	4.5	5.7	9	8.4	4.1	3	0.9	2.4	0.5	0.4	1.7	9.0	3.2	24
16	1.2	1.3	0.4	0.8	0.1	0.2	0.8	1.4	1	**P**	**P**	3.1	5.7	5.7	7.3	5.5	5.1	5.2	5.3	9.5	8.7	8.8	8.2	9.4	9.5	4.3	22
17	9.7	7.2	6.4	8.9	9.6	10.9	9.1	8	12.5	12.6	9.3	9.2	8.2	5.1	2.7	7.1	11.7	9.4	12.9	8.2	3.9	6.9	6.5	4.2	12.9	8.3	24
18	4.7	5.2	4.6	2.2	1.5	3.6	1.4	5	4.6	3.7	1.4	2.2	3.4	4.5	5	5.5	4.6	3.9	2.8	3.3	4.7	3.7	4.1	5.1	5.5	3.8	24
19	1.3	2.1	4.6	4	4.2	8.3	9	10.9	9	6.2	5.1	5.7	6.9	9.4	6.3	3.9	7.9	8.8	9.7	14.1	9.6	9.4	11.6	11.6	14.1	7.5	24
20	7.3	4.7	4.5	7.4	6.9	5.7	4.7	6.6	11.6	12.6	11	7.9	7.8	8.7	9.3	10.9	11.6	12.2	9	7.4	6	6	3.5	3.6	12.6	7.8	24
21	4.3	2	3.4	2.7	2.3	4.7	3.7	5.5	7.7	6.6	7.7	9.2	10.4	10	10.7	7.3	8.4	6	2.1	1.2	2.7	1	0.7	0.6	10.7	5.0	24
22	0.4	1.6	3.1	3.8	4.2	5	5.1	4.3	4.2	2.3	3.3	7.3	9.4	8.6	9.8	11.3	9.1	3.3	1.4	1.1	1.9	2.5	0.9	0.3	11.3	4.3	24
23	0.6	0.7	0.4	0.2	0.6	0.3	0.2	0.2	1.7	3.8	4.1	8.1	4.7	6.6	6.4	4.4	7.7	3.6	2.4	4	4.7	5.3	6.2	0.4	8.1	3.2	24
24	1	0.5	0.5	0.4	0.4	0.7	0.9	1.4	4.1	4.7	11.3	13.7	11.8	13.6	14.6	13.1	13.6	10.3	6	7.6	7.3	3.4	3.4	1.4	14.6	6.1	24
25	1	0.6	0.8	0.9	1.2	4.1	3.3	1.5	2.7	3.4	5.1	8.3	7.7	8.7	7.2	9.3	7	2.4	3.1	3.9	4.2	1.6	0.7	0.5	9.3	3.7	24
26	0.8	1.9	1.7	2.7	4.7	6.1	5.3	7.9	9.5	10.1	13.1	13	16.3	15.8	15.8	17.3	20.1	15.7	15.2	17.4	13.1	12.9	11	12.8	20.1	10.8	24
27	13.2	12.9	11.1	11.4	15.6	14.1	14.8	14.9	14.6	16.7	16.9	17.4	17.3	15.9	15.3	15.1	12.9	8.6	2.1	1.9	1	1	2.5	0.5	17.4	**11.2**	24
28	0.4	0.4	0.2	0	0.6	3.4	6.6	7.1	10.5	11.9	11.4	12.5	12.7	14.7	18.5	17.9	17.9	16.6	11.3	11.3	12.2	12.1	14	13.8	18.5	9.9	24
29	14.7	12.2	10.9	9.2	8.8	9.2	9	9.5	15.2	17.4	19.5	**21.1**	19	18.3	16.6	13.6	8.7	3.6	2.5	1.2	1.7	0.7	0.6	5.4	**21.1**	10.4	24
30	4.6	4.5	6.6	6.4	5.8	4.6	6	4.8	8.2	10.7	9.7	9.5	9.7	11.5	11.4	12.4	12.8	10.4	9.7	9.1	8.8	7.9	8.2	8.4	12.8	8.4	24
HOURLY MAX	14.7	13.3	11.7	11.4	15.6	14.1	14.8	14.9	15.2	17.4	19.5	21.1	19.0	18.3	18.5	17.9	20.1	16.6	15.2	17.4	13.1	13.3	14.0	13.8			
HOURLY AVG	4.3	4.1	3.9	3.7	4.1	4.1	4.3	5.4	7.0	7.8	8.3	8.6	9.3	9.4	9.6	9.3	8.9	6.7	5.5	6.2	5.7	5.3	5.3	5.1			

STATUS FLAG CODES

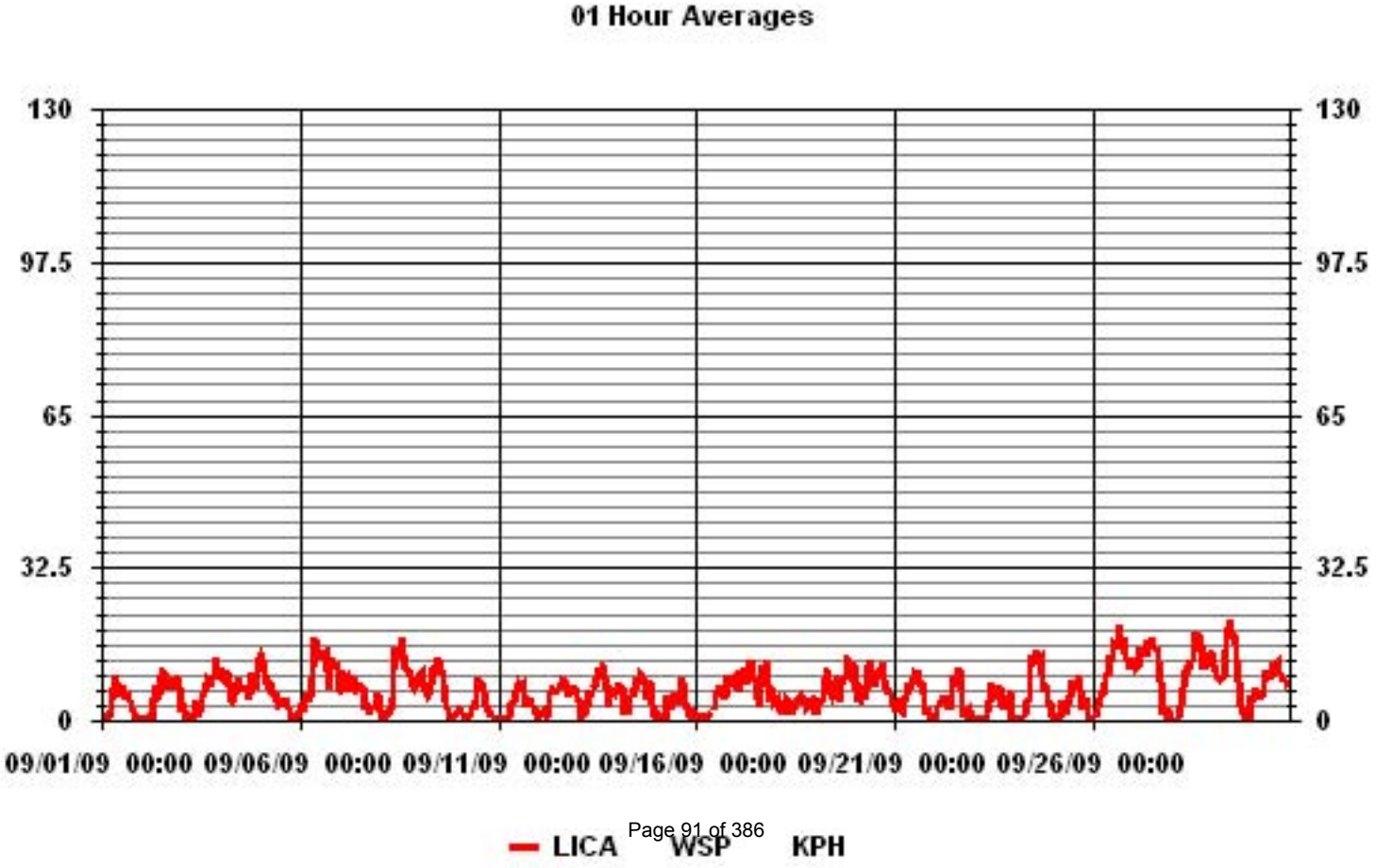
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MISSING DATA
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



LAST CALIBRATION:	November 5, 2008

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		21.1	KPH	@ HOUR(S)	11	ON DAY(S)	29
MAXIMUM 24-HR AVERAGE:		11.2	KPH			ON DAY(S)	27
CALMS (≤ 0 KPH)	3.09	%		OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	0	HRS		AMD OPERATION UPTIME		99.7	%
STANDARD DEVIATION:	4.46			MONTHLY AVERAGE:		6.32	KPH


01 Hour Averages
130
97.5
65
32.5
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA WSP KPH

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

MST

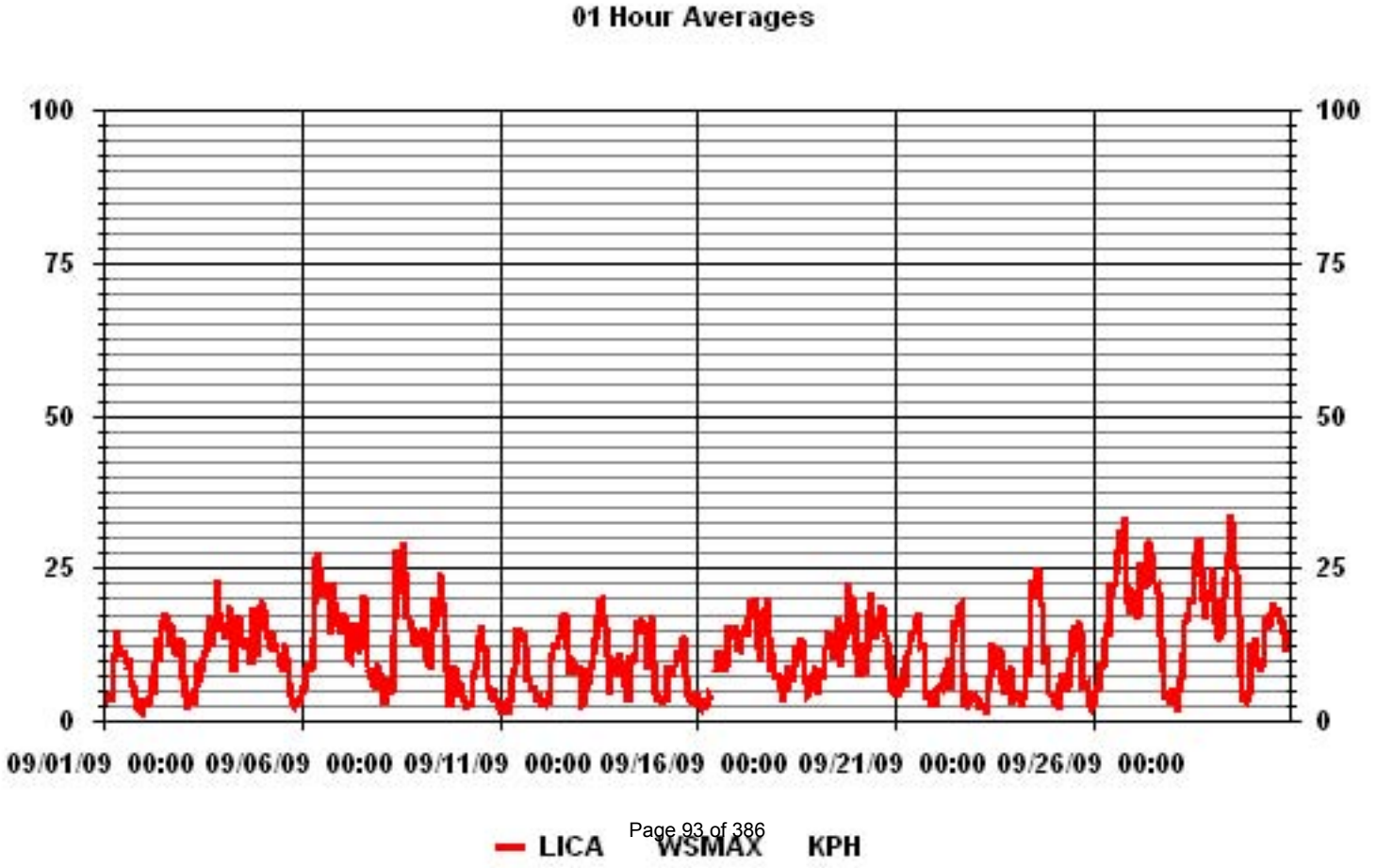
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	3	4.1	2.9	4.5	3.4	3.4	9.6	11.3	14.7	11.3	12.3	10.9	11	11	9.8	8.4	10.1	7	5.9	4.2	1.8	2.4	2.1	1.8	14.7
2	3.6	3	2.6	2.7	4.2	7.2	4	9.3	12.6	13.6	9.7	15	16.3	17.6	17.5	16.3	12.1	16.2	13.8	11.2	10.4	11.2	13	13.7	17.6
3	6.7	7.8	4.1	1.9	4.6	2.5	3.7	2.6	5.5	9.6	6.2	7.8	10.2	10.6	11.3	14.2	17.2	14	12	15.6	14.5	23.1	18.3	14.9	23.1
4	15.5	13.8	13.9	16.2	18.8	13.9	11.2	8.1	10.1	13.9	17.2	15.3	13.8	12.5	11.8	13.7	12.7	9.7	9.7	18.5	17.3	10.4	17.9	18.8	18.8
5	19.8	18.3	15.4	14.1	14.3	11.8	14.9	11.4	12.8	11.5	9.6	9.8	8	10.4	12.6	10.8	9.4	6.6	4.1	2.9	2.4	3	3.5	2.8	19.8
6	4.1	5.9	4.9	8.4	9.6	8.1	8.6	13.6	19	26.8	27.6	25.4	20.6	21.3	20.9	22.7	20.3	13.9	20	22.7	15.4	19.2	17.6	16.5	27.6
7	14	16.1	17.8	16.1	16.6	10.5	10.1	12.5	16.1	12.3	12	13.5	15.6	15.4	20.7	12	9	8	8.5	5.6	7.4	5	9.3	8.2	20.7
8	5.8	2.7	3.3	2.8	4.9	6.9	4.9	4.4	13.8	16.7	28	20.8	23.9	20.6	29.3	24.8	17.1	17	16.6	15.4	12.9	12	14.7	13.9	29.3
9	12.5	13.8	15.4	10.9	10.4	9.4	8.3	14.5	20.2	15.5	16.9	18	24.4	17.1	19.4	14.6	8.5	6	2.3	5.7	7.5	8.9	5.6	3.8	24.4
10	6.4	5.4	4.2	3.4	1.7	2.7	2.5	2.6	6.7	8.2	9.5	13.2	12.9	15.8	11.4	12.3	7.4	4.7	5.8	4.5	4.8	3.6	3.6	1.8	15.8
11	2.3	1.6	1.6	2.3	1.6	1.5	3.6	2.8	7.4	8.3	9	15.4	14.5	14	13.1	14.5	12.3	7	6.7	5.7	4.9	5.8	3.6	3.7	15.4
12	4.6	2.9	3.1	2.8	3.4	2.7	4.8	10.3	10.9	12.6	11.6	12.4	14.1	13.6	17.1	15.6	17.5	12	7.8	8.4	9.9	9.6	9.1	8.2	17.5
13	7.5	8.9	2.6	2.7	7	5.2	5.8	8.5	9.6	10.8	13.4	17.2	19.4	19.7	15.2	17.8	15.7	10.9	4.3	8.4	10.5	9.3	8.4	8.1	19.7
14	10.1	11	8.4	9.4	5.9	3.8	3	10.7	9.6	9.8	11.2	16.4	16	15.4	17	14.3	15.3	14.1	8.2	15.9	17.4	10	4.6	3.5	17.4
15	3.6	4.1	3.9	2.6	3.8	3	9.2	8.8	7.5	7.5	9	9.5	11.3	10.6	10.8	13.5	14.2	7.3	4.4	3.2	4.3	3.2	3	4.6	14.2
16	4.5	2.8	2.3	3.7	2.2	2.2	2.7	4.4	4	**P**	**P**	8.6	11.5	9.1	11.5	10.2	10.5	8.2	8.9	15.7	13.8	13.3	14.9	15.6	15.7
17	14.6	12	11.8	14.7	13.7	15.8	15.3	16.7	19.7	18.5	18.4	20.2	16.9	11.9	9.6	17.6	18.2	17.6	20.3	14.1	7.8	11.5	10	7.3	20.3
18	7.3	7.5	6.6	5.4	2.9	7.3	4.8	9.2	8.4	8	6.4	8.9	12.2	10.7	12.2	13.6	10.2	6.2	4.4	4.8	7.4	6.1	7.9	9.1	13.6
19	5	4.2	7.6	8	6.9	11.8	12	14.7	13.9	13.5	14.5	9.9	13.1	16.9	16.3	8.6	11.8	13.4	15.2	22.5	14.2	15.2	20.7	18.2	22.5
20	11.3	11.2	7	12.4	12.5	8.8	7.5	11.2	18.2	20.9	17.4	14.2	13.5	14.6	15.7	19	18.2	18.2	14.3	13.3	9.7	10	5.2	4.9	20.9
21	6.3	3.7	6.8	6.3	7.6	7.1	6.8	10.8	11.6	12.9	14.1	14.8	15.8	16.9	17.7	12.4	12.7	12.6	3.6	4.2	4.9	3.1	3	4.3	17.7
22	2.3	5.2	5.9	5.7	5.4	7.5	8.1	7.2	10.3	4.9	10.1	12.7	16.5	15.4	18.9	19.2	17.6	8.1	2.9	2.7	4.6	4.5	3.4	3.6	19.2
23	4.1	3.2	4	1.9	2.7	2.2	2.3	1	5.2	7	7.2	12.6	10.3	10.6	9.5	8.5	12	6.1	4.1	6.1	7.9	7.9	9.1	2.8	12.6
24	3.2	3.7	4.4	4.2	2	3.6	4.7	12.1	7.1	7.9	20.7	22.9	20	23.4	25.1	22.8	18.9	19.4	9.1	12.5	11.9	4.6	4.3	4.2	25.1
25	3.3	2.8	2.3	2.3	6.2	7.5	7.9	4.6	6.5	6.3	10.4	14.6	15.6	14	11.3	16.6	14.9	5	6	5.6	6.1	5	2.5	2.1	16.6
26	2.6	4.9	5.2	5.4	9.5	9.1	8.7	13.4	15.1	14.8	22.7	20.4	22	22.7	24	27.9	31.3	27.6	28.3	33.2	22.6	19.3	17.4	21.9	33.2
27	19.8	18.4	17.4	17.5	25.8	24.8	24.1	22.3	21.8	29	29.7	25.5	27.1	22.6	21.9	22.3	21.2	13.9	8.3	4.2	3.4	4.6	4.8	2.7	29.7
28	5.3	3.7	3.5	1.5	4.5	6.8	11.2	16.6	16	17.5	19	20	18.9	23.7	27.1	29.4	29.6	25.6	19.7	16.7	17.8	19.9	21.3	19.5	29.6
29	25.3	20.2	16.2	13.7	13.1	14.9	14.8	20.1	23.4	26.6	27	**33.7**	32.8	25.8	25	24.3	17.3	7.5	4.3	3.2	4	3.5	4.2	12.8	**33.7**
30	10.4	9.5	13.7	9.4	9.4	7.9	9.3	8.8	16.8	17.1	15.5	15.6	17.1	19.4	17.6	17.1	18.7	15.7	16.8	14.5	13.6	11.1	14.1	14.1	19.4
PEAK	25.3	20.2	17.8	17.5	25.8	24.8	24.1	22.3	23.4	29.0	29.7	33.7	32.8	25.8	29.3	29.4	31.3	27.6	28.3	33.2	22.6	23.1	21.3	21.9	

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

MAXIMUM INSTANTANEOUS READING	33.7	KPH	@ HOUR(S)	11
			ON DAY(S)	29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50
25
0
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09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA WSMAX KPH

LICA
WSP / WD Joint Frequency Distribution (Percent)

September 2009

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	.27	1.53	1.81	2.50	3.76	3.34	6.26	2.22	2.78	4.59	6.26	5.98	4.31	1.39	.41	.00	47.49
<	12.0	.13	.69	.41	.27	4.17	4.31	5.57	.97	.55	.55	6.40	3.20	3.34	4.45	2.08	.27	37.46
<	20.0	.00	.00	.00	.00	.83	2.50	1.39	.00	.00	.00	.13	1.25	1.39	3.20	.83	.00	11.55
<	29.0	.00	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00	.00	.00	.13	.00	.00	.27
<	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	.41	2.22	2.22	2.78	8.77	10.16	13.37	3.20	3.34	5.15	12.81	10.44	9.05	9.19	3.34	.27	

Calm : 3.20 %

Total # Operational Hours : 718

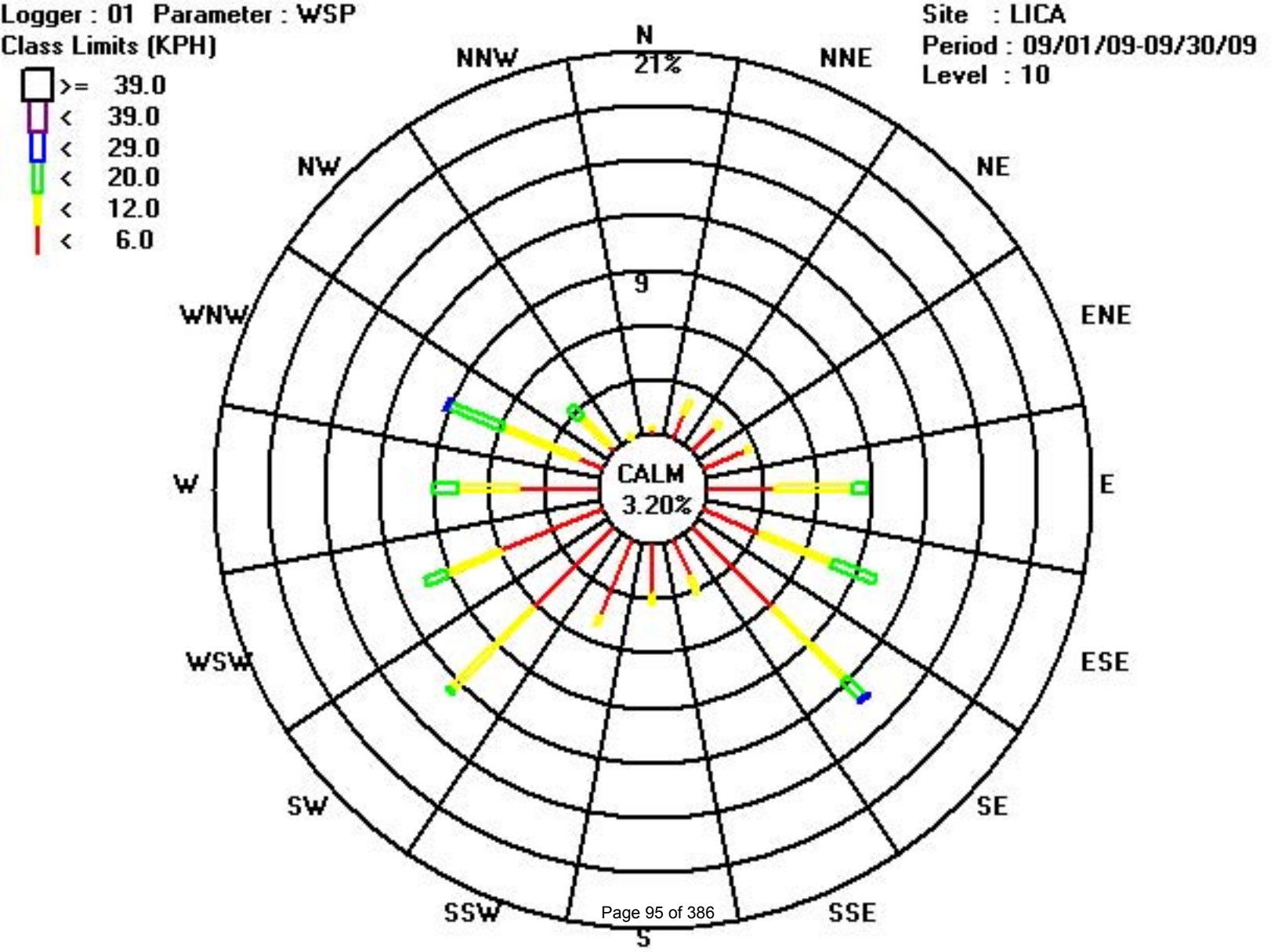
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	2	11	13	18	27	24	45	16	20	33	45	43	31	10	3		341
<	12.0	1	5	3	2	30	31	40	7	4	4	46	23	24	32	15	2	269
<	20.0					6	18	10				1	9	10	23	6		83
<	29.0							1							1			2
<	39.0																	
>=	39.0																	
	Totals	3	16	16	20	63	73	96	23	24	37	92	75	65	66	24	2	

Calm : 3.20 %

Total # Operational Hours : 718


Logger : 01 Parameter : WSP
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA
Period : 09/01/09-09/30/09
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9
CALM
3.20%

Vector Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

VECTOR WIND DIRECTION (WD) hourly averages in degrees

MST

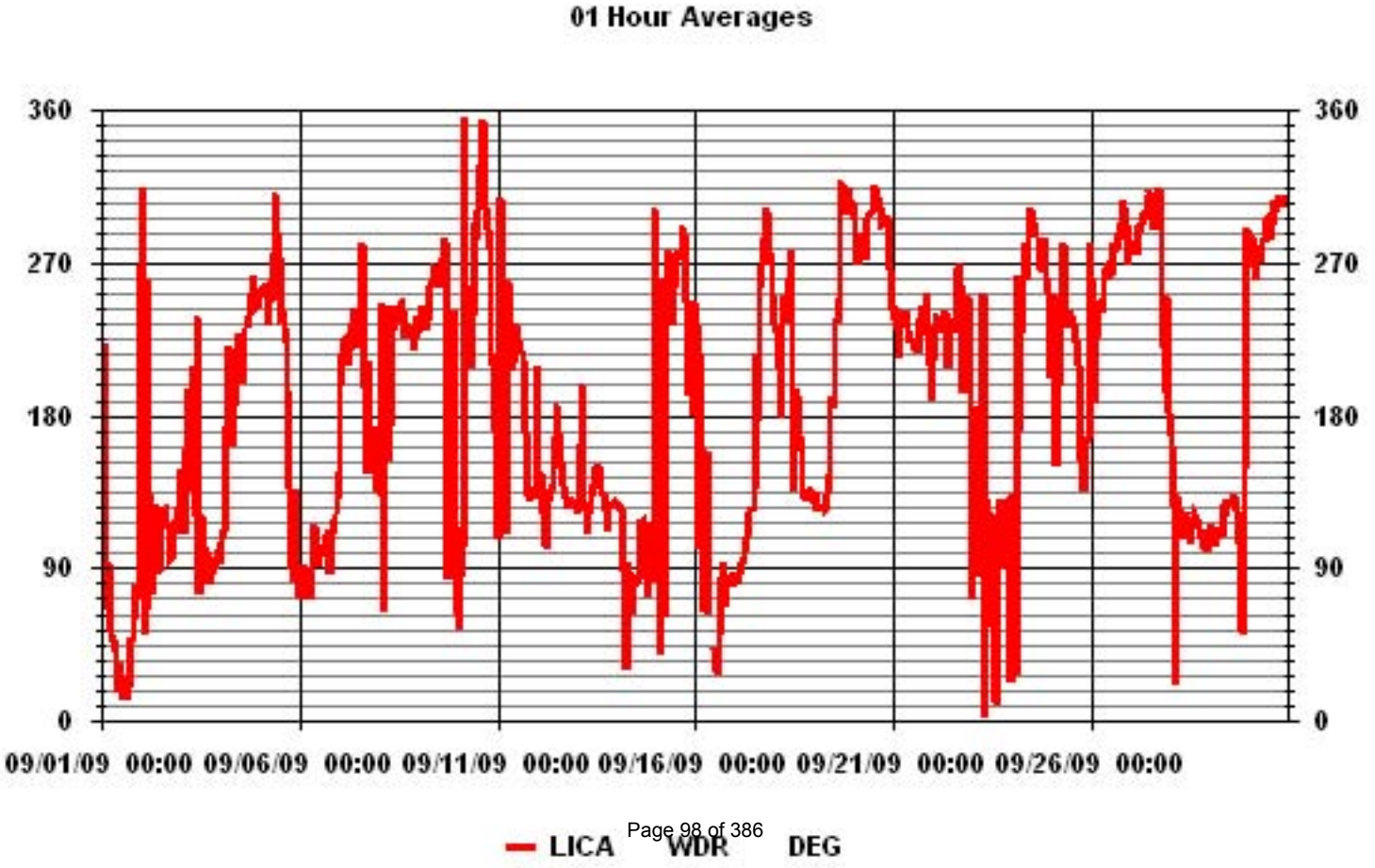
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	98	211	222	66	93	54	52	48	42	36	16	34	15	13	27	16	12	20	48	49	59	80	72	98	32	NNE	24
2	269	314	51	261	65	135	74	106	114	128	94	87	120	124	125	118	114	95	96	108	110	118	125	128	113	ESE	24
3	149	112	112	160	135	196	152	207	207	120	239	74	109	121	104	80	101	95	81	87	96	90	98	97	99	E	24
4	105	107	112	173	219	219	211	161	197	185	210	228	208	199	226	231	236	235	240	252	263	243	244	253	214	SSW	24
5	253	255	255	257	251	233	247	260	276	312	289	248	274	238	239	227	228	196	138	91	82	101	136	75	252	WSW	24
6	75	71	77	92	86	76	72	88	108	115	106	90	103	99	100	99	109	113	86	105	110	118	122	130	102	E	24
7	147	197	217	225	226	218	210	218	234	243	233	223	221	226	282	198	177	146	212	147	174	167	138	137	210	SSW	24
8	145	182	246	64	185	244	153	174	194	230	244	235	241	246	247	243	226	232	232	228	231	219	226	239	233	SW	24
9	228	234	244	240	232	232	236	256	260	270	255	262	260	256	273	285	283	274	83	114	141	222	241	63	254	WSW	24
10	114	53	84	103	356	254	256	212	208	239	294	283	301	327	341	354	352	304	291	279	209	216	171	206	309	NW	24
11	109	107	308	134	113	110	133	260	226	206	211	234	229	225	218	218	214	170	134	130	137	136	135	138	197	SSW	24
12	209	147	146	124	121	104	102	129	136	140	153	167	187	170	149	154	139	132	125	128	129	130	129	127	142	SE	24
13	125	123	163	198	130	126	110	127	126	132	139	149	136	151	142	132	135	125	111	125	126	127	127	130	132	SE	24
14	129	127	127	125	89	33	30	94	85	88	63	81	81	82	88	118	119	83	105	73	95	117	81	303	97	E	24
15	215	206	39	239	261	61	223	236	277	236	233	255	263	272	277	274	292	287	247	192	227	212	180	248	257	WSW	24
16	231	234	101	217	161	65	67	62	157	**P**	**P**	41	30	30	27	50	84	93	67	83	84	81	79	88	69	ENE	22
17	85	87	81	86	93	96	100	108	123	126	123	126	136	216	177	255	268	285	303	301	276	269	275	252	125	SE	24
18	234	229	231	209	178	251	249	243	235	261	278	135	180	195	193	169	160	138	133	129	134	136	136	131	187	S	24
19	132	124	128	127	125	125	123	124	133	145	192	186	186	237	235	249	319	298	303	315	308	314	298	306	251	WSW	24
20	297	275	269	288	284	277	278	272	296	298	299	300	314	314	306	309	303	293	294	294	293	298	267	244	293	WNW	24
21	244	238	231	214	231	240	239	233	242	231	223	225	219	224	219	219	237	244	228	233	252	210	216	189	229	SW	24
22	212	232	240	233	234	229	235	240	240	207	237	230	230	230	250	267	269	258	193	214	234	251	242	72	241	WSW	24
23	178	88	185	151	85	107	252	2	132	84	55	123	101	13	13	10	129	129	98	89	117	129	130	23	95	E	24
24	72	44	27	263	170	247	228	282	268	259	300	303	293	293	287	286	270	271	264	278	284	263	253	202	283	W	24
25	222	252	152	150	198	244	254	281	269	232	242	240	239	235	223	226	211	155	138	137	137	163	167	281	221	SW	24
26	224	261	187	225	244	247	240	249	265	267	264	263	264	281	279	277	288	294	284	307	303	293	268	283	276	W	24
27	279	274	280	279	292	288	293	299	300	299	310	313	299	300	290	294	303	314	311	220	237	193	251	183	294	WNW	24
28	170	163	128	21	133	122	124	107	121	123	118	109	105	120	124	122	120	115	109	101	112	106	99	109	114	ESE	24
29	114	114	108	103	108	112	114	113	125	124	130	128	128	129	131	131	124	105	52	57	51	148	291	283	120	ESE	24
30	287	286	268	261	261	275	280	270	283	283	296	297	284	292	293	307	305	308	307	307	303	309	306	305	293	WNW	24
HOURLY AVG	297	314	308	288	356	288	293	299	300	312	310	313	314	327	341	354	352	314	311	315	308	314	306	306			

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:	718	HRS
STANDARD DEVIATION	81.05		AMD OPERATION UPTIME	99.7	%
			MONTHLY AVERAGE	209	DEG


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA WDR DEG

Standard Deviation Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

SEPTEMBER 2009

STANDARD DEVIATION WIND DIRECTION (STDWDIR) hourly averages in degrees

MST

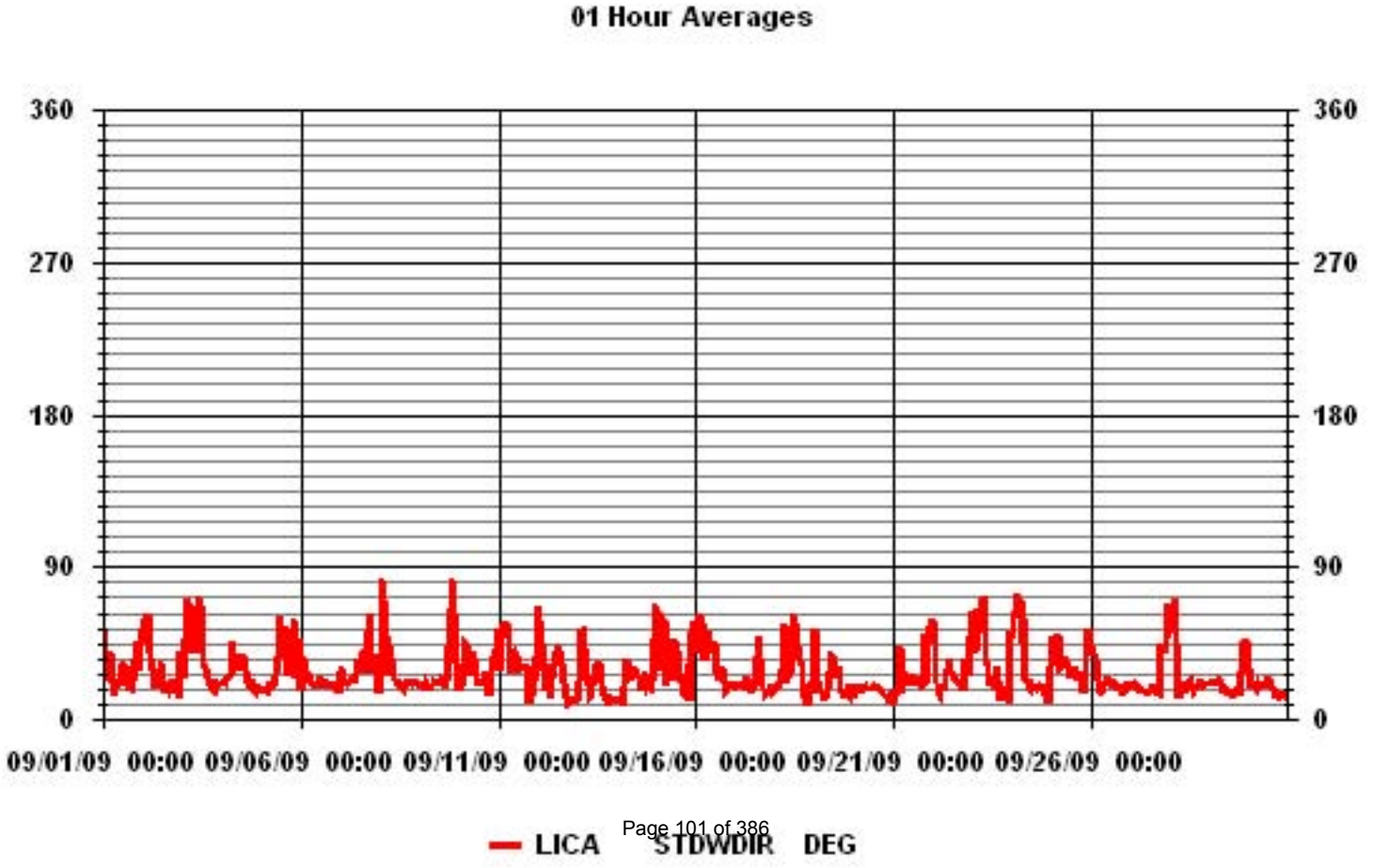
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
DAY																								
1	51	41	25	24	40	23	15	17	19	22	22	33	35	24	31	29	19	19	22	35	46	29	43	45
2	53	60	51	63	41	37	31	20	20	21	26	35	22	18	19	20	18	21	22	22	20	17	13	39
3	37	24	47	72	38	68	53	49	56	38	72	67	49	33	31	25	22	20	19	18	23	19	21	21
4	21	23	22	24	25	27	46	36	31	38	35	28	35	39	30	21	24	20	19	17	20	17	19	19
5	17	18	17	18	17	22	20	20	25	28	37	60	35	54	48	55	26	28	28	36	60	30	46	46
6	17	23	37	22	24	28	21	21	21	20	20	20	24	24	23	21	22	21	20	21	22	19	17	17
7	28	31	24	23	21	22	24	24	23	27	35	32	34	41	27	42	30	52	62	26	32	39	20	15
8	34	83	62	70	51	25	43	34	34	24	21	24	21	19	18	21	22	21	22	22	21	22	23	21
9	22	21	19	20	23	21	19	19	21	23	23	22	22	24	22	21	18	23	44	65	83	64	35	33
10	17	22	20	31	45	44	39	25	41	37	27	22	22	23	19	23	28	22	13	18	31	37	42	53
11	28	48	56	53	50	57	49	38	26	38	40	38	28	30	31	30	30	32	11	11	14	16	23	38
12	67	59	46	29	17	23	33	13	23	25	35	39	42	41	33	33	22	13	10	11	11	11	11	11
13	12	22	52	53	36	41	21	15	16	20	26	32	21	35	28	14	18	13	14	9	12	11	11	11
14	12	11	10	10	19	21	35	26	25	29	26	31	27	26	23	17	19	27	19	20	19	22	47	68
15	34	28	64	47	44	60	20	24	24	29	23	48	43	41	28	23	18	19	13	33	10	51	57	54
16	39	47	62	53	57	34	53	38	50	**P**	**P**	44	28	25	23	29	29	23	17	19	20	20	21	19
17	19	20	20	21	21	20	22	25	19	18	18	22	32	37	50	37	21	19	15	16	17	18	21	17
18	18	20	19	28	28	23	57	21	25	28	51	62	57	46	44	36	33	22	14	11	11	19	18	16
19	53	28	15	22	18	12	14	14	18	29	37	37	36	24	29	32	17	14	15	16	14	21	17	13
20	17	20	20	19	18	20	19	20	18	18	18	19	20	20	20	19	18	17	16	14	13	14	11	11
21	9	18	15	26	43	15	20	22	20	25	24	26	26	25	21	23	22	20	21	51	21	56	46	47
22	59	46	22	16	15	18	18	21	26	30	36	29	27	25	23	23	22	20	16	35	29	26	50	64
23	59	52	40	65	52	71	50	73	34	34	26	20	24	21	20	30	16	11	18	17	14	11	12	50
24	50	60	63	73	64	71	45	60	25	23	19	18	20	19	19	18	20	19	20	19	16	14	9	31
25	37	49	39	31	51	30	31	36	32	35	33	25	30	27	31	23	28	27	29	16	19	52	52	41
26	38	41	39	28	30	18	17	19	21	23	23	23	21	22	23	21	19	19	19	16	16	17	20	20
27	20	20	22	21	18	19	19	16	16	17	17	16	17	20	19	19	17	16	45	39	43	39	47	68
28	52	56	55	71	47	12	15	22	17	17	20	22	23	19	16	17	18	21	22	22	20	21	21	21
29	21	22	22	22	22	24	23	22	16	20	16	16	17	15	15	16	18	17	14	28	45	33	47	42
30	30	21	20	20	19	21	20	20	20	21	20	21	25	21	20	19	15	14	13	14	15	15	14	14

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

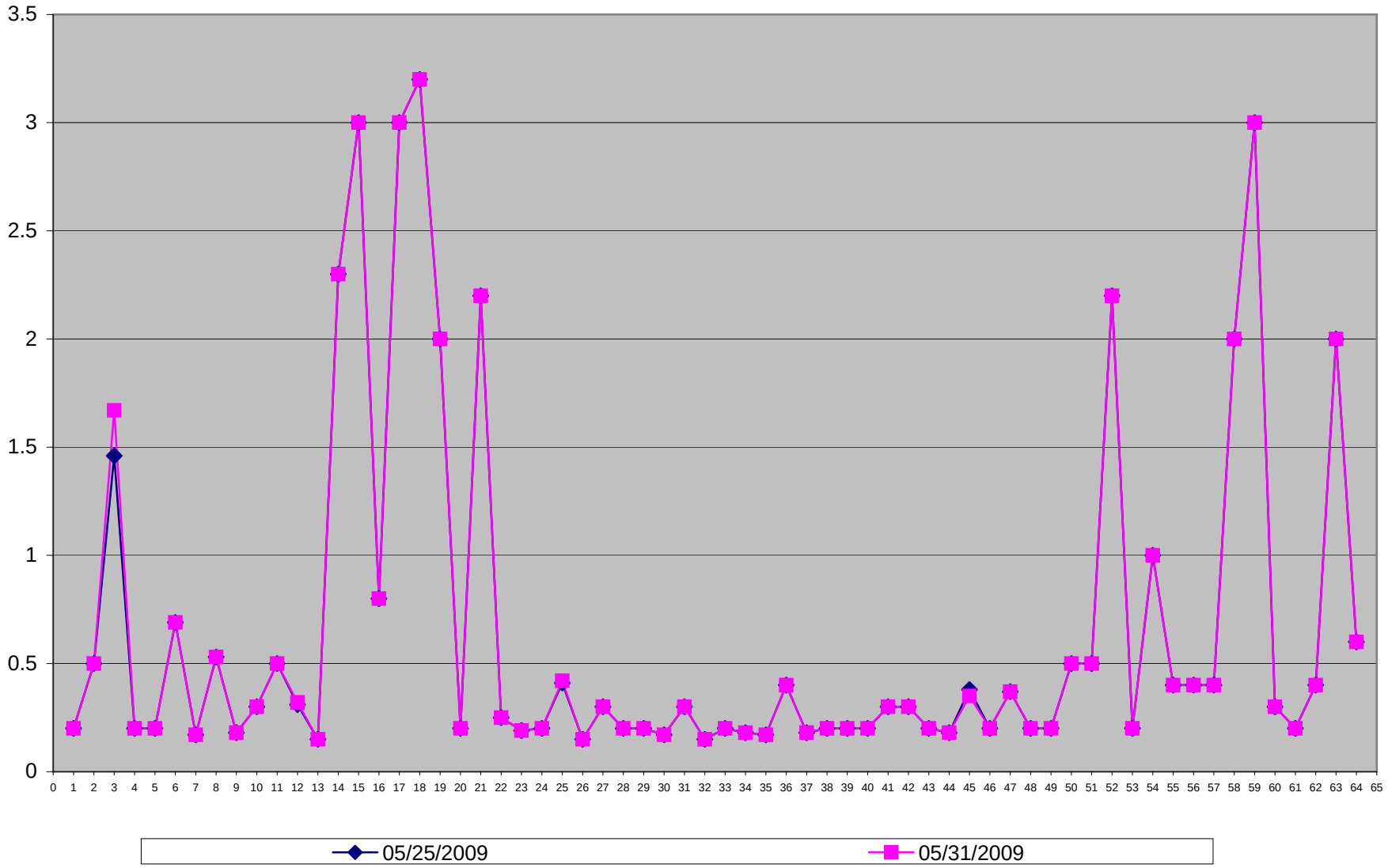
CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 718 HRS


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA STDWDIR DEG

Non-Continuous Monitoring

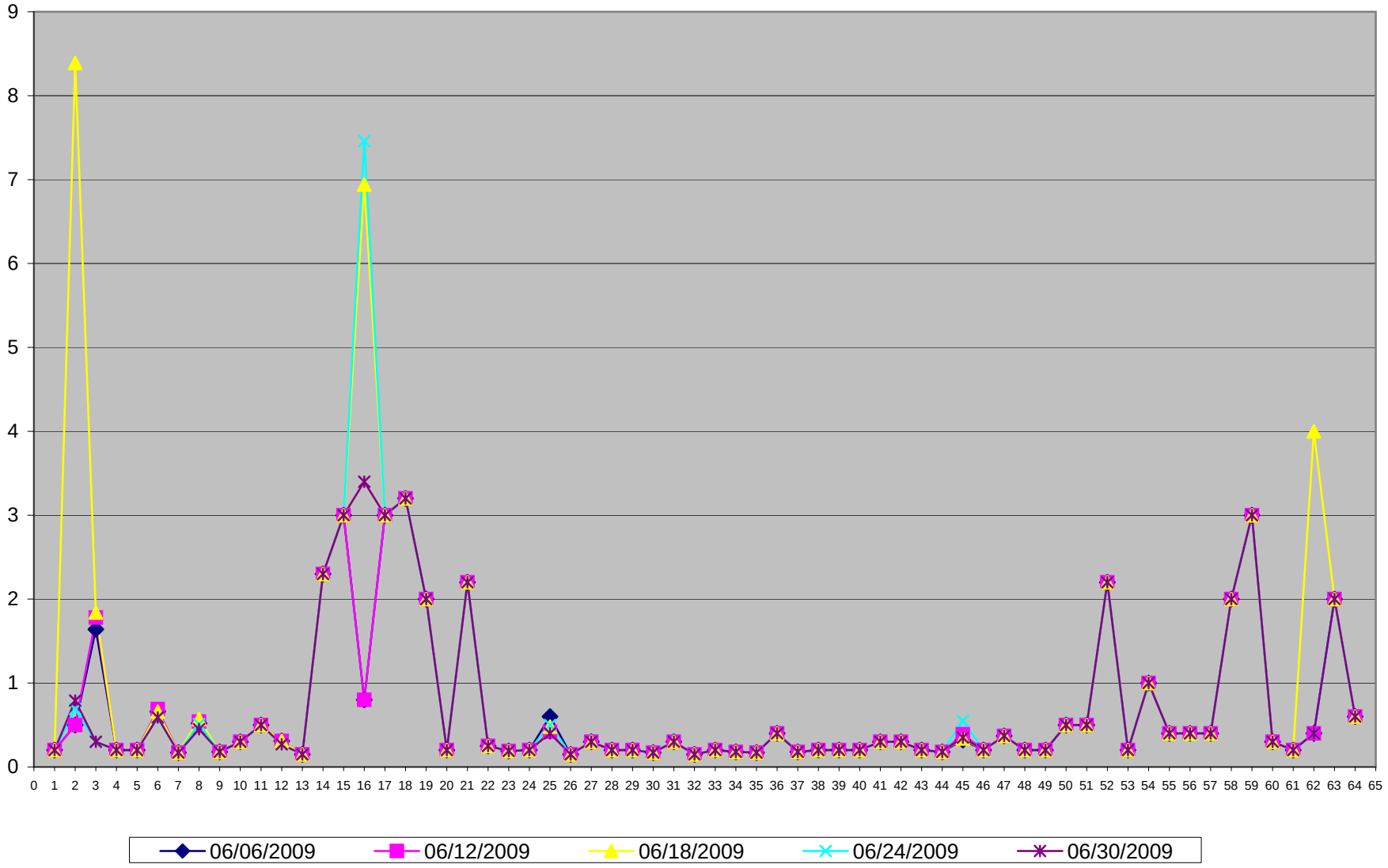
Volatile Organics

Volatile Organics 6 Days Average in ppb Site: LICA - Cold Lake South



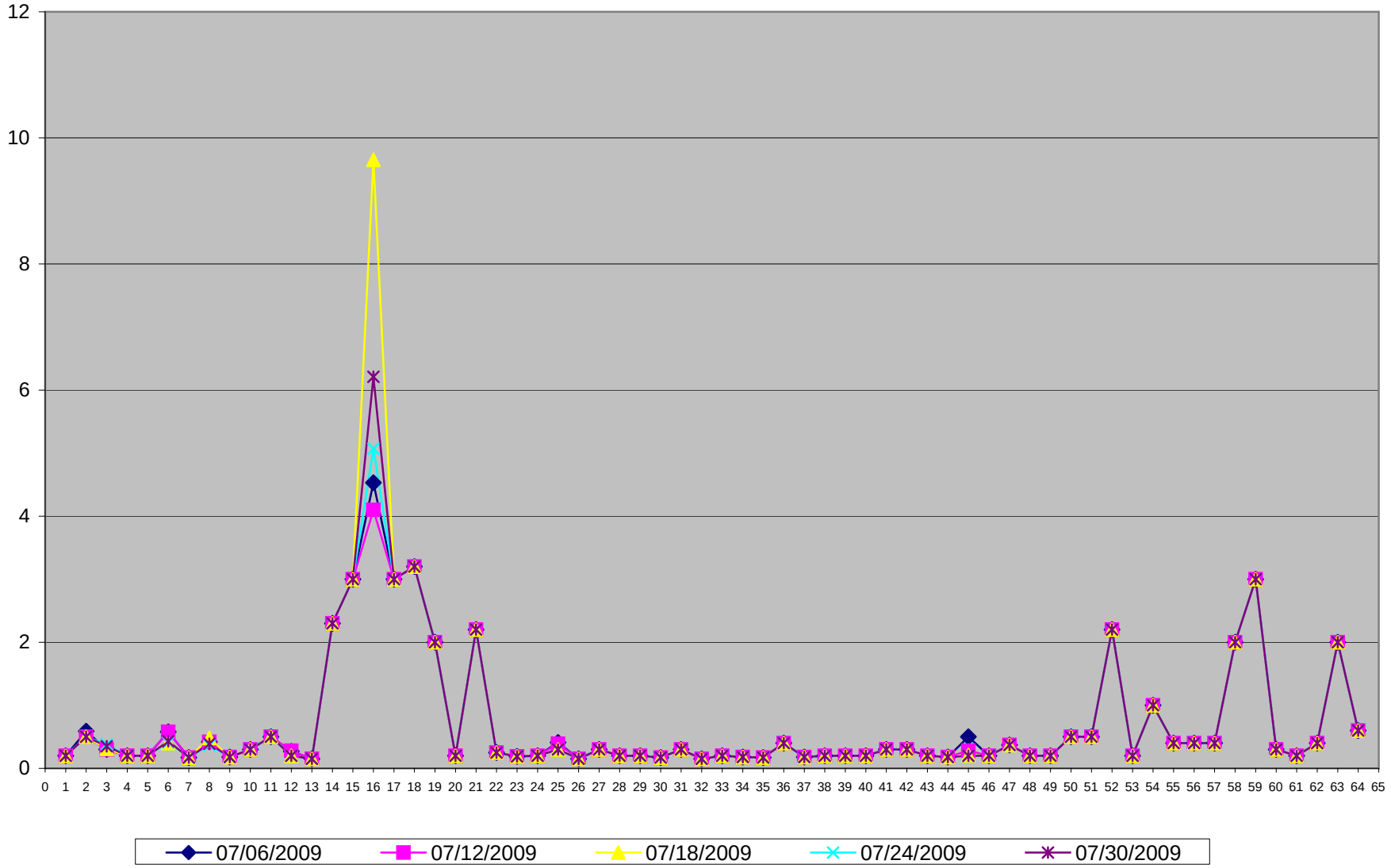
1	2,2,4-Trimethylpentane	33	1,1,2,2-Tetrachloroethane
2	Carbon Disulfide	34	cis-1,3-Dichloropropene
3	Propene	35	trans-1,3-Dichloropropene
4	Vinyl Acetate	36	1,2-Dichloropropane
5	Vinyl Bromide	37	Bromomethane
6	Dichlorodifluoromethane (FREON 12)	38	Bromoform
7	1,2-Dichlorotetrafluoroethane	39	Bromodichloromethane
8	Chloromethane	40	Dibromochloromethane
9	Vinyl Chloride	41	Heptane
10	Chloroethane	42	Trichloroethylene
11	1,3-Butadiene	43	Tetrachloroethylene
12	Trichlorofluoromethane (FREON 11)	44	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)

Volatile Organics 6 Days Average in ppb Site: LICA - Cold Lake South



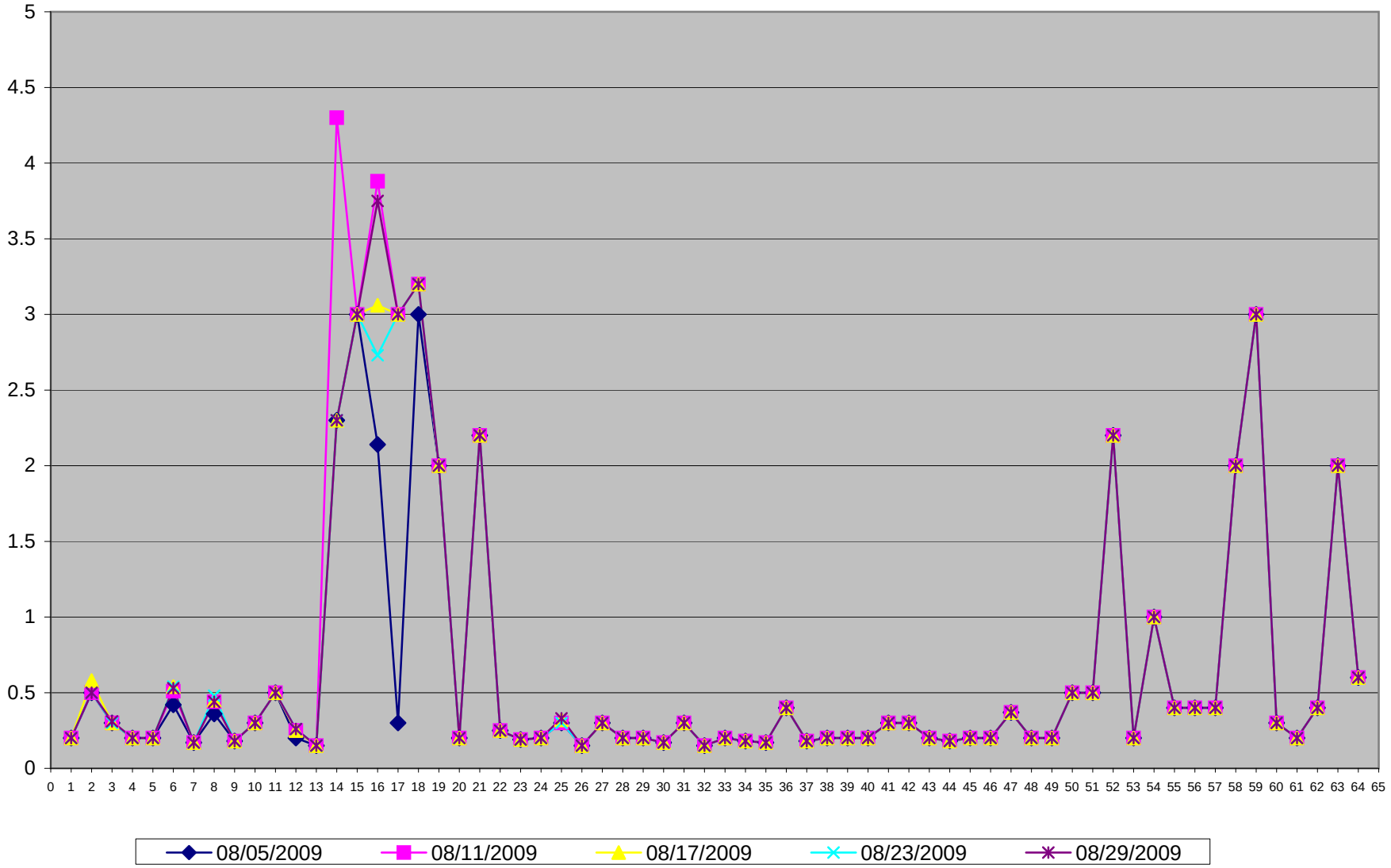
1	2,2,4-Trimethylpentane	33	1,1,2,2-Tetrachloroethane
2	Carbon Disulfide	34	cis-1,3-Dichloropropene
3	Propene	35	trans-1,3-Dichloropropene
4	Vinyl Acetate	36	1,2-Dichloropropane
5	Vinyl Bromide	37	Bromomethane
6	Dichlorodifluoromethane (FREON 12)	38	Bromoform
7	1,2-Dichlorotetrafluoroethane	39	Bromodichloromethane
8	Chloromethane	40	Dibromochloromethane
9	Vinyl Chloride	41	Heptane
10	Chloroethane	42	Trichloroethylene
11	1,3-Butadiene	43	Tetrachloroethylene
12	Trichlorofluoromethane (FREON 11)	44	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)

Volatile Organics 6 Days Average in ppb Site: LICA - Cold Lake South



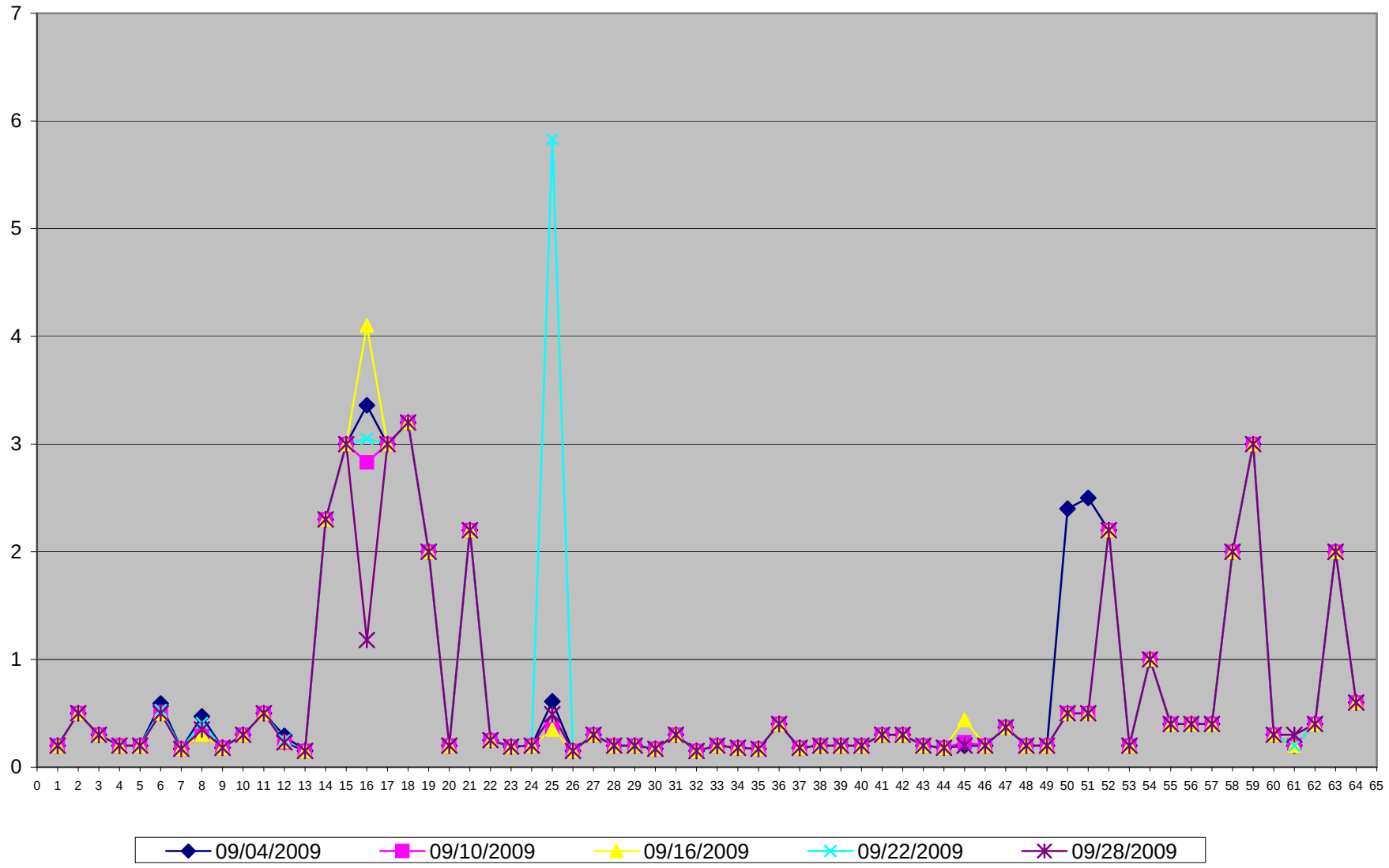
1	2,2,4-Trimethylpentane	33	1,1,2,2-Tetrachloroethane
2	Carbon Disulfide	34	cis-1,3-Dichloropropene
3	Propene	35	trans-1,3-Dichloropropene
4	Vinyl Acetate	36	1,2-Dichloropropane
5	Vinyl Bromide	37	Bromomethane
6	Dichlorodifluoromethane (FREON 12)	38	Bromoform
7	1,2-Dichlorotetrafluoroethane	39	Bromodichloromethane
8	Chloromethane	40	Dibromochloromethane
9	Vinyl Chloride	41	Heptane
10	Chloroethane	42	Trichloroethylene
11	1,3-Butadiene	43	Tetrachloroethylene
12	Trichlorofluoromethane (FREON 11)	44	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)

Volatile Organics 6 Days Average in ppb Site: LICA - Cold Lake South



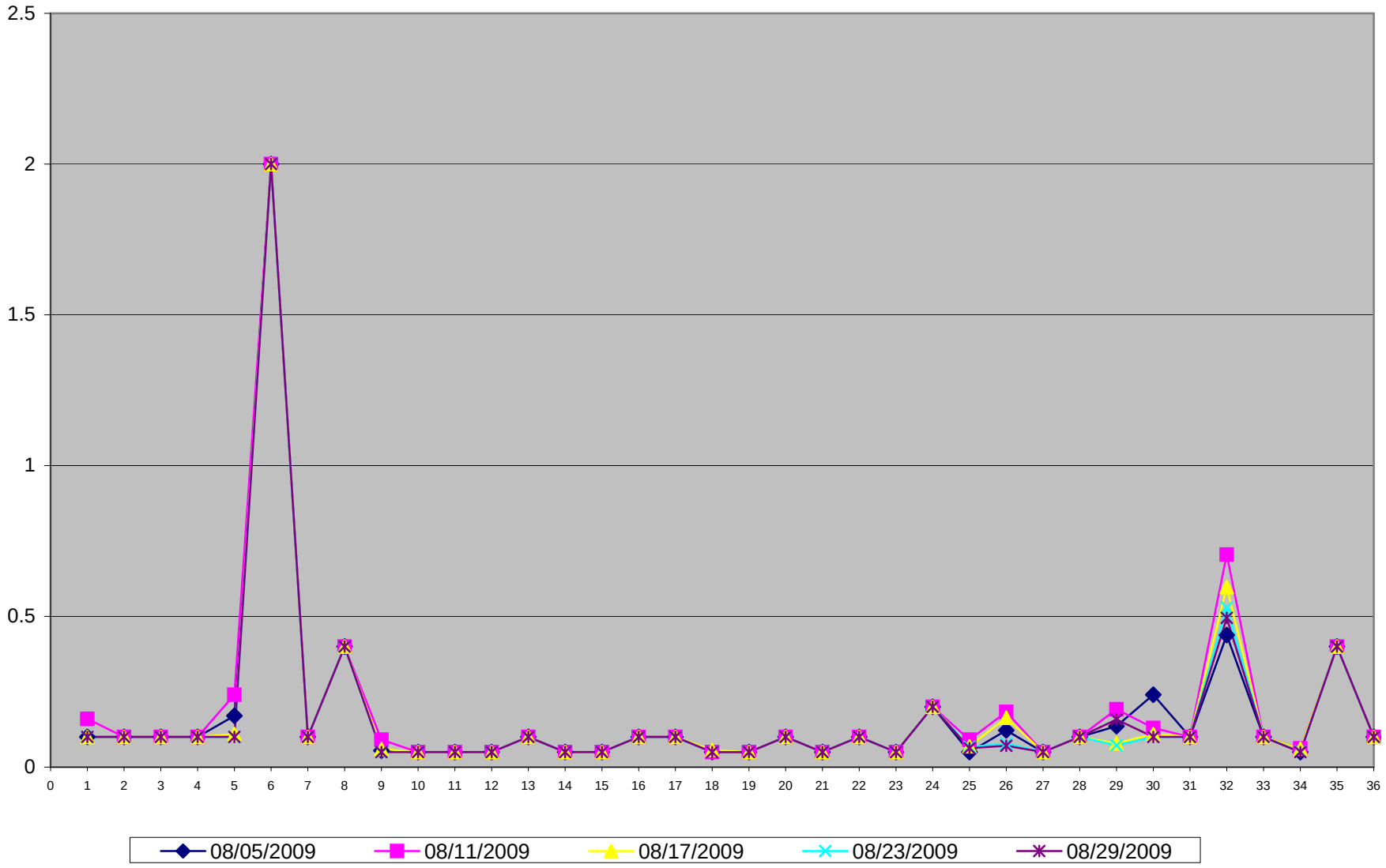
1	2,2,4-Trimethylpentane	33	1,1,2,2-Tetrachloroethane
2	Carbon Disulfide	34	cis-1,3-Dichloropropene
3	Propene	35	trans-1,3-Dichloropropene
4	Vinyl Acetate	36	1,2-Dichloropropane
5	Vinyl Bromide	37	Bromomethane
6	Dichlorodifluoromethane (FREON 12)	38	Bromoform
7	1,2-Dichlorotetrafluoroethane	39	Bromodichloromethane
8	Chloromethane	40	Dibromochloromethane
9	Vinyl Chloride	41	Heptane
10	Chloroethane	42	Trichloroethylene
11	1,3-Butadiene	43	Tetrachloroethylene
12	Trichlorofluoromethane (FREON 11)	44	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)

Volatile Organics 5 Days Average in ppb Site: LICA - Cold Lake South



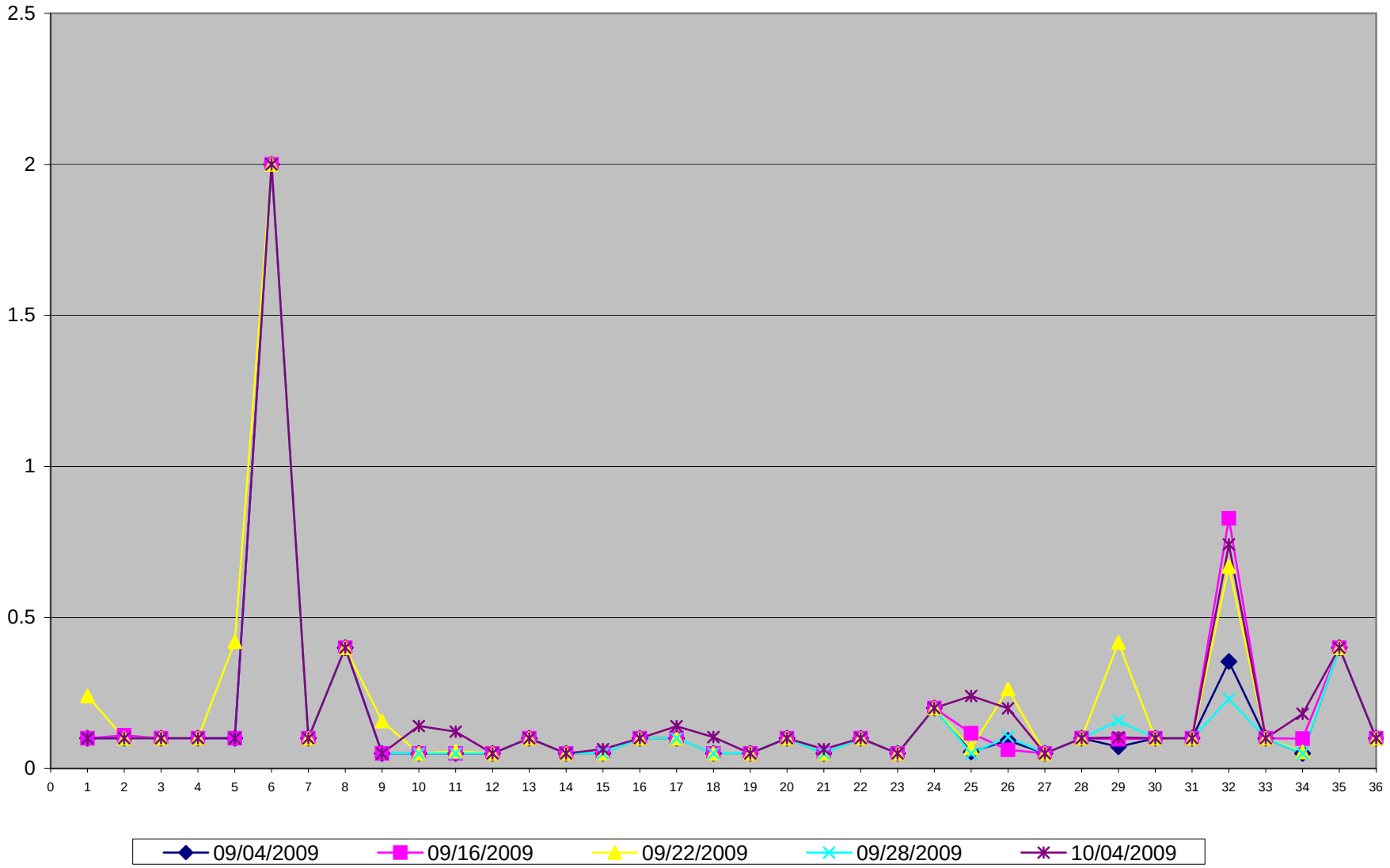
Polycyclic Aromatic Hydrocarbons

PAHs 6 Days Average in ug 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

PAHs 6 Days Average in ug 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

Cold Lake

Sulphur Dioxide

SO_2 Calibration Report

Station Information

Calibration Date	September 8, 2009		Previous Calibration	August 4, 2009	
Company	**Lakeland Community and Industry Association**				
Plant / Location	**LICA 1 - Cold Lake South**				
Start Time (MST)	7:35		End Time (MST)	11:10	
Reason:	Monthly Calibraiton				
Barometric Pressure	704	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:	-	S/N :	-		
Calibrator Make / Model:	API 700	S/N :	831	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	263		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 500	ppb				
Sample Flow / Box Temp	445	ccm	28.1	Deg C	443	ccm	27.4	Deg C
HVPS / Lamp Setting	-631.6		745		-631.6		748	
PMT / RxCell Temp	OK	Deg C	45.2	Deg C	OK	Deg C	45.2	Deg C
Converter / IZS Temp	NA	Deg C	45.0	Deg C	NA	Deg C	45.0	Deg C
Offset / Slope	5		1.041		5		1.041	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4998	0	0	0	N/A
4961	38.3	400	400	0.9998
4976	23.9	250	251	0.9941
4986	14.4	150	150	1.0022
4999	0	0	0	N/A
			Sum of Least Squares	0.3462
			New Correction Factor	0.9998

	Before Calibration	After Calibration
Auto Zero	-0.6	0.0
Auto Span	399.0	400.0
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		0.5%

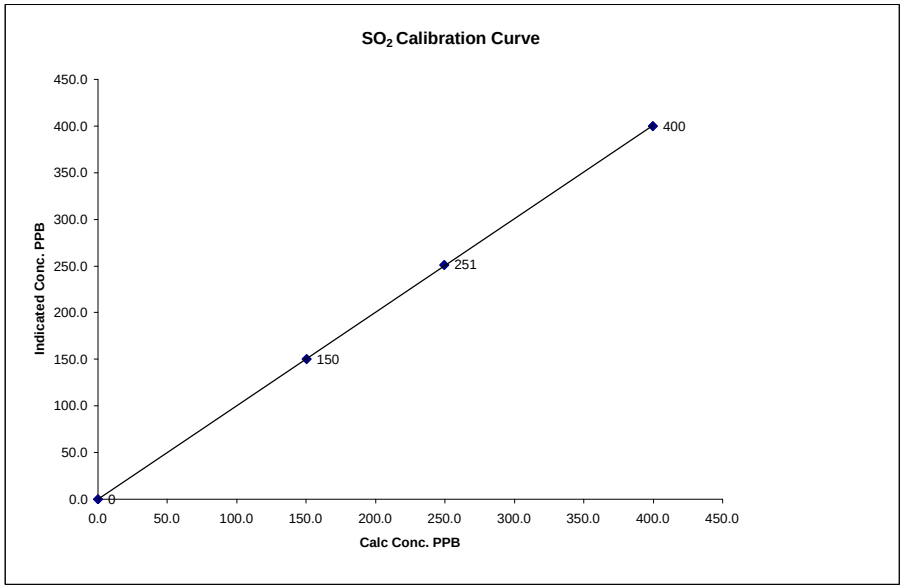
Calibration Performed by: Shea Beaton

SO_2 Calibration Curve

Calibration Date	September 8, 2009				
Company	**Lakeland Community and Industry Association**				
Plant / Location	**LICA 1 - Cold Lake South**				
Start Time (MST)	7:35		End Time (MST)	11:10	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
150	150	1.0022
250	251	0.9941
400	400	0.9998

Correlation Coefficient	(≥ 0.995)	0.999979
Slope	(0.85 to 1.15)	1.001270
Intercept	(± 3% F.S.)	0.057828



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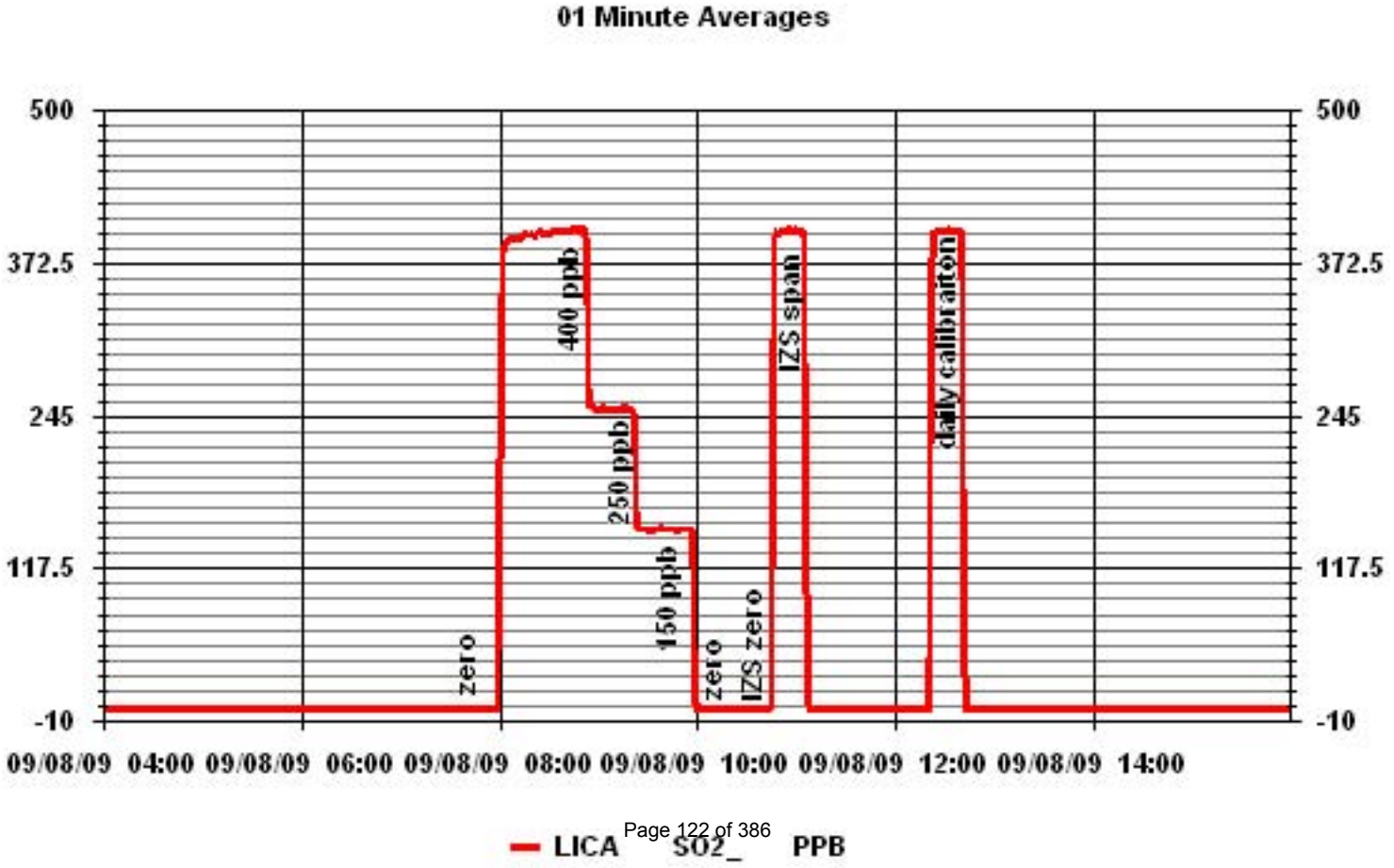

01 Minute Averages
500
372.5
245
117.5
-10
zero
400 ppb
250 ppb
150 ppb
zero
IZS zero
IZS span
daily calibration
09/08/09 04:00
09/08/09 06:00
09/08/09 08:00
09/08/09 10:00
09/08/09 12:00
09/08/09 14:00
LICA SO2_ PPB

Total Reduced Sulphur

TRS Calibration Report

Station Information

Calibration Date	September 8, 2009		Previous Calibration	August 4, 2009	
Company	**Lakeland Industry & Community Association**				
Plant / Location	**LICA 1 - Cold Lake South**				
Start Time (MST)	10:25		End Time (MST)	13:55	
Reason:	Monthly Calibration				
Barometric Pressure	705	mm Hg	Station Temperature	24	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 :	263		
Flow Meter:	API 700	S/N :	831		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range	0 -100 ppb							
Sample Flow / Box Temp	359	ccm	31.2	Deg C	359	ccm	30.3	Deg C
HVPS / Lamp Setting	-622.7		762		-622.3		762	
PMT / RxCell Temp	OK	Deg C	45.1	Deg C	OK	Deg C	45.0	Deg C
Converter / IZS Temp	850	Deg C	45.0	Deg C	850	Deg C	45.0	Deg C
Offset / Slope	10.9		1.130		11.1		1.151	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4999	0	0	0	N/A
4963	37	80	78	1.0246
4963	37	80	81	0.9867
4979	20.8	45	45	0.9984
4990	11.6	25	25	1.0019
4999	0	0	0	N/A
			Sum of Least Squares	0.9903
			New Correction Factor	0.9867

	Before Calibration	After Calibration
Auto Zero	-0.2	0.1
Auto Span	39.0	40.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		-2.5%

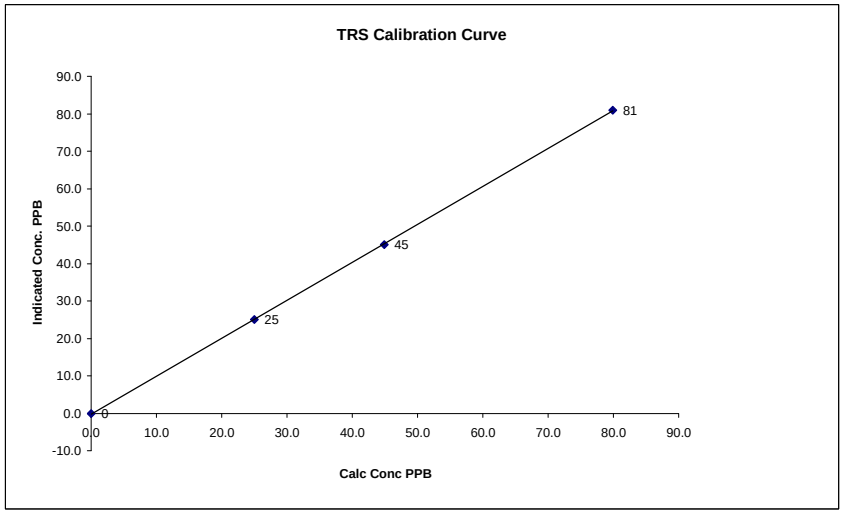
Calibration Performed by: Shea Beaton

TRS Calibration Curve

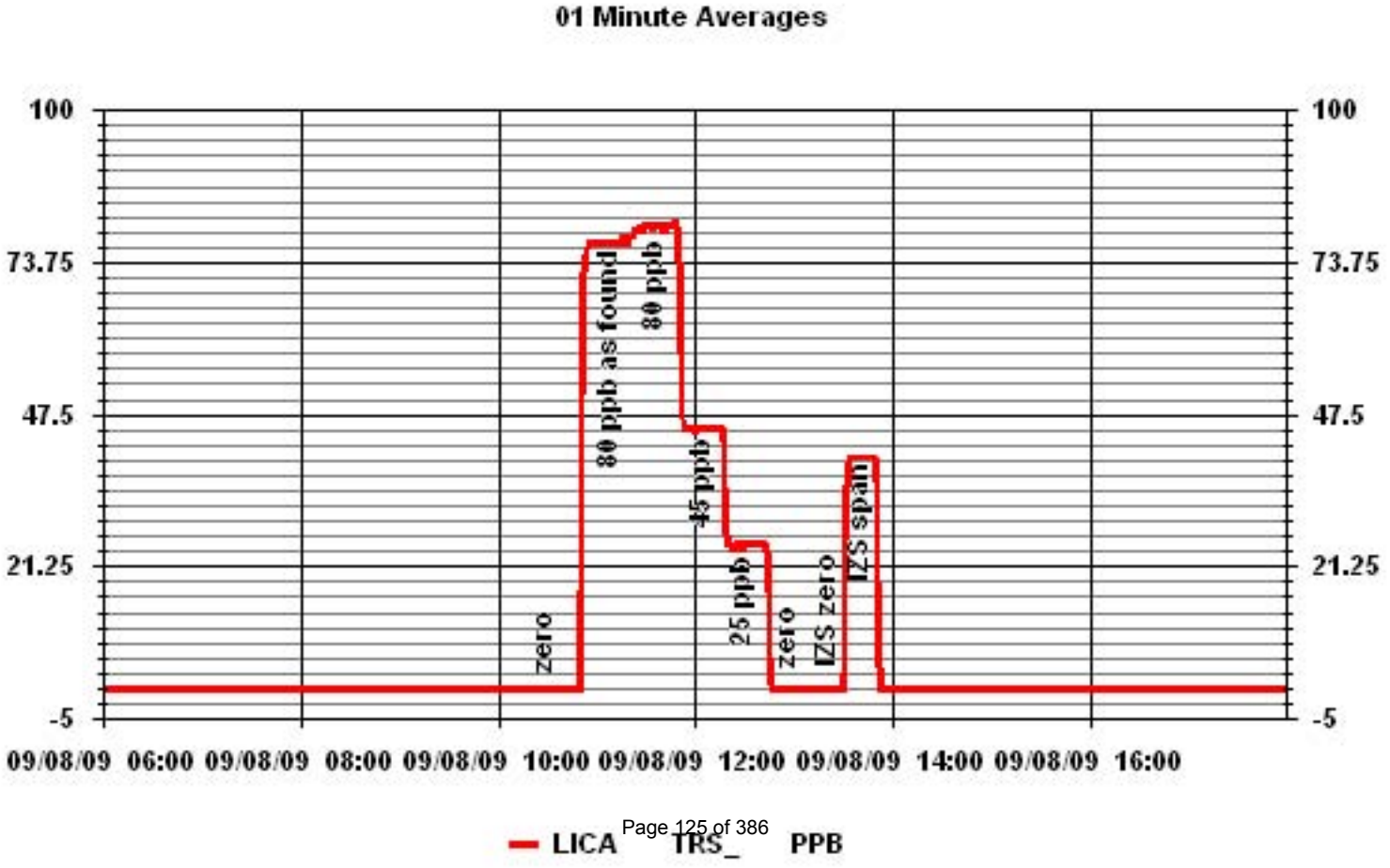
Calibration Date	September 8, 2009				
Company	**Lakeland Industry & Community Association**				
Plant / Location	**LICA 1 - Cold Lake South**				
Start Time (MST)	10:25	End Time	(MST)	13:55	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
25	25	1.0019
45	45	0.9984
80	81	0.9867

Correlation Coefficient	(≥ 0.995)	0.999936
Slope	(0.85 to 1.15)	1.013747
Intercept	(± 3% F.S.)	-0.239625



Notes:


01 Minute Averages
100
73.75
47.5
21.25
-5
zero
80 ppb as found
80 ppb
45 ppb
25 ppb
zero
IZS zero
IZS span
09/08/09 06:00
09/08/09 08:00
09/08/09 10:00
09/08/09 12:00
09/08/09 14:00
09/08/09 16:00
LICA TRS_ PPB

Total Hydrocarbons

THC Calibration Report

Station Information

Calibration Date:	September 25, 2009		Previous Calibration	August 4, 2009	
Company:	**Lakeland Industry and Community Association**				
Plant / Location:	**LICA1/Cold Lake**				
Start Time (MST)	9:20		End Time (MST)	13:45	
Reason:	Monthly Calibration				
Barometric Pressure:	718	mmHg	Station Temperature:	23	Deg C
Calibrator:	API 700		S/N:	831	
Cal Gas Concentration:	299Prop/1019Meth	ppm	Cal Gas Expiry Date:	8/11/2011	
DAS make & Model:	ESC 8832		S/N :	263	
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	6.9	psi	6.9	psi
Hydrogen Pressure	8	psi	8	psi
Air Pressure	19.5	psi	19.5	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
2998	0	0.0	0.0	N/A
2998	65	39.1	39.2	0.9968
2998	0.0	0.0	0.0	N/A
2998	65.0	39.1	39.1	0.9993
2998	35.0	21.2	20.9	1.0166
2998	20.0	12.2	11.8	1.0340
2998	0	0.0	0.0	N/A
			Correction Factor:	0.9993

Percent Change

Previous Calibration Correction Factor:	1.0009
Current Correction Factor Before Span Adjust:	0.9968
Percent Change:	0.4%

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	-0.1	0.0
Auto Span	35.0	35.2
Sample Lines Connected		**YES**

Cylinder Pressures			
Span	800	psi	
Hydrogen	2000	psi	
Zero Air	unlimited	psi	Maxxam-owned API 701 zero air supply with catalytic oxidizer

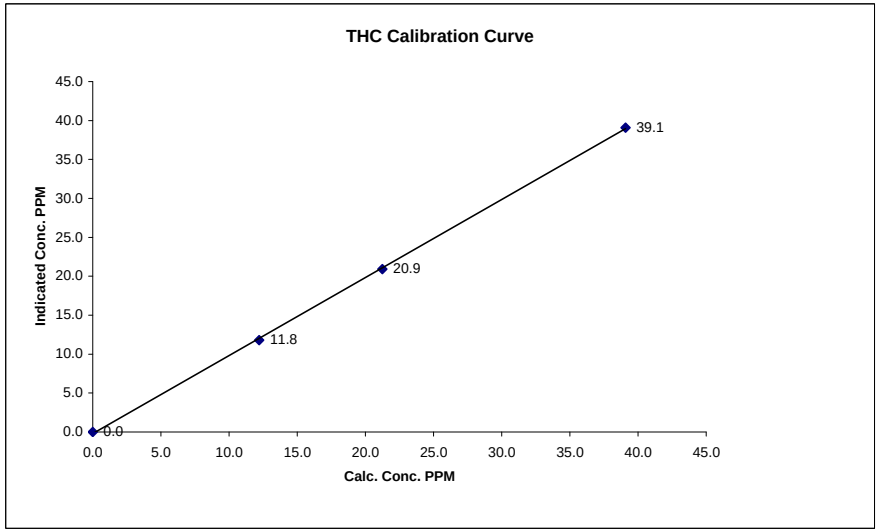
Calibration Performed by: Shea Beaton

THC Calibration Curve

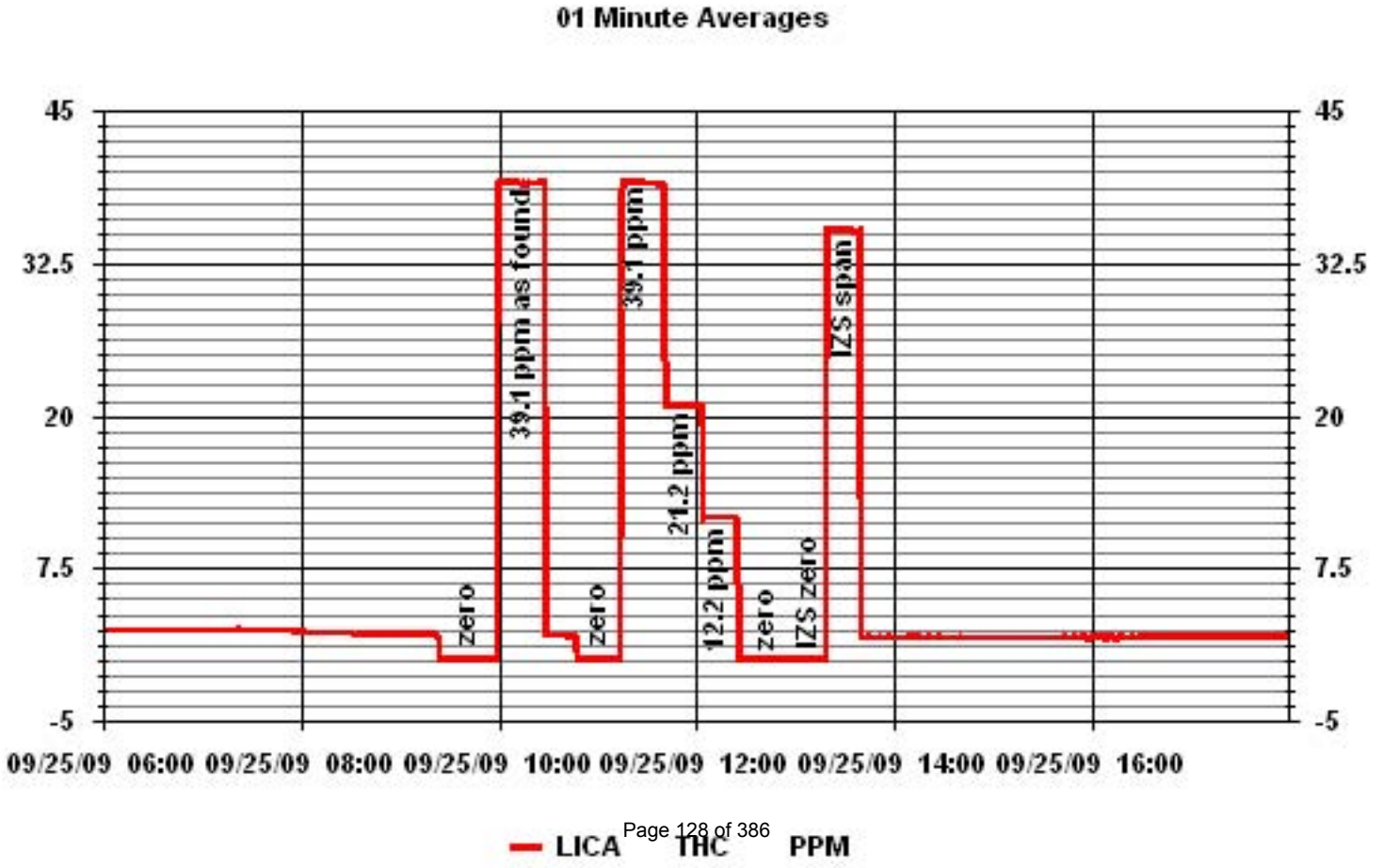
Calibration Date	September 25, 2009		
Company	**Lakeland Industry and Community Association**		
Plant / Location	**LICA1/Cold Lake**		
Start Time (MST)	9:20	End Time (MST)	13:45

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	0.0	
12.2	11.8	1.0340
21.2	20.9	1.0166
39.1	39.1	0.9993

Correlation Coefficient	(≥ 0.995)	0.999818
Slope	(0.85 to 1.15)	1.002290
Intercept	(± 3% F.S.)	-0.222153



Notes:


01 Minute Averages
45
32.5
20
7.5
-5
zero
39.1 ppm as found
zero
39.1 ppm
21.2 ppm
12.2 ppm
zero
IZS zero
IZS span
09/25/09 06:00 09/25/09 08:00 09/25/09 10:00 09/25/09 12:00 09/25/09 14:00 09/25/09 16:00
LICA THC PPM

Particulate Matter 2.5

TEOM® 1405F Audit

Station		Audit Transfer Standard	
Date:	September 25, 2009	Make/Model:	Bios DC2
Station Name:	LICA 1	Serial Number:	738
Location:	Cold Lake South	Cell s/n:	1625
Operator:	LICA	Thermometer s/n:	14-990A

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 (%)	47%
Firmware Ver.	1.22	K_o Factor	14578.0
Parameter	PM 2.5 (with FDMS)	Temp (^oC)	12.8
		Press (ATM)	0.938

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**	0.009	Warnings	None
Pump Vacuum	0.38		

Temperature/Pressure

Measured Temp **(± 2 ^oC)**	13.1	**Δ ^oC**	-0.3
Measured Press **(± 0.01atm)**	0.944	**ΔATM**	-0.006

Flow Audit

Indicated Main Flow (l/min)	3.00	Main Flow Drift **(±10.0%)**	6.65%
Measured Main Flow (l/min)	2.92	Flow Adjusted to Measured?	YES
Indicated Bypass Flow (l/min)	13.67	Bypass Flow Drift **(±10.0%)**	5.10%
Measured Bypass Flow (l/min)	13.48	Flow Adjusted to Measured?	YES

Leak Check

Main **(< 0.15 l/min)**	0.01
Aux **(< 0.15 l/min)**	0.00

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: 9:30 **Finish Time:** 10:10

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

New Filter Loading %: NA

Comments: Audit of flow, temp and pressure done prior to bypass, main flow, teom, and FDMS filter changed. Leak check done following the main flow and bypass filter changed. Following this audit, the pressure sensor was calibrated and a firmware update was performed. A second audit was done.

Auditor/s: Shea Beaton

TEOM® 1405F Audit

Station		Audit Transfer Standard	
Date:	September 25, 2009	Make/Model:	Bios DC2
Station Name:	LICA 1	Serial Number:	738
Location:	Cold Lake South	Cell s/n:	1625
Operator:	LICA	Thermometer s/n:	14-990A

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 (%)	17%
Firmware Ver.	1.28	K_o Factor	14578.0
Parameter	PM 2.5 (with FDMS)	Temp (^oC)	19.7
		Press (ATM)	0.946

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	0.38		

Temperature/Pressure

Measured Temp **(± 2 ^oC)**	19.5	**Δ ^oC**	0.2
Measured Press **(± 0.01atm)**	0.946	**ΔATM**	0.000

Flow Audit

Indicated Main Flow (l/min)	3.00	Main Flow Drift **(±10.0%)**	5.67%
Measured Main Flow (l/min)	3.04	Flow Adjusted to Measured?	YES
Indicated Bypass Flow (l/min)	13.67	Bypass Flow Drift **(±10.0%)**	4.65%
Measured Bypass Flow (l/min)	13.75	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: 13:00 **Finish Time:** 15:10

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

New Filter Loading %: 17.4%

Comments: Prior to this audit, the main and bypass in-line filters were changed, the Teom filter was changed, the FDMS filter was changed, a leak check was performed and a firmware update was done. The flows and BP were audited and adjusted to the audited value. allowed unit to stablize.

Auditor/s: Shea Beaton

Nitrogen Dioxide

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	September 8, 2009		Previous Calibration	August 4, 2009	
Company	**Lakeland Ind & Comm. Assoc.**		Plant/Location	**LICA 1 - Cold Lake South**	
Start Time (MST)	7:35		End Time (MST)	13:55	
Reason:	Monthly Calibration				
Barometric Pressure	704 mmHg		Station Temperature	23.0	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	NA	Volts

Equipment Information

Analyzer Make / Model:	TECO 42C	S/N :	42-7408-716	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	263		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 1000	ppb				
Sample Flow/Conv. Temp	716	ccm	317	Deg C	716	ccm	317	Deg C
Ozone Flow / Vacuum	OK	ccm	179.2	mmHg	OK	ccm	178.6	mmHg
HVPS	-820	Volts			-820	Volts		
Rx/ Temp / PMT Temp	50.0	Deg C	-2.5	Deg C	49.8	Deg C	-2.4	Deg C
Box Temp / IZS Temp	27.6	Deg C	OK	Deg C	27.2	Deg C	OK	Deg C
Offset	3.8	NOx	3.6	NO	3.8	NOx	3.5	NO
Slope	1.005	NOx	0.958	NO	1.004	NOx	0.945	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
5002.0	0.0	N/A	0	0	0	0	0	N/A	N/A
4964.0	38.8	N/A	402	400	407	406	2	0.9871	0.9857
4964.0	38.8	N/A	402	400	401	400	1	1.0019	1.0005
4983.0	24.3	N/A	251	250	250	249	1	1.0055	1.0057
4994.0	14.6	N/A	151	150	149	149	0	1.0134	1.0095
5007.0	0.0	N/A	0	0	0	0	0	N/A	N/A
								Converter Efficiency	
4967.0	38.8	N/A	402	400	402	401	1	N/A	
4967.0	38.8	300	402	400	399	129	270	99%	
4967.0	38.8	200	402	400	400	208	192	99%	
4967.0	38.8	100	402	400	400	303	97	98%	
4964.0	38.8	N/A	402	400	401	400	1	N/A	
5012.0	0	N/A	0	0	0	0	0	N/A	N/A
Linearity OK?			**Yes**	No	Sum of Least Squares			1.0038	1.0026
Flows Checked on-site?			Yes	**No**	New Correction Factor			1.0019	1.0005
					Average Converter Efficiency			99%	

	Before Calibration				After Calibration			
Auto Zero	0.6	NOx	0.7	NO2	0.6	NOx	0.4	NO2
Auto Span	379.0	NOx	377.0	NO2	371.0	NOx	369.0	NO2
Sample Lines Connected					YES			
Percent Change from Previous Calibration					*NOx*	1.5%	*NO*	1.3%

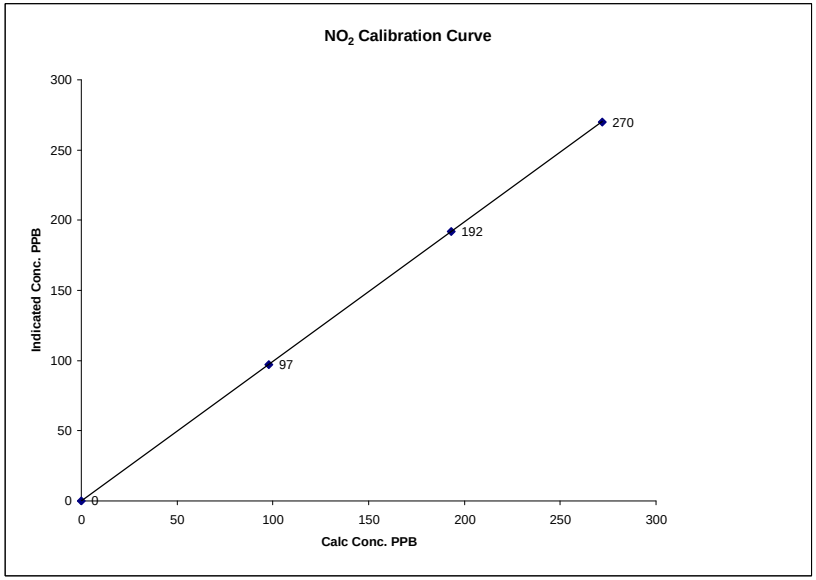
Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	September 8, 2009		
Company	**Lakeland Ind & Comm. Assoc.**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	7:35	End Time (MST)	13:55

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	N/A
98	97	1.0103
193	192	1.0052
272	270	1.0074

Correlation Coefficient	(≥ 0.995)	0.999995
Slope	(0.85 to 1.15)	0.993461
Intercept	(± 3% F.S.)	-0.07960



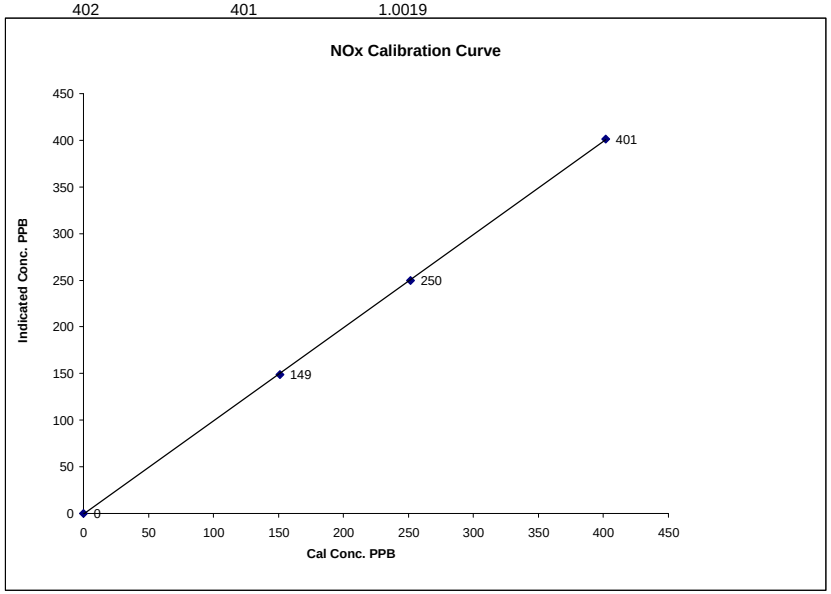
Notes:

NOx Calibration Curve

Calibration Date	September 8, 2009				
Company	**Lakeland Ind & Comm. Assoc.**				
Plant / Location	**LICA 1 - Cold Lake South**				
Start Time (MST)	7:35	End Time (MST)	13:55		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	N/A
151	149	1.0134
251	250	1.0055
402	401	1.0019

Correlation Coefficient	(≥ 0.995)	0.999976
Slope	(0.85 to 1.15)	0.998615
Intercept	(± 3% F.S.)	-0.75155

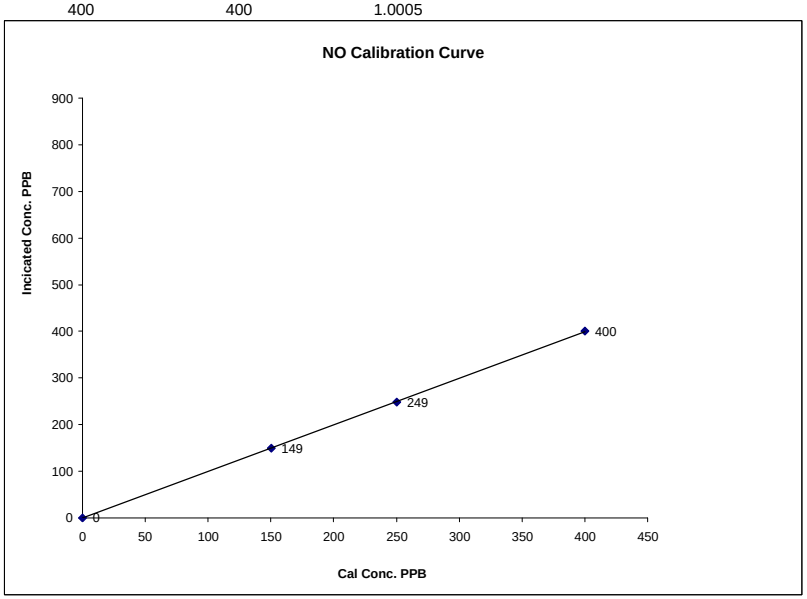


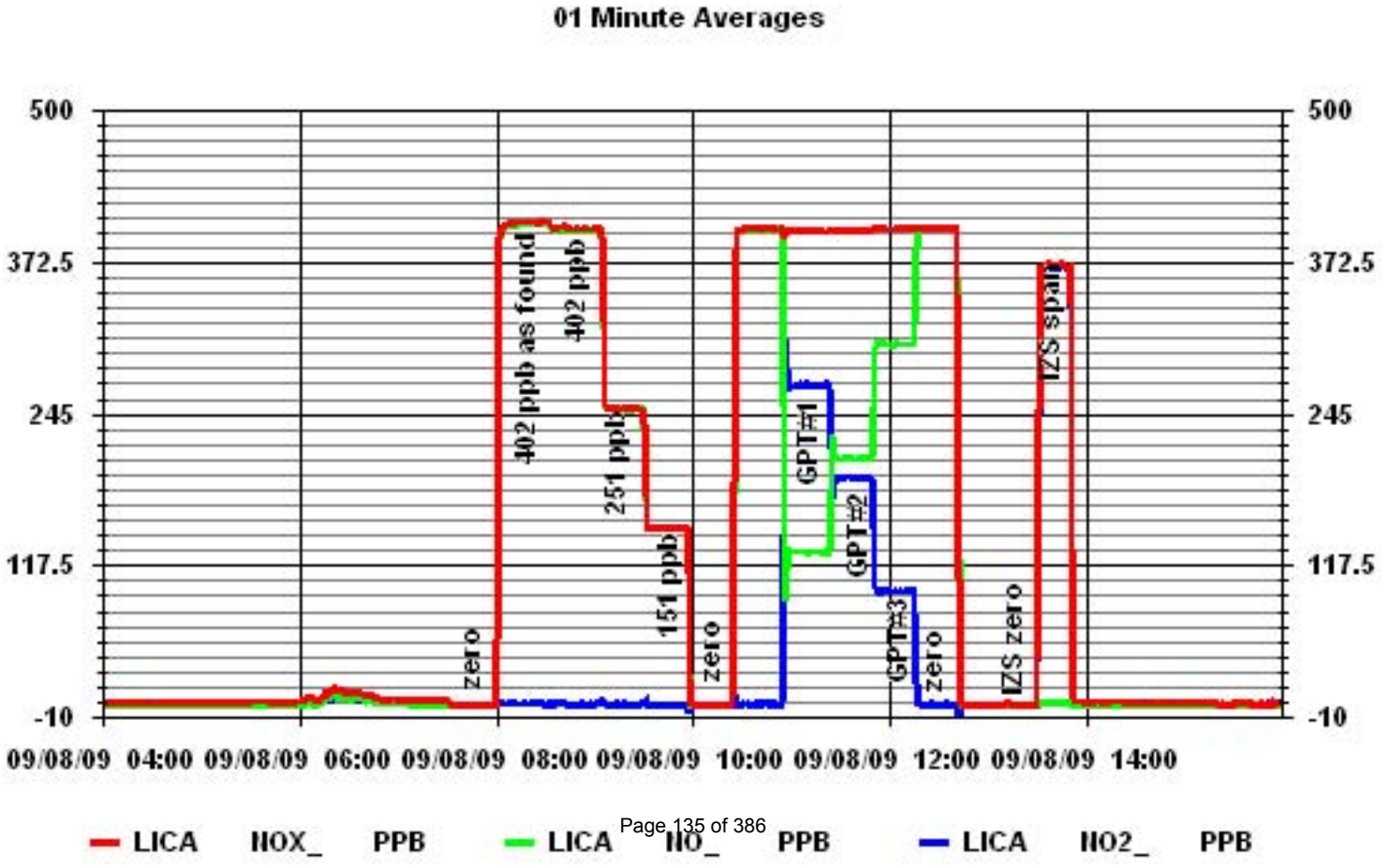
NO Calibration Curve

Calibration Date	September 8, 2009				
Company	**Lakeland Ind & Comm. Assoc.**				
Plant / Location	**LICA 1 - Cold Lake South**				
Start Time (MST)	7:35	End Time (MST)	13:55		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	N/A
150	149	1.0095
250	249	1.0057
400	400	1.0005

Correlation Coefficient	(≥ 0.995)	0.999980
Slope	(0.85 to 1.15)	1.005145
Intercept	(± 3% F.S.)	-3.4475




01 Minute Averages
500
372.5
245
117.5
-10
zero
402 ppb as found
402 ppb
251 ppb
151 ppb
zero
GPT#1
GPT#2
GPT#3
zero
IZS zero
IZS span
09/08/09 04:00
09/08/09 06:00
09/08/09 08:00
09/08/09 10:00
09/08/09 12:00
09/08/09 14:00
LICA NOX_ PPB
LICA NO_ PPB
LICA NO2_ PPB

Ozone

O_3 Calibration Report

Station Information

Calibration Date	September 8, 2009	Previous Calibration	August 4, 2009
Company	**Lakeland Industry & Community Association**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	13:10	End Time (MST)	17:00
Reason:		Monthly Calibration	
Barometric Pressure	705 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	28.4	Deg C	28.1	Deg C
O_3 Set Level	29%		29%	
Bench Lamp/O3 Lamp				
Sample Flow A/B	0.736 LPM	0.749 LPM	0.741 LPM	0.754 LPM
Offset / Slope	0.7	1.029	0.7	1.049

Calibration Data

Dilution Flow Rate	Ozone Set Point	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4999	0	0	0	N/A
5001	400	381	374	1.0187
5002	400	381	381	1.0000
5002	200	192	192	1.0000
5001	100	95	94	1.0106
5001	0	0	0	N/A
			Sum of Least Squares	N/A
			New Correction Factor	1.0000

	Before Calibration	After Calibration
Auto Zero	-0.1	-0.1
Auto Span	286.0	290.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		-1.8%

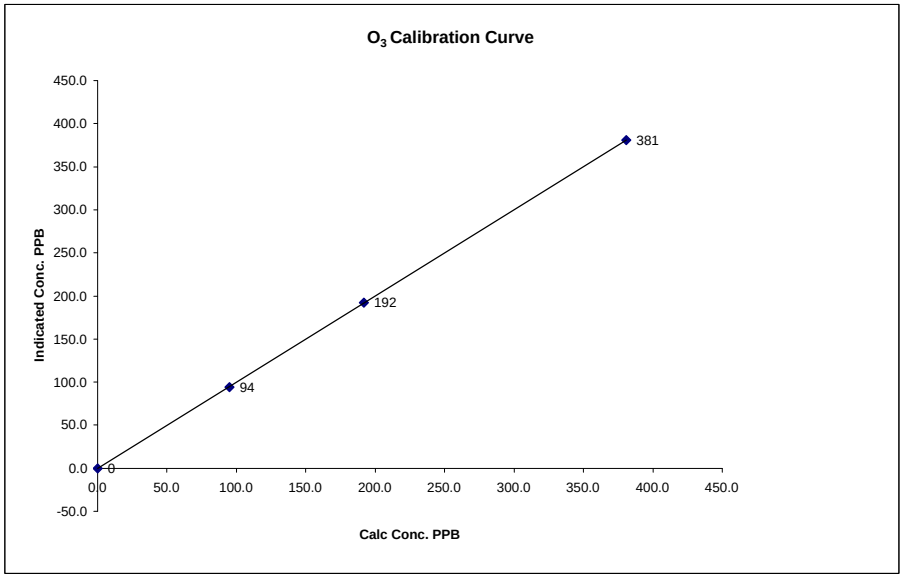
Calibration Performed by: Shea Beaton

O_3 Calibration Curve

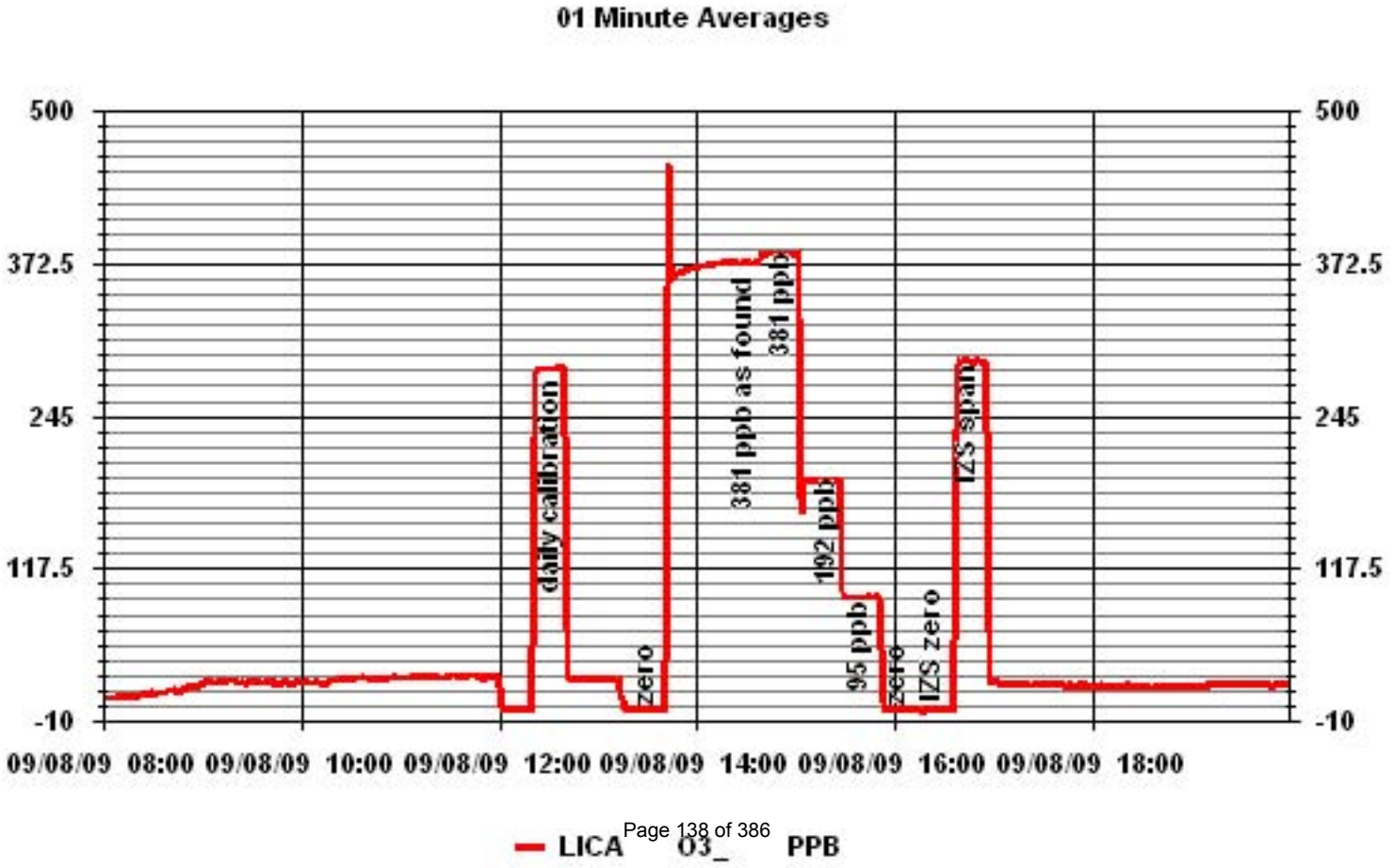
Calibration Date	September 8, 2009		
Company	**Lakeland Industry & Community Association**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	13:10	End Time (MST)	17:00

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
95	94	1.0106
192	192	1.0000
381	381	1.0000

Correlation Coefficient	(≥ 0.995)	0.999991
Slope	(0.85 to 1.15)	1.000906
Intercept	(± 3% F.S.)	-0.401257



Notes: Bench Temp=53.6C, O3 lamp temp=67.6C.


01 Minute Averages
500
372.5
245
117.5
-10
09/08/09 08:00
09/08/09 10:00
09/08/09 12:00
09/08/09 14:00
09/08/09 16:00
09/08/09 18:00
daily calibration
zero
381 ppb as found
381 ppb
192 ppb
95 ppb
zero
IZS zero
IZS span
LICA O3_ PPB

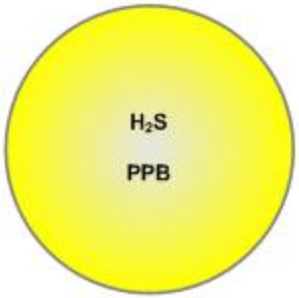
Passive Bubble Maps

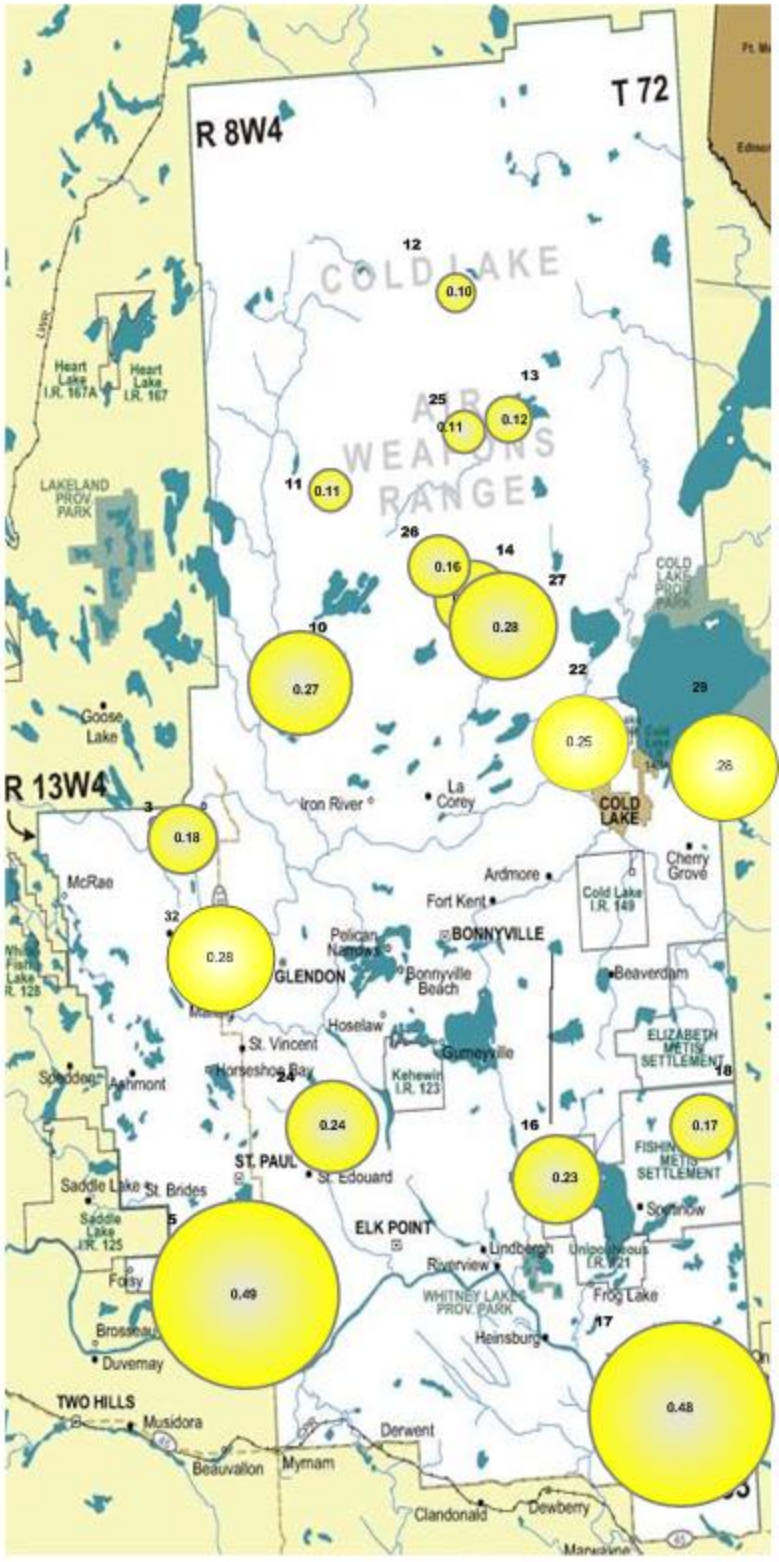
Lakeland Industry & Community Association
H_2S Passive Bubble Map

SEPTEMBER 2009

PASSIVE STATIONS

		DUPLICATE
3 – Therien	0.18 PPB	NA
5 – Lake Eliza	0.49 PPB	0.49 PPB
10 – La Corey	0.26 PPB	0.27 PPB
11 – Wolf Lake	0.11 PPB	NA
12 – Foster Creek	0.10 PPB	0.10 PPB
13 – Primrose	0.12 PPB	NA
14 – Maskwa	0.19 PPB	0.21 PPB
16 – Frog Lake	0.23 PPB	NA
17 – Clear Range	0.48 PPB	0.47 PPB
18 – Fishing Lake	0.17 PPB	NA
22 – Cold Lake South	0.25 PPB	NA
24 – Fort George	0.24 PPB	0.24 PPB
25 – Burnt Lake	0.11 PPB	NA
26 – Mahihkan	0.16 PPB	0.16 PPB
27 – Mahkeses	0.28 PPB	NA
29 – Cold Lake South 2	0.27 PPB	0.28 PPB
32 – St. Lina	0.28 PPB	NA





Summary

Minimum : 0.10 PPB – Foster Creek
Maximum: 0.49 PPB –Lake Eliza
Average: 0.23 PPB *Includes Duplicates

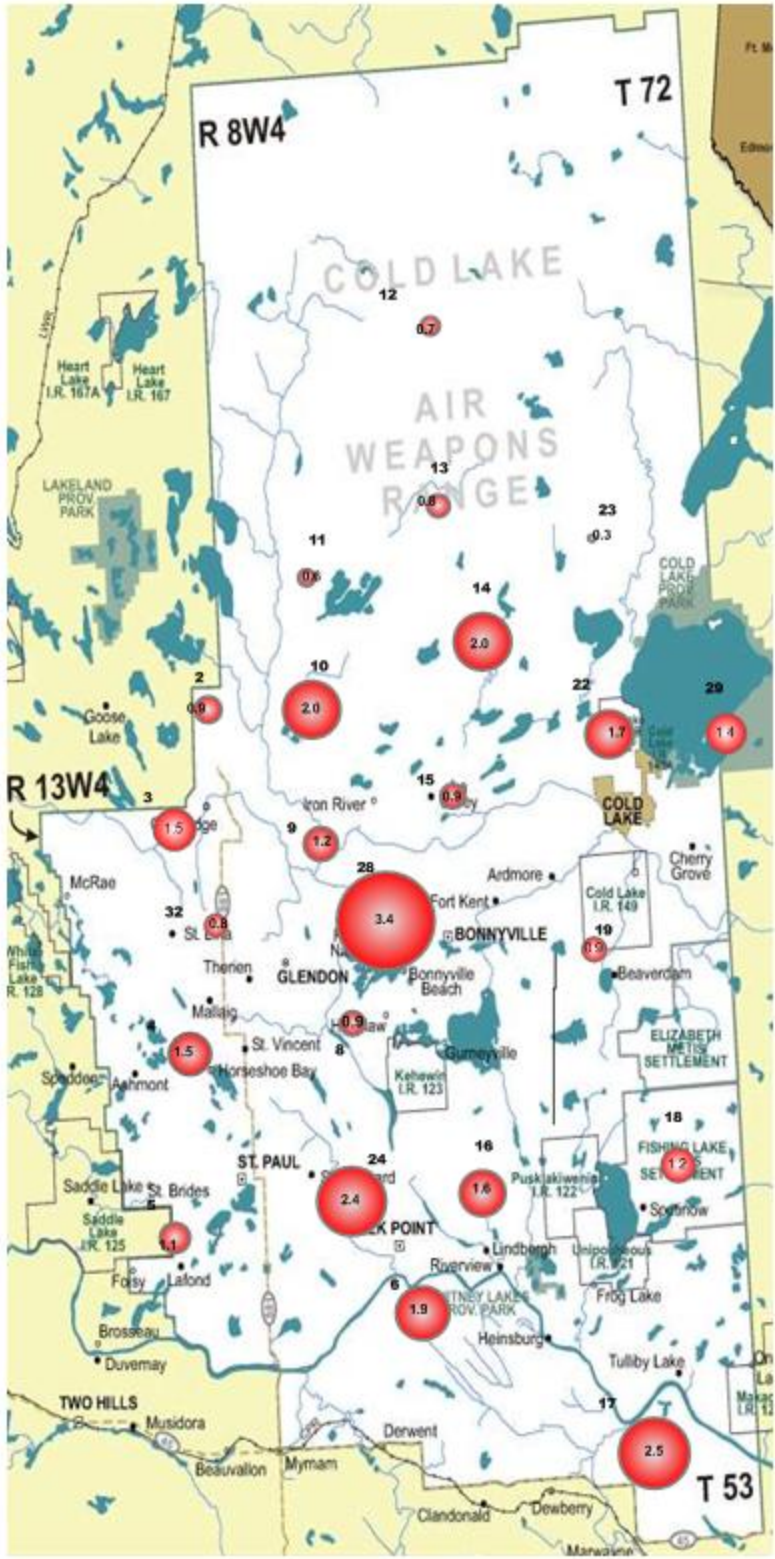
Lakeland Industry & Community Association
NO_2 Passive Bubble Map

SEPTEMBER 2009

PASSIVE STATIONS		DUPLICATE
2 – Sand River	0.9 PPB	NA
3 – Therien	1.4 PPB	1.5 PPB
4 – Flat Lake	1.5 PPB	NA
5 – Lake Eliza	1.0 PPB	1.1 PPB
6 – Telegraph Creek	1.9 PPB	NA
8 – Muriel-Kehewin	0.9 PPB	0.9 PPB
9 – Dupre	1.2 PPB	NA
10 – La Corey	1.9 PPB	2.0 PPB
11 – Wolf Lake	0.6 PPB	NA
12 – Foster Creek	0.7 PPB	0.6 PPB
13 – Primrose	0.8 PPB	NA
14 – Maskwa	2.0 PPB	2.0 PPB
15 – Ardmore	0.9 PPB	NA
16 – Frog Lake	1.4 PPB	1.7 PPB
17 – Clear Range	2.5 PPB	NA
18 – Fishing Lake	1.1 PPB	1.2 PPB
19 – Beaverdam	0.9 PPB	NA
22 – Cold Lake South	1.7 PPB	NA
23 – Medley-Martineau	0.3 PPB	0.2 PPB
24 – Fort George	2.4 PPB	NA
28 – Town of Bonnyville	3.1 PPB	3.6 PPB
29 – Cold Lake South 2	1.4 PPB	NA
32 – St. Lina	0.8 PPB	NA

Summary

Minimum : 0.3 PPB – Medley-Martineau
Maximum: 3.4 PPB – Town of Bonnyville
Average: 1.4 PPB *Includes Duplicates



Lakeland Industry & Community Association
O_3 Passive Bubble Map

SEPTEMBER 2009

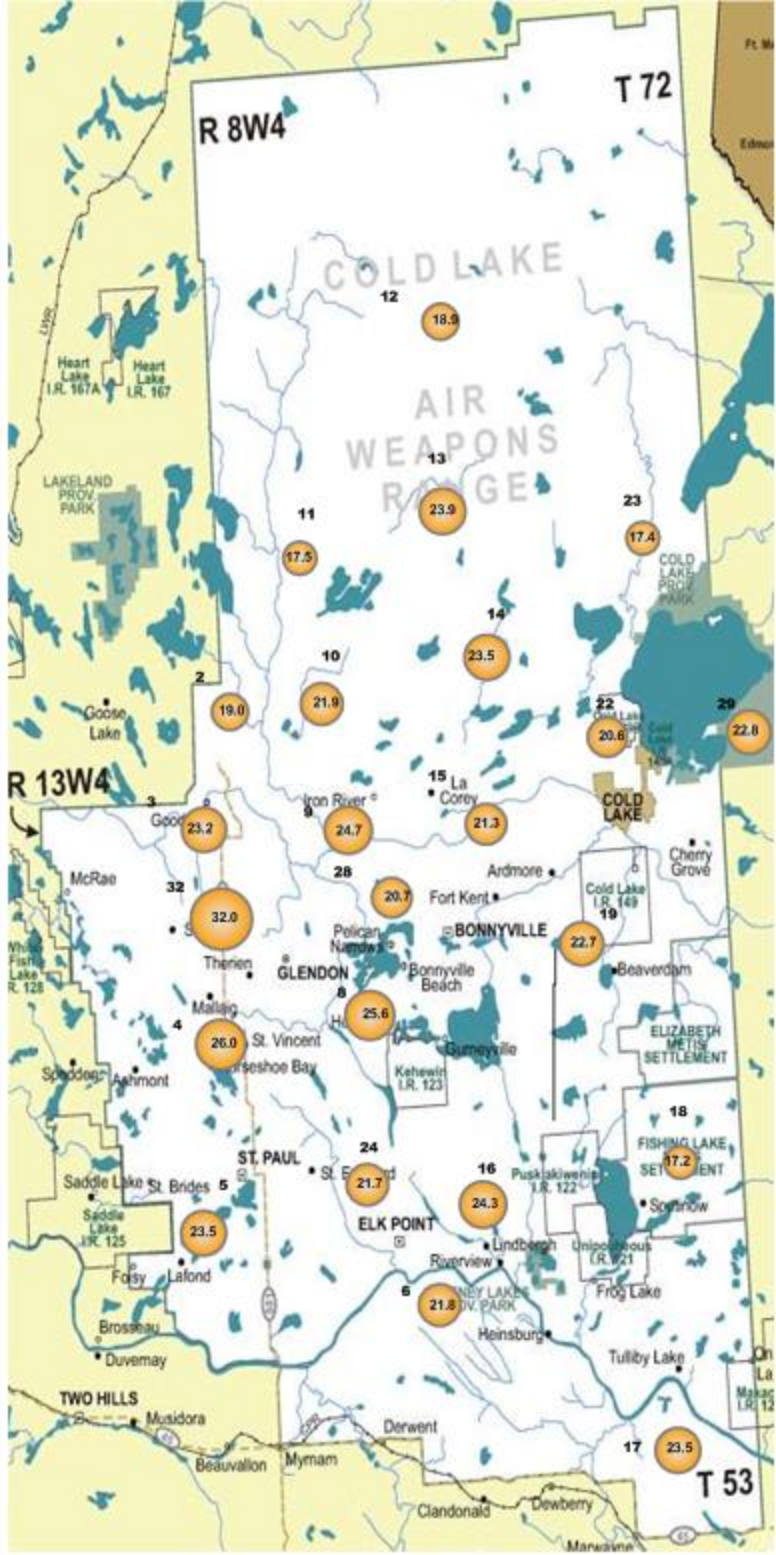
PASSIVE STATIONS

		DUPLICATE
2 – Sand River	19.0 PPB	NA
3 – Therien	21.3 PPB	25.0 PPB
4 – Flat Lake	26.0 PPB	NA
5 – Lake Eliza	23.9 PPB	23.0 PPB
6 – Telegraph Creek	21.8 PPB	NA
8 – Muriel-Kehewin	26.7 PPB	24.5 PPB
9 – Dupre	24.7 PPB	NA
10 – La Corey	24.2 PPB	19.5PPB
11 – Wolf Lake	17.5 PPB	NA
12 – Foster Creek	19.1 PPB	18.7 PPB
13 – Primrose	23.9 PPB	NA
14 – Maskwa	23.3 PPB	23.7 PPB
15 – Ardmore	21.3 PPB	NA
16 – Frog Lake	23.4 PPB	25.1 PPB
17 – Clear Range	23.5 PPB	NA
18 – Fishing Lake	16.7 PPB	17.6 PPB
19 – Beaverdam	22.7 PPB	NA
22 – Cold Lake South	20.6 PPB	NA
23 – Medley-Martineau	17.5 PPB	17.2 PPB
24 – Fort George	21.7 PPB	NA
28 – Town of Bonnyville	19.8 PPB	21.5 PPB
29 – Cold Lake South 2	22.8 PPB	NA
32 – St. Lina	32.0 PPB	NA

O_3 PPB

Summary

Minimum : 17.2 PPB – Fishing Lake
Maximum: 32.0 PPB –St. Lina
Average: 22.3 PPB *Includes Duplicates



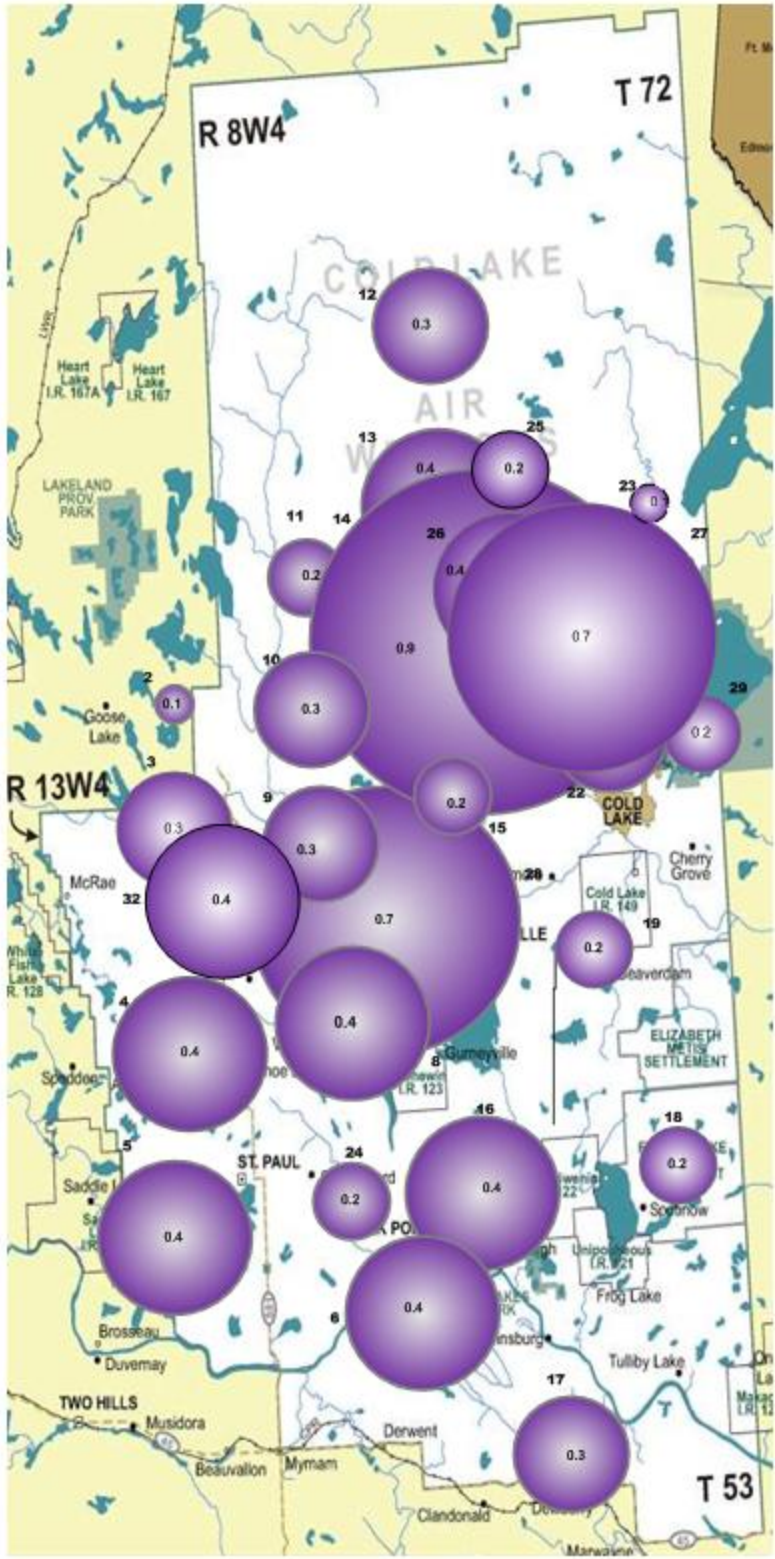
Lakeland Industry & Community Association
SO_2 Passive Bubble Map

SEPTEMBER 2009

PASSIVE STATIONS		DUPLICATE
2 – Sand River	0.1 PPB	NA
3 – Therien	0.3 PPB	0.2 PPB
4 – Flat Lake	0.4 PPB	NA
5 – Lake Eliza	0.4 PPB	0.4 PPB
6 – Telegraph Creek	0.4 PPB	NA
8 – Muriel-Kehewin	0.4 PPB	0.4 PPB
9 – Dupre	0.3 PPB	NA
10 – La Corey	0.2 PPB	0.3 PPB
11 – Wolf Lake	0.2 PPB	NA
12 – Foster Creek	0.2 PPB	0.3 PPB
13 – Primrose	0.4 PPB	NA
14 – Maskwa	0.8 PPB	0.9 PPB
15 – Ardmore	0.2 PPB	NA
16 – Frog Lake	0.3 PPB	0.4 PPB
17 – Clear Range	0.3 PPB	NA
18 – Fishing Lake	0.2 PPB	0.1 PPB
19 – Beaverdam	0.2 PPB	NA
22 – Cold Lake South	0.3 PPB	NA
23 – Medley-Martineau	< 0.1 PPB	0.1 PPB
24 – Fort George	0.2 PPB	NA
25 – Burnt Lake	0.2 PPB	0.2 PPB
26 – Mahikan	0.4 PPB	NA
27 – Mahkeses	0.7 PPB	0.6 PPB
28 – Town of Bonnyville	0.7 PPB	NA
29 – Cold Lake South 2	0.2 PPB	0.2 PPB
32 – St. Lina	0.4 PPB	NA

Summary

Minimum : < 0.1 PPB – Medley-Martineau
Maximum: 0.9 PPB –Maskwa
Average: 0.3 PPB *Includes Duplicates



Passive Field Data

Field Notes

ID	SAMPLER	START		END		NOTES
		DATE	TIME	DATE	TIME	
2	$SO_2/NO_2/O_3$	08/30/09	10:55	09/29/09	08:30	
2A (Dup)	NA	NA	NA	NA	NA	
3	$H_2S/SO_2/NO_2/O_3$	08/30/09	10:20	09/29/09	07:45	
3A (Dup)	$SO_2/NO_2/O_3$	08/30/09	10:20	09/29/09	07:45	
4	$SO_2/NO_2/O_3$	08/31/09	13:10	09/30/09	12:15	
4A (Dup)	NA	NA	NA	NA	NA	
5	$H_2S/SO_2/NO_2/O_3$	08/31/09	12:25	09/30/09	11:40	
5A (Dup)	$H_2S/SO_2/NO_2/O_3$	08/31/09	12:25	09/30/09	11:40	
6	$SO_2/NO_2/O_3$	08/31/09	10:50	09/30/09	10:10	
6A (Dup)	NA	NA	NA	NA	NA	
8	$SO_2/NO_2/O_3$	08/31/09	14:05	09/30/09	13:10	
8A (Dup)	$SO_2/NO_2/O_3$	08/31/09	14:05	09/30/09	13:10	
9	$SO_2/NO_2/O_3$	08/30/09	08:45	09/29/09	17:15	
9A (Dup)	NA	NA	NA	NA	NA	
10	$H_2S/SO_2/NO_2/O_3$	08/30/09	11:50	09/29/09	09:20	
10A (Dup)	$H_2S/SO_2/NO_2/O_3$	08/30/09	11:50	09/29/09	09:20	
11	$H_2S/SO_2/NO_2/O_3$	08/30/09	12:25	09/29/09	09:55	
11A (Dup)	NA	NA	NA	NA	NA	
12	$H_2S/SO_2/NO_2/O_3$	08/30/09	13:45	09/29/09	11:10	
12A (Dup)	$H_2S/SO_2/NO_2/O_3$	08/30/09	13:45	09/29/09	11:10	
13	$H_2S/SO_2/NO_2/O_3$	08/30/09	15:10	09/29/09	12:40	
13A (Dup)	NA	NA	NA	NA	NA	
14	$H_2S/SO_2/NO_2/O_3$	08/30/09	16:05	09/29/09	13:30	
14A (Dup)	$H_2S/SO_2/NO_2/O_3$	08/30/09	16:05	09/29/09	13:30	
15	$SO_2/NO_2/O_3$	08/30/09	07:40	09/29/09	16:40	
15A (Dup)	NA	NA	NA	NA	NA	
16	$H_2S/SO_2/NO_2/O_3$	08/31/09	09:10	09/30/09	08:30	
16A (Dup)	$SO_2/NO_2/O_3$	08/31/09	09:10	09/30/09	08:30	

ID	SAMPLER	START		END		NOTES
		DATE	TIME	DATE	TIME	
17	$H_2S/SO_2/NO_2/O_3$	08/31/09	10:00	09/30/09	09:15	
17A (Dup)	H_2S	08/31/09	10:00	09/30/09	09:15	
18	$H_2S/SO_2/NO_2/O_3$	08/31/09	08:20	09/30/09	07:45	
18A (Dup)	$SO_2/NO_2/O_3$	08/31/09	08:20	09/30/09	07:45	
19	$SO_2/NO_2/O_3$	08/31/09	07:15	09/30/09	06:45	
19A (Dup)	NA	NA	NA	NA	NA	
22	$H_2S/SO_2/NO_2/O_3$	08/30/09	07:05	09/29/09	15:45	
22A (Dup)	NA	NA	NA	NA	NA	
23	$SO_2/NO_2/O_3$	08/30/09	17:35	09/29/09	14:50	
23A (Dup)	$SO_2/NO_2/O_3$	08/30/09	17:35	09/29/09	14:50	
24	$H_2S/SO_2/NO_2/O_3$	08/31/09	11:30	09/30/09	10:55	
24A (Dup)	H_2S	08/31/09	11:30	09/30/09	10:55	
25	H_2S/SO_2	08/30/09	14:55	09/29/09	12:20	
25A (Dup)	SO_2	08/30/09	14:55	09/29/09	12:20	
26	H_2S/SO_2	08/30/09	15:45	09/29/09	13:15	
26A (Dup)	H_2S	08/30/09	15:45	09/29/09	13:15	
27	H_2S/SO_2	08/31/09	18:20	09/29/09	13:50	
27A (Dup)	SO_2	08/31/09	18:20	09/29/09	13:50	
28	$SO_2/NO_2/O_3$	08/30/09	08:15	09/30/09	14:00	
28A (Dup)	NO_2/O_3	08/30/09	08:15	09/30/09	14:00	
29	$H_2S/SO_2/NO_2/O_3$	08/30/09	06:45	09/29/09	15:55	
29A (Dup)	H_2S/SO_2	08/30/09	06:45	09/29/09	15:55	
32	$H_2S/SO_2/NO_2/O_3$	08/30/09	09:45	09/29/09	07:16	
32A(Dup)	$H_2S/SO_2/NO_2/O_3$	NA	NA	NA	NA	

Passive Network Laboratory Analysis

Your Project #: 2009/08/30 - 2009/09/29
Site:LICA

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

Report Date: 2009/10/21

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A954939
Received: 2009/10/02, 14:58

Sample Matrix: Air
Samples Received: 42

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis (1)	25	2009/10/21	2009/10/21		EDM SOP-0320
NO2 Passive Analysis (1)	33	2009/10/21	2009/10/21		EDM SOP-0318
O3 Passive Analysis (1)	33	2009/10/21	2009/10/21		EDM SOP-0317
SO2 Passive Analysis (1)	38	2009/10/20	2009/10/21		EDM SOP-0319

* 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. SCC and CALA have approved this reporting process and electronic report format.

For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 1

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		R05718	R05722	R05723	R05724		
Sampling Date		2009/08/30 10:53	2009/08/30 10:20	2009/08/30 10:20	2009/08/31 13:10		
	Units	**2**	**3**	**3A (DUP)**	**4**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb		0.18			0.02	3504986
Calculated NO2	ppb	0.9	1.4	1.5	1.5	0.1	3504726
Calculated O3	ppb	19.0	21.3	25.0	26.0	0.1	3506005
Calculated SO2	ppb	0.1	0.3	0.2	0.4	0.1	3502171

RDL = Reportable Detection Limit

Maxxam ID		R05726	R05727	R05728	R05729		
Sampling Date		2009/08/31 12:25	2009/08/31 12:25	2009/08/31 10:50	2009/08/31 14:05		
	Units	**5**	**5A (DUP)**	**6**	**8**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.49	0.49			0.02	3504986
Calculated NO2	ppb	1.0	1.1	1.9	0.9	0.1	3504726
Calculated O3	ppb	23.9	23.0	21.8	26.7	0.1	3506005
Calculated SO2	ppb	0.4	0.4	0.4	0.3	0.1	3502171

RDL = Reportable Detection Limit

Maxxam ID		R05730	R05731	R05732	R05733		
Sampling Date		2009/08/31 14:05	2009/08/30 08:45	2009/08/30 11:50	2009/08/30 11:50		
	Units	**8A (DUP)**	**9**	**10**	**10A (DUP)**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb			0.26	0.27	0.02	3504986
Calculated NO2	ppb	0.9	1.2	1.9	2.0	0.1	3504726
Calculated O3	ppb	24.5	24.7	24.2	19.5	0.1	3506005
Calculated SO2	ppb	0.4	0.3	0.2	0.3	0.1	3502171

RDL = Reportable Detection Limit

Maxxam Job #: A954939
Report Date: 2009/10/21

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Client Project #: 2009/08/30 - 2009/09/29
Site Reference: LICA
Sampler Initials: SB

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		R05734	R05735	R05736	R05737		
Sampling Date		2009/08/30 12:25	2009/08/30 13:45	2009/08/30 13:45	2009/08/30 15:10		
	Units	**11**	**12**	**12A (DUP)**	**13**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.11	0.10	0.10	0.12	0.02	3504986
Calculated NO2	ppb	0.6	0.7	0.6	0.8	0.1	3504735
Calculated O3	ppb	17.5	19.1	18.7	23.9	0.1	3506005
Calculated SO2	ppb	0.2	0.2	0.3	0.4	0.1	3502171

RDL = Reportable Detection Limit

Maxxam ID		R05738	R05739		R05740		
Sampling Date		2009/08/30 16:05	2009/08/30 16:05		2009/08/30 07:40		
	Units	**14**	**14A (DUP)**	**QC Batch**	**15**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.19	0.21	3504986		0.02	3504986
Calculated NO2	ppb	2.0	2.0	3504735	0.9	0.1	3504735
Calculated O3	ppb	23.3	23.7	3506005	21.3	0.1	3506005
Calculated SO2	ppb	0.8	0.9	3502171	0.2	0.1	3502184

RDL = Reportable Detection Limit

Maxxam ID		R05741		R05742	R05743		
Sampling Date		2009/08/31 09:10		2009/08/31 09:10	2009/08/31 10:00		
	Units	**16**	**QC Batch**	**16A (DUP)**	**17**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.23	3504986		0.48	0.02	3504986
Calculated NO2	ppb	1.4	3504735	1.7	2.5	0.1	3504735
Calculated O3	ppb	23.4	3506005	25.1	23.5	0.1	3506009
Calculated SO2	ppb	0.3	3502184	0.4	0.3	0.1	3502184

RDL = Reportable Detection Limit

Maxxam Job #: A954939
Report Date: 2009/10/21

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Client Project #: 2009/08/30 - 2009/09/29
Site Reference: LICA
Sampler Initials: SB

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		R05744	R05745	R05746	R05747		
Sampling Date		2009/08/31 10:00	2009/08/31 08:20	2009/08/31 08:20	2009/08/31 07:15		
	Units	**17A (DUP)**	**18**	**18A (DUP)**	**19**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.47	0.17			0.02	3504986
Calculated NO2	ppb		1.1	1.2	0.9	0.1	3504735
Calculated O3	ppb		16.7	17.6	22.7	0.1	3506009
Calculated SO2	ppb		0.2	0.1	0.2	0.1	3502184

RDL = Reportable Detection Limit

Maxxam ID		R05749	R05750	R05751	R05752		
Sampling Date		2009/08/30 07:05	2009/08/30 17:35	2009/08/30 17:35	2009/08/31 11:30		
	Units	**22**	**23**	**23A (DUP)**	**24**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.25			0.24	0.02	3504986
Calculated NO2	ppb	1.7	0.3	0.2	2.4	0.1	3504735
Calculated O3	ppb	20.6	17.5	17.2	21.7	0.1	3506009
Calculated SO2	ppb	0.3	<0.1	0.1	0.2	0.1	3502184

RDL = Reportable Detection Limit

Maxxam ID		R05753	R05754	R05755	R05756		
Sampling Date		2009/08/31 11:30	2009/08/30 14:55	2009/08/30 14:55	2009/08/30 15:45		
	Units	**24A (DUP)**	**25**	**25A (DUP)**	**26**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.24	0.11		0.16	0.02	3504986
Calculated SO2	ppb		0.2	0.2	0.4	0.1	3502184

RDL = Reportable Detection Limit

Maxxam Job #: A954939
Report Date: 2009/10/21

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Client Project #: 2009/08/30 - 2009/09/29
Site Reference: LICA
Sampler Initials: SB

RESULTS OF CHEMICAL ANALYSES OF AIR

Maxxam ID		R05757	R05758	R05759	R05760		
Sampling Date		2009/08/30 15:45	2009/08/31 18:20	2009/08/31 18:20	2009/08/30 08:15		
	Units	**26A (DUP)**	**27**	**27A (DUP)**	**28**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb	0.16	0.28			0.02	3504986
Calculated NO2	ppb				3.1	0.1	3504735
Calculated O3	ppb				19.8	0.1	3506009
Calculated SO2	ppb		0.7	0.6	0.7	0.1	3502184

RDL = Reportable Detection Limit

Maxxam ID		R05761	R05762	R05763	R05764		
Sampling Date		2009/08/30 08:15	2009/08/30 06:45	2009/08/30 06:45	2009/08/30 09:45		
	Units	**28A (DUP)**	**29**	**29A (DUP)**	**32**	**RDL**	**QC Batch**
Passive Monitoring							
Calculated H2S	ppb		0.27	0.28	0.28	0.02	3504986
Calculated NO2	ppb	3.6	1.4		0.8	0.1	3504735
Calculated O3	ppb	21.5	22.8		32.0	0.1	3506009
Calculated SO2	ppb		0.2	0.2	0.4	0.1	3502184

RDL = Reportable Detection Limit

General Comments

Results relate only to the items tested.

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Attention: MICHAEL BISAGA
Client Project #: 2009/08/30 - 2009/09/29
P.O. #:
Site Reference: LICA

Quality Assurance Report

Maxxam Job Number: PA954939

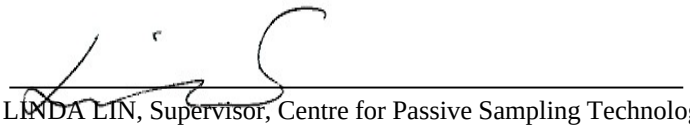
QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
3502171	DF4	Calibration Check	Calculated SO2	2009/10/20		97	%	95 - 105
		Spiked Blank	Calculated SO2	2009/10/20		99	%	N/A
		Method Blank	Calculated SO2	2009/10/20	<0.1		ppb	
3502184	DF4	Calibration Check	Calculated SO2	2009/10/20		100	%	95 - 105
		Spiked Blank	Calculated SO2	2009/10/20		100	%	N/A
		Method Blank	Calculated SO2	2009/10/20	<0.1		ppb	
3504726	DF4	Calibration Check	Calculated NO2	2009/10/21		96	%	76 - 118
		Spiked Blank	Calculated NO2	2009/10/21		99	%	N/A
		Method Blank	Calculated NO2	2009/10/21	<0.1		ppb	
3504735	DF4	Calibration Check	Calculated NO2	2009/10/21		103	%	76 - 118
		Spiked Blank	Calculated NO2	2009/10/21		96	%	N/A
		Method Blank	Calculated NO2	2009/10/21	<0.1		ppb	
3504986	TM5	Calibration Check	Calculated H2S	2009/10/21		102	%	80 - 120
		Spiked Blank	Calculated H2S	2009/10/21		99	%	N/A
3506005	OZ	Calibration Check	Calculated O3	2009/10/21		100	%	91 - 107
		Spiked Blank	Calculated O3	2009/10/21		98	%	N/A
		Method Blank	Calculated O3	2009/10/21	<0.1		ppb	
3506009	OZ	Calibration Check	Calculated O3	2009/10/21		97	%	91 - 107
		Spiked Blank	Calculated O3	2009/10/21		101	%	N/A
		Method Blank	Calculated O3	2009/10/21	<0.1		ppb	

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 #: A954939

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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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.

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 / CLS / May 25, 09

Sampler s/n: 6167
Canister ID: 7860 (Maxxam Supplied)
Canister Installation Date/Time: May 22, 09 / 07:50
Canister Removal Date/Time: May 26, 09 / 14:35

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
25-May-09	05/25/2009 0:00	05/26/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / May 31, 09

Sampler s/n: 6167
Canister ID: 7862 (Maxxam Supplied)
Canister Installation Date/Time: May 28, 09 / 14:45
Canister Removal Date/Time: June 1, 09 / 08:15

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
31-May-09	05/31/2009 0:00	06/01/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18

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.

Technician Signiture: Shea Beaton

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 / CLS / June 12, 09

Sampler s/n: 6167
Canister ID: S2023 (Maxxam Supplied)
Canister Installation Date/Time: June 10, 09 / 07:35
Canister Removal Date/Time: June 17, 09 / 13:25

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
12-Jun-09	06/12/2009 0:00	06/13/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / June 18, 09

Sampler s/n: 6167
Canister ID: S2210 (Maxxam Supplied)
Canister Installation Date/Time: June 17, 09 / 13:30
Canister Removal Date/Time: June 22, 09 / 14:30

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
18-Jun-09	06/18/2009 0:00	06/19/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18

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.

Technician Signiture: Shea Beaton

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 / CLS / June 24, 09

Sampler s/n: 6167
Canister ID: T2400 (Maxxam Supplied)
Canister Installation Date/Time: June 22, 09 / 14:40
Canister Removal Date/Time: June 29, 09 / 11:45

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
24-Jun-09	06/24/2009 0:00	06/25/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / June 30, 09

Sampler s/n: 6167
Canister ID: S2297 (Maxxam Supplied)
Canister Installation Date/Time: June 29, 09 @ 11:50
Canister Removal Date/Time: July 4, 09 @ 17:00

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
30-Jun-09	06/30/2009 0:00	07/01/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	566	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / June 6, 09

Sampler s/n: 6167
Canister ID: 7786 (Maxxam Supplied)
Canister Installation Date/Time: June 4, 09 / 10:20
Canister Removal Date/Time: June 8, 09 / 08:20

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
06-Jun-09	06/06/2009 0:00	06/07/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / July 12, 09

Sampler s/n: 6167
Canister ID: 3674 (Maxxam Supplied)
Canister Installation Date/Time: July 9, 09 @ 08:58
Canister Removal Date/Time: July 12, 09 @ 09:30

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
12-Jul-09	07/12/2009 0:00	07/13/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / July 18, 09

Sampler s/n: 6167
Canister ID: T21648 (Maxxam Supplied)
Canister Installation Date/Time: July 14, 09 @ 09:55
Canister Removal Date/Time: July 21, 09 @ 08:00

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
18-Jul-09	07/18/2009 0:00	07/19/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / July 24, 09

Sampler s/n: 6167
Canister ID: 2619 (Maxxam Supplied)
Canister Installation Date/Time: July 21, 09 @ 08:10
Canister Removal Date/Time: July 28, 09@ 07:55

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
24-Jul-09	07/24/2009 0:00	07/25/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	19

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.

Technician Signiture: Shea Beaton

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 / CLS / July 30, 09

Sampler s/n: 6167
Canister ID: 2745 (Maxxam Supplied)
Canister Installation Date/Time: July 28, 09 @ 08:00
Canister Removal Date/Time: Aug 4, 09 @ 10:20

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
30-Jul-09	07/30/2009 0:00	07/31/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	19

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.

Technician Signiture: Shea Beaton

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 / CLS / July 6, 09

Sampler s/n: 6167
Canister ID: T2380 (Maxxam Supplied)
Canister Installation Date/Time: July 4, 09 @ 1705
Canister Removal Date/Time: July 9, 09 @ 08:55

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
06-Jul-09	07/06/2009 0:00	07/07/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	566	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / Aug 11, 09

Sampler s/n: 6167
Canister ID: 7807 (Maxxam Supplied)
Canister Installation Date/Time: Aug 10, 09 @ 20:10
Canister Removal Date/Time: Aug 14, 09 @ 08:55

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
11-Aug-09	08/11/2009 0:00	08/12/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / Aug 17, 09

Sampler s/n: 6167
Canister ID: 7809 (Maxxam Supplied)
Canister Installation Date/Time: Aug 16, 09 @ 12:45 mst
Canister Removal Date/Time: Aug 18, 09 @ 10:55 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
17-Aug-09	08/17/2009 0:00	08/18/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / Aug 23, 09

Sampler s/n: 6167
Canister ID: 7783 (Maxxam Supplied)
Canister Installation Date/Time: Aug 21, 09 @ 13:20 mst
Canister Removal Date/Time: Aug 24, 09 @ 07:50 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
23-Aug-09	08/23/2009 0:00	08/24/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / Aug 29, 09

Sampler s/n: 6167
Canister ID: 7854 (Maxxam Supplied)
Canister Installation Date/Time: Aug 28, 09 @ 10:35 mst
Canister Removal Date/Time: Aug 30, 09 @ 05:25 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
29-Aug-09	08/29/2009 0:00	08/30/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / CLS / Aug 5, 09

Sampler s/n: 6167
Canister ID: T2419 (Maxxam Supplied)
Canister Installation Date/Time: Aug 4, 09 @ 10:20
Canister Removal Date/Time: Aug 6, 09 @ 05:10

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
05-Aug-09	08/05/2009 0:00	08/06/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / Sept 10, 09

Sampler s/n: 6167
Canister ID: 7813 (Maxxam Supplied)
Canister Installation Date/Time: Sept 9, 09 @ 15:50 mst
Canister Removal Date/Time: Sept 12, 09 @ 06:45 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
10-Sep-09	09/10/2009 0:00	09/11/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / Sept 16, 09

Sampler s/n: 6167
Canister ID: 7784 (Maxxam Supplied)
Canister Installation Date/Time: Sept 15, 09 @ 05:30 mst
Canister Removal Date/Time: Sept 17, 09 @ 20:30 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
16-Sep-09	09/16/2009 0:00	09/17/2009 0:00	22.99

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	17

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.

- Power failure during sampling period

Technician Signiture: Shea Beaton

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 / Sept 22, 09

Sampler s/n: 6167
Canister ID: 7798 (Maxxam Supplied)
Canister Installation Date/Time: Sept 21, 09 @ 15:15 mst
Canister Removal Date/Time: Sept 23, 09 @ 0545 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
22-Sep-09	09/22/2009 0:00	09/23/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18.5

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.

Technician Signiture: Shea Beaton

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 / Sept 28, 09

Sampler s/n: 6167
Canister ID: 7814 (Maxxam Supplied)
Canister Installation Date/Time: Sept 25, 09 @ 15:05 mst
Canister Removal Date/Time: Sept 29,09 @ 08:15 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
28-Sep-09	09/28/2009 0:00	09/29/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	598	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.
- A flow check/calibration was performed prior to this sampling run

Technician Signiture: Shea Beaton

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 / Sept 4, 09

Sampler s/n: 6167
Canister ID: 7908 (Maxxam Supplied)
Canister Installation Date/Time: Sept 3, 09 @ 13:40 mst
Canister Removal Date/Time: Sept 8, 09 @ 09:30 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
04-Sep-09	09/04/2009 0:00	09/05/2009 0:00	24.00

Flow Settings		
Meter Reading (sccm)	Pot Set Pt.	Pump Pressure Setting (psig)
10.0	569	25

Canister Information	
Initial Canister Vacuum (inHg)	Final Canister Pressure (psig)
-28	18

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.

Technician Signiture: Shea Beaton

Your Project #: LICA-1
Site: COLD LAKE SOUTH
Your C.O.C. #: 1229

Attention: Gail Nielsen
Lakeland Industry and Community Association
5107 - 50th Street
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/07/13

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A983245
Received: 2009/07/06, 16:12

Sample Matrix: AIR
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2009/07/07	BRL SOP-00304	EPA TO-15
Canister Pressure (TO-15)	2	N/A	2009/07/08	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2009/07/07	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2009/07/08	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. SCC and CALA have approved this reporting process and electronic report format.

Your Project #: LICA-1
Site: COLD LAKE SOUTH
Your C.O.C. #: 1229

Attention: Gail Nielsen
Lakeland Industry and Community Association
5107 - 50th Street
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/07/13

CERTIFICATE OF ANALYSIS

"signatories", as per section.

Total cover pages: 2

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

Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

RESULTS OF ANALYSES OF AIR

Maxxam ID		CZ3946	CZ3947		
Sampling Date		2009/05/25 00:00	2009/05/31 00:00		
COC Number		1229	1229		
	Units	**LICA/CLS/MAY25,09**	**LICA/CLS/MAY31,09**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	18	18	N/A	1871178

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		CZ3948	CZ3949		
Sampling Date		2009/06/06 00:00	2009/06/12 00:00		
COC Number		1229	1229		
	Units	**LICA/CLS/JUNE06,09**	**LICA/CLS/JUNE12,09**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	18	18	N/A	1872523

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

Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3946				
Sampling Date		2009/05/25 00:00				
COC Number		1229				
	Units	**LICA/CLS/MAY25,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1870882
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1870882
Propene	ppbv	1.46	0.30	2.50	0.516	1870882
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1870882
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1870882
Dichlorodifluoromethane (FREON 12)	ppbv	0.69	0.20	3.42	0.989	1870882
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1870882
Chloromethane	ppbv	0.53	0.30	1.10	0.620	1870882
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1870882
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1870882
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1870882
Trichlorofluoromethane (FREON 11)	ppbv	0.31	0.20	1.72	1.12	1870882
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1870882
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1870882
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1870882
2-Propanone	ppbv	<0.80	0.80	<1.90	1.90	1870882
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1870882
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1870882
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1870882
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1870882
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1870882
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1870882
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1870882
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1870882
Methylene Chloride(Dichloromethane)	ppbv	0.41	0.30	1.44	1.04	1870882
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1870882
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1870882
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1870882
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1870882
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1870882
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1870882
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1870882

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

Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3946				
Sampling Date		2009/05/25 00:00				
COC Number		1229				
	Units	**LICA/CLS/MAY25,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1870882
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1870882
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1870882
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1870882
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1870882
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1870882
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1870882
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1870882
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1870882
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1870882
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1870882
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1870882
Toluene	ppbv	0.38	0.20	1.42	0.753	1870882
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1870882
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1870882
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1870882
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1870882
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1870882
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1870882
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1870882
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1870882
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1870882
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1870882
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1870882
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1870882
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1870882
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1870882
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1870882
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1870882
Surrogate Recovery (%)						
Bromochloromethane	%	77		N/A	N/A	1870882

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

Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3946				
Sampling Date		2009/05/25 00:00				
COC Number		1229				
	Units	**LICA/CLS/MAY25,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	73		N/A	N/A	1870882
Difluorobenzene	%	77		N/A	N/A	1870882

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

Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3947				
Sampling Date		2009/05/31 00:00				
COC Number		1229				
	Units	**LICA/CLS/MAY31,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1870882
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1870882
Propene	ppbv	1.67	0.30	2.87	0.516	1870882
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1870882
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1870882
Dichlorodifluoromethane (FREON 12)	ppbv	0.69	0.20	3.39	0.989	1870882
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1870882
Chloromethane	ppbv	0.53	0.30	1.09	0.620	1870882
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1870882
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1870882
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1870882
Trichlorofluoromethane (FREON 11)	ppbv	0.32	0.20	1.78	1.12	1870882
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1870882
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1870882
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1870882
2-Propanone	ppbv	<0.80	0.80	<1.90	1.90	1870882
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1870882
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1870882
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1870882
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1870882
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1870882
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1870882
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1870882
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1870882
Methylene Chloride(Dichloromethane)	ppbv	0.42	0.30	1.45	1.04	1870882
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1870882
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1870882
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1870882
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1870882
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1870882
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1870882
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1870882

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3947				
Sampling Date		2009/05/31 00:00				
COC Number		1229				
	Units	**LICA/CLS/MAY31,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1870882
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1870882
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1870882
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1870882
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1870882
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1870882
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1870882
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1870882
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1870882
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1870882
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1870882
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1870882
Toluene	ppbv	0.35	0.20	1.30	0.753	1870882
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1870882
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1870882
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1870882
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1870882
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1870882
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1870882
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1870882
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1870882
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1870882
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1870882
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1870882
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1870882
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1870882
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1870882
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1870882
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1870882
Surrogate Recovery (%)						
Bromochloromethane	%	77		N/A	N/A	1870882

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

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3947				
Sampling Date		2009/05/31 00:00				
COC Number		1229				
	Units	**LICA/CLS/MAY31,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	73		N/A	N/A	1870882
Difluorobenzene	%	77		N/A	N/A	1870882

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

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3948				
Sampling Date		2009/06/06 00:00				
COC Number		1229				
	Units	**LICA/CLS/JUNE06,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1872527
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1872527
Propene	ppbv	1.64	0.30	2.83	0.516	1872527
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1872527
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1872527
Dichlorodifluoromethane (FREON 12)	ppbv	0.66	0.20	3.25	0.989	1872527
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1872527
Chloromethane	ppbv	0.52	0.30	1.08	0.620	1872527
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1872527
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1872527
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1872527
Trichlorofluoromethane (FREON 11)	ppbv	0.31	0.20	1.74	1.12	1872527
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1872527
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1872527
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1872527
2-Propanone	ppbv	<0.80	0.80	<1.90	1.90	1872527
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1872527
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1872527
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1872527
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1872527
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1872527
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1872527
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1872527
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1872527
Methylene Chloride(Dichloromethane)	ppbv	0.60	0.30	2.07	1.04	1872527
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1872527
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1872527
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1872527
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1872527
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1872527
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1872527
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1872527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3948				
Sampling Date		2009/06/06 00:00				
COC Number		1229				
	Units	**LICA/CLS/JUNE06,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1872527
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1872527
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1872527
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1872527
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1872527
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1872527
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1872527
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1872527
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1872527
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1872527
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1872527
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1872527
Toluene	ppbv	0.32	0.20	1.22	0.753	1872527
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1872527
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1872527
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1872527
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1872527
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1872527
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1872527
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1872527
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1872527
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1872527
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1872527
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1872527
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1872527
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1872527
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1872527
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1872527
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1872527
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1872527
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1872527
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1872527
Surrogate Recovery (%)						
Bromochloromethane	%	81		N/A	N/A	1872527

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

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3948				
Sampling Date		2009/06/06 00:00				
COC Number		1229				
	Units	**LICA/CLS/JUNE06,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	77		N/A	N/A	1872527
Difluorobenzene	%	82		N/A	N/A	1872527

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

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3949				
Sampling Date		2009/06/12 00:00				
COC Number		1229				
	Units	**LICA/CLS/JUNE12,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1872527
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1872527
Propene	ppbv	1.78	0.30	3.07	0.516	1872527
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1872527
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1872527
Dichlorodifluoromethane (FREON 12)	ppbv	0.69	0.20	3.40	0.989	1872527
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1872527
Chloromethane	ppbv	0.54	0.30	1.11	0.620	1872527
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1872527
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1872527
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1872527
Trichlorofluoromethane (FREON 11)	ppbv	0.31	0.20	1.71	1.12	1872527
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1872527
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1872527
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1872527
2-Propanone	ppbv	<0.80	0.80	<1.90	1.90	1872527
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1872527
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1872527
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1872527
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1872527
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1872527
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1872527
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1872527
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1872527
Methylene Chloride(Dichloromethane)	ppbv	0.42	0.30	1.46	1.04	1872527
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1872527
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1872527
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1872527
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1872527
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1872527
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1872527
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1872527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3949				
Sampling Date		2009/06/12 00:00				
COC Number		1229				
	Units	**LICA/CLS/JUNE12,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1872527
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1872527
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1872527
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1872527
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1872527
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1872527
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1872527
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1872527
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1872527
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1872527
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1872527
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1872527
Toluene	ppbv	0.39	0.20	1.47	0.753	1872527
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1872527
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1872527
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1872527
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1872527
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1872527
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1872527
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1872527
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1872527
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1872527
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1872527
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1872527
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1872527
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1872527
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1872527
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1872527
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1872527
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1872527
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1872527
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1872527
Surrogate Recovery (%)						
Bromochloromethane	%	80		N/A	N/A	1872527

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

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3949				
Sampling Date		2009/06/12 00:00				
COC Number		1229				
	Units	**LICA/CLS/JUNE12,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	75		N/A	N/A	1872527
Difluorobenzene	%	80		N/A	N/A	1872527

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

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA-1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID CZ3946 **Collected** 2009/05/25
Sample ID LICA/CLS/MAY25,09 **Shipped**
Matrix AIR **Received** 2009/07/06

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1871178	N/A	2009/07/07	LSY
Volatile Organics in Air (TO-15)	GC/MS	1870882	N/A	2009/07/07	LSY

Maxxam ID CZ3947 **Collected** 2009/05/31
Sample ID LICA/CLS/MAY31,09 **Shipped**
Matrix AIR **Received** 2009/07/06

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1871178	N/A	2009/07/07	LSY
Volatile Organics in Air (TO-15)	GC/MS	1870882	N/A	2009/07/07	LSY

Maxxam ID CZ3948 **Collected** 2009/06/06
Sample ID LICA/CLS/JUNE06,09 **Shipped**
Matrix AIR **Received** 2009/07/06

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1872523	N/A	2009/07/08	LSY
Volatile Organics in Air (TO-15)	GC/MS	1872527	N/A	2009/07/08	LSY

Maxxam ID CZ3949 **Collected** 2009/06/12
Sample ID LICA/CLS/JUNE12,09 **Shipped**
Matrix AIR **Received** 2009/07/06

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1872523	N/A	2009/07/08	LSY
Volatile Organics in Air (TO-15)	GC/MS	1872527	N/A	2009/07/08	LSY

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Maxxam Job #: A983245
Report Date: 2009/07/13

Lakeland Industry and Community Association
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Project name: COLD LAKE SOUTH

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	Spiked Blank	Bromochloromethane	2009/07/07		103	%	60 - 140
			D5-Chlorobenzene	2009/07/07		103	%	60 - 140
			Difluorobenzene	2009/07/07		105	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/07		90	%	70 - 130
			Carbon Disulfide	2009/07/07		88	%	70 - 130
			Propene	2009/07/07		88	%	70 - 130
			Vinyl Acetate	2009/07/07		100	%	70 - 130
			Vinyl Bromide	2009/07/07		83	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/07/07		92	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/07/07		89	%	70 - 130
			Chloromethane	2009/07/07		90	%	70 - 130
			Vinyl Chloride	2009/07/07		88	%	70 - 130
			Chloroethane	2009/07/07		89	%	70 - 130
			1,3-Butadiene	2009/07/07		83	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/07/07		94	%	70 - 130
			Trichlorotrifluoroethane	2009/07/07		88	%	70 - 130
			Ethanol	2009/07/07		128	%	70 - 130
			2-propanol	2009/07/07		98	%	70 - 130
			2-Propanone	2009/07/07		118	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/07/07		92	%	70 - 130
			Methyl Isobutyl Ketone	2009/07/07		103	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/07/07		102	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/07/07		101	%	70 - 130
			Ethyl Acetate	2009/07/07		101	%	70 - 130
			1,1-Dichloroethylene	2009/07/07		95	%	70 - 130
			cis-1,2-Dichloroethylene	2009/07/07		95	%	70 - 130
			trans-1,2-Dichloroethylene	2009/07/07		93	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/07/07		86	%	70 - 130
			Chloroform	2009/07/07		92	%	70 - 130
			Carbon Tetrachloride	2009/07/07		95	%	70 - 130
			1,1-Dichloroethane	2009/07/07		96	%	70 - 130
			1,2-Dichloroethane	2009/07/07		97	%	70 - 130
			Ethylene Dibromide	2009/07/07		84	%	70 - 130
			1,1,1-Trichloroethane	2009/07/07		93	%	70 - 130
			1,1,2-Trichloroethane	2009/07/07		86	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/07/07		85	%	70 - 130
			cis-1,3-Dichloropropene	2009/07/07		93	%	70 - 130
			trans-1,3-Dichloropropene	2009/07/07		90	%	70 - 130
			1,2-Dichloropropane	2009/07/07		91	%	70 - 130
			Bromomethane	2009/07/07		89	%	70 - 130
			Bromoform	2009/07/07		88	%	70 - 130
			Bromodichloromethane	2009/07/07		92	%	70 - 130
			Dibromochloromethane	2009/07/07		92	%	70 - 130
			Heptane	2009/07/07		99	%	70 - 130
			Trichloroethylene	2009/07/07		83	%	70 - 130
			Tetrachloroethylene	2009/07/07		84	%	70 - 130
			Benzene	2009/07/07		88	%	70 - 130
			Toluene	2009/07/07		89	%	70 - 130
			Ethylbenzene	2009/07/07		90	%	70 - 130
			p+m-Xylene	2009/07/07		90	%	70 - 130
			o-Xylene	2009/07/07		90	%	70 - 130
			Styrene	2009/07/07		68 (1)	%	70 - 130
			1,3,5-Trimethylbenzene	2009/07/07		92	%	70 - 130
			1,2,4-Trimethylbenzene	2009/07/07		89	%	70 - 130
			4-ethyltoluene	2009/07/07		89	%	70 - 130

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	Spiked Blank	Chlorobenzene	2009/07/07		77	%	70 - 130
			Benzyl chloride	2009/07/07		75	%	70 - 130
			1,3-Dichlorobenzene	2009/07/07		73	%	70 - 130
			1,4-Dichlorobenzene	2009/07/07		70	%	70 - 130
			1,2-Dichlorobenzene	2009/07/07		74	%	70 - 130
			1,2,4-Trichlorobenzene	2009/07/07		79	%	70 - 130
			Hexachlorobutadiene	2009/07/07		94	%	70 - 130
			Hexane	2009/07/07		102	%	70 - 130
			Cyclohexane	2009/07/07		95	%	70 - 130
			Tetrahydrofuran	2009/07/07		102	%	70 - 130
			1,4-Dioxane	2009/07/07		103	%	70 - 130
		Method Blank	Bromochloromethane	2009/07/07		81	%	60 - 140
			D5-Chlorobenzene	2009/07/07		74	%	60 - 140
			Difluorobenzene	2009/07/07		83	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/07	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/07/07	ND, RDL=0.50		ppbv	
			Propene	2009/07/07	1.44, RDL=0.30		ppbv	
			Vinyl Acetate	2009/07/07	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/07/07	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/07/07	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/07/07	ND, RDL=0.17		ppbv	
			Chloromethane	2009/07/07	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/07/07	ND, RDL=0.18		ppbv	
			Chloroethane	2009/07/07	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/07/07	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/07/07	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/07/07	ND, RDL=0.15		ppbv	
			Ethanol	2009/07/07	ND, RDL=2.3		ppbv	
			2-propanol	2009/07/07	ND, RDL=3.0		ppbv	
			2-Propanone	2009/07/07	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/07/07	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/07/07	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/07/07	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/07/07	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/07/07	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/07/07	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/07/07	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/07/07	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/07/07	0.36, RDL=0.30		ppbv	
			Chloroform	2009/07/07	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/07/07	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/07/07	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/07/07	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/07/07	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/07/07	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/07/07	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/07/07	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/07/07	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/07/07	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/07/07	ND, RDL=0.40		ppbv	
			Bromomethane	2009/07/07	ND, RDL=0.18		ppbv	
			Bromoform	2009/07/07	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/07/07	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/07/07	ND, RDL=0.20		ppbv	
			Heptane	2009/07/07	ND, RDL=0.30		ppbv	

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	Method Blank	Trichloroethylene	2009/07/07	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/07/07	ND, RDL=0.20		ppbv	
			Benzene	2009/07/07	ND, RDL=0.18		ppbv	
			Toluene	2009/07/07	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/07/07	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/07/07	ND, RDL=0.37		ppbv	
			o-Xylene	2009/07/07	ND, RDL=0.20		ppbv	
			Styrene	2009/07/07	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/07/07	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/07/07	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/07/07	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/07/07	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/07/07	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/07/07	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/07/07	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/07/07	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/07/07	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/07/07	ND, RDL=3.0		ppbv	
			Hexane	2009/07/07	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/07/07	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/07/07	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/07/07	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/07/07	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	2,2,4-Trimethylpentane	2009/07/07	NC		%	25
			Carbon Disulfide	2009/07/07	NC		%	25
			Propene	2009/07/07	1		%	25
			Vinyl Acetate	2009/07/07	NC		%	25
			Vinyl Bromide	2009/07/07	NC		%	25
			Dichlorodifluoromethane (FREON 12)	2009/07/07	NC		%	25
			1,2-Dichlorotetrafluoroethane	2009/07/07	NC		%	25
			Chloromethane	2009/07/07	NC		%	25
			Vinyl Chloride	2009/07/07	NC		%	25
			Chloroethane	2009/07/07	NC		%	25
			1,3-Butadiene	2009/07/07	NC		%	25
			Trichlorofluoromethane (FREON 11)	2009/07/07	NC		%	25
			Trichlorotrifluoroethane	2009/07/07	NC		%	25
			Ethanol	2009/07/07	NC		%	25
			2-propanol	2009/07/07	NC		%	25
			2-Propanone	2009/07/07	4.4		%	25
			Methyl Ethyl Ketone (2-Butanone)	2009/07/07	NC		%	25
			Methyl Isobutyl Ketone	2009/07/07	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2009/07/07	NC		%	25
			Methyl t-butyl ether (MTBE)	2009/07/07	NC		%	25
			Ethyl Acetate	2009/07/07	NC		%	25
			1,1-Dichloroethylene	2009/07/07	NC		%	25
			cis-1,2-Dichloroethylene	2009/07/07	NC		%	25
			trans-1,2-Dichloroethylene	2009/07/07	NC		%	25
			Methylene Chloride(Dichloromethane)	2009/07/07	NC		%	25
			Chloroform	2009/07/07	NC		%	25
			Carbon Tetrachloride	2009/07/07	NC		%	25
			1,1-Dichloroethane	2009/07/07	NC		%	25
			1,2-Dichloroethane	2009/07/07	NC		%	25
			Ethylene Dibromide	2009/07/07	NC		%	25

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	RPD - Sample/Sample Dup	1,1,1-Trichloroethane	2009/07/07	NC		%	25
			1,1,2-Trichloroethane	2009/07/07	NC		%	25
			1,1,2,2-Tetrachloroethane	2009/07/07	NC		%	25
			cis-1,3-Dichloropropene	2009/07/07	NC		%	25
			trans-1,3-Dichloropropene	2009/07/07	NC		%	25
			1,2-Dichloropropane	2009/07/07	NC		%	25
			Bromomethane	2009/07/07	NC		%	25
			Bromoform	2009/07/07	NC		%	25
			Bromodichloromethane	2009/07/07	NC		%	25
			Dibromochloromethane	2009/07/07	NC		%	25
			Heptane	2009/07/07	NC		%	25
			Trichloroethylene	2009/07/07	0.6		%	25
			Tetrachloroethylene	2009/07/07	NC		%	25
			Benzene	2009/07/07	NC		%	25
			Toluene	2009/07/07	2.3		%	25
			Ethylbenzene	2009/07/07	NC		%	25
			p+m-Xylene	2009/07/07	NC		%	25
			o-Xylene	2009/07/07	NC		%	25
			Styrene	2009/07/07	NC		%	25
			1,3,5-Trimethylbenzene	2009/07/07	NC		%	25
			1,2,4-Trimethylbenzene	2009/07/07	NC		%	25
			4-ethyltoluene	2009/07/07	NC		%	25
			Chlorobenzene	2009/07/07	NC		%	25
			Benzyl chloride	2009/07/07	NC		%	25
			1,3-Dichlorobenzene	2009/07/07	NC		%	25
			1,4-Dichlorobenzene	2009/07/07	NC		%	25
			1,2-Dichlorobenzene	2009/07/07	NC		%	25
			1,2,4-Trichlorobenzene	2009/07/07	NC		%	25
			Hexachlorobutadiene	2009/07/07	NC		%	25
			Hexane	2009/07/07	NC		%	25
			Cyclohexane	2009/07/07	NC		%	25
			Tetrahydrofuran	2009/07/07	NC		%	25
			1,4-Dioxane	2009/07/07	NC		%	25
			Xylene (Total)	2009/07/07	NC		%	25
1872527	LSY	Spiked Blank	Bromochloromethane	2009/07/08		101	%	60 - 140
			D5-Chlorobenzene	2009/07/08		101	%	60 - 140
			Difluorobenzene	2009/07/08		103	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/08		97	%	70 - 130
			Carbon Disulfide	2009/07/08		94	%	70 - 130
			Propene	2009/07/08		93	%	70 - 130
			Vinyl Acetate	2009/07/08		109	%	70 - 130
			Vinyl Bromide	2009/07/08		89	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/07/08		97	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/07/08		92	%	70 - 130
			Chloromethane	2009/07/08		93	%	70 - 130
			Vinyl Chloride	2009/07/08		91	%	70 - 130
			Chloroethane	2009/07/08		92	%	70 - 130
			1,3-Butadiene	2009/07/08		88	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/07/08		98	%	70 - 130
			Trichlorotrifluoroethane	2009/07/08		91	%	70 - 130
			Ethanol	2009/07/08		121	%	70 - 130
			2-propanol	2009/07/08		100	%	70 - 130
			2-Propanone	2009/07/08		111	%	70 - 130

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1872527	LSY	Spiked Blank	Methyl Ethyl Ketone (2-Butanone)	2009/07/08		98	%	70 - 130
			Methyl Isobutyl Ketone	2009/07/08		108	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/07/08		107	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/07/08		107	%	70 - 130
			Ethyl Acetate	2009/07/08		109	%	70 - 130
			1,1-Dichloroethylene	2009/07/08		99	%	70 - 130
			cis-1,2-Dichloroethylene	2009/07/08		101	%	70 - 130
			trans-1,2-Dichloroethylene	2009/07/08		100	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/07/08		91	%	70 - 130
			Chloroform	2009/07/08		95	%	70 - 130
			Carbon Tetrachloride	2009/07/08		98	%	70 - 130
			1,1-Dichloroethane	2009/07/08		101	%	70 - 130
			1,2-Dichloroethane	2009/07/08		103	%	70 - 130
			Ethylene Dibromide	2009/07/08		90	%	70 - 130
			1,1,1-Trichloroethane	2009/07/08		97	%	70 - 130
			1,1,2-Trichloroethane	2009/07/08		89	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/07/08		87	%	70 - 130
			cis-1,3-Dichloropropene	2009/07/08		100	%	70 - 130
			trans-1,3-Dichloropropene	2009/07/08		104	%	70 - 130
			1,2-Dichloropropane	2009/07/08		95	%	70 - 130
			Bromomethane	2009/07/08		92	%	70 - 130
			Bromoform	2009/07/08		93	%	70 - 130
			Bromodichloromethane	2009/07/08		98	%	70 - 130
			Dibromochloromethane	2009/07/08		96	%	70 - 130
			Heptane	2009/07/08		105	%	70 - 130
			Trichloroethylene	2009/07/08		85	%	70 - 130
			Tetrachloroethylene	2009/07/08		85	%	70 - 130
			Benzene	2009/07/08		92	%	70 - 130
			Toluene	2009/07/08		92	%	70 - 130
			Ethylbenzene	2009/07/08		94	%	70 - 130
			p+m-Xylene	2009/07/08		94	%	70 - 130
			o-Xylene	2009/07/08		93	%	70 - 130
			Styrene	2009/07/08		98	%	70 - 130
			1,3,5-Trimethylbenzene	2009/07/08		94	%	70 - 130
			1,2,4-Trimethylbenzene	2009/07/08		91	%	70 - 130
			4-ethyltoluene	2009/07/08		95	%	70 - 130
			Chlorobenzene	2009/07/08		82	%	70 - 130
			Benzyl chloride	2009/07/08		91	%	70 - 130
			1,3-Dichlorobenzene	2009/07/08		81	%	70 - 130
			1,4-Dichlorobenzene	2009/07/08		83	%	70 - 130
			1,2-Dichlorobenzene	2009/07/08		77	%	70 - 130
			1,2,4-Trichlorobenzene	2009/07/08		98	%	70 - 130
			Hexachlorobutadiene	2009/07/08		94	%	70 - 130
			Hexane	2009/07/08		108	%	70 - 130
			Cyclohexane	2009/07/08		101	%	70 - 130
			Tetrahydrofuran	2009/07/08		109	%	70 - 130
			1,4-Dioxane	2009/07/08		106	%	70 - 130
		Method Blank	Bromochloromethane	2009/07/08		85	%	60 - 140
			D5-Chlorobenzene	2009/07/08		81	%	60 - 140
			Difluorobenzene	2009/07/08		87	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/08	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/07/08	ND, RDL=0.50		ppbv	
			Propene	2009/07/08	1.49, RDL=0.30		ppbv	
			Vinyl Acetate	2009/07/08	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/07/08	ND, RDL=0.20		ppbv	

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1872527	LSY	Method Blank	Dichlorodifluoromethane (FREON 12)	2009/07/08	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/07/08	ND, RDL=0.17		ppbv	
			Chloromethane	2009/07/08	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/07/08	ND, RDL=0.18		ppbv	
			Chloroethane	2009/07/08	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/07/08	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/07/08	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/07/08	ND, RDL=0.15		ppbv	
			Ethanol	2009/07/08	ND, RDL=2.3		ppbv	
			2-propanol	2009/07/08	ND, RDL=3.0		ppbv	
			2-Propanone	2009/07/08	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/07/08	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/07/08	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/07/08	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/07/08	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/07/08	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/07/08	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/07/08	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/07/08	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/07/08	0.37, RDL=0.30		ppbv	
			Chloroform	2009/07/08	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/07/08	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/07/08	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/07/08	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/07/08	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/07/08	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/07/08	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/07/08	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/07/08	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/07/08	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/07/08	ND, RDL=0.40		ppbv	
			Bromomethane	2009/07/08	ND, RDL=0.18		ppbv	
			Bromoform	2009/07/08	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/07/08	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/07/08	ND, RDL=0.20		ppbv	
			Heptane	2009/07/08	ND, RDL=0.30		ppbv	
			Trichloroethylene	2009/07/08	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/07/08	ND, RDL=0.20		ppbv	
			Benzene	2009/07/08	ND, RDL=0.18		ppbv	
			Toluene	2009/07/08	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/07/08	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/07/08	ND, RDL=0.37		ppbv	
			o-Xylene	2009/07/08	ND, RDL=0.20		ppbv	
			Styrene	2009/07/08	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/07/08	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/07/08	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/07/08	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/07/08	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/07/08	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/07/08	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/07/08	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/07/08	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/07/08	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/07/08	ND, RDL=3.0		ppbv	
			Hexane	2009/07/08	ND, RDL=0.30		ppbv	

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1872527	LSY	Method Blank	Cyclohexane	2009/07/08	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/07/08	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/07/08	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/07/08	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	2,2,4-Trimethylpentane	2009/07/08	NC		%	25
			Carbon Disulfide	2009/07/08	2.2		%	25
			Propene	2009/07/08	3.3		%	25
			Vinyl Acetate	2009/07/08	NC		%	25
			Vinyl Bromide	2009/07/08	NC		%	25
			Dichlorodifluoromethane (FREON 12)	2009/07/08	0.9		%	25
			1,2-Dichlorotetrafluoroethane	2009/07/08	NC		%	25
			Chloromethane	2009/07/08	NC		%	25
			Vinyl Chloride	2009/07/08	NC		%	25
			Chloroethane	2009/07/08	NC		%	25
			1,3-Butadiene	2009/07/08	NC		%	25
			Trichlorofluoromethane (FREON 11)	2009/07/08	NC		%	25
			Trichlorotrifluoroethane	2009/07/08	NC		%	25
			Ethanol	2009/07/08	NC		%	25
			2-propanol	2009/07/08	NC		%	25
			2-Propanone	2009/07/08	5.5		%	25
			Methyl Ethyl Ketone (2-Butanone)	2009/07/08	NC		%	25
			Methyl Isobutyl Ketone	2009/07/08	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2009/07/08	NC		%	25
			Methyl t-butyl ether (MTBE)	2009/07/08	NC		%	25
			Ethyl Acetate	2009/07/08	NC		%	25
			1,1-Dichloroethylene	2009/07/08	NC		%	25
			cis-1,2-Dichloroethylene	2009/07/08	NC		%	25
			trans-1,2-Dichloroethylene	2009/07/08	NC		%	25
			Methylene Chloride(Dichloromethane)	2009/07/08	NC		%	25
			Chloroform	2009/07/08	2.8		%	25
			Carbon Tetrachloride	2009/07/08	NC		%	25
			1,1-Dichloroethane	2009/07/08	NC		%	25
			1,2-Dichloroethane	2009/07/08	NC		%	25
			Ethylene Dibromide	2009/07/08	NC		%	25
			1,1,1-Trichloroethane	2009/07/08	NC		%	25
			1,1,2-Trichloroethane	2009/07/08	NC		%	25
			1,1,2,2-Tetrachloroethane	2009/07/08	NC		%	25
			cis-1,3-Dichloropropene	2009/07/08	NC		%	25
			trans-1,3-Dichloropropene	2009/07/08	NC		%	25
			1,2-Dichloropropane	2009/07/08	NC		%	25
			Bromomethane	2009/07/08	NC		%	25
			Bromoform	2009/07/08	NC		%	25
			Bromodichloromethane	2009/07/08	NC		%	25
			Dibromochloromethane	2009/07/08	NC		%	25
			Heptane	2009/07/08	NC		%	25
			Trichloroethylene	2009/07/08	3.5		%	25
			Tetrachloroethylene	2009/07/08	NC		%	25
			Benzene	2009/07/08	NC		%	25
			Toluene	2009/07/08	5.3		%	25
			Ethylbenzene	2009/07/08	NC		%	25
			p+m-Xylene	2009/07/08	11.6		%	25
			o-Xylene	2009/07/08	13.5		%	25
			Styrene	2009/07/08	NC		%	25

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Lakeland Industry and Community Association
Attention: Gail Nielsen
Client Project #: LICA-1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983245

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1872527	LSY	RPD - Sample/Sample Dup	1,3,5-Trimethylbenzene	2009/07/08	NC		%	25
			1,2,4-Trimethylbenzene	2009/07/08	NC		%	25
			4-ethyltoluene	2009/07/08	NC		%	25
			Chlorobenzene	2009/07/08	NC		%	25
			Benzyl chloride	2009/07/08	NC		%	25
			1,3-Dichlorobenzene	2009/07/08	NC		%	25
			1,4-Dichlorobenzene	2009/07/08	NC		%	25
			1,2-Dichlorobenzene	2009/07/08	NC		%	25
			1,2,4-Trichlorobenzene	2009/07/08	NC		%	25
			Hexachlorobutadiene	2009/07/08	NC		%	25
			Hexane	2009/07/08	NC		%	25
			Cyclohexane	2009/07/08	NC		%	25
			Tetrahydrofuran	2009/07/08	NC		%	25
			1,4-Dioxane	2009/07/08	NC		%	25
			Xylene (Total)	2009/07/08	12.1		%	25

ND = Not detected
NC = Non-calculable
SPIKE = Fortified sample
(1) Please refer to General Comments page for specific clarification.

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Your Project #: LICA 1
Site: COLD LAKE SOUTH
Your C.O.C. #: 1230

Lakeland Industry and Community Association
5107 - 50th Street
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/07/13

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A983158
Received: 2009/07/06, 14:50

Sample Matrix: AIR
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	1	N/A	2009/07/07	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	1	N/A	2009/07/07	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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Total cover pages: 1

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Maxxam Job #: A983158
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

RESULTS OF ANALYSES OF AIR

Maxxam ID		CZ3539		
Sampling Date		2009/06/18 00:00		
COC Number		1230		
	Units	**LICA/CLS/JUNE18,09**	**DL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	17	N/A	1871178

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A983158
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3539				
Sampling Date		2009/06/18 00:00				
COC Number		1230				
	Units	**LICA/CLS/JUNE18,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1870882
Carbon Disulfide	ppbv	8.39	0.50	26.1	1.56	1870882
Propene	ppbv	1.84	0.30	3.16	0.516	1870882
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1870882
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1870882
Dichlorodifluoromethane (FREON 12)	ppbv	0.66	0.20	3.27	0.989	1870882
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1870882
Chloromethane	ppbv	0.57	0.30	1.18	0.620	1870882
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1870882
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1870882
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1870882
Trichlorofluoromethane (FREON 11)	ppbv	0.31	0.20	1.75	1.12	1870882
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1870882
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1870882
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1870882
2-Propanone	ppbv	6.94	0.80	16.5	1.90	1870882
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1870882
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1870882
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1870882
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1870882
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1870882
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1870882
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1870882
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1870882
Methylene Chloride(Dichloromethane)	ppbv	0.48	0.30	1.66	1.04	1870882
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1870882
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1870882
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1870882
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1870882
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1870882
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1870882
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1870882

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A983158
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3539				
Sampling Date		2009/06/18 00:00				
COC Number		1230				
	Units	**LICA/CLS/JUNE18,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1870882
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1870882
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1870882
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1870882
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1870882
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1870882
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1870882
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1870882
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1870882
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1870882
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1870882
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1870882
Toluene	ppbv	0.34	0.20	1.28	0.753	1870882
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1870882
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1870882
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1870882
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1870882
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1870882
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1870882
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1870882
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1870882
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1870882
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1870882
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1870882
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1870882
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1870882
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1870882
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1870882
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1870882
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1870882
Surrogate Recovery (%)						
Bromochloromethane	%	79		N/A	N/A	1870882

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

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Maxxam Job #: A983158
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		CZ3539				
Sampling Date		2009/06/18 00:00				
COC Number		1230				
	Units	**LICA/CLS/JUNE18,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	74		N/A	N/A	1870882
Difluorobenzene	%	79		N/A	N/A	1870882

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

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Maxxam Job #: A983158
Report Date: 2009/07/13

Lakeland Industry and Community Association
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID	CZ3539	**Collected**	2009/06/18
Sample ID	LICA/CLS/JUNE18,09	**Shipped**	
Matrix	AIR	**Received**	2009/07/06

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1871178	N/A	2009/07/07	LSY
Volatile Organics in Air (TO-15)	GC/MS	1870882	N/A	2009/07/07	LSY

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GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry and Community Association
Attention:
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA983158

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	Spiked Blank	Bromochloromethane	2009/07/07		103	%	60 - 140
			D5-Chlorobenzene	2009/07/07		103	%	60 - 140
			Difluorobenzene	2009/07/07		105	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/07		90	%	70 - 130
			Carbon Disulfide	2009/07/07		88	%	70 - 130
			Propene	2009/07/07		88	%	70 - 130
			Vinyl Acetate	2009/07/07		100	%	70 - 130
			Vinyl Bromide	2009/07/07		83	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/07/07		92	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/07/07		89	%	70 - 130
			Chloromethane	2009/07/07		90	%	70 - 130
			Vinyl Chloride	2009/07/07		88	%	70 - 130
			Chloroethane	2009/07/07		89	%	70 - 130
			1,3-Butadiene	2009/07/07		83	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/07/07		94	%	70 - 130
			Trichlorotrifluoroethane	2009/07/07		88	%	70 - 130
			Ethanol	2009/07/07		128	%	70 - 130
			2-propanol	2009/07/07		98	%	70 - 130
			2-Propanone	2009/07/07		118	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/07/07		92	%	70 - 130
			Methyl Isobutyl Ketone	2009/07/07		103	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/07/07		102	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/07/07		101	%	70 - 130
			Ethyl Acetate	2009/07/07		101	%	70 - 130
			1,1-Dichloroethylene	2009/07/07		95	%	70 - 130
			cis-1,2-Dichloroethylene	2009/07/07		95	%	70 - 130
			trans-1,2-Dichloroethylene	2009/07/07		93	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/07/07		86	%	70 - 130
			Chloroform	2009/07/07		92	%	70 - 130
			Carbon Tetrachloride	2009/07/07		95	%	70 - 130
			1,1-Dichloroethane	2009/07/07		96	%	70 - 130
			1,2-Dichloroethane	2009/07/07		97	%	70 - 130
			Ethylene Dibromide	2009/07/07		84	%	70 - 130
			1,1,1-Trichloroethane	2009/07/07		93	%	70 - 130
			1,1,2-Trichloroethane	2009/07/07		86	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/07/07		85	%	70 - 130
			cis-1,3-Dichloropropene	2009/07/07		93	%	70 - 130
			trans-1,3-Dichloropropene	2009/07/07		90	%	70 - 130
			1,2-Dichloropropane	2009/07/07		91	%	70 - 130
			Bromomethane	2009/07/07		89	%	70 - 130
			Bromoform	2009/07/07		88	%	70 - 130
			Bromodichloromethane	2009/07/07		92	%	70 - 130
			Dibromochloromethane	2009/07/07		92	%	70 - 130
			Heptane	2009/07/07		99	%	70 - 130
			Trichloroethylene	2009/07/07		83	%	70 - 130
			Tetrachloroethylene	2009/07/07		84	%	70 - 130
			Benzene	2009/07/07		88	%	70 - 130
			Toluene	2009/07/07		89	%	70 - 130
			Ethylbenzene	2009/07/07		90	%	70 - 130
			p+m-Xylene	2009/07/07		90	%	70 - 130
			o-Xylene	2009/07/07		90	%	70 - 130
			Styrene	2009/07/07		68 (1)	%	70 - 130
			1,3,5-Trimethylbenzene	2009/07/07		92	%	70 - 130
			1,2,4-Trimethylbenzene	2009/07/07		89	%	70 - 130
			4-ethyltoluene	2009/07/07		89	%	70 - 130

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Lakeland Industry and Community Association
Attention:
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983158

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	Spiked Blank	Chlorobenzene	2009/07/07		77	%	70 - 130
			Benzyl chloride	2009/07/07		75	%	70 - 130
			1,3-Dichlorobenzene	2009/07/07		73	%	70 - 130
			1,4-Dichlorobenzene	2009/07/07		70	%	70 - 130
			1,2-Dichlorobenzene	2009/07/07		74	%	70 - 130
			1,2,4-Trichlorobenzene	2009/07/07		79	%	70 - 130
			Hexachlorobutadiene	2009/07/07		94	%	70 - 130
			Hexane	2009/07/07		102	%	70 - 130
			Cyclohexane	2009/07/07		95	%	70 - 130
			Tetrahydrofuran	2009/07/07		102	%	70 - 130
			1,4-Dioxane	2009/07/07		103	%	70 - 130
		Method Blank	Bromochloromethane	2009/07/07		81	%	60 - 140
			D5-Chlorobenzene	2009/07/07		74	%	60 - 140
			Difluorobenzene	2009/07/07		83	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/07	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/07/07	ND, RDL=0.50		ppbv	
			Propene	2009/07/07	1.44, RDL=0.30		ppbv	
			Vinyl Acetate	2009/07/07	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/07/07	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/07/07	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/07/07	ND, RDL=0.17		ppbv	
			Chloromethane	2009/07/07	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/07/07	ND, RDL=0.18		ppbv	
			Chloroethane	2009/07/07	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/07/07	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/07/07	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/07/07	ND, RDL=0.15		ppbv	
			Ethanol	2009/07/07	ND, RDL=2.3		ppbv	
			2-propanol	2009/07/07	ND, RDL=3.0		ppbv	
			2-Propanone	2009/07/07	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/07/07	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/07/07	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/07/07	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/07/07	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/07/07	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/07/07	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/07/07	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/07/07	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/07/07	0.36, RDL=0.30		ppbv	
			Chloroform	2009/07/07	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/07/07	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/07/07	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/07/07	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/07/07	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/07/07	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/07/07	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/07/07	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/07/07	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/07/07	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/07/07	ND, RDL=0.40		ppbv	
			Bromomethane	2009/07/07	ND, RDL=0.18		ppbv	
			Bromoform	2009/07/07	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/07/07	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/07/07	ND, RDL=0.20		ppbv	
			Heptane	2009/07/07	ND, RDL=0.30		ppbv	

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Lakeland Industry and Community Association
Attention:
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983158

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	Method Blank	Trichloroethylene	2009/07/07	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/07/07	ND, RDL=0.20		ppbv	
			Benzene	2009/07/07	ND, RDL=0.18		ppbv	
			Toluene	2009/07/07	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/07/07	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/07/07	ND, RDL=0.37		ppbv	
			o-Xylene	2009/07/07	ND, RDL=0.20		ppbv	
			Styrene	2009/07/07	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/07/07	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/07/07	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/07/07	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/07/07	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/07/07	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/07/07	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/07/07	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/07/07	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/07/07	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/07/07	ND, RDL=3.0		ppbv	
			Hexane	2009/07/07	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/07/07	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/07/07	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/07/07	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/07/07	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	2,2,4-Trimethylpentane	2009/07/07	NC		%	25
			Carbon Disulfide	2009/07/07	NC		%	25
			Propene	2009/07/07	1		%	25
			Vinyl Acetate	2009/07/07	NC		%	25
			Vinyl Bromide	2009/07/07	NC		%	25
			Dichlorodifluoromethane (FREON 12)	2009/07/07	NC		%	25
			1,2-Dichlorotetrafluoroethane	2009/07/07	NC		%	25
			Chloromethane	2009/07/07	NC		%	25
			Vinyl Chloride	2009/07/07	NC		%	25
			Chloroethane	2009/07/07	NC		%	25
			1,3-Butadiene	2009/07/07	NC		%	25
			Trichlorofluoromethane (FREON 11)	2009/07/07	NC		%	25
			Trichlorotrifluoroethane	2009/07/07	NC		%	25
			Ethanol	2009/07/07	NC		%	25
			2-propanol	2009/07/07	NC		%	25
			2-Propanone	2009/07/07	4.4		%	25
			Methyl Ethyl Ketone (2-Butanone)	2009/07/07	NC		%	25
			Methyl Isobutyl Ketone	2009/07/07	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2009/07/07	NC		%	25
			Methyl t-butyl ether (MTBE)	2009/07/07	NC		%	25
			Ethyl Acetate	2009/07/07	NC		%	25
			1,1-Dichloroethylene	2009/07/07	NC		%	25
			cis-1,2-Dichloroethylene	2009/07/07	NC		%	25
			trans-1,2-Dichloroethylene	2009/07/07	NC		%	25
			Methylene Chloride(Dichloromethane)	2009/07/07	NC		%	25
			Chloroform	2009/07/07	NC		%	25
			Carbon Tetrachloride	2009/07/07	NC		%	25
			1,1-Dichloroethane	2009/07/07	NC		%	25
			1,2-Dichloroethane	2009/07/07	NC		%	25
			Ethylene Dibromide	2009/07/07	NC		%	25

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Lakeland Industry and Community Association
Attention:
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA983158

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1870882	LSY	RPD - Sample/Sample Dup	1,1,1-Trichloroethane	2009/07/07	NC		%	25
			1,1,2-Trichloroethane	2009/07/07	NC		%	25
			1,1,2,2-Tetrachloroethane	2009/07/07	NC		%	25
			cis-1,3-Dichloropropene	2009/07/07	NC		%	25
			trans-1,3-Dichloropropene	2009/07/07	NC		%	25
			1,2-Dichloropropane	2009/07/07	NC		%	25
			Bromomethane	2009/07/07	NC		%	25
			Bromoform	2009/07/07	NC		%	25
			Bromodichloromethane	2009/07/07	NC		%	25
			Dibromochloromethane	2009/07/07	NC		%	25
			Heptane	2009/07/07	NC		%	25
			Trichloroethylene	2009/07/07	0.6		%	25
			Tetrachloroethylene	2009/07/07	NC		%	25
			Benzene	2009/07/07	NC		%	25
			Toluene	2009/07/07	2.3		%	25
			Ethylbenzene	2009/07/07	NC		%	25
			p+m-Xylene	2009/07/07	NC		%	25
			o-Xylene	2009/07/07	NC		%	25
			Styrene	2009/07/07	NC		%	25
			1,3,5-Trimethylbenzene	2009/07/07	NC		%	25
			1,2,4-Trimethylbenzene	2009/07/07	NC		%	25
			4-ethyltoluene	2009/07/07	NC		%	25
			Chlorobenzene	2009/07/07	NC		%	25
			Benzyl chloride	2009/07/07	NC		%	25
			1,3-Dichlorobenzene	2009/07/07	NC		%	25
			1,4-Dichlorobenzene	2009/07/07	NC		%	25
			1,2-Dichlorobenzene	2009/07/07	NC		%	25
			1,2,4-Trichlorobenzene	2009/07/07	NC		%	25
			Hexachlorobutadiene	2009/07/07	NC		%	25
			Hexane	2009/07/07	NC		%	25
			Cyclohexane	2009/07/07	NC		%	25
			Tetrahydrofuran	2009/07/07	NC		%	25
			1,4-Dioxane	2009/07/07	NC		%	25
			Xylene (Total)	2009/07/07	NC		%	25

ND = Not detected
NC = Non-calculable
SPIKE = Fortified sample
(1) Please refer to General Comments page for specific clarification.

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Your Project #: LICA 1
Site: COLD LAKE SOUTH
Your C.O.C. #: 0638

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/07/27

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A991798
Received: 2009/07/21, 12:52

Sample Matrix: AIR
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	4	N/A	2009/07/23	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	4	N/A	2009/07/23	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3607	DD3608		
Sampling Date		2009/06/24	2009/06/30		
COC Number		0638	0638		
	Units	**LICA/CLS/JUNE24,09/T2400**	**LICA/CLS/JUNE30,09/2297**	**DL**	**QC Batch**
Surrogate Recovery (%)					
Bromochloromethane	%	85	84		1889039
D5-Chlorobenzene	%	83	84		1889039
Difluorobenzene	%	87	86		1889039

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		DD3609	DD3610		
Sampling Date		2009/07/06	2009/07/12		
COC Number		0638	0638		
	Units	**LICA/CLS/JULY6,09/T2300**	**LICA/CLS/JULY12,09/3674**	**DL**	**QC Batch**
Surrogate Recovery (%)					
Bromochloromethane	%	84	83		1889039
D5-Chlorobenzene	%	83	83		1889039
Difluorobenzene	%	85	85		1889039

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

RESULTS OF ANALYSES OF AIR

Maxxam ID		DD3607	DD3608		
Sampling Date		2009/06/24	2009/06/30		
COC Number		0638	0638		
	Units	**LICA/CLS/JUNE24,09/T2400**	**LICA/CLS/JUNE30,09/2297**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	18	18	N/A	1889040

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		DD3609	DD3610		
Sampling Date		2009/07/06	2009/07/12		
COC Number		0638	0638		
	Units	**LICA/CLS/JULY6,09/T2300**	**LICA/CLS/JULY12,09/3674**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	18	18	N/A	1889040

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3607				
Sampling Date		2009/06/24				
COC Number		0638				
	Units	**LICA/CLS/JUNE24,09/T2400**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1889039
Carbon Disulfide	ppbv	0.69	0.50	2.14	1.56	1889039
Propene	ppbv	<0.30	0.30	<0.516	0.516	1889039
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1889039
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1889039
Dichlorodifluoromethane (FREON 12)	ppbv	0.59	0.20	2.91	0.989	1889039
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1889039
Chloromethane	ppbv	0.51	0.30	1.06	0.620	1889039
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1889039
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1889039
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1889039
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.53	1.12	1889039
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1889039
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1889039
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1889039
2-Propanone	ppbv	7.46	0.80	17.7	1.90	1889039
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1889039
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1889039
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1889039
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1889039
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1889039
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1889039
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1889039
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1889039
Methylene Chloride(Dichloromethane)	ppbv	0.50	0.30	1.73	1.04	1889039
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1889039
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1889039
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1889039
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1889039
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1889039

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3607				
Sampling Date		2009/06/24				
COC Number		0638				
	Units	**LICA/CLS/JUNE24,09/T2400**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1889039
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1889039
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1889039
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1889039
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1889039
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1889039
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1889039
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1889039
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1889039
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1889039
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1889039
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1889039
Toluene	ppbv	0.55	0.20	2.09	0.753	1889039
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1889039
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1889039
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1889039
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1889039
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1889039
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1889039
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1889039
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1889039
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1889039
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1889039
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1889039
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1889039
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1889039
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1889039

QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3608				
Sampling Date		2009/06/30				
COC Number		0638				
	Units	**LICA/CLS/JUNE30,09/2297**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1889039
Carbon Disulfide	ppbv	0.79	0.50	2.45	1.56	1889039
Propene	ppbv	<0.30	0.30	<0.516	0.516	1889039
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1889039
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1889039
Dichlorodifluoromethane (FREON 12)	ppbv	0.59	0.20	2.91	0.989	1889039
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1889039
Chloromethane	ppbv	0.45	0.30	0.930	0.620	1889039
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1889039
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1889039
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1889039
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.50	1.12	1889039
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1889039
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1889039
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1889039
2-Propanone	ppbv	3.40	0.80	8.07	1.90	1889039
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1889039
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1889039
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1889039
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1889039
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1889039
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1889039
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1889039
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1889039
Methylene Chloride(Dichloromethane)	ppbv	0.40	0.30	1.38	1.04	1889039
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1889039
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1889039
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1889039
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1889039
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1889039

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3608				
Sampling Date		2009/06/30				
COC Number		0638				
	Units	**LICA/CLS/JUNE30,09/2297**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1889039
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1889039
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1889039
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1889039
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1889039
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1889039
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1889039
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1889039
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1889039
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1889039
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1889039
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1889039
Toluene	ppbv	0.35	0.20	1.33	0.753	1889039
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1889039
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1889039
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1889039
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1889039
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1889039
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1889039
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1889039
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1889039
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1889039
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1889039
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1889039
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1889039
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1889039
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1889039

QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3609				
Sampling Date		2009/07/06				
COC Number		0638				
	Units	**LICA/CLS/JULY6,09/T2300**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1889039
Carbon Disulfide	ppbv	0.59	0.50	1.82	1.56	1889039
Propene	ppbv	<0.30	0.30	<0.516	0.516	1889039
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1889039
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1889039
Dichlorodifluoromethane (FREON 12)	ppbv	0.58	0.20	2.88	0.989	1889039
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1889039
Chloromethane	ppbv	0.42	0.30	0.876	0.620	1889039
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1889039
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1889039
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1889039
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.20	1.54	1.12	1889039
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1889039
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1889039
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1889039
2-Propanone	ppbv	4.53	0.80	10.8	1.90	1889039
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1889039
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1889039
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1889039
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1889039
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1889039
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1889039
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1889039
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1889039
Methylene Chloride(Dichloromethane)	ppbv	0.41	0.30	1.41	1.04	1889039
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1889039
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1889039
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1889039
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1889039
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1889039

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3609				
Sampling Date		2009/07/06				
COC Number		0638				
	Units	**LICA/CLS/JULY6,09/T2300**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1889039
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1889039
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1889039
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1889039
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1889039
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1889039
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1889039
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1889039
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1889039
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1889039
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1889039
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1889039
Toluene	ppbv	0.50	0.20	1.89	0.753	1889039
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1889039
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1889039
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1889039
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1889039
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1889039
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1889039
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1889039
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1889039
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1889039
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1889039
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1889039
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1889039
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1889039
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1889039

QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3610				
Sampling Date		2009/07/12				
COC Number		0638				
	Units	**LICA/CLS/JULY12,09/3674**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1889039
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1889039
Propene	ppbv	<0.30	0.30	<0.516	0.516	1889039
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1889039
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1889039
Dichlorodifluoromethane (FREON 12)	ppbv	0.58	0.20	2.89	0.989	1889039
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1889039
Chloromethane	ppbv	0.42	0.30	0.864	0.620	1889039
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1889039
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1889039
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1889039
Trichlorofluoromethane (FREON 11)	ppbv	0.28	0.20	1.56	1.12	1889039
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1889039
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1889039
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1889039
2-Propanone	ppbv	4.10	0.80	9.73	1.90	1889039
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1889039
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1889039
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1889039
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1889039
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1889039
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1889039
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1889039
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1889039
Methylene Chloride(Dichloromethane)	ppbv	0.39	0.30	1.34	1.04	1889039
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1889039
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1889039
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1889039
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1889039
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1889039
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1889039

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DD3610				
Sampling Date		2009/07/12				
COC Number		0638				
	Units	**LICA/CLS/JULY12,09/3674**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1889039
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1889039
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1889039
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1889039
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1889039
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1889039
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1889039
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1889039
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1889039
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1889039
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1889039
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1889039
Toluene	ppbv	0.28	0.20	1.05	0.753	1889039
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1889039
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1889039
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1889039
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1889039
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1889039
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1889039
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1889039
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1889039
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1889039
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1889039
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1889039
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1889039
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1889039
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1889039
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1889039
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1889039

QC Batch = Quality Control Batch

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID DD3607 **Collected** 2009/06/24
Sample ID LICA/CLS/JUNE24,09/T2400 **Shipped**
Matrix AIR **Received** 2009/07/21

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1889040	N/A	2009/07/23	MM2
Volatile Organics in Air (TO-15)	GC/MS	1889039	N/A	2009/07/23	MM2

Maxxam ID DD3608 **Collected** 2009/06/30
Sample ID LICA/CLS/JUNE30,09/2297 **Shipped**
Matrix AIR **Received** 2009/07/21

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1889040	N/A	2009/07/23	MM2
Volatile Organics in Air (TO-15)	GC/MS	1889039	N/A	2009/07/23	MM2

Maxxam ID DD3609 **Collected** 2009/07/06
Sample ID LICA/CLS/JULY6,09/T2300 **Shipped**
Matrix AIR **Received** 2009/07/21

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1889040	N/A	2009/07/23	MM2
Volatile Organics in Air (TO-15)	GC/MS	1889039	N/A	2009/07/23	MM2

Maxxam ID DD3610 **Collected** 2009/07/12
Sample ID LICA/CLS/JULY12,09/3674 **Shipped**
Matrix AIR **Received** 2009/07/21

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1889040	N/A	2009/07/23	MM2
Volatile Organics in Air (TO-15)	GC/MS	1889039	N/A	2009/07/23	MM2

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Maxxam Job #: A991798
Report Date: 2009/07/27

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

GENERAL COMMENTS

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA991798

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1889039	MM2	Spiked Blank	Bromochloromethane	2009/07/23		97	%	60 - 140
			D5-Chlorobenzene	2009/07/23		102	%	60 - 140
			Difluorobenzene	2009/07/23		100	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/23		97	%	70 - 130
			Carbon Disulfide	2009/07/23		99	%	70 - 130
			Propene	2009/07/23		102	%	70 - 130
			Vinyl Acetate	2009/07/23		101	%	70 - 130
			Vinyl Bromide	2009/07/23		104	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/07/23		105	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/07/23		104	%	70 - 130
			Chloromethane	2009/07/23		102	%	70 - 130
			Vinyl Chloride	2009/07/23		107	%	70 - 130
			Chloroethane	2009/07/23		106	%	70 - 130
			1,3-Butadiene	2009/07/23		108	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/07/23		107	%	70 - 130
			Trichlorotrifluoroethane	2009/07/23		103	%	70 - 130
			Ethanol	2009/07/23		89	%	70 - 130
			2-propanol	2009/07/23		96	%	70 - 130
			2-Propanone	2009/07/23		104	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/07/23		101	%	70 - 130
			Methyl Isobutyl Ketone	2009/07/23		96	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/07/23		91	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/07/23		117	%	70 - 130
			Ethyl Acetate	2009/07/23		99	%	70 - 130
			1,1-Dichloroethylene	2009/07/23		107	%	70 - 130
			cis-1,2-Dichloroethylene	2009/07/23		108	%	70 - 130
			trans-1,2-Dichloroethylene	2009/07/23		101	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/07/23		93	%	70 - 130
			Chloroform	2009/07/23		103	%	70 - 130
			Carbon Tetrachloride	2009/07/23		107	%	70 - 130
			1,1-Dichloroethane	2009/07/23		103	%	70 - 130
			1,2-Dichloroethane	2009/07/23		105	%	70 - 130
			Ethylene Dibromide	2009/07/23		100	%	70 - 130
			1,1,1-Trichloroethane	2009/07/23		104	%	70 - 130
			1,1,2-Trichloroethane	2009/07/23		101	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/07/23		93	%	70 - 130
			cis-1,3-Dichloropropene	2009/07/23		104	%	70 - 130
			trans-1,3-Dichloropropene	2009/07/23		107	%	70 - 130
			1,2-Dichloropropane	2009/07/23		100	%	70 - 130
			Bromomethane	2009/07/23		117	%	70 - 130
			Bromoform	2009/07/23		97	%	70 - 130
			Bromodichloromethane	2009/07/23		104	%	70 - 130
			Dibromochloromethane	2009/07/23		102	%	70 - 130
			Heptane	2009/07/23		97	%	70 - 130
			Trichloroethylene	2009/07/23		103	%	70 - 130
			Tetrachloroethylene	2009/07/23		104	%	70 - 130
			Benzene	2009/07/23		103	%	70 - 130
			Toluene	2009/07/23		107	%	70 - 130
			Ethylbenzene	2009/07/23		108	%	70 - 130
			p+m-Xylene	2009/07/23		107	%	70 - 130
			o-Xylene	2009/07/23		102	%	70 - 130
			Styrene	2009/07/23		107	%	70 - 130
			1,3,5-Trimethylbenzene	2009/07/23		104	%	70 - 130
			1,2,4-Trimethylbenzene	2009/07/23		102	%	70 - 130
			4-ethyltoluene	2009/07/23		97	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA991798

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1889039	MM2	Spiked Blank	Chlorobenzene	2009/07/23		100	%	70 - 130
			Benzyl chloride	2009/07/23		83	%	70 - 130
			1,3-Dichlorobenzene	2009/07/23		93	%	70 - 130
			1,4-Dichlorobenzene	2009/07/23		91	%	70 - 130
			1,2-Dichlorobenzene	2009/07/23		91	%	70 - 130
			1,2,4-Trichlorobenzene	2009/07/23		68 (1)	%	70 - 130
			Hexachlorobutadiene	2009/07/23		77	%	70 - 130
			Hexane	2009/07/23		100	%	70 - 130
			Cyclohexane	2009/07/23		103	%	70 - 130
			Tetrahydrofuran	2009/07/23		108	%	70 - 130
			1,4-Dioxane	2009/07/23		99	%	70 - 130
		Method Blank	Bromochloromethane	2009/07/23		90	%	60 - 140
			D5-Chlorobenzene	2009/07/23		90	%	60 - 140
			Difluorobenzene	2009/07/23		94	%	60 - 140
			2,2,4-Trimethylpentane	2009/07/23	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/07/23	ND, RDL=0.50		ppbv	
			Propene	2009/07/23	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2009/07/23	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/07/23	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/07/23	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/07/23	ND, RDL=0.17		ppbv	
			Chloromethane	2009/07/23	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/07/23	ND, RDL=0.18		ppbv	
			Chloroethane	2009/07/23	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/07/23	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/07/23	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/07/23	ND, RDL=0.15		ppbv	
			Ethanol	2009/07/23	ND, RDL=2.3		ppbv	
			2-propanol	2009/07/23	ND, RDL=3.0		ppbv	
			2-Propanone	2009/07/23	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/07/23	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/07/23	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/07/23	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/07/23	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/07/23	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/07/23	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/07/23	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/07/23	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/07/23	0.51, RDL=0.30		ppbv	
			Chloroform	2009/07/23	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/07/23	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/07/23	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/07/23	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/07/23	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/07/23	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/07/23	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/07/23	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/07/23	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/07/23	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/07/23	ND, RDL=0.40		ppbv	
			Bromomethane	2009/07/23	ND, RDL=0.18		ppbv	
			Bromoform	2009/07/23	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/07/23	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/07/23	ND, RDL=0.20		ppbv	
			Heptane	2009/07/23	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA991798

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1889039	MM2	Method Blank	Trichloroethylene	2009/07/23	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/07/23	ND, RDL=0.20		ppbv	
			Benzene	2009/07/23	ND, RDL=0.18		ppbv	
			Toluene	2009/07/23	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/07/23	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/07/23	ND, RDL=0.37		ppbv	
			o-Xylene	2009/07/23	ND, RDL=0.20		ppbv	
			Styrene	2009/07/23	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/07/23	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/07/23	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/07/23	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/07/23	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/07/23	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/07/23	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/07/23	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/07/23	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/07/23	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/07/23	ND, RDL=3.0		ppbv	
			Hexane	2009/07/23	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/07/23	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/07/23	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/07/23	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/07/23	ND, RDL=0.60		ppbv	

ND = Not detected
SPIKE = Fortified sample
(1) Please refer to General Comments page for specific clarification.

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Your Project #: LICA
Site: COLD LAKE SOUTH
Your C.O.C. #: 3918

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/08/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9A5394
Received: 2009/08/17, 13:16

Sample Matrix: AIR
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	4	N/A	2009/08/19	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	4	N/A	2009/08/19	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

==========

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Total cover pages: 1

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0162	DK0163	DK0164		
Sampling Date		2009/07/18	2009/07/24	2009/07/30		
COC Number		3918	3918	3918		
	Units	**LICA/CLS/JULY18,09**	**LICA/CLS/JULY24,09**	**LICA/CLS/JULY30,09**	**DL**	**QC Batch**
Surrogate Recovery (%)						
Bromochloromethane	%	94	85	79		1911886
D5-Chlorobenzene	%	93	85	77		1911886
Difluorobenzene	%	94	87	78		1911886

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		DK0165		
Sampling Date		2009/08/05		
COC Number		3918		
	Units	**LICA/CLS/AUG5,09**	**DL**	**QC Batch**
Surrogate Recovery (%)				
Bromochloromethane	%	81		1911886
D5-Chlorobenzene	%	80		1911886
Difluorobenzene	%	82		1911886

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

RESULTS OF ANALYSES OF AIR

Maxxam ID		DK0162	DK0163	DK0164		
Sampling Date		2009/07/18	2009/07/24	2009/07/30		
COC Number		3918	3918	3918		
	Units	**LICA/CLS/JULY18,09**	**LICA/CLS/JULY24,09**	**LICA/CLS/JULY30,09**	**DL**	**QC Batch**
Volatile Organics						
Pressure on Receipt	psig	17	17	17	N/A	1911897

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		DK0165		
Sampling Date		2009/08/05		
COC Number		3918		
	Units	**LICA/CLS/AUG5,09**	**DL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	17	N/A	1911897

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0162				
Sampling Date		2009/07/18				
COC Number		3918				
	Units	**LICA/CLS/JULY18,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1911886
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1911886
Propene	ppbv	0.31	0.30	0.538	0.516	1911886
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1911886
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1911886
Dichlorodifluoromethane (FREON 12)	ppbv	0.40	0.20	1.99	0.989	1911886
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1911886
Chloromethane	ppbv	0.48	0.30	0.981	0.620	1911886
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1911886
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1911886
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1911886
Trichlorofluoromethane (FREON 11)	ppbv	<0.20	0.20	<1.12	1.12	1911886
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1911886
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1911886
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1911886
2-Propanone	ppbv	9.65	0.80	22.9	1.90	1911886
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1911886
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1911886
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1911886
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1911886
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1911886
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1911886
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1911886
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1911886
Methylene Chloride(Dichloromethane)	ppbv	<0.30	0.30	<1.04	1.04	1911886
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1911886
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1911886
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1911886
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1911886
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1911886

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0162				
Sampling Date		2009/07/18				
COC Number		3918				
	Units	**LICA/CLS/JULY18,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1911886
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1911886
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1911886
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1911886
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1911886
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1911886
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1911886
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1911886
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1911886
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1911886
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1911886
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1911886
Toluene	ppbv	0.21	0.20	0.779	0.753	1911886
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1911886
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1911886
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1911886
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1911886
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1911886
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1911886
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1911886
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1911886
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1911886
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1911886
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1911886
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1911886
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1911886
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1911886

QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0163				
Sampling Date		2009/07/24				
COC Number		3918				
	Units	**LICA/CLS/JULY24,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1911886
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1911886
Propene	ppbv	0.38	0.30	0.654	0.516	1911886
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1911886
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1911886
Dichlorodifluoromethane (FREON 12)	ppbv	0.41	0.20	2.04	0.989	1911886
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1911886
Chloromethane	ppbv	0.37	0.30	0.774	0.620	1911886
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1911886
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1911886
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1911886
Trichlorofluoromethane (FREON 11)	ppbv	<0.20	0.20	<1.12	1.12	1911886
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1911886
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1911886
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1911886
2-Propanone	ppbv	5.07	0.80	12.1	1.90	1911886
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1911886
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1911886
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1911886
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1911886
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1911886
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1911886
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1911886
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1911886
Methylene Chloride(Dichloromethane)	ppbv	<0.30	0.30	<1.04	1.04	1911886
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1911886
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1911886
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1911886
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1911886
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1911886

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0163				
Sampling Date		2009/07/24				
COC Number		3918				
	Units	**LICA/CLS/JULY24,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1911886
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1911886
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1911886
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1911886
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1911886
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1911886
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1911886
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1911886
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1911886
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1911886
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1911886
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1911886
Toluene	ppbv	0.20	0.20	0.756	0.753	1911886
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1911886
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1911886
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1911886
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1911886
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1911886
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1911886
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1911886
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1911886
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1911886
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1911886
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1911886
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1911886
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1911886
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1911886

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

Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0164				
Sampling Date		2009/07/30				
COC Number		3918				
	Units	**LICA/CLS/JULY30,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1911886
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1911886
Propene	ppbv	0.35	0.30	0.604	0.516	1911886
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1911886
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1911886
Dichlorodifluoromethane (FREON 12)	ppbv	0.43	0.20	2.11	0.989	1911886
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1911886
Chloromethane	ppbv	0.39	0.30	0.809	0.620	1911886
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1911886
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1911886
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1911886
Trichlorofluoromethane (FREON 11)	ppbv	0.20	0.20	1.14	1.12	1911886
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1911886
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1911886
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1911886
2-Propanone	ppbv	6.21	0.80	14.7	1.90	1911886
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1911886
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1911886
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1911886
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1911886
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1911886
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1911886
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1911886
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1911886
Methylene Chloride(Dichloromethane)	ppbv	<0.30	0.30	<1.04	1.04	1911886
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1911886
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1911886
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1911886
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1911886
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1911886

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

Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0164				
Sampling Date		2009/07/30				
COC Number		3918				
	Units	**LICA/CLS/JULY30,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1911886
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1911886
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1911886
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1911886
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1911886
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1911886
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1911886
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1911886
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1911886
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1911886
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1911886
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1911886
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1911886
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1911886
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1911886
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1911886
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1911886
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1911886
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1911886
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1911886
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1911886
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1911886
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1911886
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1911886
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1911886
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1911886
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1911886

QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0165				
Sampling Date		2009/08/05				
COC Number		3918				
	Units	**LICA/CLS/AUG5,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1911886
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1911886
Propene	ppbv	<0.30	0.30	<0.516	0.516	1911886
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1911886
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1911886
Dichlorodifluoromethane (FREON 12)	ppbv	0.42	0.20	2.08	0.989	1911886
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1911886
Chloromethane	ppbv	0.36	0.30	0.741	0.620	1911886
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1911886
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1911886
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1911886
Trichlorofluoromethane (FREON 11)	ppbv	<0.20	0.20	<1.12	1.12	1911886
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1911886
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1911886
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1911886
2-Propanone	ppbv	2.14	0.80	5.09	1.90	1911886
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1911886
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1911886
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1911886
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1911886
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1911886
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1911886
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1911886
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1911886
Methylene Chloride(Dichloromethane)	ppbv	<0.30	0.30	<1.04	1.04	1911886
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1911886
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1911886
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1911886
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1911886
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1911886
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1911886

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DK0165				
Sampling Date		2009/08/05				
COC Number		3918				
	Units	**LICA/CLS/AUG5,09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1911886
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1911886
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1911886
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1911886
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1911886
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1911886
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1911886
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1911886
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1911886
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1911886
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1911886
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1911886
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1911886
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1911886
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1911886
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1911886
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1911886
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1911886
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1911886
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1911886
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1911886
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1911886
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1911886
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1911886
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1911886
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1911886
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1911886
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1911886
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1911886

QC Batch = Quality Control Batch

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID DK0162 **Collected** 2009/07/18
Sample ID LICA/CLS/JULY18,09 **Shipped**
Matrix AIR **Received** 2009/08/17

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1911897	N/A	2009/08/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	1911886	N/A	2009/08/19	S_S

Maxxam ID DK0163 **Collected** 2009/07/24
Sample ID LICA/CLS/JULY24,09 **Shipped**
Matrix AIR **Received** 2009/08/17

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1911897	N/A	2009/08/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	1911886	N/A	2009/08/19	S_S

Maxxam ID DK0164 **Collected** 2009/07/30
Sample ID LICA/CLS/JULY30,09 **Shipped**
Matrix AIR **Received** 2009/08/17

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1911897	N/A	2009/08/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	1911886	N/A	2009/08/19	S_S

Maxxam ID DK0165 **Collected** 2009/08/05
Sample ID LICA/CLS/AUG5,09 **Shipped**
Matrix AIR **Received** 2009/08/17

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1911897	N/A	2009/08/19	S_S
Volatile Organics in Air (TO-15)	GC/MS	1911886	N/A	2009/08/19	S_S

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Maxxam Job #: A9A5394
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: LICA
Project name: COLD LAKE SOUTH

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: Michael Bisaga
Client Project #: LICA
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA9A5394

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1911886	S_S	Spiked Blank	Bromochloromethane	2009/08/19		105	%	60 - 140
			D5-Chlorobenzene	2009/08/19		109	%	60 - 140
			Difluorobenzene	2009/08/19		109	%	60 - 140
			2,2,4-Trimethylpentane	2009/08/19		90	%	70 - 130
			Carbon Disulfide	2009/08/19		95	%	70 - 130
			Propene	2009/08/19		85	%	70 - 130
			Vinyl Acetate	2009/08/19		94	%	70 - 130
			Vinyl Bromide	2009/08/19		86	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/08/19		99	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/08/19		87	%	70 - 130
			Chloromethane	2009/08/19		82	%	70 - 130
			Vinyl Chloride	2009/08/19		87	%	70 - 130
			Chloroethane	2009/08/19		86	%	70 - 130
			1,3-Butadiene	2009/08/19		75	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/08/19		94	%	70 - 130
			Trichlorotrifluoroethane	2009/08/19		94	%	70 - 130
			Ethanol	2009/08/19		91	%	70 - 130
			2-propanol	2009/08/19		88	%	70 - 130
			2-Propanone	2009/08/19		97	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/08/19		98	%	70 - 130
			Methyl Isobutyl Ketone	2009/08/19		93	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/08/19		93	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/08/19		102	%	70 - 130
			Ethyl Acetate	2009/08/19		95	%	70 - 130
			1,1-Dichloroethylene	2009/08/19		94	%	70 - 130
			cis-1,2-Dichloroethylene	2009/08/19		97	%	70 - 130
			trans-1,2-Dichloroethylene	2009/08/19		93	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/08/19		83	%	70 - 130
			Chloroform	2009/08/19		96	%	70 - 130
			Carbon Tetrachloride	2009/08/19		108	%	70 - 130
			1,1-Dichloroethane	2009/08/19		95	%	70 - 130
			1,2-Dichloroethane	2009/08/19		99	%	70 - 130
			Ethylene Dibromide	2009/08/19		101	%	70 - 130
			1,1,1-Trichloroethane	2009/08/19		104	%	70 - 130
			1,1,2-Trichloroethane	2009/08/19		98	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/08/19		95	%	70 - 130
			cis-1,3-Dichloropropene	2009/08/19		106	%	70 - 130
			trans-1,3-Dichloropropene	2009/08/19		109	%	70 - 130
			1,2-Dichloropropane	2009/08/19		93	%	70 - 130
			Bromomethane	2009/08/19		93	%	70 - 130
			Bromoform	2009/08/19		110	%	70 - 130
			Bromodichloromethane	2009/08/19		100	%	70 - 130
			Dibromochloromethane	2009/08/19		110	%	70 - 130
			Heptane	2009/08/19		93	%	70 - 130
			Trichloroethylene	2009/08/19		100	%	70 - 130
			Tetrachloroethylene	2009/08/19		104	%	70 - 130
			Benzene	2009/08/19		97	%	70 - 130
			Toluene	2009/08/19		103	%	70 - 130
			Ethylbenzene	2009/08/19		102	%	70 - 130
			p+m-Xylene	2009/08/19		99	%	70 - 130
			o-Xylene	2009/08/19		102	%	70 - 130
			Styrene	2009/08/19		102	%	70 - 130
			1,3,5-Trimethylbenzene	2009/08/19		105	%	70 - 130
			1,2,4-Trimethylbenzene	2009/08/19		107	%	70 - 130
			4-ethyltoluene	2009/08/19		101	%	70 - 130

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9A5394

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1911886	S_S	Spiked Blank	Chlorobenzene	2009/08/19		95	%	70 - 130
			Benzyl chloride	2009/08/19		99	%	70 - 130
			1,3-Dichlorobenzene	2009/08/19		96	%	70 - 130
			1,4-Dichlorobenzene	2009/08/19		95	%	70 - 130
			1,2-Dichlorobenzene	2009/08/19		100	%	70 - 130
			1,2,4-Trichlorobenzene	2009/08/19		82	%	70 - 130
			Hexachlorobutadiene	2009/08/19		105	%	70 - 130
			Hexane	2009/08/19		91	%	70 - 130
			Cyclohexane	2009/08/19		94	%	70 - 130
			Tetrahydrofuran	2009/08/19		93	%	70 - 130
			1,4-Dioxane	2009/08/19		94	%	70 - 130
		Method Blank	Bromochloromethane	2009/08/19		101	%	60 - 140
			D5-Chlorobenzene	2009/08/19		98	%	60 - 140
			Difluorobenzene	2009/08/19		104	%	60 - 140
			2,2,4-Trimethylpentane	2009/08/19	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/08/19	ND, RDL=0.50		ppbv	
			Propene	2009/08/19	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2009/08/19	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/08/19	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/08/19	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/08/19	ND, RDL=0.17		ppbv	
			Chloromethane	2009/08/19	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/08/19	ND, RDL=0.18		ppbv	
			Chloroethane	2009/08/19	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/08/19	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/08/19	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/08/19	ND, RDL=0.15		ppbv	
			Ethanol	2009/08/19	ND, RDL=2.3		ppbv	
			2-propanol	2009/08/19	ND, RDL=3.0		ppbv	
			2-Propanone	2009/08/19	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/08/19	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/08/19	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/08/19	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/08/19	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/08/19	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/08/19	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/08/19	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/08/19	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/08/19	ND, RDL=0.30		ppbv	
			Chloroform	2009/08/19	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/08/19	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/08/19	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/08/19	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/08/19	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/08/19	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/08/19	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/08/19	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/08/19	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/08/19	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/08/19	ND, RDL=0.40		ppbv	
			Bromomethane	2009/08/19	ND, RDL=0.18		ppbv	
			Bromoform	2009/08/19	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/08/19	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/08/19	ND, RDL=0.20		ppbv	
			Heptane	2009/08/19	ND, RDL=0.30		ppbv	

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9A5394

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1911886	S_S	Method Blank	Trichloroethylene	2009/08/19	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/08/19	ND, RDL=0.20		ppbv	
			Benzene	2009/08/19	ND, RDL=0.18		ppbv	
			Toluene	2009/08/19	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/08/19	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/08/19	ND, RDL=0.37		ppbv	
			o-Xylene	2009/08/19	ND, RDL=0.20		ppbv	
			Styrene	2009/08/19	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/08/19	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/08/19	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/08/19	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/08/19	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/08/19	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/08/19	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/08/19	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/08/19	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/08/19	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/08/19	ND, RDL=3.0		ppbv	
			Hexane	2009/08/19	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/08/19	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/08/19	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/08/19	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/08/19	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.

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Your Project #: LICA 1
Site: COLD LAKE SOUTH
Your C.O.C. #: 3952

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/09/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9B9357
Received: 2009/09/11, 14:11

Sample Matrix: AIR
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	4	N/A	2009/09/14	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	4	N/A	2009/09/14	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

RESULTS OF ANALYSES OF AIR

Maxxam ID		DR0425	DR0426		
Sampling Date		2009/08/11	2009/08/17		
COC Number		3952	3952		
	Units	**LICA/CLS/AUG11,09/7807**	**LICA/CLS/AUG17,09/7809**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	17	17	N/A	1939131

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		DR0427	DR0428		
Sampling Date		2009/08/23	2009/08/29		
COC Number		3952	3952		
	Units	**LICA/CLS/AUG23,09/7783**	**LICA VOC/CLS/AUG29,09/7854**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	17	17	N/A	1939131

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0425				
Sampling Date		2009/08/11				
COC Number		3952				
	Units	**LICA/CLS/AUG11,09/7807**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1939199
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1939199
Propene	ppbv	<0.30	0.30	<0.516	0.516	1939199
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1939199
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1939199
Dichlorodifluoromethane (FREON 12)	ppbv	0.51	0.20	2.54	0.989	1939199
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1939199
Chloromethane	ppbv	0.44	0.30	0.912	0.620	1939199
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1939199
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1939199
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1939199
Trichlorofluoromethane (FREON 11)	ppbv	0.25	0.20	1.42	1.12	1939199
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1939199
Ethanol	ppbv	4.3	2.3	8.16	4.33	1939199
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1939199
2-Propanone	ppbv	3.88	0.80	9.21	1.90	1939199
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1939199
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1939199
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1939199
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1939199
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1939199
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1939199
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1939199
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1939199
Methylene Chloride(Dichloromethane)	ppbv	<0.30	0.30	<1.04	1.04	1939199
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1939199
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1939199
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1939199
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1939199
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1939199

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0425				
Sampling Date		2009/08/11				
COC Number		3952				
	Units	**LICA/CLS/AUG11,09/7807**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1939199
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1939199
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1939199
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1939199
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1939199
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1939199
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1939199
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1939199
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1939199
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1939199
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1939199
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1939199
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1939199
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1939199
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1939199
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1939199
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1939199
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1939199
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1939199
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1939199
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1939199
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1939199
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1939199
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1939199
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1939199
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1939199
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1939199
Surrogate Recovery (%)						
Bromochloromethane	%	94		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0425				
Sampling Date		2009/08/11				
COC Number		3952				
	Units	**LICA/CLS/AUG11,09/7807**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	92		N/A	N/A	1939199
Difluorobenzene	%	91		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0426				
Sampling Date		2009/08/17				
COC Number		3952				
	Units	**LICA/CLS/AUG17,09/7809**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1939199
Carbon Disulfide	ppbv	0.58	0.50	1.80	1.56	1939199
Propene	ppbv	<0.30	0.30	<0.516	0.516	1939199
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1939199
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1939199
Dichlorodifluoromethane (FREON 12)	ppbv	0.54	0.20	2.68	0.989	1939199
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1939199
Chloromethane	ppbv	0.45	0.30	0.927	0.620	1939199
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1939199
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1939199
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1939199
Trichlorofluoromethane (FREON 11)	ppbv	0.25	0.20	1.39	1.12	1939199
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1939199
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1939199
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1939199
2-Propanone	ppbv	3.06	0.80	7.27	1.90	1939199
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1939199
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1939199
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1939199
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1939199
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1939199
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1939199
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1939199
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1939199
Methylene Chloride(Dichloromethane)	ppbv	0.32	0.30	1.13	1.04	1939199
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1939199
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1939199
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1939199
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1939199
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1939199

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0426				
Sampling Date		2009/08/17				
COC Number		3952				
	Units	**LICA/CLS/AUG17,09/7809**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1939199
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1939199
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1939199
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1939199
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1939199
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1939199
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1939199
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1939199
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1939199
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1939199
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1939199
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1939199
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1939199
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1939199
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1939199
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1939199
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1939199
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1939199
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1939199
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1939199
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1939199
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1939199
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1939199
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1939199
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1939199
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1939199
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1939199
Surrogate Recovery (%)						
Bromochloromethane	%	93		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0426				
Sampling Date		2009/08/17				
COC Number		3952				
	Units	**LICA/CLS/AUG17,09/7809**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	90		N/A	N/A	1939199
Difluorobenzene	%	89		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0427				
Sampling Date		2009/08/23				
COC Number		3952				
	Units	**LICA/CLS/AUG23,09/7783**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1939199
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1939199
Propene	ppbv	0.30	0.30	0.517	0.516	1939199
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1939199
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1939199
Dichlorodifluoromethane (FREON 12)	ppbv	0.54	0.20	2.66	0.989	1939199
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1939199
Chloromethane	ppbv	0.48	0.30	0.981	0.620	1939199
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1939199
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1939199
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1939199
Trichlorofluoromethane (FREON 11)	ppbv	0.26	0.20	1.45	1.12	1939199
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1939199
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1939199
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1939199
2-Propanone	ppbv	2.73	0.80	6.48	1.90	1939199
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1939199
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1939199
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1939199
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1939199
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1939199
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1939199
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1939199
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1939199
Methylene Chloride(Dichloromethane)	ppbv	0.30	0.30	1.05	1.04	1939199
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1939199
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1939199
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1939199
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1939199
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1939199

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0427				
Sampling Date		2009/08/23				
COC Number		3952				
	Units	**LICA/CLS/AUG23,09/7783**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1939199
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1939199
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1939199
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1939199
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1939199
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1939199
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1939199
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1939199
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1939199
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1939199
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1939199
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1939199
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1939199
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1939199
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1939199
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1939199
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1939199
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1939199
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1939199
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1939199
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1939199
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1939199
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1939199
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1939199
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1939199
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1939199
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1939199
Surrogate Recovery (%)						
Bromochloromethane	%	92		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0427				
Sampling Date		2009/08/23				
COC Number		3952				
	Units	**LICA/CLS/AUG23,09/7783**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	89		N/A	N/A	1939199
Difluorobenzene	%	87		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0428				
Sampling Date		2009/08/29				
COC Number		3952				
	Units	**LICA VOC/CLS/AUG29,09/7854**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1939199
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1939199
Propene	ppbv	0.31	0.30	0.538	0.516	1939199
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1939199
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1939199
Dichlorodifluoromethane (FREON 12)	ppbv	0.53	0.20	2.63	0.989	1939199
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1939199
Chloromethane	ppbv	0.44	0.30	0.903	0.620	1939199
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1939199
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1939199
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1939199
Trichlorofluoromethane (FREON 11)	ppbv	0.26	0.20	1.45	1.12	1939199
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1939199
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1939199
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1939199
2-Propanone	ppbv	3.75	0.80	8.91	1.90	1939199
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1939199
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1939199
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1939199
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1939199
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1939199
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1939199
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1939199
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1939199
Methylene Chloride(Dichloromethane)	ppbv	0.33	0.30	1.14	1.04	1939199
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1939199
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1939199
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1939199
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1939199
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1939199
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1939199

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0428				
Sampling Date		2009/08/29				
COC Number		3952				
	Units	**LICA VOC/CLS/AUG29,09/7854**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1939199
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1939199
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1939199
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1939199
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1939199
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1939199
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1939199
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1939199
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1939199
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1939199
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1939199
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1939199
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1939199
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1939199
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1939199
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1939199
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1939199
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1939199
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1939199
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1939199
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1939199
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1939199
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1939199
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1939199
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1939199
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1939199
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1939199
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1939199
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1939199
Surrogate Recovery (%)						
Bromochloromethane	%	92		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR0428				
Sampling Date		2009/08/29				
COC Number		3952				
	Units	**LICA VOC/CLS/AUG29,09/7854**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
D5-Chlorobenzene	%	89		N/A	N/A	1939199
Difluorobenzene	%	87		N/A	N/A	1939199

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

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID DR0425 **Collected** 2009/08/11
Sample ID LICA/CLS/AUG11,09/7807 **Shipped**
Matrix AIR **Received** 2009/09/11

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1939131	N/A	2009/09/14	S_S
Volatile Organics in Air (TO-15)	GC/MS	1939199	N/A	2009/09/14	S_S

Maxxam ID DR0426 **Collected** 2009/08/17
Sample ID LICA/CLS/AUG17,09/7809 **Shipped**
Matrix AIR **Received** 2009/09/11

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1939131	N/A	2009/09/14	S_S
Volatile Organics in Air (TO-15)	GC/MS	1939199	N/A	2009/09/14	S_S

Maxxam ID DR0427 **Collected** 2009/08/23
Sample ID LICA/CLS/AUG23,09/7783 **Shipped**
Matrix AIR **Received** 2009/09/11

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1939131	N/A	2009/09/14	S_S
Volatile Organics in Air (TO-15)	GC/MS	1939199	N/A	2009/09/14	S_S

Maxxam ID DR0428 **Collected** 2009/08/29
Sample ID LICA VOC/CLS/AUG29,09/7854 **Shipped**
Matrix AIR **Received** 2009/09/11

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1939131	N/A	2009/09/14	S_S
Volatile Organics in Air (TO-15)	GC/MS	1939199	N/A	2009/09/14	S_S

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Maxxam Job #: A9B9357
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

GENERAL COMMENTS

Sample DR0425-01: Sample received and analyzed past hold time.

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 #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA9B9357

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1939199	S_S	Spiked Blank	Bromochloromethane	2009/09/14		104	%	60 - 140
			D5-Chlorobenzene	2009/09/14		108	%	60 - 140
			Difluorobenzene	2009/09/14		107	%	60 - 140
			2,2,4-Trimethylpentane	2009/09/14		100	%	70 - 130
			Carbon Disulfide	2009/09/14		96	%	70 - 130
			Propene	2009/09/14		93	%	70 - 130
			Vinyl Acetate	2009/09/14		99	%	70 - 130
			Vinyl Bromide	2009/09/14		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/09/14		100	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/09/14		94	%	70 - 130
			Chloromethane	2009/09/14		89	%	70 - 130
			Vinyl Chloride	2009/09/14		91	%	70 - 130
			Chloroethane	2009/09/14		86	%	70 - 130
			1,3-Butadiene	2009/09/14		85	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/09/14		97	%	70 - 130
			Trichlorotrifluoroethane	2009/09/14		88	%	70 - 130
			Ethanol	2009/09/14		95	%	70 - 130
			2-propanol	2009/09/14		96	%	70 - 130
			2-Propanone	2009/09/14		99	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/09/14		107	%	70 - 130
			Methyl Isobutyl Ketone	2009/09/14		104	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/09/14		106	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/09/14		104	%	70 - 130
			Ethyl Acetate	2009/09/14		103	%	70 - 130
			1,1-Dichloroethylene	2009/09/14		94	%	70 - 130
			cis-1,2-Dichloroethylene	2009/09/14		91	%	70 - 130
			trans-1,2-Dichloroethylene	2009/09/14		97	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/09/14		85	%	70 - 130
			Chloroform	2009/09/14		91	%	70 - 130
			Carbon Tetrachloride	2009/09/14		105	%	70 - 130
			1,1-Dichloroethane	2009/09/14		90	%	70 - 130
			1,2-Dichloroethane	2009/09/14		97	%	70 - 130
			Ethylene Dibromide	2009/09/14		95	%	70 - 130
			1,1,1-Trichloroethane	2009/09/14		101	%	70 - 130
			1,1,2-Trichloroethane	2009/09/14		90	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/09/14		89	%	70 - 130
			cis-1,3-Dichloropropene	2009/09/14		102	%	70 - 130
			trans-1,3-Dichloropropene	2009/09/14		108	%	70 - 130
			1,2-Dichloropropane	2009/09/14		87	%	70 - 130
			Bromomethane	2009/09/14		89	%	70 - 130
			Bromoform	2009/09/14		112	%	70 - 130
			Bromodichloromethane	2009/09/14		107	%	70 - 130
			Dibromochloromethane	2009/09/14		114	%	70 - 130
			Heptane	2009/09/14		98	%	70 - 130
			Trichloroethylene	2009/09/14		88	%	70 - 130
			Tetrachloroethylene	2009/09/14		94	%	70 - 130
			Benzene	2009/09/14		88	%	70 - 130
			Toluene	2009/09/14		95	%	70 - 130
			Ethylbenzene	2009/09/14		94	%	70 - 130
			p+m-Xylene	2009/09/14		93	%	70 - 130
			o-Xylene	2009/09/14		93	%	70 - 130
			Styrene	2009/09/14		98	%	70 - 130
			1,3,5-Trimethylbenzene	2009/09/14		97	%	70 - 130
			1,2,4-Trimethylbenzene	2009/09/14		101	%	70 - 130
			4-ethyltoluene	2009/09/14		105	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9B9357

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1939199	S_S	Spiked Blank	Chlorobenzene	2009/09/14		85	%	70 - 130
			Benzyl chloride	2009/09/14		111	%	70 - 130
			1,3-Dichlorobenzene	2009/09/14		92	%	70 - 130
			1,4-Dichlorobenzene	2009/09/14		91	%	70 - 130
			1,2-Dichlorobenzene	2009/09/14		92	%	70 - 130
			1,2,4-Trichlorobenzene	2009/09/14		92	%	70 - 130
			Hexachlorobutadiene	2009/09/14		97	%	70 - 130
			Hexane	2009/09/14		93	%	70 - 130
			Cyclohexane	2009/09/14		99	%	70 - 130
			Tetrahydrofuran	2009/09/14		101	%	70 - 130
			1,4-Dioxane	2009/09/14		102	%	70 - 130
		Method Blank	Bromochloromethane	2009/09/14		102	%	60 - 140
			D5-Chlorobenzene	2009/09/14		101	%	60 - 140
			Difluorobenzene	2009/09/14		104	%	60 - 140
			2,2,4-Trimethylpentane	2009/09/14	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/09/14	ND, RDL=0.50		ppbv	
			Propene	2009/09/14	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2009/09/14	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/09/14	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/09/14	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/09/14	ND, RDL=0.17		ppbv	
			Chloromethane	2009/09/14	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/09/14	ND, RDL=0.18		ppbv	
			Chloroethane	2009/09/14	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/09/14	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/09/14	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/09/14	ND, RDL=0.15		ppbv	
			Ethanol	2009/09/14	ND, RDL=2.3		ppbv	
			2-propanol	2009/09/14	ND, RDL=3.0		ppbv	
			2-Propanone	2009/09/14	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/09/14	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/09/14	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/09/14	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/09/14	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/09/14	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/09/14	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/09/14	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/09/14	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/09/14	ND, RDL=0.30		ppbv	
			Chloroform	2009/09/14	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/09/14	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/09/14	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/09/14	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/09/14	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/09/14	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/09/14	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/09/14	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/09/14	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/09/14	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/09/14	ND, RDL=0.40		ppbv	
			Bromomethane	2009/09/14	ND, RDL=0.18		ppbv	
			Bromoform	2009/09/14	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/09/14	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/09/14	ND, RDL=0.20		ppbv	
			Heptane	2009/09/14	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9B9357

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1939199	S_S	Method Blank	Trichloroethylene	2009/09/14	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/09/14	ND, RDL=0.20		ppbv	
			Benzene	2009/09/14	ND, RDL=0.18		ppbv	
			Toluene	2009/09/14	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/09/14	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/09/14	ND, RDL=0.37		ppbv	
			o-Xylene	2009/09/14	ND, RDL=0.20		ppbv	
			Styrene	2009/09/14	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/09/14	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/09/14	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/09/14	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/09/14	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/09/14	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/09/14	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/09/14	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/09/14	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/09/14	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/09/14	ND, RDL=3.0		ppbv	
			Hexane	2009/09/14	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/09/14	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/09/14	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/09/14	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/09/14	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.

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Your Project #: LICA 1
Site: COLD LAKE SOUTH
Your C.O.C. #: 0750

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/10/08

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9C0217
Received: 2009/09/14, 12:38

Sample Matrix: AIR
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	1	N/A	2009/09/15	BRL SOP-00304	EPA TO-15
Sulphur Compounds In Gaseous Samples (1)	1	N/A	2009/09/29	CAM SOP-00220, -00208	GC/FPD Direct Inject
Volatile Organics in Air (TO-15) (2)	1	N/A	2009/09/15	BRL SOP-00304	EPA TO-15

(1) GC/FPD (Gas Chromatography/Flame Photometric Detection)
(2) 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. SCC and CALA have approved this reporting process and electronic report format.

Your Project #: LICA 1
Site: COLD LAKE SOUTH
Your C.O.C. #: 0750

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/10/08

CERTIFICATE OF ANALYSIS

Maxxam Analytics Inc. Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section.

Total cover pages: 2

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Maxxam Job #: A9C0217
Report Date: 2009/10/08

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

RESULTS OF ANALYSES OF AIR

Maxxam ID		DR5845		
Sampling Date		2009/09/04 00:00		
COC Number		0750		
	Units	**LICA VOC/CLS/SEPT4 09**	**DL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	17	N/A	1940543

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9C0217
Report Date: 2009/10/08

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

COMPRESSED GAS PARAMETERS (AIR)

Maxxam ID		DR5845				
Sampling Date		2009/09/04 00:00				
COC Number		0750				
	Units	**LICA VOC/CLS/SEPT4 09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Gas						
Hydrogen sulfide	ppmv	<0.10	0.10	NC	N/A	1955029
Carbonyl sulfide	ppmv	<0.10	0.10	NC	N/A	1955029
Methyl mercaptan	ppmv	<0.10	0.10	NC	N/A	1955029
Ethyl mercaptan	ppmv	<0.10	0.10	NC	N/A	1955029
1- Propyl mercaptan	ppmv	<0.10	0.10	NC	N/A	1955029
Dimethyl sulfide	ppmv	<0.10	0.10	NC	N/A	1955029
Methyl ethyl sulfide	ppmv	<5.0	5.0	NC	N/A	1955029
Dimethyl disulfide	ppmv	<0.10	0.10	NC	N/A	1955029
Sulphur dioxide	ppmv	<0.40	0.40	NC	N/A	1955029
Carbon Disulfide	ppmv	<0.040	0.040	NC	N/A	1955029

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9C0217
Report Date: 2009/10/08

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR5845				
Sampling Date		2009/09/04 00:00				
COC Number		0750				
	Units	**LICA VOC/CLS/SEPT4 09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1940538
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1940538
Propene	ppbv	<0.30	0.30	<0.516	0.516	1940538
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1940538
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1940538
Dichlorodifluoromethane (FREON 12)	ppbv	0.59	0.20	2.91	0.989	1940538
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1940538
Chloromethane	ppbv	0.47	0.30	0.970	0.620	1940538
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1940538
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1940538
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1940538
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.20	1.62	1.12	1940538
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1940538
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1940538
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1940538
2-Propanone	ppbv	3.36	0.80	7.99	1.90	1940538
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1940538
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1940538
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1940538
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1940538
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1940538
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1940538
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1940538
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1940538
Methylene Chloride(Dichloromethane)	ppbv	0.61	0.30	2.13	1.04	1940538
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1940538
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1940538
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1940538
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1940538
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1940538

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9C0217
Report Date: 2009/10/08

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR5845				
Sampling Date		2009/09/04 00:00				
COC Number		0750				
	Units	**LICA VOC/CLS/SEPT4 09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1940538
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1940538
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1940538
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1940538
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1940538
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1940538
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1940538
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1940538
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1940538
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1940538
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1940538
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1940538
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1940538
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1940538
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1940538
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1940538
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1940538
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1940538
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1940538
1,3,5-Trimethylbenzene	ppbv	<2.4	2.4	<11.8	11.8	1940538
1,2,4-Trimethylbenzene	ppbv	<2.5	2.5	<12.3	12.3	1940538
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1940538
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1940538
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1940538
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1940538
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1940538
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1940538
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1940538
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1940538
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1940538
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1940538
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1940538

QC Batch = Quality Control Batch

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Maxxam Job #: A9C0217
Report Date: 2009/10/08

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DR5845				
Sampling Date		2009/09/04 00:00				
COC Number		0750				
	Units	**LICA VOC/CLS/SEPT4 09**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1940538
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1940538
Surrogate Recovery (%)						
Bromochloromethane	%	96		N/A	N/A	1940538
D5-Chlorobenzene	%	95		N/A	N/A	1940538
Difluorobenzene	%	96		N/A	N/A	1940538

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

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Maxxam Job #: A9C0217
Report Date: 2009/10/08

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID	DR5845	**Collected**	2009/09/04
Sample ID	LICA VOC/CLS/SEPT4 09	**Shipped**	
Matrix	AIR	**Received**	2009/09/14

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1940543	N/A	2009/09/15	VEA
Sulphur Compounds In Gaseous Samples	GC/FPD	1955029	N/A	2009/09/29	
Volatile Organics in Air (TO-15)	GC/MS	1940538	N/A	2009/09/15	VEA

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Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

GENERAL COMMENTS

Sample DR5845-01: Sulfur Analysis: Sample was taken in stainless steel canisters where the suitability for sampling hydrogen sulfide is unknown. It is known that hydrogen sulfide reacts with exposed iron surfaces which can lead to biased low results.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA9C0217

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1940538	VEA	Spiked Blank	Bromochloromethane	2009/09/15		99	%	60 - 140
			D5-Chlorobenzene	2009/09/15		99	%	60 - 140
			Difluorobenzene	2009/09/15		99	%	60 - 140
			2,2,4-Trimethylpentane	2009/09/15		99	%	70 - 130
			Carbon Disulfide	2009/09/15		98	%	70 - 130
			Propene	2009/09/15		96	%	70 - 130
			Vinyl Acetate	2009/09/15		93	%	70 - 130
			Vinyl Bromide	2009/09/15		105	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/09/15		101	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/09/15		102	%	70 - 130
			Chloromethane	2009/09/15		101	%	70 - 130
			Vinyl Chloride	2009/09/15		106	%	70 - 130
			Chloroethane	2009/09/15		106	%	70 - 130
			1,3-Butadiene	2009/09/15		89	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/09/15		102	%	70 - 130
			Trichlorotrifluoroethane	2009/09/15		103	%	70 - 130
			Ethanol	2009/09/15		100	%	70 - 130
			2-propanol	2009/09/15		102	%	70 - 130
			2-Propanone	2009/09/15		112	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/09/15		97	%	70 - 130
			Methyl Isobutyl Ketone	2009/09/15		94	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/09/15		95	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/09/15		89	%	70 - 130
			Ethyl Acetate	2009/09/15		104	%	70 - 130
			1,1-Dichloroethylene	2009/09/15		103	%	70 - 130
			cis-1,2-Dichloroethylene	2009/09/15		100	%	70 - 130
			trans-1,2-Dichloroethylene	2009/09/15		96	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/09/15		90	%	70 - 130
			Chloroform	2009/09/15		99	%	70 - 130
			Carbon Tetrachloride	2009/09/15		107	%	70 - 130
			1,1-Dichloroethane	2009/09/15		94	%	70 - 130
			1,2-Dichloroethane	2009/09/15		100	%	70 - 130
			Ethylene Dibromide	2009/09/15		101	%	70 - 130
			1,1,1-Trichloroethane	2009/09/15		100	%	70 - 130
			1,1,2-Trichloroethane	2009/09/15		97	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/09/15		96	%	70 - 130
			cis-1,3-Dichloropropene	2009/09/15		105	%	70 - 130
			trans-1,3-Dichloropropene	2009/09/15		111	%	70 - 130
			1,2-Dichloropropane	2009/09/15		98	%	70 - 130
			Bromomethane	2009/09/15		98	%	70 - 130
			Bromoform	2009/09/15		103	%	70 - 130
			Bromodichloromethane	2009/09/15		103	%	70 - 130
			Dibromochloromethane	2009/09/15		104	%	70 - 130
			Heptane	2009/09/15		100	%	70 - 130
			Trichloroethylene	2009/09/15		95	%	70 - 130
			Tetrachloroethylene	2009/09/15		93	%	70 - 130
			Benzene	2009/09/15		97	%	70 - 130
			Toluene	2009/09/15		98	%	70 - 130
			Ethylbenzene	2009/09/15		99	%	70 - 130
			p+m-Xylene	2009/09/15		98	%	70 - 130
			o-Xylene	2009/09/15		97	%	70 - 130
			Styrene	2009/09/15		98	%	70 - 130
			1,3,5-Trimethylbenzene	2009/09/15		96	%	70 - 130
			1,2,4-Trimethylbenzene	2009/09/15		95	%	70 - 130
			4-ethyltoluene	2009/09/15		98	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9C0217

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1940538	VEA	Spiked Blank	Chlorobenzene	2009/09/15		96	%	70 - 130
			Benzyl chloride	2009/09/15		123	%	70 - 130
			1,3-Dichlorobenzene	2009/09/15		102	%	70 - 130
			1,4-Dichlorobenzene	2009/09/15		109	%	70 - 130
			1,2-Dichlorobenzene	2009/09/15		96	%	70 - 130
			1,2,4-Trichlorobenzene	2009/09/15		101	%	70 - 130
			Hexachlorobutadiene	2009/09/15		75	%	70 - 130
			Hexane	2009/09/15		93	%	70 - 130
			Cyclohexane	2009/09/15		100	%	70 - 130
			Tetrahydrofuran	2009/09/15		101	%	70 - 130
			1,4-Dioxane	2009/09/15		96	%	70 - 130
		Method Blank	Bromochloromethane	2009/09/15		96	%	60 - 140
			D5-Chlorobenzene	2009/09/15		98	%	60 - 140
			Difluorobenzene	2009/09/15		99	%	60 - 140
			2,2,4-Trimethylpentane	2009/09/15	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/09/15	ND, RDL=0.50		ppbv	
			Propene	2009/09/15	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2009/09/15	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/09/15	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/09/15	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/09/15	ND, RDL=0.17		ppbv	
			Chloromethane	2009/09/15	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/09/15	ND, RDL=0.18		ppbv	
			Chloroethane	2009/09/15	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/09/15	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/09/15	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/09/15	ND, RDL=0.15		ppbv	
			Ethanol	2009/09/15	ND, RDL=2.3		ppbv	
			2-propanol	2009/09/15	ND, RDL=3.0		ppbv	
			2-Propanone	2009/09/15	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/09/15	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/09/15	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/09/15	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/09/15	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/09/15	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/09/15	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/09/15	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/09/15	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/09/15	0.59, RDL=0.30		ppbv	
			Chloroform	2009/09/15	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/09/15	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/09/15	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/09/15	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/09/15	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/09/15	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/09/15	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/09/15	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/09/15	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/09/15	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/09/15	ND, RDL=0.40		ppbv	
			Bromomethane	2009/09/15	ND, RDL=0.18		ppbv	
			Bromoform	2009/09/15	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/09/15	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/09/15	ND, RDL=0.20		ppbv	
			Heptane	2009/09/15	ND, RDL=0.30		ppbv	

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9C0217

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1940538	VEA	Method Blank	Trichloroethylene	2009/09/15	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/09/15	ND, RDL=0.20		ppbv	
			Benzene	2009/09/15	ND, RDL=0.18		ppbv	
			Toluene	2009/09/15	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/09/15	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/09/15	ND, RDL=0.37		ppbv	
			o-Xylene	2009/09/15	ND, RDL=0.20		ppbv	
			Styrene	2009/09/15	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/09/15	ND, RDL=2.4		ppbv	
			1,2,4-Trimethylbenzene	2009/09/15	ND, RDL=2.5		ppbv	
			4-ethyltoluene	2009/09/15	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/09/15	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/09/15	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/09/15	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/09/15	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/09/15	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/09/15	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/09/15	ND, RDL=3.0		ppbv	
			Hexane	2009/09/15	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/09/15	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/09/15	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/09/15	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/09/15	ND, RDL=0.60		ppbv	
		RPD - Sample/Sample Dup	2,2,4-Trimethylpentane	2009/09/15	NC		%	25
			Carbon Disulfide	2009/09/15	NC		%	25
			Propene	2009/09/15	NC		%	25
			Vinyl Acetate	2009/09/15	NC		%	25
			Vinyl Bromide	2009/09/15	NC		%	25
			Dichlorodifluoromethane (FREON 12)	2009/09/15	NC		%	25
			1,2-Dichlorotetrafluoroethane	2009/09/15	NC		%	25
			Chloromethane	2009/09/15	NC		%	25
			Vinyl Chloride	2009/09/15	NC		%	25
			Chloroethane	2009/09/15	NC		%	25
			1,3-Butadiene	2009/09/15	NC		%	25
			Trichlorofluoromethane (FREON 11)	2009/09/15	3.2		%	25
			Trichlorotrifluoroethane	2009/09/15	NC		%	25
			Ethanol	2009/09/15	NC		%	25
			2-propanol	2009/09/15	NC		%	25
			2-Propanone	2009/09/15	NC		%	25
			Methyl Ethyl Ketone (2-Butanone)	2009/09/15	NC		%	25
			Methyl Isobutyl Ketone	2009/09/15	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2009/09/15	NC		%	25
			Methyl t-butyl ether (MTBE)	2009/09/15	NC		%	25
			Ethyl Acetate	2009/09/15	NC		%	25
			1,1-Dichloroethylene	2009/09/15	NC		%	25
			cis-1,2-Dichloroethylene	2009/09/15	NC		%	25
			trans-1,2-Dichloroethylene	2009/09/15	NC		%	25
			Methylene Chloride(Dichloromethane)	2009/09/15	NC		%	25
			Chloroform	2009/09/15	NC		%	25
			Carbon Tetrachloride	2009/09/15	NC		%	25
			1,1-Dichloroethane	2009/09/15	NC		%	25
			1,2-Dichloroethane	2009/09/15	NC		%	25
			Ethylene Dibromide	2009/09/15	NC		%	25

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9C0217

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1940538	VEA	RPD - Sample/Sample Dup	1,1,1-Trichloroethane	2009/09/15	NC		%	25
			1,1,2-Trichloroethane	2009/09/15	NC		%	25
			1,1,2,2-Tetrachloroethane	2009/09/15	NC		%	25
			cis-1,3-Dichloropropene	2009/09/15	NC		%	25
			trans-1,3-Dichloropropene	2009/09/15	NC		%	25
			1,2-Dichloropropane	2009/09/15	NC		%	25
			Bromomethane	2009/09/15	NC		%	25
			Bromoform	2009/09/15	NC		%	25
			Bromodichloromethane	2009/09/15	NC		%	25
			Dibromochloromethane	2009/09/15	NC		%	25
			Heptane	2009/09/15	2.9		%	25
			Trichloroethylene	2009/09/15	NC		%	25
			Tetrachloroethylene	2009/09/15	NC		%	25
			Benzene	2009/09/15	NC		%	25
			Toluene	2009/09/15	NC		%	25
			Ethylbenzene	2009/09/15	0.9		%	25
			p+m-Xylene	2009/09/15	0.7		%	25
			o-Xylene	2009/09/15	NC		%	25
			Styrene	2009/09/15	NC		%	25
			1,3,5-Trimethylbenzene	2009/09/15	0.9		%	25
			1,2,4-Trimethylbenzene	2009/09/15	1.8		%	25
			4-ethyltoluene	2009/09/15	0.7		%	25
			Chlorobenzene	2009/09/15	NC		%	25
			Benzyl chloride	2009/09/15	NC		%	25
			1,3-Dichlorobenzene	2009/09/15	NC		%	25
			1,4-Dichlorobenzene	2009/09/15	NC		%	25
			1,2-Dichlorobenzene	2009/09/15	NC		%	25
			1,2,4-Trichlorobenzene	2009/09/15	NC		%	25
			Hexachlorobutadiene	2009/09/15	NC		%	25
			Hexane	2009/09/15	NC		%	25
			Cyclohexane	2009/09/15	NC		%	25
			Tetrahydrofuran	2009/09/15	NC		%	25
			1,4-Dioxane	2009/09/15	NC		%	25
			Xylene (Total)	2009/09/15	0.6		%	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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Your C.O.C. #: 0553

Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/10/05

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9C9323
Received: 2009/09/29, 11:43

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2009/09/30	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2009/09/30	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

RESULTS OF ANALYSES OF AIR

Maxxam ID		DW2005	DW2006		
Sampling Date		2009/09/10 00:00	2009/09/16 00:00		
COC Number		0553	0553		
	Units	**LICAVOC/ CLS/SEP10/09 #7813**	**LICAVOC/CLI/ SEP 16, 09 #7784**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	18	16	N/A	1957637

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DW2005				
Sampling Date		2009/09/10 00:00				
COC Number		0553				
	Units	**LICAVOC/ CLS/SEP10/09 #7813**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1957755
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1957755
Propene	ppbv	<0.30	0.30	<0.516	0.516	1957755
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1957755
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1957755
Dichlorodifluoromethane (FREON 12)	ppbv	0.51	0.20	2.50	0.989	1957755
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1957755
Chloromethane	ppbv	<0.30	0.30	<0.620	0.620	1957755
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1957755
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1957755
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1957755
Trichlorofluoromethane (FREON 11)	ppbv	0.23	0.20	1.28	1.12	1957755
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1957755
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1957755
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1957755
2-Propanone	ppbv	2.83	0.80	6.72	1.90	1957755
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1957755
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1957755
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1957755
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1957755
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1957755
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1957755
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1957755
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1957755
Methylene Chloride(Dichloromethane)	ppbv	0.35	0.30	1.21	1.04	1957755
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1957755
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1957755
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1957755
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1957755
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1957755

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DW2005				
Sampling Date		2009/09/10 00:00				
COC Number		0553				
	Units	**LICAVOC/ CLS/SEP10/09 #7813**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1957755
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1957755
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1957755
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1957755
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1957755
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1957755
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1957755
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1957755
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1957755
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1957755
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1957755
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1957755
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1957755
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1957755
Toluene	ppbv	0.23	0.20	0.875	0.753	1957755
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1957755
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1957755
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1957755
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1957755
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1957755
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1957755
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1957755
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1957755
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1957755
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1957755
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1957755
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1957755
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1957755
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1957755
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1957755
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1957755
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1957755

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DW2005				
Sampling Date		2009/09/10 00:00				
COC Number		0553				
	Units	**LICAVOC/ CLS/SEP10/09 #7813**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1957755
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1957755
Surrogate Recovery (%)						
Bromochloromethane	%	111		N/A	N/A	1957755
D5-Chlorobenzene	%	114		N/A	N/A	1957755
Difluorobenzene	%	116		N/A	N/A	1957755

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

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DW2006				
Sampling Date		2009/09/16 00:00				
COC Number		0553				
	Units	**LICAVOC/CLI/ SEP 16, 09 #7784**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1957755
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1957755
Propene	ppbv	<0.30	0.30	<0.516	0.516	1957755
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1957755
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1957755
Dichlorodifluoromethane (FREON 12)	ppbv	0.50	0.20	2.48	0.989	1957755
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1957755
Chloromethane	ppbv	<0.30	0.30	<0.620	0.620	1957755
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1957755
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1957755
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1957755
Trichlorofluoromethane (FREON 11)	ppbv	0.24	0.20	1.32	1.12	1957755
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1957755
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1957755
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1957755
2-Propanone	ppbv	4.10	0.80	9.74	1.90	1957755
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1957755
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1957755
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1957755
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1957755
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1957755
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1957755
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1957755
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1957755
Methylene Chloride(Dichloromethane)	ppbv	0.35	0.30	1.23	1.04	1957755
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1957755
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1957755
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1957755
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1957755
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1957755

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DW2006				
Sampling Date		2009/09/16 00:00				
COC Number		0553				
	Units	**LICAVOC/CLI/ SEP 16, 09 #7784**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1957755
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1957755
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1957755
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1957755
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1957755
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1957755
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1957755
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1957755
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1957755
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1957755
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1957755
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1957755
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1957755
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1957755
Toluene	ppbv	0.44	0.20	1.64	0.753	1957755
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1957755
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1957755
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1957755
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1957755
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1957755
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1957755
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1957755
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1957755
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1957755
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1957755
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1957755
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1957755
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1957755
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1957755
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1957755
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1957755
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1957755

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DW2006				
Sampling Date		2009/09/16 00:00				
COC Number		0553				
	Units	**LICAVOC/CLI/ SEP 16, 09 #7784**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1957755
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1957755
Surrogate Recovery (%)						
Bromochloromethane	%	109		N/A	N/A	1957755
D5-Chlorobenzene	%	113		N/A	N/A	1957755
Difluorobenzene	%	114		N/A	N/A	1957755

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

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

Test Summary

Maxxam ID	DW2005	**Collected**	2009/09/10
Sample ID	LICAVOC/ CLS/SEP10/09 #7813	**Shipped**	
Matrix	AIR	**Received**	2009/09/29

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1957637	N/A	2009/09/30	MM2
Volatile Organics in Air (TO-15)	GC/MS	1957755	N/A	2009/09/30	MM2

Maxxam ID	DW2006	**Collected**	2009/09/16
Sample ID	LICAVOC/CLI/ SEP 16, 09 #7784	**Shipped**	
Matrix	AIR	**Received**	2009/09/29

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1957637	N/A	2009/09/30	MM2
Volatile Organics in Air (TO-15)	GC/MS	1957755	N/A	2009/09/30	MM2

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9323
Report Date: 2009/10/05

GENERAL COMMENTS

Results relate only to the items tested.

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

Quality Assurance Report

Maxxam Job Number: GA9C9323

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1957755	MM2	Spiked Blank	Bromochloromethane	2009/09/30		91	%	60 - 140
			D5-Chlorobenzene	2009/09/30		95	%	60 - 140
			Difluorobenzene	2009/09/30		94	%	60 - 140
			2,2,4-Trimethylpentane	2009/09/30		110	%	70 - 130
			Carbon Disulfide	2009/09/30		114	%	70 - 130
			Propene	2009/09/30		109	%	70 - 130
			Vinyl Acetate	2009/09/30		96	%	70 - 130
			Vinyl Bromide	2009/09/30		102	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/09/30		120	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/09/30		117	%	70 - 130
			Chloromethane	2009/09/30		124	%	70 - 130
			Vinyl Chloride	2009/09/30		129	%	70 - 130
			Chloroethane	2009/09/30		128	%	70 - 130
			1,3-Butadiene	2009/09/30		123	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/09/30		123	%	70 - 130
			Trichlorotrifluoroethane	2009/09/30		114	%	70 - 130
			Ethanol	2009/09/30		95	%	70 - 130
			2-propanol	2009/09/30		111	%	70 - 130
			2-Propanone	2009/09/30		132 (1)	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/09/30		116	%	70 - 130
			Methyl Isobutyl Ketone	2009/09/30		109	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/09/30		106	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/09/30		119	%	70 - 130
			Ethyl Acetate	2009/09/30		113	%	70 - 130
			1,1-Dichloroethylene	2009/09/30		108	%	70 - 130
			cis-1,2-Dichloroethylene	2009/09/30		127	%	70 - 130
			trans-1,2-Dichloroethylene	2009/09/30		111	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/09/30		103	%	70 - 130
			Chloroform	2009/09/30		116	%	70 - 130
			Carbon Tetrachloride	2009/09/30		111	%	70 - 130
			1,1-Dichloroethane	2009/09/30		124	%	70 - 130
			1,2-Dichloroethane	2009/09/30		124	%	70 - 130
			Ethylene Dibromide	2009/09/30		105	%	70 - 130
			1,1,1-Trichloroethane	2009/09/30		110	%	70 - 130
			1,1,2-Trichloroethane	2009/09/30		104	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/09/30		103	%	70 - 130
			cis-1,3-Dichloropropene	2009/09/30		117	%	70 - 130
			trans-1,3-Dichloropropene	2009/09/30		117	%	70 - 130
			1,2-Dichloropropane	2009/09/30		119	%	70 - 130
			Bromomethane	2009/09/30		116	%	70 - 130
			Bromoform	2009/09/30		110	%	70 - 130
			Bromodichloromethane	2009/09/30		118	%	70 - 130
			Dibromochloromethane	2009/09/30		109	%	70 - 130
			Heptane	2009/09/30		98	%	70 - 130
			Trichloroethylene	2009/09/30		97	%	70 - 130
			Tetrachloroethylene	2009/09/30		97	%	70 - 130
			Benzene	2009/09/30		108	%	70 - 130
			Toluene	2009/09/30		103	%	70 - 130
			Ethylbenzene	2009/09/30		102	%	70 - 130
			p+m-Xylene	2009/09/30		102	%	70 - 130
			o-Xylene	2009/09/30		102	%	70 - 130
			Styrene	2009/09/30		108	%	70 - 130
			1,3,5-Trimethylbenzene	2009/09/30		98	%	70 - 130
			1,2,4-Trimethylbenzene	2009/09/30		95	%	70 - 130
			4-ethyltoluene	2009/09/30		95	%	70 - 130

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9C9323

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1957755	MM2	Spiked Blank	Chlorobenzene	2009/09/30		96	%	70 - 130
			Benzyl chloride	2009/09/30		91	%	70 - 130
			1,3-Dichlorobenzene	2009/09/30		91	%	70 - 130
			1,4-Dichlorobenzene	2009/09/30		93	%	70 - 130
			1,2-Dichlorobenzene	2009/09/30		88	%	70 - 130
			1,2,4-Trichlorobenzene	2009/09/30		77	%	70 - 130
			Hexachlorobutadiene	2009/09/30		76	%	70 - 130
			Hexane	2009/09/30		109	%	70 - 130
			Cyclohexane	2009/09/30		101	%	70 - 130
			Tetrahydrofuran	2009/09/30		113	%	70 - 130
			1,4-Dioxane	2009/09/30		103	%	70 - 130
		Method Blank	Bromochloromethane	2009/09/30		84	%	60 - 140
			D5-Chlorobenzene	2009/09/30		85	%	60 - 140
			Difluorobenzene	2009/09/30		87	%	60 - 140
			2,2,4-Trimethylpentane	2009/09/30	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/09/30	ND, RDL=0.50		ppbv	
			Propene	2009/09/30	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2009/09/30	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/09/30	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/09/30	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/09/30	ND, RDL=0.17		ppbv	
			Chloromethane	2009/09/30	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/09/30	ND, RDL=0.18		ppbv	
			Chloroethane	2009/09/30	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/09/30	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/09/30	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/09/30	ND, RDL=0.15		ppbv	
			Ethanol	2009/09/30	ND, RDL=2.3		ppbv	
			2-propanol	2009/09/30	ND, RDL=3.0		ppbv	
			2-Propanone	2009/09/30	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/09/30	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/09/30	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/09/30	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/09/30	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/09/30	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/09/30	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/09/30	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/09/30	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/09/30	0.39, RDL=0.30		ppbv	
			Chloroform	2009/09/30	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/09/30	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/09/30	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/09/30	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/09/30	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/09/30	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/09/30	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/09/30	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/09/30	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/09/30	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/09/30	ND, RDL=0.40		ppbv	
			Bromomethane	2009/09/30	ND, RDL=0.18		ppbv	
			Bromoform	2009/09/30	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/09/30	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/09/30	ND, RDL=0.20		ppbv	
			Heptane	2009/09/30	ND, RDL=0.30		ppbv	

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9C9323

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1957755	MM2	Method Blank	Trichloroethylene	2009/09/30	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/09/30	ND, RDL=0.20		ppbv	
			Benzene	2009/09/30	ND, RDL=0.18		ppbv	
			Toluene	2009/09/30	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/09/30	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/09/30	ND, RDL=0.37		ppbv	
			o-Xylene	2009/09/30	ND, RDL=0.20		ppbv	
			Styrene	2009/09/30	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/09/30	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/09/30	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/09/30	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/09/30	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/09/30	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/09/30	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/09/30	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/09/30	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/09/30	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/09/30	ND, RDL=3.0		ppbv	
			Hexane	2009/09/30	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/09/30	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/09/30	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/09/30	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/09/30	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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Your C.O.C. #: 5277

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

Report Date: 2009/10/20

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9D2445
Received: 2009/10/05, 15:35

Sample Matrix: AIR
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2009/10/09	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	2	N/A	2009/10/09	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

RESULTS OF ANALYSES OF AIR

Maxxam ID		DX8322	DX8323		
Sampling Date		2009/09/22	2009/09/28		
COC Number		5277	5277		
	Units	**LICA VOC/CLS/SEPT22,09/7798**	**LICA VOC/CLS/SEPT28,09/7814**	**DL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	17	19	N/A	1969215

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DX8322				
Sampling Date		2009/09/22				
COC Number		5277				
	Units	**LICA VOC/CLS/SEPT22,09/7798**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1969008
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1969008
Propene	ppbv	<0.30	0.30	<0.516	0.516	1969008
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1969008
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1969008
Dichlorodifluoromethane (FREON 12)	ppbv	0.53	0.20	2.60	0.989	1969008
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1969008
Chloromethane	ppbv	0.41	0.30	0.844	0.620	1969008
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1969008
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1969008
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1969008
Trichlorofluoromethane (FREON 11)	ppbv	0.25	0.20	1.38	1.12	1969008
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1969008
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1969008
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1969008
2-Propanone	ppbv	3.05	0.80	7.25	1.90	1969008
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1969008
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1969008
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1969008
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1969008
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1969008
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1969008
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1969008
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1969008
Methylene Chloride(Dichloromethane)	ppbv	5.83	0.30	20.3	1.04	1969008
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1969008
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1969008
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1969008
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1969008
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1969008

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DX8322				
Sampling Date		2009/09/22				
COC Number		5277				
	Units	**LICA VOC/CLS/SEPT22,09/7798**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1969008
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1969008
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1969008
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1969008
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1969008
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1969008
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1969008
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1969008
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1969008
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1969008
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1969008
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1969008
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1969008
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1969008
Toluene	ppbv	0.20	0.20	0.762	0.753	1969008
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1969008
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1969008
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1969008
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1969008
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1969008
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1969008
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1969008
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1969008
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1969008
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1969008
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1969008
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1969008
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1969008
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1969008
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1969008
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1969008

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DX8322				
Sampling Date		2009/09/22				
COC Number		5277				
	Units	**LICA VOC/CLS/SEPT22,09/7798**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1969008
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1969008
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1969008
Surrogate Recovery (%)						
Bromochloromethane	%	77		N/A	N/A	1969008
D5-Chlorobenzene	%	81		N/A	N/A	1969008
Difluorobenzene	%	80		N/A	N/A	1969008

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

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DX8323				
Sampling Date		2009/09/28				
COC Number		5277				
	Units	**LICA VOC/CLS/SEPT28,09/7814**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Volatile Organics						
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	1969008
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	1969008
Propene	ppbv	<0.30	0.30	<0.516	0.516	1969008
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	1969008
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	1969008
Dichlorodifluoromethane (FREON 12)	ppbv	0.50	0.20	2.46	0.989	1969008
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	1969008
Chloromethane	ppbv	0.35	0.30	0.726	0.620	1969008
Vinyl Chloride	ppbv	<0.18	0.18	<0.460	0.460	1969008
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	1969008
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	1969008
Trichlorofluoromethane (FREON 11)	ppbv	0.23	0.20	1.27	1.12	1969008
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	1969008
Ethanol	ppbv	<2.3	2.3	<4.33	4.33	1969008
2-propanol	ppbv	<3.0	3.0	<7.37	7.37	1969008
2-Propanone	ppbv	1.18	0.80	2.81	1.90	1969008
Methyl Ethyl Ketone (2-Butanone)	ppbv	<3.0	3.0	<8.85	8.85	1969008
Methyl Isobutyl Ketone	ppbv	<3.2	3.2	<13.1	13.1	1969008
Methyl Butyl Ketone (2-Hexanone)	ppbv	<2.0	2.0	<8.19	8.19	1969008
Methyl t-butyl ether (MTBE)	ppbv	<0.20	0.20	<0.721	0.721	1969008
Ethyl Acetate	ppbv	<2.2	2.2	<7.93	7.93	1969008
1,1-Dichloroethylene	ppbv	<0.25	0.25	<0.991	0.991	1969008
cis-1,2-Dichloroethylene	ppbv	<0.19	0.19	<0.753	0.753	1969008
trans-1,2-Dichloroethylene	ppbv	<0.20	0.20	<0.793	0.793	1969008
Methylene Chloride(Dichloromethane)	ppbv	0.49	0.30	1.70	1.04	1969008
Chloroform	ppbv	<0.15	0.15	<0.732	0.732	1969008
Carbon Tetrachloride	ppbv	<0.30	0.30	<1.89	1.89	1969008
1,1-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1969008
1,2-Dichloroethane	ppbv	<0.20	0.20	<0.809	0.809	1969008
Ethylene Dibromide	ppbv	<0.17	0.17	<1.31	1.31	1969008

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DX8323				
Sampling Date		2009/09/28				
COC Number		5277				
	Units	**LICA VOC/CLS/SEPT28,09/7814**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
1,1,1-Trichloroethane	ppbv	<0.30	0.30	<1.64	1.64	1969008
1,1,2-Trichloroethane	ppbv	<0.15	0.15	<0.818	0.818	1969008
1,1,2,2-Tetrachloroethane	ppbv	<0.20	0.20	<1.37	1.37	1969008
cis-1,3-Dichloropropene	ppbv	<0.18	0.18	<0.817	0.817	1969008
trans-1,3-Dichloropropene	ppbv	<0.17	0.17	<0.772	0.772	1969008
1,2-Dichloropropane	ppbv	<0.40	0.40	<1.85	1.85	1969008
Bromomethane	ppbv	<0.18	0.18	<0.699	0.699	1969008
Bromoform	ppbv	<0.20	0.20	<2.07	2.07	1969008
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	1969008
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	1969008
Heptane	ppbv	<0.30	0.30	<1.23	1.23	1969008
Trichloroethylene	ppbv	<0.30	0.30	<1.61	1.61	1969008
Tetrachloroethylene	ppbv	<0.20	0.20	<1.36	1.36	1969008
Benzene	ppbv	<0.18	0.18	<0.575	0.575	1969008
Toluene	ppbv	<0.20	0.20	<0.753	0.753	1969008
Ethylbenzene	ppbv	<0.20	0.20	<0.868	0.868	1969008
p+m-Xylene	ppbv	<0.37	0.37	<1.61	1.61	1969008
o-Xylene	ppbv	<0.20	0.20	<0.868	0.868	1969008
Styrene	ppbv	<0.20	0.20	<0.852	0.852	1969008
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1969008
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.46	2.46	1969008
4-ethyltoluene	ppbv	<2.2	2.2	<10.8	10.8	1969008
Chlorobenzene	ppbv	<0.20	0.20	<0.921	0.921	1969008
Benzyl chloride	ppbv	<1.0	1.0	<5.18	5.18	1969008
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1969008
1,4-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1969008
1,2-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	1969008
1,2,4-Trichlorobenzene	ppbv	<2.0	2.0	<14.8	14.8	1969008
Hexachlorobutadiene	ppbv	<3.0	3.0	<32.0	32.0	1969008
Hexane	ppbv	<0.30	0.30	<1.06	1.06	1969008
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	1969008

QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		DX8323				
Sampling Date		2009/09/28				
COC Number		5277				
	Units	**LICA VOC/CLS/SEPT28,09/7814**	**DL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	1969008
1,4-Dioxane	ppbv	<2.0	2.0	<7.21	7.21	1969008
Xylene (Total)	ppbv	<0.60	0.60	<2.61	2.61	1969008
Surrogate Recovery (%)						
Bromochloromethane	%	79		N/A	N/A	1969008
D5-Chlorobenzene	%	80		N/A	N/A	1969008
Difluorobenzene	%	81		N/A	N/A	1969008

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

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

Test Summary

Maxxam ID	DX8322	**Collected**	2009/09/22
Sample ID	LICA VOC/CLS/SEPT22,09/7798	**Shipped**	
Matrix	AIR	**Received**	2009/10/05

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1969215	N/A	2009/10/09	MM2
Volatile Organics in Air (TO-15)	GC/MS	1969008	N/A	2009/10/09	MM2

Maxxam ID	DX8323	**Collected**	2009/09/28
Sample ID	LICA VOC/CLS/SEPT28,09/7814	**Shipped**	
Matrix	AIR	**Received**	2009/10/05

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	1969215	N/A	2009/10/09	MM2
Volatile Organics in Air (TO-15)	GC/MS	1969008	N/A	2009/10/09	MM2

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2445
Report Date: 2009/10/20

GENERAL COMMENTS

Results relate only to the items tested.

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Attention:
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GA9D2445

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1969008	MM2	Spiked Blank	Bromochloromethane	2009/10/09		88	%	60 - 140
			D5-Chlorobenzene	2009/10/09		91	%	60 - 140
			Difluorobenzene	2009/10/09		92	%	60 - 140
			2,2,4-Trimethylpentane	2009/10/09		94	%	70 - 130
			Carbon Disulfide	2009/10/09		100	%	70 - 130
			Propene	2009/10/09		99	%	70 - 130
			Vinyl Acetate	2009/10/09		101	%	70 - 130
			Vinyl Bromide	2009/10/09		102	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2009/10/09		105	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2009/10/09		103	%	70 - 130
			Chloromethane	2009/10/09		100	%	70 - 130
			Vinyl Chloride	2009/10/09		101	%	70 - 130
			Chloroethane	2009/10/09		99	%	70 - 130
			1,3-Butadiene	2009/10/09		104	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2009/10/09		105	%	70 - 130
			Trichlorotrifluoroethane	2009/10/09		104	%	70 - 130
			Ethanol	2009/10/09		97	%	70 - 130
			2-propanol	2009/10/09		97	%	70 - 130
			2-Propanone	2009/10/09		104	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2009/10/09		111	%	70 - 130
			Methyl Isobutyl Ketone	2009/10/09		98	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2009/10/09		93	%	70 - 130
			Methyl t-butyl ether (MTBE)	2009/10/09		105	%	70 - 130
			Ethyl Acetate	2009/10/09		102	%	70 - 130
			1,1-Dichloroethylene	2009/10/09		103	%	70 - 130
			cis-1,2-Dichloroethylene	2009/10/09		114	%	70 - 130
			trans-1,2-Dichloroethylene	2009/10/09		101	%	70 - 130
			Methylene Chloride(Dichloromethane)	2009/10/09		93	%	70 - 130
			Chloroform	2009/10/09		101	%	70 - 130
			Carbon Tetrachloride	2009/10/09		108	%	70 - 130
			1,1-Dichloroethane	2009/10/09		103	%	70 - 130
			1,2-Dichloroethane	2009/10/09		104	%	70 - 130
			Ethylene Dibromide	2009/10/09		102	%	70 - 130
			1,1,1-Trichloroethane	2009/10/09		102	%	70 - 130
			1,1,2-Trichloroethane	2009/10/09		98	%	70 - 130
			1,1,2,2-Tetrachloroethane	2009/10/09		90	%	70 - 130
			cis-1,3-Dichloropropene	2009/10/09		105	%	70 - 130
			trans-1,3-Dichloropropene	2009/10/09		108	%	70 - 130
			1,2-Dichloropropane	2009/10/09		97	%	70 - 130
			Bromomethane	2009/10/09		108	%	70 - 130
			Bromoform	2009/10/09		114	%	70 - 130
			Bromodichloromethane	2009/10/09		104	%	70 - 130
			Dibromochloromethane	2009/10/09		111	%	70 - 130
			Heptane	2009/10/09		93	%	70 - 130
			Trichloroethylene	2009/10/09		104	%	70 - 130
			Tetrachloroethylene	2009/10/09		105	%	70 - 130
			Benzene	2009/10/09		98	%	70 - 130
			Toluene	2009/10/09		102	%	70 - 130
			Ethylbenzene	2009/10/09		105	%	70 - 130
			p+m-Xylene	2009/10/09		105	%	70 - 130
			o-Xylene	2009/10/09		103	%	70 - 130
			Styrene	2009/10/09		122	%	70 - 130
			1,3,5-Trimethylbenzene	2009/10/09		98	%	70 - 130
			1,2,4-Trimethylbenzene	2009/10/09		94	%	70 - 130
			4-ethyltoluene	2009/10/09		96	%	70 - 130

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Lakeland Industry & Community Assoc.
Attention:
Client Project #:
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Quality Assurance Report (Continued)

Maxxam Job Number: GA9D2445

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1969008	MM2	Spiked Blank	Chlorobenzene	2009/10/09		102	%	70 - 130
			Benzyl chloride	2009/10/09		85	%	70 - 130
			1,3-Dichlorobenzene	2009/10/09		93	%	70 - 130
			1,4-Dichlorobenzene	2009/10/09		91	%	70 - 130
			1,2-Dichlorobenzene	2009/10/09		85	%	70 - 130
			1,2,4-Trichlorobenzene	2009/10/09		83	%	70 - 130
			Hexachlorobutadiene	2009/10/09		88	%	70 - 130
			Hexane	2009/10/09		107	%	70 - 130
			Cyclohexane	2009/10/09		94	%	70 - 130
			Tetrahydrofuran	2009/10/09		105	%	70 - 130
			1,4-Dioxane	2009/10/09		94	%	70 - 130
		Method Blank	Bromochloromethane	2009/10/09		86	%	60 - 140
			D5-Chlorobenzene	2009/10/09		89	%	60 - 140
			Difluorobenzene	2009/10/09		90	%	60 - 140
			2,2,4-Trimethylpentane	2009/10/09	ND, RDL=0.20		ppbv	
			Carbon Disulfide	2009/10/09	ND, RDL=0.50		ppbv	
			Propene	2009/10/09	ND, RDL=0.30		ppbv	
			Vinyl Acetate	2009/10/09	ND, RDL=0.20		ppbv	
			Vinyl Bromide	2009/10/09	ND, RDL=0.20		ppbv	
			Dichlorodifluoromethane (FREON 12)	2009/10/09	ND, RDL=0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2009/10/09	ND, RDL=0.17		ppbv	
			Chloromethane	2009/10/09	ND, RDL=0.30		ppbv	
			Vinyl Chloride	2009/10/09	ND, RDL=0.18		ppbv	
			Chloroethane	2009/10/09	ND, RDL=0.30		ppbv	
			1,3-Butadiene	2009/10/09	ND, RDL=0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2009/10/09	ND, RDL=0.20		ppbv	
			Trichlorotrifluoroethane	2009/10/09	ND, RDL=0.15		ppbv	
			Ethanol	2009/10/09	ND, RDL=2.3		ppbv	
			2-propanol	2009/10/09	ND, RDL=3.0		ppbv	
			2-Propanone	2009/10/09	ND, RDL=0.80		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2009/10/09	ND, RDL=3.0		ppbv	
			Methyl Isobutyl Ketone	2009/10/09	ND, RDL=3.2		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2009/10/09	ND, RDL=2.0		ppbv	
			Methyl t-butyl ether (MTBE)	2009/10/09	ND, RDL=0.20		ppbv	
			Ethyl Acetate	2009/10/09	ND, RDL=2.2		ppbv	
			1,1-Dichloroethylene	2009/10/09	ND, RDL=0.25		ppbv	
			cis-1,2-Dichloroethylene	2009/10/09	ND, RDL=0.19		ppbv	
			trans-1,2-Dichloroethylene	2009/10/09	ND, RDL=0.20		ppbv	
			Methylene Chloride(Dichloromethane)	2009/10/09	0.42, RDL=0.30		ppbv	
			Chloroform	2009/10/09	ND, RDL=0.15		ppbv	
			Carbon Tetrachloride	2009/10/09	ND, RDL=0.30		ppbv	
			1,1-Dichloroethane	2009/10/09	ND, RDL=0.20		ppbv	
			1,2-Dichloroethane	2009/10/09	ND, RDL=0.20		ppbv	
			Ethylene Dibromide	2009/10/09	ND, RDL=0.17		ppbv	
			1,1,1-Trichloroethane	2009/10/09	ND, RDL=0.30		ppbv	
			1,1,2-Trichloroethane	2009/10/09	ND, RDL=0.15		ppbv	
			1,1,2,2-Tetrachloroethane	2009/10/09	ND, RDL=0.20		ppbv	
			cis-1,3-Dichloropropene	2009/10/09	ND, RDL=0.18		ppbv	
			trans-1,3-Dichloropropene	2009/10/09	ND, RDL=0.17		ppbv	
			1,2-Dichloropropane	2009/10/09	ND, RDL=0.40		ppbv	
			Bromomethane	2009/10/09	ND, RDL=0.18		ppbv	
			Bromoform	2009/10/09	ND, RDL=0.20		ppbv	
			Bromodichloromethane	2009/10/09	ND, RDL=0.20		ppbv	
			Dibromochloromethane	2009/10/09	ND, RDL=0.20		ppbv	
			Heptane	2009/10/09	ND, RDL=0.30		ppbv	

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Client Project #:
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Quality Assurance Report (Continued)

Maxxam Job Number: GA9D2445

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1969008	MM2	Method Blank	Trichloroethylene	2009/10/09	ND, RDL=0.30		ppbv	
			Tetrachloroethylene	2009/10/09	ND, RDL=0.20		ppbv	
			Benzene	2009/10/09	ND, RDL=0.18		ppbv	
			Toluene	2009/10/09	ND, RDL=0.20		ppbv	
			Ethylbenzene	2009/10/09	ND, RDL=0.20		ppbv	
			p+m-Xylene	2009/10/09	ND, RDL=0.37		ppbv	
			o-Xylene	2009/10/09	ND, RDL=0.20		ppbv	
			Styrene	2009/10/09	ND, RDL=0.20		ppbv	
			1,3,5-Trimethylbenzene	2009/10/09	ND, RDL=0.50		ppbv	
			1,2,4-Trimethylbenzene	2009/10/09	ND, RDL=0.50		ppbv	
			4-ethyltoluene	2009/10/09	ND, RDL=2.2		ppbv	
			Chlorobenzene	2009/10/09	ND, RDL=0.20		ppbv	
			Benzyl chloride	2009/10/09	ND, RDL=1.0		ppbv	
			1,3-Dichlorobenzene	2009/10/09	ND, RDL=0.40		ppbv	
			1,4-Dichlorobenzene	2009/10/09	ND, RDL=0.40		ppbv	
			1,2-Dichlorobenzene	2009/10/09	ND, RDL=0.40		ppbv	
			1,2,4-Trichlorobenzene	2009/10/09	ND, RDL=2.0		ppbv	
			Hexachlorobutadiene	2009/10/09	ND, RDL=3.0		ppbv	
			Hexane	2009/10/09	ND, RDL=0.30		ppbv	
			Cyclohexane	2009/10/09	ND, RDL=0.20		ppbv	
			Tetrahydrofuran	2009/10/09	ND, RDL=0.40		ppbv	
			1,4-Dioxane	2009/10/09	ND, RDL=2.0		ppbv	
			Xylene (Total)	2009/10/09	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.

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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/Aug 5, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/08/04 @17:05
Removal Date/Time: 2009/08/06 @ 04:50

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
05-Aug-09	08/05/2009 0:00	08/06/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
30-Jul-09	06-Aug-09	13-Aug-09	27-Jul-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 04-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
717	229	13.6	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: When this PUF cartrige was received the ice pack was melted; cooler at room temperature.
GA993155 PUFF#2

Technician Signiture: _____

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/Aug 11, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/08/10 @ 21:10
Removal Date/Time: 2009/08/14 @ 09:10

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
11-Aug-09	08/11/2009 0:00	08/12/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
05-Aug-09	06-Aug-09	19-Aug-09	31-Jul-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
707	229	15.3	330.31

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

Comments:
GA995816 PUFF#2
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Aug 11, 09

Technician Signiture: _____

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/Aug 17, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/08/16 @ 12:50 mst
Removal Date/Time: 2009/08/18 @ 11:05 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
17-Aug-09	08/17/2009 0:00	08/18/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
14-Aug-09	18-Aug-09	09-Sep-09	31-Jul-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
709	229	16.1	330.07

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

Comments:

GA993198 PUFF#1

Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Aug 17, 09

- During the sampling run the sampler condtions were checked; during this check the Hi-vol motor was accidentally stopped.

Power to the unit was cycled and sampling resumed. This episode occurred at about 07:05 mst and lasted about 2 minutes.

Technician Signiture: _____

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/Aug 23, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/08/21 @ 13:30 mst
Removal Date/Time: 2009/08/24 @ 08:00 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
23-Aug-09	08/23/2009 0:00	08/24/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
14-Aug-09	24-Aug-09	09-Sep-09	01-Aug-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
707	229	13.9	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:
GA993198 PUFF#2
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Aug 23, 09

Technician Signiture: _____

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/Aug 29, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/08/28 @ 10:15 mst
Removal Date/Time: 2009/08/30 @ 05:30 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
29-Aug-09	08/29/2009 0:00	08/30/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
28-Aug-09	31-Aug-09	04-Sep-09	24-Aug-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
715	229	18.9	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:
GA993208 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Aug 29, 09
- Upon arrival the cooler was at room temperature, ice pack melted.

Technician Signiture: _____

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/Sept 4, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/09/3 @ 13:30 mst
Removal Date/Time: 2009/09/08 @ 0905 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
04-Sep-09	09/04/2009 0:00	09/05/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
03-Sep-09	08-Sep-09	16-Sep-09	28-Aug-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
703	229	18	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:
GA993209 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Sept 4, 09
- Upon arrival the cooler was at room temperature, ice pack melted.

Technician Signiture: _____

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/Sept 16, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/09/15 @ 05:40 mst
Removal Date/Time: 2009/09/17 @ 20:45 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
16-Sep-09	09/16/2009 0:00	09/17/2009 0:00	22:58

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
11-Sep-09	2009/09/	25-Sep-09	03-Sep-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
715	229	17.3	316.11

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

Comments:
GA993209 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Sept 16, 09
- Upon arrival the cooler was at room temperature, ice pack melted.
- Power Failure during sampling period.

Technician Signiture: _____

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/Sept 22, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 09/21/09
Removal Date/Time: 09/23/09

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
22-Sep-09	09/22/2009 0:00	09/22/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
21-Sep-09			

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
713	229	15.3	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:
GA9C3100 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Sept 22, 09

- Original Data sheet was accidentally saved over - this data is from the PUF+ report the station log

Technician Signiture: _____

Maxxam Analytics Inc.

Tisch Hi-Vol PUF+ Sample Collection Data Sheet

Client: Lica
Location: Cold Lake South
Station ID: Lica1
eld Sample ID: LICA PUF/CLS/Sept 28, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/09/25 @ 15:30 mst
Removal Date/Time: 2009/09/29 @ 08:25 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
28-Sep-09	09/28/2009 0:00	09/29/2009 0:00	24.00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
21-Sep-09	Sept 29,09	01-Oct-09	18-Sep-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
713	229	4.2	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:
GA9C3100 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Sept 28, 09

Technician Signiture: _____

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/Oct 4, 09

Puf+ s/n: 100-1020
Motor s/n: 1138
Installation Date/Time: 2009/10/02 @ 07:20 mst
Removal Date/Time: 2009/10/05 @ 09:10 mst

Date and Time Information			
Sample Date	Start Time (MST)	End Time (MST)	Elapsed Time (Hours)
04-Oct-09	10/04/2009 0:00	10/05/2009 0:00	24:00:00

PUF and QFF Information			
Date Received	Date Shipped	Puf Expiration Date	QFF Prep Date
29-Sep-09	05-Oct-09	12-Oct-09	18-Sep-09

Set Flow Rate (slpm): 230

Date of Last Calibration: 10-Aug-09

Sampling Data			
Average Pressure(mmHg)	AverageFlow (Qstd slpm)	Average Tempurature (C)	Volume (Vstd m^3)
719	229	4.5	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:
GA9C8181 PUFF#1
Ran with a 102mm Quartz Fiber Filter - Sample ID - LICA QFF/CLS/Oct 4, 09

Technician Signiture: _____

Your Project #: NAPS
Site: COLD LAKE SOUTH
Your C.O.C. #: 0735

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/08/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9A2283
Received: 2009/08/11, 11:20

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/08/14	2009/08/20	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A9A2283
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: NAPS
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DI4393		
Sampling Date		2009/08/05 00:00		
COC Number		0735		
	Units	**LICA PUF/QFF/US/AUG5/09**	**DL**	**QC Batch**
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	70		1907446
D10-Fluoranthene	%	101		1907446
D10-Fluorene (FS)	%	22 (1)		1907446
D10-Phenanthrene	%	90		1907446
D12-Benzo(a)anthracene	%	116		1907446
D12-Benzo(a)pyrene	%	104		1907446
D12-Benzo(b)fluoranthene	%	107		1907446
D12-Benzo(ghi)perylene	%	105		1907446
D12-Benzo(k)fluoranthene	%	104		1907446
D12-Chrysene	%	99		1907446
D12-Indeno(1,2,3-cd)pyrene	%	122		1907446
D12-Perylene	%	99		1907446
D14-Dibenzo(a,h)anthracene	%	105		1907446
D14-Terphenyl (FS)	%	102		1907446
D8-Acenaphthylene	%	80		1907446
D8-Naphthalene	%	72		1907446

RDL = Reportable Detection Limit
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.

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

Maxxam Job #: A9A2283
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: NAPS
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DI4393		
Sampling Date		2009/08/05 00:00		
COC Number		0735		
	Units	**LICA PUF/QFF/US/AUG5/09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	<0.10	0.10	1907446
1-Methylphenanthrene	ug	<0.10	0.10	1907446
2-Chloronaphthalene	ug	<0.10	0.10	1907446
2-Methylanthracene	ug	<0.10	0.10	1907446
2-Methylnaphthalene	ug	0.17	0.10	1907446
3-Methylcholanthrene	ug	<2.0	2.0	1907446
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1907446
9,10-Dimethylanthracene	ug	<0.40	0.40	1907446
Acenaphthene	ug	0.055	0.050	1907446
Acenaphthylene	ug	<0.050	0.050	1907446
Anthracene	ug	<0.050	0.050	1907446
Benzo(a)anthracene	ug	<0.050	0.050	1907446
Benzo(a)fluorene	ug	<0.10	0.10	1907446
Benzo(a)pyrene	ug	<0.050	0.050	1907446
Benzo(b)fluoranthene	ug	<0.050	0.050	1907446
Benzo(b)fluorene	ug	<0.10	0.10	1907446
Benzo(e)pyrene	ug	<0.10	0.10	1907446
Benzo(g,h,i)perylene	ug	<0.050	0.050	1907446
Benzo(k)fluoranthene	ug	<0.050	0.050	1907446
Biphenyl	ug	<0.10	0.10	1907446
Chrysene	ug	<0.050	0.050	1907446
Coronene	ug	<0.10	0.10	1907446
Dibenz(a,h)anthracene	ug	<0.050	0.050	1907446
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1907446
Fluoranthene	ug	<0.050	0.050	1907446
Fluorene	ug	0.122	0.050	1907446
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1907446
m-Terphenyl	ug	<0.10	0.10	1907446
Naphthalene	ug	0.136	0.072	1907446
o-Terphenyl	ug	0.24	0.10	1907446
Perylene	ug	<0.10	0.10	1907446

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9A2283
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: NAPS
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DI4393		
Sampling Date		2009/08/05 00:00		
COC Number		0735		
	Units	**LICA PUF/QFF/US/AUG5/09**	**DL**	**QC Batch**
Phenanthrene	ug	0.438	0.050	1907446
p-Terphenyl	ug	<0.10	0.10	1907446
Pyrene	ug	<0.050	0.050	1907446
Quinoline	ug	<0.40	0.40	1907446
Tetralin	ug	<0.10	0.10	1907446

QC Batch = Quality Control Batch

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Maxxam Job #: A9A2283
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: NAPS
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID	DI4393	**Collected**	2009/08/05
Sample ID	LICA PUF/QFF/US/AUG5/09	**Shipped**	
Matrix	Filter	**Received**	2009/08/11

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1907446	2009/08/14	2009/08/20	VEA

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Maxxam Job #: A9A2283
Report Date: 2009/08/24

Lakeland Industry & Community Assoc.
Client Project #: NAPS
Project name: COLD LAKE SOUTH

GENERAL COMMENTS

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

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: Michael Bisaga
Client Project #: NAPS
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA9A2283

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1907446	VEA	Spiked Blank	D10-2-Methylnaphthalene	2009/08/20		85	%	50 - 150
			D10-Fluoranthene	2009/08/20		104	%	50 - 150
			D10-Phenanthrene	2009/08/20		94	%	50 - 150
			D12-Benzo(a)anthracene	2009/08/20		115	%	50 - 150
			D12-Benzo(a)pyrene	2009/08/20		109	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/08/20		114	%	50 - 150
			D12-Benzo(ghi)perylene	2009/08/20		107	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/08/20		111	%	50 - 150
			D12-Chrysene	2009/08/20		107	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/08/20		127	%	50 - 150
			D12-Perylene	2009/08/20		104	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/08/20		108	%	50 - 150
			D8-Acenaphthylene	2009/08/20		89	%	50 - 150
			D8-Naphthalene	2009/08/20		88	%	50 - 150
			Acenaphthene	2009/08/20		78	%	60 - 130
		RPD	Acenaphthene	2009/08/20	0.4		%	50
		Spiked Blank	Acenaphthylene	2009/08/20		75	%	60 - 130
		RPD	Acenaphthylene	2009/08/20	4.5		%	50
		Spiked Blank	Anthracene	2009/08/20		70	%	60 - 130
		RPD	Anthracene	2009/08/20	1.7		%	50
		Spiked Blank	Benzo(a)anthracene	2009/08/20		93	%	60 - 130
		RPD	Benzo(a)anthracene	2009/08/20	2.5		%	50
		Spiked Blank	Benzo(a)pyrene	2009/08/20		85	%	60 - 130
		RPD	Benzo(a)pyrene	2009/08/20	3.6		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/08/20		87	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/08/20	2.9		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/08/20		95	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/08/20	3.1		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/08/20		104	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/08/20	2.3		%	50
		Spiked Blank	Chrysene	2009/08/20		92	%	60 - 130
		RPD	Chrysene	2009/08/20	1.1		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/08/20		95	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/08/20	3.8		%	50
		Spiked Blank	Fluoranthene	2009/08/20		88	%	60 - 130
		RPD	Fluoranthene	2009/08/20	3.0		%	50
		Spiked Blank	Fluorene	2009/08/20		78	%	60 - 130
		RPD	Fluorene	2009/08/20	2.1		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/08/20		94	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/08/20	2.5		%	50
		Spiked Blank	Naphthalene	2009/08/20		82	%	60 - 130
		RPD	Naphthalene	2009/08/20	1.3		%	50
		Spiked Blank	Phenanthrene	2009/08/20		82	%	60 - 130
		RPD	Phenanthrene	2009/08/20	1.9		%	50
		Spiked Blank	Pyrene	2009/08/20		82	%	60 - 130
		RPD	Pyrene	2009/08/20	0.6		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/08/20		79	%	50 - 150
			D10-Fluoranthene	2009/08/20		106	%	50 - 150
			D10-Phenanthrene	2009/08/20		95	%	50 - 150
			D12-Benzo(a)anthracene	2009/08/20		116	%	50 - 150
			D12-Benzo(a)pyrene	2009/08/20		105	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/08/20		106	%	50 - 150
			D12-Benzo(ghi)perylene	2009/08/20		104	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/08/20		107	%	50 - 150
			D12-Chrysene	2009/08/20		104	%	50 - 150

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9A2283

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1907446	VEA	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/08/20		122	%	50 - 150
			D12-Perylene	2009/08/20		101	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/08/20		104	%	50 - 150
			D8-Acenaphthylene	2009/08/20		89	%	50 - 150
			D8-Naphthalene	2009/08/20		81	%	50 - 150
			1-Methylnaphthalene	2009/08/20	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/08/20	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/08/20	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/08/20	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/08/20	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/08/20	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/08/20	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/08/20	ND, RDL=0.40		ug	
			Acenaphthene	2009/08/20	ND, RDL=0.050		ug	
			Acenaphthylene	2009/08/20	ND, RDL=0.050		ug	
			Anthracene	2009/08/20	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/08/20	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/08/20	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/08/20	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/08/20	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/08/20	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/08/20	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/08/20	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/08/20	ND, RDL=0.050		ug	
			Biphenyl	2009/08/20	ND, RDL=0.10		ug	
			Chrysene	2009/08/20	ND, RDL=0.050		ug	
			Coronene	2009/08/20	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/08/20	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/08/20	ND, RDL=0.20		ug	
			Fluoranthene	2009/08/20	ND, RDL=0.050		ug	
			Fluorene	2009/08/20	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/08/20	ND, RDL=0.050		ug	
			m-Terphenyl	2009/08/20	ND, RDL=0.10		ug	
			Naphthalene	2009/08/20	ND, RDL=0.072		ug	
			o-Terphenyl	2009/08/20	ND, RDL=0.10		ug	
			Perylene	2009/08/20	ND, RDL=0.10		ug	
			Phenanthrene	2009/08/20	ND, RDL=0.050		ug	
			p-Terphenyl	2009/08/20	ND, RDL=0.10		ug	
			Pyrene	2009/08/20	ND, RDL=0.050		ug	
			Quinoline	2009/08/20	ND, RDL=0.40		ug	
			Tetralin	2009/08/20	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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Your Project #: LICA1
Site: COLD LAKE SOUTH
Your C.O.C. #: 0742

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/09/11

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9A8859
Received: 2009/08/21, 12:01

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/09/02	2009/09/08	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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Total cover pages: 1

Maxxam Job #: A9A8859
Report Date: 2009/09/11

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DL6695		
Sampling Date		2009/08/11		
COC Number		0742		
	Units	**LICA PUF ICLS AUG 11,09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	0.16	0.10	1927033
1-Methylphenanthrene	ug	<0.10	0.10	1927033
2-Chloronaphthalene	ug	<0.10	0.10	1927033
2-Methylanthracene	ug	<0.10	0.10	1927033
2-Methylnaphthalene	ug	0.24	0.10	1927033
3-Methylcholanthrene	ug	<2.0	2.0	1927033
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1927033
9,10-Dimethylanthracene	ug	<0.40	0.40	1927033
Acenaphthene	ug	0.091	0.050	1927033
Acenaphthylene	ug	<0.050	0.050	1927033
Anthracene	ug	<0.050	0.050	1927033
Benzo(a)anthracene	ug	<0.050	0.050	1927033
Benzo(a)fluorene	ug	<0.10	0.10	1927033
Benzo(a)pyrene	ug	<0.050	0.050	1927033
Benzo(b)fluoranthene	ug	<0.050	0.050	1927033
Benzo(b)fluorene	ug	<0.10	0.10	1927033
Benzo(e)pyrene	ug	<0.10	0.10	1927033
Benzo(g,h,i)perylene	ug	<0.050	0.050	1927033
Benzo(k)fluoranthene	ug	<0.050	0.050	1927033
Biphenyl	ug	<0.10	0.10	1927033
Chrysene	ug	<0.050	0.050	1927033
Coronene	ug	<0.10	0.10	1927033
Dibenz(a,h)anthracene	ug	<0.050	0.050	1927033
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1927033
Fluoranthene	ug	0.091	0.050	1927033
Fluorene	ug	0.183	0.050	1927033
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1927033
m-Terphenyl	ug	<0.10	0.10	1927033
Naphthalene	ug	0.192	0.072	1927033
o-Terphenyl	ug	0.13	0.10	1927033
Perylene	ug	<0.10	0.10	1927033

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9A8859
Report Date: 2009/09/11

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DL6695		
Sampling Date		2009/08/11		
COC Number		0742		
	Units	**LICA PUF ICLS AUG 11,09**	**DL**	**QC Batch**
Phenanthrene	ug	0.705	0.050	1927033
p-Terphenyl	ug	<0.10	0.10	1927033
Pyrene	ug	0.062	0.050	1927033
Quinoline	ug	<0.40	0.40	1927033
Tetralin	ug	<0.10	0.10	1927033
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	74		1927033
D10-Fluoranthene	%	107		1927033
D10-Fluorene (FS)	%	6.7 (1)		1927033
D10-Phenanthrene	%	98		1927033
D12-Benzo(a)anthracene	%	120		1927033
D12-Benzo(a)pyrene	%	111		1927033
D12-Benzo(b)fluoranthene	%	101		1927033
D12-Benzo(ghi)perylene	%	105		1927033
D12-Benzo(k)fluoranthene	%	110		1927033
D12-Chrysene	%	91		1927033
D12-Indeno(1,2,3-cd)pyrene	%	126		1927033
D12-Perylene	%	101		1927033
D14-Dibenzo(a,h)anthracene	%	111		1927033
D14-Terphenyl (FS)	%	99		1927033
D8-Acenaphthylene	%	90		1927033
D8-Naphthalene	%	74		1927033

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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Maxxam Job #: A9A8859
Report Date: 2009/09/11

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID	DL6695	**Collected**	2009/08/11
Sample ID	LICA PUF ICLS AUG 11,09	**Shipped**	
Matrix	Filter	**Received**	2009/08/21

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1927033	2009/09/02	2009/09/08	WZ

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Maxxam Job #: A9A8859
Report Date: 2009/09/11

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

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.

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 DL6695-01: PAHMS-F

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

Sample extracted past hold time.

Results relate only to the items tested.

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA9A8859

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1927033	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/09/08		84	%	50 - 150
			D10-Fluoranthene	2009/09/08		99	%	50 - 150
			D10-Phenanthrene	2009/09/08		94	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/08		125	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/08		120	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/08		104	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/08		107	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/08		111	%	50 - 150
			D12-Chrysene	2009/09/08		94	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/09/08		129	%	50 - 150
			D12-Perylene	2009/09/08		109	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/08		111	%	50 - 150
			D8-Acenaphthylene	2009/09/08		98	%	50 - 150
			D8-Naphthalene	2009/09/08		88	%	50 - 150
			Acenaphthene	2009/09/08		77	%	60 - 130
		RPD	Acenaphthene	2009/09/08	2.3		%	50
		Spiked Blank	Acenaphthylene	2009/09/08		81	%	60 - 130
		RPD	Acenaphthylene	2009/09/08	6.0		%	50
		Spiked Blank	Anthracene	2009/09/08		76	%	60 - 130
		RPD	Anthracene	2009/09/08	2.5		%	50
		Spiked Blank	Benzo(a)anthracene	2009/09/08		98	%	60 - 130
		RPD	Benzo(a)anthracene	2009/09/08	1.6		%	50
		Spiked Blank	Benzo(a)pyrene	2009/09/08		92	%	60 - 130
		RPD	Benzo(a)pyrene	2009/09/08	0.9		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/09/08		94	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/09/08	1.9		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/09/08		90	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/09/08	2.5		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/09/08		90	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/09/08	1.3		%	50
		Spiked Blank	Chrysene	2009/09/08		89	%	60 - 130
		RPD	Chrysene	2009/09/08	0.4		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/09/08		94	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/09/08	1.4		%	50
		Spiked Blank	Fluoranthene	2009/09/08		88	%	60 - 130
		RPD	Fluoranthene	2009/09/08	5.3		%	50
		Spiked Blank	Fluorene	2009/09/08		79	%	60 - 130
		RPD	Fluorene	2009/09/08	0.7		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/09/08		93	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/09/08	0.03		%	50
		Spiked Blank	Naphthalene	2009/09/08		82	%	60 - 130
		RPD	Naphthalene	2009/09/08	8.6		%	50
		Spiked Blank	Phenanthrene	2009/09/08		83	%	60 - 130
		RPD	Phenanthrene	2009/09/08	2.5		%	50
		Spiked Blank	Pyrene	2009/09/08		80	%	60 - 130
		RPD	Pyrene	2009/09/08	7.4		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/09/08		84	%	50 - 150
			D10-Fluoranthene	2009/09/08		98	%	50 - 150
			D10-Phenanthrene	2009/09/08		97	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/08		117	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/08		113	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/08		99	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/08		104	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/08		108	%	50 - 150
			D12-Chrysene	2009/09/08		90	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9A8859

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1927033	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/09/08		126	%	50 - 150
			D12-Perylene	2009/09/08		103	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/08		108	%	50 - 150
			D8-Acenaphthylene	2009/09/08		97	%	50 - 150
			D8-Naphthalene	2009/09/08		88	%	50 - 150
			1-Methylnaphthalene	2009/09/08	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/09/08	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/09/08	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/09/08	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/09/08	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/09/08	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/09/08	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/09/08	ND, RDL=0.40		ug	
			Acenaphthene	2009/09/08	ND, RDL=0.050		ug	
			Acenaphthylene	2009/09/08	ND, RDL=0.050		ug	
			Anthracene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/09/08	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/09/08	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/09/08	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/09/08	ND, RDL=0.050		ug	
			Biphenyl	2009/09/08	ND, RDL=0.10		ug	
			Chrysene	2009/09/08	ND, RDL=0.050		ug	
			Coronene	2009/09/08	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/09/08	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/09/08	ND, RDL=0.20		ug	
			Fluoranthene	2009/09/08	ND, RDL=0.050		ug	
			Fluorene	2009/09/08	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/09/08	ND, RDL=0.050		ug	
			m-Terphenyl	2009/09/08	ND, RDL=0.10		ug	
			Naphthalene	2009/09/08	ND, RDL=0.072		ug	
			o-Terphenyl	2009/09/08	ND, RDL=0.10		ug	
			Perylene	2009/09/08	ND, RDL=0.10		ug	
			Phenanthrene	2009/09/08	ND, RDL=0.050		ug	
			p-Terphenyl	2009/09/08	ND, RDL=0.10		ug	
			Pyrene	2009/09/08	ND, RDL=0.050		ug	
			Quinoline	2009/09/08	ND, RDL=0.40		ug	
			Tetralin	2009/09/08	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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Your C.O.C. #: 0741

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/09/03

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9B0058
Received: 2009/08/25, 09:01

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/08/27	2009/08/31	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9B0058
Report Date: 2009/09/03

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DM2650		
Sampling Date		2009/08/17		
COC Number		0741		
	Units	**LICA PUF+QFF/CLS/AUG17,09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	<0.10	0.10	1923875
1-Methylphenanthrene	ug	<0.10	0.10	1923875
2-Chloronaphthalene	ug	<0.10	0.10	1923875
2-Methylanthracene	ug	<0.10	0.10	1923875
2-Methylnaphthalene	ug	0.11	0.10	1923875
3-Methylcholanthrene	ug	<2.0	2.0	1923875
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1923875
9,10-Dimethylanthracene	ug	<0.40	0.40	1923875
Acenaphthene	ug	<0.060	0.060	1923875
Acenaphthylene	ug	<0.050	0.050	1923875
Anthracene	ug	<0.050	0.050	1923875
Benzo(a)anthracene	ug	<0.050	0.050	1923875
Benzo(a)fluorene	ug	<0.10	0.10	1923875
Benzo(a)pyrene	ug	<0.050	0.050	1923875
Benzo(b)fluoranthene	ug	<0.050	0.050	1923875
Benzo(b)fluorene	ug	<0.10	0.10	1923875
Benzo(e)pyrene	ug	<0.10	0.10	1923875
Benzo(g,h,i)perylene	ug	0.057	0.050	1923875
Benzo(k)fluoranthene	ug	<0.050	0.050	1923875
Biphenyl	ug	<0.10	0.10	1923875
Chrysene	ug	<0.050	0.050	1923875
Coronene	ug	<0.10	0.10	1923875
Dibenz(a,h)anthracene	ug	<0.050	0.050	1923875
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1923875
Fluoranthene	ug	0.069	0.050	1923875
Fluorene	ug	0.164	0.050	1923875
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1923875
m-Terphenyl	ug	<0.10	0.10	1923875
Naphthalene	ug	0.079	0.072	1923875
o-Terphenyl	ug	0.11	0.10	1923875
Perylene	ug	<0.10	0.10	1923875
Phenanthrene	ug	0.597	0.050	1923875

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9B0058
Report Date: 2009/09/03

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DM2650		
Sampling Date		2009/08/17		
COC Number		0741		
	Units	**LICA PUF+QFF/CLS/AUG17,09**	**DL**	**QC Batch**
p-Terphenyl	ug	<0.10	0.10	1923875
Pyrene	ug	0.061	0.050	1923875
Quinoline	ug	<0.40	0.40	1923875
Tetralin	ug	<0.10	0.10	1923875
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	80		1923875
D10-Fluoranthene	%	110		1923875
D10-Fluorene (FS)	%	14 (1)		1923875
D10-Phenanthrene	%	101		1923875
D12-Benzo(a)anthracene	%	111		1923875
D12-Benzo(a)pyrene	%	113		1923875
D12-Benzo(b)fluoranthene	%	123		1923875
D12-Benzo(ghi)perylene	%	112		1923875
D12-Benzo(k)fluoranthene	%	99		1923875
D12-Chrysene	%	110		1923875
D12-Indeno(1,2,3-cd)pyrene	%	131		1923875
D12-Perylene	%	109		1923875
D14-Dibenzo(a,h)anthracene	%	112		1923875
D14-Terphenyl (FS)	%	101		1923875
D8-Acenaphthylene	%	97		1923875
D8-Naphthalene	%	82		1923875

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 #: A9B0058
Report Date: 2009/09/03

Test Summary

Maxxam ID	DM2650	**Collected**	2009/08/17
Sample ID	LICA PUF+QFF/CLS/AUG17,09	**Shipped**	
Matrix	Filter	**Received**	2009/08/25

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1923875	2009/08/27	2009/08/31	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 #: A9B0058
Report Date: 2009/09/03

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 DM2650-01: PAHMS-F

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

Mdl raised for Acenaphtene due to matrix interference on a possible positive.

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: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GA9B0058

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1923875	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/08/31		87	%	50 - 150
			D10-Fluoranthene	2009/08/31		101	%	50 - 150
			D10-Phenanthrene	2009/08/31		94	%	50 - 150
			D12-Benzo(a)anthracene	2009/08/31		111	%	50 - 150
			D12-Benzo(a)pyrene	2009/08/31		118	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/08/31		124	%	50 - 150
			D12-Benzo(ghi)perylene	2009/08/31		110	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/08/31		103	%	50 - 150
			D12-Chrysene	2009/08/31		116	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/08/31		130	%	50 - 150
			D12-Perylene	2009/08/31		113	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/08/31		109	%	50 - 150
			D8-Acenaphthylene	2009/08/31		96	%	50 - 150
			D8-Naphthalene	2009/08/31		92	%	50 - 150
			Acenaphthene	2009/08/31		77	%	60 - 130
		RPD	Acenaphthene	2009/08/31	4.9		%	50
		Spiked Blank	Acenaphthylene	2009/08/31		80	%	60 - 130
		RPD	Acenaphthylene	2009/08/31	6.9		%	50
		Spiked Blank	Anthracene	2009/08/31		75	%	60 - 130
		RPD	Anthracene	2009/08/31	4.5		%	50
		Spiked Blank	Benzo(a)anthracene	2009/08/31		101	%	60 - 130
		RPD	Benzo(a)anthracene	2009/08/31	3.1		%	50
		Spiked Blank	Benzo(a)pyrene	2009/08/31		91	%	60 - 130
		RPD	Benzo(a)pyrene	2009/08/31	0.9		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/08/31		91	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/08/31	0.3		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/08/31		94	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/08/31	0.4		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/08/31		97	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/08/31	2.2		%	50
		Spiked Blank	Chrysene	2009/08/31		89	%	60 - 130
		RPD	Chrysene	2009/08/31	2.9		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/08/31		92	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/08/31	2.2		%	50
		Spiked Blank	Fluoranthene	2009/08/31		86	%	60 - 130
		RPD	Fluoranthene	2009/08/31	2.6		%	50
		Spiked Blank	Fluorene	2009/08/31		80	%	60 - 130
		RPD	Fluorene	2009/08/31	6.5		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/08/31		92	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/08/31	0.6		%	50
		Spiked Blank	Naphthalene	2009/08/31		83	%	60 - 130
		RPD	Naphthalene	2009/08/31	5.4		%	50
		Spiked Blank	Phenanthrene	2009/08/31		79	%	60 - 130
		RPD	Phenanthrene	2009/08/31	2.0		%	50
		Spiked Blank	Pyrene	2009/08/31		81	%	60 - 130
		RPD	Pyrene	2009/08/31	3.6		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/08/31		90	%	50 - 150
			D10-Fluoranthene	2009/08/31		111	%	50 - 150
			D10-Phenanthrene	2009/08/31		103	%	50 - 150
			D12-Benzo(a)anthracene	2009/08/31		111	%	50 - 150
			D12-Benzo(a)pyrene	2009/08/31		120	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/08/31		107	%	50 - 150
			D12-Benzo(ghi)perylene	2009/08/31		116	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/08/31		117	%	50 - 150
			D12-Chrysene	2009/08/31		111	%	50 - 150

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9B0058

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1923875	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/08/31		136	%	50 - 150
			D12-Perylene	2009/08/31		114	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/08/31		115	%	50 - 150
			D8-Acenaphthylene	2009/08/31		99	%	50 - 150
			D8-Naphthalene	2009/08/31		92	%	50 - 150
			1-Methylnaphthalene	2009/08/31	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/08/31	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/08/31	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/08/31	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/08/31	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/08/31	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/08/31	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/08/31	ND, RDL=0.40		ug	
			Acenaphthene	2009/08/31	ND, RDL=0.050		ug	
			Acenaphthylene	2009/08/31	ND, RDL=0.050		ug	
			Anthracene	2009/08/31	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/08/31	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/08/31	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/08/31	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/08/31	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/08/31	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/08/31	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/08/31	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/08/31	ND, RDL=0.050		ug	
			Biphenyl	2009/08/31	ND, RDL=0.10		ug	
			Chrysene	2009/08/31	ND, RDL=0.050		ug	
			Coronene	2009/08/31	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/08/31	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/08/31	ND, RDL=0.20		ug	
			Fluoranthene	2009/08/31	ND, RDL=0.050		ug	
			Fluorene	2009/08/31	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/08/31	ND, RDL=0.050		ug	
			m-Terphenyl	2009/08/31	ND, RDL=0.10		ug	
			Naphthalene	2009/08/31	ND, RDL=0.072		ug	
			o-Terphenyl	2009/08/31	ND, RDL=0.10		ug	
			Perylene	2009/08/31	ND, RDL=0.10		ug	
			Phenanthrene	2009/08/31	ND, RDL=0.050		ug	
			p-Terphenyl	2009/08/31	ND, RDL=0.10		ug	
			Pyrene	2009/08/31	ND, RDL=0.050		ug	
			Quinoline	2009/08/31	ND, RDL=0.40		ug	
			Tetralin	2009/08/31	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.

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

Site: LAKELAND INDUSTRY
Your C.O.C. #: 1034

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/09/11

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9B2872
Received: 2009/08/28, 11:44

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/09/02	2009/09/08	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9B2872
Report Date: 2009/09/11

Project name: LAKELAND INDUSTRY

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DN6586		
Sampling Date		2009/08/23		
COC Number		1034		
	Units	**LICA PUF+QFF/CLS/AUG23,09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	<0.10	0.10	1927033
1-Methylphenanthrene	ug	<0.10	0.10	1927033
2-Chloronaphthalene	ug	<0.10	0.10	1927033
2-Methylanthracene	ug	<0.10	0.10	1927033
2-Methylnaphthalene	ug	<0.10	0.10	1927033
3-Methylcholanthrene	ug	<2.0	2.0	1927033
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1927033
9,10-Dimethylanthracene	ug	<0.40	0.40	1927033
Acenaphthene	ug	<0.050	0.050	1927033
Acenaphthylene	ug	<0.050	0.050	1927033
Anthracene	ug	<0.050	0.050	1927033
Benzo(a)anthracene	ug	<0.050	0.050	1927033
Benzo(a)fluorene	ug	<0.10	0.10	1927033
Benzo(a)pyrene	ug	<0.050	0.050	1927033
Benzo(b)fluoranthene	ug	<0.050	0.050	1927033
Benzo(b)fluorene	ug	<0.10	0.10	1927033
Benzo(e)pyrene	ug	<0.10	0.10	1927033
Benzo(g,h,i)perylene	ug	<0.050	0.050	1927033
Benzo(k)fluoranthene	ug	<0.050	0.050	1927033
Biphenyl	ug	<0.10	0.10	1927033
Chrysene	ug	<0.050	0.050	1927033
Coronene	ug	<0.10	0.10	1927033
Dibenz(a,h)anthracene	ug	<0.050	0.050	1927033
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1927033
Fluoranthene	ug	0.067	0.050	1927033
Fluorene	ug	0.078	0.050	1927033
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1927033
m-Terphenyl	ug	<0.10	0.10	1927033
Naphthalene	ug	<0.072	0.072	1927033
o-Terphenyl	ug	<0.10	0.10	1927033
Perylene	ug	<0.10	0.10	1927033
Phenanthrene	ug	0.530	0.050	1927033

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9B2872
Report Date: 2009/09/11

Project name: LAKELAND INDUSTRY

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DN6586		
Sampling Date		2009/08/23		
COC Number		1034		
	Units	**LICA PUF+QFF/CLS/AUG23,09**	**DL**	**QC Batch**
p-Terphenyl	ug	<0.10	0.10	1927033
Pyrene	ug	0.052	0.050	1927033
Quinoline	ug	<0.40	0.40	1927033
Tetralin	ug	<0.10	0.10	1927033
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	74		1927033
D10-Fluoranthene	%	100		1927033
D10-Fluorene (FS)	%	31 (1)		1927033
D10-Phenanthrene	%	92		1927033
D12-Benzo(a)anthracene	%	118		1927033
D12-Benzo(a)pyrene	%	107		1927033
D12-Benzo(b)fluoranthene	%	100		1927033
D12-Benzo(ghi)perylene	%	107		1927033
D12-Benzo(k)fluoranthene	%	107		1927033
D12-Chrysene	%	93		1927033
D12-Indeno(1,2,3-cd)pyrene	%	129		1927033
D12-Perylene	%	99		1927033
D14-Dibenzo(a,h)anthracene	%	114		1927033
D14-Terphenyl (FS)	%	94		1927033
D8-Acenaphthylene	%	83		1927033
D8-Naphthalene	%	75		1927033

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 #: A9B2872
Report Date: 2009/09/11

Project name: LAKELAND INDUSTRY

Test Summary

Maxxam ID	DN6586	**Collected**	2009/08/23
Sample ID	LICA PUF+QFF/CLS/AUG23,09	**Shipped**	
Matrix	Filter	**Received**	2009/08/28

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1927033	2009/09/02	2009/09/08	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9B2872
Report Date: 2009/09/11

Project name: LAKELAND INDUSTRY

GENERAL COMMENTS

Sample DN6586-01: PAHMS-F

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

Sample extracted past hold time.

Results relate only to the items tested.

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

Quality Assurance Report

Maxxam Job Number: GA9B2872

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1927033	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/09/08		84	%	50 - 150
			D10-Fluoranthene	2009/09/08		99	%	50 - 150
			D10-Phenanthrene	2009/09/08		94	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/08		125	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/08		120	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/08		104	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/08		107	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/08		111	%	50 - 150
			D12-Chrysene	2009/09/08		94	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/09/08		129	%	50 - 150
			D12-Perylene	2009/09/08		109	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/08		111	%	50 - 150
			D8-Acenaphthylene	2009/09/08		98	%	50 - 150
			D8-Naphthalene	2009/09/08		88	%	50 - 150
			Acenaphthene	2009/09/08		77	%	60 - 130
		RPD	Acenaphthene	2009/09/08	2.3		%	50
		Spiked Blank	Acenaphthylene	2009/09/08		81	%	60 - 130
		RPD	Acenaphthylene	2009/09/08	6.0		%	50
		Spiked Blank	Anthracene	2009/09/08		76	%	60 - 130
		RPD	Anthracene	2009/09/08	2.5		%	50
		Spiked Blank	Benzo(a)anthracene	2009/09/08		98	%	60 - 130
		RPD	Benzo(a)anthracene	2009/09/08	1.6		%	50
		Spiked Blank	Benzo(a)pyrene	2009/09/08		92	%	60 - 130
		RPD	Benzo(a)pyrene	2009/09/08	0.9		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/09/08		94	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/09/08	1.9		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/09/08		90	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/09/08	2.5		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/09/08		90	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/09/08	1.3		%	50
		Spiked Blank	Chrysene	2009/09/08		89	%	60 - 130
		RPD	Chrysene	2009/09/08	0.4		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/09/08		94	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/09/08	1.4		%	50
		Spiked Blank	Fluoranthene	2009/09/08		88	%	60 - 130
		RPD	Fluoranthene	2009/09/08	5.3		%	50
		Spiked Blank	Fluorene	2009/09/08		79	%	60 - 130
		RPD	Fluorene	2009/09/08	0.7		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/09/08		93	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/09/08	0.03		%	50
		Spiked Blank	Naphthalene	2009/09/08		82	%	60 - 130
		RPD	Naphthalene	2009/09/08	8.6		%	50
		Spiked Blank	Phenanthrene	2009/09/08		83	%	60 - 130
		RPD	Phenanthrene	2009/09/08	2.5		%	50
		Spiked Blank	Pyrene	2009/09/08		80	%	60 - 130
		RPD	Pyrene	2009/09/08	7.4		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/09/08		84	%	50 - 150
			D10-Fluoranthene	2009/09/08		98	%	50 - 150
			D10-Phenanthrene	2009/09/08		97	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/08		117	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/08		113	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/08		99	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/08		104	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/08		108	%	50 - 150
			D12-Chrysene	2009/09/08		90	%	50 - 150

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9B2872

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1927033	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/09/08		126	%	50 - 150
			D12-Perylene	2009/09/08		103	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/08		108	%	50 - 150
			D8-Acenaphthylene	2009/09/08		97	%	50 - 150
			D8-Naphthalene	2009/09/08		88	%	50 - 150
			1-Methylnaphthalene	2009/09/08	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/09/08	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/09/08	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/09/08	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/09/08	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/09/08	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/09/08	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/09/08	ND, RDL=0.40		ug	
			Acenaphthene	2009/09/08	ND, RDL=0.050		ug	
			Acenaphthylene	2009/09/08	ND, RDL=0.050		ug	
			Anthracene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/09/08	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/09/08	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/09/08	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/09/08	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/09/08	ND, RDL=0.050		ug	
			Biphenyl	2009/09/08	ND, RDL=0.10		ug	
			Chrysene	2009/09/08	ND, RDL=0.050		ug	
			Coronene	2009/09/08	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/09/08	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/09/08	ND, RDL=0.20		ug	
			Fluoranthene	2009/09/08	ND, RDL=0.050		ug	
			Fluorene	2009/09/08	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/09/08	ND, RDL=0.050		ug	
			m-Terphenyl	2009/09/08	ND, RDL=0.10		ug	
			Naphthalene	2009/09/08	ND, RDL=0.072		ug	
			o-Terphenyl	2009/09/08	ND, RDL=0.10		ug	
			Perylene	2009/09/08	ND, RDL=0.10		ug	
			Phenanthrene	2009/09/08	ND, RDL=0.050		ug	
			p-Terphenyl	2009/09/08	ND, RDL=0.10		ug	
			Pyrene	2009/09/08	ND, RDL=0.050		ug	
			Quinoline	2009/09/08	ND, RDL=0.40		ug	
			Tetralin	2009/09/08	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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Your Project #: LICA 1
Site: COLD LAKE SOUTH
Your C.O.C. #: 1037

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/09/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9B7078
Received: 2009/09/08, 11:29

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/09/11	2009/09/14	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A9B7078
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DP9210		
Sampling Date		2009/08/29		
COC Number		1037		
	Units	**LICA/CLS/AUG24,09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	<0.10	0.10	1936192
1-Methylphenanthrene	ug	<0.10	0.10	1936192
2-Chloronaphthalene	ug	<0.10	0.10	1936192
2-Methylanthracene	ug	<0.10	0.10	1936192
2-Methylnaphthalene	ug	<0.10	0.10	1936192
3-Methylcholanthrene	ug	<2.0	2.0	1936192
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1936192
9,10-Dimethylanthracene	ug	<0.40	0.40	1936192
Acenaphthene	ug	<0.050	0.050	1936192
Acenaphthylene	ug	<0.050	0.050	1936192
Anthracene	ug	<0.050	0.050	1936192
Benzo(a)anthracene	ug	<0.050	0.050	1936192
Benzo(a)fluorene	ug	<0.10	0.10	1936192
Benzo(a)pyrene	ug	<0.050	0.050	1936192
Benzo(b)fluoranthene	ug	<0.050	0.050	1936192
Benzo(b)fluorene	ug	<0.10	0.10	1936192
Benzo(e)pyrene	ug	<0.10	0.10	1936192
Benzo(g,h,i)perylene	ug	<0.050	0.050	1936192
Benzo(k)fluoranthene	ug	<0.050	0.050	1936192
Biphenyl	ug	<0.10	0.10	1936192
Chrysene	ug	<0.050	0.050	1936192
Coronene	ug	<0.10	0.10	1936192
Dibenz(a,h)anthracene	ug	<0.050	0.050	1936192
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1936192
Fluoranthene	ug	0.063	0.050	1936192
Fluorene	ug	0.071	0.050	1936192
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1936192
m-Terphenyl	ug	<0.10	0.10	1936192
Naphthalene	ug	0.158	0.072	1936192
o-Terphenyl	ug	<0.10	0.10	1936192
Perylene	ug	<0.10	0.10	1936192
Phenanthrene	ug	0.495	0.050	1936192

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9B7078
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DP9210		
Sampling Date		2009/08/29		
COC Number		1037		
	Units	**LICA/CLS/AUG24,09**	**DL**	**QC Batch**
p-Terphenyl	ug	<0.10	0.10	1936192
Pyrene	ug	0.050	0.050	1936192
Quinoline	ug	<0.40	0.40	1936192
Tetralin	ug	<0.10	0.10	1936192
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	72		1936192
D10-Fluoranthene	%	97		1936192
D10-Fluorene (FS)	%	26 (1)		1936192
D10-Phenanthrene	%	90		1936192
D12-Benzo(a)anthracene	%	113		1936192
D12-Benzo(a)pyrene	%	107		1936192
D12-Benzo(b)fluoranthene	%	98		1936192
D12-Benzo(ghi)perylene	%	104		1936192
D12-Benzo(k)fluoranthene	%	108		1936192
D12-Chrysene	%	98		1936192
D12-Indeno(1,2,3-cd)pyrene	%	124		1936192
D12-Perylene	%	98		1936192
D14-Dibenzo(a,h)anthracene	%	109		1936192
D14-Terphenyl (FS)	%	103		1936192
D8-Acenaphthylene	%	78		1936192
D8-Naphthalene	%	73		1936192

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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Maxxam Job #: A9B7078
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID	DP9210	**Collected**	2009/08/29
Sample ID	LICA/CLS/AUG24,09	**Shipped**	
Matrix	Filter	**Received**	2009/09/08

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1936192	2009/09/11	2009/09/14	WZ

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Maxxam Job #: A9B7078
Report Date: 2009/09/23

Lakeland Industry & Community Assoc.
Client Project #: LICA 1
Project name: COLD LAKE SOUTH

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.

Pyrene is statistically out of control at 70% recovery in the spike . Spike Dup recovery is in control. Acceptance criteria met for both spike and dup. Data reported and flagged.

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: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA9B7078

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1936192	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/09/14		76	%	50 - 150
			D10-Fluoranthene	2009/09/14		85	%	50 - 150
			D10-Phenanthrene	2009/09/14		84	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/14		99	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/14		101	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/14		92	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/14		94	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/14		101	%	50 - 150
			D12-Chrysene	2009/09/14		92	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/09/14		111	%	50 - 150
			D12-Perylene	2009/09/14		93	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/14		97	%	50 - 150
			D8-Acenaphthylene	2009/09/14		79	%	50 - 150
			D8-Naphthalene	2009/09/14		79	%	50 - 150
			Acenaphthene	2009/09/14		69	%	60 - 130
		RPD	Acenaphthene	2009/09/14	2.5		%	50
		Spiked Blank	Acenaphthylene	2009/09/14		67	%	60 - 130
		RPD	Acenaphthylene	2009/09/14	8.1		%	50
		Spiked Blank	Anthracene	2009/09/14		68	%	60 - 130
		RPD	Anthracene	2009/09/14	11.6		%	50
		Spiked Blank	Benzo(a)anthracene	2009/09/14		82	%	60 - 130
		RPD	Benzo(a)anthracene	2009/09/14	8.7		%	50
		Spiked Blank	Benzo(a)pyrene	2009/09/14		78	%	60 - 130
		RPD	Benzo(a)pyrene	2009/09/14	11.7		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/09/14		81	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/09/14	5.0		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/09/14		77	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/09/14	12.1		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/09/14		83	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/09/14	5.7		%	50
		Spiked Blank	Chrysene	2009/09/14		83	%	60 - 130
		RPD	Chrysene	2009/09/14	0.9		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/09/14		78	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/09/14	15.2		%	50
		Spiked Blank	Fluoranthene	2009/09/14		75	%	60 - 130
		RPD	Fluoranthene	2009/09/14	12.5		%	50
		Spiked Blank	Fluorene	2009/09/14		71	%	60 - 130
		RPD	Fluorene	2009/09/14	5.7		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/09/14		77	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/09/14	14.7		%	50
		Spiked Blank	Naphthalene	2009/09/14		72	%	60 - 130
		RPD	Naphthalene	2009/09/14	0.4		%	50
		Spiked Blank	Phenanthrene	2009/09/14		71	%	60 - 130
		RPD	Phenanthrene	2009/09/14	8.3		%	50
		Spiked Blank	Pyrene	2009/09/14		70	%	60 - 130
		RPD	Pyrene	2009/09/14	12.0		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/09/14		80	%	50 - 150
			D10-Fluoranthene	2009/09/14		92	%	50 - 150
			D10-Phenanthrene	2009/09/14		88	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/14		108	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/14		111	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/14		95	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/14		99	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/14		102	%	50 - 150
			D12-Chrysene	2009/09/14		88	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA 1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9B7078

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1936192	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/09/14		120	%	50 - 150
			D12-Perylene	2009/09/14		98	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/14		105	%	50 - 150
			D8-Acenaphthylene	2009/09/14		87	%	50 - 150
			D8-Naphthalene	2009/09/14		83	%	50 - 150
			1-Methylnaphthalene	2009/09/14	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/09/14	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/09/14	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/09/14	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/09/14	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/09/14	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/09/14	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/09/14	ND, RDL=0.40		ug	
			Acenaphthene	2009/09/14	ND, RDL=0.050		ug	
			Acenaphthylene	2009/09/14	ND, RDL=0.050		ug	
			Anthracene	2009/09/14	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/09/14	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/09/14	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/09/14	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/09/14	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/09/14	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/09/14	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/09/14	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/09/14	ND, RDL=0.050		ug	
			Biphenyl	2009/09/14	ND, RDL=0.10		ug	
			Chrysene	2009/09/14	ND, RDL=0.050		ug	
			Coronene	2009/09/14	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/09/14	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/09/14	ND, RDL=0.20		ug	
			Fluoranthene	2009/09/14	ND, RDL=0.050		ug	
			Fluorene	2009/09/14	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/09/14	ND, RDL=0.050		ug	
			m-Terphenyl	2009/09/14	ND, RDL=0.10		ug	
			Naphthalene	2009/09/14	ND, RDL=0.072		ug	
			o-Terphenyl	2009/09/14	ND, RDL=0.10		ug	
			Perylene	2009/09/14	ND, RDL=0.10		ug	
			Phenanthrene	2009/09/14	ND, RDL=0.050		ug	
			p-Terphenyl	2009/09/14	ND, RDL=0.10		ug	
			Pyrene	2009/09/14	ND, RDL=0.050		ug	
			Quinoline	2009/09/14	ND, RDL=0.40		ug	
			Tetralin	2009/09/14	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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Your Project #: LICA1
Site: COLD LAKE SOUTH
Your C.O.C. #: 1030

Attention: Michael Bisaga
Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/09/29

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9C0193
Received: 2009/09/14, 10:53

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/09/16	2009/09/18	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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Total cover pages: 1

Maxxam Job #: A9C0193
Report Date: 2009/09/29

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DR5631		
Sampling Date		2009/09/04		
COC Number		1030		
	Units	**LICAPUF/QFF/CLS/SEPT 4,09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	<0.10	0.10	1940546
1-Methylphenanthrene	ug	<0.10	0.10	1940546
2-Chloronaphthalene	ug	<0.10	0.10	1940546
2-Methylanthracene	ug	<0.10	0.10	1940546
2-Methylnaphthalene	ug	<0.10	0.10	1940546
3-Methylcholanthrene	ug	<2.0	2.0	1940546
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1940546
9,10-Dimethylanthracene	ug	<0.40	0.40	1940546
Acenaphthene	ug	<0.050	0.050	1940546
Acenaphthylene	ug	<0.050	0.050	1940546
Anthracene	ug	<0.050	0.050	1940546
Benzo(a)anthracene	ug	<0.050	0.050	1940546
Benzo(a)fluorene	ug	<0.10	0.10	1940546
Benzo(a)pyrene	ug	<0.050	0.050	1940546
Benzo(b)fluoranthene	ug	<0.050	0.050	1940546
Benzo(b)fluorene	ug	<0.10	0.10	1940546
Benzo(e)pyrene	ug	<0.10	0.10	1940546
Benzo(g,h,i)perylene	ug	<0.050	0.050	1940546
Benzo(k)fluoranthene	ug	<0.050	0.050	1940546
Biphenyl	ug	<0.10	0.10	1940546
Chrysene	ug	<0.050	0.050	1940546
Coronene	ug	<0.10	0.10	1940546
Dibenz(a,h)anthracene	ug	<0.050	0.050	1940546
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1940546
Fluoranthene	ug	0.055	0.050	1940546
Fluorene	ug	0.093	0.050	1940546
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1940546
m-Terphenyl	ug	<0.10	0.10	1940546
Naphthalene	ug	<0.072	0.072	1940546
o-Terphenyl	ug	<0.10	0.10	1940546
Perylene	ug	<0.10	0.10	1940546
Phenanthrene	ug	0.354	0.050	1940546

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: A9C0193
Report Date: 2009/09/29

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DR5631		
Sampling Date		2009/09/04		
COC Number		1030		
	Units	**LICAPUF/QFF/CLS/SEPT 4,09**	**DL**	**QC Batch**
p-Terphenyl	ug	<0.10	0.10	1940546
Pyrene	ug	<0.050	0.050	1940546
Quinoline	ug	<0.40	0.40	1940546
Tetralin	ug	<0.10	0.10	1940546
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	86		1940546
D10-Fluoranthene	%	105		1940546
D10-Fluorene (FS)	%	12 (1)		1940546
D10-Phenanthrene	%	100		1940546
D12-Benzo(a)anthracene	%	111		1940546
D12-Benzo(a)pyrene	%	109		1940546
D12-Benzo(b)fluoranthene	%	112		1940546
D12-Benzo(ghi)perylene	%	107		1940546
D12-Benzo(k)fluoranthene	%	101		1940546
D12-Chrysene	%	99		1940546
D12-Indeno(1,2,3-cd)pyrene	%	128		1940546
D12-Perylene	%	103		1940546
D14-Dibenzo(a,h)anthracene	%	114		1940546
D14-Terphenyl (FS)	%	100		1940546
D8-Acenaphthylene	%	95		1940546
D8-Naphthalene	%	88		1940546

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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Maxxam Job #: A9C0193
Report Date: 2009/09/29

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

Test Summary

Maxxam ID	DR5631	**Collected**	2009/09/04
Sample ID	LICAPUF/QFF/CLS/SEPT 4,09	**Shipped**	
Matrix	Filter	**Received**	2009/09/14

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1940546	2009/09/16	2009/09/18	WZ

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Maxxam Job #: A9C0193
Report Date: 2009/09/29

Lakeland Industry & Community Assoc.
Client Project #: LICA1
Project name: COLD LAKE SOUTH

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.

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

Naphthalene positive found in blank. Samples should be considered to be possibly contaminated to the level found in the blank.

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: Michael Bisaga
Client Project #: LICA1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report

Maxxam Job Number: GA9C0193

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1940546	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/09/18		93	%	50 - 150
			D10-Fluoranthene	2009/09/18		111	%	50 - 150
			D10-Phenanthrene	2009/09/18		107	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/18		117	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/18		120	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/18		112	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/18		102	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/18		98	%	50 - 150
			D12-Chrysene	2009/09/18		94	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/09/18		126	%	50 - 150
			D12-Perylene	2009/09/18		103	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/18		111	%	50 - 150
			D8-Acenaphthylene	2009/09/18		97	%	50 - 150
			D8-Naphthalene	2009/09/18		96	%	50 - 150
			Acenaphthene	2009/09/18		86	%	60 - 130
		RPD	Acenaphthene	2009/09/18	4.8		%	50
		Spiked Blank	Acenaphthylene	2009/09/18		81	%	60 - 130
		RPD	Acenaphthylene	2009/09/18	1.6		%	50
		Spiked Blank	Anthracene	2009/09/18		86	%	60 - 130
		RPD	Anthracene	2009/09/18	1.3		%	50
		Spiked Blank	Benzo(a)anthracene	2009/09/18		93	%	60 - 130
		RPD	Benzo(a)anthracene	2009/09/18	3.4		%	50
		Spiked Blank	Benzo(a)pyrene	2009/09/18		94	%	60 - 130
		RPD	Benzo(a)pyrene	2009/09/18	7.5		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/09/18		94	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/09/18	3.0		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/09/18		93	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/09/18	20.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/09/18		89	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/09/18	0.9		%	50
		Spiked Blank	Chrysene	2009/09/18		86	%	60 - 130
		RPD	Chrysene	2009/09/18	3.9		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/09/18		97	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/09/18	18.3		%	50
		Spiked Blank	Fluoranthene	2009/09/18		95	%	60 - 130
		RPD	Fluoranthene	2009/09/18	2.5		%	50
		Spiked Blank	Fluorene	2009/09/18		89	%	60 - 130
		RPD	Fluorene	2009/09/18	2.6		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/09/18		93	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/09/18	15.4		%	50
		Spiked Blank	Naphthalene	2009/09/18		100	%	60 - 130
		RPD	Naphthalene	2009/09/18	4.4		%	50
		Spiked Blank	Phenanthrene	2009/09/18		90	%	60 - 130
		RPD	Phenanthrene	2009/09/18	0.08		%	50
		Spiked Blank	Pyrene	2009/09/18		89	%	60 - 130
		RPD	Pyrene	2009/09/18	3.1		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/09/18		91	%	50 - 150
			D10-Fluoranthene	2009/09/18		103	%	50 - 150
			D10-Phenanthrene	2009/09/18		98	%	50 - 150
			D12-Benzo(a)anthracene	2009/09/18		114	%	50 - 150
			D12-Benzo(a)pyrene	2009/09/18		119	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/09/18		111	%	50 - 150
			D12-Benzo(ghi)perylene	2009/09/18		101	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/09/18		101	%	50 - 150
			D12-Chrysene	2009/09/18		96	%	50 - 150

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Lakeland Industry & Community Assoc.
Attention: Michael Bisaga
Client Project #: LICA1
P.O. #:
Project name: COLD LAKE SOUTH

Quality Assurance Report (Continued)

Maxxam Job Number: GA9C0193

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1940546	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/09/18		123	%	50 - 150
			D12-Perylene	2009/09/18		104	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/09/18		109	%	50 - 150
			D8-Acenaphthylene	2009/09/18		100	%	50 - 150
			D8-Naphthalene	2009/09/18		93	%	50 - 150
			1-Methylnaphthalene	2009/09/18	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/09/18	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/09/18	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/09/18	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/09/18	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/09/18	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/09/18	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/09/18	ND, RDL=0.40		ug	
			Acenaphthene	2009/09/18	ND, RDL=0.050		ug	
			Acenaphthylene	2009/09/18	ND, RDL=0.050		ug	
			Anthracene	2009/09/18	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/09/18	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/09/18	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/09/18	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/09/18	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/09/18	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/09/18	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/09/18	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/09/18	ND, RDL=0.050		ug	
			Biphenyl	2009/09/18	ND, RDL=0.10		ug	
			Chrysene	2009/09/18	ND, RDL=0.050		ug	
			Coronene	2009/09/18	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/09/18	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/09/18	ND, RDL=0.20		ug	
			Fluoranthene	2009/09/18	ND, RDL=0.050		ug	
			Fluorene	2009/09/18	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/09/18	ND, RDL=0.050		ug	
			m-Terphenyl	2009/09/18	ND, RDL=0.10		ug	
			Naphthalene	2009/09/18	0.161, RDL=0.072		ug	
			o-Terphenyl	2009/09/18	ND, RDL=0.10		ug	
			Perylene	2009/09/18	ND, RDL=0.10		ug	
			Phenanthrene	2009/09/18	ND, RDL=0.050		ug	
			p-Terphenyl	2009/09/18	ND, RDL=0.10		ug	
			Pyrene	2009/09/18	ND, RDL=0.050		ug	
			Quinoline	2009/09/18	ND, RDL=0.40		ug	
			Tetralin	2009/09/18	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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Your C.O.C. #: 1031

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

Report Date: 2009/10/08

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9C6808
Received: 2009/09/24, 12:41

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/09/29	2009/10/01	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9C6808
Report Date: 2009/10/08

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DU9647		
Sampling Date		2009/09/16 00:00		
COC Number		1031		
	Units	**LICA PUFF&QFF/CLS/SEPT16,09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	<0.10	0.10	1954962
1-Methylphenanthrene	ug	0.11	0.10	1954962
2-Chloronaphthalene	ug	<0.10	0.10	1954962
2-Methylanthracene	ug	<0.10	0.10	1954962
2-Methylnaphthalene	ug	<0.10	0.10	1954962
3-Methylcholanthrene	ug	<2.0	2.0	1954962
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1954962
9,10-Dimethylanthracene	ug	<0.40	0.40	1954962
Acenaphthene	ug	<0.050	0.050	1954962
Acenaphthylene	ug	<0.050	0.050	1954962
Anthracene	ug	<0.050	0.050	1954962
Benzo(a)anthracene	ug	<0.050	0.050	1954962
Benzo(a)fluorene	ug	<0.10	0.10	1954962
Benzo(a)pyrene	ug	<0.050	0.050	1954962
Benzo(b)fluoranthene	ug	<0.050	0.050	1954962
Benzo(b)fluorene	ug	<0.10	0.10	1954962
Benzo(e)pyrene	ug	<0.10	0.10	1954962
Benzo(g,h,i)perylene	ug	<0.050	0.050	1954962
Benzo(k)fluoranthene	ug	<0.050	0.050	1954962
Biphenyl	ug	<0.10	0.10	1954962
Chrysene	ug	<0.050	0.050	1954962
Coronene	ug	<0.10	0.10	1954962
Dibenz(a,h)anthracene	ug	<0.050	0.050	1954962
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1954962
Fluoranthene	ug	0.117	0.050	1954962
Fluorene	ug	0.062	0.050	1954962
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1954962
m-Terphenyl	ug	<0.10	0.10	1954962
Naphthalene	ug	0.097	0.072	1954962
o-Terphenyl	ug	<0.10	0.10	1954962
Perylene	ug	<0.10	0.10	1954962

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C6808
Report Date: 2009/10/08

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DU9647		
Sampling Date		2009/09/16 00:00		
COC Number		1031		
	Units	**LICA PUFF&QFF/CLS/SEPT16,09**	**DL**	**QC Batch**
Phenanthrene	ug	0.828	0.050	1954962
p-Terphenyl	ug	<0.10	0.10	1954962
Pyrene	ug	0.099	0.050	1954962
Quinoline	ug	<0.40	0.40	1954962
Tetralin	ug	<0.10	0.10	1954962
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	78		1954962
D10-Fluoranthene	%	111		1954962
D10-Fluorene (FS)	%	28 (1)		1954962
D10-Phenanthrene	%	100		1954962
D12-Benzo(a)anthracene	%	95		1954962
D12-Benzo(a)pyrene	%	104		1954962
D12-Benzo(b)fluoranthene	%	113		1954962
D12-Benzo(ghi)perylene	%	107		1954962
D12-Benzo(k)fluoranthene	%	95		1954962
D12-Chrysene	%	107		1954962
D12-Indeno(1,2,3-cd)pyrene	%	108		1954962
D12-Perylene	%	106		1954962
D14-Dibenzo(a,h)anthracene	%	110		1954962
D14-Terphenyl (FS)	%	108		1954962
D8-Acenaphthylene	%	88		1954962
D8-Naphthalene	%	74		1954962

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 #: A9C6808
Report Date: 2009/10/08

Test Summary

Maxxam ID	DU9647	**Collected**	2009/09/16
Sample ID	LICA PUFF&QFF/CLS/SEPT16,09	**Shipped**	
Matrix	Filter	**Received**	2009/09/24

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1954962	2009/09/29	2009/10/01	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C6808
Report Date: 2009/10/08

GENERAL COMMENTS

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

Benzo(g,h,i) positive found in blank. Suspect Glassware contaminated .

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 DU9647-01: PAHMS-F

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

Results relate only to the items tested.

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

Quality Assurance Report

Maxxam Job Number: GA9C6808

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1954962	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/10/01		90	%	50 - 150
			D10-Fluoranthene	2009/10/01		113	%	50 - 150
			D10-Phenanthrene	2009/10/01		110	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/01		102	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/01		111	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/01		100	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/01		106	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/01		105	%	50 - 150
			D12-Chrysene	2009/10/01		103	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/10/01		109	%	50 - 150
			D12-Perylene	2009/10/01		109	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/01		108	%	50 - 150
			D8-Acenaphthylene	2009/10/01		106	%	50 - 150
			D8-Naphthalene	2009/10/01		91	%	50 - 150
			Acenaphthene	2009/10/01		91	%	60 - 130
		RPD	Acenaphthene	2009/10/01	3.2		%	50
		Spiked Blank	Acenaphthylene	2009/10/01		100	%	60 - 130
		RPD	Acenaphthylene	2009/10/01	4.1		%	50
		Spiked Blank	Anthracene	2009/10/01		98	%	60 - 130
		RPD	Anthracene	2009/10/01	1.7		%	50
		Spiked Blank	Benzo(a)anthracene	2009/10/01		89	%	60 - 130
		RPD	Benzo(a)anthracene	2009/10/01	1.1		%	50
		Spiked Blank	Benzo(a)pyrene	2009/10/01		101	%	60 - 130
		RPD	Benzo(a)pyrene	2009/10/01	1.8		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/10/01		94	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/10/01	0.6		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/10/01		115	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/10/01	2.3		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/10/01		99	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/10/01	4.5		%	50
		Spiked Blank	Chrysene	2009/10/01		98	%	60 - 130
		RPD	Chrysene	2009/10/01	0.03		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/10/01		101	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/10/01	2.9		%	50
		Spiked Blank	Fluoranthene	2009/10/01		108	%	60 - 130
		RPD	Fluoranthene	2009/10/01	2.5		%	50
		Spiked Blank	Fluorene	2009/10/01		92	%	60 - 130
		RPD	Fluorene	2009/10/01	4.3		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/10/01		103	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/10/01	1.4		%	50
		Spiked Blank	Naphthalene	2009/10/01		86	%	60 - 130
		RPD	Naphthalene	2009/10/01	3.8		%	50
		Spiked Blank	Phenanthrene	2009/10/01		91	%	60 - 130
		RPD	Phenanthrene	2009/10/01	1.4		%	50
		Spiked Blank	Pyrene	2009/10/01		95	%	60 - 130
		RPD	Pyrene	2009/10/01	2.2		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/10/01		97	%	50 - 150
			D10-Fluoranthene	2009/10/01		114	%	50 - 150
			D10-Phenanthrene	2009/10/01		104	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/01		101	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/01		116	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/01		118	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/01		109	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/01		95	%	50 - 150
			D12-Chrysene	2009/10/01		106	%	50 - 150

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Quality Assurance Report (Continued)

Maxxam Job Number: GA9C6808

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1954962	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/10/01		111	%	50 - 150
			D12-Perylene	2009/10/01		113	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/01		111	%	50 - 150
			D8-Acenaphthylene	2009/10/01		108	%	50 - 150
			D8-Naphthalene	2009/10/01		97	%	50 - 150
			1-Methylnaphthalene	2009/10/01	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/10/01	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/10/01	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/10/01	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/10/01	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/10/01	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/10/01	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/10/01	ND, RDL=0.40		ug	
			Acenaphthene	2009/10/01	ND, RDL=0.050		ug	
			Acenaphthylene	2009/10/01	ND, RDL=0.050		ug	
			Anthracene	2009/10/01	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/10/01	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/10/01	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/10/01	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/10/01	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/10/01	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/10/01	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/10/01	0.098, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/10/01	ND, RDL=0.050		ug	
			Biphenyl	2009/10/01	ND, RDL=0.10		ug	
			Chrysene	2009/10/01	ND, RDL=0.050		ug	
			Coronene	2009/10/01	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/10/01	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/10/01	ND, RDL=0.20		ug	
			Fluoranthene	2009/10/01	ND, RDL=0.050		ug	
			Fluorene	2009/10/01	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/10/01	ND, RDL=0.050		ug	
			m-Terphenyl	2009/10/01	ND, RDL=0.10		ug	
			Naphthalene	2009/10/01	ND, RDL=0.072		ug	
			o-Terphenyl	2009/10/01	ND, RDL=0.10		ug	
			Perylene	2009/10/01	ND, RDL=0.10		ug	
			Phenanthrene	2009/10/01	ND, RDL=0.050		ug	
			p-Terphenyl	2009/10/01	ND, RDL=0.10		ug	
			Pyrene	2009/10/01	ND, RDL=0.050		ug	
			Quinoline	2009/10/01	ND, RDL=0.40		ug	
			Tetralin	2009/10/01	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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Your C.O.C. #: 1036

Lakeland Industry & Community Assoc.
5107 W-50th St.
Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/10/26

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9C9388
Received: 2009/09/29, 11:38

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/10/05	2009/10/07	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9388
Report Date: 2009/10/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DW2506		
Sampling Date		2009/09/22		
COC Number		1036		
	Units	**LICA PUF&QFF/CLS/SEPT22,09**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	0.24	0.10	1961731
1-Methylphenanthrene	ug	<0.10	0.10	1961731
2-Chloronaphthalene	ug	<0.10	0.10	1961731
2-Methylanthracene	ug	<0.10	0.10	1961731
2-Methylnaphthalene	ug	0.42	0.10	1961731
3-Methylcholanthrene	ug	<2.0	2.0	1961731
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1961731
9,10-Dimethylanthracene	ug	<0.40	0.40	1961731
Acenaphthene	ug	0.157	0.050	1961731
Acenaphthylene	ug	<0.050	0.050	1961731
Anthracene	ug	0.057	0.050	1961731
Benzo(a)anthracene	ug	<0.050	0.050	1961731
Benzo(a)fluorene	ug	<0.10	0.10	1961731
Benzo(a)pyrene	ug	<0.050	0.050	1961731
Benzo(b)fluoranthene	ug	<0.050	0.050	1961731
Benzo(b)fluorene	ug	<0.10	0.10	1961731
Benzo(e)pyrene	ug	<0.10	0.10	1961731
Benzo(g,h,i)perylene	ug	<0.050	0.050	1961731
Benzo(k)fluoranthene	ug	<0.050	0.050	1961731
Biphenyl	ug	<0.10	0.10	1961731
Chrysene	ug	<0.050	0.050	1961731
Coronene	ug	<0.10	0.10	1961731
Dibenz(a,h)anthracene	ug	<0.050	0.050	1961731
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1961731
Fluoranthene	ug	0.068	0.050	1961731
Fluorene	ug	0.263	0.050	1961731
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1961731
m-Terphenyl	ug	<0.10	0.10	1961731
Naphthalene	ug	0.417	0.072	1961731
o-Terphenyl	ug	<0.10	0.10	1961731
Perylene	ug	<0.10	0.10	1961731
Phenanthrene	ug	0.669	0.050	1961731

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9C9388
Report Date: 2009/10/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DW2506		
Sampling Date		2009/09/22		
COC Number		1036		
	Units	**LICA PUF&QFF/CLS/SEPT22,09**	**DL**	**QC Batch**
p-Terphenyl	ug	<0.10	0.10	1961731
Pyrene	ug	0.055	0.050	1961731
Quinoline	ug	<0.40	0.40	1961731
Tetralin	ug	<0.10	0.10	1961731
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	80		1961731
D10-Fluoranthene	%	110		1961731
D10-Fluorene (FS)	%	6.4 (1)		1961731
D10-Phenanthrene	%	103		1961731
D12-Benzo(a)anthracene	%	98		1961731
D12-Benzo(a)pyrene	%	105		1961731
D12-Benzo(b)fluoranthene	%	112		1961731
D12-Benzo(ghi)perylene	%	109		1961731
D12-Benzo(k)fluoranthene	%	99		1961731
D12-Chrysene	%	109		1961731
D12-Indeno(1,2,3-cd)pyrene	%	110		1961731
D12-Perylene	%	106		1961731
D14-Dibenzo(a,h)anthracene	%	111		1961731
D14-Terphenyl (FS)	%	113		1961731
D8-Acenaphthylene	%	94		1961731
D8-Naphthalene	%	78		1961731

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 #: A9C9388
Report Date: 2009/10/26

Test Summary

Maxxam ID	DW2506	**Collected**	2009/09/22
Sample ID	LICA PUF&QFF/CLS/SEPT22,09	**Shipped**	
Matrix	Filter	**Received**	2009/09/29

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1961731	2009/10/05	2009/10/07	WZ

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Maxxam Job #: A9C9388
Report Date: 2009/10/26

GENERAL COMMENTS

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

Naphthalene positive found in blank. Samples should be considered to be possibly contaminated to the level found in the blank.

Sample DW2506-01: 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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Quality Assurance Report

Maxxam Job Number: GA9C9388

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1961731	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/10/07		91	%	50 - 150
			D10-Fluoranthene	2009/10/07		107	%	50 - 150
			D10-Phenanthrene	2009/10/07		101	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/07		101	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/07		111	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/07		108	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/07		107	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/07		99	%	50 - 150
			D12-Chrysene	2009/10/07		101	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/10/07		109	%	50 - 150
			D12-Perylene	2009/10/07		109	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/07		110	%	50 - 150
			D8-Acenaphthylene	2009/10/07		102	%	50 - 150
			D8-Naphthalene	2009/10/07		92	%	50 - 150
			Acenaphthene	2009/10/07		92	%	60 - 130
		RPD	Acenaphthene	2009/10/07	1.2		%	50
		Spiked Blank	Acenaphthylene	2009/10/07		98	%	60 - 130
		RPD	Acenaphthylene	2009/10/07	1.8		%	50
		Spiked Blank	Anthracene	2009/10/07		92	%	60 - 130
		RPD	Anthracene	2009/10/07	1.7		%	50
		Spiked Blank	Benzo(a)anthracene	2009/10/07		88	%	60 - 130
		RPD	Benzo(a)anthracene	2009/10/07	3.2		%	50
		Spiked Blank	Benzo(a)pyrene	2009/10/07		100	%	60 - 130
		RPD	Benzo(a)pyrene	2009/10/07	0.7		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/10/07		88	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/10/07	0.3		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/10/07		97	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/10/07	3.1		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/10/07		105	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/10/07	0.9		%	50
		Spiked Blank	Chrysene	2009/10/07		97	%	60 - 130
		RPD	Chrysene	2009/10/07	0.6		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/10/07		101	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/10/07	2.1		%	50
		Spiked Blank	Fluoranthene	2009/10/07		100	%	60 - 130
		RPD	Fluoranthene	2009/10/07	1.5		%	50
		Spiked Blank	Fluorene	2009/10/07		93	%	60 - 130
		RPD	Fluorene	2009/10/07	0.6		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/10/07		101	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/10/07	1.1		%	50
		Spiked Blank	Naphthalene	2009/10/07		105	%	60 - 130
		RPD	Naphthalene	2009/10/07	5.0		%	50
		Spiked Blank	Phenanthrene	2009/10/07		92	%	60 - 130
		RPD	Phenanthrene	2009/10/07	1.1		%	50
		Spiked Blank	Pyrene	2009/10/07		87	%	60 - 130
		RPD	Pyrene	2009/10/07	1.5		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/10/07		86	%	50 - 150
			D10-Fluoranthene	2009/10/07		102	%	50 - 150
			D10-Phenanthrene	2009/10/07		98	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/07		86	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/07		102	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/07		102	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/07		102	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/07		97	%	50 - 150
			D12-Chrysene	2009/10/07		105	%	50 - 150

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Quality Assurance Report (Continued)

Maxxam Job Number: GA9C9388

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1961731	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/10/07		103	%	50 - 150
			D12-Perylene	2009/10/07		102	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/07		103	%	50 - 150
			D8-Acenaphthylene	2009/10/07		98	%	50 - 150
			D8-Naphthalene	2009/10/07		86	%	50 - 150
			1-Methylnaphthalene	2009/10/07	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/10/07	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/10/07	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/10/07	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/10/07	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/10/07	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/10/07	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/10/07	ND, RDL=0.40		ug	
			Acenaphthene	2009/10/07	ND, RDL=0.050		ug	
			Acenaphthylene	2009/10/07	ND, RDL=0.050		ug	
			Anthracene	2009/10/07	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/10/07	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/10/07	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/10/07	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/10/07	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/10/07	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/10/07	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/10/07	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/10/07	ND, RDL=0.050		ug	
			Biphenyl	2009/10/07	ND, RDL=0.10		ug	
			Chrysene	2009/10/07	ND, RDL=0.050		ug	
			Coronene	2009/10/07	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/10/07	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/10/07	ND, RDL=0.20		ug	
			Fluoranthene	2009/10/07	ND, RDL=0.050		ug	
			Fluorene	2009/10/07	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/10/07	ND, RDL=0.050		ug	
			m-Terphenyl	2009/10/07	ND, RDL=0.10		ug	
			Naphthalene	2009/10/07	0.099, RDL=0.072		ug	
			o-Terphenyl	2009/10/07	ND, RDL=0.10		ug	
			Perylene	2009/10/07	ND, RDL=0.10		ug	
			Phenanthrene	2009/10/07	ND, RDL=0.050		ug	
			p-Terphenyl	2009/10/07	ND, RDL=0.10		ug	
			Pyrene	2009/10/07	ND, RDL=0.050		ug	
			Quinoline	2009/10/07	ND, RDL=0.40		ug	
			Tetralin	2009/10/07	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.
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Your C.O.C. #: 1038

Attention: Michael Bisaga
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Bonnyville, AB
CANADA T9N 2J5

Report Date: 2009/10/26

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9D2286
Received: 2009/10/05, 11:38

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	1	2009/10/13	2009/10/15	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. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2286
Report Date: 2009/10/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DX7496		
Sampling Date		2009/09/28 00:00		
COC Number		1038		
	Units	**LICA/CLS/SEPT2809**	**DL**	**QC Batch**
Semivolatile Organics				
1-Methylnaphthalene	ug	<0.10	0.10	1971052
1-Methylphenanthrene	ug	<0.10	0.10	1971052
2-Chloronaphthalene	ug	<0.10	0.10	1971052
2-Methylanthracene	ug	<0.10	0.10	1971052
2-Methylnaphthalene	ug	0.10	0.10	1971052
3-Methylcholanthrene	ug	<2.0	2.0	1971052
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	0.10	1971052
9,10-Dimethylanthracene	ug	<0.40	0.40	1971052
Acenaphthene	ug	<0.050	0.050	1971052
Acenaphthylene	ug	<0.050	0.050	1971052
Anthracene	ug	<0.050	0.050	1971052
Benzo(a)anthracene	ug	<0.050	0.050	1971052
Benzo(a)fluorene	ug	<0.10	0.10	1971052
Benzo(a)pyrene	ug	<0.050	0.050	1971052
Benzo(b)fluoranthene	ug	<0.050	0.050	1971052
Benzo(b)fluorene	ug	<0.10	0.10	1971052
Benzo(e)pyrene	ug	<0.10	0.10	1971052
Benzo(g,h,i)perylene	ug	<0.050	0.050	1971052
Benzo(k)fluoranthene	ug	<0.050	0.050	1971052
Biphenyl	ug	<0.10	0.10	1971052
Chrysene	ug	<0.050	0.050	1971052
Coronene	ug	<0.10	0.10	1971052
Dibenz(a,h)anthracene	ug	<0.050	0.050	1971052
Dibenzo(a,e)pyrene	ug	<0.20	0.20	1971052
Fluoranthene	ug	<0.050	0.050	1971052
Fluorene	ug	0.102	0.050	1971052
Indeno(1,2,3-cd)pyrene	ug	<0.050	0.050	1971052
m-Terphenyl	ug	<0.10	0.10	1971052
Naphthalene	ug	0.158	0.072	1971052
o-Terphenyl	ug	<0.10	0.10	1971052
Perylene	ug	<0.10	0.10	1971052
Phenanthrene	ug	0.230	0.050	1971052

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2286
Report Date: 2009/10/26

SEMI-VOLATILE ORGANICS BY GC-MS (FILTER)

Maxxam ID		DX7496		
Sampling Date		2009/09/28 00:00		
COC Number		1038		
	Units	**LICA/CLS/SEPT2809**	**DL**	**QC Batch**
p-Terphenyl	ug	<0.10	0.10	1971052
Pyrene	ug	<0.050	0.050	1971052
Quinoline	ug	<0.40	0.40	1971052
Tetralin	ug	<0.10	0.10	1971052
Surrogate Recovery (%)				
D10-2-Methylnaphthalene	%	89		1971052
D10-Fluoranthene	%	105		1971052
D10-Fluorene (FS)	%	43 (1)		1971052
D10-Phenanthrene	%	103		1971052
D12-Benzo(a)anthracene	%	102		1971052
D12-Benzo(a)pyrene	%	112		1971052
D12-Benzo(b)fluoranthene	%	114		1971052
D12-Benzo(ghi)perylene	%	107		1971052
D12-Benzo(k)fluoranthene	%	94		1971052
D12-Chrysene	%	104		1971052
D12-Indeno(1,2,3-cd)pyrene	%	110		1971052
D12-Perylene	%	111		1971052
D14-Dibenzo(a,h)anthracene	%	110		1971052
D14-Terphenyl (FS)	%	106		1971052
D8-Acenaphthylene	%	106		1971052
D8-Naphthalene	%	90		1971052

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 #: A9D2286
Report Date: 2009/10/26

Test Summary

Maxxam ID	DX7496	**Collected**	2009/09/28
Sample ID	LICA/CLS/SEPT2809	**Shipped**	
Matrix	Filter	**Received**	2009/10/05

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1971052	2009/10/13	2009/10/15	WZ

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D2286
Report Date: 2009/10/26

GENERAL COMMENTS

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

Pyrene is statistically out of control but within method control at 101% recovery in the spike. Spike dup recovery is in control.

Naphthalene positive found in blank. Samples should be considered to be possibly contaminated to the level found in the blank.

All sample extracted past the holding time.

Sample DX7496-01: 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: Michael Bisaga
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GA9D2286

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1971052	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/10/15		90	%	50 - 150
			D10-Fluoranthene	2009/10/15		119	%	50 - 150
			D10-Phenanthrene	2009/10/15		112	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/15		107	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/15		118	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/15		119	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/15		112	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/15		94	%	50 - 150
			D12-Chrysene	2009/10/15		104	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/10/15		116	%	50 - 150
			D12-Perylene	2009/10/15		114	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/15		116	%	50 - 150
			D8-Acenaphthylene	2009/10/15		107	%	50 - 150
			D8-Naphthalene	2009/10/15		93	%	50 - 150
			Acenaphthene	2009/10/15		95	%	60 - 130
		RPD	Acenaphthene	2009/10/15	3.7		%	50
		Spiked Blank	Acenaphthylene	2009/10/15		105	%	60 - 130
		RPD	Acenaphthylene	2009/10/15	4.2		%	50
		Spiked Blank	Anthracene	2009/10/15		102	%	60 - 130
		RPD	Anthracene	2009/10/15	9.8		%	50
		Spiked Blank	Benzo(a)anthracene	2009/10/15		93	%	60 - 130
		RPD	Benzo(a)anthracene	2009/10/15	2.4		%	50
		Spiked Blank	Benzo(a)pyrene	2009/10/15		105	%	60 - 130
		RPD	Benzo(a)pyrene	2009/10/15	0.06		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/10/15		97	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/10/15	3.8		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/10/15		122	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/10/15	8.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/10/15		104	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/10/15	1.8		%	50
		Spiked Blank	Chrysene	2009/10/15		97	%	60 - 130
		RPD	Chrysene	2009/10/15	3.1		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/10/15		108	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/10/15	1.5		%	50
		Spiked Blank	Fluoranthene	2009/10/15		114	%	60 - 130
		RPD	Fluoranthene	2009/10/15	14.6		%	50
		Spiked Blank	Fluorene	2009/10/15		99	%	60 - 130
		RPD	Fluorene	2009/10/15	7.1		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/10/15		109	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/10/15	1.7		%	50
		Spiked Blank	Naphthalene	2009/10/15		89	%	60 - 130
		RPD	Naphthalene	2009/10/15	0.9		%	50
		Spiked Blank	Phenanthrene	2009/10/15		101	%	60 - 130
		RPD	Phenanthrene	2009/10/15	13.7		%	50
		Spiked Blank	Pyrene	2009/10/15		101	%	60 - 130
		RPD	Pyrene	2009/10/15	14.0		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/10/15		86	%	50 - 150
			D10-Fluoranthene	2009/10/15		106	%	50 - 150
			D10-Phenanthrene	2009/10/15		101	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/15		106	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/15		108	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/15		111	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/15		104	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/15		93	%	50 - 150
			D12-Chrysene	2009/10/15		102	%	50 - 150

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9D2286

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1971052	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/10/15		108	%	50 - 150
			D12-Perylene	2009/10/15		106	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/15		108	%	50 - 150
			D8-Acenaphthylene	2009/10/15		101	%	50 - 150
			D8-Naphthalene	2009/10/15		87	%	50 - 150
			1-Methylnaphthalene	2009/10/15	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/10/15	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/10/15	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/10/15	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/10/15	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/10/15	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/10/15	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/10/15	ND, RDL=0.40		ug	
			Acenaphthene	2009/10/15	ND, RDL=0.050		ug	
			Acenaphthylene	2009/10/15	ND, RDL=0.050		ug	
			Anthracene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/10/15	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/10/15	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/10/15	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/10/15	ND, RDL=0.050		ug	
			Biphenyl	2009/10/15	ND, RDL=0.10		ug	
			Chrysene	2009/10/15	ND, RDL=0.050		ug	
			Coronene	2009/10/15	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/10/15	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/10/15	ND, RDL=0.20		ug	
			Fluoranthene	2009/10/15	ND, RDL=0.050		ug	
			Fluorene	2009/10/15	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/10/15	ND, RDL=0.050		ug	
			m-Terphenyl	2009/10/15	ND, RDL=0.10		ug	
			Naphthalene	2009/10/15	0.098, RDL=0.072		ug	
			o-Terphenyl	2009/10/15	ND, RDL=0.10		ug	
			Perylene	2009/10/15	ND, RDL=0.10		ug	
			Phenanthrene	2009/10/15	ND, RDL=0.050		ug	
			p-Terphenyl	2009/10/15	ND, RDL=0.10		ug	
			Pyrene	2009/10/15	ND, RDL=0.050		ug	
			Quinoline	2009/10/15	ND, RDL=0.40		ug	
			Tetralin	2009/10/15	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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Your C.O.C. #: 1039

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

Report Date: 2009/10/20

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A9D5453
Received: 2009/10/09, 11:41

Sample Matrix: PUF AND FILTER
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
PAH's in Air (CARB429mod)	2	2009/10/13	2009/10/15	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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Total cover pages: 1

Lakeland Industry & Community Assoc.

Maxxam Job #: A9D5453
Report Date: 2009/10/20

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

Maxxam ID		DZ3471	DZ3473		
Sampling Date		2009/10/04 00:00	2009/10/04 00:00		
COC Number		1039	1039		
	Units	**LICA PUF/QFF/CLS/OCT4,09**	**LICA PUF/QFF/PORT/OCT4,09**	**DL**	**QC Batch**
Semivolatile Organics					
1-Methylnaphthalene	ug	<0.10	<0.10	0.10	1971052
1-Methylphenanthrene	ug	<0.10	<0.10	0.10	1971052
2-Chloronaphthalene	ug	<0.10	<0.10	0.10	1971052
2-Methylanthracene	ug	<0.10	<0.10	0.10	1971052
2-Methylnaphthalene	ug	<0.10	<0.10	0.10	1971052
3-Methylcholanthrene	ug	<2.0	<2.0	2.0	1971052
7,12-Dimethylbenzo(a)anthracene	ug	<0.10	<0.10	0.10	1971052
9,10-Dimethylanthracene	ug	<0.40	<0.40	0.40	1971052
Acenaphthene	ug	<0.050	<0.050	0.050	1971052
Acenaphthylene	ug	0.141	<0.050	0.050	1971052
Anthracene	ug	0.122	<0.050	0.050	1971052
Benzo(a)anthracene	ug	<0.050	<0.050	0.050	1971052
Benzo(a)fluorene	ug	<0.10	<0.10	0.10	1971052
Benzo(a)pyrene	ug	<0.050	<0.050	0.050	1971052
Benzo(b)fluoranthene	ug	0.064	<0.050	0.050	1971052
Benzo(b)fluorene	ug	<0.10	<0.10	0.10	1971052
Benzo(e)pyrene	ug	<0.10	<0.10	0.10	1971052
Benzo(g,h,i)perylene	ug	0.104	0.150	0.050	1971052
Benzo(k)fluoranthene	ug	<0.050	<0.050	0.050	1971052
Biphenyl	ug	<0.10	<0.10	0.10	1971052
Chrysene	ug	0.064	<0.050	0.050	1971052
Coronene	ug	<0.10	0.11	0.10	1971052
Dibenz(a,h)anthracene	ug	<0.050	<0.050	0.050	1971052
Dibenzo(a,e)pyrene	ug	<0.20	<0.20	0.20	1971052
Fluoranthene	ug	0.240	<0.050	0.050	1971052
Fluorene	ug	0.199	0.053	0.050	1971052
Indeno(1,2,3-cd)pyrene	ug	<0.050	<0.050	0.050	1971052
m-Terphenyl	ug	<0.10	<0.10	0.10	1971052
Naphthalene	ug	0.103	<0.072	0.072	1971052
o-Terphenyl	ug	<0.10	<0.10	0.10	1971052
Perylene	ug	<0.10	<0.10	0.10	1971052

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Lakeland Industry & Community Assoc.

Maxxam Job #: A9D5453
Report Date: 2009/10/20

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

Maxxam ID		DZ3471	DZ3473		
Sampling Date		2009/10/04 00:00	2009/10/04 00:00		
COC Number		1039	1039		
	Units	**LICA PUF/QFF/CLS/OCT4,09**	**LICA PUF/QFF/PORT/OCT4,09**	**DL**	**QC Batch**
Phenanthrene	ug	0.742	0.107	0.050	1971052
p-Terphenyl	ug	<0.10	<0.10	0.10	1971052
Pyrene	ug	0.181	<0.050	0.050	1971052
Quinoline	ug	<0.40	<0.40	0.40	1971052
Tetralin	ug	<0.10	<0.10	0.10	1971052
Surrogate Recovery (%)					
D10-2-Methylnaphthalene	%	87	95		1971052
D10-Fluoranthene	%	113	115		1971052
D10-Fluorene (FS)	%	37 (1)	33 (1)		1971052
D10-Phenanthrene	%	105	110		1971052
D12-Benzo(a)anthracene	%	102	106		1971052
D12-Benzo(a)pyrene	%	108	115		1971052
D12-Benzo(b)fluoranthene	%	112	115		1971052
D12-Benzo(ghi)perylene	%	108	111		1971052
D12-Benzo(k)fluoranthene	%	93	94		1971052
D12-Chrysene	%	103	103		1971052
D12-Indeno(1,2,3-cd)pyrene	%	110	112		1971052
D12-Perylene	%	108	112		1971052
D14-Dibenzo(a,h)anthracene	%	110	112		1971052
D14-Terphenyl (FS)	%	90	91		1971052
D8-Acenaphthylene	%	105	115		1971052
D8-Naphthalene	%	88	97		1971052

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 #: A9D5453
Report Date: 2009/10/20

Test Summary

Maxxam ID	DZ3471	**Collected**	2009/10/04
Sample ID	LICA PUF/QFF/CLS/OCT4,09	**Shipped**	
Matrix	PUF AND FILTER	**Received**	2009/10/09

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1971052	2009/10/13	2009/10/15	WZ

Maxxam ID	DZ3473	**Collected**	2009/10/04
Sample ID	LICA PUF/QFF/PORT/OCT4,09	**Shipped**	
Matrix	PUF AND FILTER	**Received**	2009/10/09

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
PAH's in Air (CARB429mod)	GC/MS	1971052	2009/10/13	2009/10/15	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 #: A9D5453
Report Date: 2009/10/20

GENERAL COMMENTS

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

Pyrene is statistically out of control but within method control at 101% recovery in the spike. Spike dup recovery is in control.

Naphthalene positive found in blank. Samples should be considered to be possibly contaminated to the level found in the blank.

Sample DZ3471-01: 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 it would have a value below the estimated mdl.
Since Triphenylene co-elutes with Chrysene, the maximum possible value for this compound would be 0.064ug, which is the value reported for Chrysene.
Benzo(b)Anthracene elutes after Benzo(a)Anthracene and Chysene. Searched for ions specific to this compound in the appropriate retention time range with no possible positive detected.
Picene elutes after Dibenzo(a,h) anthracene. Searched for ions specific to this compounds in the appropriate retention time range, possible positive detected, but would fall below the mdl using Dibenzo(a,h) anthracene calibration.

Sample DZ3473-01: 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:
Client Project #:
P.O. #:
Project name:

Quality Assurance Report

Maxxam Job Number: GA9D5453

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1971052	WZ	Spiked Blank	D10-2-Methylnaphthalene	2009/10/15		90	%	50 - 150
			D10-Fluoranthene	2009/10/15		119	%	50 - 150
			D10-Phenanthrene	2009/10/15		112	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/15		107	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/15		118	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/15		119	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/15		112	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/15		94	%	50 - 150
			D12-Chrysene	2009/10/15		104	%	50 - 150
			D12-Indeno(1,2,3-cd)pyrene	2009/10/15		116	%	50 - 150
			D12-Perylene	2009/10/15		114	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/15		116	%	50 - 150
			D8-Acenaphthylene	2009/10/15		107	%	50 - 150
			D8-Naphthalene	2009/10/15		93	%	50 - 150
			Acenaphthene	2009/10/15		95	%	60 - 130
		RPD	Acenaphthene	2009/10/15	3.7		%	50
		Spiked Blank	Acenaphthylene	2009/10/15		105	%	60 - 130
		RPD	Acenaphthylene	2009/10/15	4.2		%	50
		Spiked Blank	Anthracene	2009/10/15		102	%	60 - 130
		RPD	Anthracene	2009/10/15	9.8		%	50
		Spiked Blank	Benzo(a)anthracene	2009/10/15		93	%	60 - 130
		RPD	Benzo(a)anthracene	2009/10/15	2.4		%	50
		Spiked Blank	Benzo(a)pyrene	2009/10/15		105	%	60 - 130
		RPD	Benzo(a)pyrene	2009/10/15	0.06		%	50
		Spiked Blank	Benzo(b)fluoranthene	2009/10/15		97	%	60 - 130
		RPD	Benzo(b)fluoranthene	2009/10/15	3.8		%	50
		Spiked Blank	Benzo(g,h,i)perylene	2009/10/15		122	%	60 - 130
		RPD	Benzo(g,h,i)perylene	2009/10/15	8.2		%	50
		Spiked Blank	Benzo(k)fluoranthene	2009/10/15		104	%	60 - 130
		RPD	Benzo(k)fluoranthene	2009/10/15	1.8		%	50
		Spiked Blank	Chrysene	2009/10/15		97	%	60 - 130
		RPD	Chrysene	2009/10/15	3.1		%	50
		Spiked Blank	Dibenz(a,h)anthracene	2009/10/15		108	%	60 - 130
		RPD	Dibenz(a,h)anthracene	2009/10/15	1.5		%	50
		Spiked Blank	Fluoranthene	2009/10/15		114	%	60 - 130
		RPD	Fluoranthene	2009/10/15	14.6		%	50
		Spiked Blank	Fluorene	2009/10/15		99	%	60 - 130
		RPD	Fluorene	2009/10/15	7.1		%	50
		Spiked Blank	Indeno(1,2,3-cd)pyrene	2009/10/15		109	%	60 - 130
		RPD	Indeno(1,2,3-cd)pyrene	2009/10/15	1.7		%	50
		Spiked Blank	Naphthalene	2009/10/15		89	%	60 - 130
		RPD	Naphthalene	2009/10/15	0.9		%	50
		Spiked Blank	Phenanthrene	2009/10/15		101	%	60 - 130
		RPD	Phenanthrene	2009/10/15	13.7		%	50
		Spiked Blank	Pyrene	2009/10/15		101	%	60 - 130
		RPD	Pyrene	2009/10/15	14.0		%	50
		Method Blank	D10-2-Methylnaphthalene	2009/10/15		86	%	50 - 150
			D10-Fluoranthene	2009/10/15		106	%	50 - 150
			D10-Phenanthrene	2009/10/15		101	%	50 - 150
			D12-Benzo(a)anthracene	2009/10/15		106	%	50 - 150
			D12-Benzo(a)pyrene	2009/10/15		108	%	50 - 150
			D12-Benzo(b)fluoranthene	2009/10/15		111	%	50 - 150
			D12-Benzo(ghi)perylene	2009/10/15		104	%	50 - 150
			D12-Benzo(k)fluoranthene	2009/10/15		93	%	50 - 150
			D12-Chrysene	2009/10/15		102	%	50 - 150

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

Quality Assurance Report (Continued)

Maxxam Job Number: GA9D5453

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
1971052	WZ	Method Blank	D12-Indeno(1,2,3-cd)pyrene	2009/10/15		108	%	50 - 150
			D12-Perylene	2009/10/15		106	%	50 - 150
			D14-Dibenzo(a,h)anthracene	2009/10/15		108	%	50 - 150
			D8-Acenaphthylene	2009/10/15		101	%	50 - 150
			D8-Naphthalene	2009/10/15		87	%	50 - 150
			1-Methylnaphthalene	2009/10/15	ND, RDL=0.10		ug	
			1-Methylphenanthrene	2009/10/15	ND, RDL=0.10		ug	
			2-Chloronaphthalene	2009/10/15	ND, RDL=0.10		ug	
			2-Methylanthracene	2009/10/15	ND, RDL=0.10		ug	
			2-Methylnaphthalene	2009/10/15	ND, RDL=0.10		ug	
			3-Methylcholanthrene	2009/10/15	ND, RDL=2.0		ug	
			7,12-Dimethylbenzo(a)anthracene	2009/10/15	ND, RDL=0.10		ug	
			9,10-Dimethylanthracene	2009/10/15	ND, RDL=0.40		ug	
			Acenaphthene	2009/10/15	ND, RDL=0.050		ug	
			Acenaphthylene	2009/10/15	ND, RDL=0.050		ug	
			Anthracene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(a)anthracene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(a)fluorene	2009/10/15	ND, RDL=0.10		ug	
			Benzo(a)pyrene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(b)fluoranthene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(b)fluorene	2009/10/15	ND, RDL=0.10		ug	
			Benzo(e)pyrene	2009/10/15	ND, RDL=0.10		ug	
			Benzo(g,h,i)perylene	2009/10/15	ND, RDL=0.050		ug	
			Benzo(k)fluoranthene	2009/10/15	ND, RDL=0.050		ug	
			Biphenyl	2009/10/15	ND, RDL=0.10		ug	
			Chrysene	2009/10/15	ND, RDL=0.050		ug	
			Coronene	2009/10/15	ND, RDL=0.10		ug	
			Dibenz(a,h)anthracene	2009/10/15	ND, RDL=0.050		ug	
			Dibenzo(a,e)pyrene	2009/10/15	ND, RDL=0.20		ug	
			Fluoranthene	2009/10/15	ND, RDL=0.050		ug	
			Fluorene	2009/10/15	ND, RDL=0.050		ug	
			Indeno(1,2,3-cd)pyrene	2009/10/15	ND, RDL=0.050		ug	
			m-Terphenyl	2009/10/15	ND, RDL=0.10		ug	
			Naphthalene	2009/10/15	0.098, RDL=0.072		ug	
			o-Terphenyl	2009/10/15	ND, RDL=0.10		ug	
			Perylene	2009/10/15	ND, RDL=0.10		ug	
			Phenanthrene	2009/10/15	ND, RDL=0.050		ug	
			p-Terphenyl	2009/10/15	ND, RDL=0.10		ug	
			Pyrene	2009/10/15	ND, RDL=0.050		ug	
			Quinoline	2009/10/15	ND, RDL=0.40		ug	
			Tetralin	2009/10/15	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
September 2009

Prepared By:

Maxxam Analytics

Driven by Service and Science

October 14, 2009

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: September 2009

The monthly ambient data report:

- Prepared by Lily Lin
- Reviewed by Craig Snider

The monthly analytical report for static & passive monitoring:

- Authorized by Levi Manchak

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 – September 2009

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	0.55	9	20	6	6	310(NW)	3.5	20	100.0
H2S (PPB)	10	3	0	0	0.02	2	23	20	6.5	130(SE)	0.2	8	100.0
THC (PPM)	-	-	-	-	2.03	2.8	1	2, 3	0, 2.3	51(NE), 74(ENE)	2.2	12	100.0
NOx (PPB)	-	-	-	-	2.70	24	24	8	5.7	296(WNW)	9.5	20	100.0
NO (PPB)	-	-	-	-	0.38	12	30	6	9.6	305(WNW)	2.2	30	100.0
NO_2 (PPB)	212	106	0	0	2.09	19	25	1	2.3	240(WSW)	7.4	20	100.0
VECTOR WS (KPH)	-	-	-	-	6.57	17.7	28	16	-	129(SE)	10.1	28	100.0
VECTOR WD (DEGREES)	-	-	-	-	210(SSW)	-	-	-	-	-	-	-	100.0
RELATIVE HUMIDITY (%)	-	-	-	-	68.29	94	VAR	VAR	VAR	VAR	80.7	10	100.0
TEMPERATURE (DEG C)	-	-	-	-	14.05	29.7	3	14	6.3	112(ESE)	20.8	3	100.0
BAROMETRIC PRESSURE (MILIBAR)	-	-	-	-	941	956	11	VAR	VAR	VAR	953.6	11	100.0
PRECIPITATION (MM)	-	-	-	-	0.01	1.2	7	15	6	201(SSW)	1.7	7	100.0

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

No operational issue was observed during the month. The inlet filter was changed before the monthly calibration was performed. Data was corrected using daily zero information.

Hydrogen Sulphide (PPB)

- Analyzer make / model - API 101E

No operational issue was observed during the month. The inlet filter was changed before the monthly calibration was performed. Data was corrected using daily zero information.

Total HydroCarbon (PPM)

- Analyzer make / model –TECO 51C-LT

No operational issue was observed during the month. The inlet filter was changed before the monthly calibration was performed. The CH4 span gas cylinder was changed during the trip on September 14th. Data was corrected using daily zero information.

Nitrogen Dioxide (PPB)

- Analyzer make / model - API 200E

No operational issue was observed during the month. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

General Monthly Summary

AQM STATION – LICA – Maskwa

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

- System make / model - Climatronics MIII

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.

Relative Humidity (PERCENT)

- System make / model - Met One 083

No operational issues observed during the month.

Precipitation (MM)

- System make / model - Met One 387

No operational issue was observed during the month.

Barometric Pressure (MILLIBAR)

- System make / model - Met One 092

No operation issue was observed during the month.

Ambient Temperature (DEGC)

- System make / model - Met One 060

No operational issue was observed during the month.

Trailer Temperature (DEG C)

- System make / model – R&R 61

No operational issue was observed during the month.

General Monthly Summary

AQM STATION – LICA – Maskwa

Standard Deviation Wind Direction (DEG)

- System make / model – Climatronics MIII

No operational issue was observed during the month.

Datalogger

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

No operational issue was observed during the month.

Trailer

No issues with the station.

Continuous Monitoring

Monthly Summaries, Graphs & Wind Roses

Sulphur Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

SULPHUR DIOXIDE (SO_2) hourly averages in ppb

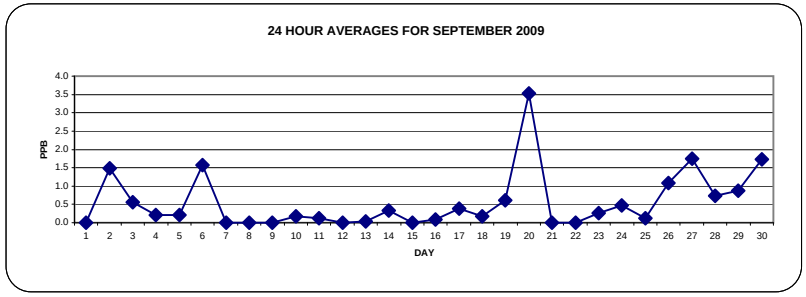
MST

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	**IZS**	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	**IZS**	0	0	1	2	1	1	2	1	2	2	3	3	5	1	6	3	1	0	6	1.5	24
3	0	0	0	0	**IZS**	0	0	0	1	1	1	1	1	2	1	1	2	1	1	0	0	0	0	0	2	0.6	24
4	0	2	2	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0.2	24
5	0	0	**IZS**	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
6	0	**IZS**	0	0	0	0	0	0	1	3	3	2	2	2	1	2	3	4	3	2	3	2	2	1	4	1.6	24
7	**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
8	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
9	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
10	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	**IZS**	0	0	0	1	0.2	24
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	1	1	1	0.1	24
12	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
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	0	1	0.0	24
14	0	0	1	1	0	0	0	0	**C**	**C**	**C**	**C**	**C**	0	2	0	**IZS**	1	0	0	0	0	1	0	2	0.3	24
15	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
16	0	0	0	0	0	0	0	0	0	1	0	0	1	0	**IZS**	0	0	0	0	0	0	0	0	0	1	0.1	24
17	0	0	0	0	0	0	0	0	2	0	0	0	0	**IZS**	0	0	1	1	1	1	0	2	1	0	2	0.4	24
18	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	1	1	1	1	0	1	0.2	24
19	0	0	1	1	1	0	0	0	1	1	0	**IZS**	0	0	0	1	0	2	1	0	2	0	0	3	3	0.6	24
20	8	7	4	4	0	1	**9**	5	6	5	**IZS**	0	1	1	2	2	3	4	3	8	5	2	1	0	**9**	**3.5**	24
21	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
22	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
23	0	0	0	0	0	0	0	**IZS**	0	0	0	1	1	0	1	0	0	0	0	1	2	0	0	0	2	0.3	24
24	0	0	0	0	0	0	**IZS**	0	3	0	1	1	3	1	0	0	0	0	0	0	0	1	0	1	3	0.5	24
25	1	1	1	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
26	0	4	1	1	**IZS**	0	0	0	1	0	0	0	0	0	1	0	1	2	1	4	3	2	1	3	4	1.1	24
27	1	0	0	**IZS**	4	2	5	6	3	2	1	4	2	3	2	3	1	0	1	0	0	0	0	0	6	1.7	24
28	0	0	**IZS**	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	2	2	2	2	2	2	2	0.7	24
29	3	**IZS**	3	4	3	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	3	4	0.9	24
30	**IZS**	2	0	1	0	2	7	4	2	2	2	1	1	1	1	2	6	1	1	2	0	0	0	**IZS**	7	1.7	24
HOURLY MAX	8	7	4	4	4	2	9	6	6	5	3	4	3	3	2	3	6	4	5	8	6	3	2	3			
HOURLY AVG	0.5	0.6	0.5	0.4	0.3	0.2	0.8	0.6	0.8	0.8	0.4	0.4	0.6	0.4	0.5	0.4	0.7	0.7	0.7	0.8	0.8	0.6	0.4	0.5			

STATUS FLAG CODES

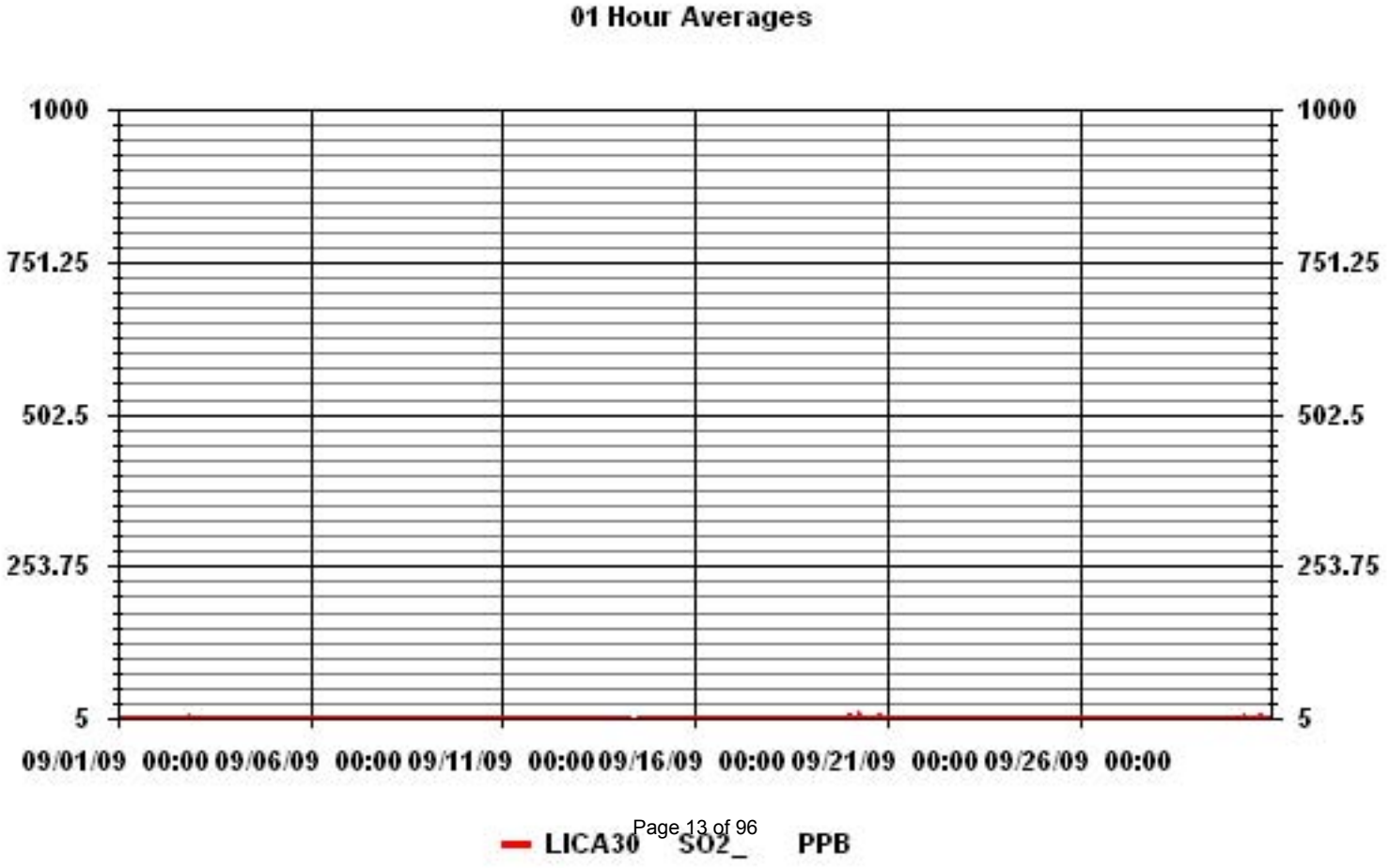
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

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:	185					
MAXIMUM 1-HR AVERAGE:	9	PPB	@ HOUR(S)	6	ON DAY(S)	20
MAXIMUM 24-HR AVERAGE:	3.5	PPB			ON DAY(S)	20
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		720	HRS
MONTHLY CALIBRATION TIME:	5	HRS	AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	1.21		MONTHLY AVERAGE:		0.55	PPB


01 Hour Averages
1000
751.25
502.5
253.75
5
09/01/09 00:00 09/06/09 00:00 09/11/09 00:00 09/16/09 00:00 09/21/09 00:00 09/26/09 00:00
LICA30 SO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

MST

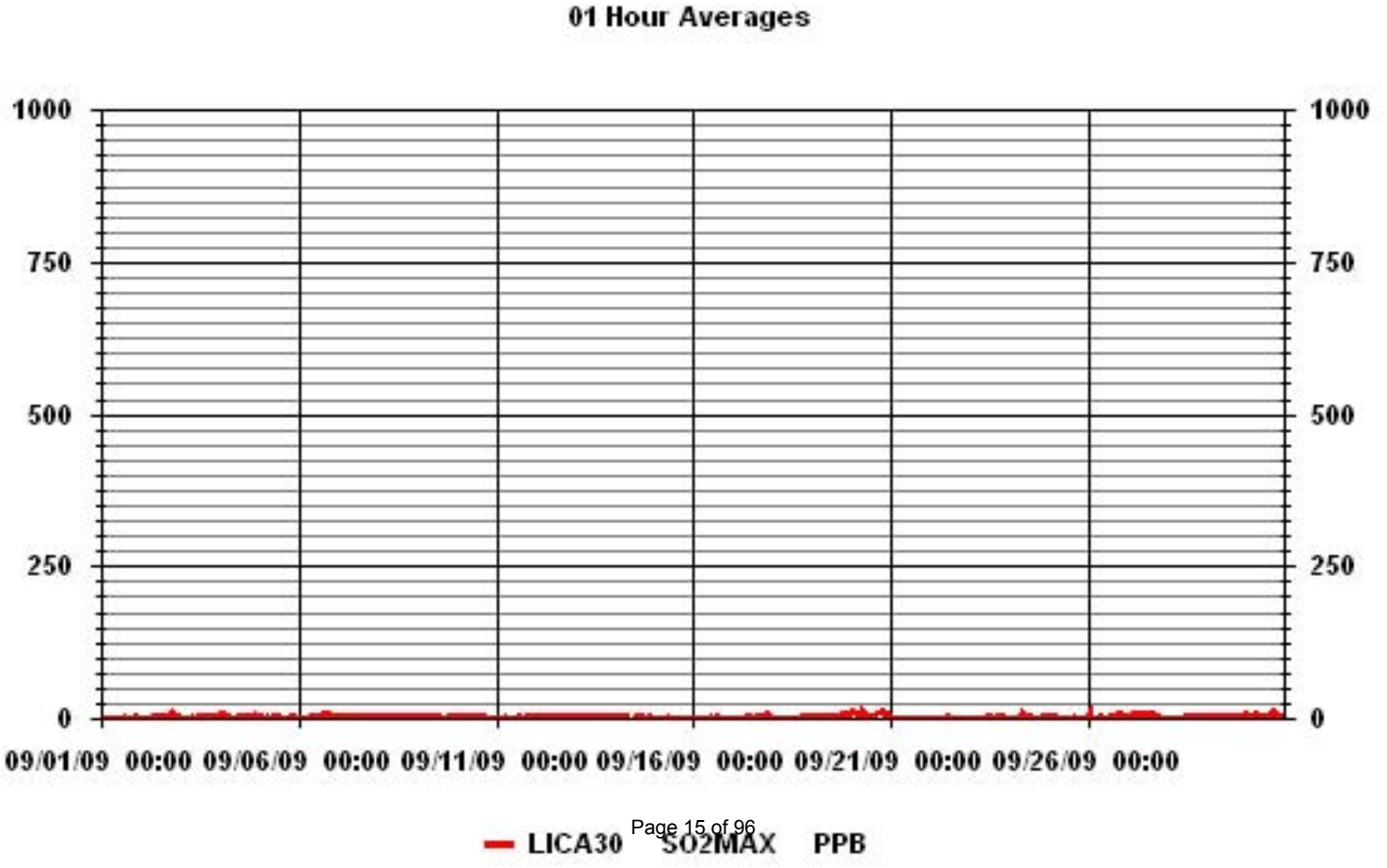
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	1	0	0	0	0	0	**IZS**	0	0	0	0	0	1	0	2	2	1	0	0	0	0	3	0	0	3	0.4	24
2	0	0	0	0	0	**IZS**	0	0	3	4	2	2	4	2	4	4	4	5	8	3	9	6	1	1	9	2.7	24
3	1	0	0	0	**IZS**	0	1	0	1	1	3	2	3	4	3	3	5	3	3	1	1	1	1	1	5	1.7	24
4	1	6	6	**IZS**	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	6	1	1	6	1.7	24
5	1	1	**IZS**	1	3	1	1	2	5	5	1	1	2	3	0	1	0	0	1	1	1	1	1	0	5	1.4	24
6	0	**IZS**	0	0	0	0	0	1	4	5	4	5	5	4	3	3	6	7	7	6	5	3	3	1	7	3.1	24
7	**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
8	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	1.0	24
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	**IZS**	1	1	1	0.9	24
10	1	1	1	1	1	1	1	1	1	2	2	1	3	3	0	1	1	1	1	1	0	**IZS**	0	0	3	1.0	24
11	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	0	1	**IZS**	1	1	1	1	1	0.4	24
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	5	1	2	2	1	5	1.3	24
13	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	1.0	24
14	1	1	1	1	1	1	1	1	**C**	**C**	**C**	**C**	**C**	2	5	1	**IZS**	3	0	1	0	2	3	0	5	1.4	24
15	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
16	0	0	0	0	0	0	0	0	0	2	1	2	3	1	**IZS**	1	1	0	0	0	0	0	0	0	3	0.5	24
17	0	0	0	0	0	0	0	1	4	0	1	1	0	**IZS**	0	3	5	5	4	4	2	8	6	1	8	2.0	24
18	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	1	2	2	2	1	1	2	0.4	24
19	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	3	2	6	3	1	9	1	2	9	9	2.2	24
20	10	13	9	10	2	3	**13**	9	**13**	10	**IZS**	1	6	4	6	8	8	8	8	13	13	6	6	1	**13**	7.8	24
21	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
22	0	0	0	0	0	0	0	0	**IZS**	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0.2	24
23	0	0	0	0	0	0	0	**IZS**	0	0	1	2	3	1	1	2	1	1	1	3	4	1	1	0	4	1.0	24
24	0	0	0	0	0	0	**IZS**	0	8	4	3	4	7	5	0	0	0	0	0	0	1	1	1	2	8	1.6	24
25	2	3	2	1	1	**IZS**	0	0	1	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	0.6	24
26	4	10	2	1	**IZS**	0	0	0	4	1	0	0	0	1	4	0	5	6	6	9	8	6	3	5	10	3.3	24
27	3	0	1	**IZS**	8	6	7	9	7	5	6	7	7	6	5	6	6	0	3	2	1	0	0	0	9	4.1	24
28	0	0	**IZS**	0	0	0	0	0	0	1	0	3	2	2	2	1	2	3	3	4	3	4	3	2	4	1.5	24
29	3	**IZS**	5	6	5	2	1	1	2	5	1	1	1	1	1	1	1	4	1	1	1	1	3	9	9	2.5	24
30	**IZS**	5	1	2	1	5	10	8	4	6	5	5	5	2	6	10	12	3	7	7	2	1	1	**IZS**	12	4.9	24
HOURLY MAX	10	13	9	10	8	6	13	9	13	10	6	7	7	6	6	10	12	8	8	13	13	8	6	9			
HOURLY AVG	1.2	1.6	1.2	1.0	1.0	0.9	1.5	1.4	2.3	2.2	1.4	1.6	2.1	1.7	1.7	2.0	2.3	2.1	2.2	2.3	2.4	2.1	1.5	1.4			

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:	458					
MAXIMUM INSTANTANEOUS VALUE:	13	PPB	@ HOUR(S)	6, 8	ON DAY(S)	20
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:		720	HRS
MONTHLY CALIBRATION TIME:	5	HRS				
STANDARD DEVIATION:	2.39					


01 Hour Averages
1000
750
500
250
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 SO2MAX PPB

LICA30
SO2_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	.87	1.17	5.12	6.88	5.12	6.14	6.73	6.00	6.44	11.12	11.42	7.17	5.71	9.66	7.61	2.78	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	.87	1.17	5.12	6.88	5.12	6.14	6.73	6.00	6.44	11.12	11.42	7.17	5.71	9.66	7.61	2.78	

Calm : .00 %

Total # Operational Hours : 683

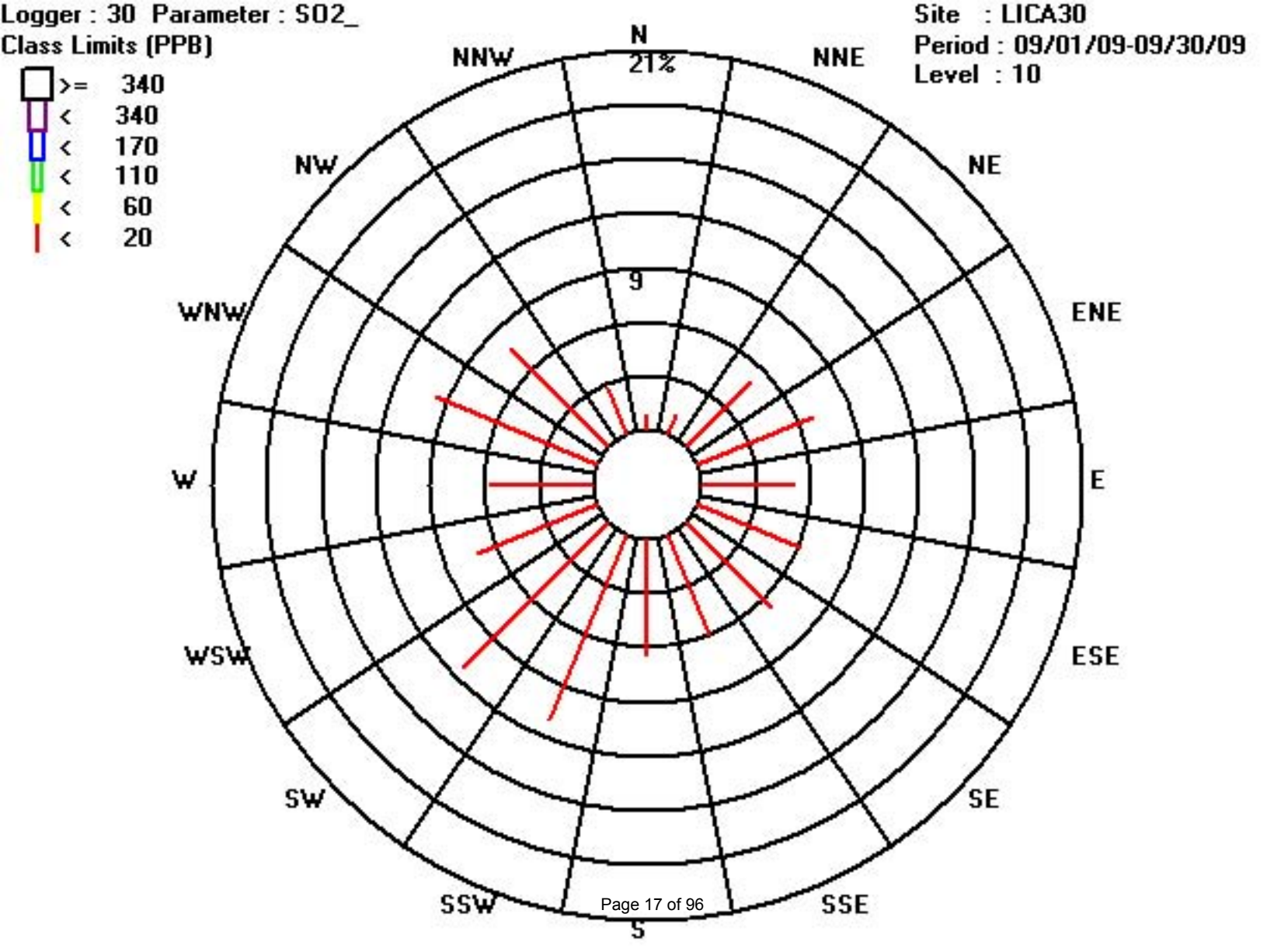
Distribution By Samples

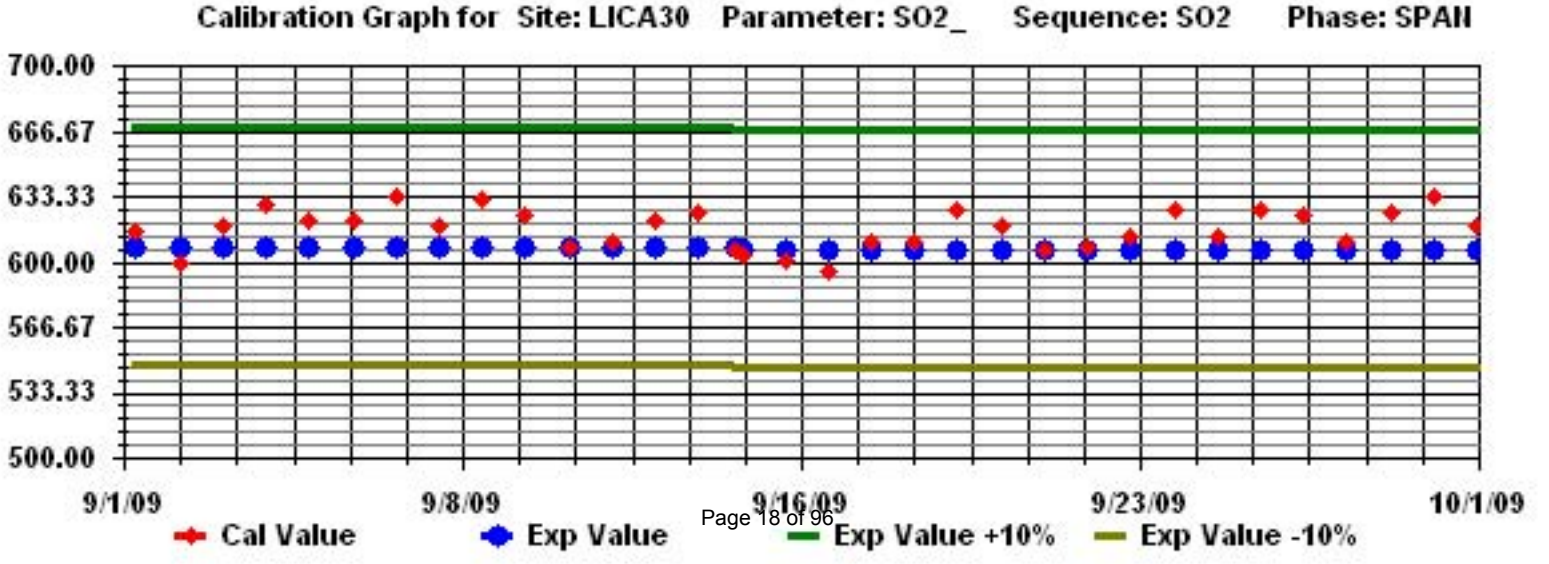
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 20	6	8	35	47	35	42	46	41	44	76	78	49	39	66	52	19	683
< 60																	
< 110																	
< 170																	
< 340																	
>= 340																	
Totals	6	8	35	47	35	42	46	41	44	76	78	49	39	66	52	19	

Calm : .00 %

Total # Operational Hours : 683


Logger : 30 Parameter : SO2_
Class Limits (PPB)
>= 340
< 340
< 170
< 110
< 60
< 20
Site : LICA30
Period : 09/01/09-09/30/09
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
700.00
666.67
633.33
600.00
566.67
533.33
500.00
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Hydrogen Sulphide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

HYDROGEN SULPHIDE (H_2S) hourly averages in ppb

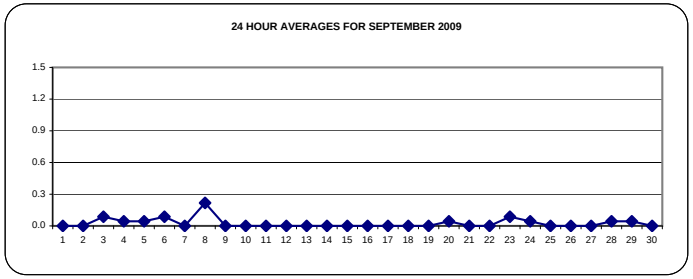
MST

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	**IZS**	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	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
3	0	1	1	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
4	0	0	0	**IZS**	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
5	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.0	24
6	0	**IZS**	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.1	24
7	**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
8	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	**0.2**	24
9	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
10	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
11	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
12	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
13	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
14	0	0	0	0	0	0	0	0	**C**	**C**	**C**	0	**C**	0	0	0	**IZS**	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	**IZS**	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	**IZS**	0	0	0	0	0	0	0	0	0	0	0.0	24
17	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
18	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
19	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
20	0	0	0	0	0	0	1	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
21	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
22	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
23	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	0	0	**2**	0.1	24
24	0	0	0	0	0	0	**IZS**	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
25	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
26	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
27	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
28	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.0	24
29	0	**IZS**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
30	**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
HOURLY MAX	0	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	2	1	1	0			
HOURLY AVG	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	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	0.1	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

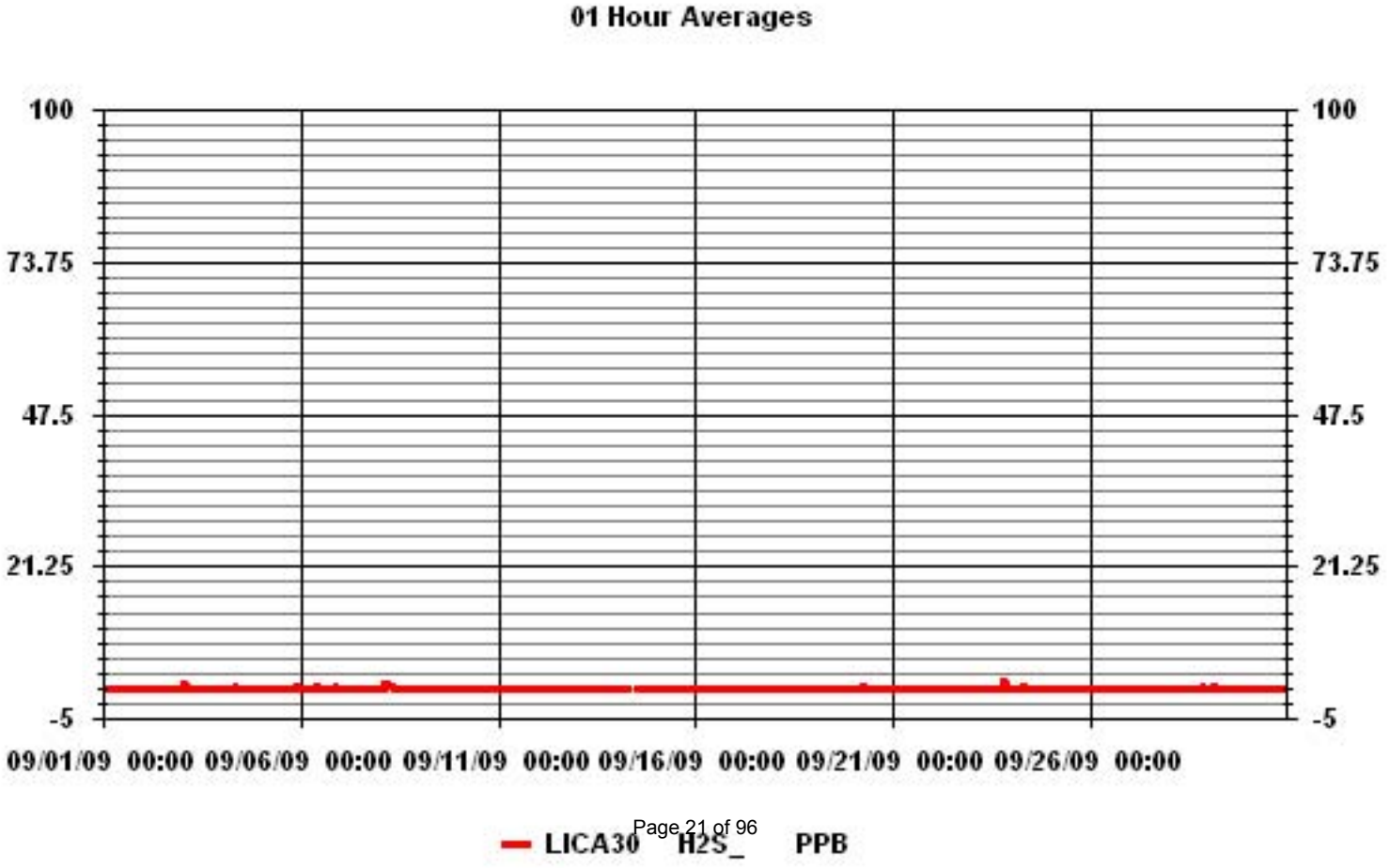
OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 10 PPB 24-HR 3 PPB



MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	16					
MAXIMUM 1-HR AVERAGE:	2	PPB	@ HOUR(S)	20	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:	0.2	PPB			ON DAY(S)	8
					VAR-VARIOUS	

IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:	720	HRS
MONTHLY CALIBRATION TIME:	4	HRS	AMD OPERATION UPTIME:	100.0	%
STANDARD DEVIATION:	0.16		MONTHLY AVERAGE:	0.02	PPB


01 Hour Averages
100
73.75
47.5
21.25
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 H2S_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

HYDROGEN SULPHIDE MAX instantaneous maximum in ppb

MST

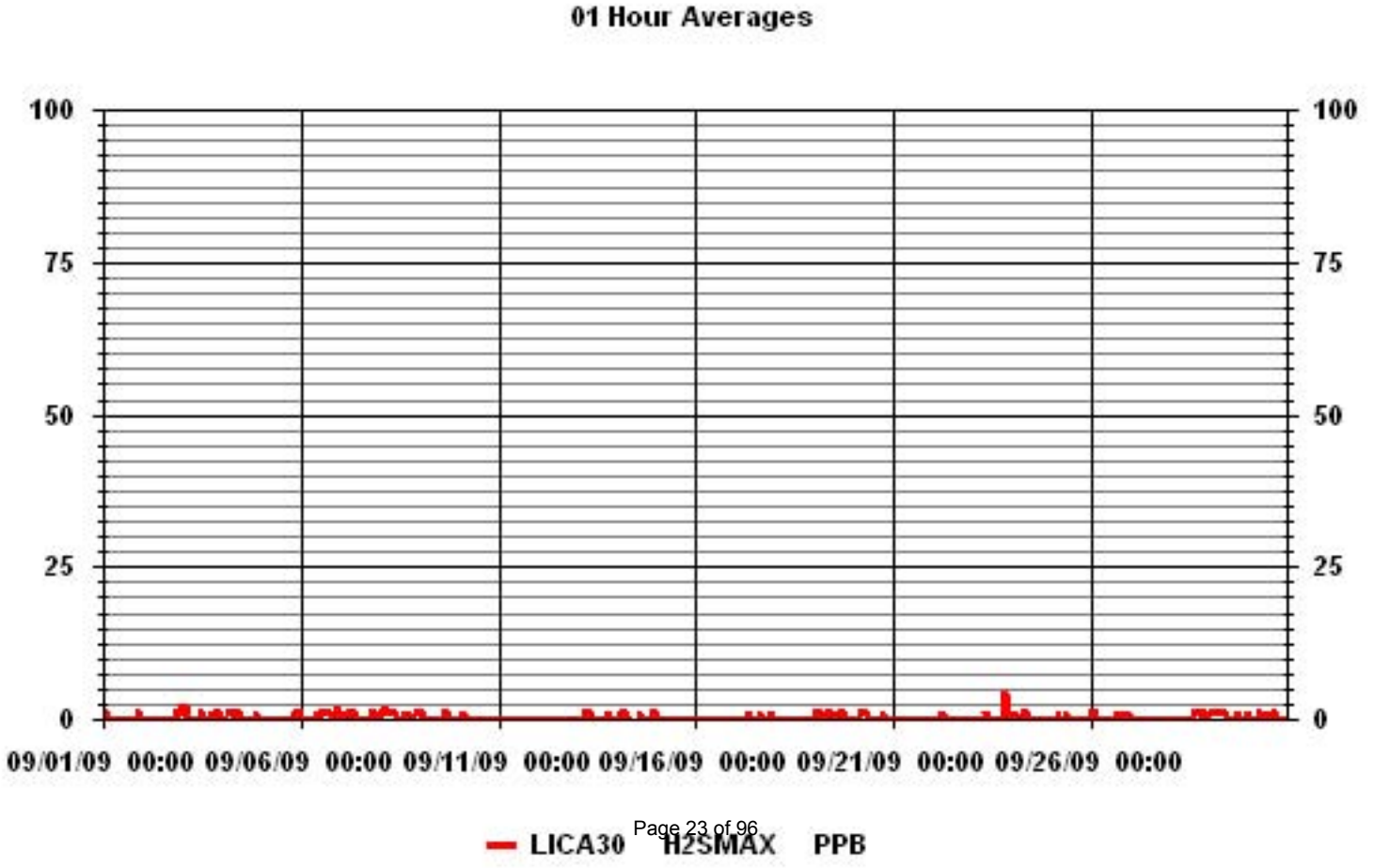
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00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

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

NUMBER OF NON-ZERO READINGS:	124						
MAXIMUM INSTANTANEOUS VALUE:	4	PPB	@ HOUR(S)	19, 20	ON DAY(S)	23	
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:			720	HRS
MONTHLY CALIBRATION TIME:	5	HRS					
STANDARD DEVIATION:	0.46						


01 Hour Averages
100
75
50
25
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 H2SMAX PPB

LICA30
H2S_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	.87	1.16	5.11	7.01	5.11	6.14	6.72	5.99	6.43	11.11	11.40	7.16	5.70	9.64	7.60	2.77	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	.87	1.16	5.11	7.01	5.11	6.14	6.72	5.99	6.43	11.11	11.40	7.16	5.70	9.64	7.60	2.77	

Calm : .00 %

Total # Operational Hours : 684

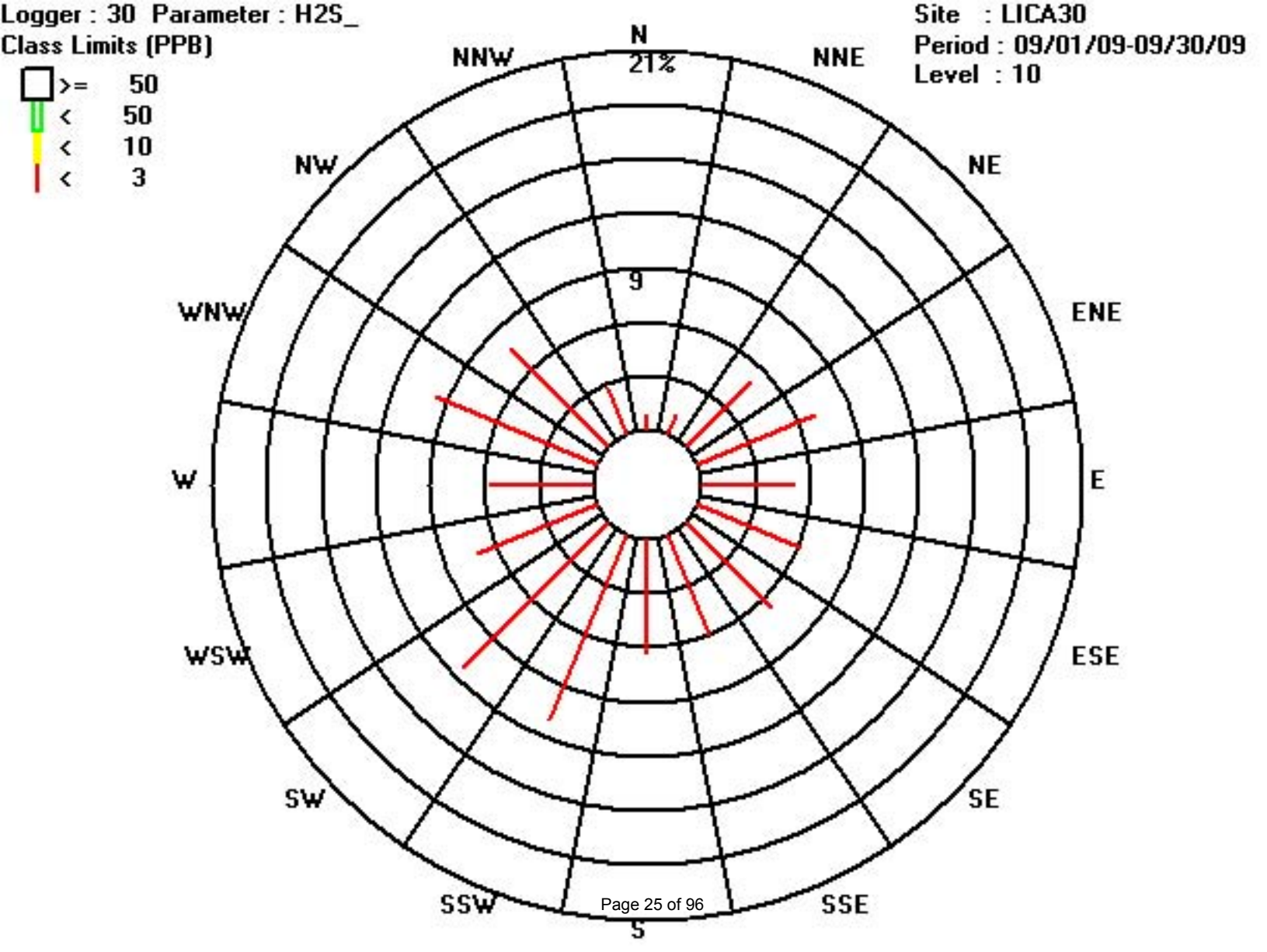
Distribution By Samples

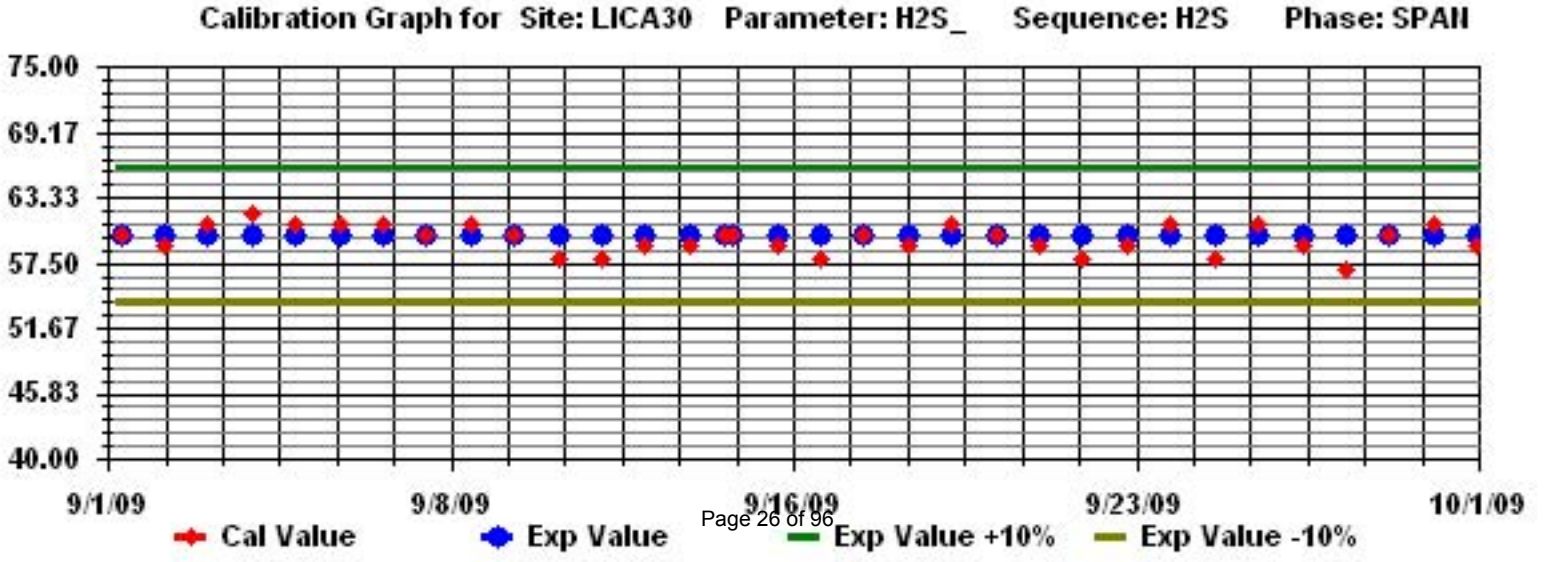
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	6	8	35	48	35	42	46	41	44	76	78	49	39	66	52	19	684
< 10																	
< 50																	
>= 50																	
Totals	6	8	35	48	35	42	46	41	44	76	78	49	39	66	52	19	

Calm : .00 %

Total # Operational Hours : 684


Logger : 30 Parameter : H2S_
Class Limits (PPB)
>= 50
< 50
< 10
< 3
Site : LICA30
Period : 09/01/09-09/30/09
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: H2S_ Sequence: H2S Phase: SPAN
75.00
69.17
63.33
57.50
51.67
45.83
40.00
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Hydrocarbons

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION -MASKWA

SEPTEMBER 2009

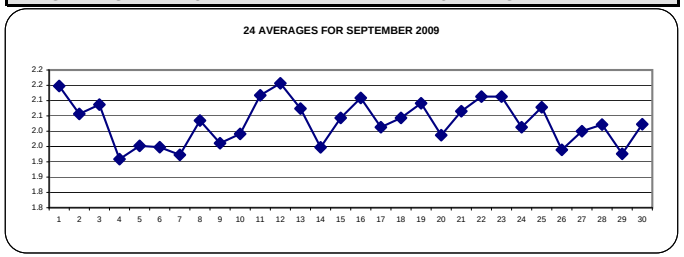
TOTAL HYDROCARBONS hourly averages in ppm

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	2.6	**2.8**	**2.8**	2.6	2.4	**IZS**	2	1.9	1.9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	**2.8**	2.1	24
2	2	2	2.1	2.1	2.1	**IZS**	2.1	2.1	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2	2.3	2.1	2	2	2.3	2.1	24
3	2.1	2.2	2.2	2.2	**IZS**	2.2	2.2	2.2	2.2	2.1	2.2	2.2	2	2	2	2	2.1	2.1	2.1	2	2	1.9	1.9	1.9	2.2	2.1	24
4	1.9	2	1.9	**IZS**	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	1.9	1.9	2.0	1.9	24
5	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	1.9	1.9	2	2.1	2.2	2.2	2.2	2.2	2.0	24
6	2.1	**IZS**	2	2	2	2	2	2	2	2	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	2.1	1.9	24
7	**IZS**	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	2	2	**IZS**	2.0	1.9	24
8	2.1	2.2	2.2	2.2	2.3	2.4	2.3	2.2	2.1	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	**IZS**	2	2.4	2.0	24
9	2	2	1.9	1.9	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	1.9	1.9	2	2	**IZS**	2	2	2.3	2.0	24
10	2	2	2	1.9	1.9	1.9	2	2.1	2	2	2	2	2	1.9	1.9	2	2	2	2	2	**IZS**	2.1	2	2.1	2.1	2.0	24
11	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2	2	2	2	2	2	2	2	**IZS**	2	2.1	2.2	2.2	2.3	2.1	24
12	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.3	2.3	2.2	2.1	2.1	2.1	2	2	2	1.9	2	**IZS**	2	2	2	2.1	2.1	2.5	**2.2**	24
13	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2	2	2	2	1.9	**IZS**	2	2	2	2	2	2	2.2	2.1	24
14	2	2	2	2	2	2	2	2	1.9	1.9	1.9	**C**	**C**	**C**	**C**	1.9	**IZS**	2	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	24
15	1.9	1.9	2	1.9	2	2.1	2	2.1	2.3	2.2	2.3	2.1	2.1	2.1	2	**IZS**	2	2	2	2	2	2	2	2	2.3	2.0	24
16	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.1	2	2	**IZS**	2.1	2	2.1	2.1	2	2	2	2	2	2.3	2.1	24
17	2	2	2	2	2	2	2	2	2	2	2	2	2	**IZS**	2.1	2.1	2.1	2.1	2	2	1.9	2	2	2	2.1	2.0	24
18	1.9	2	2	2	2.2	2.2	2.2	2.2	2.1	2	2	**IZS**	1.9	2	2.1	2	2	2	2	2	2	2	2	2	2.2	2.0	24
19	2.1	2.2	2.1	2.2	2.3	2.3	2.4	2.3	2.3	2.3	2.3	**IZS**	2.1	2	1.9	2	1.9	2	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.1	24
20	1.9	2	2	2	1.9	2	2	2.1	2	2	**IZS**	1.9	1.9	1.9	1.9	2	2	2	2.1	2	2.1	2	2	2	2.1	2.0	24
21	2.1	2	2	2	2	2.1	2.4	2.4	2.3	**IZS**	2.2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.4	2.1	24
22	2	2	2.1	2	2.1	2.5	2.6	2.3	**IZS**	2.2	2.5	2.1	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	2.4	2.4	2.6	2.1	24
23	2.3	2.2	2.2	2.2	2.3	2.3	2.3	**IZS**	2.4	2.1	2	1.9	2	2	2.1	2.1	2	2.1	2.1	2.1	1.9	2	2	2	2.4	2.1	24
24	1.9	2	2	2	2.1	2.4	**IZS**	2.4	2.4	1.9	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2.1	2.4	2.0	24
25	2.1	2.1	2.1	2.2	2.2	**IZS**	2.1	2.2	2.1	2.1	2	2.1	2	2	2	2	1.9	1.9	2	2	2.1	2.2	2.2	2.2	2.2	2.1	24
26	2.2	2.2	2	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	1.9	2	1.9	1.9	2	2.2	1.9	24
27	2	1.9	1.9	**IZS**	2	2.1	2	2	2	1.9	1.9	2	2	2	2	2	2	2	2	2	2.1	2	2.1	2.1	2.1	2.0	24
28	2.2	2.3	**IZS**	2.4	2.3	2	2	2	2	2	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	1.9	2.4	2.0	24
29	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	1.9	2	1.9	1.9	1.9	1.9	2	2.3	2.3	1.9	24
30	**IZS**	2	2.1	2	2	2.1	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	**IZS**	2.1	2.0	24
HOURLY MAX	2.4	2.6	2.8	2.8	2.6	2.5	2.6	2.4	2.4	2.3	2.5	2.2	2.1	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.3	2.2	2.4	2.4			
HOURLY AVG	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0			

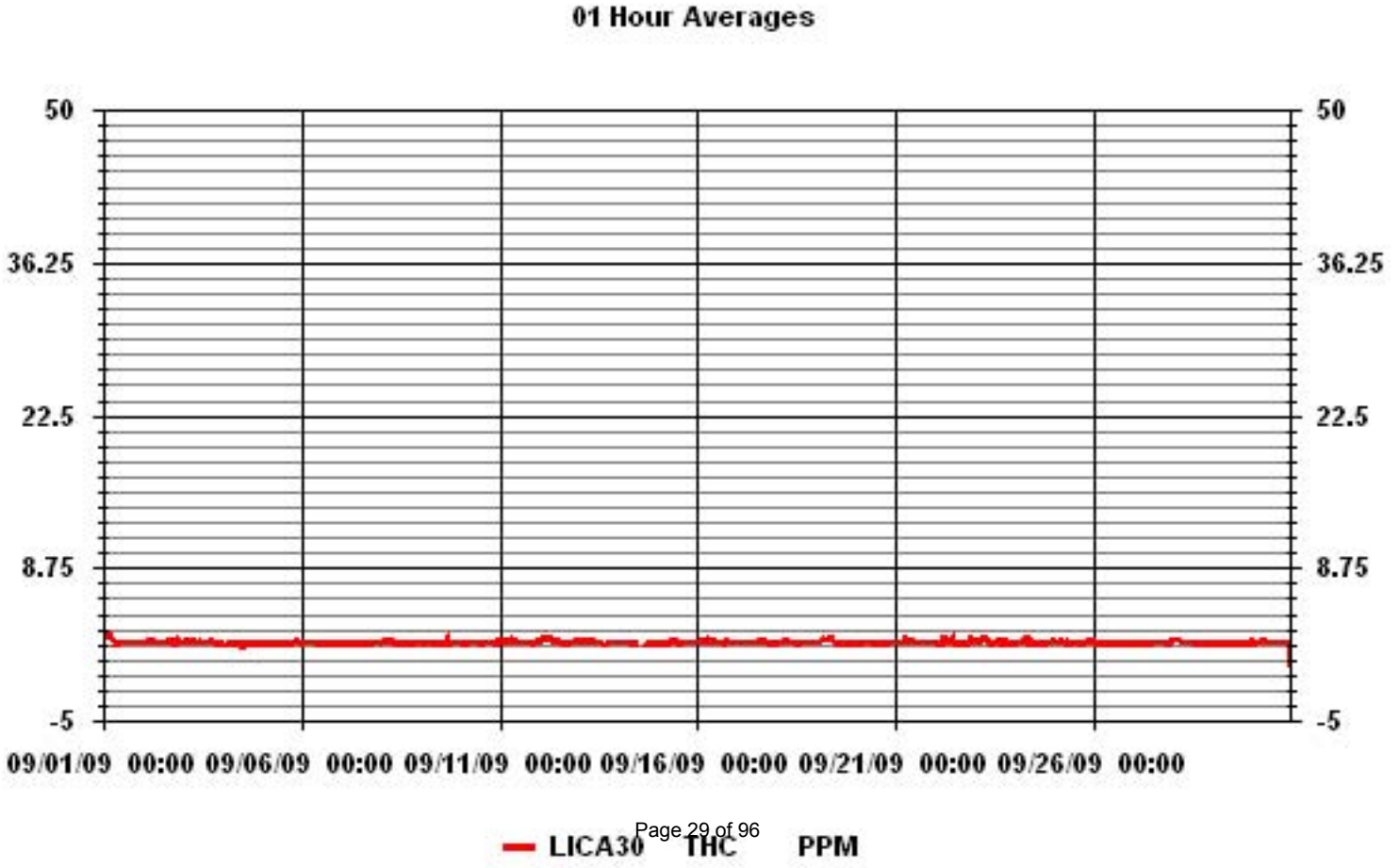
STATUS FLAG CODES

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:	684						
MAXIMUM 1-HR AVERAGE:	2.8	PPM	@ HOUR(S)	2, 3	ON DAY(S)	1	
MAXIMUM 24-HR AVERAGE:	2.2	PPM			ON DAY(S)	12	
					VAR- VARIOUS		
IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:			720	HRS
MONTHLY CALIBRATION TIME:	4	HRS	AMD OPERATION UPTIME:			100.0	%
STANDARD DEVIATION:	0.14		MONTHLY AVERAGE:			2.03	PPM


01 Hour Averages
50
36.25
22.5
8.75
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 THC PPM

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

MST

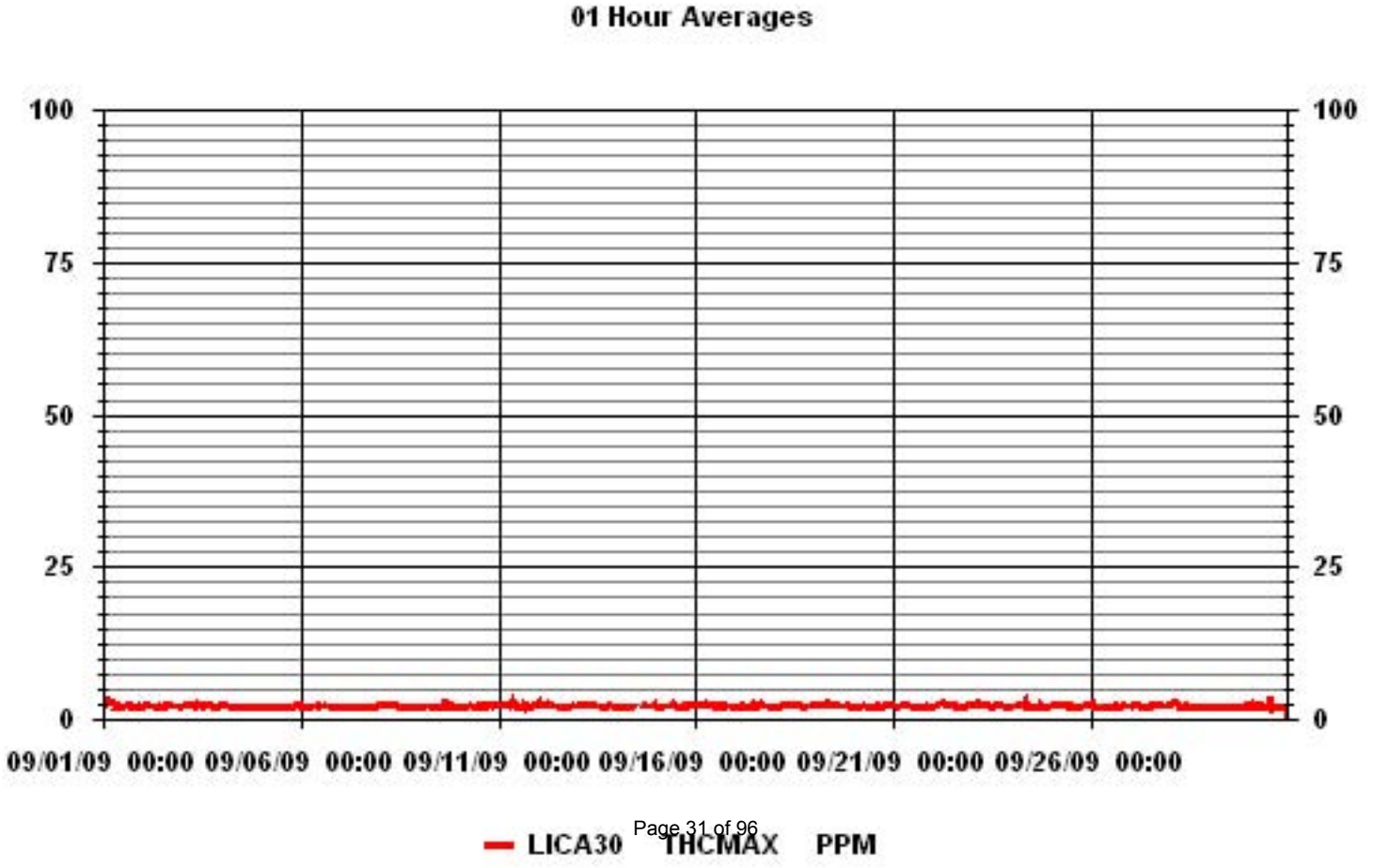
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.6	3.2	3.4	3	2.9	2.8	**IZS**	2.1	2	2.4	2	2	2.2	2.4	2.2	2.3	2	2.4	2.2	2.1	2.2	2	2.3	2	3.4	2.4	24
2	2	2.3	2.4	2.6	2.3	**IZS**	2.3	2.4	2.2	2	2.3	2.4	2.1	2	2.2	2.2	2.3	2.2	2.2	2.2	2.4	2.2	2.1	2	2.6	2.2	24
3	2.2	2.3	2.4	2.4	**IZS**	2.5	2.5	2.4	2.2	2.8	2.5	2.4	2.3	2.1	2.4	2.2	2.2	2.2	2.2	2	2.1	2	2	2.2	2.8	2.3	24
4	2.2	2.2	2.2	**IZS**	2.1	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	1.9	1.9	1.9	2.1	2.3	2	1.9	2.3	2.0	24
5	1.9	1.9	**IZS**	2	2	2	2	2	2	2.3	2.1	2.1	2.2	1.9	2.2	2.1	2.1	2	2.3	2.1	2.3	2.3	2.3	2.3	2.3	2.1	24
6	2.3	**IZS**	2.1	2	2	2.3	2.1	2	2.1	2.2	2.4	2	2.3	2.1	2.1	2.3	2.4	2.2	2.1	2	2	2	2	2.2	2.4	2.1	24
7	**IZS**	2.2	1.9	1.9	1.9	1.9	2	2.1	2.1	1.9	1.9	2.1	1.9	1.9	2.2	2	1.9	2	2.2	2	2.2	2	2.2	**IZS**	2.2	2.0	24
8	2.2	2.2	2.2	2.3	2.3	2.5	2.4	2.4	2.3	2.4	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	1.9	1.9	2.2	**IZS**	2	2.5	2.1	24
9	2	2	2	1.9	2	2.1	2.2	2.1	2	2	2.2	1.9	1.9	1.9	2.2	2	3	2.2	2.1	2	2.4	**IZS**	2	2	3	2.1	24
10	2	2	2	2	2	2	2.2	2.3	2.2	2.1	2	2	2.3	2	2	2.3	2	2.2	2.2	2.2	**IZS**	2.2	2.4	2.3	2.4	2.1	24
11	2.1	2.1	2.4	2.3	2.5	2.4	2.7	2.4	3	2.3	2.4	2.1	2.3	2.3	2.1	2.6	2	2.4	2.2	**IZS**	2.1	2.3	2.2	2.3	3	2.3	24
12	2.3	2.8	2.3	2.4	2.4	2.4	2.9	2.6	2.5	2.3	2.2	2.1	2.1	2.1	2	2	2	2	**IZS**	2	2.1	2.2	2.2	2.4	2.9	2.3	24
13	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.5	2.7	2.3	2.4	2.1	2.1	2	2.1	**IZS**	2	2.4	2.2	2.3	2.2	2	2.7	2.2	24
14	2	2	2.1	2.1	2	2.2	2	2	2.2	2	2.3	**C**	**C**	**C**	**C**	2.4	**IZS**	2.4	2.3	2.1	2.2	2.1	2.1	2.5	2.5	2.2	24
15	2	2.1	2.2	2	2.1	2.1	2.1	2.2	2.4	2.3	2.9	2.6	2.3	2.2	2	**IZS**	2	2.3	2	2.1	2.3	2.2	2.1	2.3	2.9	2.2	24
16	2.4	2.3	2.5	2.2	2.3	2.7	2.3	2.4	2.3	2.2	2.2	2.5	2.2	2.1	**IZS**	2.2	2.2	2.1	2.4	2.2	2.1	2.3	2.2	2	2.7	2.3	24
17	2	2	2	2	2.3	2	2.2	2.3	2.1	2	2	2.5	2	**IZS**	2.2	2.2	2.7	2.3	2.2	2.1	2.2	2.1	2	2	2.7	2.1	24
18	2	2	2	2	2.4	2.3	2.2	2.2	2.3	2.2	2.2	2.5	**IZS**	2.3	2.3	2.5	2.1	2.2	2	2.1	2.2	2.1	2.3	2.2	2.5	2.2	24
19	2.4	2.5	2.2	2.3	2.5	2.4	2.4	2.4	2.7	2.3	2.3	**IZS**	2.5	2.1	2.1	2.2	2.2	2.1	2.1	2.4	2.3	2.3	2.1	2	2.7	2.3	24
20	2	2.3	2.1	2	2	2.1	2.2	2.2	2.1	2	**IZS**	2	2	2	2	2.3	2.4	2.1	2.3	2.3	2.2	2.1	2.3	2.3	2.4	2.1	24
21	2.2	2.2	2.1	2	2.1	2.2	2.6	2.5	2.4	**IZS**	2.3	2.1	2	2	2	2	2	2.1	2.1	2	2.2	2.2	2.1	2	2.6	2.1	24
22	2	2.3	2.1	2.2	2.4	2.8	2.7	2.4	**IZS**	2.5	2.6	2.3	2.2	2.4	2	2	1.9	1.9	2.2	2	2.2	2.4	2.5	2.6	2.8	2.3	24
23	2.4	2.4	2.6	2.4	2.8	2.5	2.4	**IZS**	2.8	2.2	2.1	2	2	2.1	2.4	2.2	2.1	2.2	2.3	2.1	2.1	2	2	2.2	2.8	2.3	24
24	2	2.1	2.1	2.1	2.4	2.5	**IZS**	2.5	3	2.1	2	2	2	2	2.2	2	2	2.6	2	2	2.1	2	2.2	2.1	3	2.2	24
25	2.3	2.2	2.2	2.3	2.3	**IZS**	2.4	2.2	2.3	2.3	2	2.4	2.2	2.2	2	2	2	2	2.3	2.1	2.2	2.2	2.2	2.7	2.7	2.2	24
26	2.5	2.7	2	2	**IZS**	1.9	2	2	2.2	2	1.9	2	1.9	2	2	2.4	2	2.2	2	2.1	2.5	2.1	2.1	2.1	2.7	2.1	24
27	2.3	2	2.4	**IZS**	2.4	2.2	2.2	2	2	2	2	2.1	2	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.4	2.2	24
28	2.7	2.6	**IZS**	2.7	2.7	2.1	2	2	2	2	2.3	2	2	2.2	2	2.2	2	2	2	2	2	2.1	2	2	2.7	2.2	24
29	2	**IZS**	2	2.1	2	2.1	2.3	1.9	2	2.2	2	2	2.1	2	2.1	2	2.1	2.3	2.1	2	2	2.1	2.4	2.7	2.7	2.1	24
30	**IZS**	2.1	2.6	2.1	2.4	2.4	2.2	2.1	2.4	2.1	2.3	2	2.1	**3.8**	2	2.2	2.1	2.1	2.1	2	2.2	2.3	2.1	**IZS**	**3.8**	2.3	24
HOURLY MAX	3	3	3	3	3	3	3	3	3	3	3	3	3	4	2	3	3	3	2	2	3	2	3	3			
HOURLY AVG	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.1	2.2	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:		684					
MAXIMUM INSTANTANEOUS VALUE:		3.8	PPM	@ HOUR(S)	13	ON DAY(S)	30
IZS CALIBRATION TIME:	32	HRS		OPERATIONAL TIME:		720	HRS
MONTHLY CALIBRATION TIME:	4	HRS					
STANDARD DEVIATION:	0.22						


01 Hour Averages
100
75
50
25
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 THCMAX PPM

LICA30
THC / WDR Joint Frequency Distribution (Percent)

September 2009

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	.87	1.16	5.40	7.01	4.97	5.99	6.72	5.99	6.43	11.11	11.40	7.16	5.70	9.64	7.60	2.77	100.00
< 10.0	.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
>= 50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	.87	1.16	5.40	7.01	4.97	5.99	6.72	5.99	6.43	11.11	11.40	7.16	5.70	9.64	7.60	2.77	

Calm : .00 %

Total # Operational Hours : 684

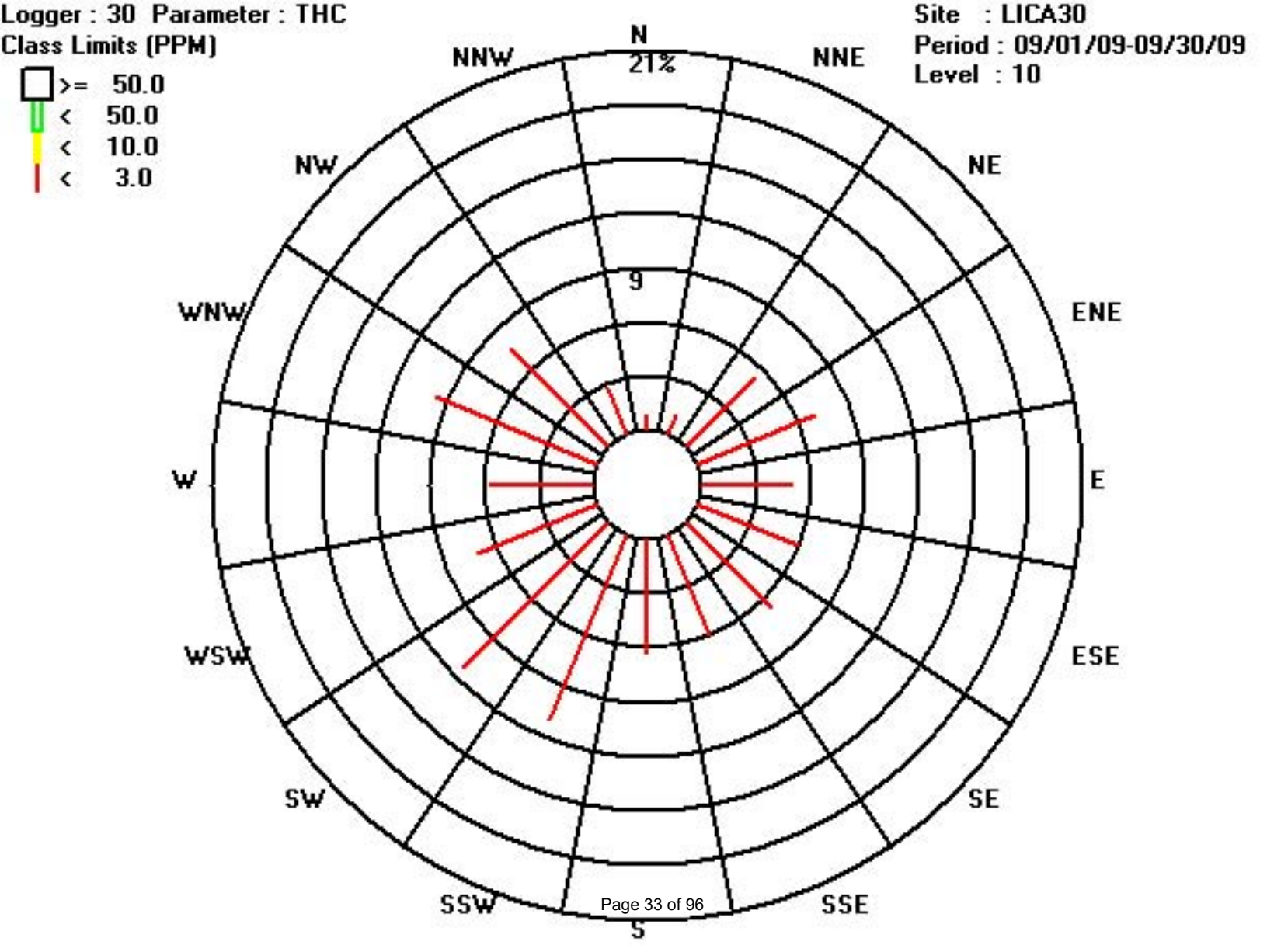
Distribution By Samples

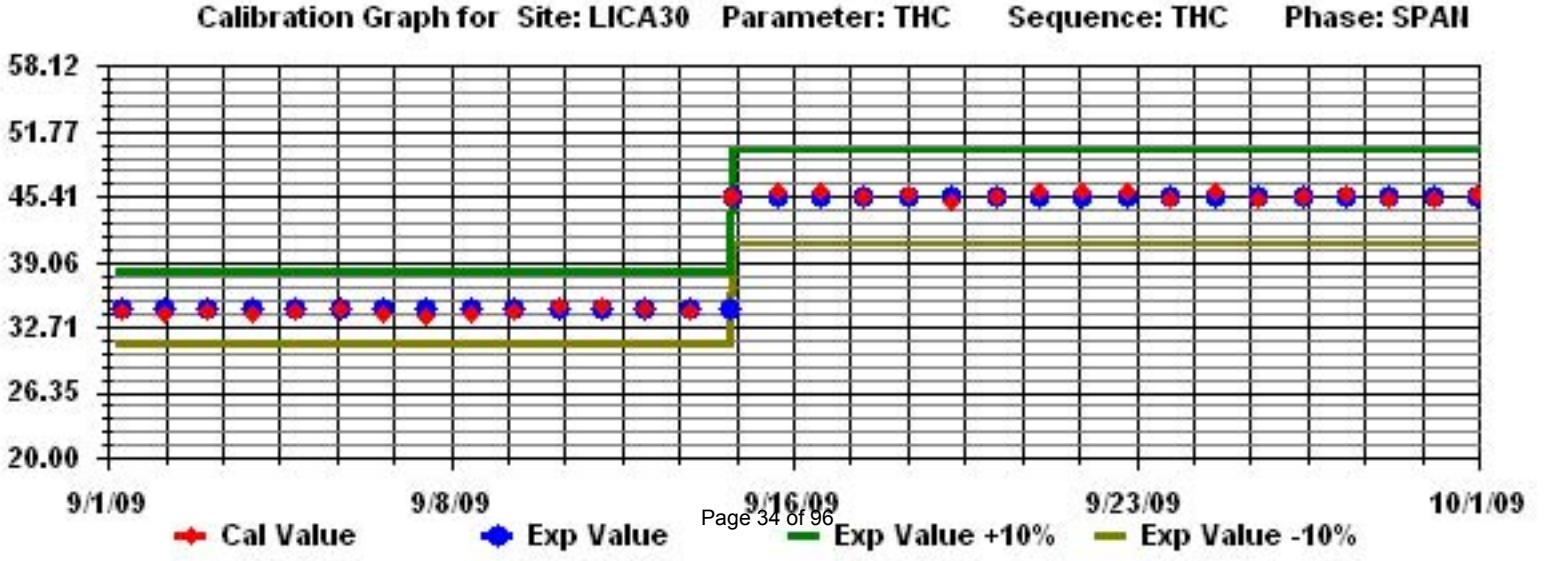
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3.0	6	8	37	48	34	41	46	41	44	76	78	49	39	66	52	19	684
< 10.0																	
< 50.0																	
>= 50.0																	
Totals	6	8	37	48	34	41	46	41	44	76	78	49	39	66	52	19	

Calm : .00 %

Total # Operational Hours : 684


Logger : 30 Parameter : THC
Class Limits (PPM)
>= 50.0
< 50.0
< 10.0
< 3.0
Site : LICA30
Period : 09/01/09-09/30/09
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
58.12
51.77
45.41
39.06
32.71
26.35
20.00
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitrogen Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

NITROGEN DIOXIDE hourly averages in ppb

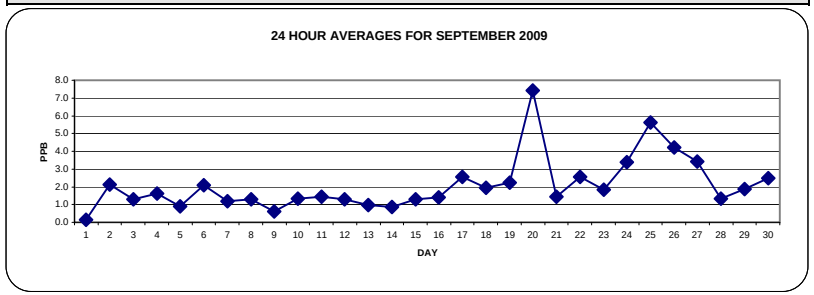
MST

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	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0.1	24
2	1	1	1	1	1	**IZS**	0	0	0	1	0	1	2	0	3	3	4	4	8	0	12	6	0	0	12	2.1	24
3	0	0	0	0	**IZS**	1	1	1	1	2	4	3	3	3	2	2	4	1	2	0	0	0	0	0	4	1.3	24
4	0	4	3	**IZS**	1	2	3	3	3	2	2	1	1	0	1	1	1	1	1	0	0	7	0	0	7	1.6	24
5	0	0	**IZS**	1	3	0	0	4	2	2	2	2	2	0	0	0	0	0	0	1	1	1	0	0	4	0.9	24
6	0	**IZS**	0	0	0	0	0	0	3	6	4	2	2	1	1	2	4	7	4	3	5	2	2	0	7	2.1	24
7	**IZS**	1	1	1	1	1	2	1	0	0	0	0	0	0	1	1	0	0	2	4	3	4	3	**IZS**	4	1.2	24
8	2	2	2	1	1	4	5	3	4	1	1	0	0	1	0	0	1	0	0	0	0	1	**IZS**	1	5	1.3	24
9	2	1	0	0	1	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	1	3	0.6	24
10	1	1	0	0	0	0	4	6	5	2	3	3	2	2	0	0	0	0	1	1	**IZS**	0	0	0	6	1.3	24
11	0	0	0	0	0	2	6	5	2	2	1	1	1	1	1	1	1	1	1	**IZS**	2	1	2	2	6	1.4	24
12	2	2	2	1	2	2	4	3	2	1	1	0	0	0	0	0	0	0	**IZS**	0	1	2	3	2	4	1.3	24
13	2	2	2	2	2	2	1	2	1	1	2	1	0	0	0	0	0	**IZS**	0	0	0	0	1	1	2	1.0	24
14	0	1	1	1	1	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	4	0	0	0	2	3	0	4	0.9	24
15	0	0	0	0	0	1	5	8	4	3	4	1	1	1	0	**IZS**	0	1	0	0	0	0	0	1	8	1.3	24
16	5	4	4	2	1	1	1	1	2	3	2	2	1	1	**IZS**	2	0	0	0	0	0	0	0	0	5	1.4	24
17	0	0	0	0	0	0	0	1	3	0	1	1	1	**IZS**	2	4	6	4	2	2	1	9	13	9	13	2.6	24
18	1	0	0	1	3	6	4	4	2	1	0	1	**IZS**	1	1	1	1	1	1	5	3	3	2	3	6	2.0	24
19	2	1	2	2	3	2	3	2	1	2	1	**IZS**	1	1	1	2	2	5	2	1	5	1	1	8	8	2.2	24
20	15	14	10	9	7	9	16	9	7	6	**IZS**	0	2	1	3	5	5	7	11	14	11	4	3	3	16	**7.4**	24
21	1	0	3	0	0	3	7	4	2	**IZS**	1	1	2	1	1	1	1	1	1	2	1	0	0	0	7	1.4	24
22	0	2	2	0	3	7	8	5	**IZS**	3	5	2	2	1	1	1	0	0	0	0	1	3	7	6	8	2.6	24
23	4	3	3	3	2	1	3	**IZS**	2	2	2	2	2	1	1	1	0	2	2	2	2	1	1	0	4	1.8	24
24	0	0	0	0	0	1	**IZS**	7	13	2	3	3	6	3	0	0	0	0	0	0	9	16	8	7	16	3.4	24
25	13	**19**	18	15	9	**IZS**	8	7	5	6	1	1	1	0	1	1	0	1	1	1	1	2	11	7	**19**	5.6	24
26	4	15	11	6	**IZS**	1	3	2	4	0	0	0	0	0	2	0	3	9	5	8	8	6	4	6	15	4.2	24
27	5	0	3	**IZS**	8	5	9	10	4	2	1	6	2	3	3	5	1	0	3	3	4	0	1	1	10	3.4	24
28	1	0	**IZS**	0	0	1	0	1	1	1	0	0	1	1	1	0	1	2	2	4	3	3	4	4	4	1.3	24
29	4	**IZS**	6	6	3	1	1	1	1	3	0	0	0	0	1	1	1	2	0	0	0	0	1	11	11	1.9	24
30	**IZS**	4	2	3	3	7	8	5	4	3	2	1	1	0	2	2	5	0	1	2	0	0	0	IZS	8	2.5	24
HOURLY MAX	15	19	18	15	9	9	16	10	13	6	5	6	6	3	3	5	6	9	11	14	12	16	13	11			
HOURLY AVG	2.3	2.8	2.7	2.0	2.0	2.3	3.8	3.3	2.8	2.0	1.5	1.3	1.3	0.8	1.1	1.3	1.4	1.8	1.7	1.8	2.5	2.6	2.4	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

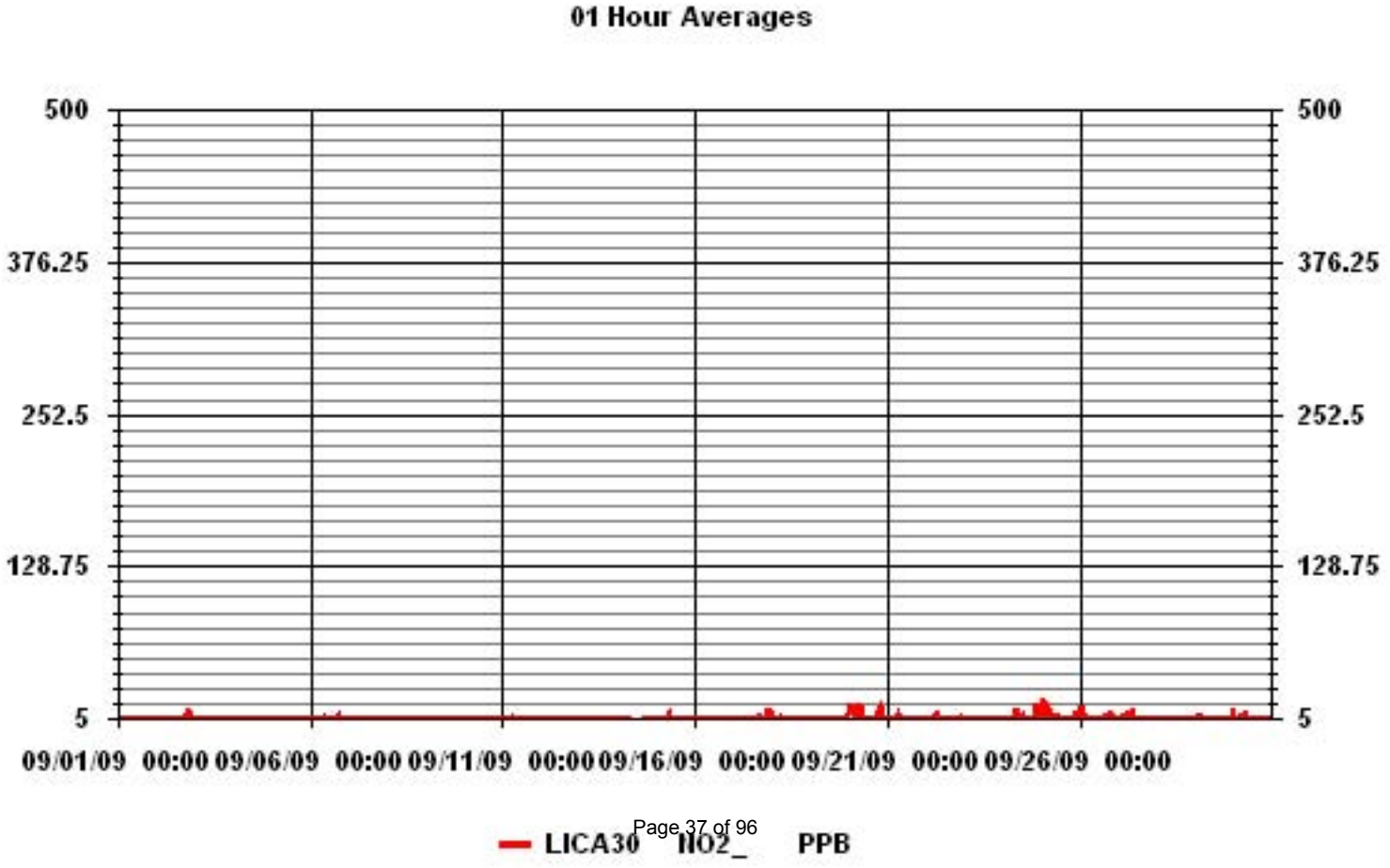
OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 212 PPB | 24-HR 106 PPB



MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	457					
MAXIMUM 1-HR AVERAGE:	19	PPB	@ HOUR(S)	1	ON DAY(S)	25
MAXIMUM 24-HR AVERAGE:	7.4	PPB			ON DAY(S)	20

IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:	720	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME:	100.0	%
STANDARD DEVIATION:	2.86		MONTHLY AVERAGE:	2.09	PPB


01 Hour Averages
500
376.25
252.5
128.75
5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 NO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

NITROGEN DIOXIDE MAX instantaneous maximum in ppb

MST

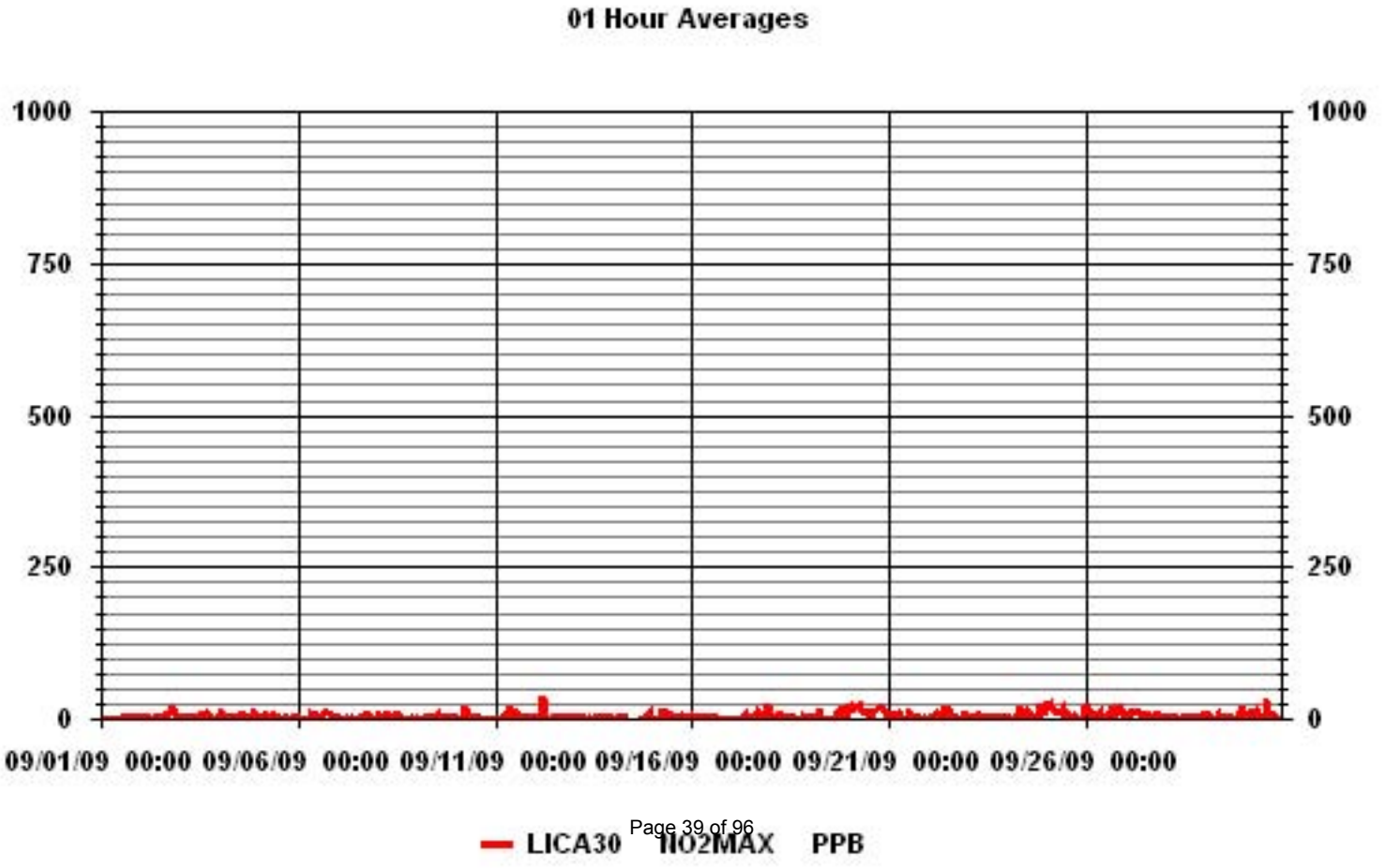
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	1	1	0	0	0	1	**IZS**	0	0	1	0	0	1	0	4	4	3	1	1	1	1	1	1	1	4	1.0	24
2	1	1	1	1	1	**IZS**	2	2	4	4	3	3	5	3	6	10	11	9	14	6	17	14	2	1	17	5.3	24
3	1	1	1	0	**IZS**	3	3	3	2	3	6	4	6	9	5	4	9	5	6	1	1	0	1	1	9	3.3	24
4	1	12	11	**IZS**	2	5	5	4	3	3	3	2	1	1	13	4	2	1	1	1	1	15	3	1	15	4.1	24
5	0	1	**IZS**	7	8	3	4	6	8	8	3	5	5	1	1	2	2	1	1	1	2	2	1	1	8	3.2	24
6	1	**IZS**	0	0	0	0	0	0	10	8	6	6	6	4	4	4	8	13	12	9	9	5	4	0	13	4.7	24
7	**IZS**	2	2	1	2	1	5	2	1	1	0	0	1	2	4	2	2	1	7	8	7	5	3	**IZS**	8	2.7	24
8	2	7	7	2	2	8	7	6	6	2	1	1	1	12	1	1	2	1	2	1	1	3	**IZS**	2	12	3.4	24
9	3	2	0	0	2	5	5	3	2	0	1	1	5	9	0	1	1	1	1	1	0	**IZS**	2	2	9	2.0	24
10	2	1	1	0	0	2	20	14	7	4	7	5	6	4	1	1	2	1	3	2	**IZS**	0	0	0	20	3.6	24
11	0	0	0	0	0	5	2	8	3	18	3	1	3	17	3	3	1	1	1	**IZS**	2	2	2	3	18	3.4	24
12	2	2	2	2	2	**32**	**32**	6	4	1	2	1	1	1	1	1	1	1	**IZS**	1	3	4	5	3	**32**	4.8	24
13	3	2	3	3	3	2	2	3	1	2	2	2	1	1	1	1	1	**IZS**	1	1	1	1	1	1	3	1.7	24
14	1	1	2	2	2	1	1	1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2	3	1	7	11	1	11	2.6	24
15	0	0	0	0	1	3	12	13	7	9	10	3	2	2	2	**IZS**	1	5	1	1	1	1	1	3	13	3.4	24
16	8	7	6	2	2	3	3	2	3	5	4	4	4	2	**IZS**	4	2	1	0	0	0	0	0	0	8	2.7	24
17	0	0	0	0	0	0	1	4	8	1	2	2	2	**IZS**	5	10	15	11	7	7	6	20	18	18	20	6.0	24
18	5	0	1	2	5	8	6	7	3	2	1	1	**IZS**	7	1	2	1	2	3	7	5	5	4	4	8	3.6	24
19	3	3	3	3	3	3	16	4	2	3	2	**IZS**	2	1	2	7	5	12	7	2	19	2	4	19	19	5.5	24
20	19	22	16	18	18	18	22	15	13	12	**IZS**	1	9	5	7	12	12	15	17	21	21	13	12	7	22	14.1	24
21	3	3	12	1	1	5	10	6	3	**IZS**	2	1	16	2	2	1	2	2	2	2	2	1	1	0	16	3.5	24
22	1	4	4	1	7	10	10	8	**IZS**	5	18	9	18	1	4	2	1	1	1	1	2	7	8	8	18	5.7	24
23	5	4	5	4	3	3	10	**IZS**	3	3	3	4	4	2	2	3	1	4	3	3	5	6	2	1	10	3.6	24
24	1	1	1	0	2	7	**IZS**	9	18	9	8	9	14	9	2	11	0	1	1	1	20	20	16	14	20	7.6	24
25	22	22	26	20	17	**IZS**	12	10	11	16	2	4	15	1	3	1	1	5	1	2	2	4	14	11	26	9.7	24
26	13	25	16	13	**IZS**	7	5	3	9	12	1	1	0	1	9	2	9	17	12	19	21	15	10	12	25	10.1	24
27	9	1	7	**IZS**	13	11	12	14	12	6	8	9	8	6	7	9	7	0	7	7	7	1	1	2	14	7.1	24
28	2	1	**IZS**	1	1	1	1	1	1	2	1	3	4	3	3	1	3	4	4	5	5	5	6	6	6	2.8	24
29	5	**IZS**	9	9	6	2	2	1	3	8	1	1	1	1	1	1	1	5	2	1	1	1	10	18	18	3.9	24
30	**IZS**	10	7	10	8	12	12	8	14	5	5	5	4	2	31	10	10	3	8	7	2	0	1	**IZS**	31	7.9	24
HOURLY MAX	22	25	26	20	18	32	32	15	18	18	18	9	18	17	31	12	15	17	17	21	21	20	18	19			
HOURLY AVG	4.1	4.9	5.1	3.6	4.0	5.8	7.9	5.6	5.8	5.5	3.8	3.1	5.2	3.9	4.5	4.1	4.0	4.4	4.4	4.2	5.7	5.5	5.0	5.0			

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:	621						
MAXIMUM INSTANTANEOUS VALUE:	32	PPB	@ HOUR(S)	5, 6	ON DAY(S)	12	
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:			720	HRS
MONTHLY CALIBRATION TIME:	10	HRS					
STANDARD DEVIATION:	5.33						


01 Hour Averages
1000
750
500
250
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 HO2MAX PPB

LICA30
NO2_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	.88	1.17	5.14	6.91	5.00	6.02	6.61	6.02	6.47	11.17	11.47	7.20	5.73	9.70	7.64	2.79	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	.88	1.17	5.14	6.91	5.00	6.02	6.61	6.02	6.47	11.17	11.47	7.20	5.73	9.70	7.64	2.79	

Calm : .00 %

Total # Operational Hours : 680

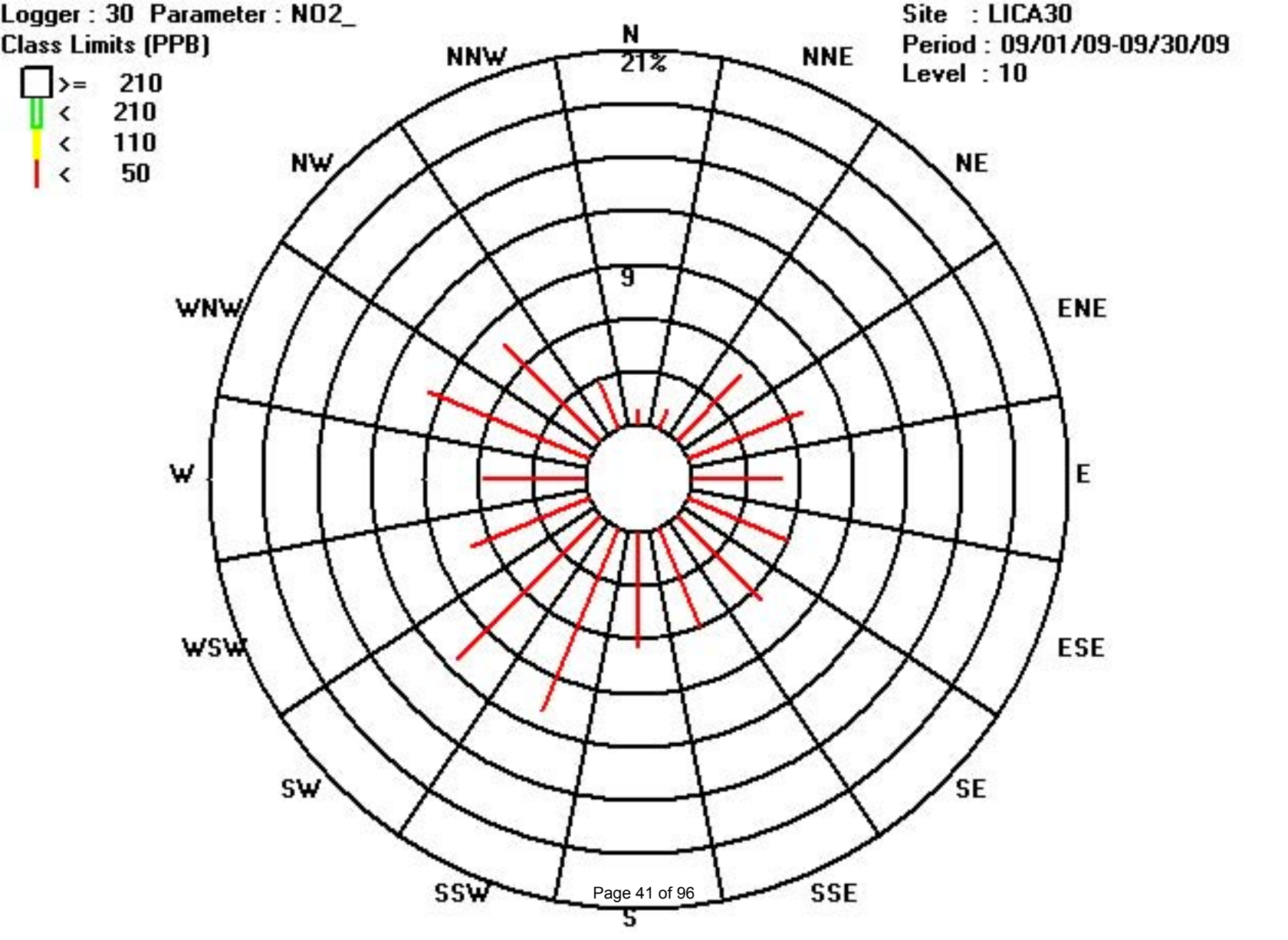
Distribution By Samples

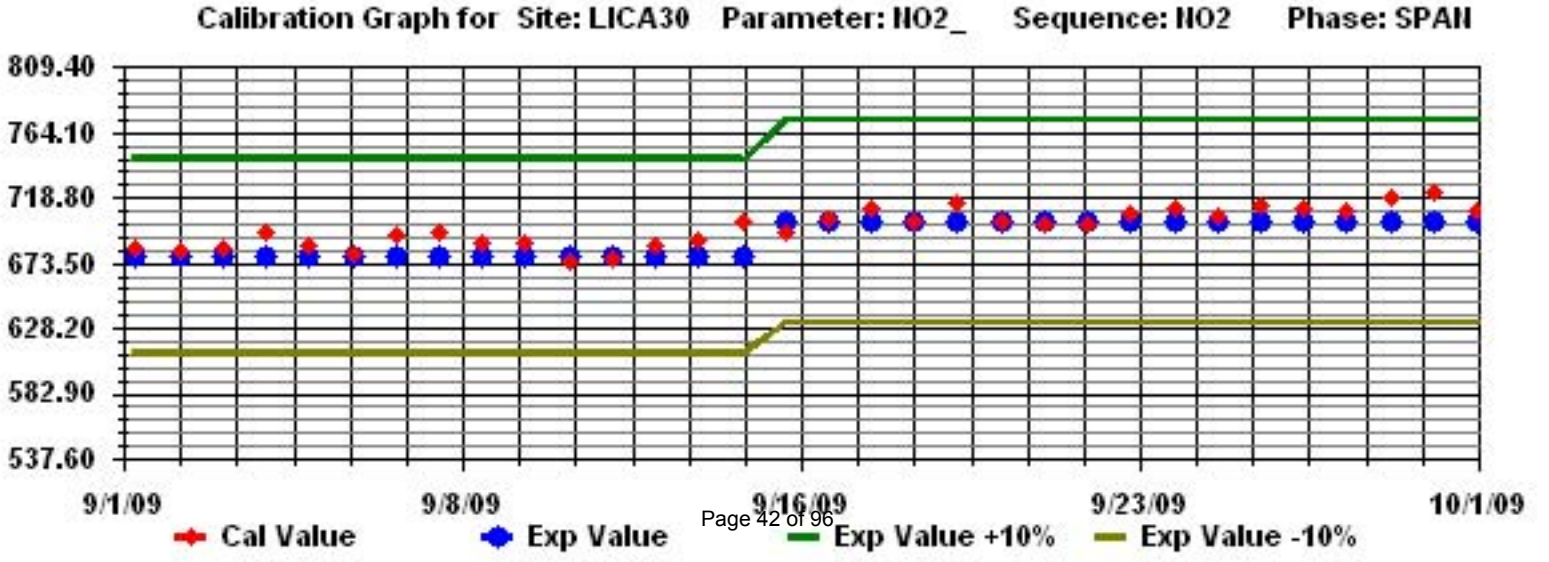
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	6	8	35	47	34	41	45	41	44	76	78	49	39	66	52	19	680
< 110																	
< 210																	
>= 210																	
Totals	6	8	35	47	34	41	45	41	44	76	78	49	39	66	52	19	

Calm : .00 %

Total # Operational Hours : 680


Logger : 30 Parameter : NO2_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA30
Period : 09/01/09-09/30/09
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
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitric Oxide

LAKELAND INDUSTRY & COMMUNITY ASSCOICATION - MASKWA

SEPTEMBER 2009

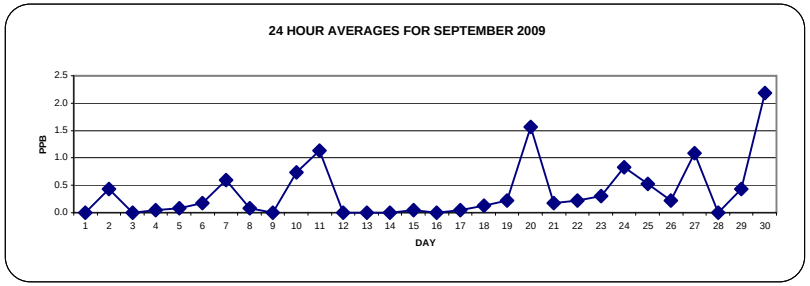
NITRIC OXIDE hourly averages in ppb

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	**IZS**	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	1	0	**IZS**	1	1	0	0	0	0	0	0	1	1	1	1	1	0	2	0	0	0	2	0.4	24
3	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
4	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.0	24
5	0	0	**IZS**	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
6	0	**IZS**	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0.2	24
7	**IZS**	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	**IZS**	2	0.6	24
8	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	1	0.1	24
9	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
10	0	0	0	0	0	0	6	8	2	0	0	0	1	0	0	0	0	0	0	0	**IZS**	0	0	0	8	0.7	24
11	0	0	0	0	0	3	8	9	3	2	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	9	1.1	24
12	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
13	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
14	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	0.0	24
15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	1	0.0	24
16	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
17	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	1	0	0	0	0	0	0	0	1	0.0	24
18	0	0	0	0	0	0	0	2	1	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	2	0.1	24
19	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	0	0	1	0	1	2	2	0.2	24
20	3	3	1	1	1	0	6	3	3	3	**IZS**	0	0	0	1	2	1	2	1	3	2	0	0	0	6	1.6	24
21	0	0	0	0	0	0	2	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	24
22	0	0	0	0	0	0	0	1	**IZS**	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.2	24
23	0	0	0	0	0	0	6	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0.3	24
24	0	0	0	0	0	3	**IZS**	5	10	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10	0.8	24
25	0	0	2	0	0	**IZS**	1	2	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0.5	24
26	0	1	0	0	**IZS**	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0.2	24
27	0	0	0	**IZS**	3	1	4	5	1	0	0	4	1	2	1	3	0	0	0	0	0	0	0	0	5	1.1	24
28	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
29	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	0.4	24
30	**IZS**	1	0	0	0	3	**12**	7	4	3	2	2	2	0	2	3	6	0	0	1	0	0	0	**IZS**	**12**	**2.2**	24
HOURLY MAX	3	3	2	1	3	3	12	9	10	5	3	4	2	2	2	3	6	2	1	3	2	1	2	9			
HOURLY AVG	0.1	0.2	0.2	0.1	0.2	0.4	1.7	1.6	1.1	0.5	0.3	0.3	0.2	0.1	0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.4			

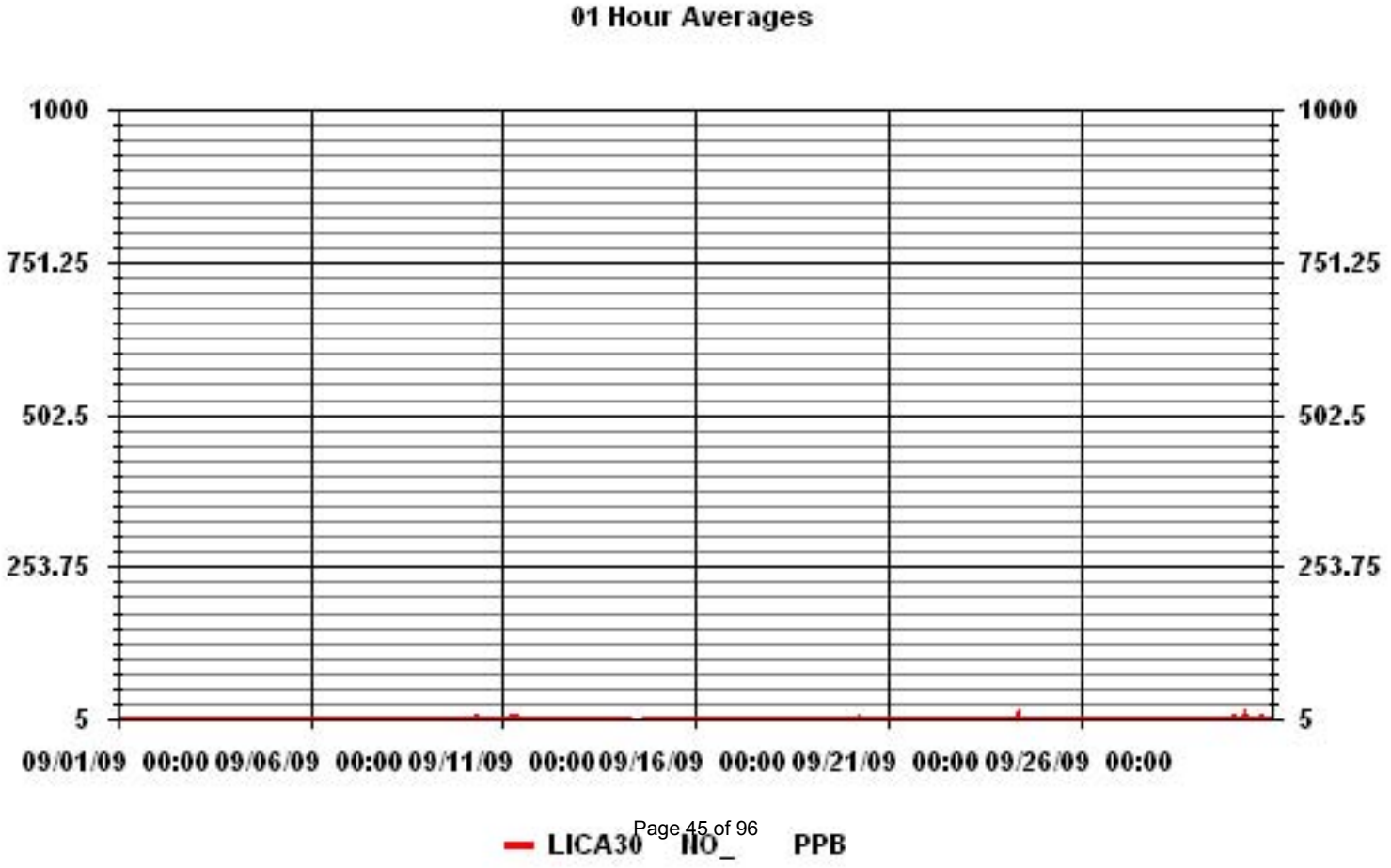
STATUS FLAG CODES

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:	111						
MAXIMUM 1-HR AVERAGE:	12	PPB	@ HOUR(S)	6	ON DAY(S)	30	
MAXIMUM 24-HR AVERAGE:	2.2	PPB			ON DAY(S)	30	
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		720	HRS	
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME:		100.0	%	
STANDARD DEVIATION:	1.23		MONTHLY AVERAGE:		0.38	PPB	


01 Hour Averages
1000
751.25
502.5
253.75
5
09/01/09 00:00 09/06/09 00:00 09/11/09 00:00 09/16/09 00:00 09/21/09 00:00 09/26/09 00:00
LICA30 NO_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

NITRIC OXIDE MAX instantaneous maximum in ppb

MST

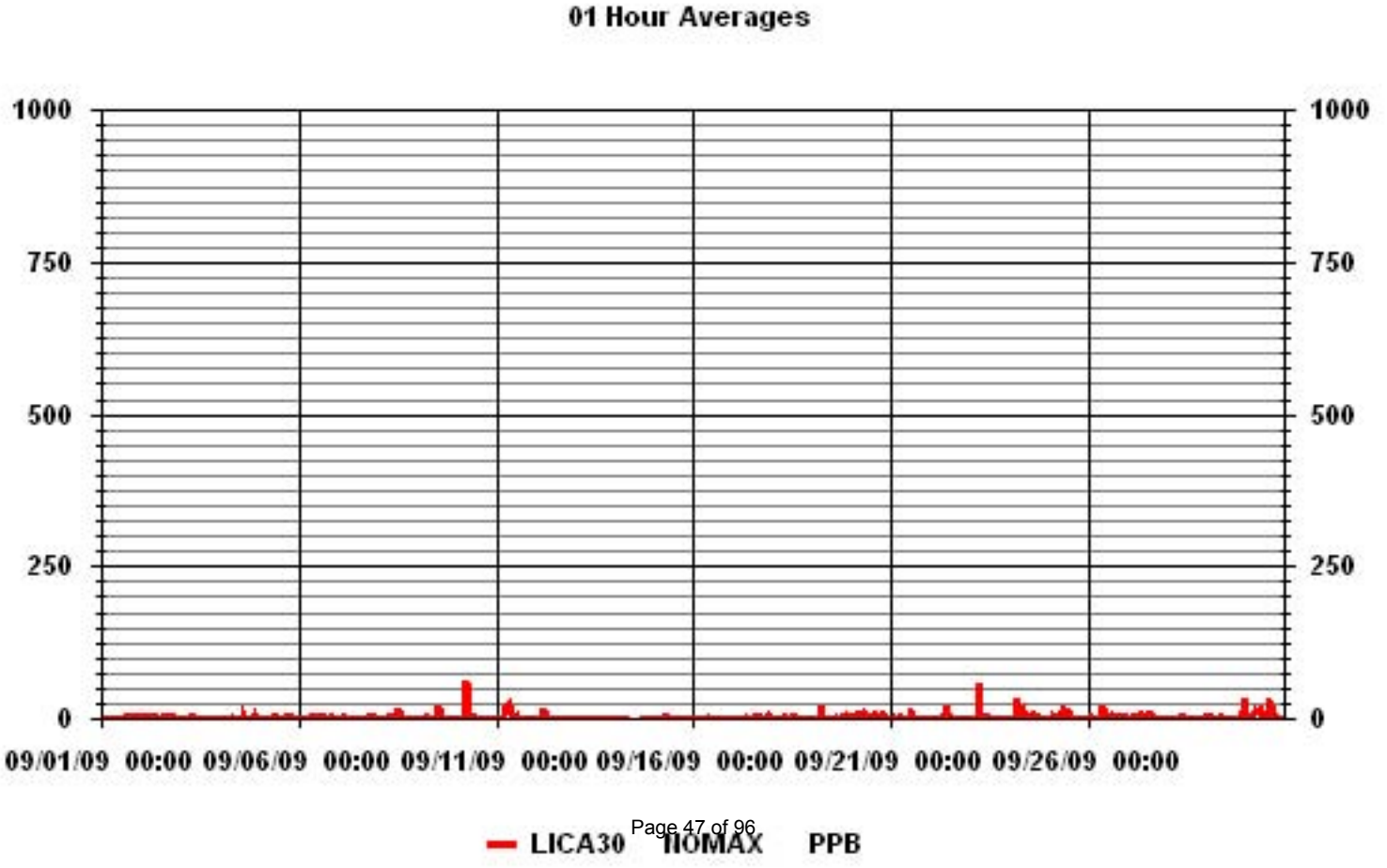
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0.4	24
2	1	1	1	1	1	**IZS**	3	2	2	2	1	1	2	1	2	3	3	2	2	0	4	2	1	0	4	1.7	24
3	0	0	0	0	**IZS**	1	3	3	0	1	1	0	1	2	0	0	1	0	0	0	0	0	0	0	3	0.6	24
4	0	0	0	**IZS**	0	0	0	0	1	1	0	0	0	0	8	1	0	0	0	0	0	6	0	0	8	0.7	24
5	0	0	**IZS**	0	1	0	0	1	5	5	1	3	3	0	0	0	1	1	1	1	1	1	0	0	5	1.1	24
6	0	**IZS**	0	0	0	0	0	0	4	3	2	4	4	2	2	2	2	2	1	1	1	1	0	0	4	1.3	24
7	**IZS**	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	**IZS**	1	0.4	24
8	1	0	0	0	0	3	1	1	4	0	0	0	0	17	0	0	0	0	0	0	0	0	**IZS**	0	17	1.2	24
9	0	0	0	0	0	1	1	1	1	0	0	1	10	20	0	0	1	0	0	0	0	**IZS**	0	0	20	1.6	24
10	0	0	0	0	0	0	**62**	44	4	1	1	1	4	2	0	0	0	0	0	0	**IZS**	0	0	0	**62**	5.2	24
11	0	0	0	0	1	13	18	22	5	21	7	1	1	6	0	0	0	0	0	**IZS**	0	0	0	0	22	4.1	24
12	0	0	0	0	0	13	13	4	1	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	13	1.3	24
13	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
14	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0.0	24
15	0	0	0	0	0	0	3	3	2	2	2	1	0	0	0	**IZS**	0	0	0	0	0	0	0	0	3	0.6	24
16	0	0	0	0	0	0	1	2	1	1	1	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	2	0.3	24
17	0	0	0	0	0	0	0	0	3	0	0	0	0	**IZS**	1	1	6	5	2	1	0	5	1	0	6	1.1	24
18	2	0	0	0	0	0	0	5	2	3	0	0	**IZS**	6	0	0	0	0	0	0	0	0	0	0	6	0.8	24
19	0	0	0	0	0	0	22	0	0	0	0	**IZS**	1	0	0	1	1	2	1	1	5	1	1	5	22	1.8	24
20	5	5	3	3	8	8	10	7	11	8	**IZS**	0	5	2	6	6	6	5	4	8	8	1	2	0	11	5.3	24
21	0	0	3	0	0	0	5	3	2	**IZS**	2	0	17	0	0	0	0	0	0	0	0	0	0	0	17	1.4	24
22	0	0	0	0	3	1	2	4	**IZS**	2	18	8	5	0	2	1	0	0	0	0	0	0	0	0	18	2.0	24
23	0	0	0	0	0	2	52	**IZS**	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	52	2.6	24
24	0	0	0	0	0	29	**IZS**	11	15	3	2	2	5	3	1	13	0	0	1	1	0	0	0	0	29	3.7	24
25	0	1	7	4	0	**IZS**	3	5	12	19	0	2	15	0	2	0	0	0	0	0	0	0	0	0	19	3.0	24
26	1	4	0	0	**IZS**	2	0	1	4	21	0	0	0	0	5	0	3	3	2	5	7	4	2	5	21	3.0	24
27	2	0	0	**IZS**	6	5	6	8	7	3	6	8	7	6	3	8	5	0	1	0	0	0	0	0	8	3.5	24
28	0	0	**IZS**	0	0	0	0	0	1	1	0	4	2	0	0	0	0	1	0	0	0	0	1	1	4	0.5	24
29	1	**IZS**	3	2	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10	30	30	2.2	24
30	**IZS**	5	0	1	1	10	16	13	16	9	8	9	8	3	31	14	19	2	8	6	0	0	0	**IZS**	31	8.1	24
HOURLY MAX	5	5	7	4	8	29	62	44	16	21	18	9	17	20	31	14	19	5	8	8	8	6	10	30			
HOURLY AVG	0.5	0.6	0.6	0.4	0.8	3.2	7.9	4.8	3.8	3.9	1.9	1.6	3.3	2.5	2.3	1.9	1.7	0.9	0.9	0.9	1.0	0.8	0.7	1.5			

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:	281					
MAXIMUM INSTANTANEOUS VALUE:	62	PPB	@ HOUR(S)	6	ON DAY(S)	10
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		720	HRS
MONTHLY CALIBRATION TIME:	10	HRS				
STANDARD DEVIATION:	5.22					


01 Hour Averages
1000
750
500
250
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 HOMAX PPB

LICA30
NO_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	.88	1.17	5.14	6.91	5.00	6.02	6.61	6.02	6.47	11.17	11.47	7.20	5.73	9.70	7.64	2.79	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	.88	1.17	5.14	6.91	5.00	6.02	6.61	6.02	6.47	11.17	11.47	7.20	5.73	9.70	7.64	2.79	

Calm : .00 %

Total # Operational Hours : 680

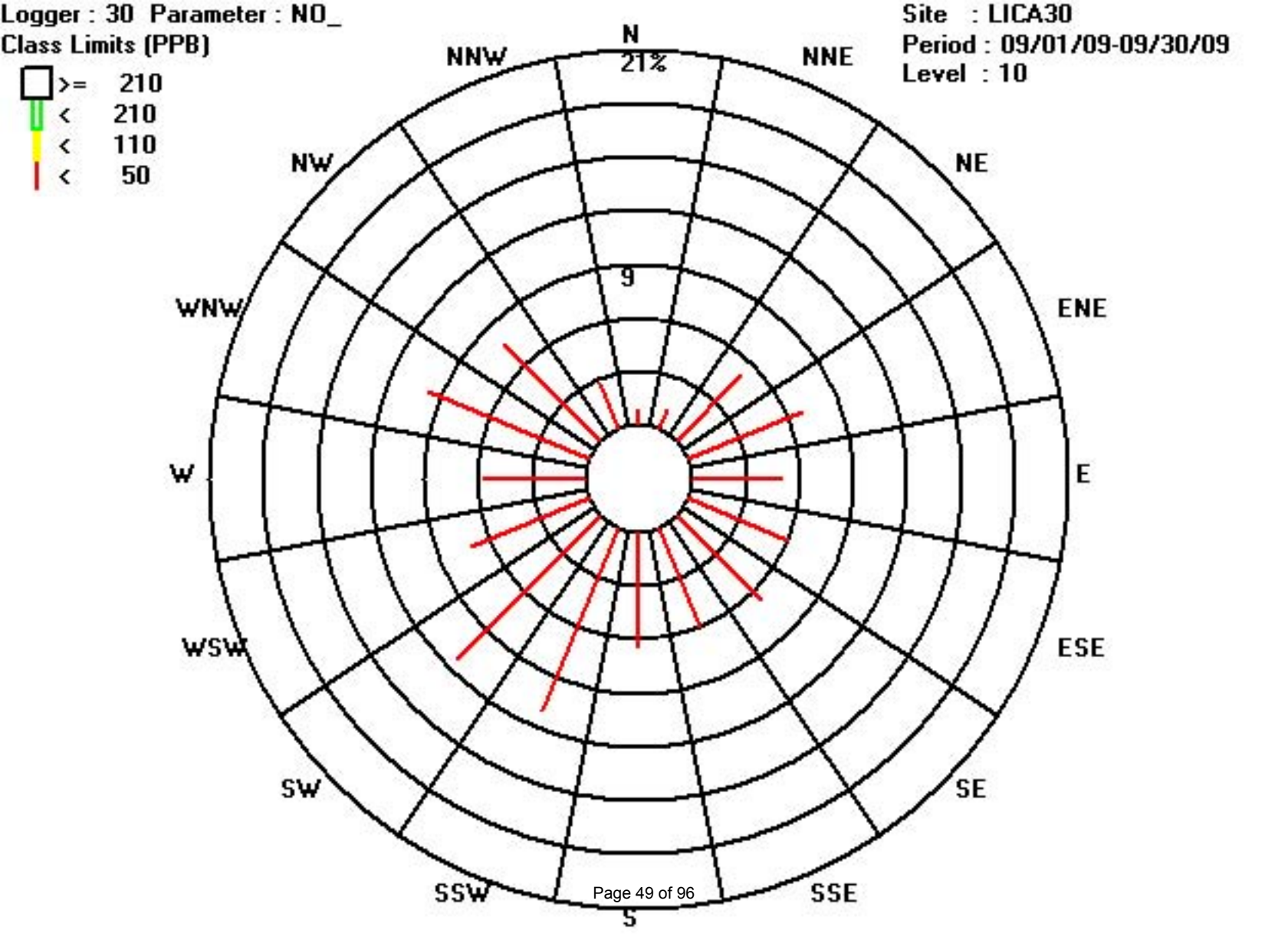
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	6	8	35	47	34	41	45	41	44	76	78	49	39	66	52	19	680
< 110																	
< 210																	
>= 210																	
Totals	6	8	35	47	34	41	45	41	44	76	78	49	39	66	52	19	

Calm : .00 %

Total # Operational Hours : 680


Logger : 30 Parameter : NO_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA30
Period : 09/01/09-09/30/09
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

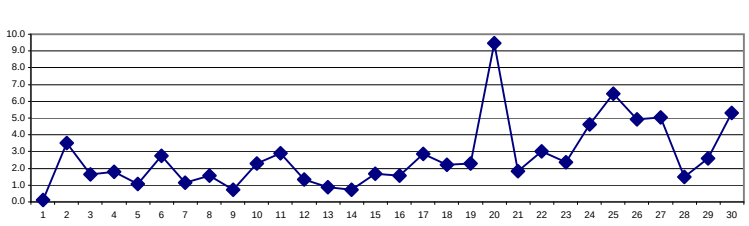
SEPTEMBER 2009

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	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0.1	24
2	1	1	0	1	0	**IZS**	1	2	2	4	2	3	4	2	5	5	7	6	10	1	16	7	1	0	16	3.5	24
3	0	0	0	0	**IZS**	1	3	2	2	3	5	3	3	3	2	2	4	2	3	0	0	0	0	0	5	1.7	24
4	0	4	3	**IZS**	1	2	3	3	3	3	2	1	1	0	2	1	1	1	1	0	0	9	0	0	9	1.8	24
5	0	0	**IZS**	1	3	0	0	4	3	3	3	3	3	0	0	0	0	0	0	0	1	1	0	0	4	1.1	24
6	0	**IZS**	0	0	0	0	0	0	4	8	5	4	4	3	1	3	5	8	5	4	5	2	2	0	8	2.7	24
7	**IZS**	1	1	1	1	0	3	1	1	0	0	0	0	0	1	0	0	0	2	4	3	4	2	**IZS**	4	1.1	24
8	2	3	2	1	1	5	6	4	6	1	1	0	0	2	0	0	1	0	0	0	0	0	**IZS**	1	6	1.6	24
9	2	1	0	0	1	3	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	1	4	0.7	24
10	1	1	0	0	0	0	11	14	7	3	4	4	4	2	0	0	0	0	1	1	**IZS**	0	0	0	14	2.3	24
11	0	0	0	0	0	6	15	15	6	5	3	1	1	2	1	2	1	1	1	**IZS**	2	1	2	2	15	2.9	24
12	1	1	2	1	2	2	5	4	3	1	1	0	0	0	0	0	0	0	**IZS**	0	1	2	3	2	5	1.3	24
13	2	1	2	2	2	2	1	2	1	2	2	1	0	0	0	0	0	**IZS**	0	0	0	0	0	0	2	0.9	24
14	0	0	1	1	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	4	0	0	0	2	3	0	4	0.7	24
15	0	0	0	0	0	1	6	10	6	5	5	2	1	1	0	**IZS**	0	1	0	0	0	0	0	1	10	1.7	24
16	5	4	4	1	1	1	2	2	3	4	3	2	1	1	**IZS**	2	0	0	0	0	0	0	0	0	5	1.6	24
17	0	0	0	0	0	0	0	1	5	0	1	0	1	**IZS**	2	4	8	5	3	2	1	11	13	9	13	2.9	24
18	1	0	0	1	3	6	5	7	4	2	0	1	**IZS**	1	0	1	1	1	1	5	3	3	2	3	7	2.2	24
19	1	1	2	2	3	2	4	2	1	3	1	**IZS**	1	1	1	3	2	6	2	0	5	0	1	9	9	2.3	24
20	18	16	10	10	8	10	23	13	12	10	**IZS**	0	4	2	4	7	7	10	12	18	13	5	3	3	23	**9.5**	24
21	1	0	4	0	0	2	10	7	4	**IZS**	2	1	3	1	1	1	1	1	1	1	1	0	0	0	10	1.8	24
22	0	2	2	0	3	7	9	7	**IZS**	5	9	3	2	1	1	1	0	0	0	0	1	3	7	6	9	3.0	24
23	4	3	3	2	2	2	10	**IZS**	4	3	2	3	2	2	2	1	1	2	1	2	2	1	0	0	10	2.3	24
24	0	0	0	0	0	5	**IZS**	12	**24**	3	4	4	8	4	1	1	0	0	0	0	9	16	8	7	**24**	4.6	24
25	14	20	20	16	9	**IZS**	10	10	8	12	1	2	2	0	1	0	0	1	1	1	1	2	11	6	20	6.4	24
26	4	16	11	6	**IZS**	1	3	2	6	0	0	0	0	0	3	0	4	10	6	10	10	7	5	9	16	4.9	24
27	6	0	3	**IZS**	12	7	14	16	7	3	2	10	4	6	5	9	1	0	3	3	4	0	0	1	16	5.0	24
28	0	0	**IZS**	0	0	0	0	1	1	1	0	1	3	2	1	0	1	2	2	4	3	3	4	5	5	1.5	24
29	5	**IZS**	8	7	4	0	0	1	1	4	1	0	1	0	1	1	1	2	0	0	0	0	1	22	22	2.6	24
30	**IZS**	7	2	3	3	11	21	13	9	7	5	4	4	1	4	6	12	0	1	4	0	0	0	IZS	21	5.3	24
HOURLY MAX	18	20	20	16	12	11	23	16	24	12	9	10	8	6	5	9	12	10	12	18	16	16	13	22			
HOURLY AVG	2.4	2.9	2.9	2.0	2.1	2.7	6.0	5.4	4.8	3.4	2.3	1.9	2.0	1.3	1.4	1.8	2.0	2.2	1.9	2.1	2.8	2.7	2.4	3.1			

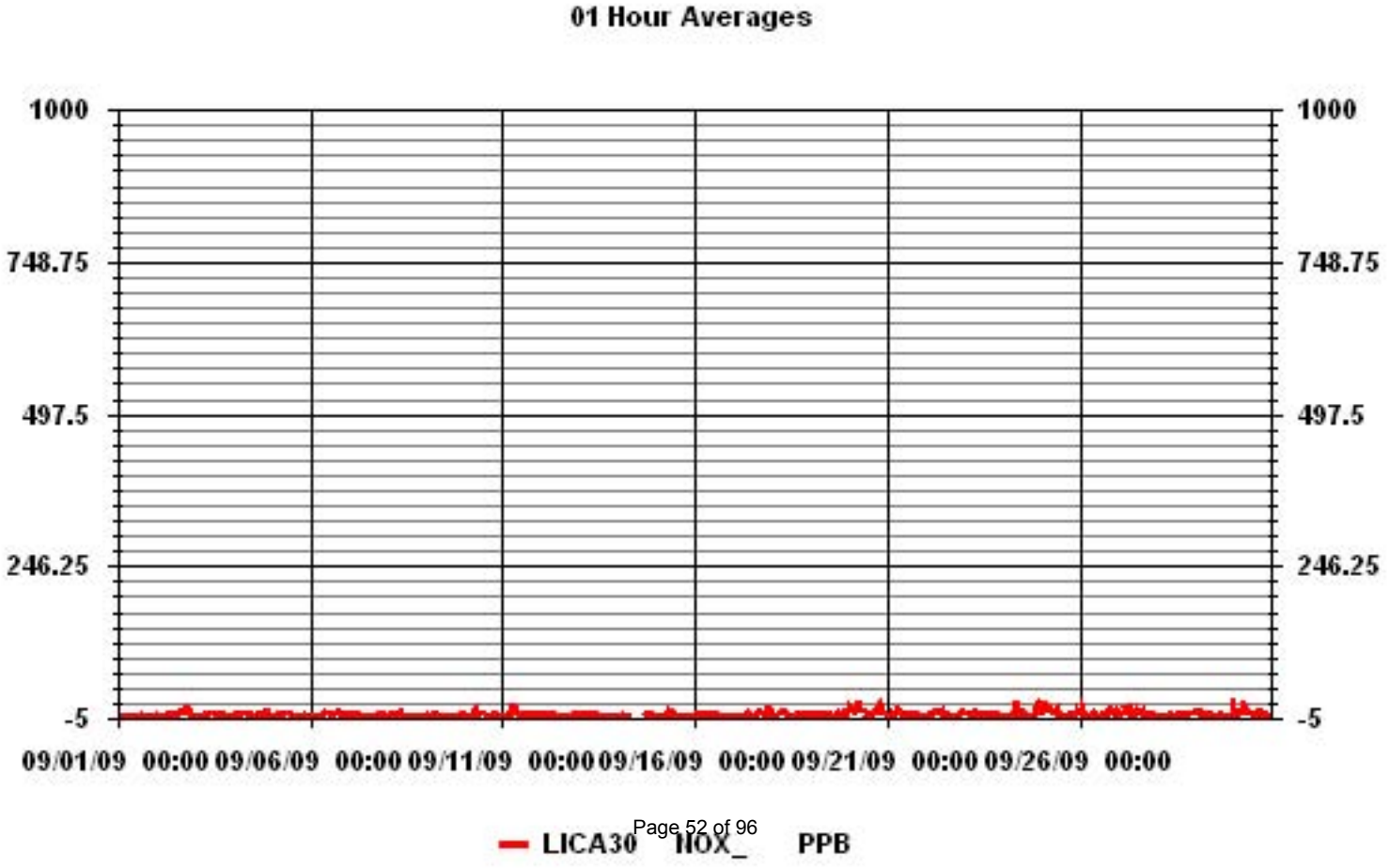
STATUS FLAG CODES

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:	452					
MAXIMUM 1-HR AVERAGE:	24	PPB	@ HOUR(S)	8	ON DAY(S)	24
MAXIMUM 24-HR AVERAGE:	9.5	PPB			ON DAY(S)	20
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		720	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME		100.0	%
STANDARD DEVIATION	3.82		MONTHLY AVERAGE		2.70	PPB


01 Hour Averages
1000
748.75
497.5
246.25
-5
09/01/09 00:00 09/06/09 00:00 09/11/09 00:00 09/16/09 00:00 09/21/09 00:00 09/26/09 00:00
LICA30 NOX_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

OXIDES OF NITROGEN MAX instantaneous maximum in ppb

MST

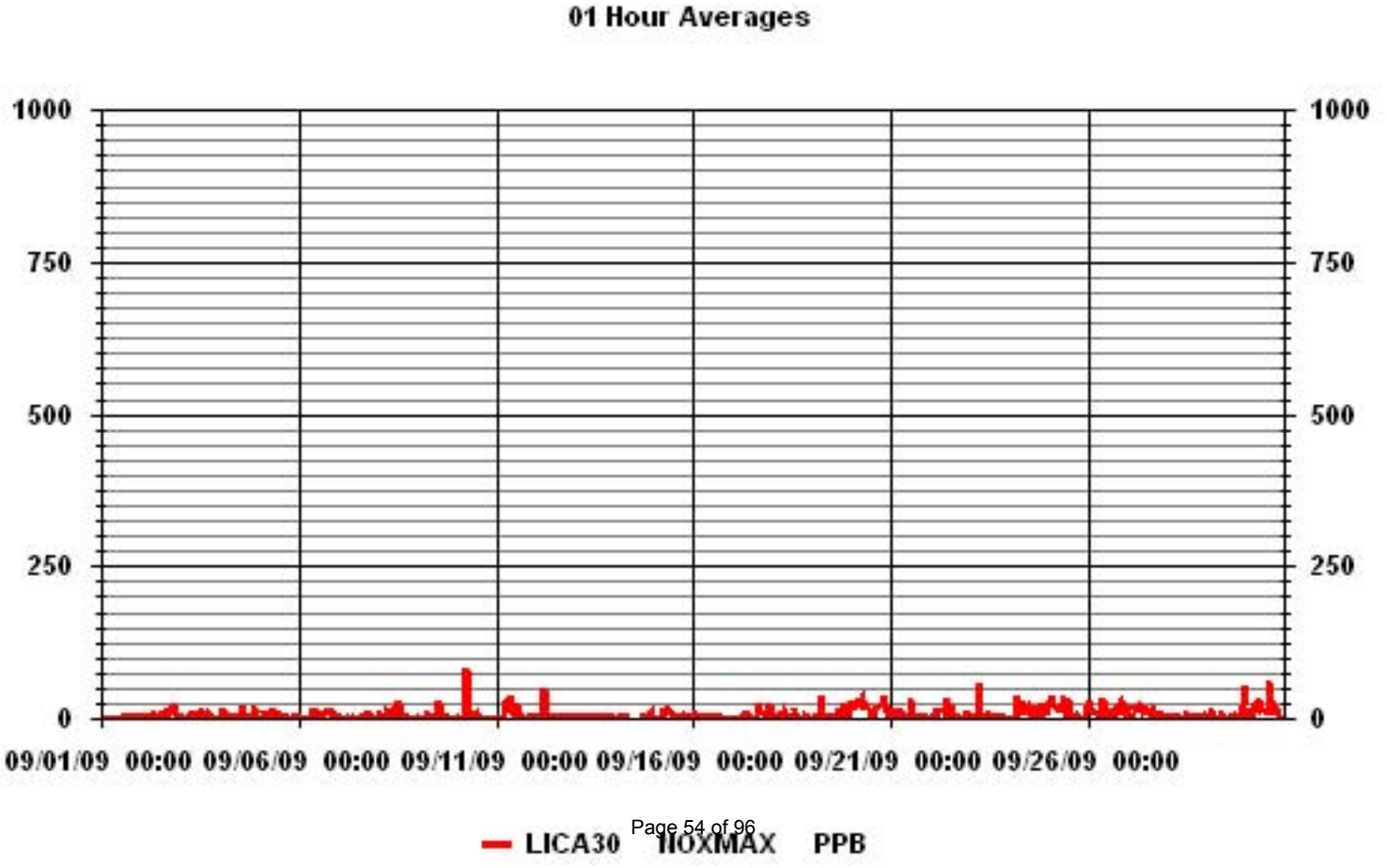
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	1	1	0	0	0	0	**IZS**	0	0	1	0	0	1	0	5	4	3	1	1	1	1	1	1	1	5	1.0	24
2	1	1	1	1	1	**IZS**	4	3	6	7	5	5	8	4	9	13	14	11	16	7	22	17	1	0	22	6.8	24
3	1	1	1	0	**IZS**	5	7	6	3	4	8	5	7	10	6	5	10	5	6	1	0	0	0	0	10	4.0	24
4	1	13	12	**IZS**	2	7	5	4	5	5	3	3	2	1	21	5	2	2	1	1	0	21	3	2	21	5.3	24
5	0	0	**IZS**	8	9	3	5	6	14	13	5	9	8	1	0	2	2	1	1	1	2	2	1	1	14	4.1	24
6	1	**IZS**	0	0	0	0	0	0	13	12	8	10	10	7	6	6	10	15	14	11	11	6	4	0	15	6.3	24
7	**IZS**	2	2	1	2	1	5	2	1	1	1	0	1	2	4	2	2	1	7	8	7	5	3	**IZS**	8	2.7	24
8	2	7	7	2	2	12	9	7	11	3	2	1	1	30	1	1	2	1	1	1	1	2	**IZS**	2	30	4.7	24
9	3	2	0	0	3	7	6	4	4	1	1	3	11	28	0	1	2	1	1	1	0	**IZS**	2	1	28	3.6	24
10	2	2	1	0	0	3	**81**	55	11	5	7	6	11	6	1	1	2	1	3	2	**IZS**	0	0	0	**81**	8.7	24
11	0	0	0	0	2	16	26	31	9	35	10	2	4	24	3	4	2	2	1	**IZS**	3	2	2	2	35	7.8	24
12	2	2	2	2	2	46	46	11	6	2	2	1	1	1	1	1	1	1	**IZS**	1	3	4	5	3	46	6.3	24
13	3	2	2	2	3	2	2	4	2	2	3	2	1	1	1	1	1	**IZS**	1	1	1	1	1	1	4	1.7	24
14	1	1	2	2	1	1	1	1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2	2	1	8	12	1	12	2.6	24
15	0	1	0	0	1	3	15	17	10	12	12	4	2	2	2	**IZS**	1	6	1	1	1	1	1	2	17	4.1	24
16	9	7	6	2	2	2	4	4	5	7	5	4	5	2	**IZS**	5	1	0	0	0	0	0	0	0	9	3.0	24
17	0	0	0	0	0	0	1	5	12	1	2	2	1	**IZS**	5	11	22	16	10	8	6	25	19	19	25	7.2	24
18	7	0	1	2	5	8	6	13	6	5	2	2	**IZS**	13	1	2	1	1	3	7	5	5	4	4	13	4.5	24
19	2	2	3	3	3	3	37	5	2	4	2	**IZS**	3	2	3	8	5	14	7	2	23	1	4	23	37	7.0	24
20	23	25	19	20	26	26	32	22	25	21	**IZS**	2	16	8	13	16	18	20	21	30	30	14	14	7	32	19.5	24
21	3	3	15	1	0	5	15	8	5	**IZS**	5	2	32	3	2	1	3	2	2	2	1	1	1	0	32	4.9	24
22	1	4	5	1	11	12	12	12	**IZS**	7	31	15	23	2	6	4	1	1	1	1	2	7	8	8	31	7.6	24
23	5	4	5	4	3	5	53	**IZS**	5	5	4	6	6	2	3	3	1	4	3	3	5	5	2	0	53	5.9	24
24	0	0	1	0	1	33	**IZS**	20	30	13	11	11	19	12	3	22	1	1	1	0	20	20	17	14	33	10.9	24
25	23	24	34	24	18	**IZS**	15	15	24	35	3	6	31	2	4	1	1	5	1	1	2	4	14	11	35	13.0	24
26	14	29	17	13	**IZS**	10	6	4	14	32	1	1	0	1	15	2	13	18	15	24	29	20	11	17	32	13.3	24
27	11	1	6	**IZS**	19	16	18	23	19	10	15	18	16	13	10	17	12	0	8	7	7	2	1	2	23	10.9	24
28	1	1	**IZS**	1	1	1	1	1	2	3	1	7	7	4	4	1	4	5	5	5	5	6	8	7	8	3.5	24
29	6	**IZS**	12	11	7	1	2	1	4	11	1	1	2	1	1	1	1	5	1	1	0	1	21	47	47	6.0	24
30	**IZS**	15	7	12	9	22	26	21	31	15	14	14	13	5	62	24	30	6	16	14	2	1	2	**IZS**	62	16.4	24
HOURLY MAX	23	29	34	24	26	46	81	55	31	35	31	18	32	30	62	24	30	20	21	30	30	25	21	47			
HOURLY AVG	4.4	5.4	5.8	4.0	4.8	8.9	15.7	10.5	10.0	9.7	5.9	5.1	8.6	6.7	6.9	5.9	5.8	5.2	5.2	5.0	6.6	6.3	5.6	6.3			

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

NUMBER OF NON-ZERO READINGS:	612					
MAXIMUM INSTANTANEOUS VALUE:	81	PPB	@ HOUR(S)	6	ON DAY(S)	10
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		720	HRS
MONTHLY CALIBRATION TIME:	10	HRS				
STANDARD DEVIATION:	9.10					


01 Hour Averages
1000
750
500
250
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 NOXMAX PPB

LICA30
NOX_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	.88	1.17	5.14	6.91	5.00	6.02	6.61	6.02	6.47	11.17	11.47	7.20	5.73	9.70	7.64	2.79	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	.88	1.17	5.14	6.91	5.00	6.02	6.61	6.02	6.47	11.17	11.47	7.20	5.73	9.70	7.64	2.79	

Calm : .00 %

Total # Operational Hours : 680

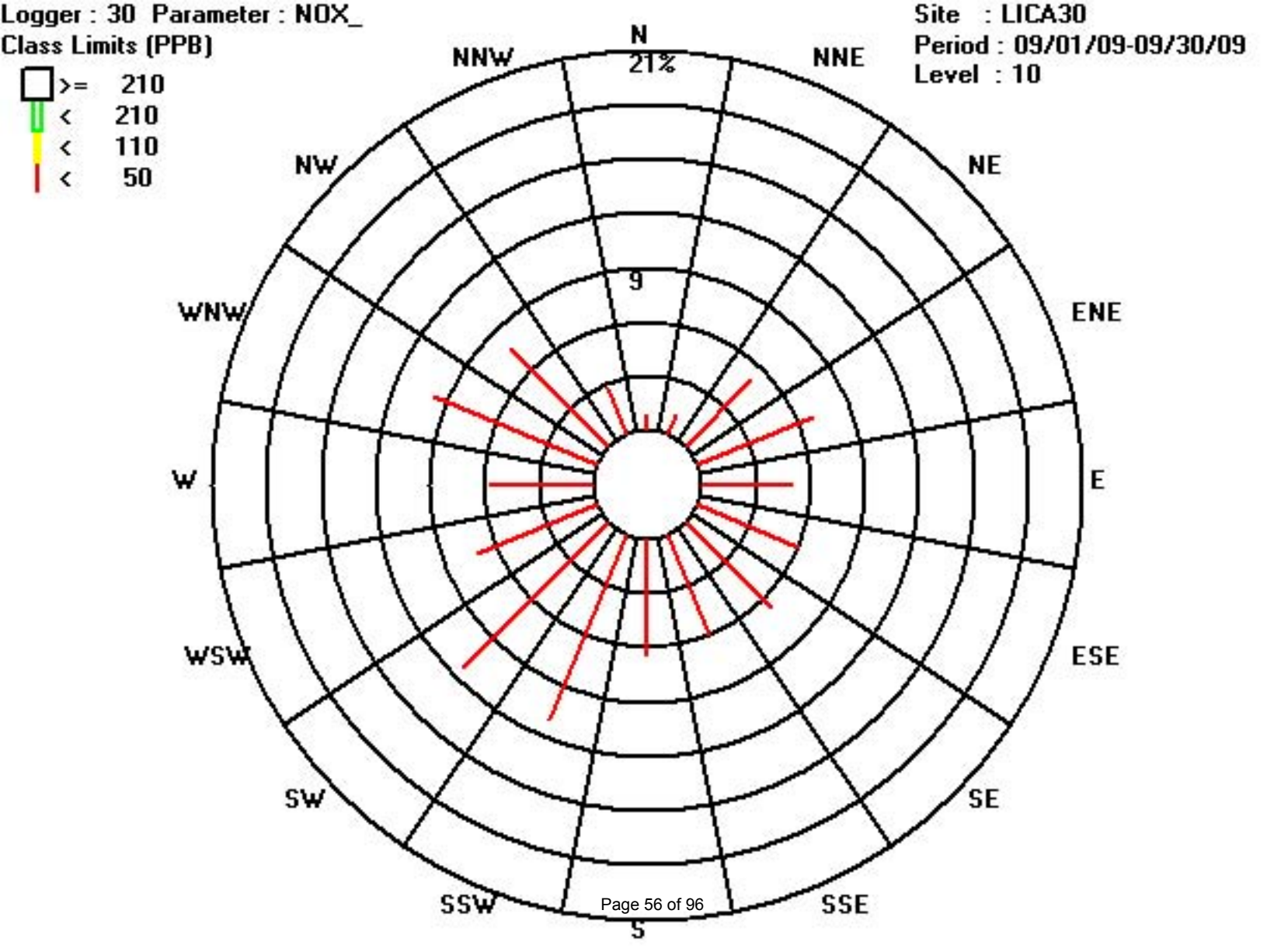
Distribution By Samples

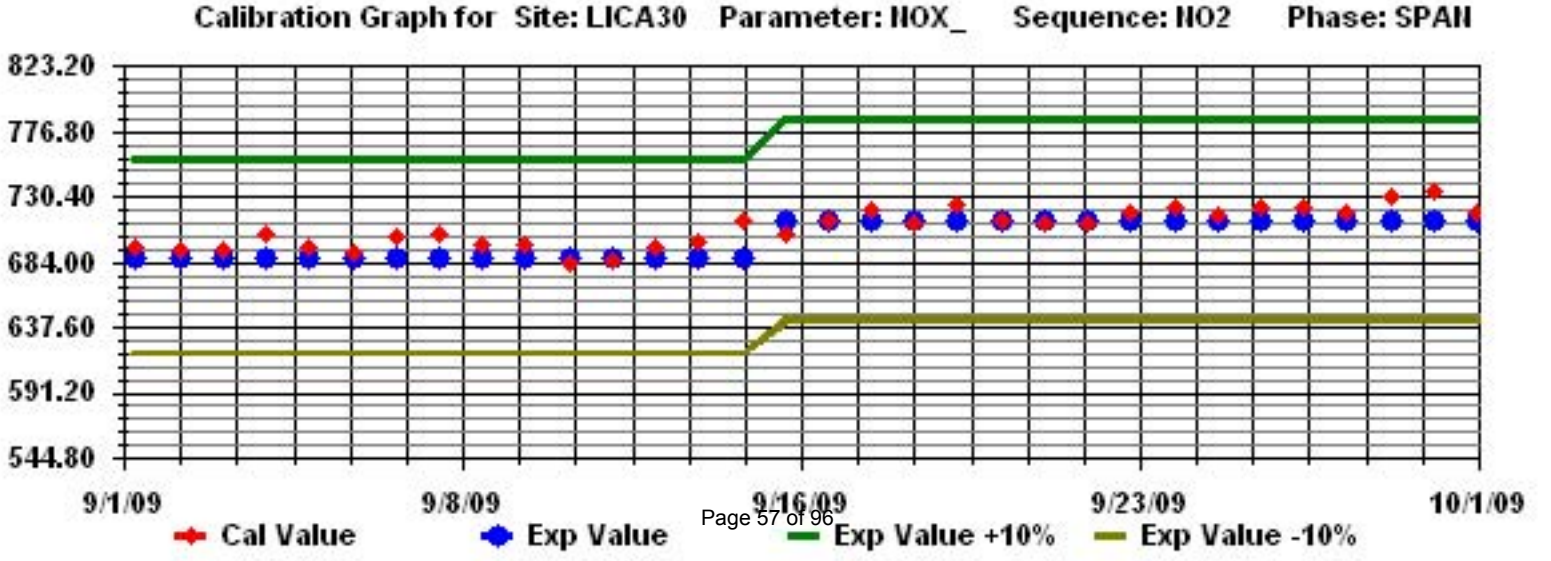
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	6	8	35	47	34	41	45	41	44	76	78	49	39	66	52	19	680
< 110																	
< 210																	
>= 210																	
Totals	6	8	35	47	34	41	45	41	44	76	78	49	39	66	52	19	

Calm : .00 %

Total # Operational Hours : 680


Logger : 30 Parameter : NOX_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA30
Period : 09/01/09-09/30/09
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
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Temperature

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

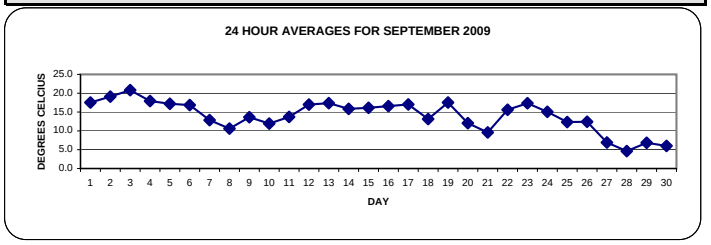
AMBIENT TEMPERATURE hourly averages (Degrees C)

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	10.1	9.3	8.7	8.3	7.5	8.5	11.6	15.4	18.7	20.9	22.7	24.1	25.5	26	27.2	27.3	26.6	25.3	21.8	18.2	16.4	15.2	13	12.4	27.3	17.5	24
2	11.4	10.8	10.1	9.3	9.4	9.6	10	13.9	19.3	22.6	23.8	26	26.9	27.6	28.2	26.8	26.3	26.3	24.4	22.2	20.8	19	17.5	16.1	28.2	19.1	24
3	15.1	13.9	13.4	12.5	11.7	10.9	11.1	14.7	20.5	23.1	26.1	27.8	29.2	29.5	**29.7**	29.3	28.8	27	24.6	22.2	20.6	20.5	18.6	18.7	**29.7**	**20.8**	24
4	18.8	20	20.1	18.6	16.7	15.4	14.1	14.4	14.3	15.7	17.2	19.5	20.4	20.6	19.8	20.8	20.6	20.1	17.3	17.2	17.4	17.5	16.9	16.8	20.8	17.9	24
5	16.4	15.9	15.3	15.2	15.3	15.2	15	15.1	15.7	18.5	20.7	22.5	23.4	23.9	24.5	23.6	24.1	22.2	17.3	13	10.8	10.4	9.6	9.1	24.5	17.2	24
6	9.1	10	11.8	12.6	12.9	12.8	13.4	14	15.4	17	17.9	20.3	21.5	22.4	21.8	22.6	21.8	20.2	19.5	18.7	18	17.4	16.8	16.6	22.6	16.9	24
7	16.4	15.4	12.9	11.7	11.9	10.8	9.6	11	13.9	16.5	18	19.2	18.9	16.4	12.7	11.6	11.9	11.8	10.9	8.2	9.8	9.4	9.7	9.8	19.2	12.9	24
8	8.9	8	7.6	7.5	7.2	6.3	7.4	8.3	10.1	12.5	12.8	13.9	13.7	13.4	14	13.3	12.3	12.1	11.2	11.1	11.1	10.5	10.6	10.9	14.0	10.6	24
9	11	11.5	11.6	11	9.9	8.8	8.4	10.2	13.9	15.6	17.4	18.1	19.1	19.1	18.3	18	16.9	15.8	13.5	12.4	12	11.8	12.2	10.6	19.1	13.6	24
10	10.8	10.6	10.2	10.2	9.8	9.5	9.6	11.5	13.8	15.3	13.5	13.3	14.8	16	16	16.7	15.9	14.8	13.6	10.5	8.5	7.8	7.3	6.5	16.7	11.9	24
11	5.9	6.1	5.1	3.9	3.4	3.8	5.9	8.3	12.1	15.1	17	19.5	20.9	21.9	22.6	22.7	22.5	21.1	17.3	15.6	15.3	15	14.4	13.4	22.7	13.7	24
12	13.4	12.2	8.6	8.1	8.4	7.6	6.4	11.9	15.6	18.2	20.7	23.2	24.4	25	26	25.9	25.6	23.8	20.1	18.4	17.9	17.4	15.3	13.5	26.0	17.0	24
13	12.5	14.3	13.7	13.1	10.3	6.7	6.2	11.2	17.3	18.9	21	22.6	24	25.1	25.3	25.4	25.2	22.9	18.3	15.9	17.4	17	16.5	15.9	25.4	17.4	24
14	15.1	14.2	14.1	11.6	9.6	8.5	7.8	11.4	16.4	19.9	20.5	22.3	22.9	22.7	21.4	20	18.4	17.2	15.5	15.5	15	14.6	13.9	11.7	22.9	15.8	24
15	10.2	9.3	10.4	11.2	11.5	11.4	11.8	12	14.1	17	17.1	20.3	22.5	23.9	25.4	24.9	24.7	22.7	18.7	15.9	13.9	13.3	13	12	25.4	16.1	24
16	11.3	10.5	10.2	9.4	9	8.6	8	10.1	15.5	20.1	23.9	25	24.8	25.5	25.7	25.2	24.8	21.4	18.1	15.9	14.7	14	13.2	12.8	25.7	16.6	24
17	13	13.8	13.8	13.6	13.2	13.4	13.7	15.4	18.8	21.2	22.8	23.6	24.2	25.2	24.2	23.5	19.2	17.3	16.1	15.5	14.2	12.4	11.2	9.1	25.2	17.0	24
18	8.1	7.5	6.9	6.1	5.9	5.9	5.7	6.2	7.8	12.4	14.2	16.9	18.9	20.4	21.6	21.6	21.4	19.4	16.2	15.6	15	13.6	14.1	13.9	21.6	13.1	24
19	12.9	11.1	13.9	13.4	12.8	9.8	8.8	14	15.5	18	20.2	22.3	24	25.9	27.2	26.3	24.7	22.1	20.2	17.5	16.3	15.5	14.5	13.7	27.2	17.5	24
20	13.4	13.2	12.6	11.2	9.3	9.1	8.9	9.5	10.3	11.5	12.8	13.3	14.5	16	17.2	17.1	16.7	15.3	13.3	11.9	10.4	9.2	7.9	4.5	17.2	12.0	24
21	3.3	3.4	3.4	3.5	2.4	3.5	3.5	5	8.3	9.9	11.7	13.5	14.7	16.5	17	18.5	18.8	16.7	13.2	11	9.1	8.3	6.9	8	18.8	9.6	24
22	9.2	9.6	9.6	10.4	9.5	8.9	9.4	11.5	14.1	15.2	16.3	20.4	23.3	24.4	24.7	26	25.6	22.8	17.5	14	13.9	13.8	12.7	11.7	26.0	15.6	24
23	10.6	11.9	9.3	8.4	7.3	6.5	6.3	9.1	15.6	20.7	24.9	27.1	28	28.6	29.2	28.9	27.3	23.2	18.1	15.4	18.5	16.9	12.8	11.5	29.2	17.3	24
24	11	10.2	9.6	9.5	8.4	7.3	7.4	9.4	15.5	20.3	23.1	24.4	25.1	25.6	24.4	23.1	20.9	18.1	16.2	14.3	12	10	7.8	7.8	25.6	15.1	24
25	6.9	4.7	4.1	3	2.1	1.6	2	5.4	11.5	16.1	18.2	18.7	19.5	20.3	20.8	20.4	19.9	17.4	15	14.6	14.5	14.1	13.2	12.1	20.8	12.3	24
26	12.6	12.9	12.1	12.7	11.7	10.1	9.2	10.6	13.4	15.2	16.1	17.1	17.4	16.6	18	17.1	14.6	11.4	11	9.1	7.3	7	7.1	7.7	18.0	12.4	24
27	7.7	6.8	7	7.3	7.1	7	6.9	6.8	7.3	8.4	9.9	10.1	9.8	10.5	10.4	10.4	9.2	8.4	6.4	4	2.4	1.4	0.6	0.1	10.5	6.9	24
28	-1.1	-1.8	**-2**	-1.3	-1.2	2.5	3.5	4.2	5.1	6.2	7	8.6	7.7	7.6	7.9	8.6	8.5	7.5	6.8	6.4	5.9	5.4	4.8	4.4	8.6	4.6	24
29	4.1	4.1	4	4	3.9	4.1	4.6	5.2	6.3	7.7	10.2	11.3	11.3	11.2	11.7	12.7	11.4	9.2	6.4	5.9	4.2	3	3.2	4.4	12.7	6.8	24
30	4.9	4.9	4.9	5.3	5.9	5.8	5.2	4.6	4.5	5.2	6.6	8.1	9.4	9	8.4	7.9	7.3	6.7	6	5.5	5.2	4.8	4.2	3.8	9.4	6.0	24
HOURLY MAX	18.8	20.0	20.1	18.6	16.7	15.4	15.0	15.4	20.5	23.1	26.1	27.8	29.2	29.5	29.7	29.3	28.8	27.0	24.6	22.2	20.8	20.5	18.6	18.7			
HOURLY AVG	10.4	10.1	9.8	9.4	8.8	8.3	8.4	10.3	13.4	15.8	17.5	19.1	20.0	20.6	20.7	20.5	19.7	18.0	15.5	13.7	13.0	12.2	11.3	10.7			

STATUS FLAG CODES

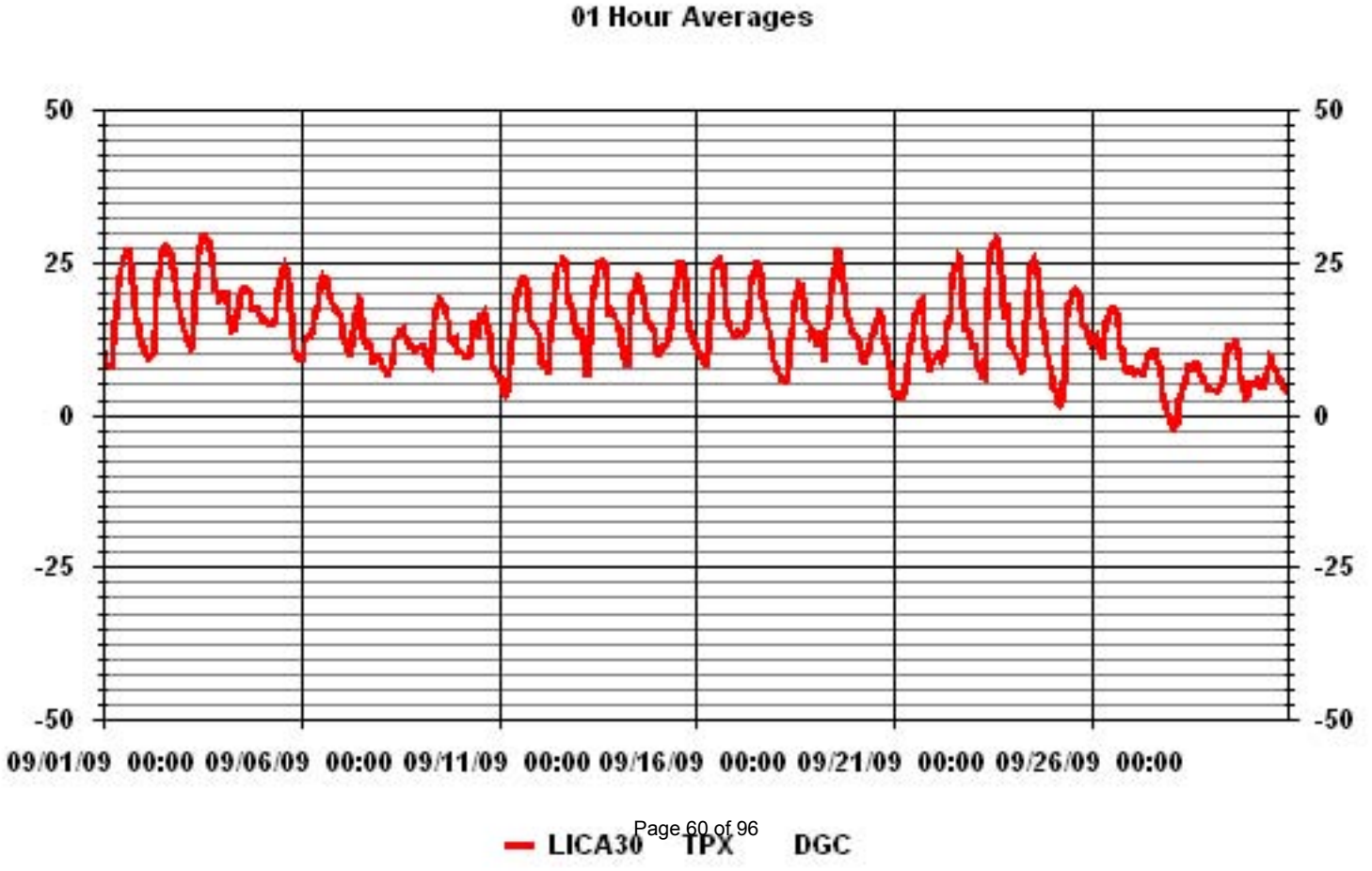
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	-2	^{O}C	@ HOUR(S)	2	ON DAY(S)	28
MAXIMUM 1-HR AVERAGE:	29.7	^{O}C	@ HOUR(S)	14	ON DAY(S)	3
MAXIMUM 24-HR AVERAGE:	20.8	^{O}C			ON DAY(S)	3

CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	720	HRS
			AMD OPERATION UPTIME:	100.0	%
STANDARD DEVIATION:	6.48		MONTHLY AVERAGE:	14.05	^{O}C


01 Hour Averages
50
25
0
-25
-50
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30
TPX
DGC

Precipitation

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

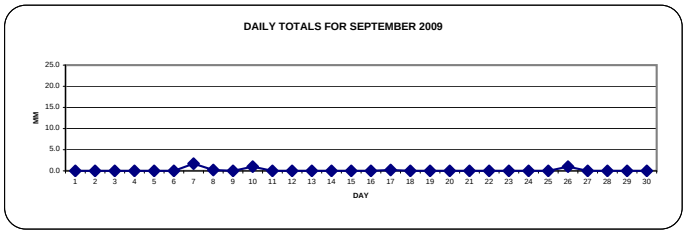
PRECIPITATION hourly averages (mm)

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	0.3	0.2	**1.2**	0	0	0	0	0	0	0	0	**1.2**	**1.7**	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0.2	0.2	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	0.2	0	0	0	0	0	0	0	0	0.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.7	1.0	24
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	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	0.1	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0.2	24
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	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	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	0	0	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	0.7	0.1	0.2	0	0	0.7	1.0	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	0	0	0	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	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.7	0.1	0.0	0.3	0.2	1.2	0.2	0.0	0.0	0.7	0.1	0.2	0.0	0.0			

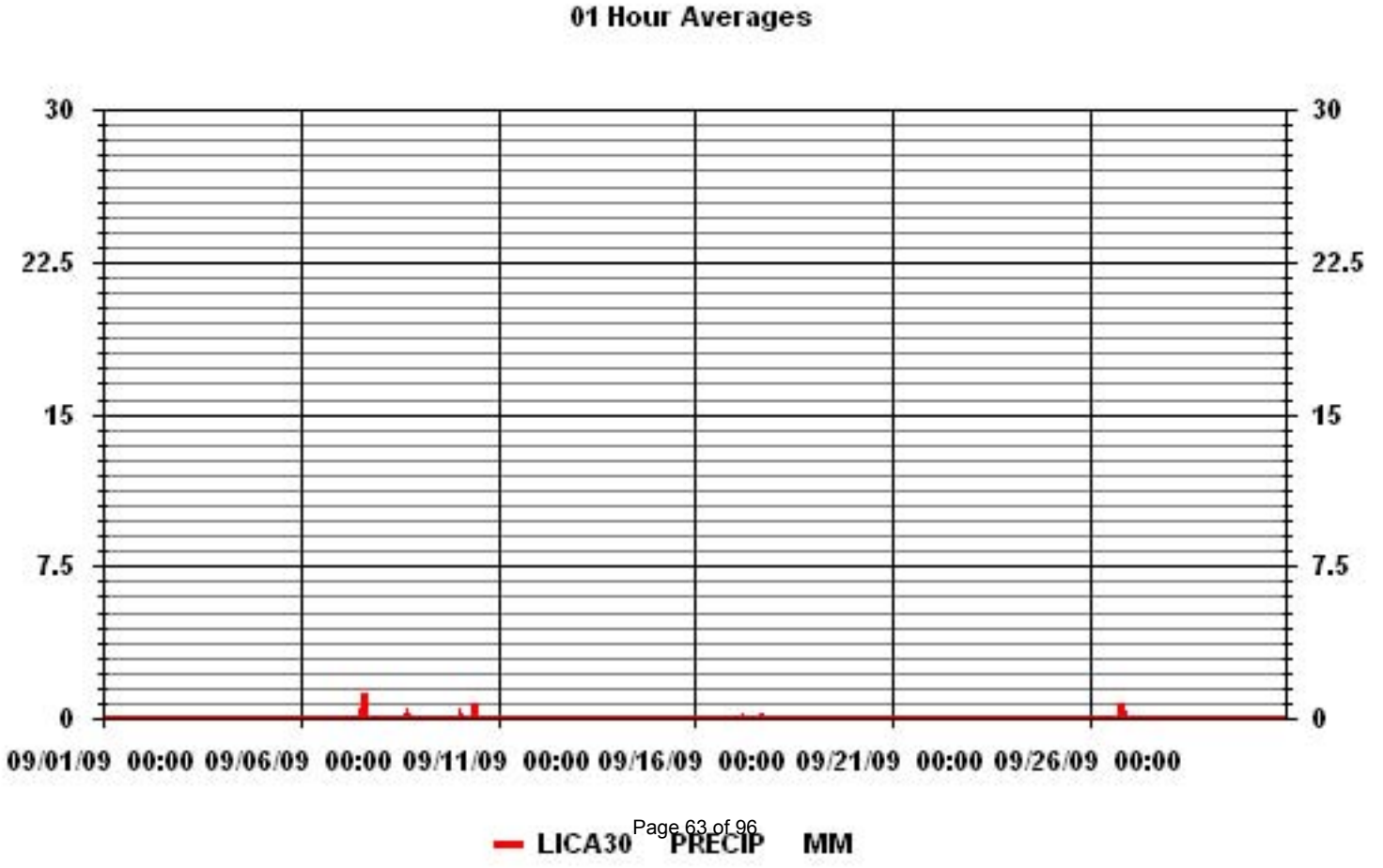
STATUS FLAG CODES

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:			1.2	MM	HOUR(S)	15	ON DAY(S) 7
MAXIMUM DAILY TOTAL			1.7	MM			ON DAY(S) 7
MONTHLY TOTAL			4.1	MM			
CALIBRATION TIME:	0	HRS		OPERATIONAL TIME:		720	HRS
				AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	0.06			MONTHLY AVERAGE:		0.01	MM


01 Hour Averages
30
22.5
15
7.5
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 PRECIP MM

Relative Humidity

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

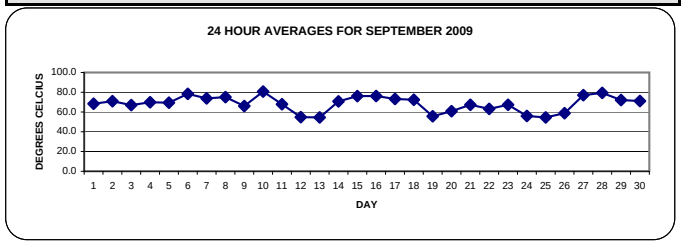
RELATIVE HUMIDITY hourly averages (%)

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	93	94	94	94	93	92	80	71	62	57	52	49	45	42	38	36	40	47	58	70	73	80	89	92	94	68.4	24
2	93	94	94	94	94	94	94	87	70	58	57	48	45	45	44	49	52	52	58	65	70	77	81	88	94	71.0	24
3	92	92	92	93	94	94	94	90	70	63	55	50	41	39	35	36	41	49	52	61	66	65	71	73	94	67.0	24
4	74	70	69	74	80	82	80	75	73	67	64	59	55	54	57	56	59	62	73	78	79	78	80	79	82	69.9	24
5	80	81	84	84	84	84	83	81	79	68	58	49	44	42	37	39	38	43	63	82	90	90	92	92	92	69.5	24
6	91	90	90	90	90	92	91	90	87	80	74	67	64	61	61	58	63	69	72	75	78	81	83	84	92	78.4	24
7	79	74	75	78	80	82	85	79	68	59	51	47	46	56	77	82	79	79	80	89	81	83	82	80	89	73.8	24
8	83	86	87	85	85	87	82	77	73	65	68	62	64	64	64	66	72	76	78	76	75	76	76	75	87	75.1	24
9	75	71	71	72	74	77	77	70	61	58	53	50	46	45	46	47	52	60	73	79	80	80	80	88	88	66.0	24
10	84	86	88	88	89	91	92	88	78	71	79	83	75	67	63	59	62	66	73	84	91	93	93	94	94	**80.7**	24
11	94	94	93	93	93	93	94	94	83	72	65	56	46	42	38	36	36	42	56	61	61	61	62	64	94	67.9	24
12	63	66	82	84	81	84	85	69	57	52	48	41	35	33	29	30	28	34	46	52	50	49	56	62	85	54.8	24
13	65	57	59	59	70	84	87	72	51	48	46	43	37	35	36	35	33	37	52	61	57	59	62	63	87	54.5	24
14	66	68	68	77	85	88	91	81	68	58	57	48	47	50	52	57	64	71	79	80	81	83	87	92	92	70.8	24
15	93	93	93	93	92	92	91	90	84	74	75	65	57	53	44	44	46	52	67	78	86	87	87	90	93	76.1	24
16	91	93	93	94	94	94	94	94	82	68	56	50	49	44	45	48	49	67	78	85	88	90	91	92	94	76.2	24
17	92	91	92	92	93	92	90	82	67	57	53	52	50	46	48	52	70	74	76	72	73	77	80	87	93	73.3	24
18	92	93	93	94	93	94	94	93	92	77	67	55	53	48	44	46	46	56	67	67	68	72	67	67	94	72.4	24
19	68	74	66	68	70	80	84	67	63	58	53	43	39	33	30	35	38	47	49	49	54	54	56	58	84	55.7	24
20	58	56	56	59	67	68	70	67	65	61	58	58	56	54	50	48	49	50	54	59	65	70	75	87	87	60.8	24
21	91	90	89	89	92	92	92	87	73	65	58	51	44	38	36	31	31	37	51	61	72	78	85	82	92	67.3	24
22	79	78	79	77	80	82	80	72	63	61	59	47	39	36	36	34	33	42	62	76	73	72	76	80	82	63.2	24
23	85	79	89	89	92	92	93	86	69	58	44	34	33	34	33	34	40	52	70	80	70	76	90	93	93	67.3	24
24	94	93	94	94	94	94	94	91	67	42	28	20	19	20	20	19	25	33	36	40	48	54	62	62	94	56.0	24
25	67	76	79	84	89	91	92	84	64	50	40	37	32	29	27	27	27	35	42	43	43	45	50	55	92	54.5	24
26	53	55	61	60	62	68	72	68	58	50	45	42	41	42	38	38	45	56	56	72	82	84	84	79	84	58.8	24
27	76	77	75	74	75	77	80	81	78	74	66	68	72	67	65	66	70	74	81	87	90	92	92	92	92	77.0	24
28	92	92	92	92	92	93	93	92	89	82	77	69	72	74	71	67	66	68	70	70	69	69	75	78	93	79.3	24
29	80	80	80	80	79	78	76	74	71	68	59	55	56	57	56	52	57	66	77	81	85	89	90	85	90	72.1	24
30	84	83	82	82	83	82	78	76	73	69	63	56	52	55	57	59	61	64	67	71	74	76	79	81	84	71.1	24
HOURLY MAX	94	94	94	94	94	94	94	94	92	82	79	83	75	74	77	82	79	79	81	89	91	93	93	94			
HOURLY AVG	80.9	80.9	82.0	82.9	84.6	86.4	86.3	80.9	71.3	63.0	57.6	51.8	48.5	46.8	45.9	46.2	49.1	55.3	63.9	70.1	72.4	74.7	77.8	79.8			

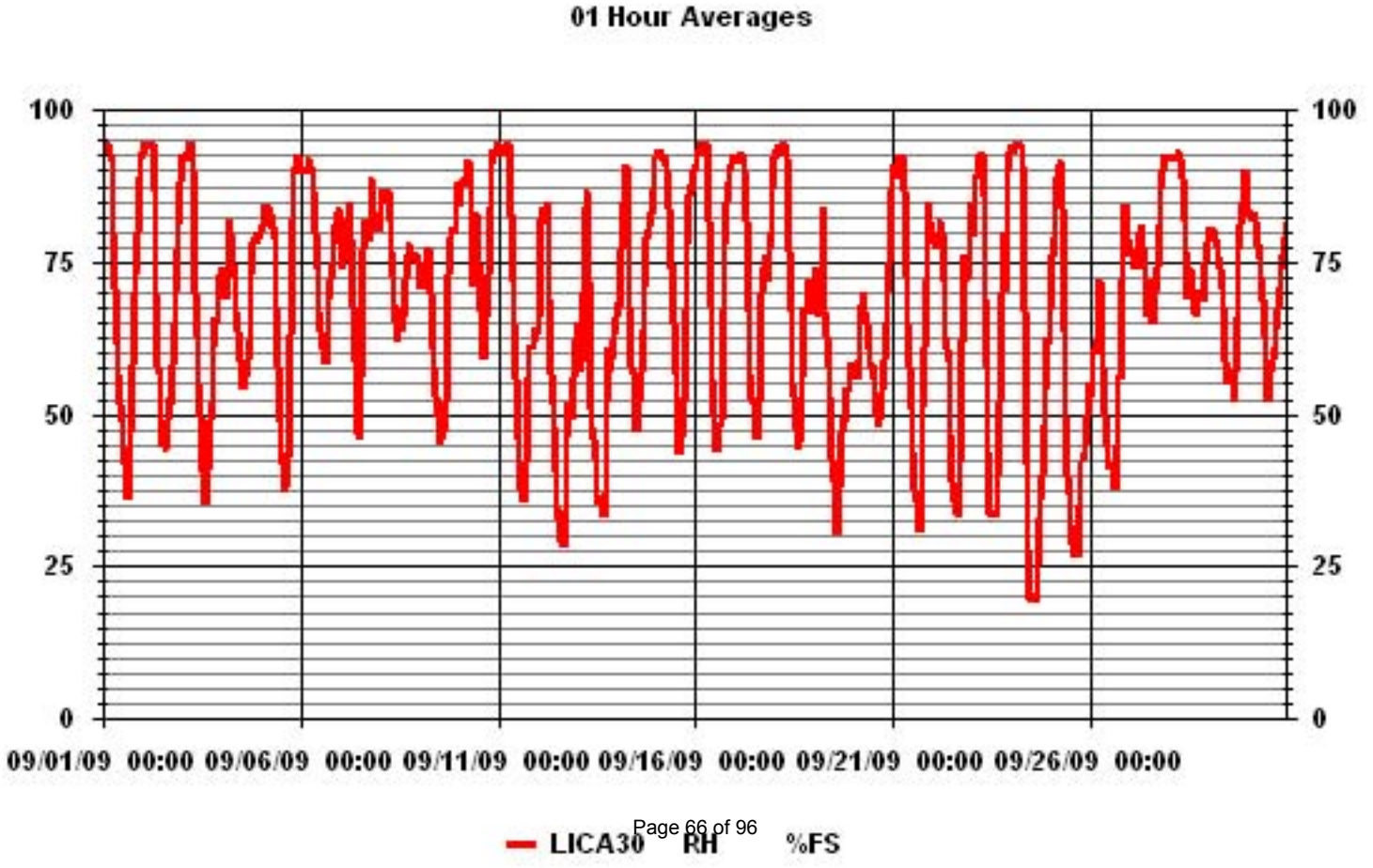
STATUS FLAG CODES

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

MAXIMUM 1-HR AVERAGE:		94	%	@ HOUR(S)	VAR	ON DAY(S)	VAR
MAXIMUM 24-HR AVERAGE:		80.7	%			ON DAY(S)	10
						VAR-VARIOUS	
CALIBRATION TIME:	0	HRS		OPERATIONAL TIME:		720	HRS
				AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	18.42			MONTHLY AVERAGE:		68.29	%


01 Hour Averages
100
75
50
25
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 RH %FS

Barometric Pressure

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

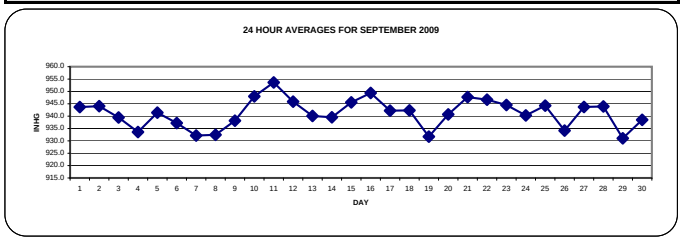
BAROMETRIC PRESSURE hourly averages (inHg)

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	940	940	940	941	941	942	943	944	945	945	945	945	945	945	945	945	945	945	944	944	944	945	945	945	945	943.7	24
2	945	945	944	944	944	944	944	945	946	946	946	946	945	945	944	944	943	943	943	943	942	942	942	942	946	944.0	24
3	942	941	942	942	941	941	941	942	943	942	943	942	941	940	939	939	938	937	937	936	936	935	934	933	943	939.5	24
4	932	931	931	930	930	931	931	932	932	933	933	933	933	934	934	935	935	935	936	936	937	937	937	938	938	933.6	24
5	938	939	939	940	940	941	941	942	942	943	943	943	943	943	943	942	942	942	942	941	941	941	941	942	943	941.4	24
6	942	941	941	941	941	941	941	940	940	940	939	938	937	937	936	935	935	935	934	933	932	932	931	931	942	937.2	24
7	930	930	931	931	931	931	931	932	934	934	934	934	933	933	933	933	932	933	932	932	932	932	932	932	934	932.2	24
8	932	932	931	931	931	931	931	932	932	932	933	932	933	933	933	933	933	933	933	933	933	934	934	934	934	932.5	24
9	934	934	935	935	935	936	936	937	938	939	939	939	939	939	940	940	940	940	940	939	940	940	941	941	941	938.2	24
10	941	941	941	942	942	943	944	945	946	947	947	948	949	949	950	951	952	952	953	953	954	954	954	954	954	948.0	24
11	954	954	954	954	954	955	955	955	956	956	956	956	955	954	954	953	953	953	952	951	951	951	951	950	**956**	**953.6**	24
12	950	949	949	949	948	948	948	948	949	948	948	947	946	946	945	944	944	944	943	942	942	942	941	941	950	945.9	24
13	941	941	941	940	940	940	940	940	942	942	942	941	941	940	940	940	939	939	939	938	939	939	939	939	942	940.1	24
14	939	939	939	939	939	938	938	939	940	940	940	940	939	939	940	939	940	940	939	940	940	941	941	941	941	939.5	24
15	941	941	942	942	942	943	943	943	944	945	946	946	947	947	947	947	948	948	948	948	949	949	949	949	949	945.6	24
16	950	950	950	950	950	950	950	950	952	952	952	951	951	950	950	949	949	948	948	947	947	947	946	946	952	949.4	24
17	945	945	944	943	943	942	942	941	941	942	941	940	941	941	941	941	942	943	942	942	942	943	943	943	945	942.2	24
18	943	944	943	943	943	943	944	944	944	945	945	944	944	943	943	942	942	941	941	940	940	939	938	938	945	942.3	24
19	937	936	936	935	934	933	932	931	931	931	930	930	930	929	929	929	929	930	931	931	931	931	932	933	937	931.7	24
20	933	934	934	935	935	935	936	937	938	939	939	940	941	942	943	943	944	945	946	947	947	948	948	948	948	940.7	24
21	948	949	949	949	949	949	949	949	949	949	949	949	948	948	947	947	946	946	946	946	946	946	946	946	949	947.7	24
22	947	947	947	947	947	947	948	948	948	948	948	948	948	947	947	946	946	946	945	945	945	945	945	945	948	946.7	24
23	945	945	945	946	946	946	945	946	947	948	947	947	946	945	945	945	944	944	943	942	941	941	940	939	948	944.5	24
24	938	937	936	936	936	935	935	937	939	940	940	941	941	941	941	942	942	943	943	944	945	945	945	945	945	940.3	24
25	946	946	946	946	947	947	947	947	949	949	949	948	947	946	945	944	943	942	940	939	938	938	937	936	949	944.3	24
26	936	935	935	935	934	934	934	934	935	934	934	934	933	933	933	933	933	933	934	934	934	935	935	936	936	934.2	24
27	936	937	937	938	939	939	940	941	942	943	944	945	945	946	947	947	947	948	948	948	948	948	948	948	948	943.7	24
28	948	948	948	948	948	948	948	947	947	947	947	946	945	944	943	942	941	940	940	939	939	938	937	936	948	943.9	24
29	935	935	934	933	932	932	932	931	931	930	931	930	930	930	930	930	930	930	930	930	929	929	930	931	935	931.0	24
30	931	932	933	934	935	936	936	936	938	938	938	939	939	939	940	940	941	941	942	942	943	943	944	944	944	938.5	24
HOURLY MAX	954	954	954	954	954	955	955	955	956	956	956	956	955	954	954	953	953	953	953	953	954	954	954	954			
HOURLY AVG	941	941	941	941	941	941	941	941	942	942	942	942	942	942	942	941	941	941	941	941	941	941	941	941			

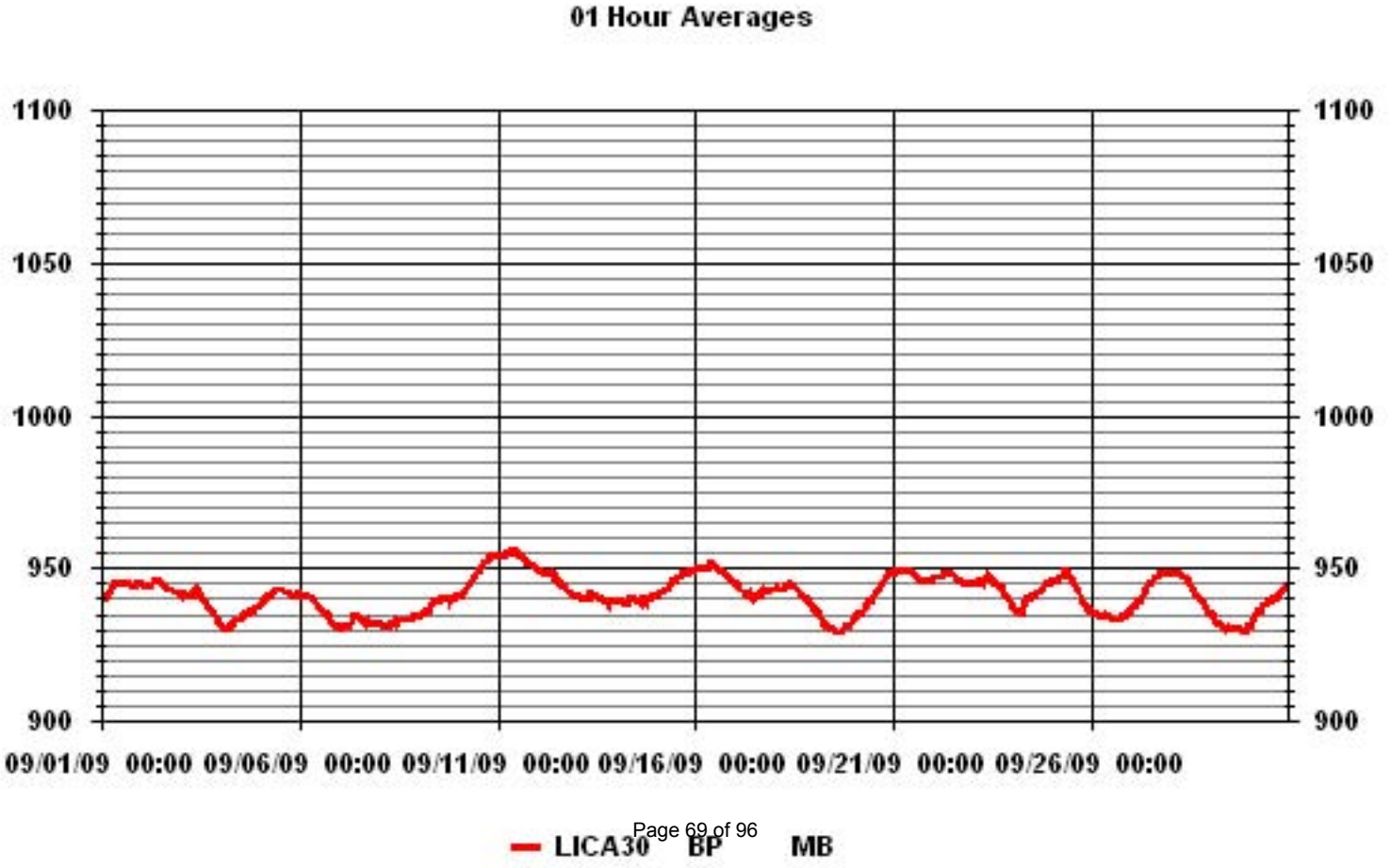
STATUS FLAG CODES

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	INHG	@ HOUR(S)	VAR	ON DAY(S)	11
MAXIMUM 24-HR AVERAGE:		953.6	INHG			ON DAY(S)	11
						VAR-VARIOUS	
CALIBRATION TIME:	0	HRS		OPERATIONAL TIME:		720	HRS
				AMD OPERATION UPTIME:		100.0	%
STANDARD DEVIATION:	6.16			MONTHLY AVERAGE:		941	INHG


01 Hour Averages
1100
1050
1000
950
900
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 BP MB

Vector Wind Speed

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

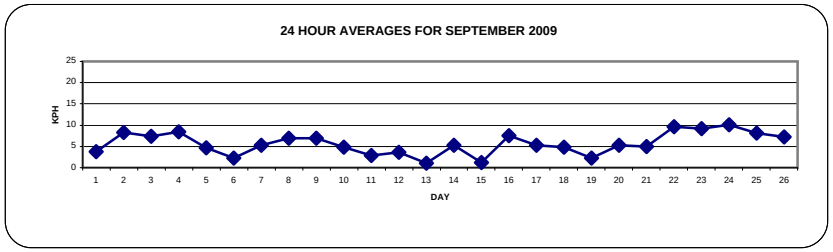
WIND SPEED hourly averages (km/hr)

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	0.2	0.2	0	2.3	2.6	5.2	6.1	8.7	10.1	9.3	8.5	7.3	6.1	6.4	3.3	2.3	5.2	5.1	4.5	3.6	3.9	3.6	3	3.5	10.1	4.3	24
2	2.6	1.9	1.8	3.3	3.7	2.4	2.3	3.2	3.9	3.8	5.4	5.9	8.8	8.9	8.1	7	7.7	7	7.1	5.3	5.7	3.4	3	1.4	8.9	4.2	24
3	3.3	1.8	0.9	1.3	0.4	0.1	1.2	2.9	3.1	6.3	4	1.6	3.8	5.4	6.3	7.8	7.5	6.2	6.2	5.3	5.6	6.6	5	5.3	7.8	3.1	24
4	6	7.1	6.3	5.3	9.6	6.4	10.3	11.8	12.8	11.3	11	9.4	11.8	8.7	7	7.1	6.3	5.1	4.3	6.4	12.6	9.3	9.3	8.7	12.8	5.4	24
5	7.4	8.4	7.1	6.8	5.5	6.1	8.7	7.9	7.2	5.7	4.6	3.7	3.2	4	5.7	3.8	4.3	4.2	2.8	0.7	1.4	2.3	0.2	0.3	8.7	3.8	24
6	4.3	5.3	4.5	3.8	4.6	3.3	5.2	7	7	10	11.6	14.5	13.2	14.6	14.1	12.1	11	8.6	9.9	12	11.6	11.2	11.4	11.2	14.6	8.3	24
7	10.3	11.4	12.2	10	9.3	8.5	9.1	10.2	8.6	6	8	7.2	7	7	5.7	6	6.8	7.8	6.1	4.7	5.9	6.5	7.5	8	12.2	7.4	24
8	7.1	7.2	8.2	8.6	8.8	7.1	8.6	10.1	9.3	8.9	10.3	11.8	10.5	9.3	12.4	10.8	9.2	10.1	9.9	8	8.1	7.2	7.5	6.9	12.4	8.4	24
9	6.3	7.1	6.6	6	6.5	7	6.2	6.4	7.7	6.9	8.5	7.8	10.3	9	9.4	6.9	4.3	1.9	0.6	1.1	2.2	1.5	2	2.9	10.3	4.6	24
10	2.7	3.3	4.3	3.6	1.5	0	1.1	0.7	1.4	3.4	1.9	5.1	7.3	9.5	7.7	8.8	6.3	4.9	3.3	2.5	2.2	2.2	1.4	2	9.5	2.3	24
11	1.3	2	0.6	0.8	1.3	2.2	2.2	3.4	5.3	6.6	8.2	7.1	8.6	9.7	9.5	10	10.2	6.5	4.6	6	5.7	6.5	7.4	6.9	10.2	5.2	24
12	7.7	6.2	2.6	4.2	4.5	4.2	2.6	6.4	7.9	7.7	8.4	9.6	9.6	10.8	11.3	10.9	11.3	8.1	6.5	7.3	8	7.5	5.9	4.8	11.3	6.9	24
13	6	7	6.7	6.1	2.5	2.6	3.1	4.4	5.4	6.4	6.4	8.3	11.6	10.6	10.8	9.8	10	6.1	4.7	5.4	8.9	9.1	10.9	10.1	11.6	6.9	24
14	7.8	7.7	7.3	2.5	4	3.9	3.9	4.4	6.4	5.9	9.3	10.5	10.8	9.8	6.9	8.3	5.6	4.9	2.1	5	5.9	6.1	3.5	1.9	10.8	4.8	24
15	0.3	0.6	1.5	0.4	0.4	1.5	2	4.6	2.8	2.8	6	3.7	7	7.3	6.6	9.7	7.1	4.8	3.3	3.7	2.9	2.4	2.8	2.5	9.7	2.9	24
16	1.7	2	1.2	2.1	2.1	1.4	0.2	2.7	3.8	3.1	2.7	2.7	6.2	6.3	7.5	7.2	7.9	9	8.4	8.8	7.8	8.8	8.6	7.1	9	3.6	24
17	7.7	8	7.8	7.1	7.1	6.5	5.1	5.9	6.7	8.9	7.9	7.4	7.4	5.7	5.2	9.7	12.5	10.3	8.7	9.1	4.5	7.4	7.2	2.2	12.5	1.1	24
18	3.4	4.1	4.5	3.8	4.2	3.7	3.1	4.7	6.5	5.7	5.3	7.8	7	10	9.1	9	8.3	5.5	5.5	6.4	5.4	4.1	5.6	5.7	10	5.3	24
19	4.1	4.7	5.9	6.3	6	3.7	2.9	6.7	5.6	6.4	8.1	10.4	9.9	7.3	3.7	5.4	4.8	7.1	9.1	8.7	7.6	9.2	10.2	8.3	10.4	1.2	24
20	9.8	7.5	7.2	5	6	7.4	6	8.4	8.8	10.9	9.7	9.6	8.4	8.2	9	10.4	10.8	10.8	8.9	7	6	5.2	3.7	2.6	10.9	7.5	24
21	3	3.1	3.7	3.4	3.1	6.6	8.5	7.2	6.5	7	8.1	9.4	9.6	8.9	7.3	7.6	7.1	4.5	3.9	3.5	2.9	2.7	3.3	3.6	9.6	5.3	24
22	4.2	5.8	3.5	3.7	4.7	5.4	5.2	3.9	4.2	4.3	5.6	7.6	8.7	9.6	6.3	8.2	9.9	4.5	3.1	3.7	4.1	4.2	3.5	2.7	9.9	4.8	24
23	1.7	3.5	1.5	0.6	0.1	0.3	0.8	0.4	2.4	4.9	4.3	6.2	6.2	6.3	6.2	5.8	4.3	2.7	2.4	2.9	6.5	3.4	2.9	2	6.5	2.3	24
24	3	3.8	2.5	0.4	0.8	1.6	2.3	3.4	5.7	9.4	11.3	11.5	10.4	9.5	10.8	12.3	9.7	8.5	6.3	6.4	5.2	4	3.6	4.6	12.3	5.2	24
25	4	2.3	2.8	1.7	2.3	3.4	2.4	3.6	2.3	2.4	5.1	9.2	9.3	9	9.4	11.3	10	6.8	6.9	6.4	6.6	5.7	4.4	3.2	11.3	5	24
26	3.3	4	2.7	7.9	6.8	7.3	5.5	5.8	10.3	10.4	12.3	12.2	14.4	15.8	12.9	16.9	14.7	6.2	11.4	11.4	12.2	9.1	12.5	14.5	16.9	9.7	24
27	13.1	13.4	12.5	13.3	15.5	14	14	12.7	12.3	13.2	13.7	14.1	11.2	13.9	12	11.5	7.5	4.8	3.5	2.4	0.9	0.9	0.8	0.8	15.5	9.2	24
28	1.1	1	0.7	0.2	2.5	6.4	8.2	9	9.2	9.8	10.1	12.3	12.2	12.2	13	14.5	**17.7**	15.1	14.4	14.8	15.3	14.8	15.3	15.6	**17.7**	**10.1**	24
29	13.4	11.8	10.6	8.9	10.6	9.7	10.6	10.8	10.7	12	16.5	16.6	16.4	13.4	13.4	12	5.4	3.2	4.6	3.8	3.6	2	3.1	3.8	16.6	8.2	24
30	5.7	3.3	6	6.6	7.9	8.6	9.6	10.2	10.1	7.7	9.2	8.5	9	8.9	9.6	9	9.2	8.3	6.5	7	7.8	6.5	5.2	5.7	10.2	7.3	24
HOURLY MAX	13.4	13.4	12.5	13.3	15.5	14.0	14.0	12.7	12.8	13.2	16.5	16.6	16.4	15.8	14.1	16.9	17.7	15.1	14.4	14.8	15.3	14.8	15.3	15.6			
HOURLY AVG	5.1	5.2	4.8	4.5	4.8	4.9	5.2	6.3	6.8	7.2	8.1	8.6	9.2	9.2	8.7	9.1	8.4	6.6	6.0	6.0	6.2	5.8	5.7	5.3			

STATUS FLAG CODES

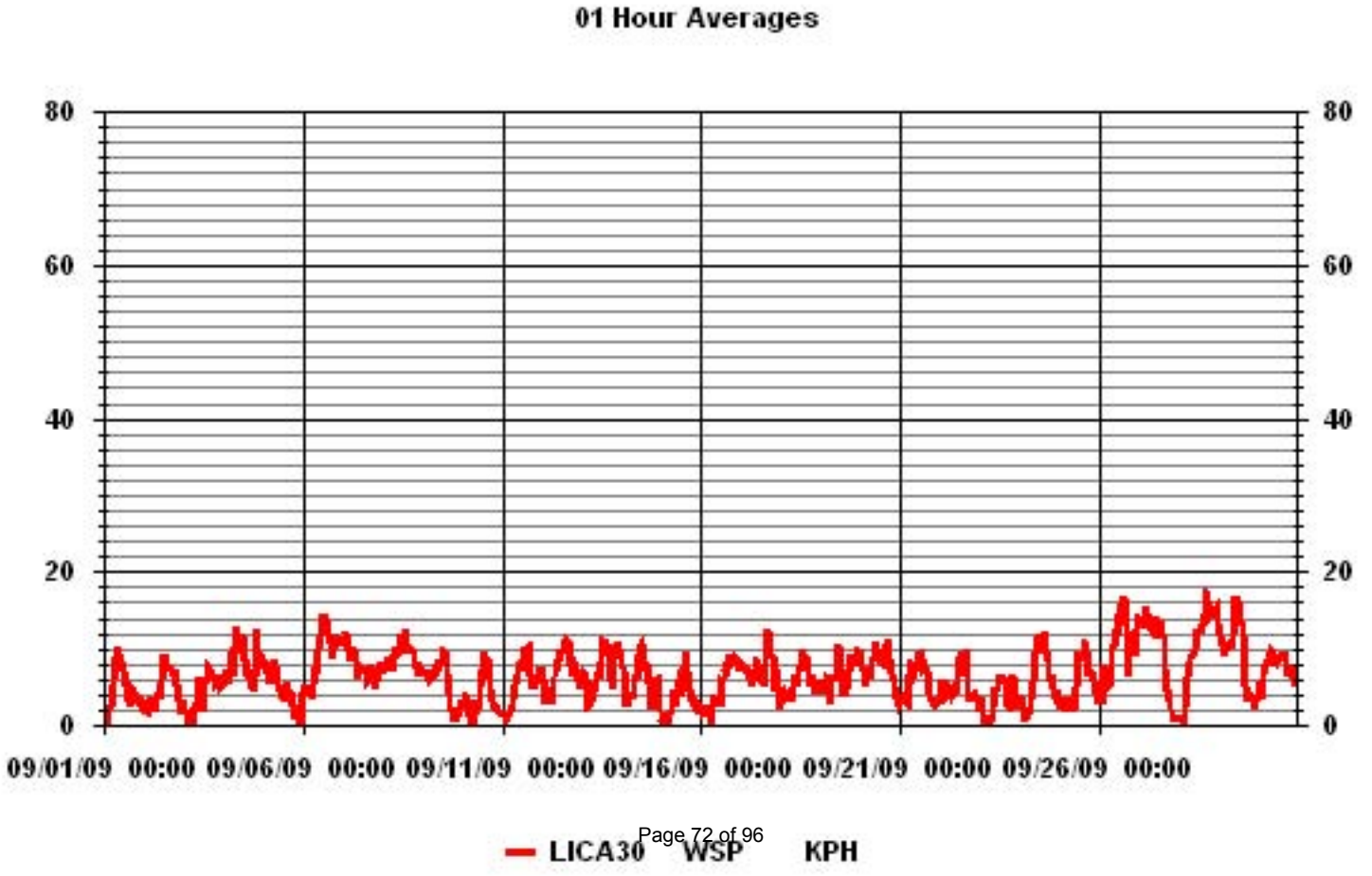
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



LAST CALIBRATION: November 7, 2007

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:			17.7	KPH	@ HOUR(S)	16	ON DAY(S) 28
MAXIMUM 24-HR AVERAGE:			10.1	KPH			ON DAY(S) 28
CALMS (≤ 1 KPH)	3.90	%	OPERATIONAL TIME:			720	HRS
MONTHLY CALIBRATION TIME:	0	HRS	AMD OPERATION UPTIME			100.0	%
STANDARD DEVIATION	3.55		MONTHLY AVERAGE			6.57	KPH


01 Hour Averages
80
60
40
20
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 WSP KPH

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

MST

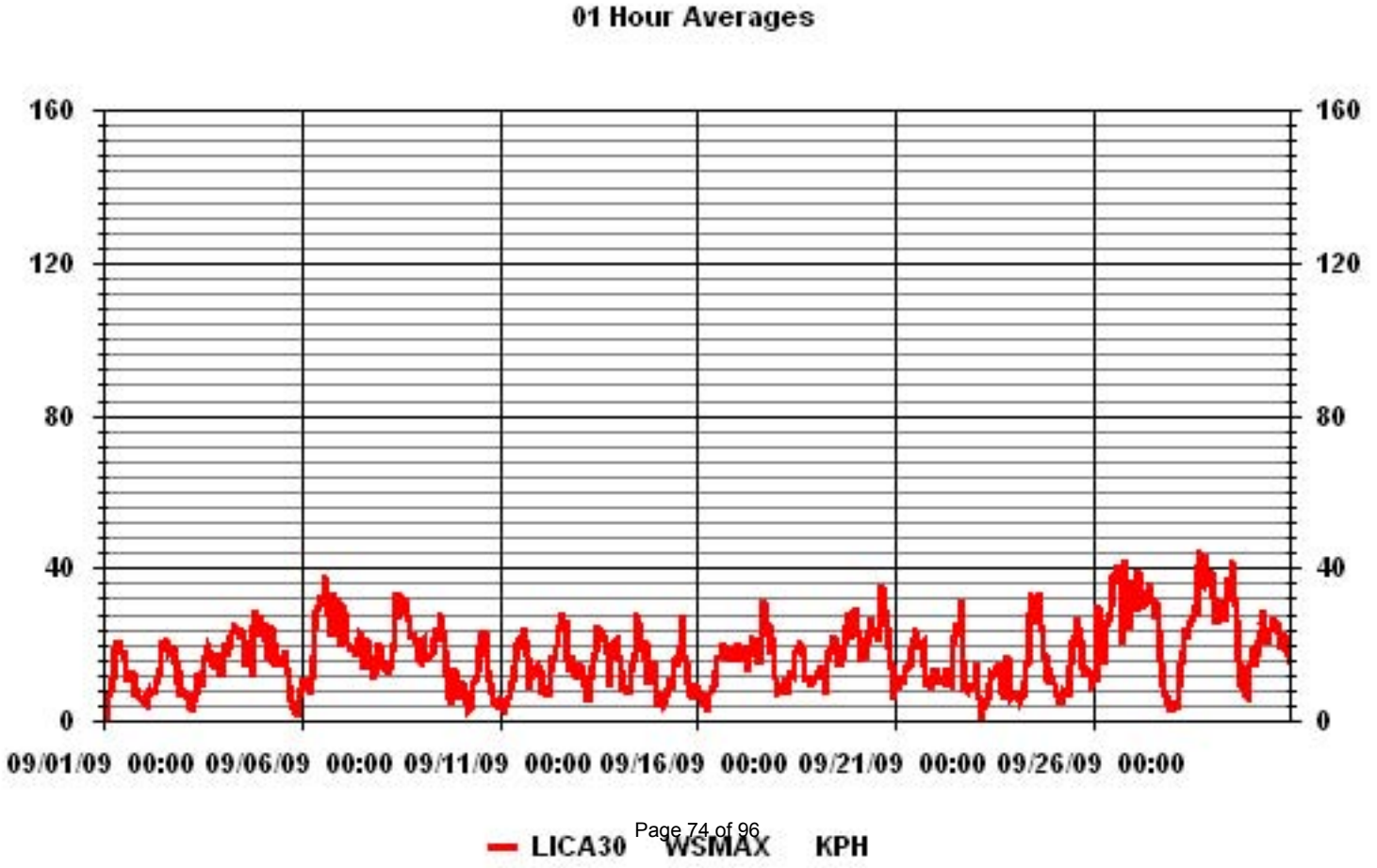
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	0.3	0.3	1.9	6	7.2	10.6	11.1	19.3	21.1	18.4	19.4	18.1	15.8	18.2	13.9	10.1	11.7	12.9	12.7	7.6	8	7	6.7	6	21.1
2	5.6	5.4	4.8	7.1	8.3	7.6	8	7.9	9.3	11.4	14	18.7	21.1	20	21.7	18	18.6	18.6	19.4	15	16.2	11.2	11.7	6.5	21.7
3	7.4	8.1	7.7	6.1	3.6	3.4	3.3	5.1	7	12.1	12.4	8.7	12.7	15.2	17.1	19.8	19.1	16.6	17.3	13	17	17.8	11.5	12.6	19.8
4	11.4	20.7	16.8	19	22.5	18.9	23.6	25.3	23.4	23.4	22.4	22.2	24.1	21.6	13.7	17	16.4	14.4	11.6	24.7	28.7	24.7	21.7	27.9	28.7
5	23.9	24.3	21.2	18.8	16.7	16.2	25.1	20.7	19.8	14.1	15.3	14.1	15.4	15.6	18.4	14.4	12.6	10	5.6	3.4	4	5.4	0.9	5.8	25.1
6	8.4	11.3	10.2	9.9	11.4	6.8	10.4	17.4	23.6	28.7	30.4	32.7	32.9	32.7	38.3	30.3	27.9	22.7	22.6	33.7	29.4	32.1	26.8	23.7	38.3
7	19	31.1	28.7	22.8	21	19.7	18.9	18.6	20	16.5	21.4	22.9	22	21.8	13.1	21.3	21.2	17.7	13.9	10.6	14.7	12.3	14	20.2	31.1
8	14.2	14	15.8	14.8	14.8	12.6	13.5	18.1	20.5	33.4	26.5	30.9	33.3	27.6	30.7	32.5	28.5	26.6	23.7	21.4	22.7	20.9	21	16.3	33.4
9	15.8	20.8	21.4	16.3	16	16.2	17.1	17.6	21.8	24.1	22.9	22.5	28.1	24.1	22	18.9	12.2	6.3	3.9	6.2	5.6	13.6	10.3	5.9	28.1
10	5.9	8.5	10.2	8.5	4.5	2.6	3.1	3.8	9.4	10.3	11.7	12.6	19.4	23.1	20	23.6	17.2	14.1	10.5	7.5	5.9	5.1	4.6	4.1	23.6
11	3.2	6.3	3	2.7	3.7	5.6	6.6	8.3	10.2	14.2	16.1	20.5	21.2	20.6	21.7	24.4	21.7	17	8.2	10.6	12.9	11.3	13.6	13.9	24.4
12	14.6	13.7	7.6	7.4	8.8	7.3	6.3	12.9	16.8	16.1	20	19.3	25.2	24.2	28.1	24.7	25.1	15.8	12.8	15.3	16.8	14.8	11.9	10.6	28.1
13	12.5	15	13	12.2	9.1	5.8	5.8	10.6	14.5	16	18.1	24.8	23.1	23.2	23.6	23	21.1	17.8	10	9.8	17.8	17.4	20.6	21	24.8
14	17.9	15.9	13.9	8.2	8.1	7.6	6.8	9.2	12.4	15.3	18.1	28.5	25.9	23.7	18.5	17	17.2	21	9	16.1	14.9	16.1	11.6	8.4	28.5
15	4.6	4.9	5.6	4	4.7	6	8.5	11	9.5	8.5	16.2	13.7	16.8	19.9	18.4	27.5	17.3	15.7	10.1	6.9	6.6	6.4	6.4	10	27.5
16	7.5	5.6	6.5	5.2	5.9	4.2	2.3	7	8.6	8.5	9.1	13	16.7	16.6	18.4	18.1	20.4	18.5	15.7	17.5	18.9	19.3	18.3	15.1	20.4
17	20.7	18.3	18.6	19	16	15.8	12.5	17.8	19.8	22.6	20.3	17.6	17.1	14.6	21.8	23.1	31.8	24.1	22	25.6	17.2	22.3	19.8	11.6	31.8
18	7.3	7.6	7.7	8.2	9.7	11	6.7	9	13.4	12.3	11.8	17.8	18.3	19.8	20.9	19.5	17.3	11.5	10.3	11.9	10.5	9.2	11.1	11.7	20.9
19	10.8	12.7	13.7	14	13.5	6.5	11.3	18.5	17.7	19.2	17.8	22.6	19.6	18.9	14.1	16.2	16.5	20	25.3	28	21.4	25.3	29.1	22.2	29.1
20	29.8	24	22.5	16.2	16.3	21	15.8	19.9	23.4	26.9	24.8	23.9	22.6	20.8	23.4	28.8	35.3	29.6	29.3	25	19.3	13.1	15.3	5.6	35.3
21	9.2	9.9	9.5	11.6	9.3	10.3	14.4	13.1	15.3	13.7	19.3	21.8	24.4	21.6	19.9	20.2	20.7	14.7	10.1	9.9	10.5	7.9	11.1	13.2	24.4
22	13.4	10.3	9.3	11.6	10.4	10.2	12.9	13	10.2	9.8	13.4	19.8	22.4	25.5	22.4	23.2	31.4	16.8	7.3	8.8	8.2	9.6	7.9	9.4	31.4
23	8.2	15.4	6.6	6.3	0.3	3.7	4	4.7	5.6	9.8	12.6	12	12.6	14.2	14.6	15.3	10.1	7.5	5.3	8.8	17.2	11.8	6	6.5	17.2
24	6.6	7.5	7.2	5	5.7	8.9	8.4	15.9	14.4	28.6	33.3	30	26.9	28.3	25.1	33.8	25.3	23.7	15.8	17.5	11.8	12.3	9.2	11.7	33.8
25	10.5	7.4	7.2	6.1	4.6	5.7	8.2	7.7	8.5	6.3	14.4	20.3	20.3	22.3	26.7	25.2	22	13.4	14.2	11.6	13.1	12.6	9	9.4	26.7
26	10.2	12.9	10	30.1	22.9	18.9	14.7	18	24.6	25.9	28	29.8	38.3	39.1	35.4	40.3	40.3	19.7	38	42.2	32.6	23.7	30.6	36.9	42.2
27	35	32.9	28.4	38.9	38.7	33.7	31.9	30.5	30.7	34.1	36.5	32.4	32.4	31.9	26.3	31.2	24.7	16	9.5	8.2	6.8	4.9	3.3	2.2	38.9
28	5.4	4.1	3.7	2.9	8.5	14.9	18.2	24.5	23.5	21.6	24.7	26.1	27.3	29.2	28.8	40.9	**44.6**	36.7	36.1	43.8	42.2	35.1	37.9	36.4	**44.6**
29	39.6	32.6	26.4	26.2	29.4	30.4	26.5	31.6	26	30.8	37.6	36.4	42	33	30.2	27	15.9	9.6	9.6	8.9	7	6.6	14.3	14.8	42
30	19.1	14	19.5	16.3	20.7	23.5	25.4	29	22.9	20.2	22	23.5	24.3	26.8	24.3	26.2	23.4	21.6	18.7	19.5	23.3	18.8	17.3	15.3	29
PEAK	39.6	32.9	28.7	38.9	38.7	33.7	31.9	31.6	30.7	34.1	37.6	36.4	42.0	39.1	38.3	40.9	44.6	36.7	38.0	43.8	42.2	35.1	37.9	36.9	

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

MAXIMUM INSTANTANEOUS READING	44.6	KPH	@ HOUR(S)	16
			ON DAY(S)	28


01 Hour Averages
160
120
80
40
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 WSMAX KPH

LICA30
WSP / WDR Joint Frequency Distribution (Percent)

September 2009

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	.27	1.11	3.75	4.30	3.19	1.80	1.66	1.80	2.77	3.61	6.80	4.58	3.05	2.22	1.52	.83	43.33
<	12.0	.69	.00	1.66	2.36	1.66	3.05	3.19	4.16	3.47	7.22	4.44	2.36	2.63	4.86	4.72	1.94	48.47
<	20.0	.00	.00	.00	.00	.13	1.25	1.94	.41	.00	.27	.00	.13	.00	2.50	1.25	.00	7.91
<	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	.97	1.11	5.41	6.66	5.00	6.11	6.80	6.38	6.25	11.11	11.25	7.08	5.69	9.58	7.50	2.77	

Calm : .27 %

Total # Operational Hours : 720

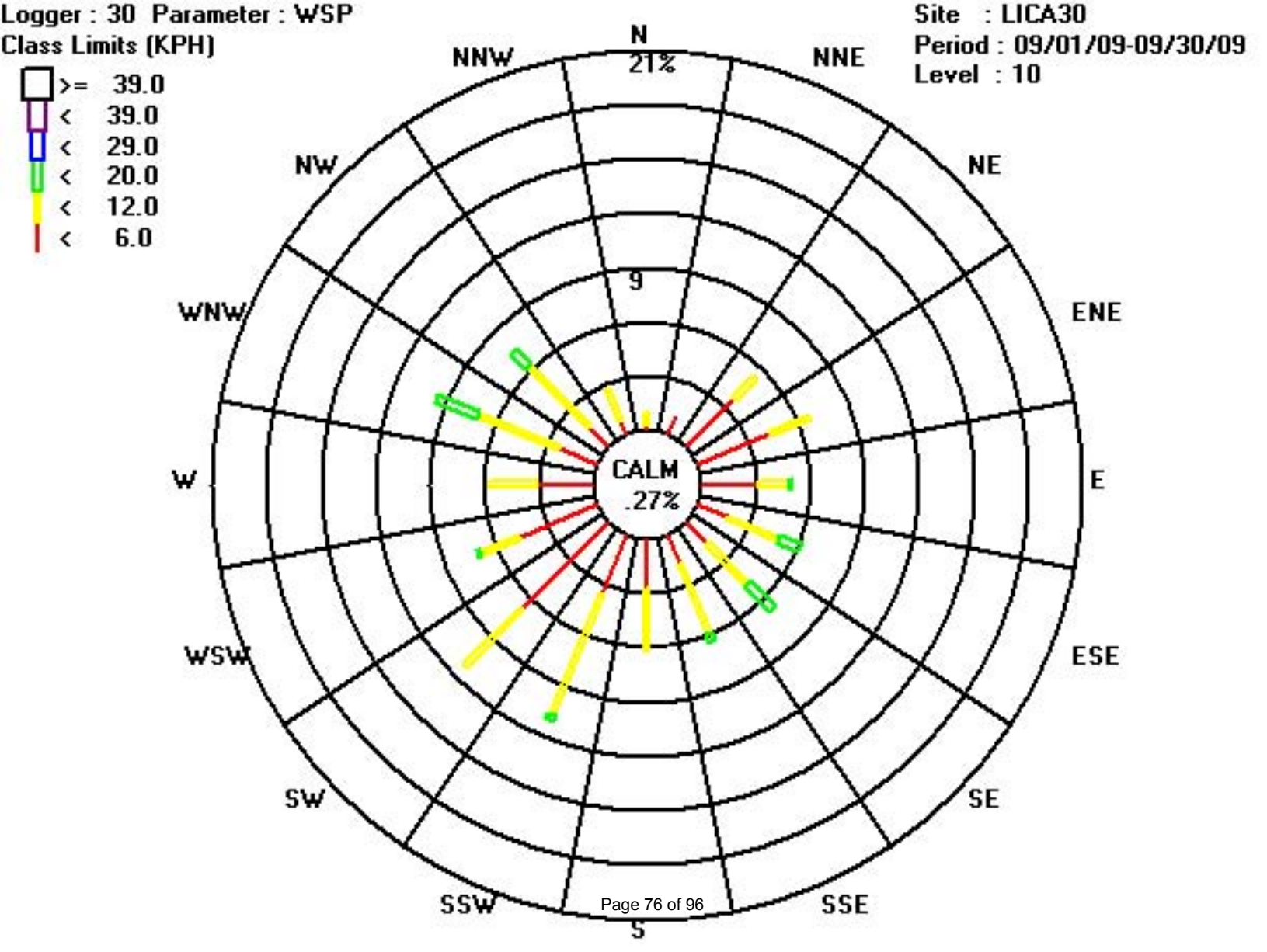
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	2	8	27	31	23	13	12	13	20	26	49	33	22	16	11	6	312
<	12.0	5		12	17	12	22	23	30	25	52	32	17	19	35	34	14	349
<	20.0					1	9	14	3		2		1		18	9		57
<	29.0																	
<	39.0																	
>=	39.0																	
	Totals	7	8	39	48	36	44	49	46	45	80	81	51	41	69	54	20	

Calm : .27 %

Total # Operational Hours : 720


Logger : 30 Parameter : WSP
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA30
Period : 09/01/09-09/30/09
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9
CALM
.27%

Vector Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - MASKWA

SEPTEMBER 2009

WIND DIRECTION hourly averages in degrees

MST

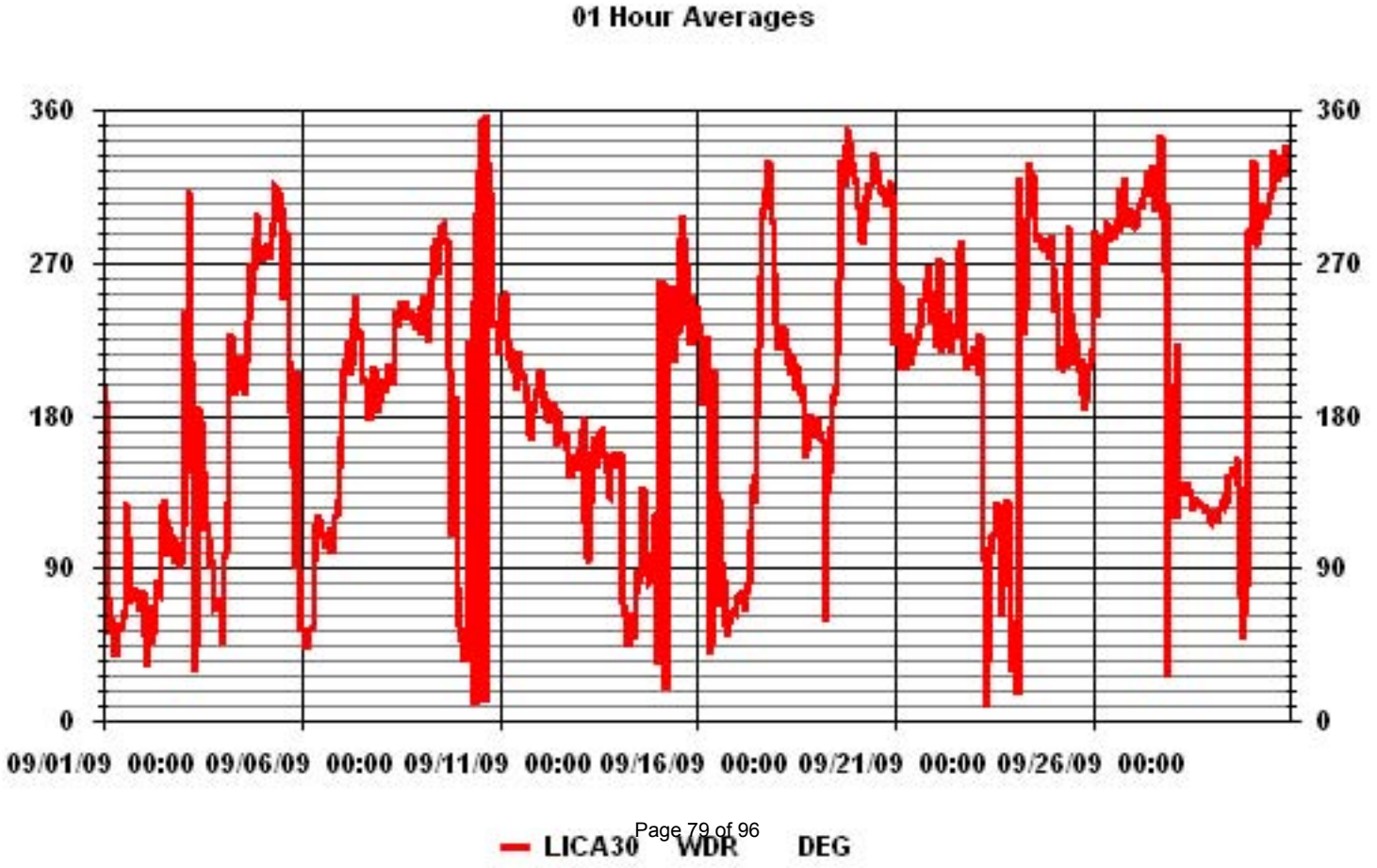
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	196	189	51	74	62	58	46	37	52	53	58	54	65	59	129	110	69	77	75	78	75	71	65	69	62	ENE	24
2	77	50	31	47	58	45	68	50	83	75	74	119	127	131	120	97	114	108	108	93	99	105	89	93	97	E	24
3	103	115	241	146	313	213	158	28	44	46	185	178	142	148	112	117	108	90	95	67	68	64	67	73	94	E	24
4	45	95	99	129	212	229	201	192	196	197	203	215	196	194	194	211	236	270	251	266	285	299	282	277	218	SW	24
5	270	279	276	282	280	272	285	294	316	315	300	311	304	248	278	289	284	214	182	150	98	90	206	91	282	W	24
6	54	54	52	42	48	53	54	56	93	115	122	119	113	109	101	105	110	114	98	105	120	121	130	148	104	ESE	24
7	168	189	207	213	223	213	203	209	237	250	224	231	226	204	199	201	185	177	195	192	209	194	182	187	204	SSW	24
8	192	202	198	194	197	210	202	197	209	242	231	236	242	247	244	245	236	238	240	242	237	237	230	239	225	SW	24
9	227	245	251	239	234	222	243	261	280	263	284	263	280	291	292	280	284	244	207	108	167	149	191	80	259	WSW	24
10	56	47	34	45	35	62	224	209	247	9	300	285	325	354	356	10	357	331	313	250	236	232	235	215	345	NNW	24
11	235	250	245	227	254	225	216	217	210	206	194	213	218	203	206	202	198	188	170	165	181	188	191	196	200	SSW	24
12	206	208	195	185	181	179	176	187	186	186	167	162	184	168	164	168	168	161	148	143	151	157	152	147	170	SSE	24
13	160	169	168	180	118	97	93	127	159	168	149	160	169	170	171	155	159	147	133	132	149	151	158	156	156	SSE	24
14	156	149	158	70	62	48	43	56	52	64	48	74	89	80	109	138	129	89	87	81	82	99	121	33	91	E	24
15	123	259	82	170	260	18	252	235	252	257	210	246	228	229	284	298	286	271	234	223	223	251	244	236	252	WSW	24
16	244	235	225	185	194	202	227	39	45	51	207	137	67	115	130	95	85	56	50	57	61	64	65	64	77	ENE	24
17	68	73	74	70	73	64	74	81	113	140	128	145	179	219	263	296	302	312	326	330	306	295	293	266	22	NNE	24
18	234	221	220	220	224	232	221	211	203	216	209	194	210	197	191	199	189	154	159	169	166	181	178	173	196	SSW	24
19	179	167	171	167	165	63	59	134	146	174	186	192	197	215	260	330	316	316	340	350	326	341	331	322	245	WSW	24
20	318	306	302	284	281	294	310	307	316	316	326	335	325	320	321	310	316	310	302	314	310	318	311	221	311	NW	24
21	237	259	254	258	207	211	210	214	228	210	219	216	221	225	233	231	249	247	253	259	269	241	235	253	229	SW	24
22	245	219	235	273	217	220	226	238	239	222	217	228	228	234	259	279	283	270	217	206	217	214	213	221	236	SW	24
23	215	220	203	229	208	93	102	8	35	42	98	109	111	120	129	117	61	88	79	111	130	86	39	28	105	ESE	24
24	60	32	15	321	270	227	239	242	296	329	320	323	307	288	282	287	285	279	277	284	280	271	284	284	296	WNW	24
25	269	240	252	216	210	209	221	208	269	292	242	209	229	225	223	209	210	193	182	189	192	206	211	219	215	SSW	24
26	250	289	237	286	279	286	270	272	295	290	282	288	287	292	295	288	314	293	307	320	302	291	295	302	292	WNW	24
27	294	291	292	301	305	301	308	314	321	321	324	309	328	314	300	306	332	346	297	264	306	26	184	186	308	NW	24
28	199	157	118	222	132	135	134	134	140	135	137	133	124	127	129	130	129	127	127	122	128	125	118	117	128	SE	24
29	122	122	118	118	124	125	129	127	130	127	146	143	148	148	146	155	139	74	47	62	70	79	289	291	130	SE	24
30	301	330	282	280	288	290	305	300	296	303	298	307	312	337	327	323	318	334	331	329	320	340	338	335	312	NW	24
HOURLY AVG	318	330	302	321	313	301	310	314	321	329	326	335	328	354	356	330	357	346	340	350	326	341	338	335			

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:	November 7, 2007
DECLINATION :	19 DEGREES FROM MAGNETIC NORTH

MONTHLY CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	720	HRS
STANDARD DEVIATION	85.93		AMD OPERATION UPTIME	100.0	%
			MONTHLY AVERAGE	210	DEG


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 WDR DEG

Standard Deviation Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *MASKWA*

SEPTEMBER 2009

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	15	23	42	22	27	14	13	9	18	20	27	35	43	37	45	64	26	22	17	11	13	13	11	12
2	16	27	38	15	20	24	36	22	26	45	33	37	31	28	35	29	25	27	24	26	23	25	30	58
3	16	33	28	38	62	24	19	34	51	21	51	69	46	39	37	28	31	25	23	20	20	19	22	22
4	14	27	27	25	19	29	15	15	13	16	16	21	19	25	19	20	28	30	23	31	22	29	24	26
5	28	29	32	27	30	29	25	27	30	31	44	47	58	56	36	46	38	18	7	38	33	21	30	46
6	16	17	17	35	28	22	19	18	34	32	31	27	30	31	30	31	28	23	30	28	26	26	24	15
7	14	15	16	16	18	16	10	15	24	36	25	32	29	35	21	43	15	14	14	10	16	9	11	15
8	13	11	9	9	11	9	10	11	17	28	20	26	24	28	27	28	24	23	23	26	23	23	21	22
9	19	27	28	22	21	16	26	30	29	33	30	35	27	29	23	29	24	19	40	37	52	46	53	13
10	19	32	34	17	40	59	42	36	42	40	40	27	33	29	31	25	28	35	32	30	23	18	15	15
11	13	19	25	23	24	19	22	18	20	19	16	31	24	20	22	19	14	14	10	9	12	10	10	11
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13	11	12	12	13	20	34	13	16	25	29	30	28	20	23	20	20	17	18	10	10	12	13	14	13
14	13	17	12	33	14	16	12	20	19	30	22	24	32	28	31	19	21	32	16	28	28	24	28	36
15	49	60	55	49	47	58	42	21	35	35	25	53	33	33	40	24	25	27	19	15	17	27	23	30
16	34	23	26	15	24	32	41	11	27	43	61	59	30	26	30	31	26	17	14	16	18	18	17	17
17	20	32	34	30	23	21	26	25	31	28	33	35	29	39	29	27	24	27	31	28	30	27	27	31
18	17	10	10	11	14	24	17	14	14	21	22	20	26	21	23	20	17	13	9	11	11	16	11	14
19	18	28	20	17	21	23	27	28	32	29	20	17	21	25	49	32	35	25	31	28	28	28	27	31
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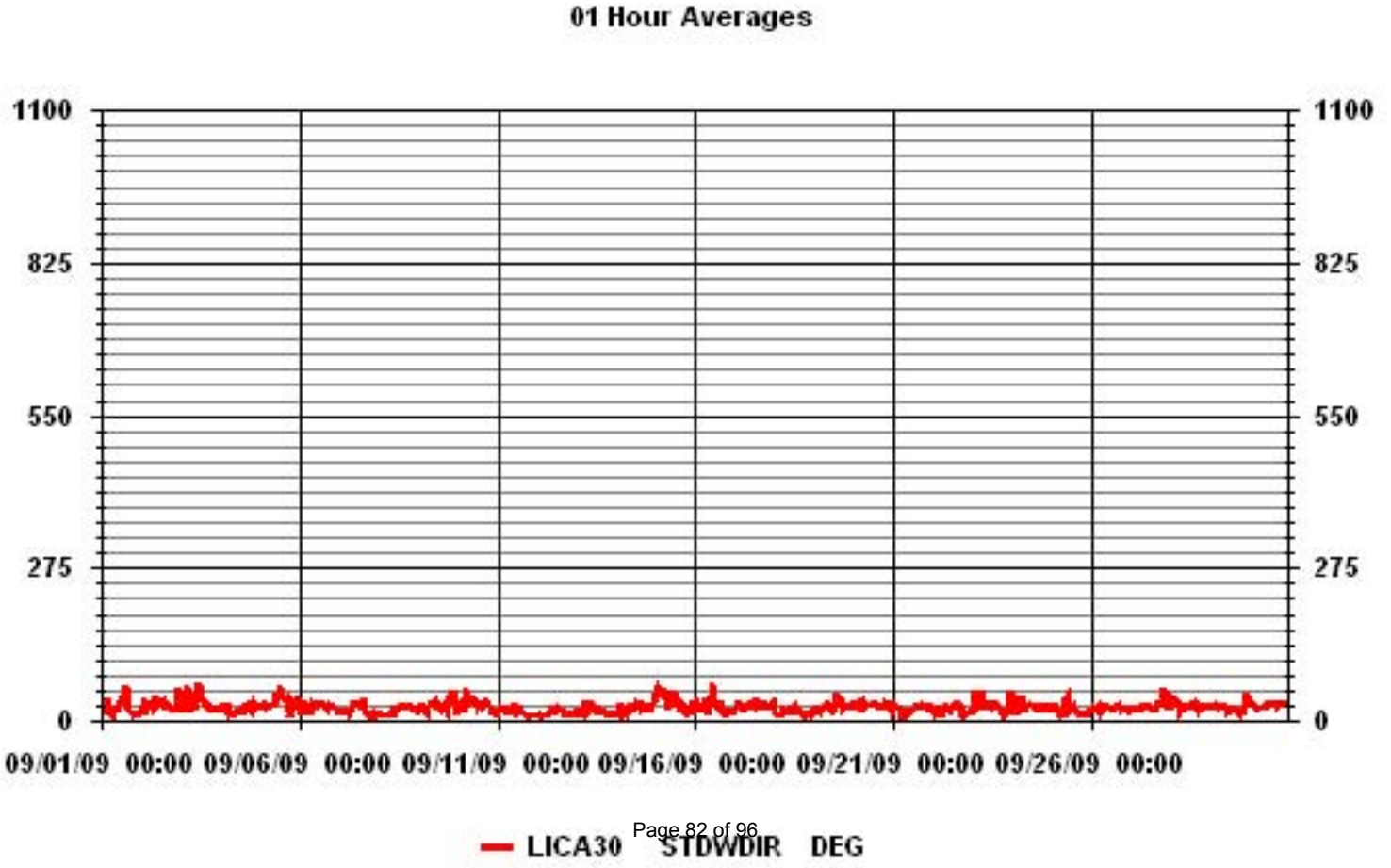
21	23	27	26	23	22	8	8	14	19	15	19	20	22	27	26	26	30	25	23	24	27	22	22	26
22	20	14	20	27	14	14	18	25	27	24	20	25	27	26	32	32	27	26	13	10	14	14	16	17
23	18	40	35	53	47	49	33	37	33	19	36	27	33	30	32	26	25	18	16	10	15	23	35	53
24	19	18	23	46	38	40	23	26	23	30	32	30	28	27	27	22	26	22	26	22	22	27	25	23
25	28	25	28	22	19	11	15	14	41	47	33	21	24	28	23	21	16	11	12	12	14	13	13	20
26	22	28	25	22	27	19	26	28	24	26	25	26	24	21	24	24	23	28	22	24	22	21	22	19
27	21	21	20	21	21	22	21	26	26	27	28	23	27	24	25	24	33	34	30	30	58	37	40	20
28	29	46	38	34	41	15	19	25	21	23	27	26	29	24	24	29	21	28	24	22	22	25	26	25
29	28	28	26	29	24	29	28	25	27	27	18	23	19	21	20	20	20	17	13	20	14	38	47	36
30	23	34	28	27	23	22	23	24	24	28	26	30	31	31	32	30	26	30	33	30	29	30	32	30

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 7, 2007

CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 720 HRS


01 Hour Averages
1100
825
550
275
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA30 STDWDIR DEG

Calibration Reports

Sulphur Dioxide

SO_2 Calibration Report

Station Information

Calibration Date	September 14, 2009		Previous Calibration	August 25, 2009	
Company	**Lakeland Industry & Community Association**				
Plant / Location	**Cold Lake - Maskwa**				
Start Time (MST)	8:30		End Time (MST)	12:40	
Reason:	Monthly Calibration				
Barometric Pressure	940	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:	Environics 2000	`	1991	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	AO 791		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 -1000	ppb				
Sample Flow / Box Temp	610	ccm	32.4	Deg C	610	ccm	33.9	Deg C
HVPS / Lamp Setting	522		3604		522		3602	
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	28.7		1.109		30.1		1.075	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
5014.0	0	0	1	N/A
5014.0	0	0	0	N/A
4940.0	77.8	809	835	0.9693
4940.0	77.8	809	809	1.0004
4981.0	38.9	405	405	0.9988
5003.0	19.4	202	200	1.0082
5019.0	0	0	1	N/A
			Sum of Least Squares	1.0005
			New Correction Factor	1.0004

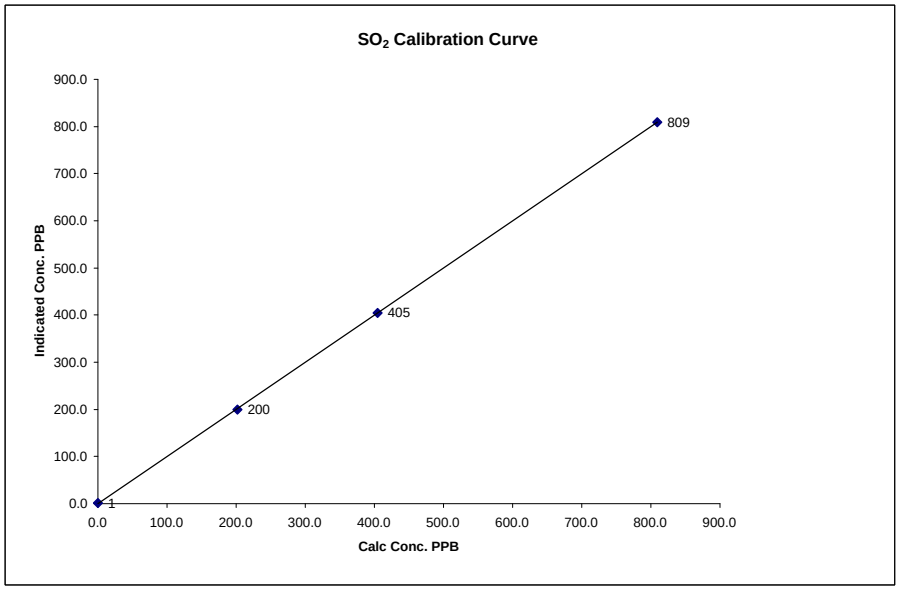
	Before Calibration	After Calibration
Auto Zero	1.0	0.1
Auto Span	625.0	607.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		3.1%

Calibration Performed by: Shea Beaton

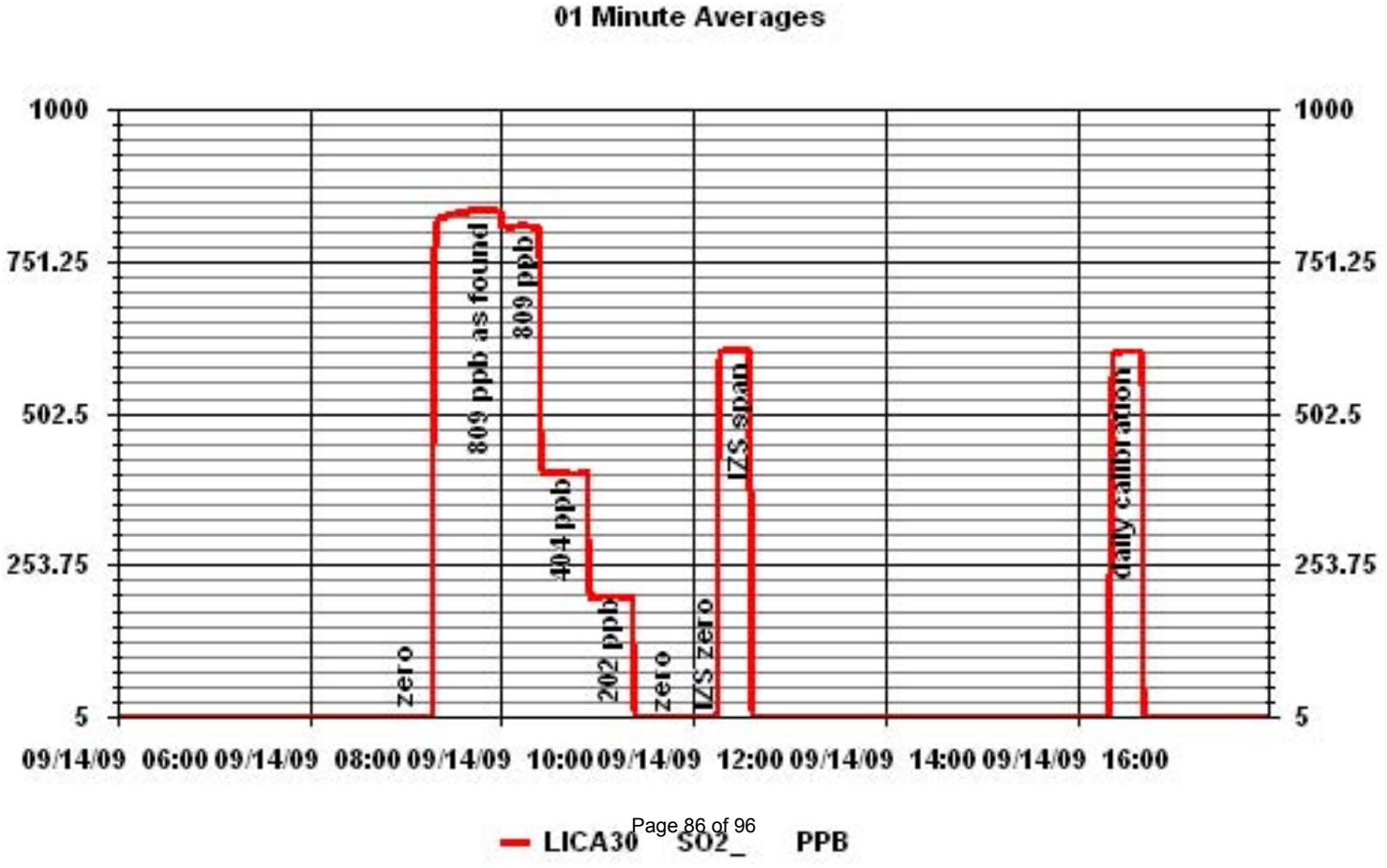
SO_2 Calibration Curve

Calibration Date	September 14, 2009			
Company	**Lakeland Industry & Community Association**			
Plant / Location	**Cold Lake - Maskwa**			
Start Time (MST)	8:30	End Time (MST)	12:40	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999989
			Slope (0.85 to 1.15)	0.999330
0	1	n/a	Intercept (± 3% F.S.)	0.114629
202	200	1.0082		
405	405	0.9988		
809	809	1.0004		



Notes: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1000
751.25
502.5
253.75
5
zero
809 ppb as found
809 ppb
404 ppb
202 ppb
zero
LZS zero
LZS span
daily calibration
09/14/09 06:00 09/14/09 08:00 09/14/09 10:00 09/14/09 12:00 09/14/09 14:00 09/14/09 16:00
LICA30 SO2_ PPB

Hydrogen Sulphide

H_2S Calibration Report

Station Information

Calibration Date	September 14, 2009		Previous Calibration	August 26, 2009	
Company	**Lakelnad Industry & Community Association**				
Plant / Location	**Cold Lake - Maskwa**				
Start Time (MST)	8:30		End Time (MST)	12:40	
Reason:	Monthly Calibration				
Barometric Pressure	940	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	529	ccm	33.9	Deg C	524	ccm	36.2	Deg C
HVPS / Lamp Setting	532		3020		532		3017	
PMT / RxCell Temp	7.9	Deg C	50	Deg C	7.9	Deg C	50	Deg C
Converter / IZS Temp	314.5	Deg C	45	Deg C	315.1	Deg C	45	Deg C
Offset / Slope	24.1		1.075		24.1		1.078	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4998	0	0	0	N/A
4961	37	80	79	1.0121
4961	37	80	80	0.9994
4978	21.2	46	45	1.0178
4988	11.6	25	25	1.0023
4998	0	0	0	N/A
			Sum of Least Squares	1.0038
			New Correction Factor	0.9994

	Before Calibration	After Calibration
Auto Zero	0.0	0.1
Auto Span	60.0	60.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		-1.3%

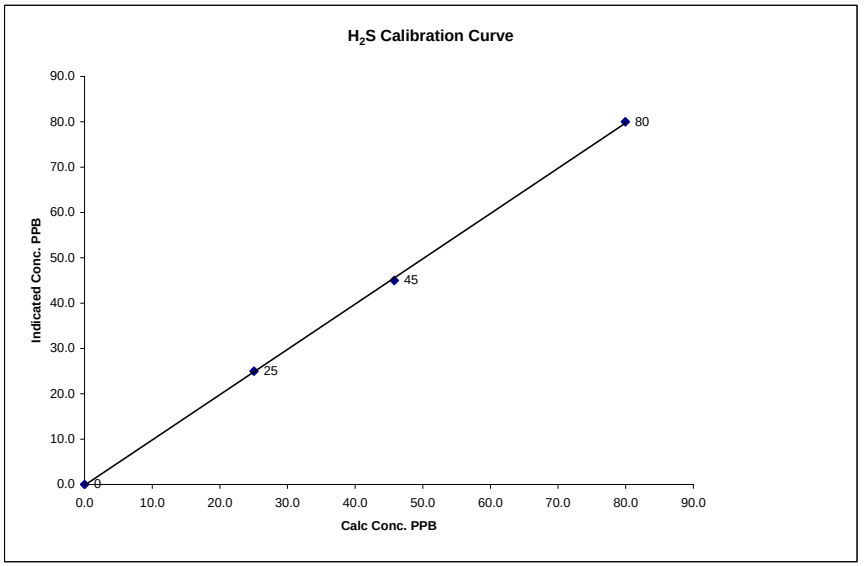
Calibration Performed by: Shea Beaton

H_2S Calibration Curve

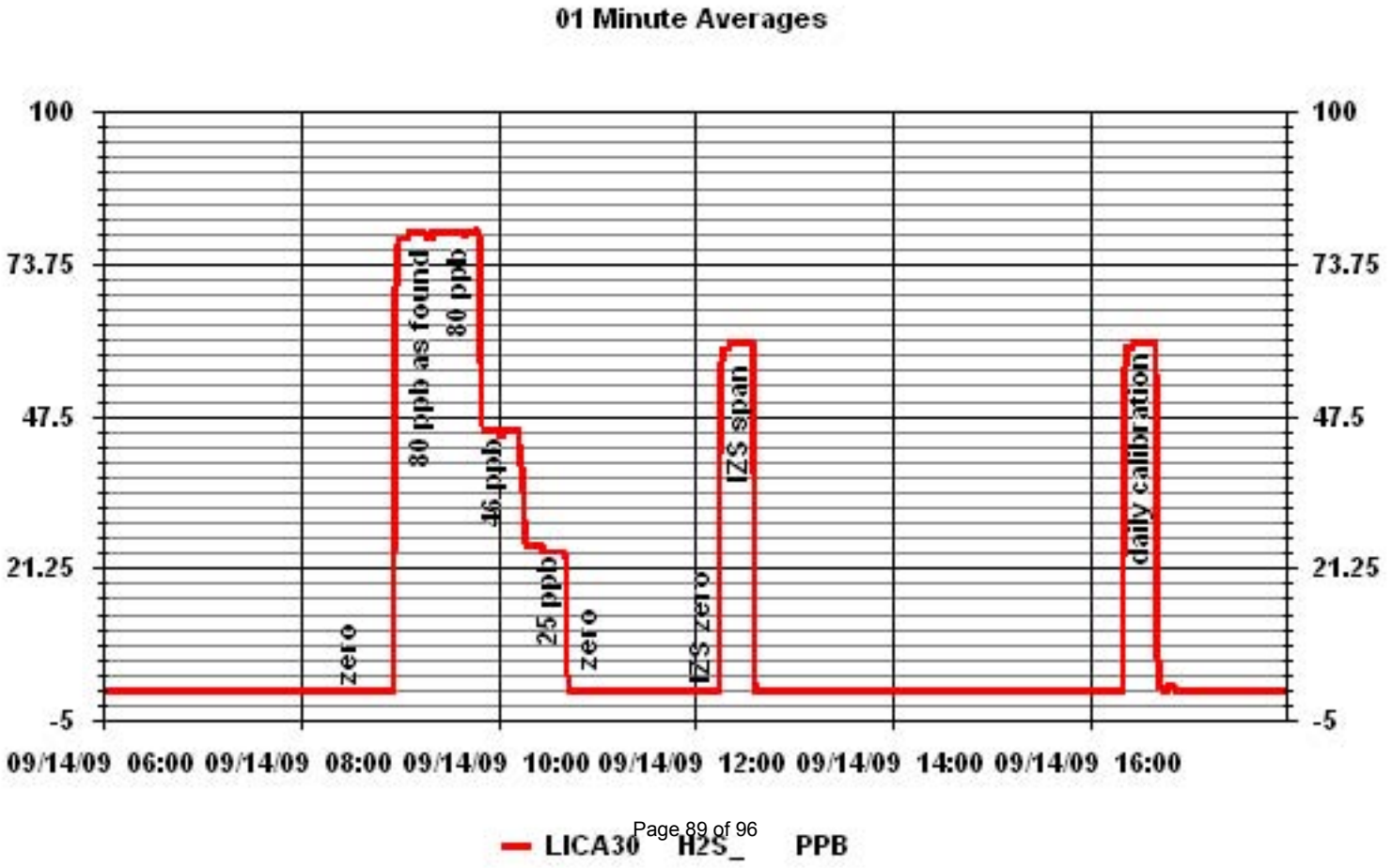
Calibration Date	September 14, 2009		
Company	**Lakelnad Industry & Community Association**		
Plant / Location	**Cold Lake - Maskwa**		
Start Time (MST)	8:30	End Time (MST)	12:40

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
25	25	1.0023
46	45	1.0178
80	80	0.9994

Correlation Coefficient	(≥ 0.995)	0.999861
Slope	(0.85 to 1.15)	0.998919
Intercept	(± 3% F.S.)	-0.161572



Notes: Multi-point cal finished at 11:07. The daily cal was completeed at 12:40.


01 Minute Averages
100
73.75
47.5
21.25
-5
zero
80 ppb as found
80 ppb
46 ppb
25 ppb
zero
IZS zero
IZS span
daily calibration
09/14/09 06:00 09/14/09 08:00 09/14/09 10:00 09/14/09 12:00 09/14/09 14:00 09/14/09 16:00
LICA30 H2S_ PPB

Total Hydrocarbons

THC Calibration Report

Station Information

Calibration Date:	September 14, 2009	Previous Calibration	August 26, 2009
Company:	**Lakeland Industry & Community Association**		
Plant / Location:	**Cold Lake - Maskwa**		
: (MST)	11:30	End Time (MST)	14:45
Reason:	Monthly Calibration		
Barometric Pressure:	940 mBar	Station Temperature:	25 Deg C
Calibrator:	API 700	S/N:	831
Cal Gas Concentration:	299 Prop/ 1019 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
3000	0.0	0.0	0.0	N/A
3000	65.0	39.0	38.8	1.0064
3000	65.0	39.0	39.2	0.9961
3000	35.0	21.2	21.1	1.0063
3000	20.0	12.2	12.1	1.0077
3000	0	0.0	0.0	N/A
			Correction Factor:	0.9961

Previous Calibration Correction Factor:	0.9976	
Current Correction Factor Before Span Adjust:	0.9961	
Percent Change:	0.15%	

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	0.0	0.0
Auto Span	34.3	45.4
Sample Lines Connected		YES

Cylinder Pressures		
Span	2000	psi
Hydrogen	700	psi
Zero Air	-	psi

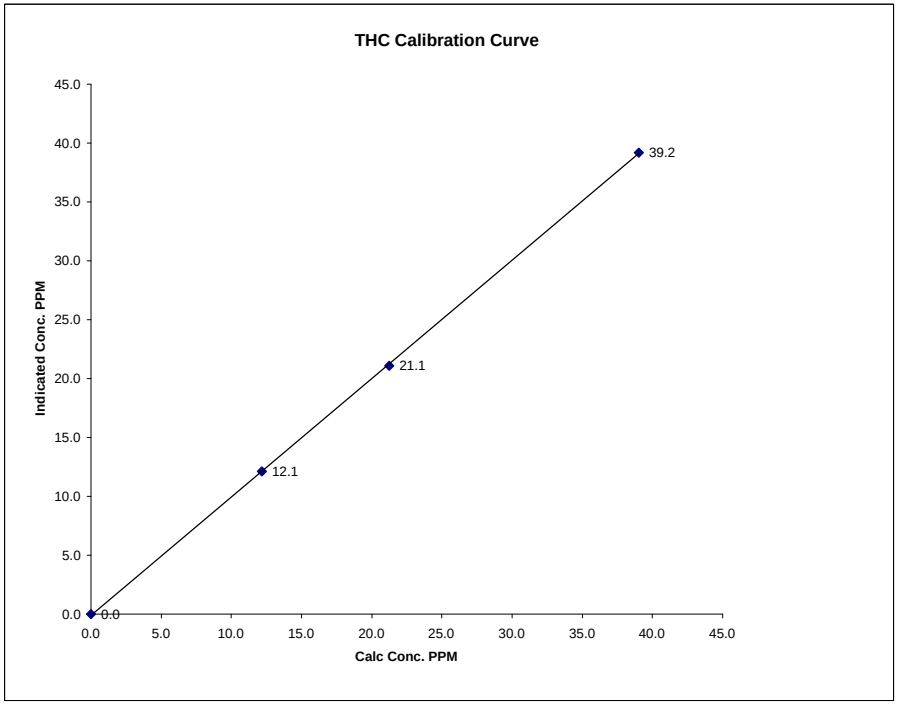
Calibration Performed by: Shea Beaton

THC Calibration Curve

Calibration Date	September 14, 2009		
Company	**Lakeland Industry & Community Association**		
Plant / Location	**Cold Lake - Maskwa**		
Start Time (MST)	11:30	End Time (MST)	14:45

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	0.0	
12.2	12.1	1.0077
21.2	21.1	1.0063
39.0	39.2	0.9961

Correlation Coefficient	(≥ 0.995)	0.999958
Slope	(0.85 to 1.15)	1.004101
Intercept	(± 3% F.S.)	-0.093044



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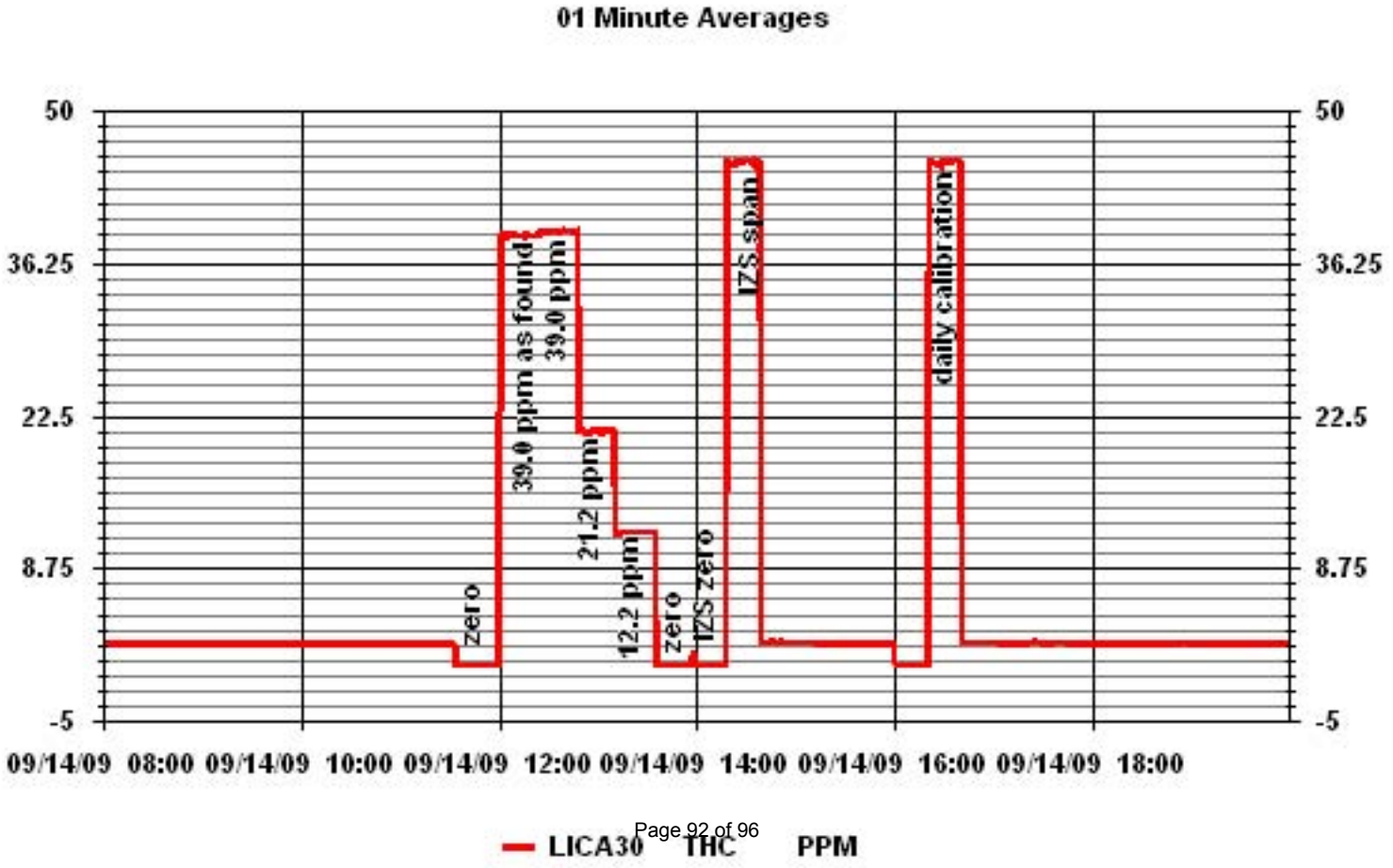

01 Minute Averages
50
36.25
22.5
8.75
-5
zero
39.0 ppm as found
39.0 ppm
21.2 ppm
12.2 ppm
zero
IZS zero
IZS span
daily calibration
09/14/09 08:00
09/14/09 10:00
09/14/09 12:00
09/14/09 14:00
09/14/09 16:00
09/14/09 18:00
LICA30 THC PPM

Nitrogen Dioxide

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	September 14, 2009		Previous Calibration	August 25, 2009	
Company	**LICA**		Plant/Location	**Cold Lake - Maskwa**	
Start Time (MST)	8:30		End Time (MST)	17:04	
Reason:	Monthly Calibration				
Barometric Pressure	940 mBar		Station Temperature	25.0	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 :	594	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	AO 791		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range			0 - 1000	ppb				
Sample Flow/Conv. Temp	458	ccm	314	Deg C	458	ccm	314	Deg C
Ozone Flow / Vacuum	76	ccm	4.2	"Hg-A	76	ccm	4.2	"Hg-A
HVPS	767		Volts		767		Volts	
Rx/ Temp / PMT Temp	50	Deg C	6.6	Deg C	50	Deg C	6.6	Deg C
Box Temp / IZS Temp	34.5	Deg C	45	Deg C	33.9	Deg C	45	Deg C
Offset	9	NOx	0.6	NO	0.9	NOx	0.6	NO
Slope	1.137	NOx	1.133	NO	1.172	NOx	1.164	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
5014.0	0	N/A	0	0	-1	-1	0	N/A	N/A
4940.0	77.8	N/A	803	800	779	780	-1	1.0310	1.0257
4940.0	77.8	N/A	803	800	804	801	3	0.9989	0.9988
4981.0	38.9	N/A	401	400	403	402	2	0.9960	0.9947
5003.0	19.4	N/A	200	199	200	200	0	1.0004	0.9966
5019.0	0	N/A	0	0	0	0	0	N/A	N/A
								Converter Efficiency	
4943.0	77.8	N/A	803	800	811	807	4	N/A	
4943.0	77.8	400	803	N/A	811	420	391	100%	
4943.0	77.8	200	803	N/A	813	613	200	101%	
4943.0	77.8	100	803	N/A	814	714	100	103%	
4943.0	77.8	N/A	803	800	815	812	4	N/A	
								Correction Factor	
5022.0	0	N/A	0	0	1	0	-1	N/A	N/A

Linearity OK?	**Yes**	No	Sum of Least Squares	0.9985	0.9979
Flows Checked on-site?	Yes	**No**	New Correction Factor	0.9989	0.9988
			Average Converter Efficiency	101%	

	Before Calibration				After Calibration			
Auto Zero	-0.2	NOx	-0.3	NO2	-0.2	NOx	-0.2	NO2
Auto Span	699.0	NOx	689.0	NO2	714.0	NOx	703.0	NO2
Sample Lines Connected					YES			
Percent Change from Previous Calibration					*NOx*	-2.7%	*NO*	-2.5%

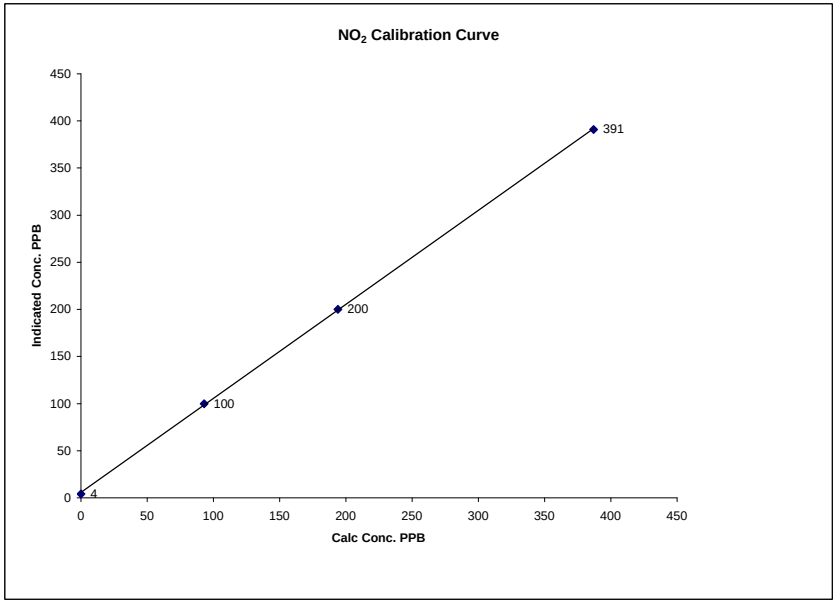
Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	September 14, 2009		
Company	**LICA**		
Plant / Location	**Cold Lake - Maskwa**		
Start Time (MST)	8:30	End Time (MST)	17:04

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	4	N/A
93	100	0.9300
194	200	0.9700
387	391	0.9898

Correlation Coefficient	(≥ 0.995)	0.999922
Slope	(0.85 to 1.15)	0.997872
Intercept	(± 3% F.S.)	5.608511

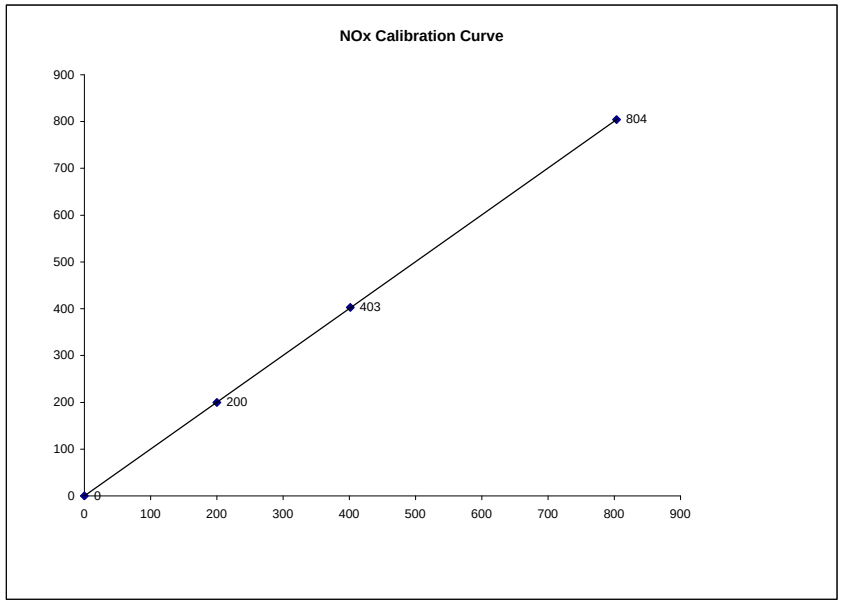


Notes: GPT portion of cal was repeated, converter efficiency of last point on initial GPT was too high. Initial O3 concentration selected for first GPT point was incorrect, problem corrected, point repeated.

NOx Calibration Curve

Calibration Date	September 14, 2009				
Company	LICA				
Plant / Location	Cold Lake - Maskwa				
Start Time (MST)	8:30	End Time (MST)	17:04		

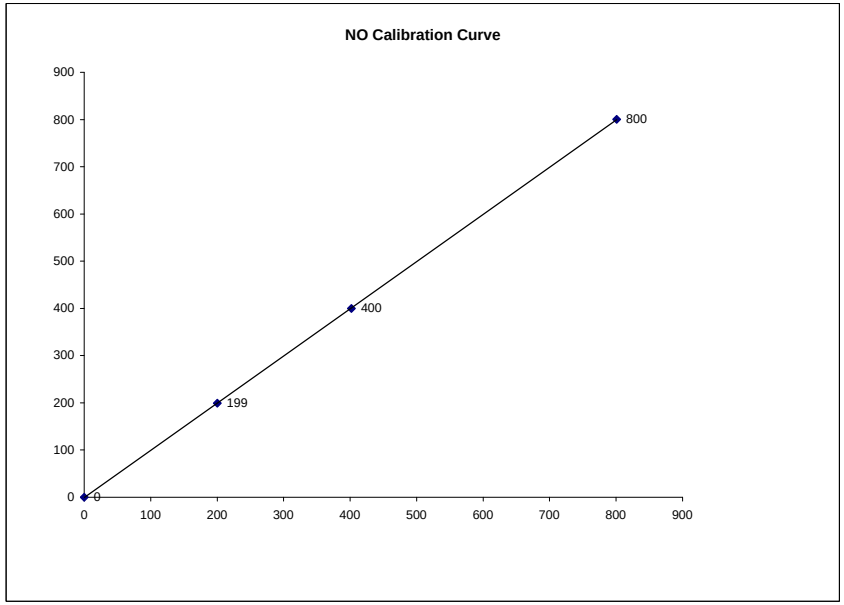
Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999997
			Slope (0.85 to 1.15)	1.001354
0	0	N/A	Intercept (± 3% F.S.)	0.113687
200	200	1.0004		
401	403	0.9960		
803	804	0.9989		

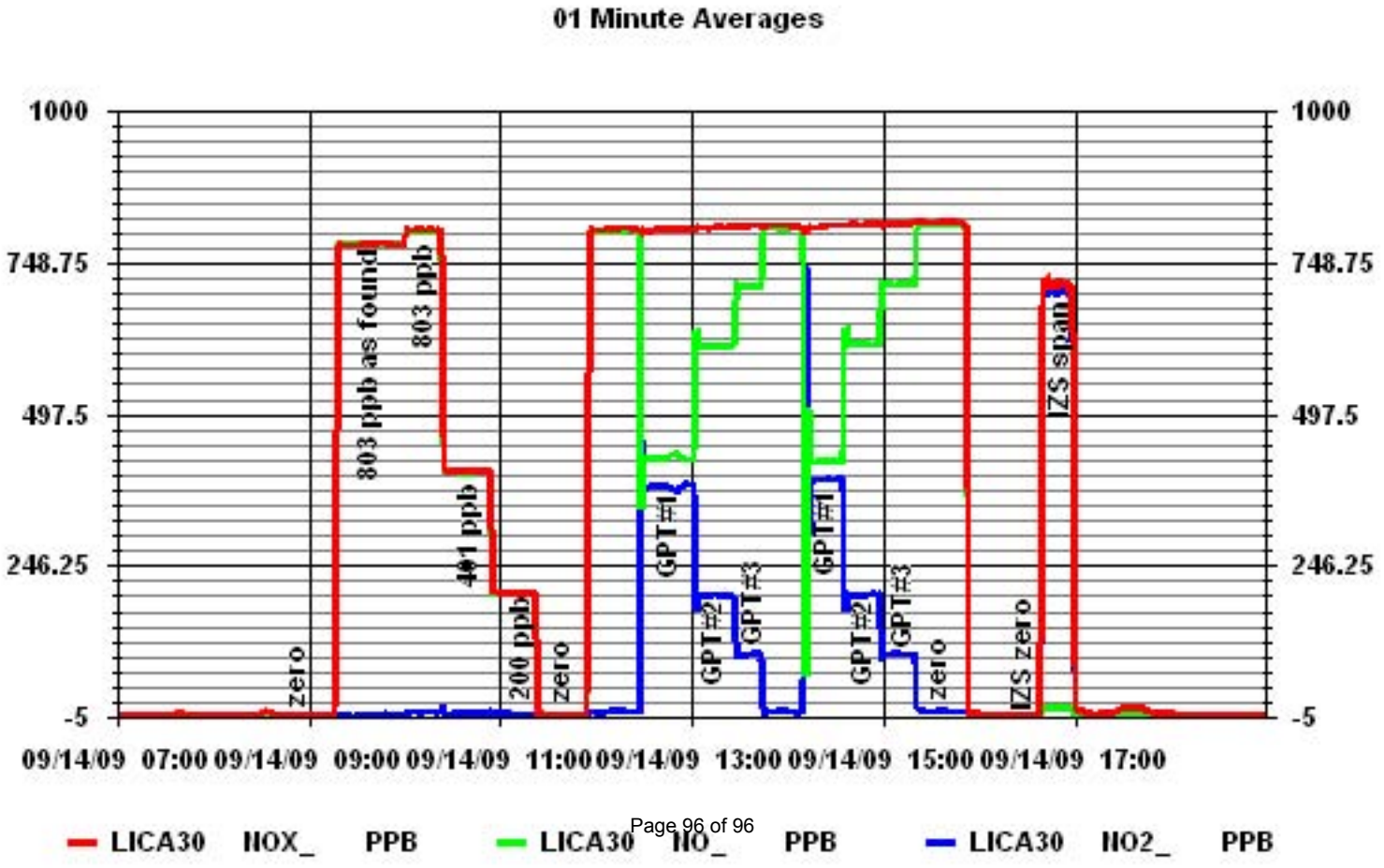


NO Calibration Curve

Calibration Date	September 14, 2009				
Company	LICA				
Plant / Location	Cold Lake - Maskwa				
Start Time (MST)	8:30	End Time (MST)	17:04		

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999995
			Slope (0.85 to 1.15)	1.001236
0	0	N/A	Intercept (± 3% F.S.)	0.512749
199	200	0.9966		
400	402	0.9947		
800	801	0.9988		




01 Minute Averages
1000
748.75
497.5
246.25
-5
zero
803 ppb as found
803 ppb
401 ppb
200 ppb
zero
GPT#1
GPT#2
GPT#3
GPT#1
GPT#2
GPT#3
zero
IZS zero
IZS span
09/14/09 07:00
09/14/09 09:00
09/14/09 11:00
09/14/09 13:00
09/14/09 15:00
09/14/09 17:00
LICA30 NOX_ PPB
LICA30 NO_ PPB
LICA30 NO2_ PPB

Lakeland Industry & Community Association

St. Lina Monitoring Site
Ambient Air Monitoring
Data Report
For
September 2009

Prepared By:

Maxxam Analytics

Driven by Service and Science

October 16, 2009

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: September 2009

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 – September 2009

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	0.12	4	18	11	13	183(S)	0.8	18	99.7
H2S (PPB)	10	3	0	0	0.10	3	6	2	11.6	75(ENE)	1.1	6	99.7
THC (PPM)	-	-	-	-	2.06	2.9	1	2	8.2	76(ENE)	2.3	1	99.2
NOx (PPB)	-	-	-	-	0.86	6	24	7	15.9	284(WNW)	2.4	23	99.7
NO (PPB)	-	-	-	-	0.03	3	11	8	7	217(SW)	0.3	11	99.7
NO_2 (PPB)	212	106	0	0	1.03	6	24	7	15.9	284(WNW)	2.8	23	99.7
VECTOR WS (KPH)	-	-	-	-	12.66	33.3	23	15	-	134(SE)	20.8	23	99.7
VECTOR WD (DEGREES)	-	-	-	-	218(SW)	-	-	-	-	-	-	-	99.7

VAR-VARI96.5OUS

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

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started. Analog output was verified during the calibration. Two hours of data were invalidated due to a power failure event on September 3rd. Data was corrected using daily zero information.

Hydrogen Sulphide (PPB)

- Analyzer make / model - API 101E

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started. Two hours of data were invalidated due to a power failure event on September 3rd. Data was corrected using daily zero information.

Total HydroCarbon (PPM)

- Analyzer make / model –TECO 51C

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started. Two hours of data were invalidated due to a power failure event on September 3rd. The analyzer flamed out after the power failure, and it was re-lit 6 hours later. A daily calibration program was run after the analyzer was re-lit. A total of 6 hours of data was invalidated due to this event. Data was corrected using daily zero information.

General Monthly Summary

AQM STATION – LICA – St. Lina

Nitrogen Dioxide (PPB)

- Analyzer make / model - API 200E

No operational issue was observed during this month. The inlet filter was changed before the monthly calibration was started. The IZS desorber DUF filter was also replaced during the calibration. Two hours of data were invalidated due to a power failure event on September 3rd. Data was corrected using daily zero information.

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

- System make / model – Met 50.5

The wind system is reported as vector wind speed and vector wind direction.
Two hours of data were invalidated due to a power failure event on September 3rd.

Datalogger

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

The station is connected to a modem to allow for daily polling of the station.
Two hours of data were invalidated due to a power failure event on September 3rd.

Trailer

The trailer is located at 54°12’59”N, 111°30’1”E, Elevation 695M ASL.
No issued was discovered.

Continuous Monitoring

Monthly Summaries, Graphs & Wind Roses

Sulphur Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION -ST. LINA

SEPTEMBER 2009

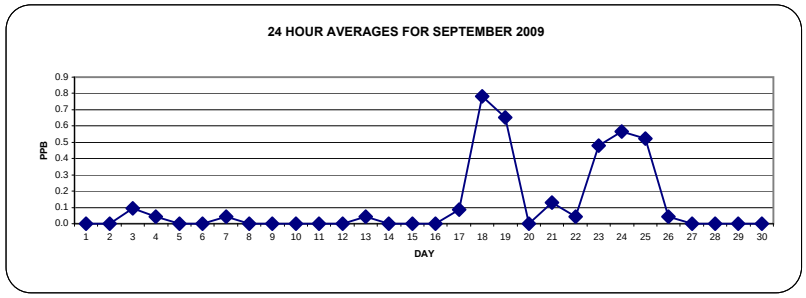
SULPHUR DIOXIDE (SO_2) hourly averages in ppb

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	**IZS**	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	**IZS**	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	**IZS**	0	0	0	1	0	**P**	**P**	1	0	0	0	0	0	0	0	0	0	1	0.1	22
4	0	0	0	1	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
5	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
6	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
7	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.0	24
8	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
9	**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
10	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
11	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
12	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
13	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**IZS**	0	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	**IZS**	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	**IZS**	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	**IZS**	0	0	0	0	0	0	0	0	0.0	24
17	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
18	0	0	0	0	0	0	0	0	0	1	0	**4**	2	2	**IZS**	1	1	1	1	1	1	1	1	1	**4**	**0.8**	24
19	1	1	1	1	0	0	1	1	2	2	1	1	1	**IZS**	1	1	0	0	0	0	0	0	0	0	2	0.7	24
20	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
21	0	0	0	0	0	0	0	0	0	1	0	**IZS**	0	0	0	1	1	0	0	0	0	0	0	0	1	0.1	24
22	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.0	24
23	0	0	1	1	0	0	0	0	0	**IZS**	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	0.5	24
24	2	2	2	1	1	1	1	3	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.6	24
25	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	1	0	1	1	2	2	1	1	1	1	2	0.5	24
26	1	0	0	0	0	0	**IZS**	0	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	**IZS**	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	**IZS**	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	**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
30	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
HOURLY MAX	2	2	2	1	1	1	1	3	2	2	1	4	2	2	1	1	1	1	2	2	1	1	1	1			
HOURLY AVG	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			

STATUS FLAG CODES

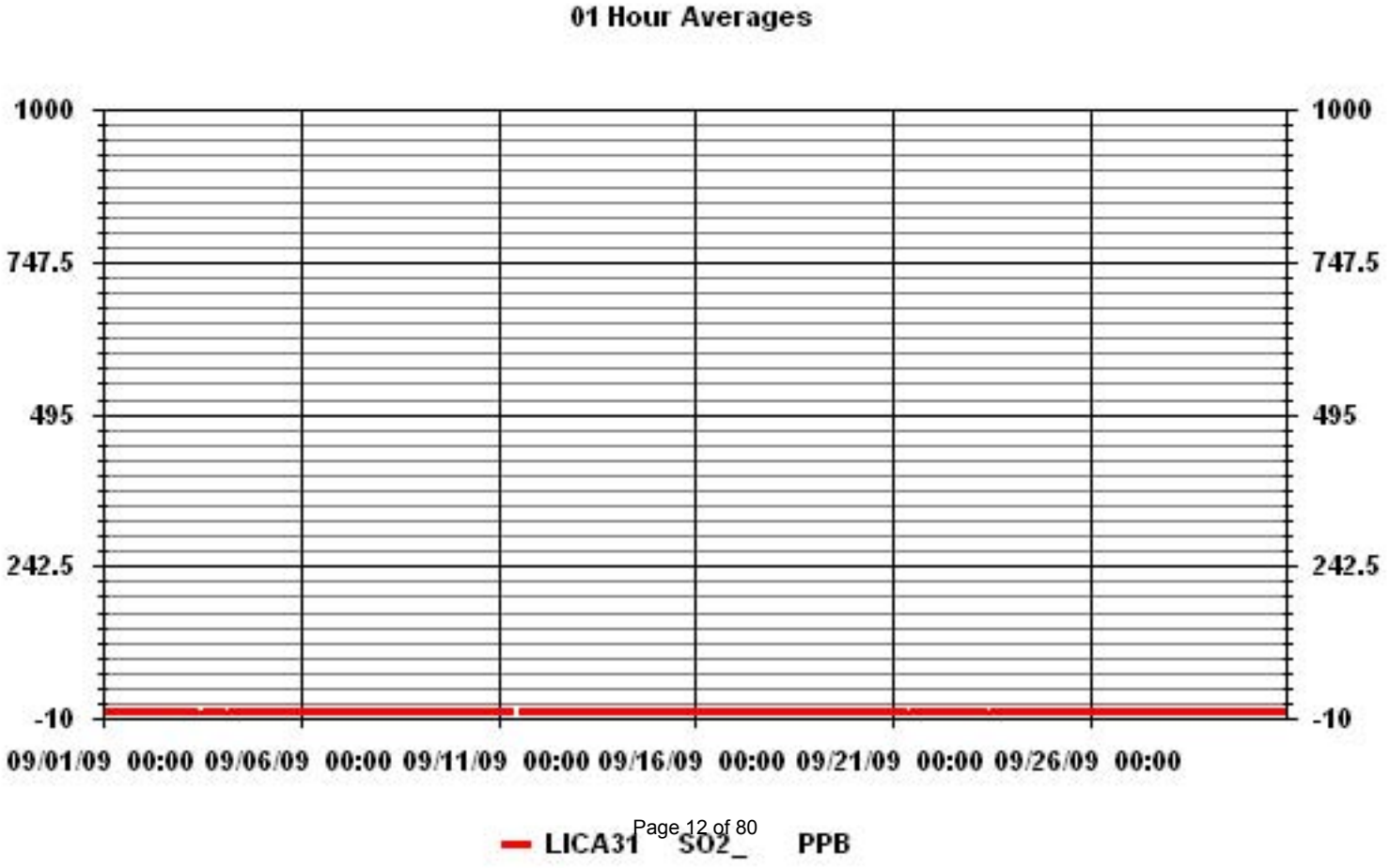
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



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:	4	PPB	@ HOUR(S)	11	ON DAY(S)	18
MAXIMUM 24-HR AVERAGE:	0.8	PPB			ON DAY(S)	18
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	6	HRS	AMD OPERATION UPTIME:		99.7	%
STANDARD DEVIATION:	0.40		MONTHLY AVERAGE:		0.12	PPB


01 Hour Averages
1000
747.5
495
242.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 SO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

SEPTEMBER 2009

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

MST

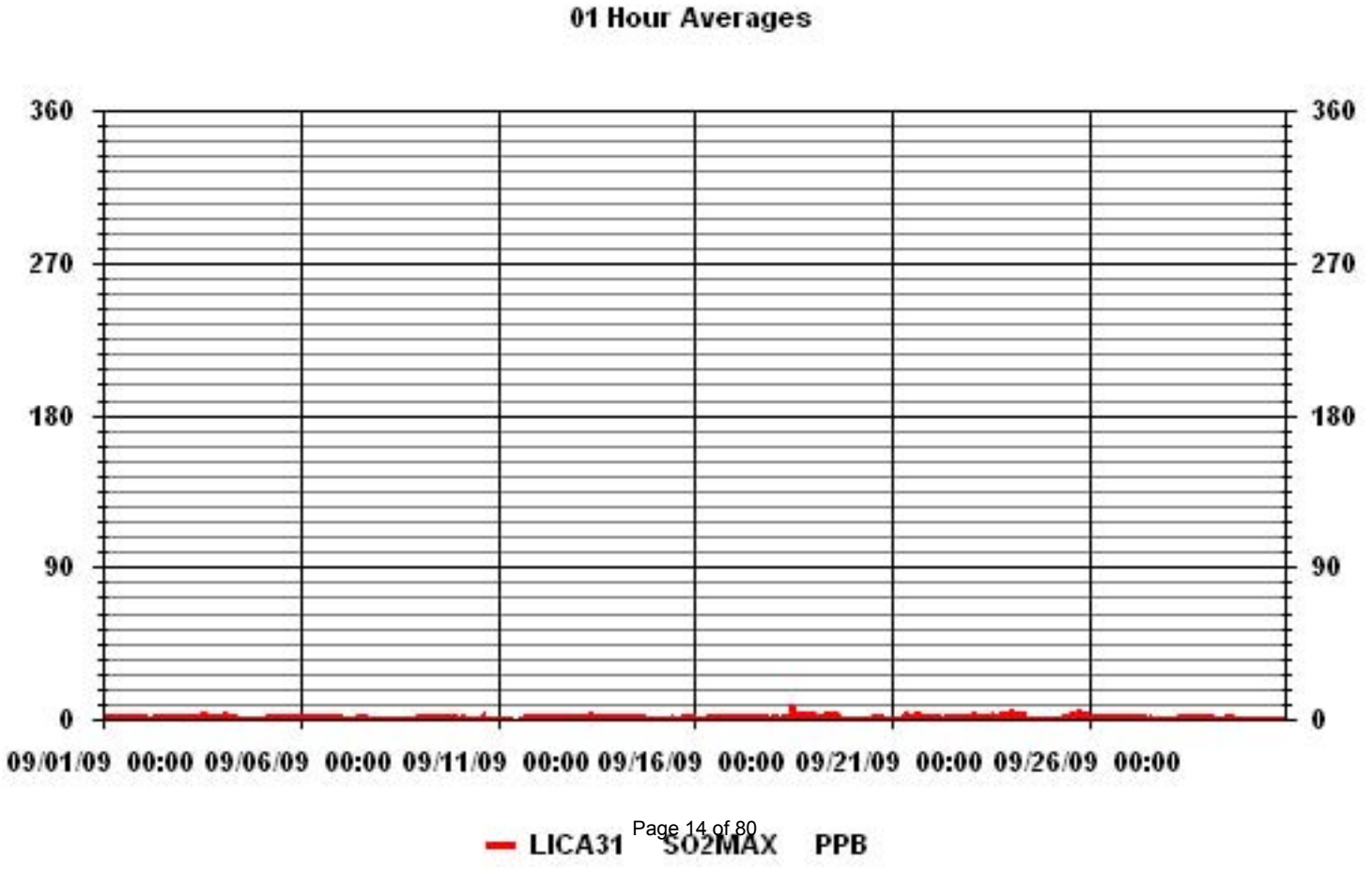
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24
2	1	1	1	1	0	0	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	24
3	1	1	1	1	1	1	**IZS**	1	1	1	1	1	**P**	**P**	3	1	1	1	2	1	1	1	1	1	3	1.1	22
4	1	1	2	2	1	**IZS**	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.4	24
5	0	0	0	0	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	24
6	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24
7	1	1	**IZS**	0	0	0	0	0	0	0	0	1	1	1	1	2	1	1	0	0	0	0	0	0	2	0.4	24
8	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
9	**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
10	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	**IZS**	0	2	0.3	24
11	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	0	0	1	1	1	1	**IZS**	0	1	1	0.3	24
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	**IZS**	1	1	1	2	1.0	24
13	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	2	1.1	24
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	0	0	0	0	0	1	0.8	24
15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	**IZS**	1	1	1	1	1	1	1	0.3	24
16	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	0.7	24
17	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	**IZS**	1	1	1	1	1	1	0	0	2	1.0	24
18	1	0	1	0	0	1	1	1	1	2	1	**8**	4	3	**IZS**	2	2	2	2	2	2	2	1	2	**8**	1.8	24
19	2	2	1	1	1	1	2	3	3	3	2	2	2	**IZS**	2	2	1	0	0	0	0	0	0	0	3	1.3	24
20	0	0	0	0	0	0	0	**P**	0	0	0	0	**IZS**	1	1	1	1	1	1	1	0	0	0	0	1	0.3	23
21	0	0	0	0	0	0	0	0	2	3	2	**IZS**	1	1	1	2	2	2	1	1	1	1	1	1	3	1.0	24
22	1	1	1	0	0	1	0	0	1	1	**IZS**	1	1	1	2	1	1	1	1	1	1	1	1	1	2	0.9	24
23	1	1	2	2	1	1	1	1	1	**IZS**	1	2	1	2	2	1	1	1	2	2	2	2	2	2	2	1.5	24
24	3	4	4	2	2	2	2	4	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1.0	24
25	0	0	0	0	0	0	0	**IZS**	0	1	1	1	1	2	2	1	3	3	4	4	2	2	2	2	4	1.3	24
26	2	1	1	1	1	1	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	24
27	1	1	1	1	1	**IZS**	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0.5	24
28	0	0	0	0	**IZS**	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	24
29	1	1	1	**IZS**	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0.4	24
30	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
HOURLY MAX	3	4	4	2	2	2	2	4	3	3	2	8	4	3	3	2	3	3	4	4	2	2	2	2			
HOURLY AVG	0.8	0.8	0.9	0.6	0.6	0.6	0.6	0.8	0.9	0.9	0.8	1.1	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.7	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:	449					
MAXIMUM INSTANTANEOUS VALUE:	8	PPB	@ HOUR(S)	11	ON DAY(S)	18
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		717	HRS
MONTHLY CALIBRATION TIME:	6	HRS				
STANDARD DEVIATION:	0.76					


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 SO2MAX PPB

LICA31
SO2_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	1.32	1.02	1.61	5.58	7.63	6.75	7.78	6.75	7.04	5.72	7.63	8.66	7.63	13.95	10.13	.73	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	1.32	1.02	1.61	5.58	7.63	6.75	7.78	6.75	7.04	5.72	7.63	8.66	7.63	13.95	10.13	.73	

Calm : .00 %

Total # Operational Hours : 681

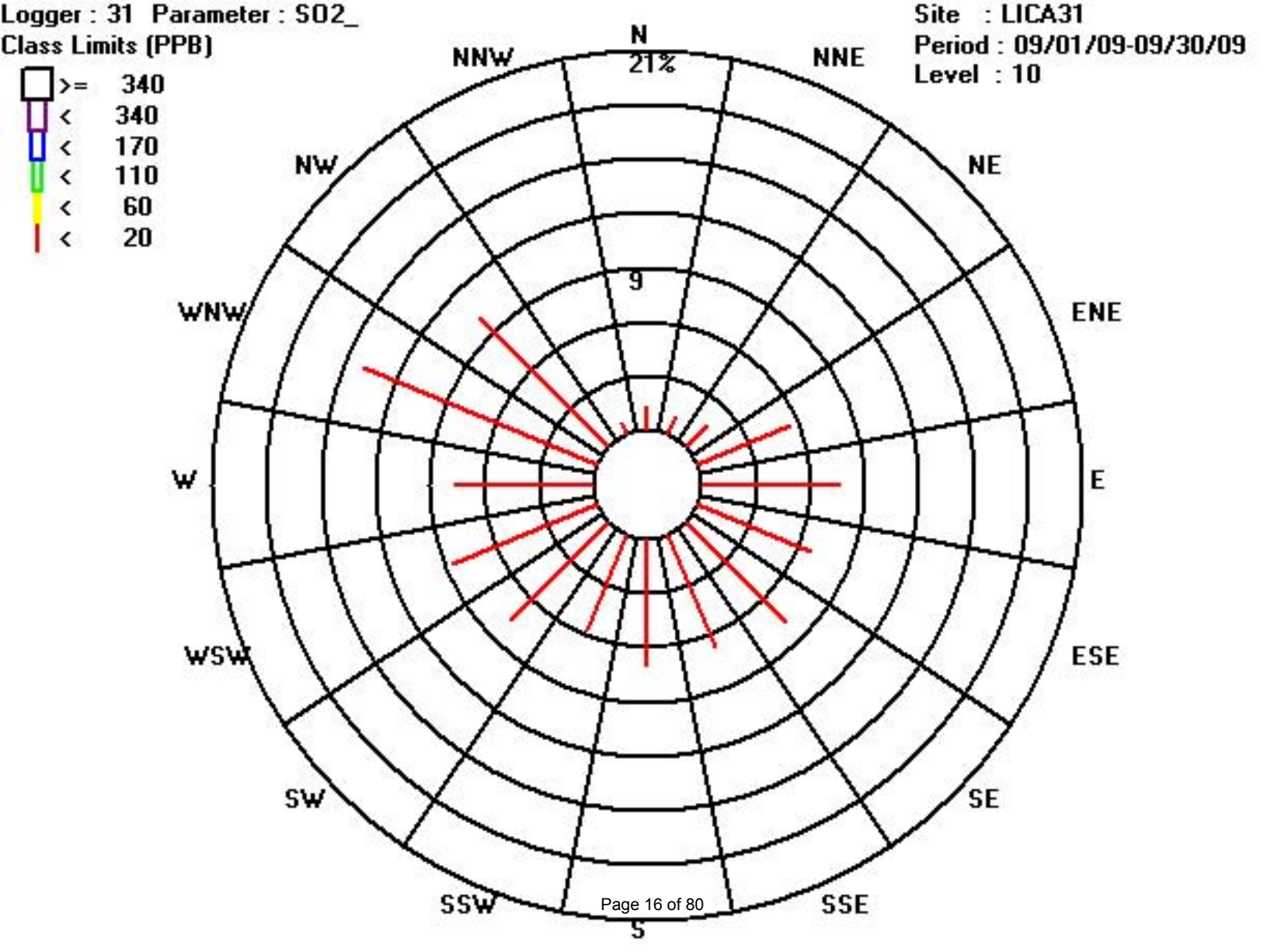
Distribution By Samples

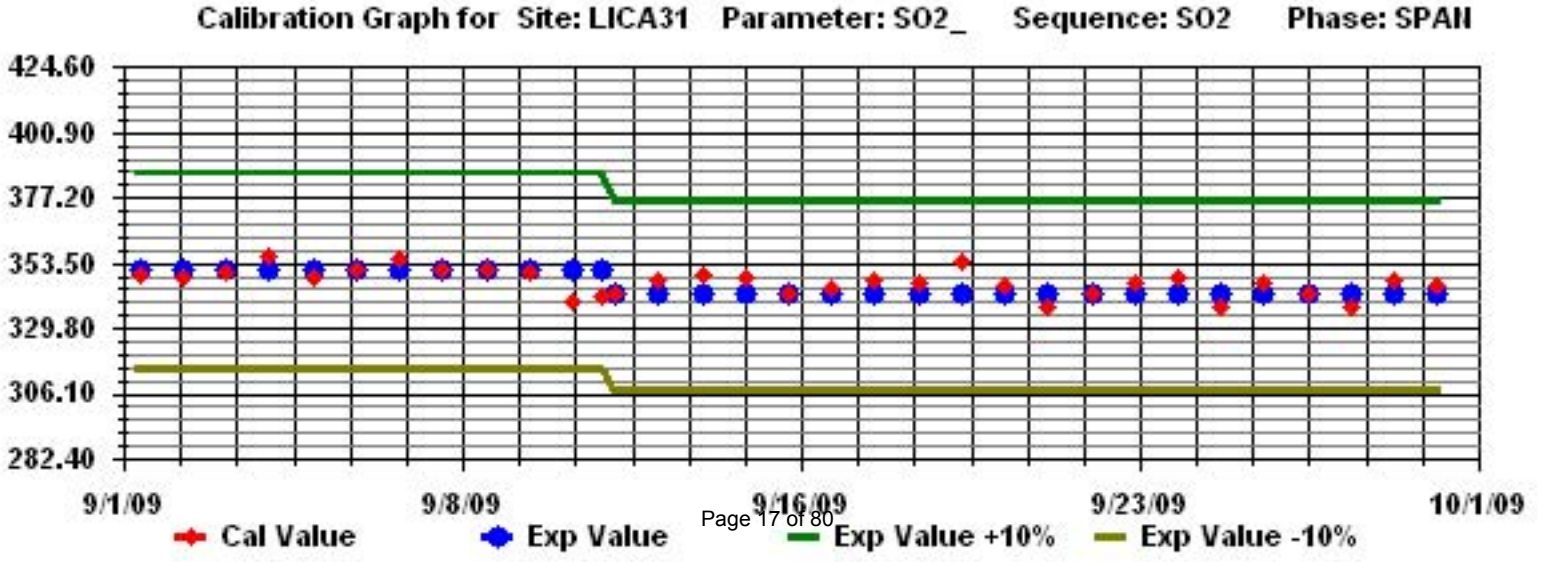
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	20	9	7	11	38	52	46	53	46	48	39	52	59	52	95	69	5	681
<	60																	
<	110																	
<	170																	
<	340																	
>=	340																	
	Totals	9	7	11	38	52	46	53	46	48	39	52	59	52	95	69	5	

Calm : .00 %

Total # Operational Hours : 681


Logger : 31 Parameter : SO2_
Class Limits (PPB)
>= 340
< 340
< 170
< 110
< 60
< 20
Site : LICA31
Period : 09/01/09-09/30/09
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


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
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Hydrogen Sulphide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

SEPTEMBER 2009

HYDROGEN SULPHIDE (H_2S) hourly averages in ppb

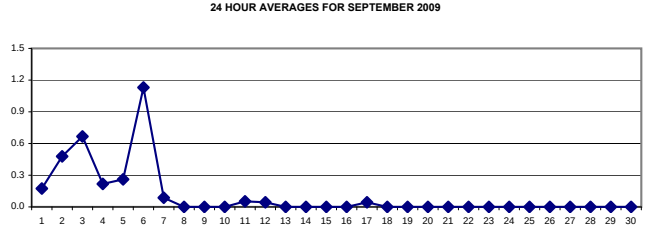
MST

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	**IZS**	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.2	24
2	1	1	2	1	1	1	1	**IZS**	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0.5	24
3	0	1	1	1	1	1	**IZS**	1	1	0	0	0	**P**	**P**	1	0	0	1	0	1	1	1	1	1	1	0.7	22
4	1	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
5	0	0	0	0	**IZS**	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	2	0.3	24
6	1	2	**3**	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**3**	**1.1**	24
7	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
8	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
9	**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
10	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
11	0	0	0	1	0	0	0	0	0	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	0	**IZS**	0	0	1	0.1	24
12	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	1	0.0	24
13	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
14	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
15	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
16	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
17	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	**IZS**	0	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	**IZS**	0	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	**IZS**	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	**IZS**	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	**IZS**	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	**IZS**	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	0	0	**IZS**	0	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	**IZS**	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	**IZS**	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	**IZS**	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	**IZS**	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	**IZS**	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	**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
30	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
HOURLY MAX	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1			
HOURLY AVG	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.1	0.1			

STATUS FLAG CODES

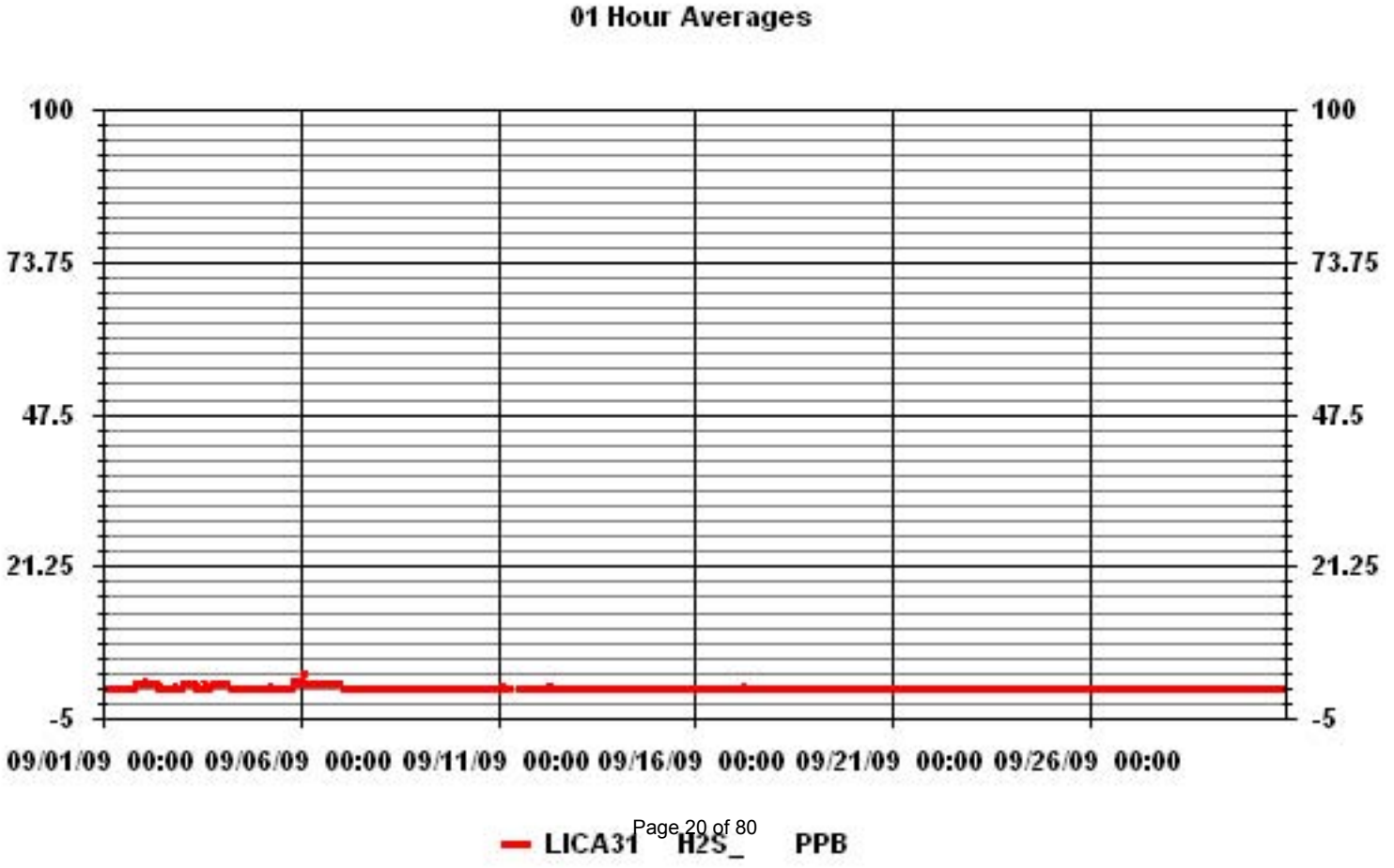
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE

OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 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:	66					
MAXIMUM 1-HR AVERAGE:	3	PPB	@ HOUR(S)	2	ON DAY(S)	6
MAXIMUM 24-HR AVERAGE:	1.1	PPB			ON DAY(S)	6
					VAR-VARIOUS	
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	4	HRS	AMD OPERATION UPTIME:		99.7	%
STANDARD DEVIATION:	0.33		MONTHLY AVERAGE:		0.10	PPB


01 Hour Averages
100
73.75
47.5
21.25
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 H2S_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

SEPTEMBER 2009

HYDROGEN SULPHIDE MAX instantaneous maximum in ppb

MST

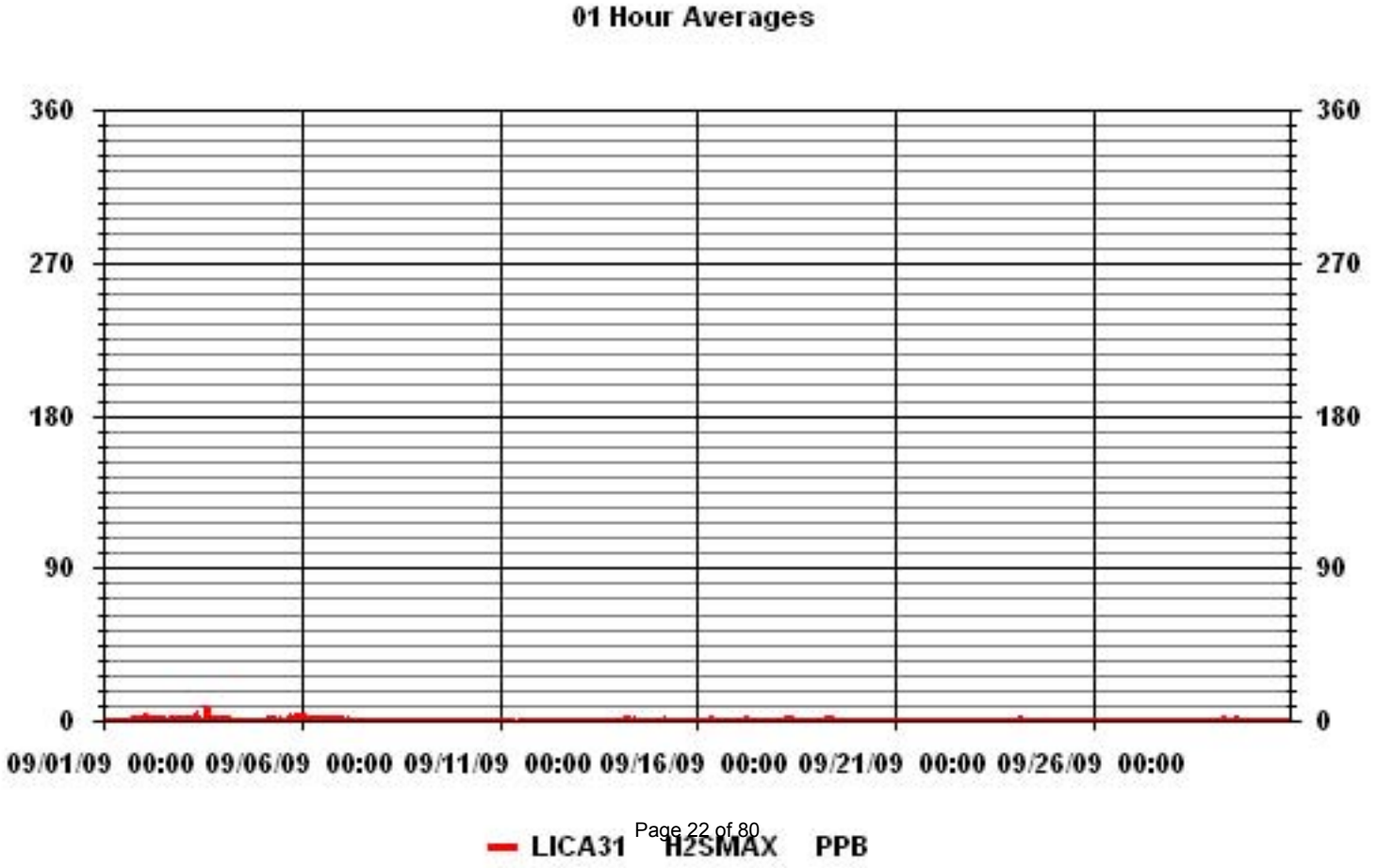
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	0.3	24
2	1	2	3	2	1	2	1	**IZS**	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	3	1.1	24
3	1	1	1	1	1	1	**IZS**	1	3	1	0	1	**P**	**P**	**7**	0	1	1	1	1	1	1	1	1	**7**	1.3	22
4	1	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
5	0	0	0	0	**IZS**	1	1	1	1	1	0	1	1	0	0	0	0	2	1	1	1	2	2	1	2	0.7	24
6	3	2	3	**IZS**	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1.3	24
7	1	1	**IZS**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	24
8	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
9	**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
10	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
11	0	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	0	0	0	0	0	0	0	**IZS**	0	0	0	0.0	24
12	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
13	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
14	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	1	0.2	24
15	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	1	0.1	24
16	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	1	0.0	24
17	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	1	0.1	24
18	0	0	0	0	0	0	1	0	0	1	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	1	0.1	24
19	0	0	0	0	0	0	1	0	1	1	1	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	1	0.2	24
20	0	0	0	0	0	0	0	**P**	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	23
21	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
22	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
23	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
24	0	0	0	0	1	1	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
25	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
26	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
27	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
28	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
29	0	0	0	**IZS**	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0.1	24
30	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
HOURLY MAX	3	2	3	2	2	2	1	1	3	1	1	1	1	1	7	1	1	2	1	1	1	2	2	1			
HOURLY AVG	0.2	0.2	0.3	0.1	0.3	0.3	0.3	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.2	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:	111					
MAXIMUM INSTANTANEOUS VALUE:	7	PPB	@ HOUR(S)	14	ON DAY(S)	3
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		717	HRS
MONTHLY CALIBRATION TIME:	5	HRS				
STANDARD DEVIATION:	0.53					


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 H2SMAX PPB

LICA31
H2S_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	1.31	1.02	1.61	5.41	7.61	6.73	7.75	6.73	7.02	5.85	7.75	8.63	7.61	13.90	10.10	.73	99.85
< 10	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
< 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	1.31	1.02	1.61	5.56	7.61	6.73	7.75	6.73	7.02	5.85	7.75	8.63	7.61	13.90	10.10	.73	

Calm : .00 %

Total # Operational Hours : 683

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	9	7	11	37	52	46	53	46	48	40	53	59	52	95	69	5	682
< 10				1													1
< 50																	
>= 50																	
Totals	9	7	11	38	52	46	53	46	48	40	53	59	52	95	69	5	

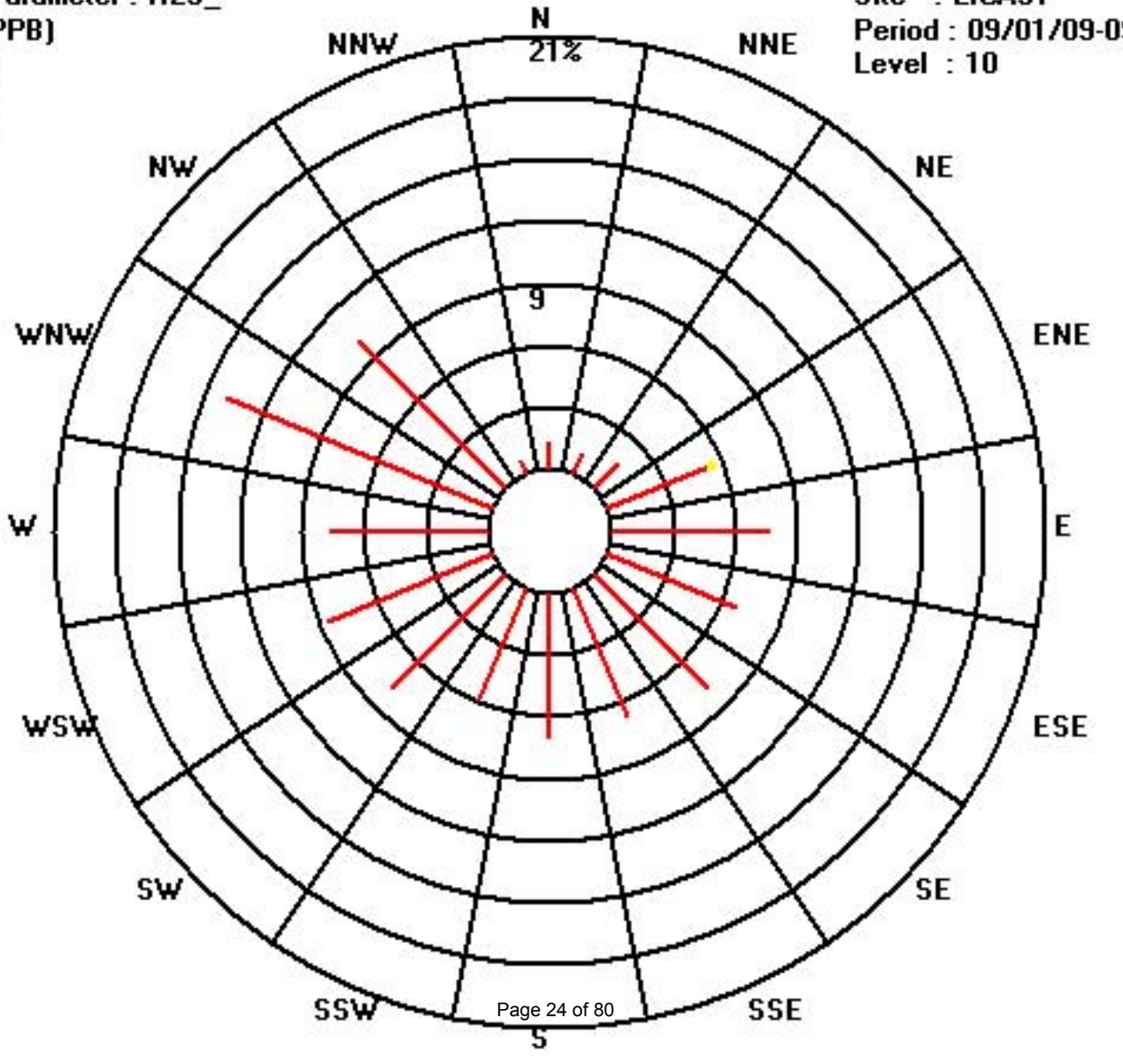
Calm : .00 %

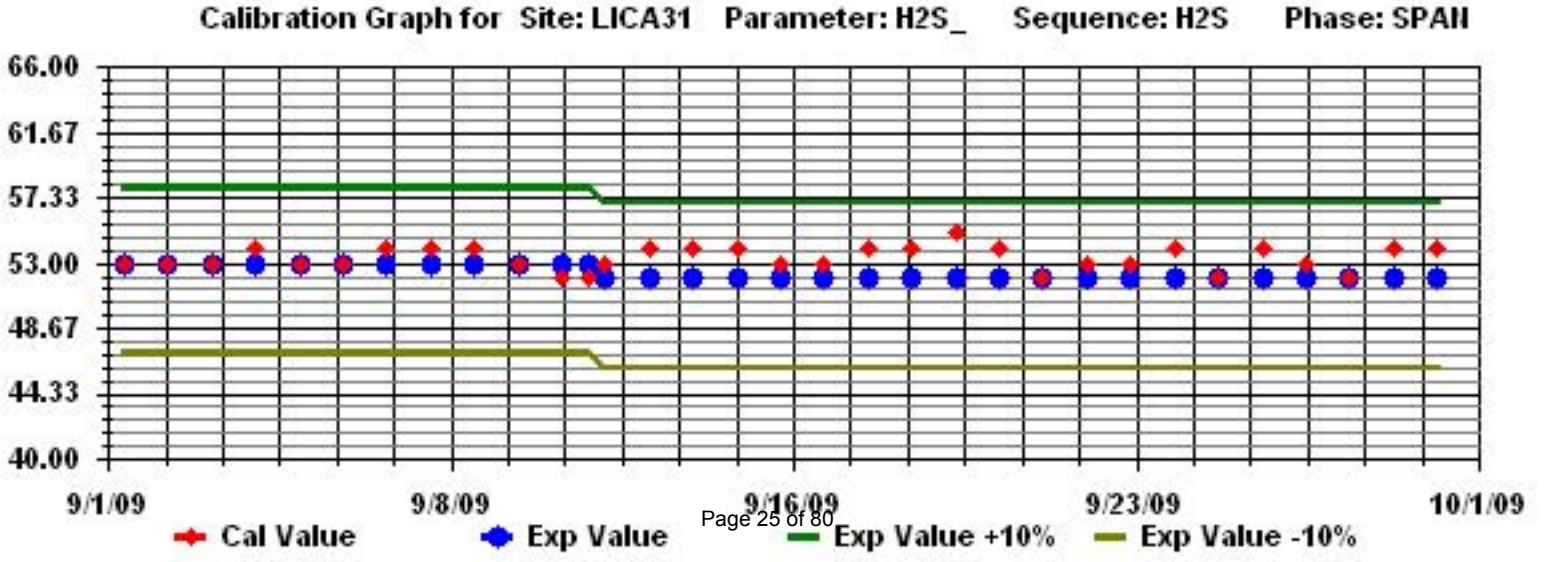
Total # Operational Hours : 683

Logger : 31 Parameter : H2S_
Class Limits (PPB)

>= 50
< 50
< 10
< 3

Site : LICA31
Period : 09/01/09-09/30/09
Level : 10




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
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Total Hydrocarbons

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

SEPTEMBER 2009

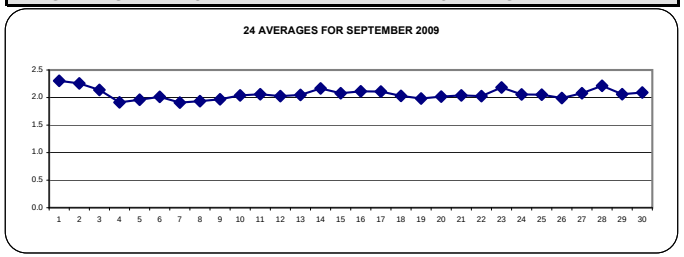
TOTAL HYDROCARBONS hourly averages in ppm

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	2.6	**2.9**	2.8	2.8	2.3	2.3	2.4	**IZS**	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	**2.9**	**2.3**	24
2	2.3	2.4	2.4	2.4	2.4	2.5	2.5	**IZS**	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.3	24
3	2.3	2.2	2.2	2.3	2.2	2.1	**IZS**	2.1	2.2	2.1	2.1	2	**P**	**P**	**N**	**N**	**N**	**N**	**N**	**N**	**C**	**C**	1.9	2.1	2.3	2.1	18
4	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	2	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	24
5	1.9	1.9	1.9	1.9	**IZS**	1.9	1.9	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	2	2.1	2.1	2	2	2.1	2	2.1	2.0	24
6	2.1	2.1	2.1	**IZS**	2.2	2.2	2.2	2.1	2.1	2.1	2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2	1.9	2.2	2.0	24
7	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	1.9	1.9	2	2	1.9	1.9	1.9	2.0	1.9	24
8	2	**IZS**	2	2	2	2	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	1.9	1.9	1.9	1.9	2.0	1.9	24
9	**IZS**	1.9	2	2	2	2	2	2	2	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2	2	2	2	2	**IZS**	2.0	2.0	24
10	2.1	2.3	2.2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.1	2.1	2.1	2	**IZS**	2	2	2.3	2.0	24
11	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2	2	2	**C**	**C**	**C**	2	2	2	2	2	**IZS**	2	2	2.2	2.1	24
12	2	2.1	2.1	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	**IZS**	2	2	2.1	2.1	2.0	24
13	2.1	2.1	2	2	2	2	2.1	2.2	2.2	2.1	2	2	2	2	2	2	2	2	2	**IZS**	2	2	2.1	2.2	2.2	2.0	24
14	2.3	2.3	2.3	2.2	2.3	2.6	2.5	2.5	2.4	2.2	2.1	2.1	2	2	2	2	2	2	**IZS**	2	2	2	2	2	2.6	2.2	24
15	2	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2	2.1	2.1	2	2	2	2	2	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	24
16	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	24
17	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	**IZS**	2	2	2	2	2	2	2	2	2.2	2.1	24
18	2	2	2.1	2	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2	2	**IZS**	2	2	2	2	2	2	2	2	2	2.1	2.0	24
19	2	2	2	2.1	2.1	2.1	2.1	2.1	2	2	2	2	1.9	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2.1	2.0	24
20	2	2	2	2	2	2	2	2	2	2	2	2	**IZS**	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2	2.1	2.0	24
21	2	2.1	2	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	2	2	2	2.1	2.0	24
22	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2	2	2	1.9	1.9	1.9	1.9	2	2	2	2	2	2	2.1	2.0	24
23	2	2.1	2	2	2	2	2	2	2.1	**IZS**	2.1	2.1	2.1	2.2	2.2	2.2	2.4	2.5	2.7	2.5	2.4	2.2	2.2	2.2	2.7	2.2	24
24	2.1	2.1	2	2.1	2.1	2.1	2.1	2.2	**IZS**	2	2	2	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	2.1	2.2	2.1	24
25	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**IZS**	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2	2.1	2.1	2.1	2.1	24
26	2.1	2.1	2	2	2	2	**IZS**	2	2	1.9	1.9	1.9	2	1.9	2	2	2	2	2	2	2	2	2	2	2.1	2.0	24
27	2	2	2	2	2	**IZS**	2	2	2.1	2.1	2.1	2.1	2	2.1	2.1	2.1	2.1	2	2.1	2.1	2.1	2.3	2.3	2.1	2.3	2.1	24
28	2.1	2.1	2.1	2.1	**IZS**	2.2	2.3	2.5	2.6	2.4	2.5	2.7	2.7	2.3	2.1	2.1	2.1	2	2	2	2	2	2	2	2.7	2.2	24
29	2	2	2	**IZS**	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2	2	2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	24
30	2.1	2.1	**IZS**	2.1	2.1	2.1	2	2.1	2.1	2.1	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	24
HOURLY MAX	2.4	2.6	2.9	2.8	2.8	2.6	2.5	2.5	2.6	2.4	2.5	2.7	2.7	2.3	2.2	2.2	2.4	2.5	2.7	2.5	2.4	2.3	2.3	2.3			
HOURLY AVG	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0			

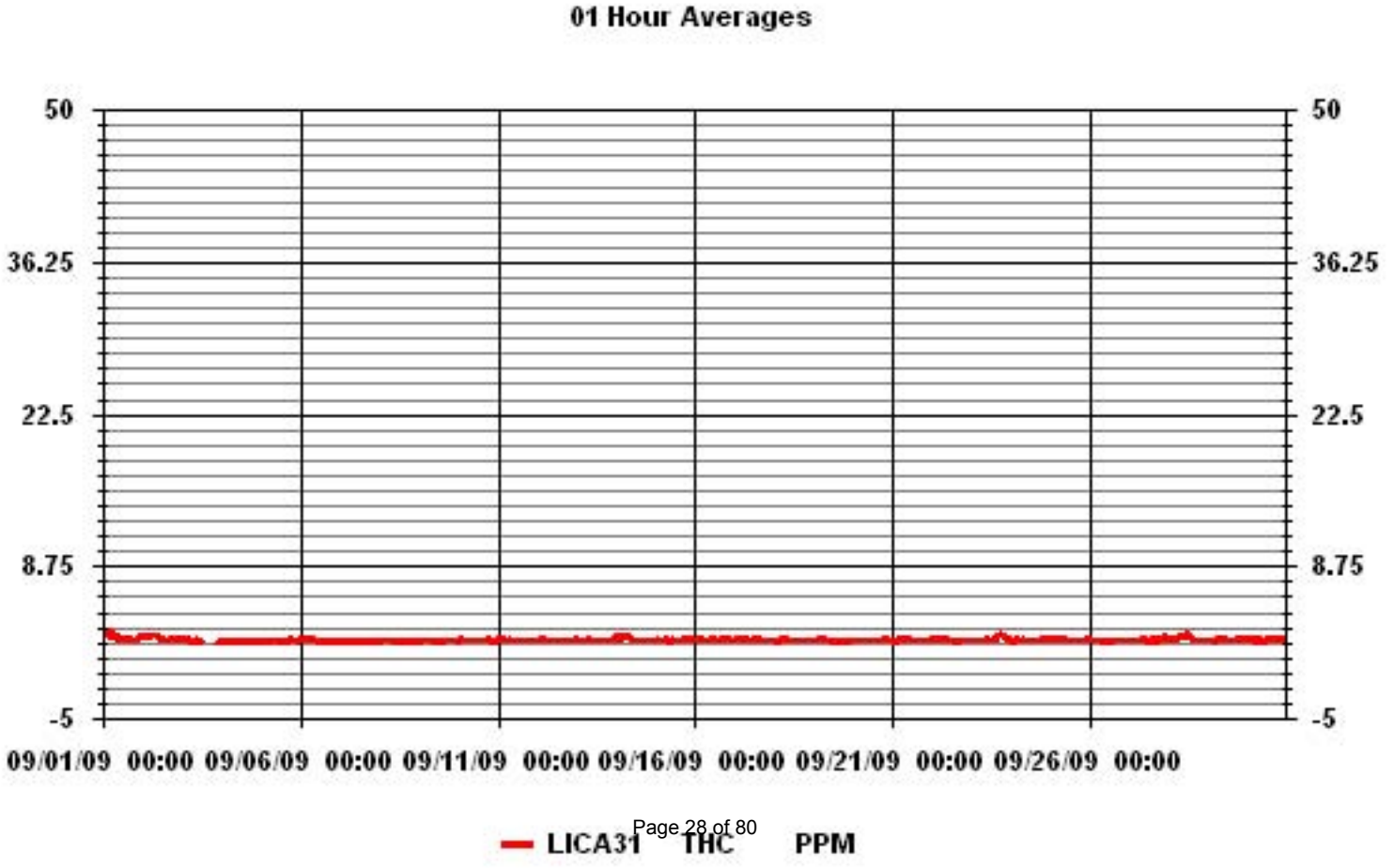
STATUS FLAG CODES

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:	676						
MAXIMUM 1-HR AVERAGE:	2.9	PPM	@ HOUR(S)	2	ON DAY(S)	1	
MAXIMUM 24-HR AVERAGE:	2.3	PPM			ON DAY(S)	1	
					VAR- VARIOUS		
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:			714	HRS
MONTHLY CALIBRATION TIME:	5	HRS	AMD OPERATION UPTIME:			99.2	%
STANDARD DEVIATION:	0.14		MONTHLY AVERAGE:			2.06	PPM


01 Hour Averages
50
36.25
22.5
8.75
-5
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 THC PPM

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

SEPTEMBER 2009

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

MST

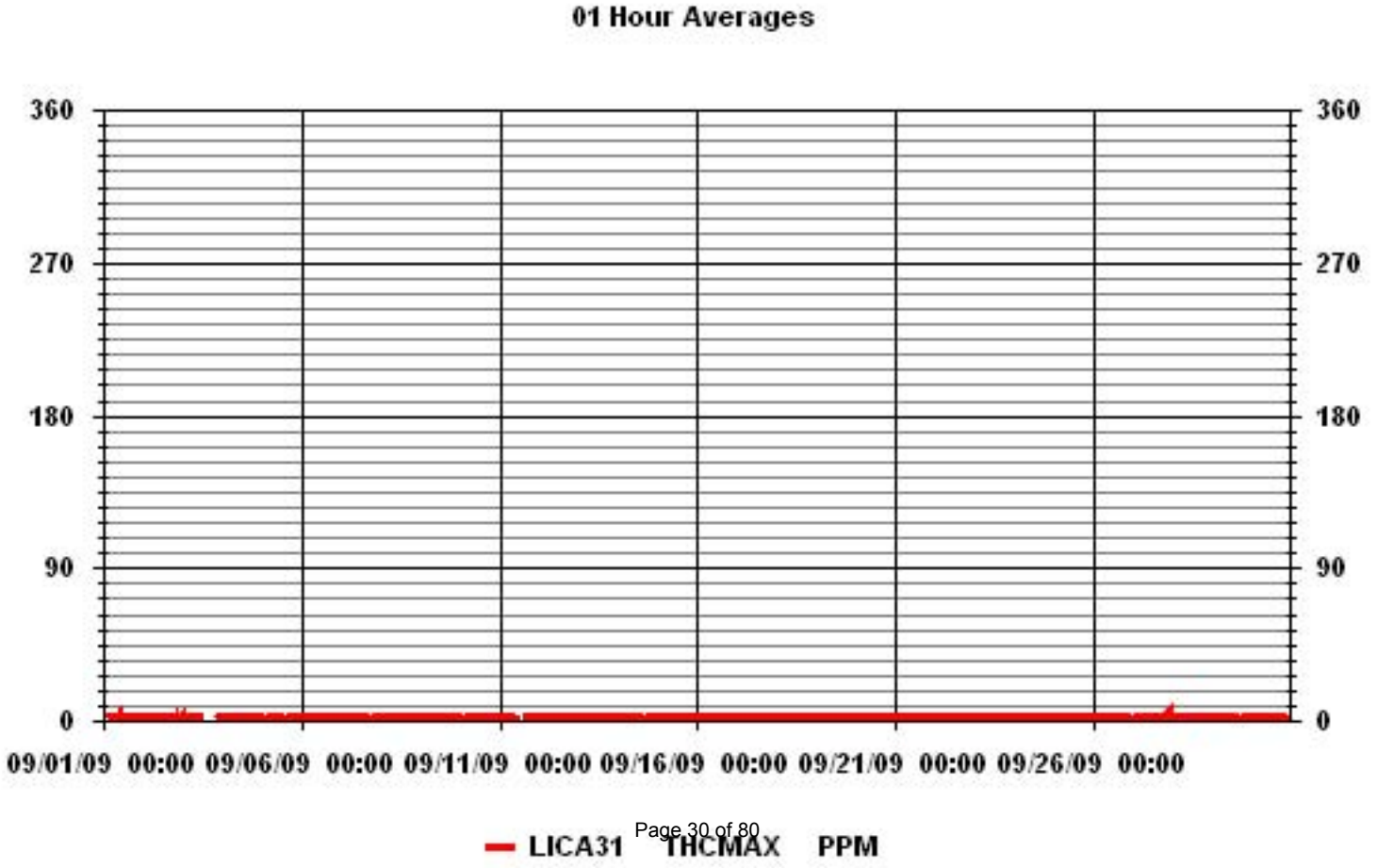
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	2.6	2.8	3.1	3	3	2.4	2.4	2.4	**IZS**	2.3	4.6	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.4	2.3	2.4	2.3	4.6	2.5	24
2	2.4	2.5	2.5	2.6	2.4	2.7	2.6	**IZS**	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.1	4.2	2.7	2.5	4.2	2.5	24
3	4.4	2.3	3.3	3.7	2.6	2.2	**IZS**	2.2	2.2	2.2	2.1	2.1	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**N**	**C**	**C**	2.1	2.9	4.4	2.6	16
4	2.3	2.3	2	1.9	2	**IZS**	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2	2	1.9	2	1.9	1.9	2	2.3	2.0	24
5	2.1	2	2	1.9	**IZS**	2.2	2.1	2.3	2.5	2.2	2.3	2	1.9	2.1	2.2	1.9	2	2.2	2.3	2.3	2.2	2.2	2.2	2.1	2.5	2.1	24
6	2.1	2.2	2.2	**IZS**	2.3	2.2	2.2	2.2	2.2	2.2	2	2	1.9	1.9	1.9	2	2	2	1.9	2	2	2.1	2.1	1.9	2.3	2.1	24
7	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	2	1.9	1.9	1.9	1.9	1.9	2.6	2.6	2.1	1.9	2	2.6	2.0	24
8	2	**IZS**	2	2	2	2.1	2.1	2	2	1.9	1.9	1.9	1.9	2	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	24
9	**IZS**	2	2	2	2	2	2	2	2.1	2	2.1	2	2.1	2	2	2.4	2.7	2.1	2.1	2.2	2.2	3	3	**IZS**	3	2.2	24
10	2.2	2.5	2.5	2	2	2	2.8	3.3	2.4	2.4	2.3	2.3	2.4	2.2	2.3	2.1	2.2	2.6	2.9	2.3	3	2.7	**IZS**	2.1	3.3	2.4	24
11	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2	**C**	**C**	**C**	**C**	2	2	2	2	2	**IZS**	2	2	2.2	2.1	24
12	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2.1	2	2	2	2	2	2	2	2	2	2	2	**IZS**	2	2	2.1	2.1	2.0	24
13	2.1	2.1	2.1	2	2	2.1	2.1	2.2	2.2	2.2	2	2.1	2	2	2	2	2	2	2	**IZS**	2.1	2.1	2.1	2.3	2.3	2.1	24
14	2.3	2.3	2.3	2.3	2.6	2.6	2.6	2.6	2.5	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2	**IZS**	2.1	2.1	2.1	2.1	2	2.6	2.2	24
15	2.8	2.4	2.5	3.2	2.3	2.3	2.9	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	**IZS**	2.5	2.7	2.4	2.3	2.1	2.4	3.2	2.4	24
16	2.4	2.3	2.4	2.5	2.2	2.1	2.2	2.3	2.2	2.2	2.2	2.1	2.1	2.2	2.3	2.3	**IZS**	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.5	2.2	24
17	2.2	2.3	2.3	2.4	2.3	2.3	2.3	2.4	2.3	2.3	2.1	2.2	2.3	2.2	2.2	**IZS**	2.4	2.2	2.1	2.2	2	2	2	2	2.4	2.2	24
18	2	2	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.1	2.1	2	2	2	**IZS**	2	2	2	2	2	2	2	2	2	2.2	2.0	24
19	2	2	2	2.1	2.1	2.1	2.1	2.1	2	2	2	2	2	**IZS**	2.1	2.1	2	2	2	2	2.3	2	2.2	2.2	2.3	2.1	24
20	2	2.2	2.1	2.1	2.1	2.2	2.4	**P**	2	2	2	2.1	**IZS**	2	2.1	2.1	2.1	2.4	2.2	2.2	2.2	2.2	2.5	2	2.5	2.1	23
21	2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	**IZS**	2	2	2	2	2	2	2	2	2.1	2.4	2	2.1	2.4	2.1	24
22	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	2.1	2.1	2	2	2	2	2	2.2	2	2.2	2.1	24
23	2.1	2.1	2.1	2.1	2.1	2	2	2.2	2.1	**IZS**	2.2	2.1	2.1	2.2	2.2	2.4	2.4	2.6	2.7	2.6	2.5	2.3	2.3	2.3	2.7	2.2	24
24	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.3	2.4	2.3	2.3	2.4	2.6	2.2	2.6	2.2	24
25	2.1	2.1	2.2	2.1	2.2	2.1	2.1	**IZS**	2.1	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2	2.6	3	3	2.1	24
26	2.6	2.8	2.3	2.2	2.4	2.1	**IZS**	2.1	2.1	2	2	2.1	2.2	2.1	2.2	2.1	2	2.1	2.2	2.1	2.1	2.4	2	2.1	2.8	2.2	24
27	2.7	2.1	2.1	2.1	2.1	**IZS**	2.1	2.2	2.2	2.1	2.3	2.2	2.2	2.3	2.1	2.2	2.2	2.1	2.1	2.6	2.8	5.4	**7.1**	2.1	**7.1**	2.6	24
28	2.1	2.5	2.1	2.2	**IZS**	2.2	2.4	2.6	2.7	2.5	2.6	2.8	2.8	2.4	2.2	2.1	2.1	2.1	2.1	2	2	2	2	2	2.8	2.3	24
29	2	2	2	**IZS**	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2	2	2	2	2.2	2.7	2.1	2.1	2.3	2.3	2.5	2.4	2.7	2.1	24
30	2.3	2.4	**IZS**	2.3	2.2	2.4	2.2	2.2	2.4	2.4	2.2	2.1	2.1	2.1	2.2	2.4	2.2	2.2	2.5	2.2	2.4	2.3	2.6	2.3	2.6	2.3	24
HOURLY MAX	4	3	3	4	3	3	3	3	3	3	5	3	3	2	2	2	3	3	3	3	3	5	7	3			
HOURLY AVG	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.4	2.4	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:		674					
MAXIMUM INSTANTANEOUS VALUE:		7.1	PPM	@ HOUR(S)	22	ON DAY(S)	27
IZS CALIBRATION TIME:	31	HRS		OPERATIONAL TIME:		711	HRS
MONTHLY CALIBRATION TIME:	6	HRS					
STANDARD DEVIATION:	0.36						


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 THCMAX PPM

LICA31
THC / WDR Joint Frequency Distribution (Percent)

September 2009

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	1.33	1.03	1.62	5.62	7.10	6.36	7.84	6.80	6.95	6.21	7.69	8.72	7.69	14.05	10.20	.73	100.00
<	10.0	.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
>=	50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	1.33	1.03	1.62	5.62	7.10	6.36	7.84	6.80	6.95	6.21	7.69	8.72	7.69	14.05	10.20	.73	

Calm : .00 %

Total # Operational Hours : 676

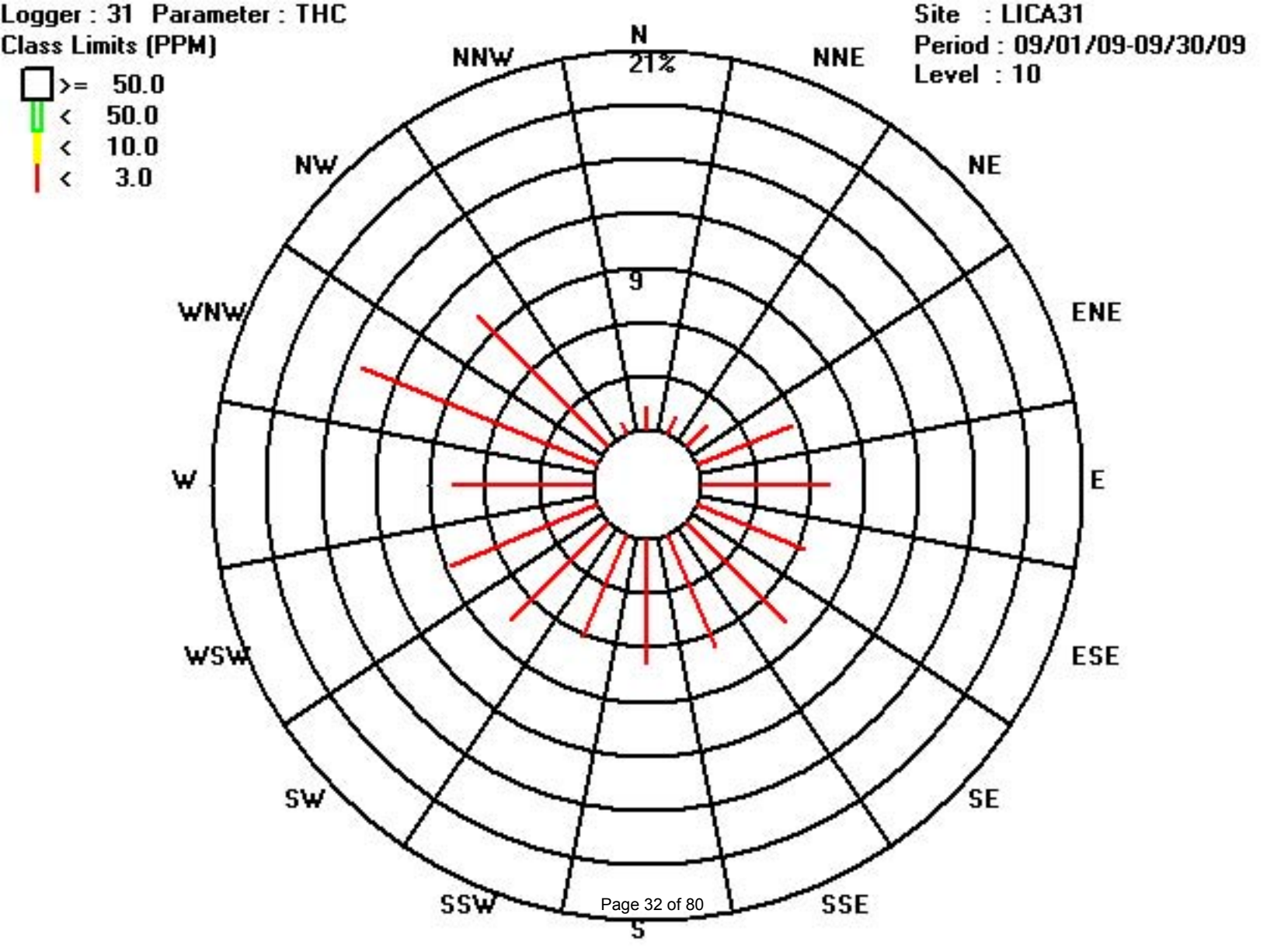
Distribution By Samples

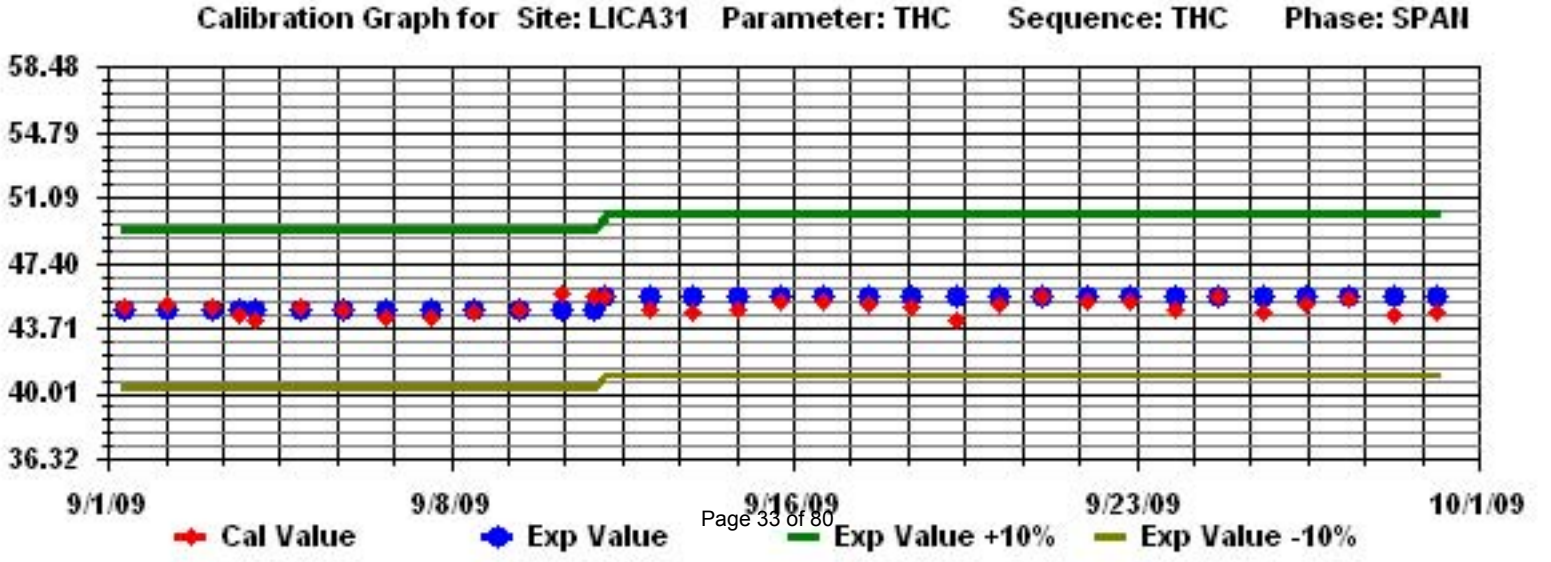
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	3.0	9	7	11	38	48	43	53	46	47	42	52	59	52	95	69	5	676
<	10.0																	
<	50.0																	
>=	50.0																	
	Totals	9	7	11	38	48	43	53	46	47	42	52	59	52	95	69	5	

Calm : .00 %

Total # Operational Hours : 676


Logger : 31 Parameter : THC
Class Limits (PPM)
>= 50.0
< 50.0
< 10.0
< 3.0
Site : LICA31
Period : 09/01/09-09/30/09
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA31 Parameter: THC Sequence: THC Phase: SPAN
58.48
54.79
51.09
47.40
43.71
40.01
36.32
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitrogen Dioxide

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST. LINA

SEPTEMBER 2009

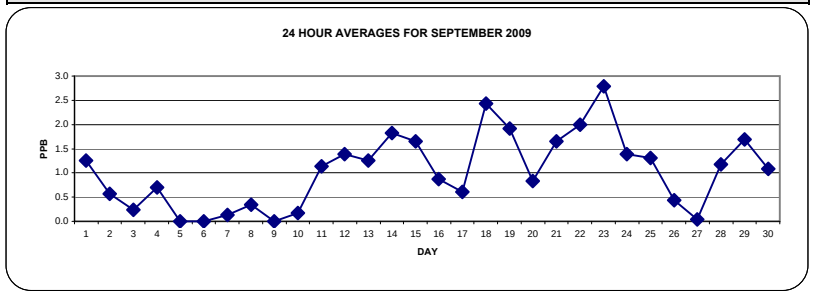
NITROGEN DIOXIDE hourly averages in ppb

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	3	4	5	4	4	2	2	2	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	5	1.3	24
2	1	1	1	1	1	1	2	**IZS**	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	0.6	24
3	1	1	1	1	0	1	**IZS**	0	0	0	0	0	**P**	**P**	0	0	0	0	0	0	0	0	0	0	1	0.2	22
4	0	0	1	4	1	**IZS**	3	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0.7	24
5	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
6	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
7	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	2	0.1	24
8	1	**IZS**	0	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.3	24
9	**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
10	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	2	0.2	24
11	0	1	1	1	0	1	1	1	1	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	1	2	2	**IZS**	2	2	2	1.1	24
12	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	2	2	1.4	24
13	2	2	2	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	2	1.3	24
14	2	2	2	2	2	3	3	3	2	2	2	2	1	1	1	1	1	1	**IZS**	1	2	2	2	2	3	1.8	24
15	2	1	2	1	1	2	2	2	2	2	2	3	2	1	1	1	1	**IZS**	1	1	2	2	2	2	3	1.7	24
16	1	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	**IZS**	0	0	0	0	0	1	0	2	0.9	24
17	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	**IZS**	0	1	1	1	1	1	1	1	1	0.6	24
18	1	2	2	2	3	5	5	4	3	3	2	3	2	2	**IZS**	1	1	2	2	2	3	2	2	2	5	2.4	24
19	2	3	2	2	2	2	2	3	3	3	3	3	2	**IZS**	2	2	1	1	1	1	1	1	1	1	3	1.9	24
20	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	0	0	0	0	1	1	1	1	1	1	1	1	0.8	24
21	1	1	1	1	2	2	2	3	3	3	3	**IZS**	1	1	1	2	2	1	1	1	1	1	2	2	3	1.7	24
22	2	2	3	4	3	3	3	3	2	2	**IZS**	1	1	1	2	1	0	0	1	1	3	3	2	3	4	2.0	24
23	4	5	5	5	5	3	3	3	3	**IZS**	1	1	1	1	1	1	2	2	3	3	3	3	3	3	5	**2.8**	24
24	3	3	3	3	4	5	5	**6**	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**	1.4	24
25	0	0	0	0	0	1	1	**IZS**	1	2	1	1	1	1	1	1	1	2	3	3	2	2	3	3	3	1.3	24
26	3	2	2	1	1	1	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.4	24
27	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.0	24
28	0	1	0	0	**IZS**	1	2	2	2	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	2	1.2	24
29	1	1	1	**IZS**	1	1	1	2	1	1	1	2	2	2	2	2	2	2	3	2	3	2	2	2	3	1.7	24
30	2	2	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.1	24
HOURLY MAX	4	5	5	5	5	5	5	6	3	3	3	3	2	2	2	2	2	2	3	3	3	3	3	3			
HOURLY AVG	1.2	1.4	1.4	1.4	1.3	1.5	1.6	1.6	1.1	1.0	0.9	0.9	0.7	0.6	0.6	0.7	0.6	0.6	0.8	0.8	1.0	0.9	1.0	1.1			

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

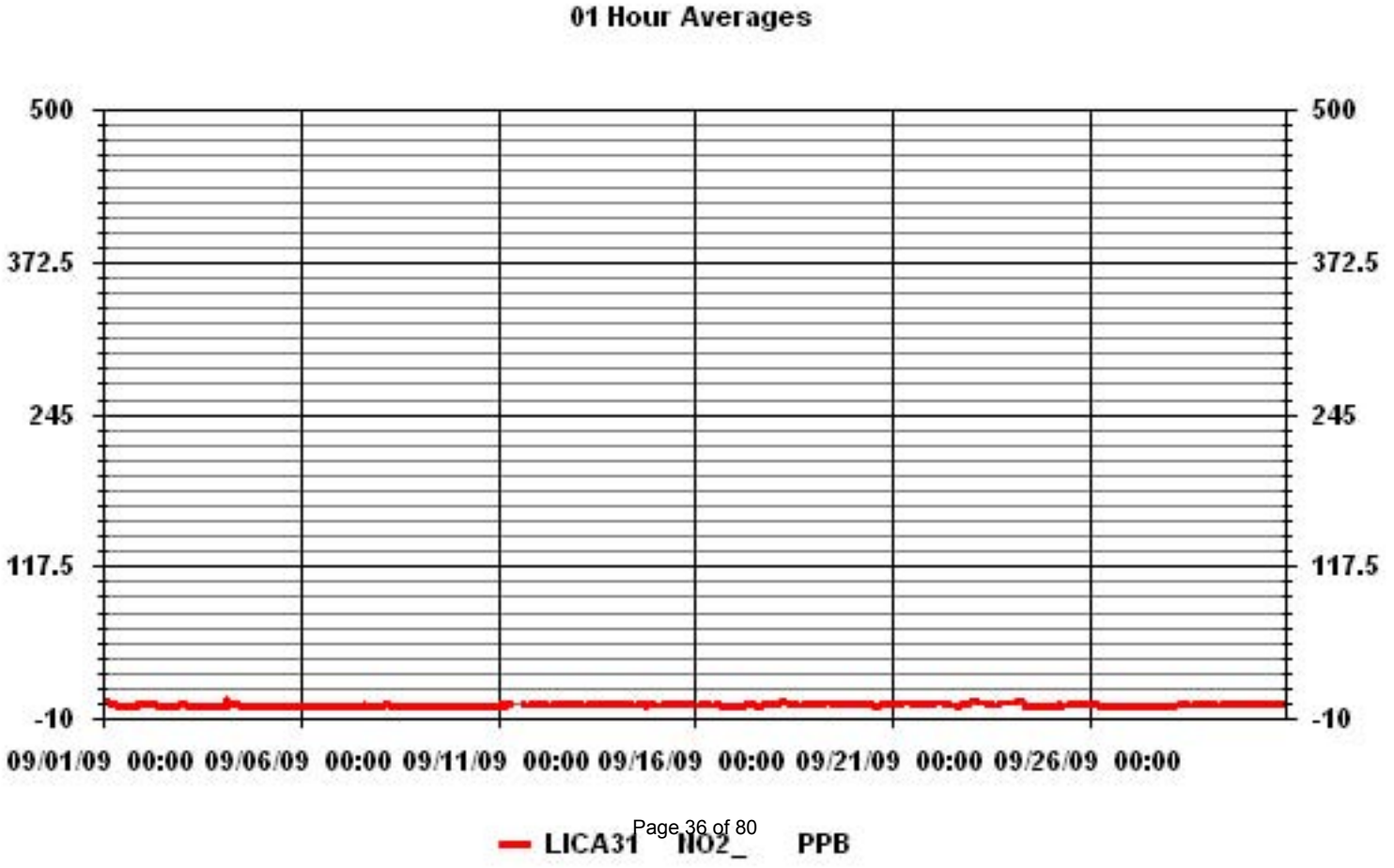


OBJECTIVE LIMIT: **ALBERTA ENVIRONMENT:** 1-HR 212 PPB | 24-HR 106 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	415					
MAXIMUM 1-HR AVERAGE:	6	PPB	@ HOUR(S)	7	ON DAY(S)	24
MAXIMUM 24-HR AVERAGE:	2.8	PPB			ON DAY(S)	23

IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:	718	HRS
MONTHLY CALIBRATION TIME:	8	HRS	AMD OPERATION UPTIME:	99.7	%
STANDARD DEVIATION:	1.10		MONTHLY AVERAGE:	1.03	PPB


01 Hour Averages
500
372.5
245
117.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 NO2_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

SEPTEMBER 2009

NITROGEN DIOXIDE MAX instantaneous maximum in ppb

MST

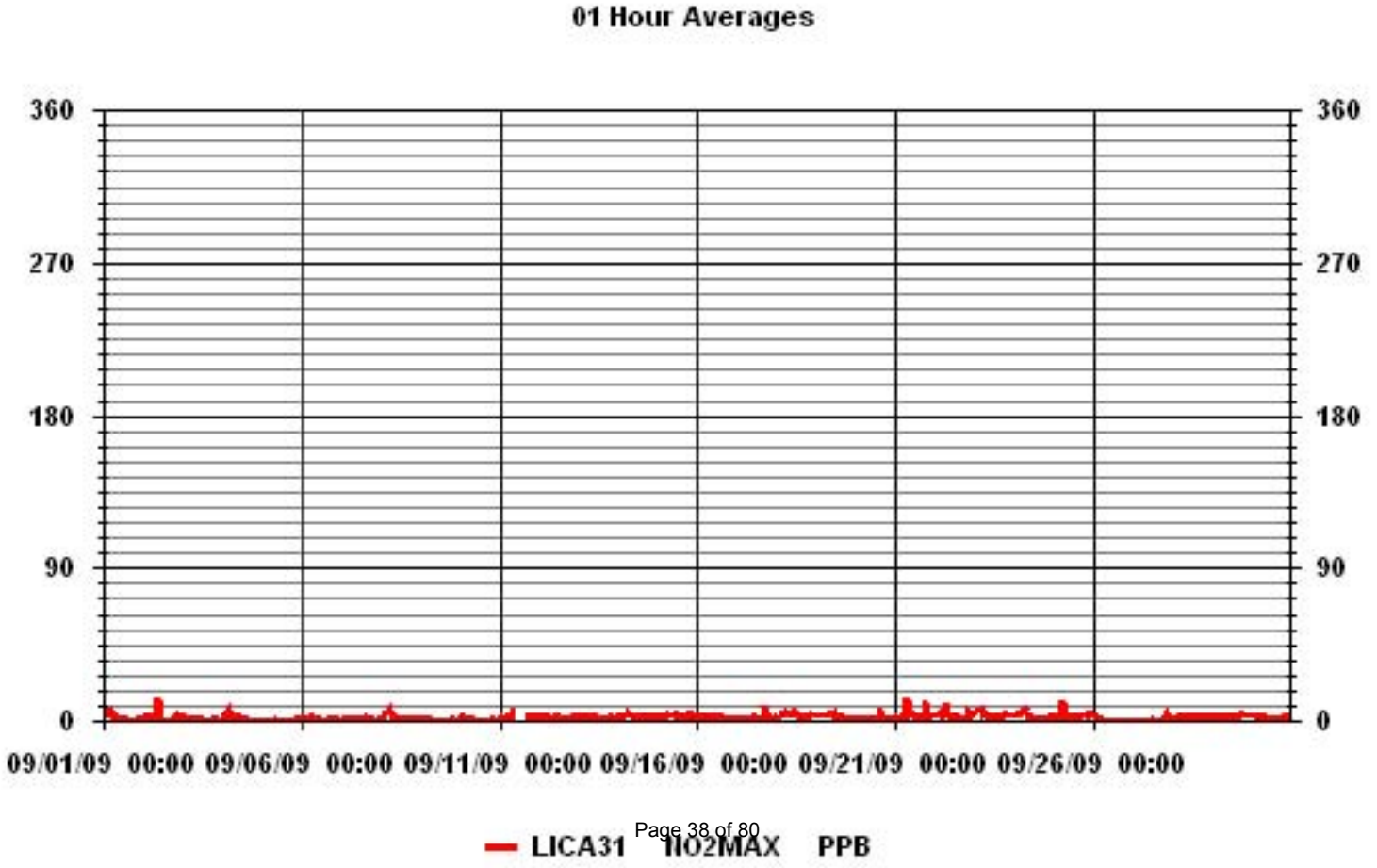
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4	6	5	5	6	2	3	3	IZS	1	1	0	1	1	1	0	0	0	0	0	1	1	1	1	6	1.9	24
2	1	1	2	2	2	2	3	IZS	1	**14**	1	1	0	0	0	0	0	0	1	1	3	1	1	2	**14**	1.7	24
3	2	2	1	1	1	1	IZS	1	1	1	1	1	P	P	1	0	0	0	1	1	1	1	0	0	2	0.9	22
4	1	0	4	6	2	IZS	4	3	2	2	3	2	1	1	1	1	0	0	0	0	0	0	0	0	6	1.4	24
5	0	0	0	0	IZS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.1	24
6	1	1	1	IZS	1	1	2	2	1	1	0	1	0	0	0	0	1	1	2	1	0	1	1	1	2	0.9	24
7	0	0	IZS	1	1	1	1	1	1	1	0	1	0	1	1	3	2	1	1	1	1	0	0	0	1	3	0.8	24
8	1	IZS	3	4	5	7	5	4	3	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	7	2.1	24
9	IZS	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	IZS	1	0.4	24
10	2	3	3	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	IZS	0	3	0.6	24
11	1	2	2	1	1	3	1	2	6	C	C	C	C	C	C	C	C	C	2	2	3	IZS	2	2	6	2.1	24
12	2	2	3	2	2	2	3	3	2	2	2	2	2	1	1	1	1	1	2	1	IZS	2	2	2	3	1.9	24
13	3	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	IZS	2	2	2	3	3	1.9	24
14	2	3	3	2	3	3	5	4	3	3	3	2	2	2	2	2	2	2	IZS	2	2	3	2	2	5	2.6	24
15	2	2	3	2	2	3	4	3	3	3	3	4	3	2	2	2	2	IZS	3	2	5	2	2	3	5	2.7	24
16	2	3	2	2	3	2	2	2	2	2	2	2	2	1	2	2	IZS	1	1	1	1	1	1	1	3	1.7	24
17	1	1	1	1	1	1	1	1	2	1	2	2	1	1	1	IZS	8	1	1	1	2	2	1	1	8	1.5	24
18	2	2	3	3	5	6	6	5	4	4	4	5	3	3	IZS	2	2	3	2	2	4	3	3	3	6	3.4	24
19	3	3	3	3	3	3	3	3	4	4	3	5	3	IZS	3	2	2	1	1	1	1	1	1	1	5	2.5	24
20	1	1	1	1	1	1	1	P	1	1	1	1	IZS	1	1	7	1	1	1	2	1	1	2	1	7	1.4	23
21	2	2	1	2	3	3	3	13	4	5	4	IZS	2	2	2	3	3	3	12	2	2	3	3	3	13	3.6	24
22	3	3	4	4	3	6	4	10	4	3	IZS	1	2	2	3	2	1	1	1	2	6	5	3	4	10	3.3	24
23	5	6	6	6	7	4	5	4	3	IZS	2	2	2	2	2	2	2	3	4	4	4	3	3	3	7	3.7	24
24	3	3	4	4	5	6	6	7	IZS	2	2	2	1	1	1	1	1	1	1	2	1	3	2	2	7	2.7	24
25	2	1	2	2	2	12	6	IZS	3	3	2	2	2	2	2	2	2	3	3	3	4	3	4	4	12	3.1	24
26	3	3	2	2	1	1	IZS	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.6	24
27	0	0	0	0	0	IZS	0	0	0	0	0	0	1	0	0	0	0	0	0	2	4	1	1	1	4	0.4	24
28	1	2	1	1	IZS	2	2	3	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	3	2.0	24
29	2	2	2	IZS	2	2	2	2	2	2	2	2	3	2	2	2	3	3	4	3	3	3	3	3	4	2.4	24
30	3	3	IZS	2	2	2	1	2	2	1	1	1	1	1	1	2	1	1	2	1	2	2	2	2	3	1.7	24
HOURLY MAX	5	6	6	6	7	12	6	13	6	14	4	5	3	3	3	7	8	3	12	4	6	5	4	4			
HOURLY AVG	1.9	2.0	2.3	2.3	2.4	2.9	2.8	3.0	2.1	2.2	1.6	1.6	1.4	1.1	1.2	1.4	1.4	1.1	1.7	1.4	2.0	1.7	1.6	1.7			

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:	557					
MAXIMUM INSTANTANEOUS VALUE:	14	PPB	@ HOUR(S)	9	ON DAY(S)	2
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		717	HRS
MONTHLY CALIBRATION TIME:	9	HRS				
STANDARD DEVIATION:	1.68					


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 TIO2MAX PPB

LICA31
NO2_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	1.32	1.03	1.62	5.59	7.65	6.77	7.80	6.77	7.06	5.44	7.65	8.68	7.65	13.99	10.16	.73	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	1.32	1.03	1.62	5.59	7.65	6.77	7.80	6.77	7.06	5.44	7.65	8.68	7.65	13.99	10.16	.73	

Calm : .00 %

Total # Operational Hours : 679

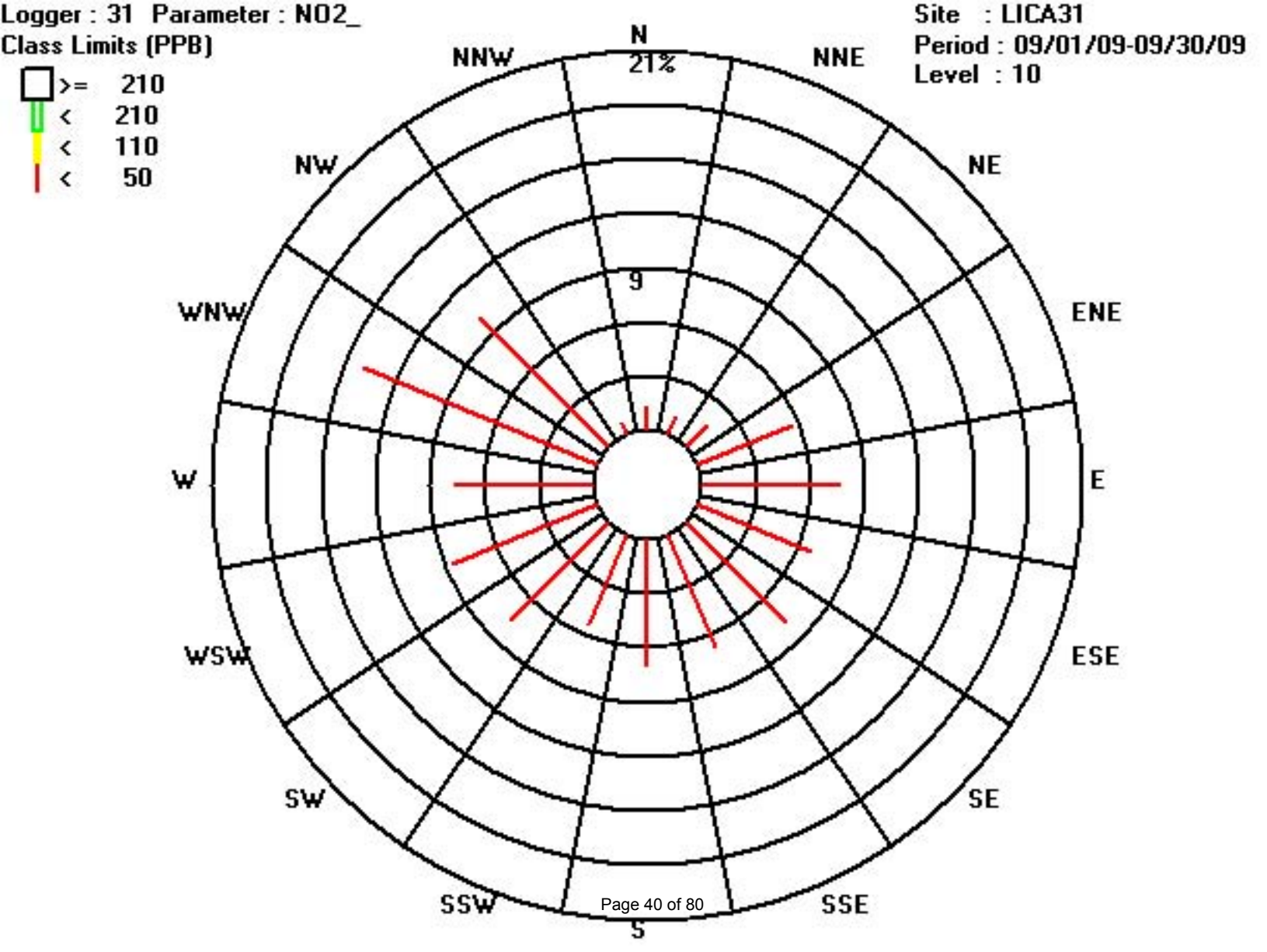
Distribution By Samples

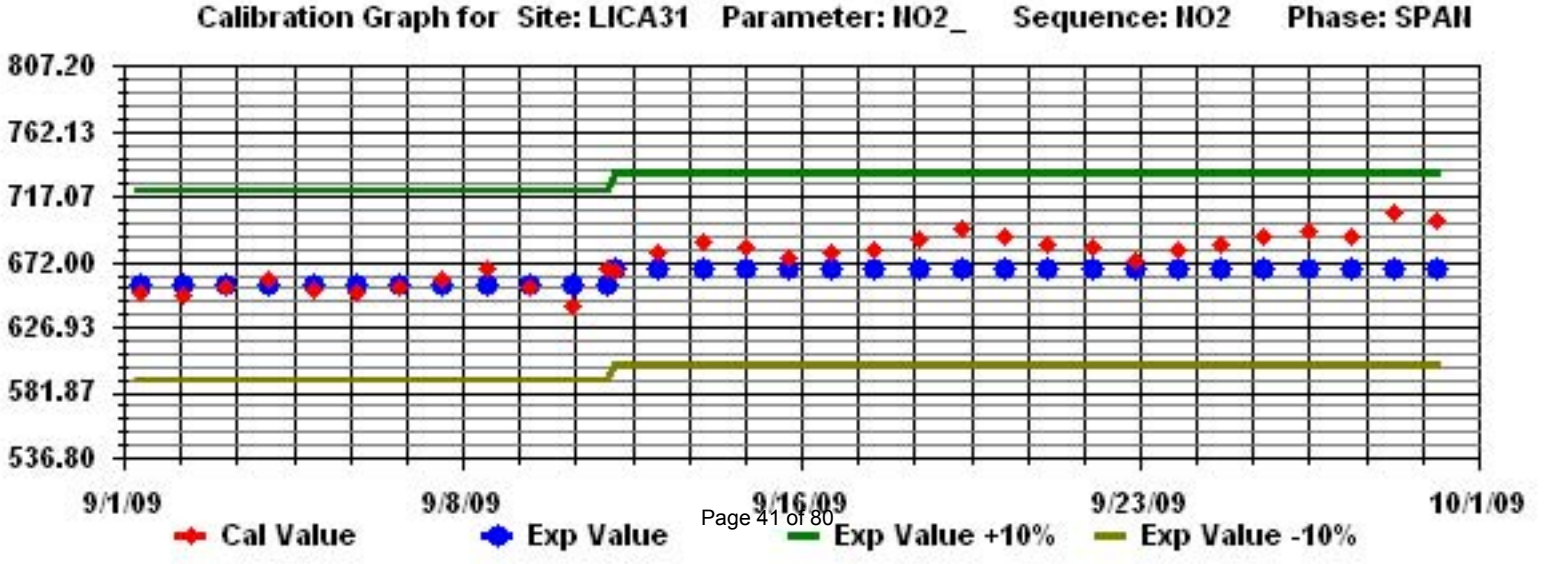
Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	9	7	11	38	52	46	53	46	48	37	52	59	52	95	69	5	679
<	110																	
<	210																	
>=	210																	
	Totals	9	7	11	38	52	46	53	46	48	37	52	59	52	95	69	5	

Calm : .00 %

Total # Operational Hours : 679


Logger : 31 Parameter : NO2_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA31
Period : 09/01/09-09/30/09
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA31 Parameter: NO2_ Sequence: NO2 Phase: SPAN
807.20
762.13
717.07
672.00
626.93
581.87
536.80
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Nitric Oxide

LAKELAND INDUSTRY & COMMUNICATY ASSOCIATION - ST. LINA

SEPTEMBER 2009

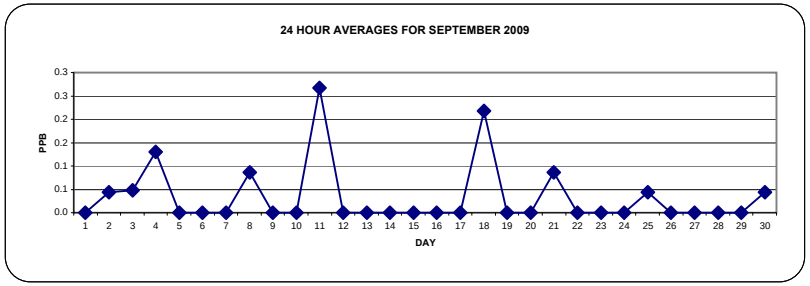
NITRIC OXIDE hourly averages in ppb

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	**IZS**	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	**IZS**	1	0	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	**IZS**	0	0	0	0	0	**P**	**P**	1	0	0	0	0	0	0	0	0	0	1	0.0	22
4	0	0	0	0	0	**IZS**	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
5	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
6	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
7	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
8	0	**IZS**	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
9	**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
10	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
11	0	0	0	0	0	0	0	1	**3**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	0	**IZS**	0	0	**3**	**0.3**	24
12	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
13	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
14	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
15	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
16	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
17	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
18	0	0	0	0	0	0	0	1	2	2	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	2	0.2	24
19	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
20	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
21	0	0	0	0	0	0	0	1	0	1	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
22	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
23	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
24	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
25	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
26	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
27	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
28	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
29	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
30	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
HOURLY MAX	0	0	0	1	0	0	1	1	3	2	0	0	0	0	1	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	0.2	0.3	0.1	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			

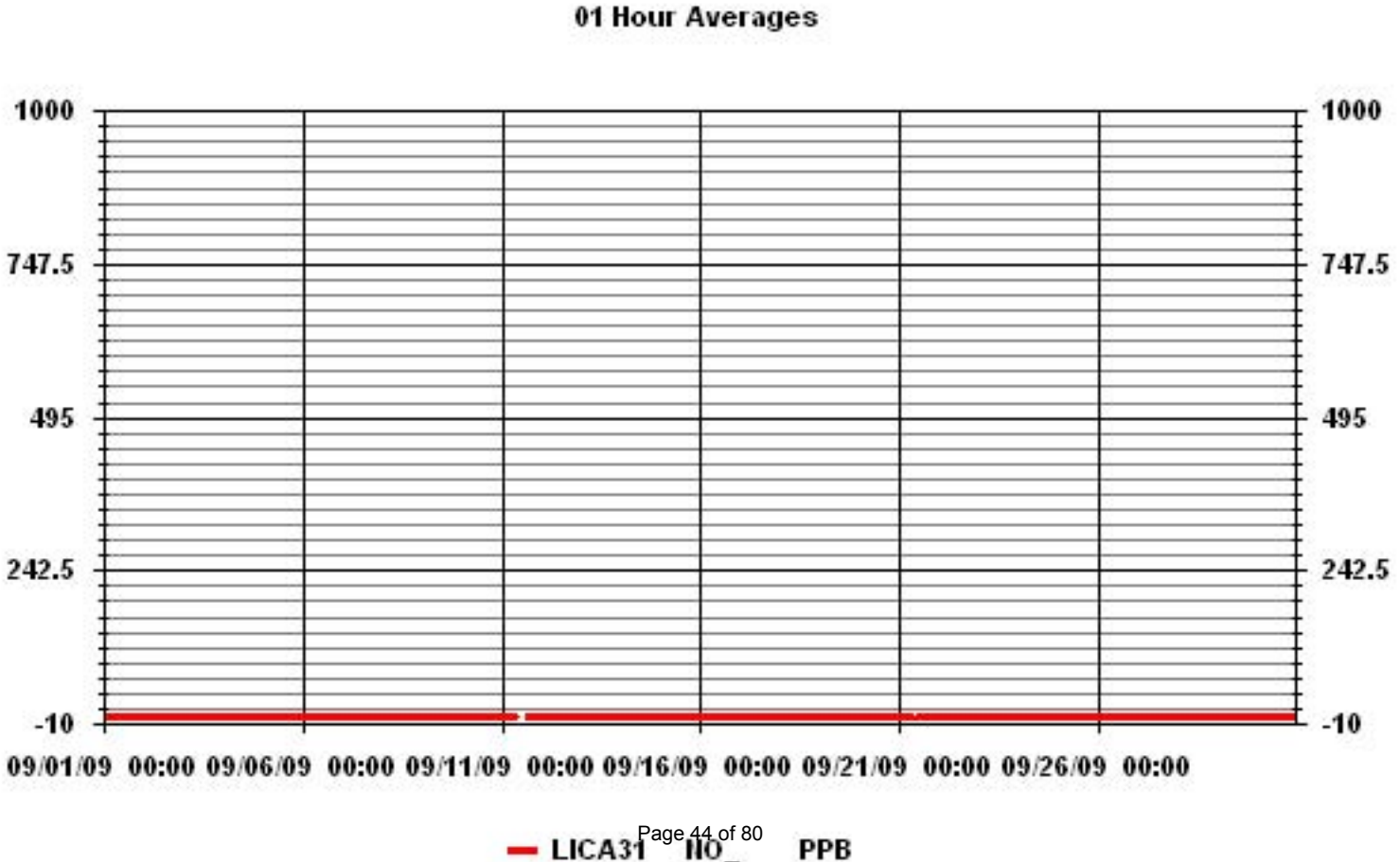
STATUS FLAG CODES

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:	16						
MAXIMUM 1-HR AVERAGE:	3	PPB	@ HOUR(S)	8	ON DAY(S)	11	
MAXIMUM 24-HR AVERAGE:	0.3	PPB			ON DAY(S)	11	
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		718	HRS	
MONTHLY CALIBRATION TIME:	8	HRS	AMD OPERATION UPTIME:		99.7	%	
STANDARD DEVIATION:	0.21		MONTHLY AVERAGE:		0.03	PPB	


01 Hour Averages
1000
747.5
495
242.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 NO_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

SEPTEMBER 2009

NITRIC OXIDE MAX instantaneous maximum in ppb

MST

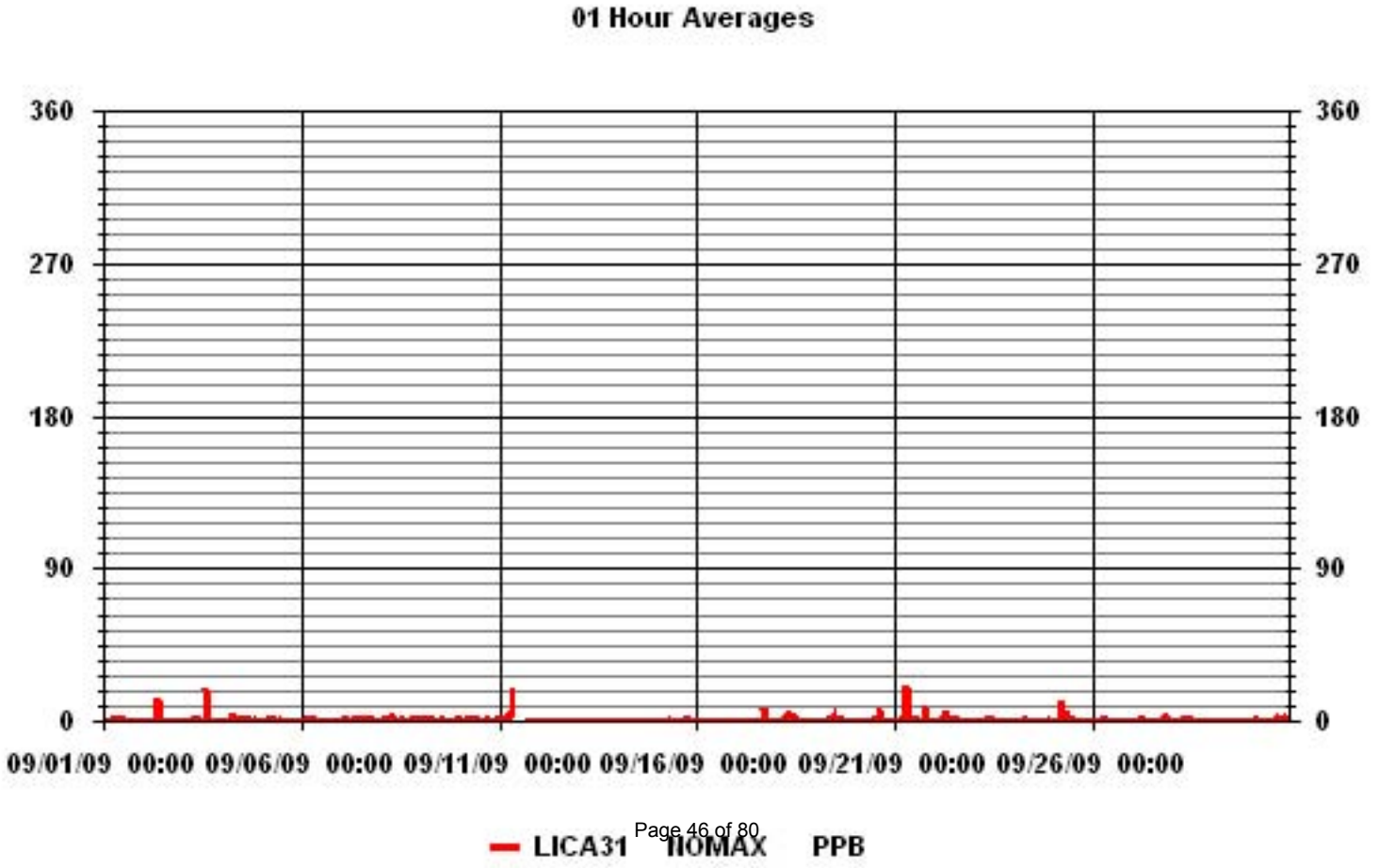
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	0	0	0	1	1	**IZS**	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0.3	24
2	0	0	0	0	0	0	1	**IZS**	2	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0.7	24
3	0	0	0	0	0	0	**IZS**	1	1	0	1	0	**P**	**P**	17	0	0	0	0	0	0	0	0	0	17	1.0	22
4	0	0	0	0	0	**IZS**	2	2	2	1	2	1	0	1	1	0	1	0	0	0	1	0	0	0	2	0.6	24
5	0	0	0	0	**IZS**	2	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	24
6	0	0	0	**IZS**	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	24
7	0	0	**IZS**	1	1	1	0	1	1	1	0	1	0	1	0	1	1	0	0	1	0	0	0	0	1	0.5	24
8	1	**IZS**	2	1	1	2	3	1	2	1	0	0	0	1	1	0	0	0	0	1	1	0	1	0	3	0.8	24
9	**IZS**	1	1	1	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	**IZS**	1	0.3	24
10	2	0	0	0	0	1	0	0	1	0	1	1	1	0	0	0	1	1	1	0	0	0	**IZS**	1	2	0.5	24
11	1	0	1	0	1	3	1	2	17	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	0	0	0	**IZS**	0	0	17	1.9	24
12	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
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	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	**IZS**	1	0	0	0	0	1	0.0	24
15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**IZS**	2	0	0	0	0	0	2	0.1	24
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	1	0	0	0	0	0	0	1	0.0	24
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	6	0	0	0	0	0	0	0	6	0.3	24
18	0	0	0	0	0	3	2	3	6	3	1	2	0	0	**IZS**	1	0	0	0	0	0	0	0	0	6	0.9	24
19	0	0	0	0	0	0	0	0	1	1	1	3	0	**IZS**	1	0	1	0	0	0	0	0	0	0	3	0.3	24
20	0	0	0	0	0	0	0	**P**	0	0	0	0	**IZS**	2	0	7	0	0	0	0	0	0	0	0	7	0.4	23
21	0	0	0	0	0	3	0	**21**	1	2	1	**IZS**	2	1	0	0	0	0	9	0	0	0	0	0	**21**	1.7	24
22	0	0	0	0	0	2	1	5	1	0	**IZS**	2	0	1	1	0	0	0	0	0	0	0	0	0	5	0.6	24
23	0	0	0	0	0	0	0	0	0	**IZS**	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.1	24
24	0	0	0	0	0	0	1	1	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.2	24
25	0	0	0	0	0	12	0	**IZS**	5	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	12	0.8	24
26	0	0	0	0	0	0	**IZS**	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24
27	0	0	0	0	0	**IZS**	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	2	0.2	24
28	0	0	0	0	**IZS**	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0.3	24
29	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
30	0	0	**IZS**	2	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	1	0	0	2	0.3	24
HOURLY MAX	2	1	2	2	2	12	3	21	17	13	2	3	2	2	17	7	6	1	9	1	2	1	1	1			
HOURLY AVG	0.1	0.0	0.1	0.2	0.3	1.1	0.5	1.6	1.6	1.0	0.4	0.4	0.2	0.3	0.8	0.4	0.4	0.1	0.4	0.1	0.2	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:	143					
MAXIMUM INSTANTANEOUS VALUE:	21	PPB	@ HOUR(S)	7	ON DAY(S)	21
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		717	HRS
MONTHLY CALIBRATION TIME:	9	HRS				
STANDARD DEVIATION:	1.60					


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 HOMAX PPB

LICA31
NO_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	1.32	1.03	1.62	5.59	7.65	6.77	7.80	6.77	7.06	5.44	7.65	8.68	7.65	13.99	10.16	.73	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	1.32	1.03	1.62	5.59	7.65	6.77	7.80	6.77	7.06	5.44	7.65	8.68	7.65	13.99	10.16	.73	

Calm : .00 %

Total # Operational Hours : 679

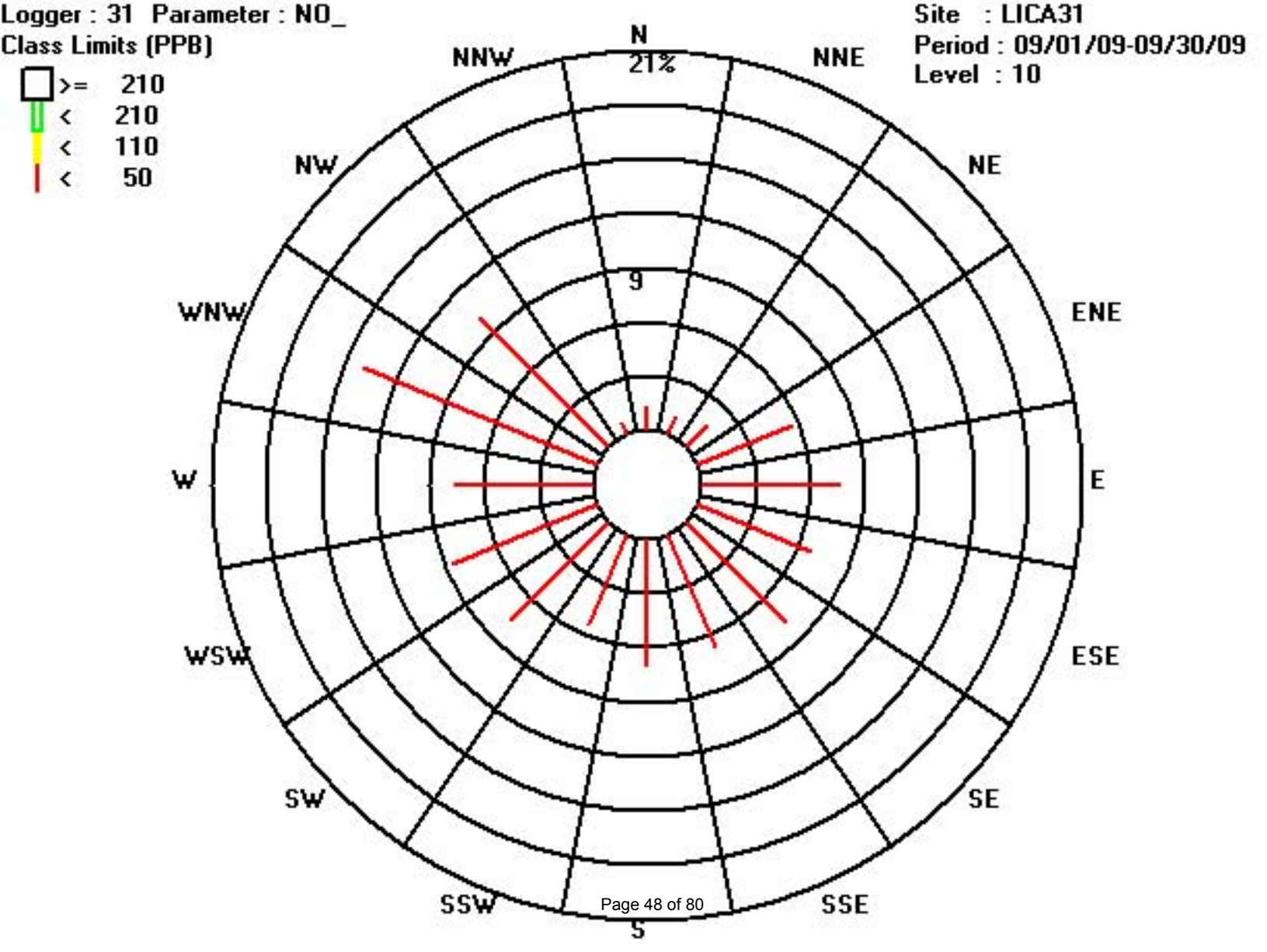
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	9	7	11	38	52	46	53	46	48	37	52	59	52	95	69	5	679
< 110																	
< 210																	
>= 210																	
Totals	9	7	11	38	52	46	53	46	48	37	52	59	52	95	69	5	

Calm : .00 %

Total # Operational Hours : 679


Logger : 31 Parameter : NO_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA31
Period : 09/01/09-09/30/09
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 - ST. LINA

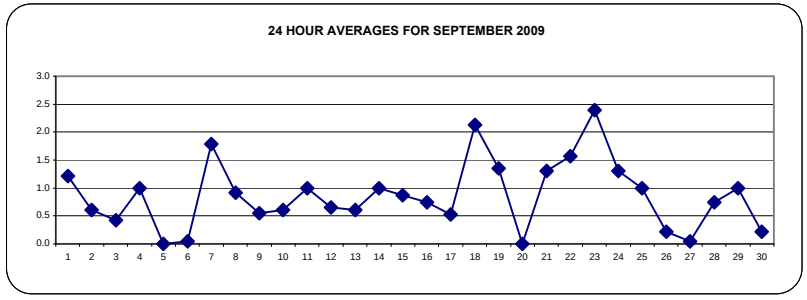
SEPTEMBER 2009

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	3	4	5	4	4	1	2	3	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1.2	24
2	1	1	1	1	1	1	2	**IZS**	2	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	0.6	24
3	1	1	1	1	1	1	**IZS**	1	1	0	0	0	**P**	**P**	1	0	0	0	0	0	0	0	0	0	1	0.4	22
4	0	0	1	4	1	**IZS**	4	4	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	4	1.0	24
5	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
6	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	24
7	0	0	**IZS**	3	2	2	2	2	2	2	1	1	2	2	2	4	3	2	2	2	1	1	1	2	4	1.8	24
8	3	**IZS**	2	2	2	4	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.9	24
9	**IZS**	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	**IZS**	2	0.5	24
10	3	3	2	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	3	0.6	24
11	0	1	1	0	0	1	1	2	4	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	1	0	1	1	**IZS**	1	1	4	1.0	24
12	1	1	1	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	**IZS**	0	1	1	2	0.7	24
13	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	**IZS**	1	0	1	1	1	0.6	24
14	1	1	1	1	1	2	2	3	2	2	1	1	0	0	0	0	0	0	**IZS**	1	1	1	1	1	3	1.0	24
15	1	1	1	0	1	1	1	1	1	1	2	2	1	0	0	0	0	**IZS**	1	1	1	1	1	1	2	0.9	24
16	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	**IZS**	1	1	1	1	1	1	0	1	0.7	24
17	0	0	0	0	0	0	1	1	2	2	2	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	2	0.5	24
18	1	1	1	1	2	4	5	5	5	5	2	3	2	2	**IZS**	1	1	1	1	1	2	1	1	1	5	2.1	24
19	2	2	2	1	1	1	2	2	3	3	3	3	2	**IZS**	2	1	1	0	0	0	0	0	0	0	3	1.3	24
20	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
21	0	0	0	0	1	2	2	4	3	4	3	**IZS**	1	1	1	2	2	1	0	0	0	1	1	1	4	1.3	24
22	1	1	2	3	2	3	3	3	2	2	**IZS**	1	1	1	1	0	0	0	0	1	3	2	2	2	3	1.6	24
23	4	4	5	4	4	3	3	3	3	**IZS**	2	1	1	1	1	1	1	1	2	3	2	2	2	2	5	**2.4**	24
24	2	2	3	3	3	4	5	**6**	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	**6**	1.3	24
25	0	0	0	0	0	1	1	**IZS**	3	2	1	0	0	0	1	0	1	1	2	2	2	2	2	2	3	1.0	24
26	2	1	1	0	0	0	**IZS**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	24
27	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.0	24
28	0	1	1	1	**IZS**	1	1	2	2	1	1	2	2	1	1	0	0	0	0	0	0	0	0	0	2	0.7	24
29	0	0	0	**IZS**	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	2	1.0	24
30	1	1	**IZS**	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	24
HOURLY MAX	4	4	5	4	4	4	5	6	5	5	3	3	2	2	2	4	3	2	2	3	3	2	2	2			
HOURLY AVG	1.0	1.0	1.3	1.3	1.1	1.4	1.7	1.9	1.6	1.2	0.9	0.7	0.6	0.4	0.4	0.4	0.4	0.3	0.4	0.6	0.7	0.5	0.6	0.6			

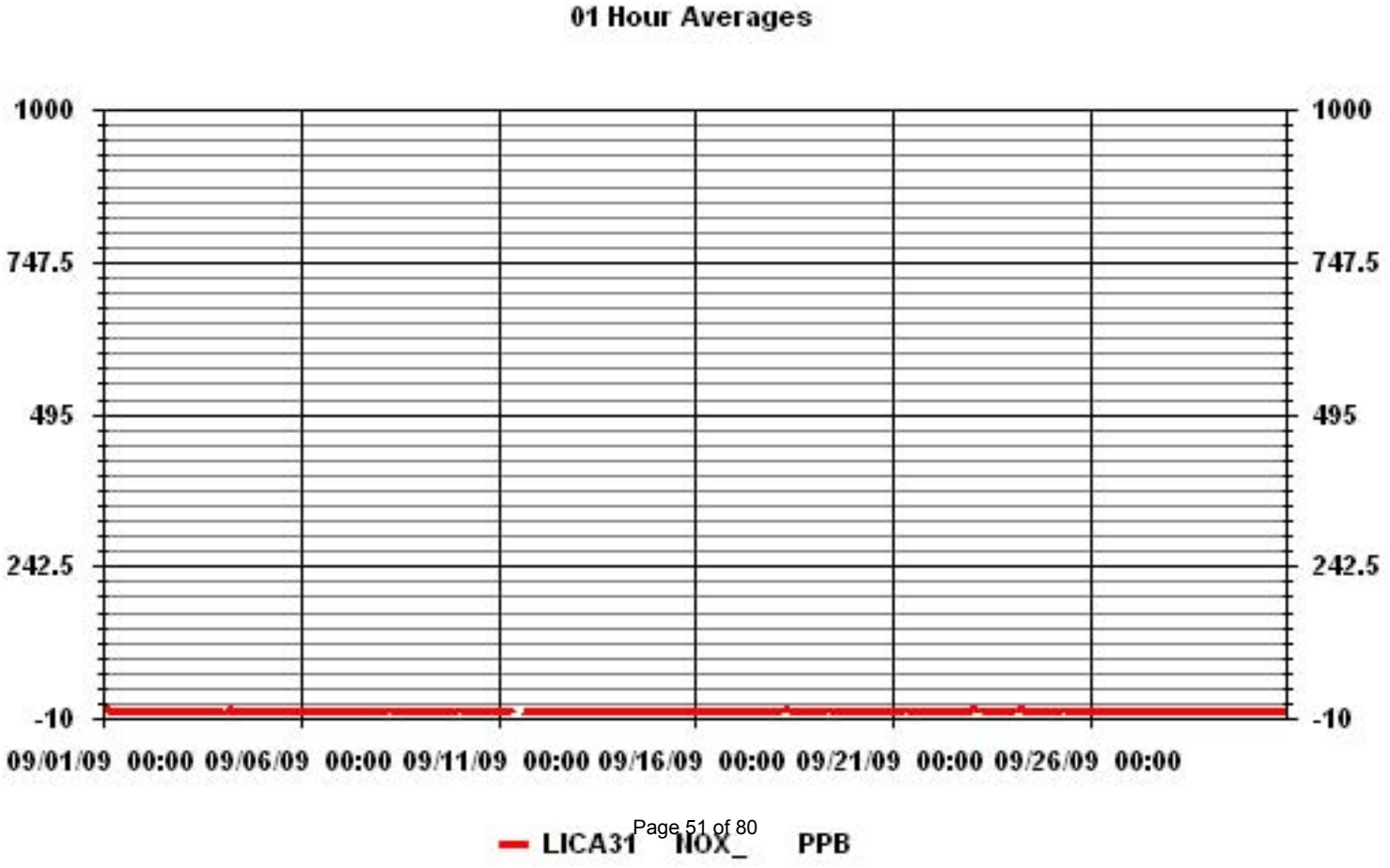
STATUS FLAG CODES

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



MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	355						
MAXIMUM 1-HR AVERAGE:	6	PPB	@ HOUR(S)	7	ON DAY(S)	24	
MAXIMUM 24-HR AVERAGE:	2.4	PPB			ON DAY(S)	23	
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		718	HRS	
MONTHLY CALIBRATION TIME:	8	HRS	AMD OPERATION UPTIME		99.7	%	
STANDARD DEVIATION	1.09		MONTHLY AVERAGE		0.86	PPB	


01 Hour Averages
1000
747.5
495
242.5
-10
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 NOX_ PPB

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

SEPTEMBER 2009

OXIDES OF NITROGEN MAX instantaneous maximum in ppb

MST

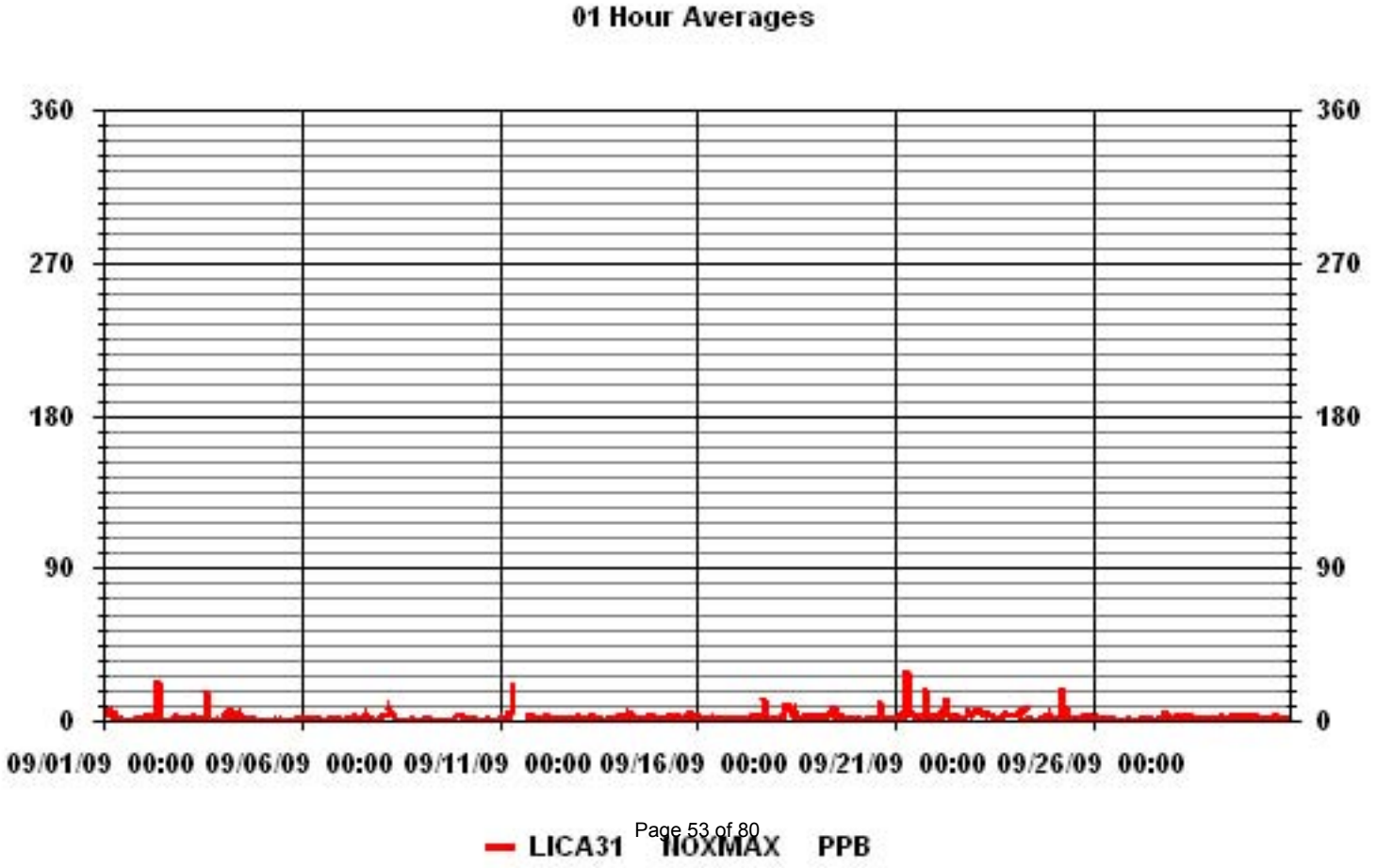
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	5	6	6	5	6	2	3	4	**IZS**	2	1	1	1	0	0	0	0	0	0	1	1	1	1	1	6	2.0	24
2	1	2	2	2	2	2	3	**IZS**	3	24	1	0	0	0	0	0	0	0	1	1	4	1	1	2	24	2.3	24
3	1	2	1	1	1	2	**IZS**	2	2	1	1	1	**P**	**P**	16	0	0	0	0	0	0	1	0	0	16	1.5	22
4	1	0	4	5	2	**IZS**	5	5	4	2	4	2	1	1	1	1	1	0	1	1	1	0	0	0	5	1.8	24
5	0	0	0	0	**IZS**	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0.2	24
6	1	1	1	**IZS**	2	1	2	1	1	1	0	1	1	0	0	0	0	1	2	1	1	1	2	1	2	1.0	24
7	0	0	**IZS**	2	1	1	1	1	2	2	0	1	1	1	1	4	2	1	1	1	0	0	0	1	4	1.0	24
8	2	**IZS**	3	3	4	8	6	4	4	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	8	1.6	24
9	**IZS**	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	**IZS**	1	0.3	24
10	3	3	3	1	0	1	1	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	**IZS**	0	3	0.7	24
11	1	2	2	1	2	5	2	4	21	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	2	2	2	**IZS**	2	1	21	3.5	24
12	1	2	1	2	2	2	2	2	1	1	2	1	1	1	1	1	1	1	1	1	**IZS**	1	1	2	2	1.3	24
13	2	2	1	1	1	1	1	2	2	2	1	1	1	1	1	1	0	1	1	**IZS**	1	1	1	2	2	1.2	24
14	2	2	2	2	2	2	5	4	4	3	3	2	1	1	1	1	1	1	**IZS**	2	2	2	2	1	5	2.1	24
15	1	1	2	1	1	2	3	2	2	3	3	3	2	2	2	1	2	**IZS**	4	2	5	2	2	3	5	2.2	24
16	1	2	2	1	2	1	1	2	1	2	2	1	1	1	1	1	**IZS**	2	1	1	1	1	2	1	2	1.3	24
17	1	1	1	1	1	1	1	2	3	2	2	2	2	2	2	**IZS**	11	0	1	1	1	1	1	1	11	1.8	24
18	2	1	2	2	4	8	7	7	10	6	4	6	3	2	**IZS**	2	1	4	1	2	3	3	2	2	10	3.7	24
19	2	2	2	2	2	2	2	3	4	5	3	8	3	**IZS**	4	2	2	1	1	1	1	1	1	1	8	2.4	24
20	0	1	1	1	0	0	1	**P**	1	1	1	1	**IZS**	2	1	12	0	1	1	1	1	0	1	0	12	1.3	23
21	1	1	1	2	2	6	3	**29**	5	5	4	**IZS**	2	2	1	3	3	2	20	1	1	2	2	2	**29**	4.3	24
22	2	2	3	4	3	7	5	13	4	3	**IZS**	3	1	3	3	2	1	1	1	2	5	5	3	4	13	3.5	24
23	5	5	6	6	6	4	4	3	4	**IZS**	4	2	1	1	1	1	2	2	3	4	3	3	3	3	6	3.3	24
24	3	3	4	3	5	5	6	8	**IZS**	2	1	1	0	0	0	1	0	1	0	2	1	4	2	1	8	2.3	24
25	1	1	1	1	1	20	6	**IZS**	7	3	2	1	2	1	1	1	2	3	3	3	3	2	3	3	20	3.1	24
26	3	2	2	1	0	0	**IZS**	1	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	3	0.6	24
27	0	0	0	0	0	**IZS**	1	1	1	1	1	0	1	0	0	1	0	1	1	3	6	2	2	1	6	1.0	24
28	1	3	2	1	**IZS**	2	2	2	3	2	2	3	3	2	1	1	1	1	1	1	1	1	1	1	3	1.7	24
29	1	1	1	**IZS**	2	1	2	2	1	2	1	2	2	2	2	2	2	2	3	3	3	2	2	2	3	1.9	24
30	2	2	**IZS**	2	2	1	1	1	1	1	1	1	1	1	1	4	1	1	1	1	2	1	1	1	4	1.3	24
HOURLY MAX	5	6	6	6	6	20	7	29	21	24	4	8	3	3	16	12	11	4	20	4	6	5	3	4			
HOURLY AVG	1.6	1.7	2.0	1.9	2.0	3.2	2.8	3.9	3.4	2.8	1.6	1.6	1.1	1.0	1.5	1.5	1.2	1.0	1.8	1.3	1.8	1.4	1.3	1.3			

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

NUMBER OF NON-ZERO READINGS:	546					
MAXIMUM INSTANTANEOUS VALUE:	29	PPB	@ HOUR(S)	7	ON DAY(S)	21
IZS CALIBRATION TIME:	31	HRS	OPERATIONAL TIME:		717	HRS
MONTHLY CALIBRATION TIME:	9	HRS				
STANDARD DEVIATION:	2.53					


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 NOXMAX PPB

LICA31
NOX_ / WDR Joint Frequency Distribution (Percent)

September 2009

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	1.32	1.03	1.62	5.59	7.65	6.77	7.80	6.77	7.06	5.44	7.65	8.68	7.65	13.99	10.16	.73	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	1.32	1.03	1.62	5.59	7.65	6.77	7.80	6.77	7.06	5.44	7.65	8.68	7.65	13.99	10.16	.73	

Calm : .00 %

Total # Operational Hours : 679

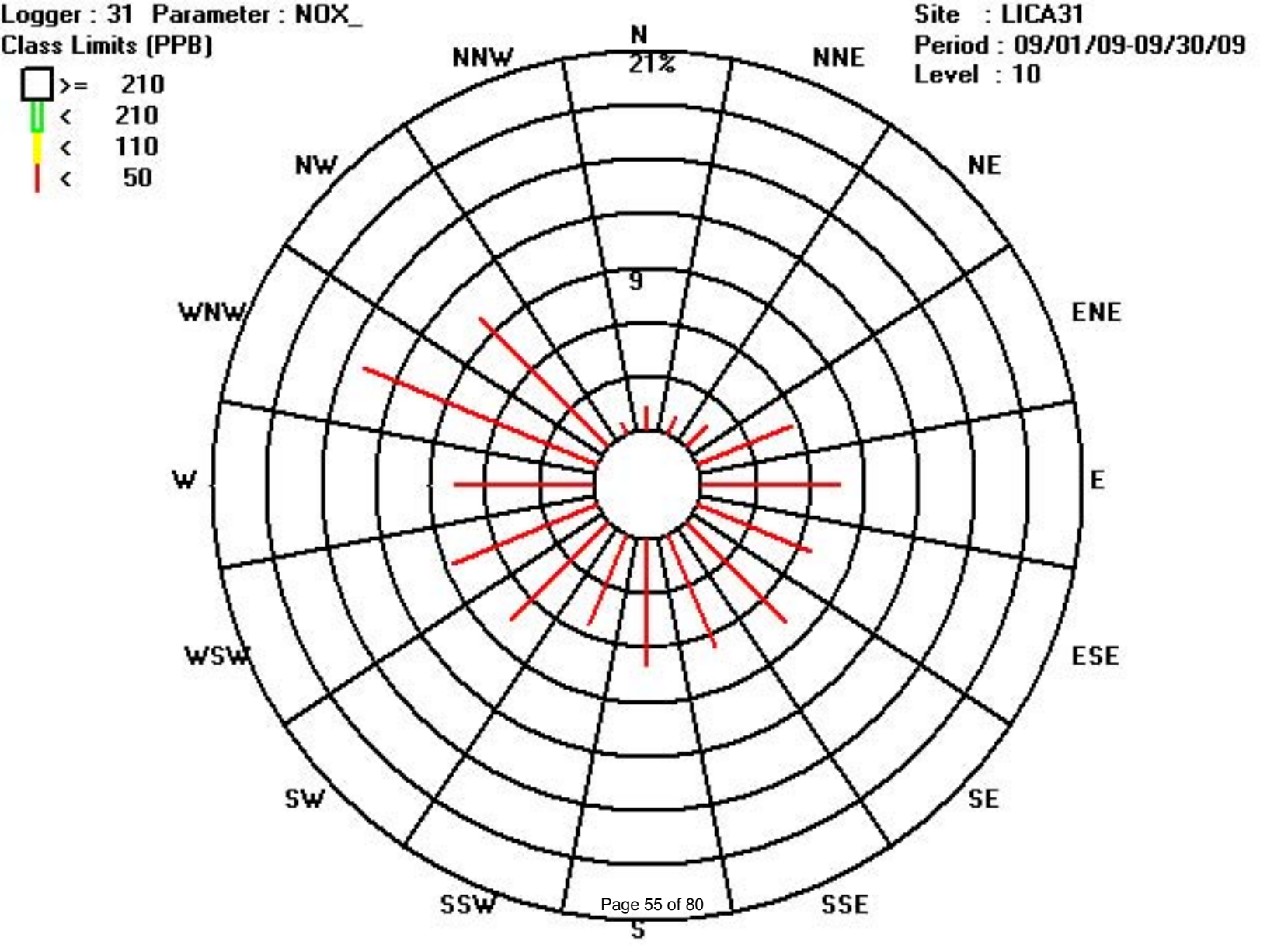
Distribution By Samples

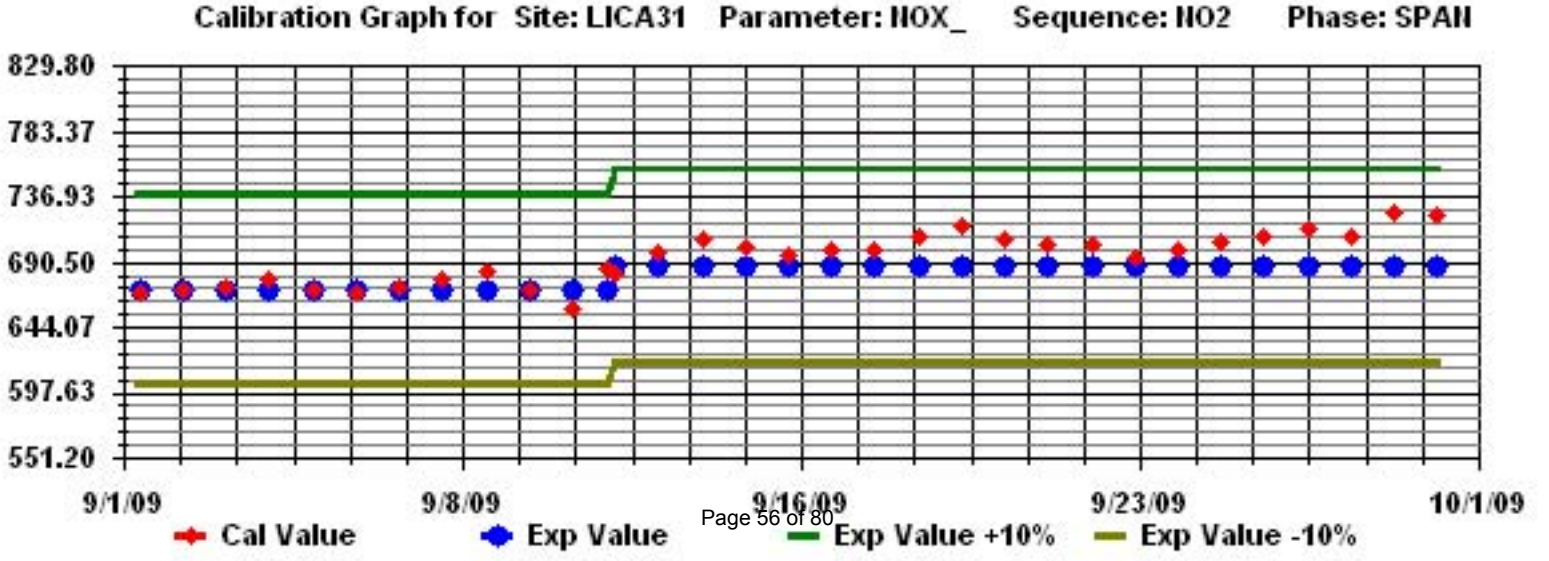
Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	9	7	11	38	52	46	53	46	48	37	52	59	52	95	69	5	679
< 110																	
< 210																	
>= 210																	
Totals	9	7	11	38	52	46	53	46	48	37	52	59	52	95	69	5	

Calm : .00 %

Total # Operational Hours : 679


Logger : 31 Parameter : NOX_
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA31
Period : 09/01/09-09/30/09
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9


Calibration Graph for Site: LICA31 Parameter: NOX_ Sequence: NO2 Phase: SPAN
829.80
783.37
736.93
690.50
644.07
597.63
551.20
9/1/09
9/8/09
9/16/09
9/23/09
10/1/09
Cal Value
Exp Value
Exp Value +10%
Exp Value -10%

Vector Wind Speed

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION -ST. LINA

SEPTEMBER 2009

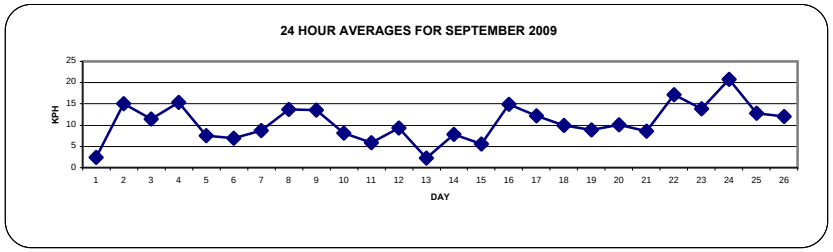
WIND SPEED hourly averages (km/hr)

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	7.6	8.2	8.2	7.5	8.8	10.3	12	12.3	14.8	10.8	9.2	9.3	5.5	3.5	4.5	4.5	5.4	6.1	9.8	9.5	10.7	11.5	10.1	10.3	14.8	8.3	24
2	9	10.1	11.5	11.1	7.7	7.7	9	9.6	8.1	10.5	13.3	14	14.2	15.7	14.9	13	13	9.5	8.7	8.4	3.9	3	5.5	7.6	15.7	7.8	24
3	10.1	11.8	8.7	6.5	7.2	6.9	5.9	2	1.5	6.3	8.1	9.5	**P**	**P**	15.1	16.4	16.1	15.8	17.1	16.1	16.4	6.4	7.2	7.6	17.1	4.6	22
4	9.5	12.7	20.8	21.7	12.3	19.5	15.8	14.1	10.6	14.2	11.2	13.3	9.6	5.7	10	16.4	17.8	20.8	22.2	16.9	13.6	17.9	18.7	13.2	22.2	12.9	24
5	12.7	11.6	11.1	11.8	14.6	10.1	7.8	8.5	8.7	8.5	6.3	5.3	4.9	6.6	2.7	2.4	1.3	3.6	6.7	8.7	10.2	11.5	11.9	11.5	14.6	2.4	24
6	12.6	13.1	11.6	12.7	12.5	14.3	15.2	14.4	15.6	14.5	21.3	25.5	26.9	26.8	24.2	20.7	18.9	19.9	19.9	18.4	19.9	18.4	14.3	20.7	26.9	15.1	24
7	16.2	19.4	21.4	21.5	16.5	10.3	8.7	11.7	10.7	15.7	18.5	14.8	17.6	15.6	7.5	9.1	11.1	10.9	9.7	10	7.8	9.2	12.8	11	21.5	11.4	24
8	10.7	8.8	8.3	9	8.8	7.2	6.6	8.1	13.1	29.3	31	32.2	33.3	24.8	20.8	25.3	23.1	18.6	14.8	11.1	10.5	13	14.9	19.3	33.3	15.4	24
9	15.9	17.6	15.9	13.9	13.1	13.4	11.8	12.8	14.6	14	16	16.7	13.9	13.9	12.5	9.6	4.3	3.9	4.5	7	8.2	3.6	6.3	7.8	17.6	7.6	24
10	8.4	7	7.8	8.3	7.7	7.6	4.6	6	11.3	12	12	13.7	12.2	13.2	10	10.2	9.2	7.4	6	7	7	7.9	7.3	6	13.7	7	24
11	5.9	6.5	6.4	8	10.1	7.6	6.9	6.2	7	8.5	11.6	12.6	13.1	14.6	11.6	12.5	10.2	8.8	8	9.6	10.3	10.3	10.2	9.8	14.6	8.8	24
12	13.5	12.4	11.2	12.9	12.7	11.1	10.3	9.9	11.8	12	14.6	17.7	18.4	19.6	18.9	17.9	17.6	15.3	10.8	12.3	14	13.8	13.4	12.5	19.6	13.7	24
13	12	13.4	12.6	13.1	12.9	14.4	13.7	15.8	15	13.7	13.1	14.7	15.9	16.8	18.3	15.9	15.2	12.8	11.2	11.9	13.5	14.1	13.8	10.8	18.3	13.5	24
14	12.2	11.8	9.8	9.1	8.7	10.1	8.9	10.8	8.1	8.5	8.5	10.8	11.2	13.7	13.2	15	11.9	7.6	5.7	6.3	8.7	7.7	3	3.4	15	8.1	24
15	4.3	5	3.2	0.7	4.4	3.6	2.3	1.7	9.7	9.8	10.8	12.4	12.8	14.1	12.2	11	10.8	8.9	6.4	6.6	7.8	7	7.2	9	14.1	5.9	24
16	8.5	9.4	6.1	5	4.5	8	5.3	4	7.7	7.4	8.9	11	12.1	15.1	16.2	17.3	17.3	16.3	16.8	17.6	19.1	18.3	18.8	19.1	19.1	9.4	24
17	17.2	17.3	16.1	14.1	11.6	13.2	16.1	8.1	9.9	9.5	6.2	7	12.5	15.6	19.7	20.9	15.5	11.9	10.3	11.7	11.1	12.6	11.1	10.4	20.9	2.3	24
18	7.2	7.9	6.7	5.2	8	7.6	6.5	5.9	4.9	9.8	10.8	13	11.4	10.2	8.5	7.2	8.3	6.3	8.1	9.9	10.1	11.7	14.2	11.7	14.2	7.8	24
19	13.6	13.8	15	14.4	11.9	13.2	12	15.2	15.5	13.5	13.4	13	13.6	11.1	11.1	12.6	16.6	19.2	15.1	14.6	15.7	15.9	15.1	16	19.2	5.6	24
20	13.4	13	11.1	9.6	11.8	14.5	16.4	18.4	19	21.2	18.5	19.7	20.9	19.9	18.7	16.4	17.4	16.4	15	11.9	10.6	9.5	9.8	9.5	21.2	14.9	24
21	10.9	9.8	10.4	11.1	12	10.2	9.5	6.4	7.4	11.5	13.3	20.7	25.4	22.3	21.9	21.1	20.2	15.7	9.9	9.3	7.8	8	9	8.7	25.4	12.2	24
22	7.2	7.6	8.3	8.6	9.3	7.6	8.2	5.6	7.2	9.1	15.2	18	19.6	21	19.7	14.2	14.3	10.6	8.9	8.1	7.3	8.4	6.8	8	21	9.9	24
23	7.3	6.6	5.8	3.3	6.6	4	6.5	5.3	5.1	7.7	12	15	14	12.9	12.7	**12.4**	11.2	11.4	12.3	14.1	14.4	13.5	14.5	12.8	**15**	**8.9**	24
24	13.5	13.1	10.4	13	12.3	13	11.9	15.9	12.9	19.4	19.9	20	18.5	21	21.3	16.1	15.5	9.7	8.6	9.3	8.9	9.2	9.2	9	21.3	10.1	24
25	10.2	9.5	10.9	11.6	9.7	8.9	8.6	6.6	5.4	5.4	9.4	16.5	14.6	13.1	15.4	17.5	13.7	10.5	9.7	10.9	8.8	7	5.9	8.5	17.5	8.6	24
26	9.7	8	7.4	10.3	11.2	10.4	12.1	10.8	14.3	19.6	20.4	22	21.5	23.1	24.8	26.8	25	20.7	20	18.5	22.1	22	19.3	17.1	26.8	17.2	24
27	17.1	20.1	19.1	18.9	22	18.6	18.8	17.3	17.8	21.7	19.2	18.6	17.7	16.1	15.4	14.8	13.1	9.5	8.2	6.8	5.8	5.7	5.5	6.6	22	13.9	24
28	8.7	8.3	8.1	9.6	11.2	11.1	12.5	12.9	16	17.3	21.2	23.5	22.4	27.5	29.1	30.6	30.6	29.9	27.1	26.9	30.8	32.4	32.7	30.5	32.7	20.8	24
29	29.9	27.8	26.1	23.4	22.9	23.9	23.2	26.7	21.1	22.8	22.4	19.3	19.6	16.1	16.9	12.9	9.9	7.3	8.9	9	13.4	12.8	13	11	29.9	12.8	24
30	10.5	10.8	9.5	11.2	10.3	10.1	14	13.4	15.4	15.6	15.5	14.6	15.1	16.1	16	14.8	14.7	13.4	9.7	10.2	8.6	8.9	8.6	8.8	16.1	12	24
HOURLY MAX	29.9	27.8	26.1	23.4	22.9	23.9	23.2	26.7	21.1	29.3	31.0	32.2	33.3	27.5	29.1	30.6	30.6	29.9	27.1	26.9	30.8	32.4	32.7	30.5			
HOURLY AVG	11.5	11.7	11.3	11.2	11.1	10.9	10.7	10.5	11.3	13.3	14.4	15.8	16.2	16.1	15.5	15.2	14.3	12.6	11.7	11.6	11.9	11.7	11.7	11.6			

STATUS FLAG CODES

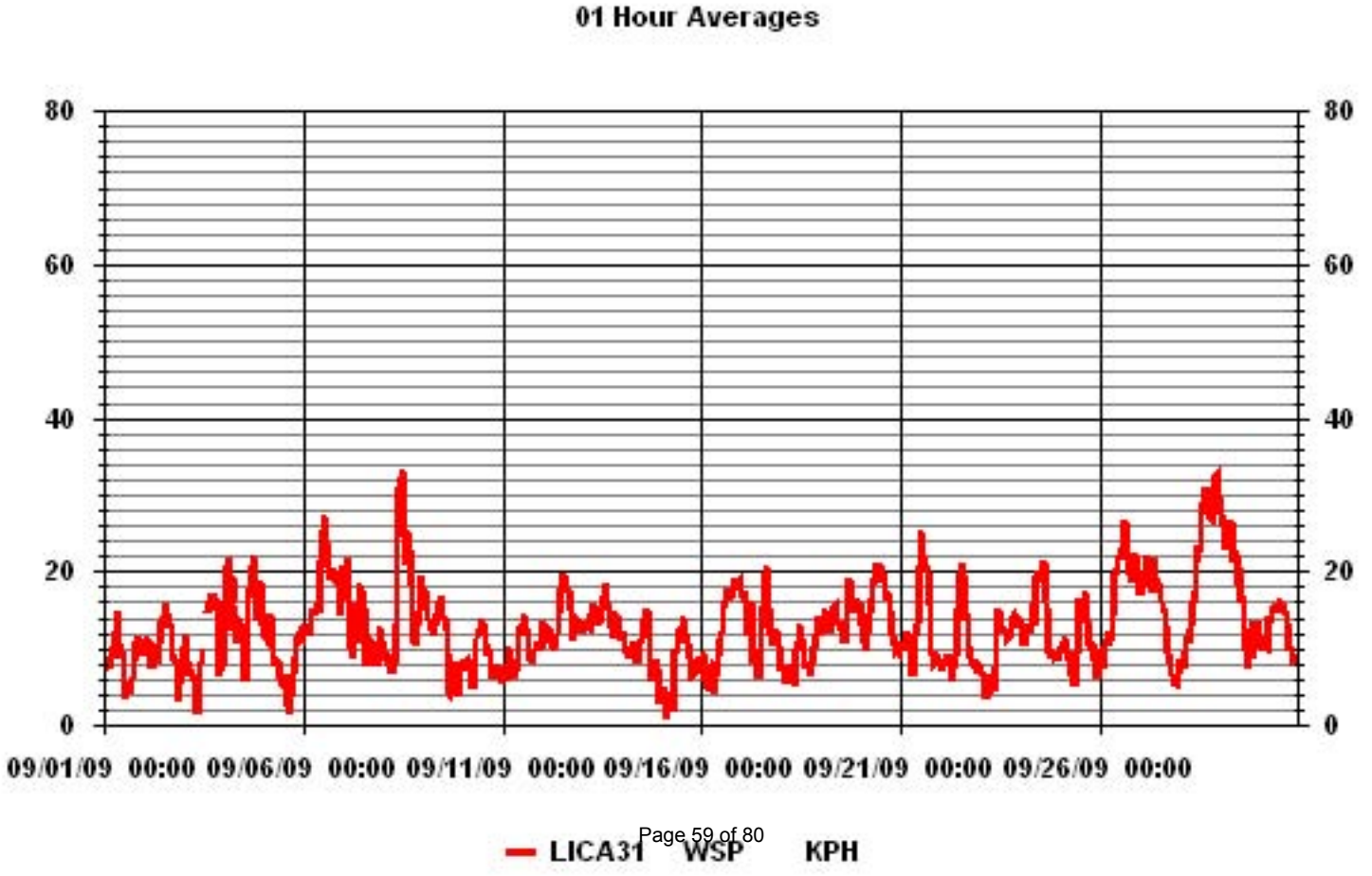
S	- OUT OF SERVICE	IZS	- IZS - DAILY ZERO/SPAN CHECK
N	- INVALID DATA	M	- MAINTENANCE
D	- INSTRUMENT DRIFT	P	- POWER FAILURE
C	- CALIBRATION	NA	- NOT APPLICABLE



LAST CALIBRATION: November 7, 2007

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:		33.3	KPH	@ HOUR(S)	15	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:		20.8	KPH			ON DAY(S)	23
CALMS (≤ 1 KPH)	0.13	%		OPERATIONAL TIME:		718	HRS
MONTHLY CALIBRATION TIME:	0	HRS		AMD OPERATION UPTIME		99.7	%
STANDARD DEVIATION	5.61			MONTHLY AVERAGE		12.66	KPH


01 Hour Averages
80
60
40
20
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 WSP KPH

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *ST. LINA*

SEPTEMBER 2009

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

MST

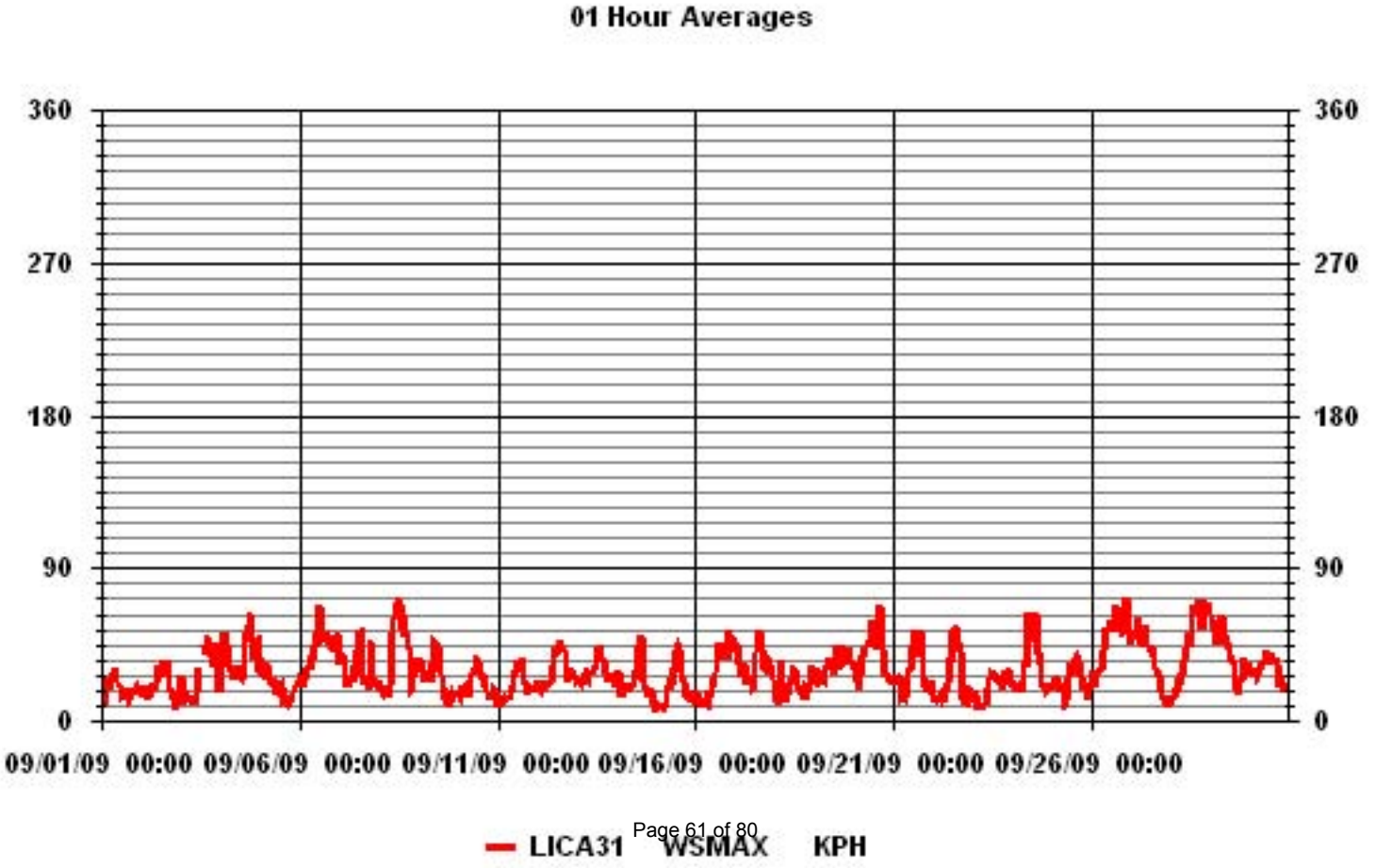
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	9.7	10.8	11.2	25.7	18.1	22.4	27.4	24.7	31.7	23.7	20.7	20.7	16.2	17.7	15.9	19.2	12.4	13.4	19.4	15.7	18.1	20.3	18.6	16.8	31.7
2	17.9	16.3	19.6	19.8	16.2	13.2	17.5	22.2	17.7	22.6	30.8	30.2	34.9	34.7	28.5	29.3	34.9	18.5	17.9	15	17.2	6.5	14.2	13.3	34.9
3	24.8	25	18.3	13.1	14.2	13.2	11.9	11.6	9.7	14.9	17.2	29.1	0	0	42.5	38.6	50	47.2	38.6	36.2	32.4	45.5	41.8	16.8	50
4	22.6	30.8	52.4	49	38.4	39.9	30.6	30.8	24.2	30.2	24.6	32.8	27.2	25.2	26.7	50.7	51.7	56.3	63.7	47.1	35.2	47.9	48.6	33.2	63.7
5	34.1	29.1	27.6	29.6	34.1	26.3	20.9	23.5	19.9	25.4	17	16.4	19.4	20.9	12.7	14	11.6	10.1	11.4	13.8	16.6	20.3	21.8	21.4	34.1
6	26.1	25.2	23.9	28.5	27.4	30.9	31.5	37.3	37.6	43.8	52.4	58.4	67.7	60.6	48.5	49.4	48.3	49.8	46.8	44.4	45.7	39.7	49.9	52.2	67.7
7	32.8	35.4	40.2	34.3	27.6	19.4	22.9	26.5	22.4	31.9	41.6	35.2	52.2	52.8	27.4	21.6	23.9	25.2	17.7	47.3	26.3	23.5	21.5	20.3	52.8
8	23.3	18.3	16.4	18.6	20.9	15.9	13.8	20.9	52.2	60.2	69.1	70.8	71	69.3	54	63.7	51.4	50.7	43.8	19.6	20.9	25.8	35.2	37.3	71
9	28.7	36.9	30	29.8	23.7	25.4	26	23.1	33.9	32.4	47.3	46.2	43.6	29.8	28	21.1	13.4	11.6	8.2	14	17	15.3	17.9	13.9	47.3
10	16.4	14.7	19.4	20.5	22	21.6	13.6	23.7	27.6	30	29.6	38.6	30.2	33.5	24.8	27.6	21.1	17.9	14.7	14.7	12.5	20.1	19.2	17.9	38.6
11	9	10.6	10.1	11.2	14	12.7	13.4	13.8	16.6	20.9	25.5	28.9	34.3	34.5	30.6	37.5	24.8	23	15.3	20.5	17.9	17.9	19.2	17	37.5
12	22.9	20.7	18.8	21.6	21.8	19.9	21.1	21.8	23.1	32	38.1	42.1	44.4	46.8	43.4	44.6	42.5	41	22.6	25.4	28.9	29.1	27.8	25.4	46.8
13	22.9	23.5	22	24.4	22	26.8	25	29.8	29.1	27	31.7	31.5	34	42.1	43.8	35.1	37.7	28	22.4	26.7	27	27.3	28	20.5	43.8
14	24.2	24.4	29.4	16.6	16	20.3	16.6	22.4	20.3	20.5	20.9	24.6	29.1	44.2	32.8	50	24.6	19.8	19.2	13.1	17.9	17.5	11	5.4	50
15	10.6	9.9	10.1	8.8	8	10.1	8.6	19.8	20.1	25	20.5	30.8	41	44.4	42.5	29.5	25.6	23.7	14.7	12.1	15.7	13.6	12.7	16.2	44.4
16	15.3	17.8	12.2	9.9	9.9	11.4	10.3	9.7	15.7	15.5	20	25	28.7	36.2	46.6	45.1	36	38.6	45.3	35.5	52.8	41	47.9	46.4	52.8
17	40.1	46	34.1	30.9	25.8	29.4	34.7	20.5	26.7	22.9	19.6	20.9	40.4	50.5	49.4	53.1	43.6	31.9	28.9	38.9	26.7	31.5	29.8	25.3	53.1
18	12.5	11.2	11.2	18.6	35.6	13.8	17.9	11.6	15.5	22.2	24.8	32.4	30	25.7	21.3	20.3	17.5	16.4	12.5	19.6	18.1	21.5	32.6	23.3	35.6
19	23.9	23.1	31.1	24.6	23.5	25	23.9	32.2	35.8	35.4	31.5	30.4	28	43.8	30.1	36.7	37.5	45.1	35.2	36	38.8	40.1	36.2	34.5	45.1
20	31.9	28.1	24.4	18.8	26.3	38	41.2	0	46	47.9	43.4	59.3	56.8	43.8	42.1	49.2	68	45.8	42.5	29.1	27.4	22.2	25.5	21.8	68
21	26.1	23.9	25	21.6	25.9	14	15.3	14	18.8	29.8	31.1	45.1	52.9	46.5	37.5	48.5	52.9	43.6	26.7	22	17.7	20.5	18.9	20.1	52.9
22	11.8	14	11.9	12.7	15.1	12.2	14	11.6	17.5	22.7	35.8	35.8	52.4	53.5	55.8	41.4	42.9	40.5	13.6	12.5	11.4	18.3	18.3	15.4	55.8
23	16	10.6	16	6.2	8.6	6.3	9.7	10.3	10.8	18.5	24.4	28.7	27.6	28	26.7	25.4	23.7	20.8	21.3	29.3	27	26.7	31.1	23.3	31.1
24	21.6	24.1	19.3	19	20.7	17	24.2	35.4	31.9	63.4	56	55.4	46.4	53.1	63.6	41.6	40.8	33.9	21.8	21.3	17.9	19.6	18.3	18.8	63.6
25	20.5	20.7	24.6	26.9	22.8	19.4	17.9	8.8	9.1	12.7	25	32.7	32.7	31.5	36.7	38.2	35.4	27	17.9	21.8	19.8	12.9	17.9	18.5	38.2
26	29.6	21.8	21.6	30	28.3	29.1	30	40.4	41.7	53.3	54	58.3	54.8	52.4	65.8	68	60	54.4	52	52.9	66.9	**72.8**	52	44.1	**72.8**
27	53.8	50.3	50.5	50.3	60.9	44.4	53.6	43.4	49.9	56.6	45.8	42.5	40.8	44.5	33	32	30.9	27.2	18.6	14.5	13.6	11.2	9.5	9.9	60.9
28	13.4	13.8	14.5	18.6	22	20.7	27.2	27.9	35.2	43.4	49.7	49	43.2	64.1	67.8	65	64.6	70.5	56.7	56.1	62.2	70.6	63.7	70.2	70.6
29	63.9	57.1	57.7	46.9	47.1	46.9	50.3	61.6	49.4	52.3	46.9	43.4	39.3	36.1	34.5	25.7	20.2	15.5	22.7	25	37.4	32.6	29.6	34.5	63.9
30	27.9	30.7	25.9	27.8	25.3	27.2	32.2	32.4	35.6	38.2	41.2	33	37.1	38.2	35.6	36.5	35.4	33	20.9	22.7	19	18.8	20.5	19	41.2
PEAK	63.9	57.1	57.7	50.3	60.9	46.9	53.6	61.6	52.2	63.4	69.1	70.8	71.0	69.3	67.8	68.0	68.0	70.5	63.7	56.1	66.9	72.8	63.7	70.2	

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	72.8	KPH	@ HOUR(S)	21
			ON DAY(S)	26


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 WSMAX KPH

LICA31
WSP / WDR Joint Frequency Distribution (Percent)

September 2009

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	.69	.13	.69	.83	.41	.13	.41	.41	.27	.55	.97	.83	.13	.00	.55	.27	7.38
<	12.0	.55	.83	.97	3.48	3.89	.83	2.22	2.36	3.76	4.03	4.03	2.36	4.03	5.57	4.45	.27	43.73
<	20.0	.00	.00	.41	1.11	3.06	1.94	4.45	4.03	2.92	1.53	2.22	3.62	2.92	5.71	4.59	.00	38.57
<	29.0	.00	.00	.00	.00	.00	2.64	.41	.00	.00	.00	.69	1.25	.55	2.36	.41	.00	8.35
<	39.0	.00	.00	.00	.00	.00	1.25	.00	.00	.00	.00	.00	.55	.00	.00	.00	.00	1.81
>=	39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	1.25	.97	2.08	5.43	7.38	6.82	7.52	6.82	6.96	6.12	7.93	8.63	7.66	13.64	10.02	.55	

Calm : .13 %

Total # Operational Hours : 718

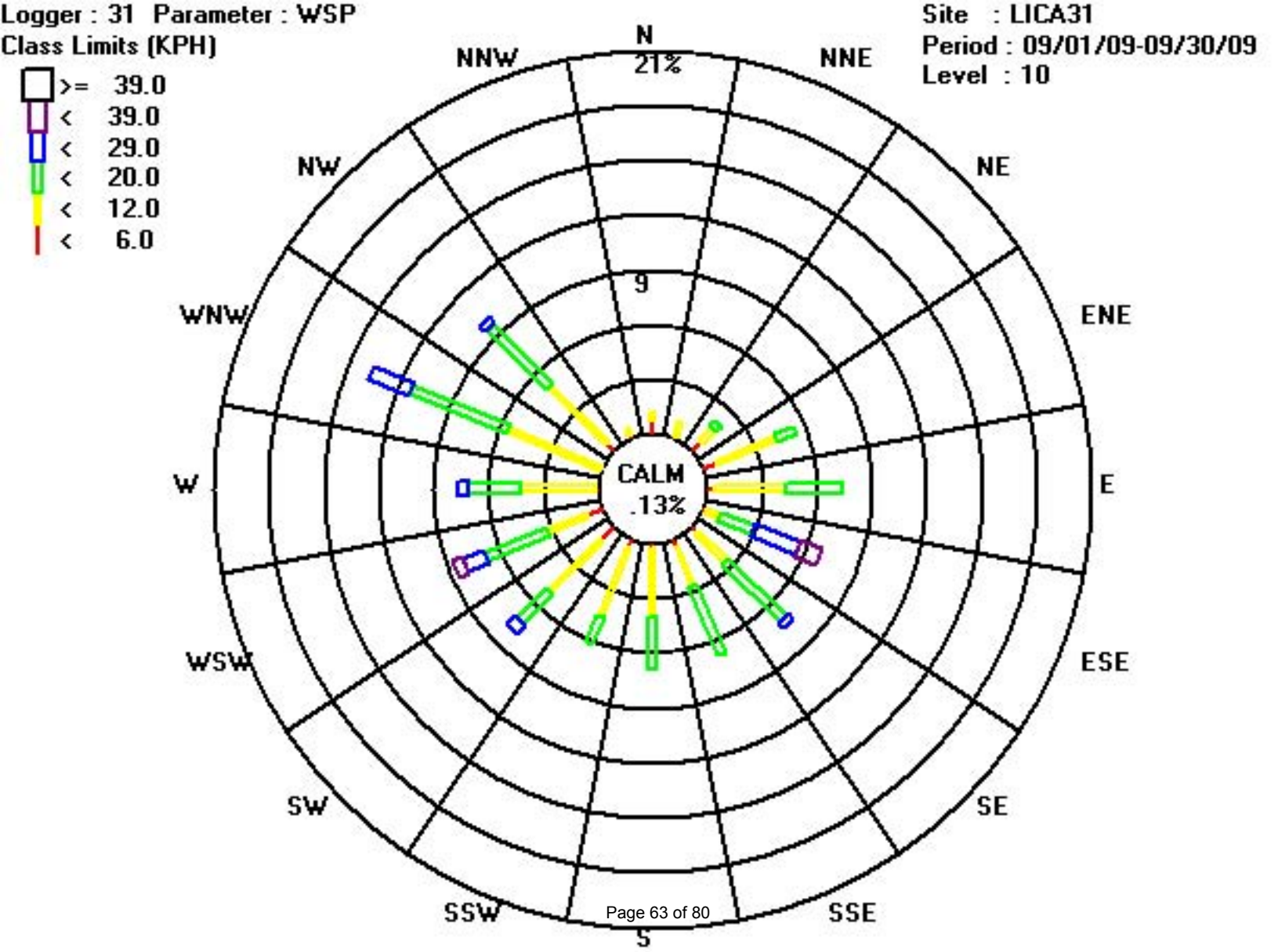
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	6.0	5	1	5	6	3	1	3	3	2	4	7	6	1		4	2	53
<	12.0	4	6	7	25	28	6	16	17	27	29	29	17	29	40	32	2	314
<	20.0			3	8	22	14	32	29	21	11	16	26	21	41	33		277
<	29.0						19	3				5	9	4	17	3		60
<	39.0						9						4					13
>=	39.0																	
	Totals	9	7	15	39	53	49	54	49	50	44	57	62	55	98	72	4	

Calm : .13 %

Total # Operational Hours : 718


Logger : 31 Parameter : WSP
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA31
Period : 09/01/09-09/30/09
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9
CALM
.13%

Vector Wind Direction

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - ST.LINA

SEPTEMBER 2009

WIND DIRECTION hourly averages in degrees

MST

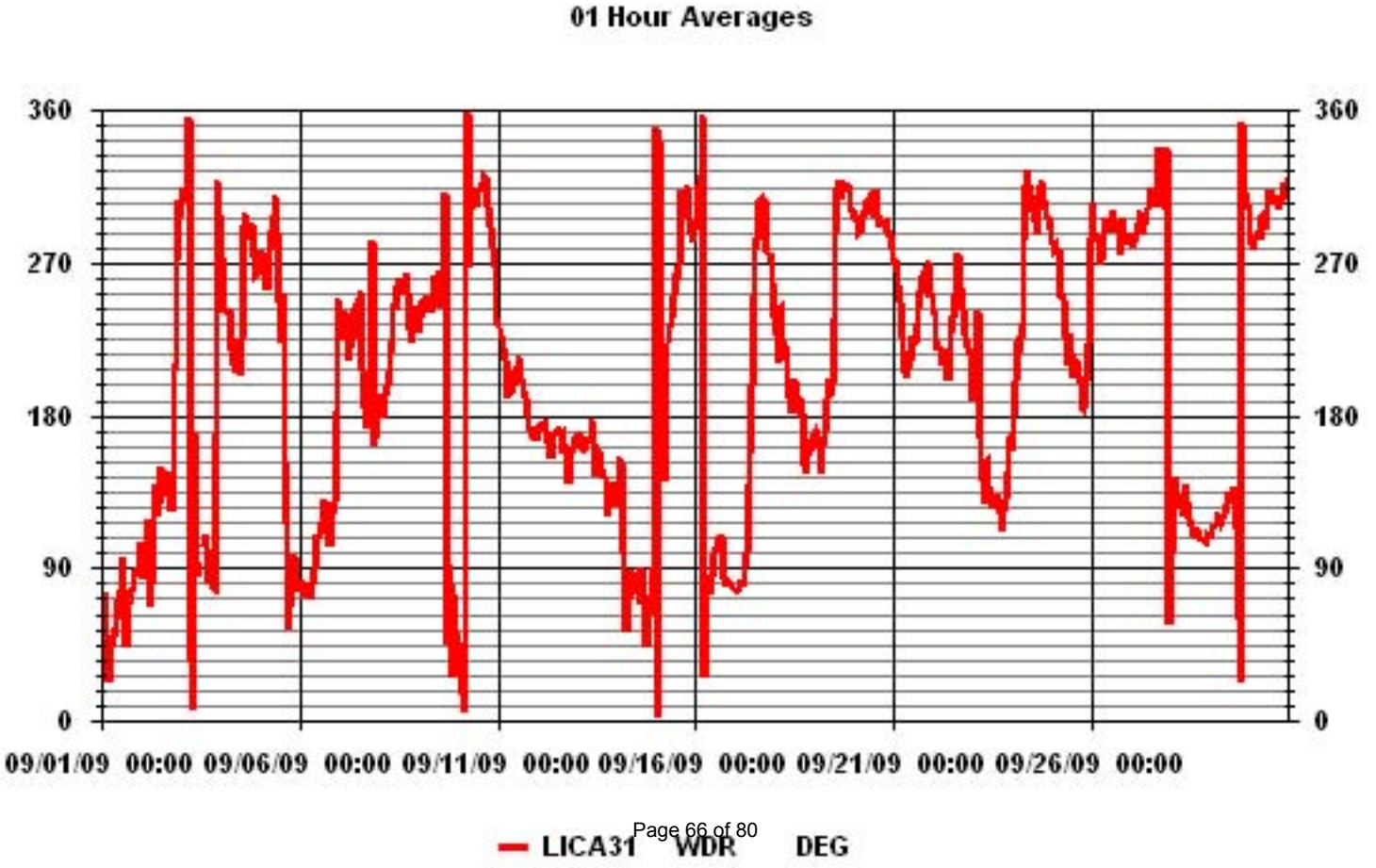
HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24-HOUR	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	48	63	76	46	23	38	44	50	55	59	71	77	63	96	73	43	61	69	77	79	88	89	85	95	65	ENE	24
2	105	85	85	95	119	67	80	96	139	137	120	128	149	137	141	132	146	128	124	133	208	208	272	307	122	ESE	24
3	297	306	314	311	324	356	35	6	171	87	87	92	**P**	**P**	105	110	102	83	82	80	79	169	319	298	65	ENE	22
4	297	274	241	243	240	243	222	223	214	215	205	212	203	225	292	300	292	284	288	293	274	262	263	265	256	WSW	24
5	271	277	273	261	254	271	277	289	298	310	289	247	222	247	252	116	153	53	68	71	85	98	91	78	280	W	24
6	76	83	75	76	81	79	72	79	81	89	110	108	110	116	117	130	125	111	103	108	122	129	182	249	106	ESE	24
7	234	225	230	238	242	227	213	220	226	243	245	247	245	253	207	185	172	180	173	275	283	163	166	180	224	SW	24
8	187	191	190	178	191	197	206	217	224	244	244	257	253	260	254	252	260	263	254	232	223	232	237	244	240	WSW	24
9	228	237	247	248	242	244	244	241	250	263	260	256	266	244	248	272	312	44	65	92	82	25	74	53	250	WSW	24
10	47	32	21	16	5	349	359	267	302	304	306	303	314	312	317	315	322	321	304	293	291	280	269	234	317	NW	24
11	237	233	227	226	221	214	190	192	197	194	198	206	209	215	202	201	195	191	181	172	168	168	173	165	198	SSW	24
12	170	173	173	175	176	172	165	158	155	166	169	169	171	172	169	170	158	163	154	140	151	158	161	167	165	SSE	24
13	168	169	167	161	160	162	164	166	168	178	165	144	151	158	158	149	145	144	133	121	134	140	136	127	153	SSE	24
14	133	141	156	152	100	74	52	65	72	89	86	77	77	76	68	90	87	65	43	65	62	74	91	67	86	E	24
15	350	2	331	341	213	141	148	223	233	234	238	251	262	262	269	313	297	304	308	315	296	288	282	289	275	W	24
16	295	310	316	322	357	26	64	83	74	85	86	98	102	108	100	108	108	85	79	81	83	82	80	79	81	E	24
17	78	77	78	81	81	81	90	100	140	158	198	250	277	284	306	308	309	302	309	278	276	270	276	260	322	NW	24
18	239	228	211	243	244	224	222	214	190	192	183	183	201	195	189	191	179	183	151	146	157	159	166	168	189	S	24
19	167	171	169	162	146	163	163	171	190	201	191	199	237	287	314	318	307	318	314	315	316	315	303	302	243	WSW	24
20	297	296	287	288	289	297	300	301	306	308	304	300	297	307	312	300	292	294	293	294	289	289	287	279	297	WNW	24
21	270	272	266	258	248	227	219	206	203	208	212	225	225	222	234	243	253	263	257	265	268	271	250	253	240	WSW	24
22	243	241	225	218	221	209	213	220	208	201	219	228	238	252	263	275	271	257	243	229	227	221	216	189	235	SW	24
23	196	202	240	240	168	145	143	128	154	155	140	129	125	131	128	134	123	113	113	124	131	146	164	163	142	SE	24
24	169	180	200	221	220	226	234	284	316	324	317	311	301	296	296	287	301	315	318	308	305	295	298	291	284	WNW	24
25	282	278	280	276	278	250	252	249	227	209	217	228	218	203	203	213	204	200	185	184	189	200	222	284	228	SW	24
26	303	303	282	287	285	270	272	281	288	297	288	290	296	301	288	292	293	275	290	297	284	285	281	287	288	WNW	24
27	283	280	283	287	294	301	296	286	292	299	302	307	314	306	306	305	305	336	336	305	304	306	338	56	300	WNW	24
28	74	100	138	144	130	131	126	120	127	139	131	120	116	111	109	109	114	110	108	107	107	106	110	109	114	ESE	24
29	109	113	115	116	121	120	117	119	121	122	128	135	132	132	137	128	114	61	23	353	303	313	302	304	116	ESE	24
30	282	280	280	285	286	288	287	297	298	293	290	304	313	310	310	305	310	301	305	310	307	317	310	318	299	WNW	24
HOURLY AVG	350	310	331	341	357	356	359	301	316	324	317	311	314	312	317	318	322	336	336	353	316	317	338	318			

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:	November 7, 2007
DECLINATION :	19 DEGREES FROM MAGNETIC NORTH

MONTHLY CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	718	HRS
STANDARD DEVIATION	84.71		AMD OPERATION UPTIME	99.7	%
			MONTHLY AVERAGE	218	DEG


01 Hour Averages
360
270
180
90
0
09/01/09 00:00
09/06/09 00:00
09/11/09 00:00
09/16/09 00:00
09/21/09 00:00
09/26/09 00:00
LICA31 WDR DEG

Calibration Reports

Sulphur Dioxide

SO_2 Calibration Report

Station Information

Calibration Date	September 11, 2009		Previous Calibration	August 18, 2009	
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	ST. LINA				
Start Time (MST)	8:55		End Time (MST)	14:45	
Reason:	Monthly Calibration				
Barometric Pressure	708	mmHg	Station Temperature	22	Deg C
Cal Gas	52.2	ppm	Cal Gas Expiry date	12/19/2010	
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	596	ccm	30	Deg C	588	ccm	32.9	Deg C
HVPS / Lamp Setting	529		2592		529		2593	
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	56.6		1.126		56.6		1.114	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
5003.0	0	0	0	N/A
4927.0	77.6	809	816	0.9919
5003.0	0	0	0	N/A
4933.0	77.7	809	810	0.9993
4971.0	38.8	404	406	0.9958
4992.0	19.4	202	202	1.0004
5003.0	0	0	0	N/A
			Sum of Least Squares	0.9987
			New Correction Factor	0.9993

	Before Calibration	After Calibration
Auto Zero	0.0	0.3
Auto Span	341.0	342.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		0.7%

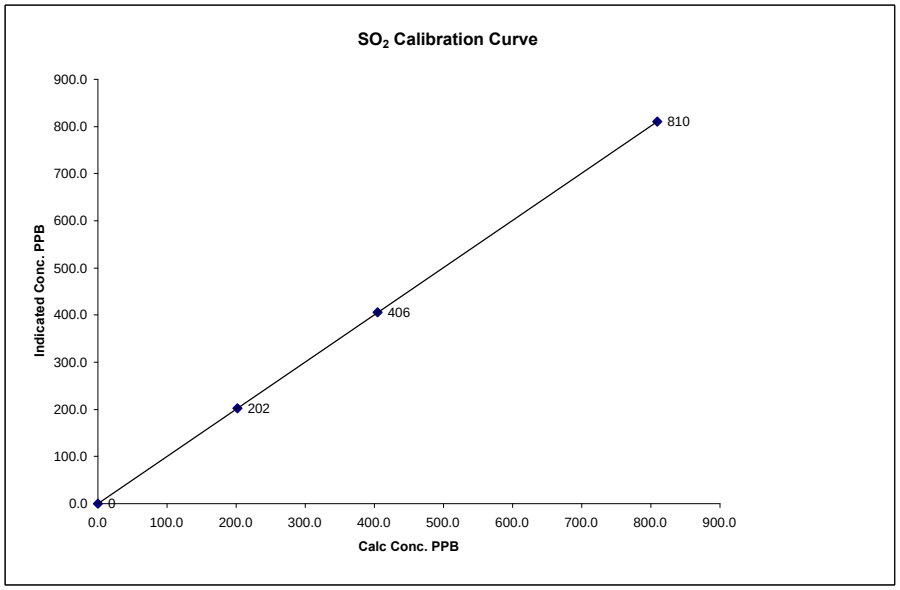
Calibration Performed by: Shea Beaton

SO_2 Calibration Curve

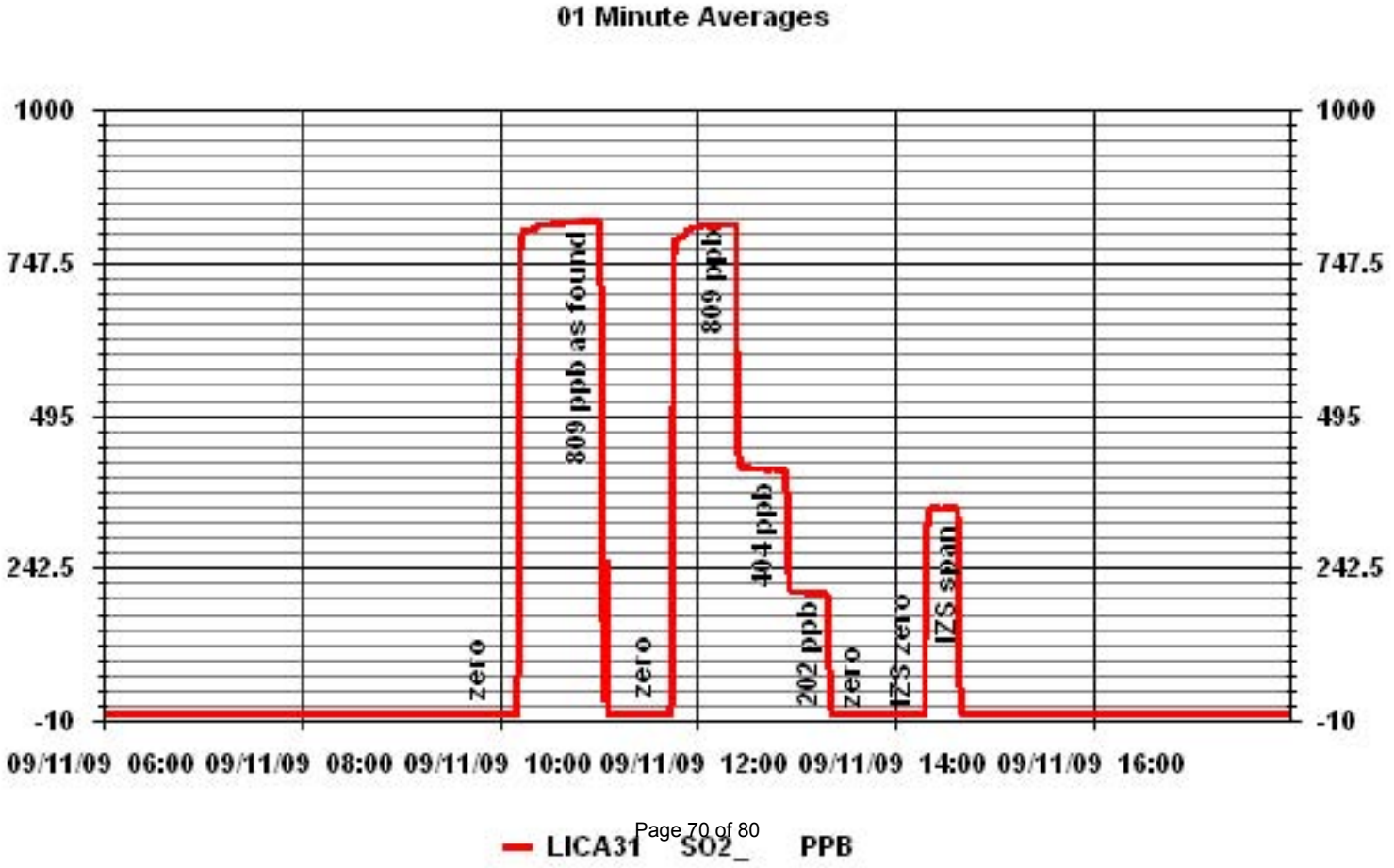
Calibration Date	September 11, 2009				
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	ST. LINA				
Start Time (MST)	8:55		End Time (MST)	14:45	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
202	202	1.0004
404	406	0.9958
809	810	0.9993

Correlation Coefficient	(≥ 0.995)	0.999995
Slope	(0.85 to 1.15)	1.000965
Intercept	(± 3% F.S.)	0.205684



Notes:


01 Minute Averages
1000
747.5
495
242.5
-10
zero
809 ppb as found
zero
809 ppb
404 ppb
202 ppb
zero
IZS zero
IZS span
09/11/09 06:00
09/11/09 08:00
09/11/09 10:00
09/11/09 12:00
09/11/09 14:00
09/11/09 16:00
LICA31 SO2_ PPB

Hydrogen Sulphide

H_2S Calibration Report

Station Information

Calibration Date	September 11, 2009		Previous Calibration	August 18, 2009	
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	ST.LINA				
Start Time (MST)	8:35		End Time (MST)	13:13	
Reason:			Monthly Calibration		
Barometric Pressure	708	mmHg	Station Temperature	24	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	556	ccm	32.2	Deg C	552	ccm	35.1	Deg C
HVPS / Lamp Setting	534		2163		534		2156	
PMT / RxCell Temp	8.4	Deg C	50	Deg C	8.4	Deg C	50	Deg C
Converter / IZS Temp	315.5	Deg C	45	Deg C	314.9	Deg C	45	Deg C
Offset / Slope	48.9		0.989		48.9		0.989	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
4998	0	0	0	N/A
4961	37	80	80	0.9994
4977	20.8	45	45	0.9988
4988	11.6	25	26	0.9638
4999	0	0	1	N/A
			Sum of Least Squares	0.9967
			New Correction Factor	0.9994

	Before Calibration	After Calibration
Auto Zero	0.6	0.5
Auto Span	52.0	52.0
Sample Lines Connected		YES
Percent Change from Previous Calibration		0.0%

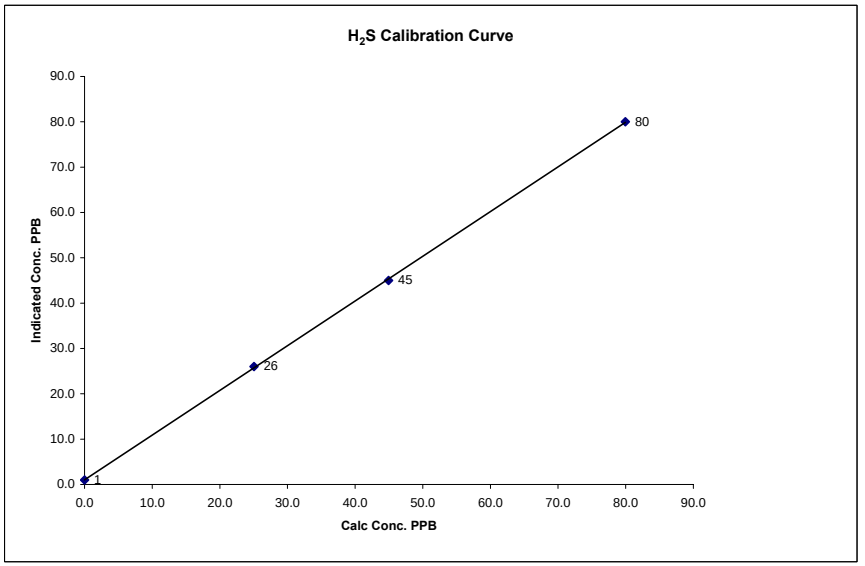
Calibration Performed by: Shea Beaton

H_2S Calibration Curve

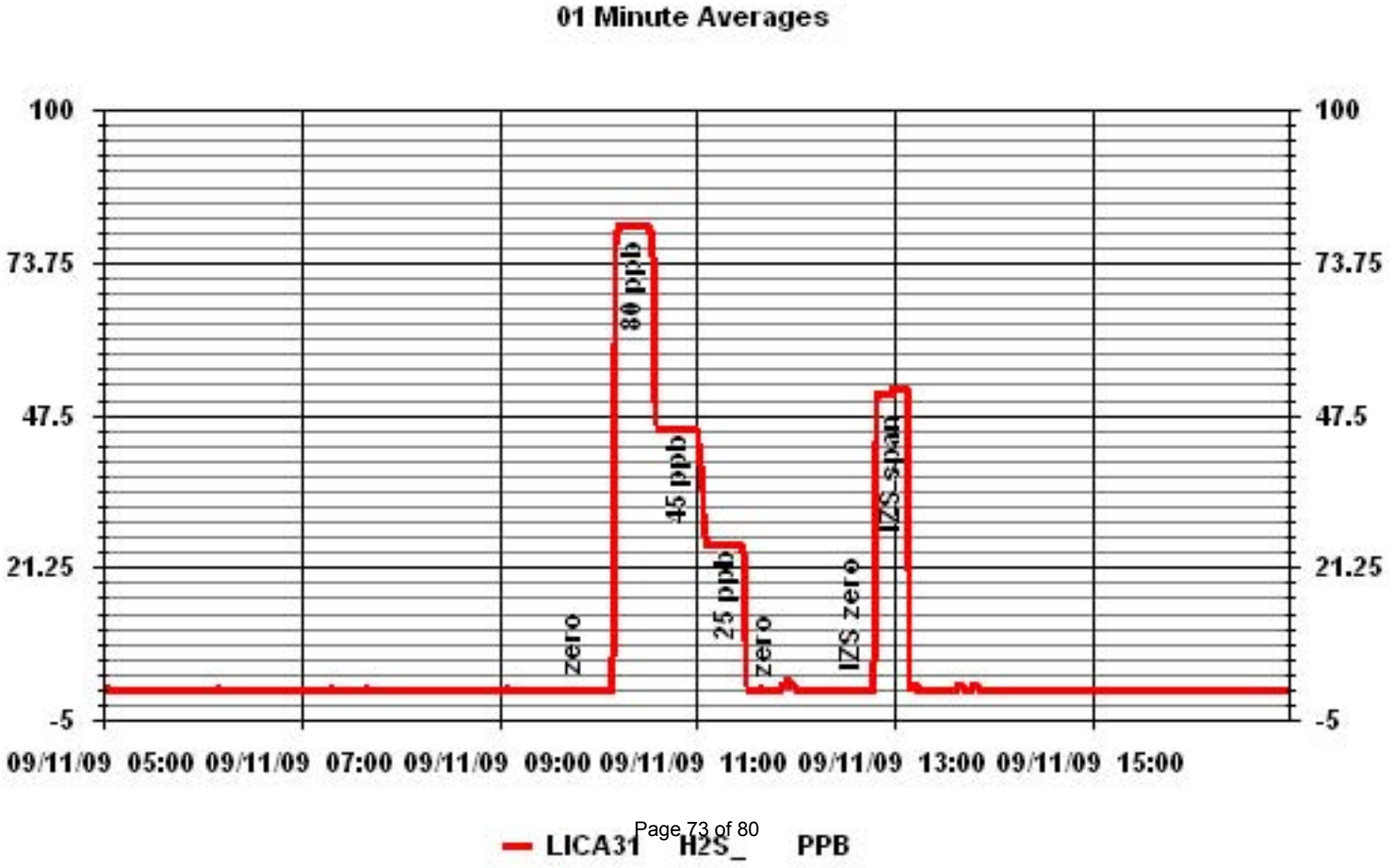
Calibration Date	September 11, 2009				
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION				
Plant / Location	ST.LINA				
Start Time (MST)	8:35		End Time (MST)	13:13	

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	1	n/a
25	26	0.9638
45	45	0.9988
80	80	0.9994

Correlation Coefficient	(≥ 0.995)	0.999937
Slope	(0.85 to 1.15)	0.986319
Intercept	(± 3% F.S.)	1.023454



Notes:


01 Minute Averages
100
73.75
47.5
21.25
-5
zero
80 ppb
45 ppb
25 ppb
zero
IZS zero
IZS span
09/11/09 05:00
09/11/09 07:00
09/11/09 09:00
09/11/09 11:00
09/11/09 13:00
09/11/09 15:00
LICA31 H2S_ PPB

Total Hydrocarbons

THC Calibration Report

Station Information

Calibration Date:	September 11, 2009	Previous Calibration	August 18, 2009
Company:	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION		
Plant / Location:	ST. LINA		
: (MST)	13:00	End Time (MST)	15:55
Reason:	Monthly Calibration		
Barometric Pressure:	708 mmHg	Station Temperature:	22 Deg C
Calibrator:	API 700	S/N:	831
Cal Gas Concentration:	299 Prop/ 1019 Meth ppm	Cal Gas Expiry Date:	August 21, 2011
DAS make & Model:	ESC 8832	S/N :	A0717
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	psi	8	psi
Air Pressure	20	psi	20	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
3000	0.0	0.0	0.0	N/A
3000	65.0	39.0	39.3	0.9936
3000	35.0	21.2	21.0	1.0111
3000	20.0	12.2	12.0	1.0161
3000	0	0.0	0.0	N/A
			Correction Factor:	0.9936

Previous Calibration Correction Factor:	0.9992	
Current Correction Factor Before Span Adjust:	0.9936	
Percent Change:	0.57%	

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	0.0	0.0
Auto Span	45.8	45.6
Sample Lines Connected		YES

Cylinder Pressures			
Span	500	psi	
Hydrogen	500	psi	
Zero Air	N/A	psi	Unlimited API 701

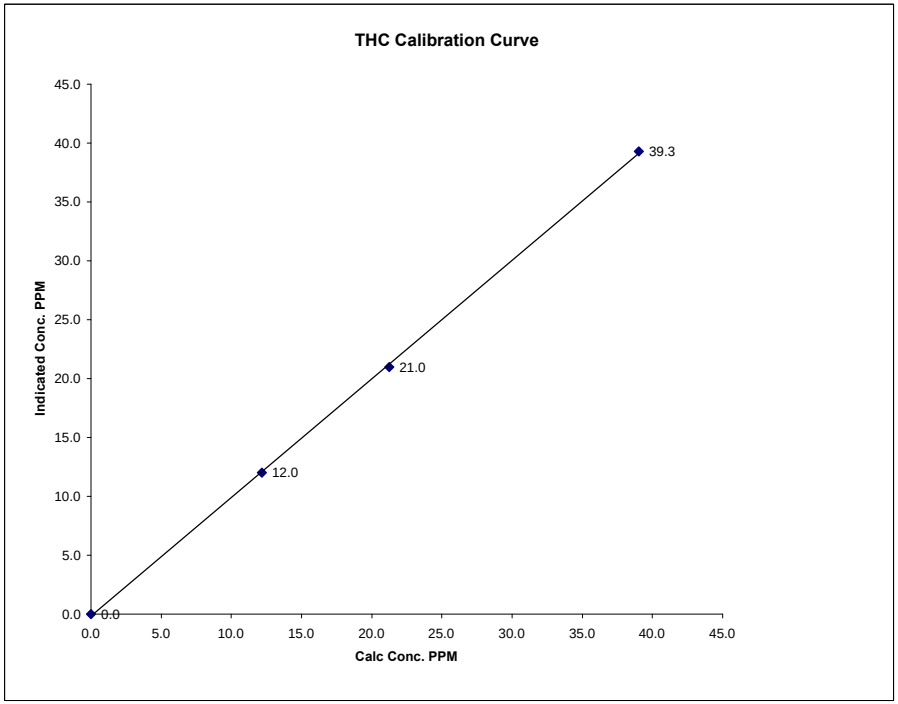
Calibration Performed by: Shea Beaton

THC Calibration Curve

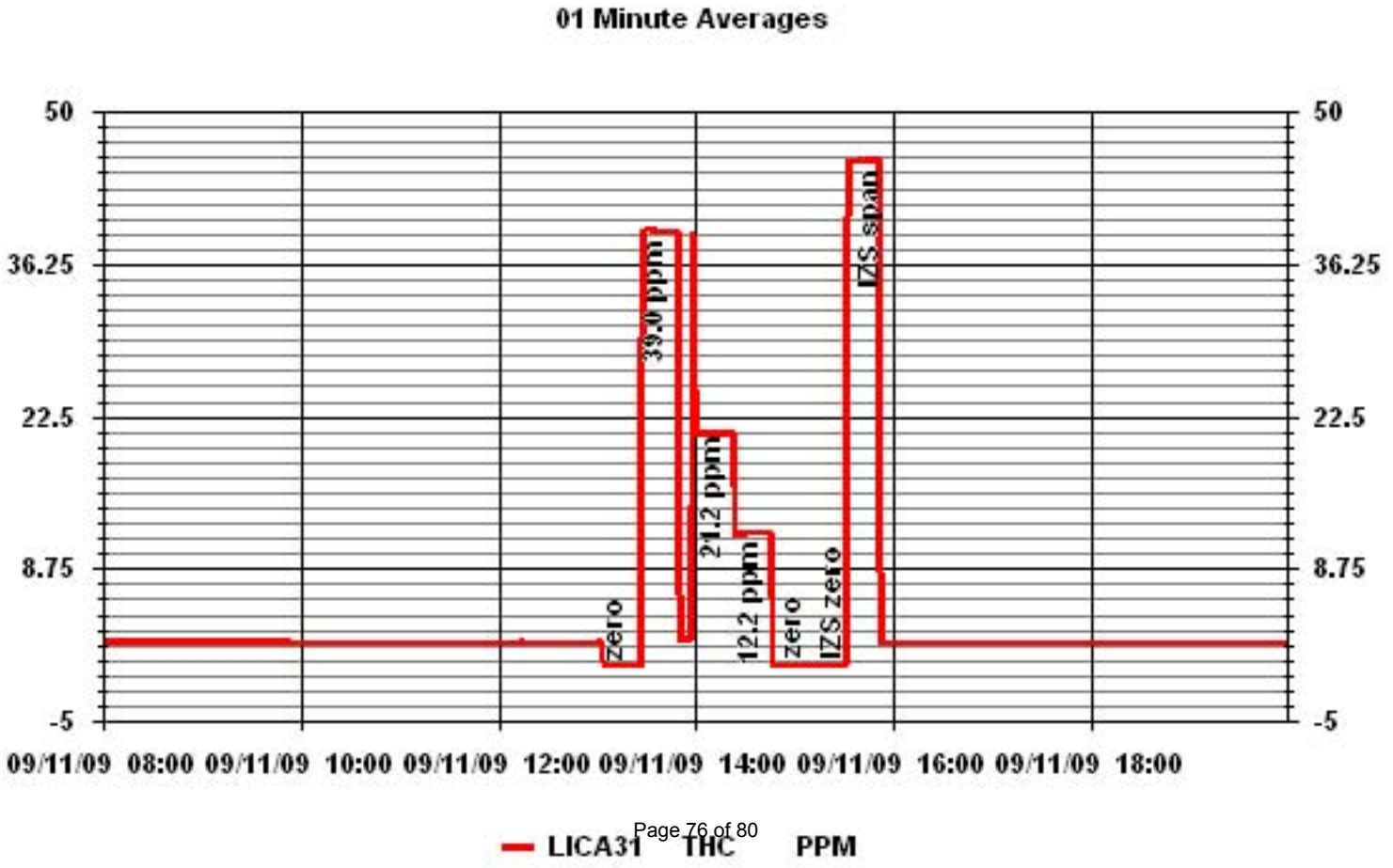
Calibration Date	September 11, 2009		
Company	LAKELAND INDUSTRY & COMMUNITY ASSOCIATION		
Plant / Location	ST. LINA		
Start Time (MST)	13:00	End Time (MST)	15:55

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	0.0	
12.2	12.0	1.0161
21.2	21.0	1.0111
39.0	39.3	0.9936

Correlation Coefficient	(≥ 0.995)	0.999869
Slope	(0.85 to 1.15)	1.007028
Intercept	(± 3% F.S.)	-0.171073



Notes: Flame temp 172.


01 Minute Averages
50
36.25
22.5
8.75
-5
zero
39.0 ppm
21.2 ppm
12.2 ppm
zero
IZS zero
IZS span
09/11/09 08:00
09/11/09 10:00
09/11/09 12:00
09/11/09 14:00
09/11/09 16:00
09/11/09 18:00
LICA31 THC PPM

Nitrogen Dioxide

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	September 11, 2009		Previous Calibration	August 18, 2009	
Company	**LICA**		Plant/Location	**ST. LINA**	
Start Time (MST)	9:35		End Time (MST)	17:09	
Reason:	Monthly Calibration				
Barometric Pressure	708 mmHg		Station Temperature	24.0	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				

Equipment Information

Analyzer Make / Model:	API 200E	S/N :	592	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	A0717		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range				0 - 1000 ppb				
Sample Flow/Conv. Temp	456	ccm	316.4	Deg C	457	ccm	314.5	Deg C
Ozone Flow / Vacuum	73	ccm	3.8	"Hg-A	73	ccm	3.8	"Hg-A
HVPS	710		Volts		710		Volts	
Rx/ Temp / PMT Temp	50	Deg C	6.8	Deg C	50	Deg C	6.9	Deg C
Box Temp / IZS Temp	29.5	Deg C	45	Deg C	32.7	Deg C	45.1	Deg C
Offset	3.8	NOx	0.3	NO	1.6	NOx	1.6	NO
Slope	0.989	NOx	0.986	NO	1.045	NOx	1.039	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
5003	0	N/A	0	0	-1	1	-1	N/A	N/A
4927.0	77.6	N/A	803	800	762	766	-3	1.0541	1.0445
5003.0	0	N/A	0	0	0	0	0	N/A	N/A
4933.0	77.7	N/A	803	800	803	801	2	1.0003	0.9989
4971.0	38.8	N/A	401	400	403	401	2	0.9955	0.9966
4992.0	19.4	N/A	201	200	200	199	1	1.0026	1.0038
5003.0	0	N/A	0	0	0	0	0	N/A	N/A
								Converter Efficiency	
4933.0	77.7	N/A	803	800	800	798	2	N/A	
4933.0	77.7	400	803	N/A	797	430	367	99%	
4933.0	77.7	200	803	N/A	800	619	181	100%	
4935.0	77.7	100	803	N/A	801	710	91	101%	
4935.0	77.7	N/A	803	800	803	801	3	N/A	
								Correction Factor	
5009.0	0	N/A	0	0	0	0	0	N/A	N/A

Linearity OK?	**Yes**	No	Sum of Least Squares	0.9995	0.9987
Flows Checked on-site?	Yes	**No**	New Correction Factor	1.0003	0.9989
			Average Converter Efficiency	100%	

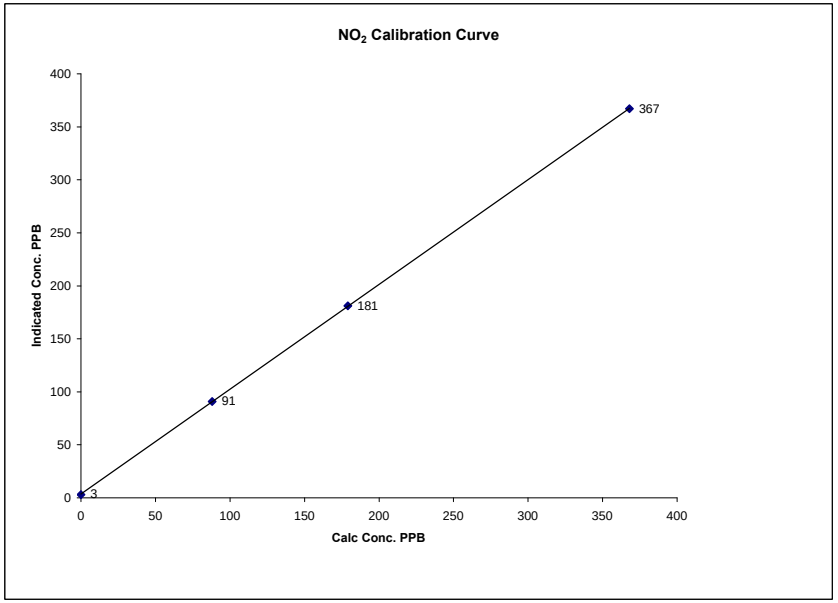
	Before Calibration				After Calibration			
Auto Zero	-0.7	NOx	-0.8	NO2	-0.1	NOx	0.5	NO2
Auto Span	656.0	NOx	642.0	NO2	688.0	NOx	667.0	NO2
Sample Lines Connected					YES			
Percent Change from Previous Calibration					*NOx*	-5.4%	*NO*	-4.7%

Calibration Performed by: Shea Beaton

NO_2 Calibration Curve

Calibration Date	September 11, 2009		
Company	**LICA**		
Plant / Location	**ST. LINA**		
Start Time (MST)	9:35	End Time (MST)	17:09

Calculated Conc. ppb	Indicated Response ppb	Correction Factor			
0	3	N/A	Correlation Coefficient	(≥ 0.995)	0.999988
88	91	0.9670	Slope	(0.85 to 1.15)	0.988478
179	181	0.9890	Intercept	(± 3% F.S.)	3.579078
368	367	1.0027			



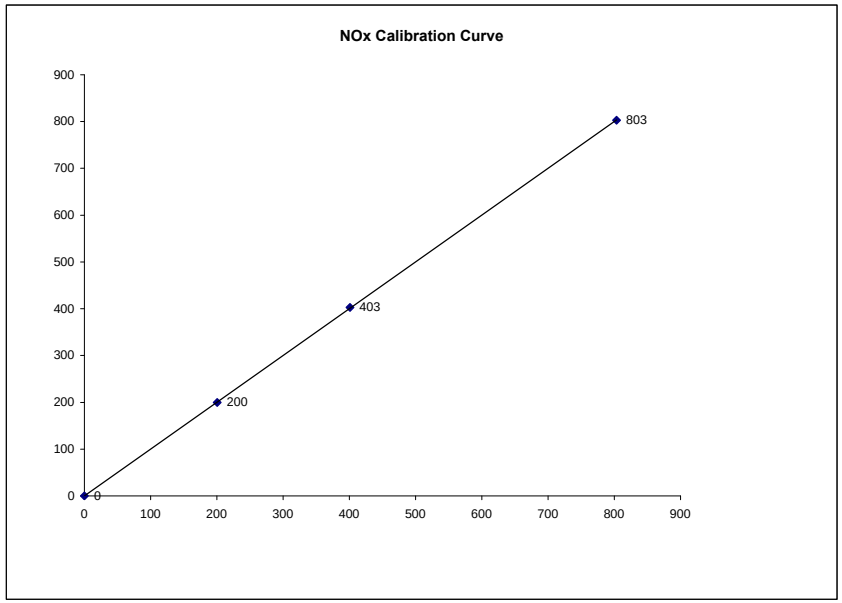
Notes: Performed an analog output cal and replaced the IZS desorber filter following the A/F points.

NOx Calibration Curve

Calibration Date	September 11, 2009		
Company	LICA		
Plant / Location	ST. LINA		
Start Time (MST)	9:35	End Time (MST)	17:09

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	N/A
201	200	1.0026
401	403	0.9955
803	803	1.0003

Correlation Coefficient	(≥ 0.995)	0.999990
Slope	(0.85 to 1.15)	1.000158
Intercept	(± 3% F.S.)	0.204053

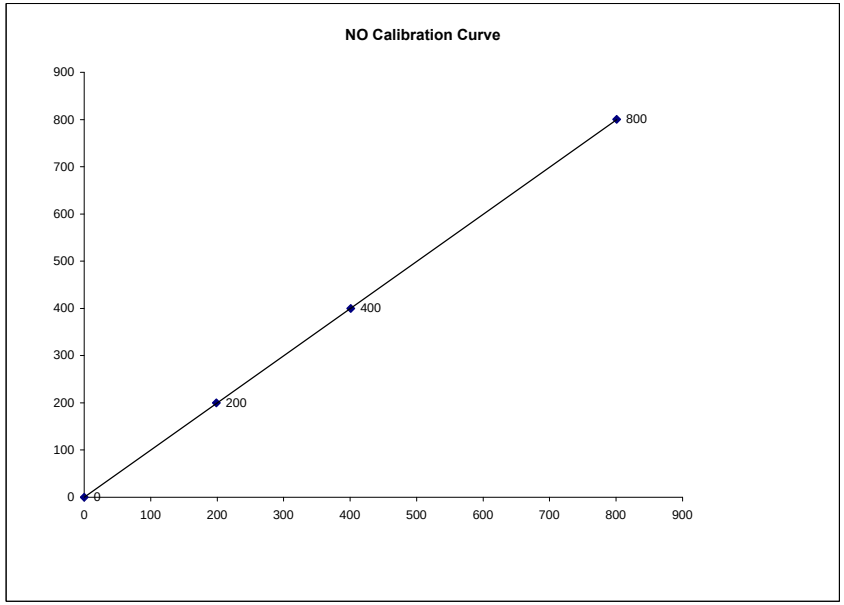


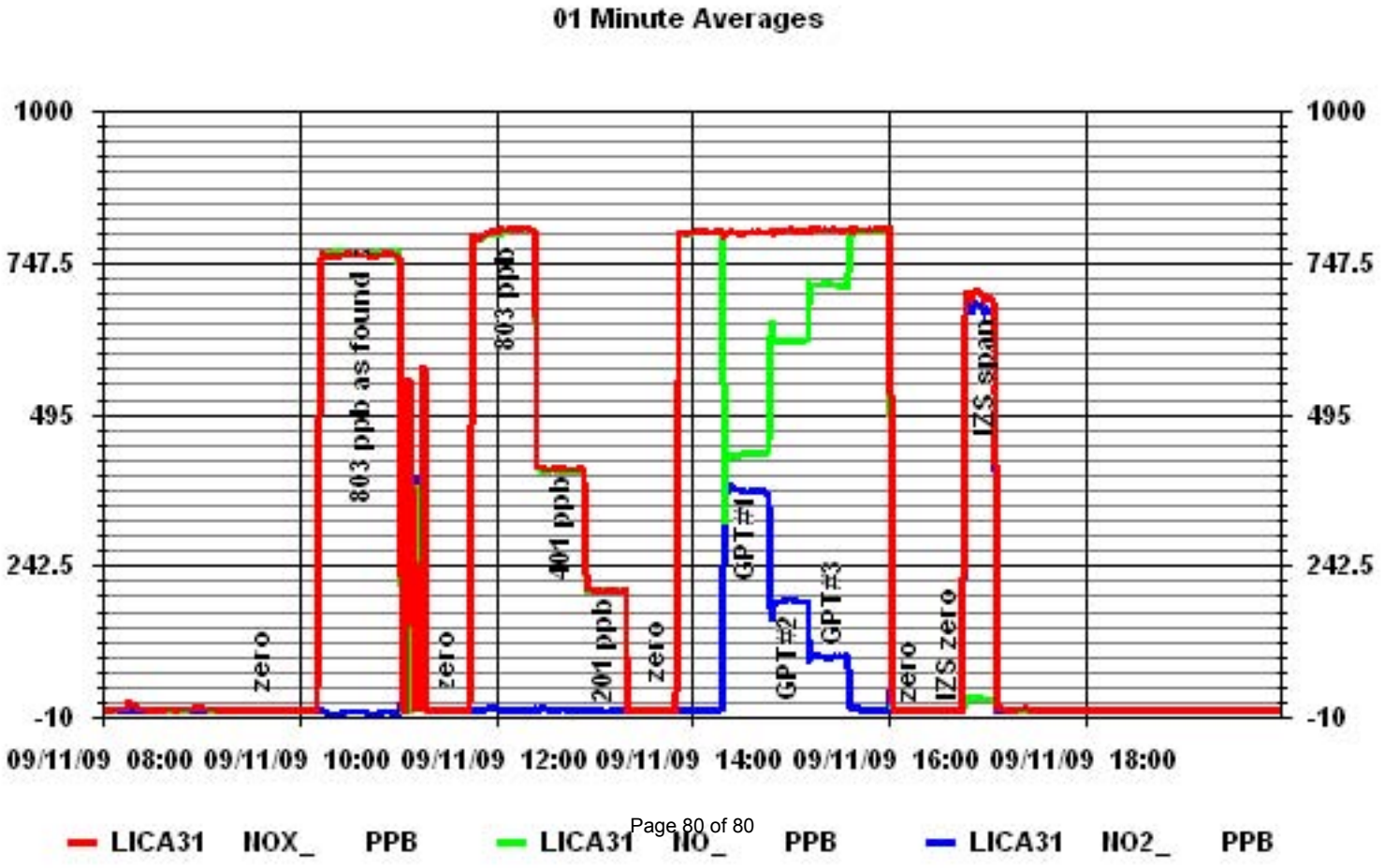
NO Calibration Curve

Calibration Date	September 11, 2009		
Company	LICA		
Plant / Location	ST. LINA		
Start Time (MST)	9:35	End Time (MST)	17:09

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	N/A
200	199	1.0038
400	401	0.9966
800	801	0.9989

Correlation Coefficient	(≥ 0.995)	0.999995
Slope	(0.85 to 1.15)	1.001608
Intercept	(± 3% F.S.)	-0.196750




01 Minute Averages
1000
747.5
495
242.5
-10
zero
803 ppb as found
zero
803 ppb
401 ppb
201 ppb
zero
GPT#1
GPT#2
GPT#3
zero
IZS zero
IZS span
09/11/09 08:00
09/11/09 10:00
09/11/09 12:00
09/11/09 14:00
09/11/09 16:00
09/11/09 18:00
LICA31 NOX_ PPB
LICA31 NO_ PPB
LICA31 NO2_ PPB