

December 12, 2007

Lakeland Industry & Community Association
Box 8237
5006-50 Avenue
Bonnyville, Alberta
T9N 2J5

ATTENTION: Mr. Mike Bisaga

REFERENCE: Ambient Air Monitoring Report For November 2007

Maxxam Analytics Inc. is pleased to submit this report of data collected at the Ambient Air Monitoring Station located at the Lakeland Industry & Community Assoc. Cold Lake site for the month of November 2007.

Included is a summary of the monthly continuous and hourly average reports, equipment calibration reports, as well as a brief description of the calibration procedure. The passive network data are also included in this report.

During the month of November 2007 the following proceedings were noted:

Cold Lake South Site

- All analyzers and wind systems were all above 90% uptime objective for the month.
- All data was within Provincial objectives for the month.
- All data was corrected using daily zero calibration data. Furthermore the PM 2.5 data was corrected using Alberta Environment correction standards.
- There was 0 hours of data for THC that was invalidated as no concentrations fell below the historical background average of 1.5 ppm, a concentration agreed to with the LICA Program Manager.
- During the monthly check the V-Ring seal was changed on the PM 2.5, also an adjustment to the temperature sensor was made. All maintenance was performed after an "As Found" audit of flows was completed. After all maintenance was completed the equipment was allowed to stabilize, then an 'As Left' audit of flows was completed.
- The NOx analyzer has displayed a drift between monthly calibrations; the drift this month was about 5% difference from October's calibration. All diagnostic tests are within operating range of analyzer and the analyzer is linear. General maintenance to the PMT will be completed next calibration in order to correct this issue.

Passive Network

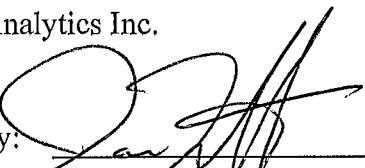
A summary of the passive monitoring are reported as follows:

- Monitoring period averages for O₃ ranged from 18.9 – 27.2 ppb.
- Monitoring period averages for SO₂ ranged from 0.3 – 2.6 ppb.
- Monitoring period averages for NO₂ ranged from 0.8 – 6.1 ppb.
- Monitoring period averages for H₂S ranged from 0.08 – 0.15 ppb.

Site #12 – Sampler shelter was replaced as the bottom plate came off the sampler. The reason was attributed to the age of the sampler.

Please feel free to contact either of Craig Snider at (403) 219-3689 or Darren Morissette (403)-219-3661, should you have any questions concerning this report.

Sincerely,
Maxxam Analytics Inc.

Prepared by: 
Darren Morissette, CEPIT
Senior Technologist

Reviewed by: 
Craig Snider, CET
Ambient Manager

Lakeland Industry & Community Association
Cold Lake Monitoring Site
Ambient Air Monitoring
Data Report
For
November 2007

Prepared By:

MAXXAM ANALYTICS INC.

Lakeland Industry & Community Assoc.

COLD LAKE

AMBIENT AIR MONITORING STATION

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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*.

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION

MONTHLY CONTINUOUS DATA SUMMARY

COLD LAKE

Continuous Ambient Monitoring – November 2007

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION COLD LAKE SITE					MAXIMUM VALUES					OPERATIONAL TIME (PERCENT)	
					1-HOUR				24-HOUR		
PARAMETER	OBJECTIVES		EXCEEDENCES		MONTHLY AVERAGE	READING	DAY	HOUR	READING	DAY	
	1-HR	24-HR	1-HR	24-HR							
SO ₂ (PPB)	172	57	0	0	0.46	8	8	17	1.3	8.21	100.0
TRS (PPB)	-	-	-	-	0.00	1	14	23,0	0.1	14	100.0
NO ₂ (PPB)	212	106	0	0	4.87	24	14	23	11.2	24	100.0
NO (PPB)	-	-	-	-	0.76	33	14	0	4.1	6	100.0
NOx (PPB)	-	-	-	-	5.87	54	14	0	13	24	100.0
O ₃ (PPB)	82	-	0	-	21.65	38	30	VARIOUS	33.8	30	100.0
THC (PPM)	-	-	-	-	1.98	4.1	21,22	23,1,3	2.4	24	100.0
PM 2.5 (UG/M ³)	-	30	-	0	2.75	13.8	23	20	7.2	24	100.0
TEMPERATURE (DEG C)	-	-	-	-	-6.03	6.5	3	14	3.6	1	100.0
RELATIVE HUMIDITY (%)	-	-	-	-	76.91	97.8	18	5	96.1	18	100.0
VECTOR WS (KPH)	-	-	-	-	7.28	22.6	13	13	15.2	13	100.0
VECTOR WD (DEGREES)	-	-	-	-	W	-	-	-	-	-	100.0

**LAKELAND INDUSTRY & COMMUNITY ASSOCIATION
Passive Ambient Monitoring Network – November 2007**

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION PASSIVE NETWORK			
NETWORK MAXIMUM (PPB)		NETWORK AVERAGE (PPB)	
PARAMETER	STATION	READING	READING
NO ₂	25	6.1	2.2
SO ₂	13	2.6	0.6
H ₂ S	10	0.15	0.11
O ₃	7	27.2	23.3

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

S02

- Analyzer make / model TECO 43A

No operational issues during the month. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

TRS

- Analyzer make / model TECO 43A

CD NOVA CDN 101 Converter

No operational issues during the month. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

THC

- Analyzer make / model TECO 51C-LT

No operational issues during the month. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information. It was agreed to with the LICA Program Manager to invalidate all data, after zero correction, which falls below the historical background average of 1.5 ppm. As a result 0 hours of data was invalidated and the uptime was at 100.0%.

NO_x

- Analyzer make / model TECO 42C

The analyzer has been noticed to drifting marginally between monthly calibrations. This month the percent change from last calibration was 5%. The technician confirmed all diagnostic tests were within the operating range of analyzer and that the analyzer calibration was linear. An adjustment will be made to the PMT during the December calibration. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

O₃

- Analyzer make / model

TECO 49I

No operational issues during the month. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information.

PM 2.5

- Analyzer make / model

TEOM 1400A

An ‘As Found’ audit on flows was completed prior to the V-Ring seal replacement in the sensor unit. The temperature sensor was adjusted in order to read closer to the actual measured temperature. The TEOM was allowed to stabilize after the maintenance; afterwards a flow audit was completed. The TEOM filter was replaced.

Wind Speed & Direction

- 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.

Relative Humidity

- System make / model

Rotronic Hygroclip-S3

No operational issues observed during the month

Temperature

- System make / model

Rotronic Hygroclip-S3

No operational issues observed during the month.

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.

Trailer

- No new information to report.

Air Quality Index (AQI)

The AQI data was adjusted to reflect regular monthly calibrations, maintenance, and downtime and daily calibrations.

Passive Network

Site #12 – Sampler was replaced as the bottom plate became dislodged. This issue was related to the age of the sampler.

LICA - COLD LAKE SITE

MONTHLY SUMMARIES,

GRAPHS

&

WIND ROSES

AIR QUALITY INDEX

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

AIR QUALITY INDEX (AQI)

STATUS FLAG CODES

NA - NOT APPLICABLE

AOI SUMMARY



SO₂

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

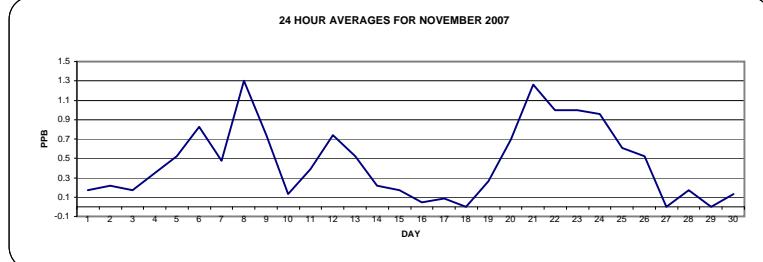
NOVEMBER 2007

SULPHUR DIOXIDE (SO₂) hourly averages in ppb

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



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:	
MAXIMUM 1-HR AVERAGE:	8 PPB @ HOUR(S) 17 ON DAY(S) 8
MAXIMUM 24-HR AVERAGE:	1.3 PPB ON DAY(S) 8,21

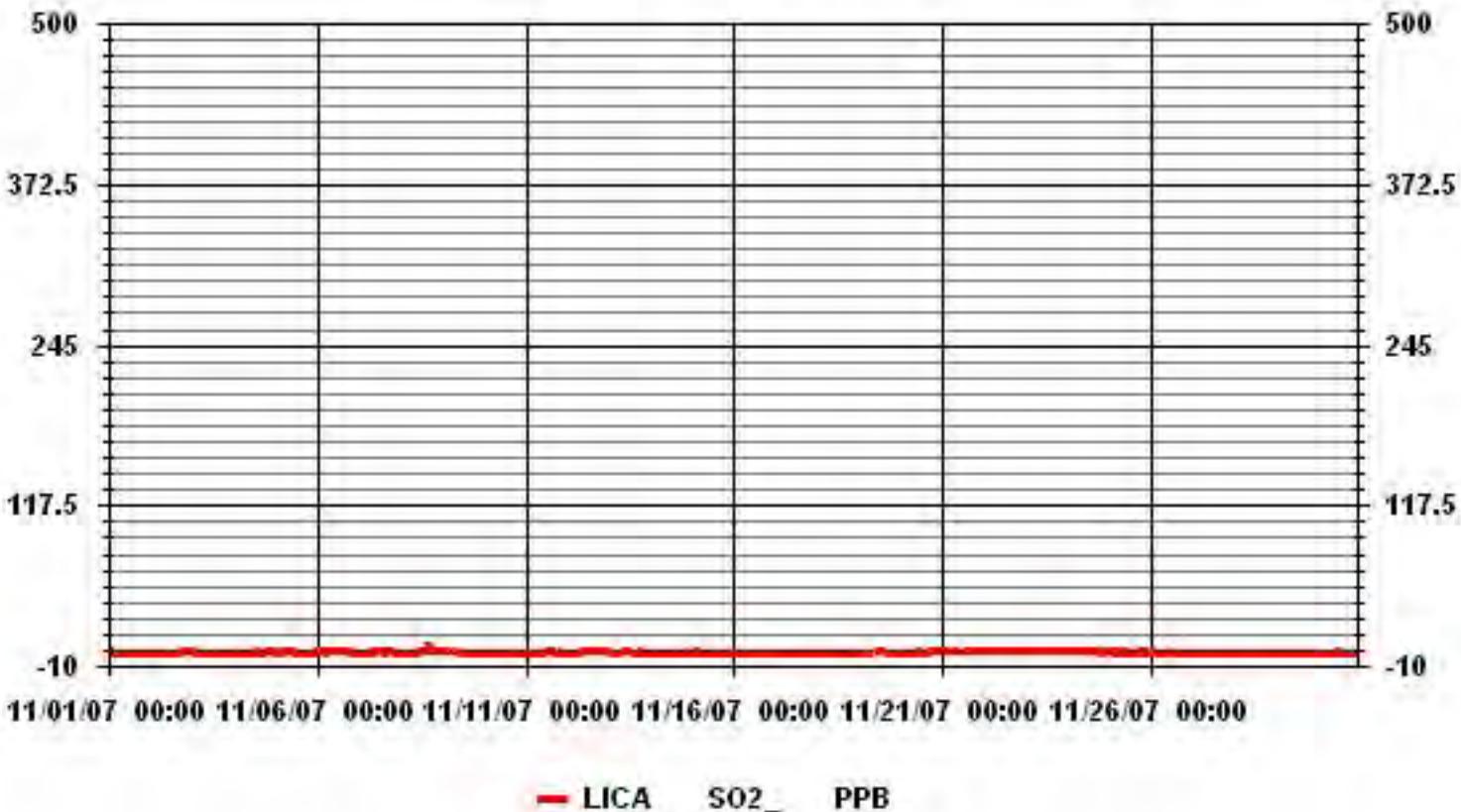
Izs CALIBRATION TIME: 32 HRS OPERATIONAL TIME: 720 HRS

MONTHLY CALIBRATION TIME: 3 HRS AMD OPERATION UPTIME: 100.0 %

STANDARD DEVIATION: 0.67 MONTHLY AVERAGE: 0.46 PPB

MOUNTAIN STANDARD TIME

01 Hour Averages



LICA
SO2_ / WD Joint Frequency Distribution (Percent)

November 2007

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : SO2_
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
< 20	.87	.43	.87	1.02	8.90	10.94	8.32	1.75	1.60	2.91	12.40	19.70	12.26	7.00	8.32	2.62	100.00
< 60	.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	
< 170	.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	
>= 340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
Totals	.87	.43	.87	1.02	8.90	10.94	8.32	1.75	1.60	2.91	12.40	19.70	12.26	7.00	8.32	2.62	

Calm : .00 %

Total # Operational Hours : 685

Distribution By Samples

Direction

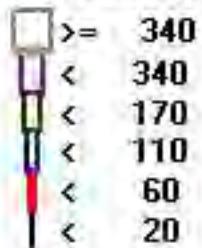
Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 20	6	3	6	7	61	75	57	12	11	20	85	135	84	48	57	18	685
< 60																	
< 110																	
< 170																	
< 340																	
>= 340																	
Totals	6	3	6	7	61	75	57	12	11	20	85	135	84	48	57	18	

Calm : .00 %

Total # Operational Hours : 685

Logger : 01 Parameter : SO2

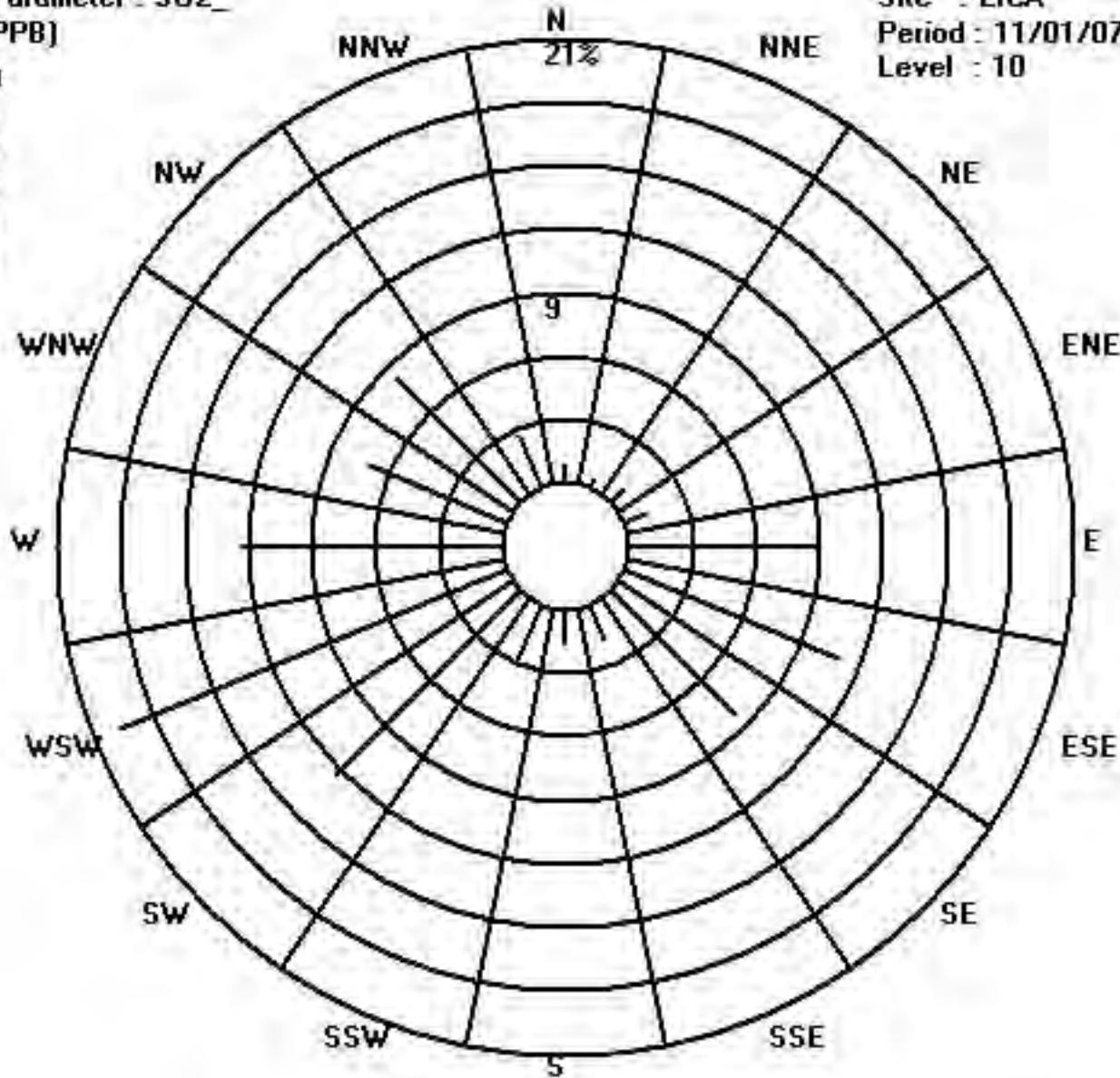
Class Limits (PPB)



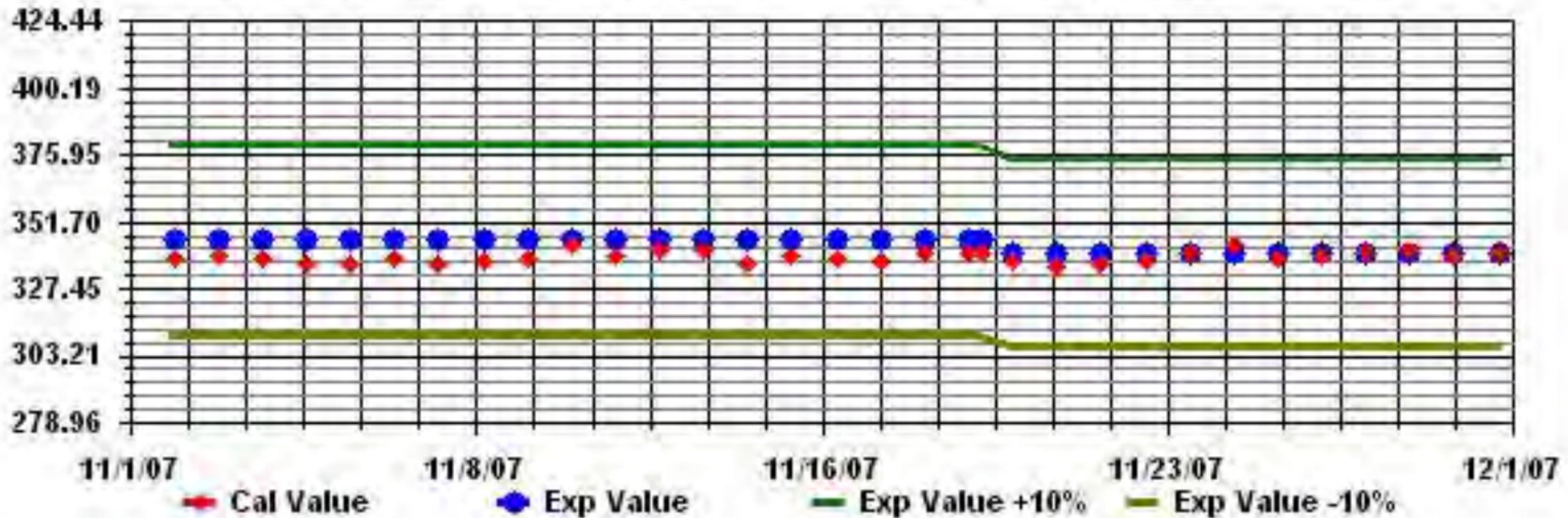
Site : LICA

Period : 11/01/07-11/30/07

Level : 10



Calibration Graph for Site: LICA Parameter: SO2_ Sequence: SO2 Phase: SPAN



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

SULPHUR DIOXIDE MAX instantaneous maximum in ppt

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.					
DAY																																
1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	1	2	1.0	24			
2	1	1	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			
3	1	1	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			
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	IZS	1	2	2	2			
5	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	IZS	1	1	1	1.1			
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	IZS	1	1	1	1	1	1	1	1	1.2			
7	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	IZS	1	1	1	1	1	1	1	1	1.1			
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	IZS	9	7	3	3	3	2	2	9	2.1				
9	2	2	2	2	2	2	2	3	2	2	2	1	1	1	1	IZS	1	1	1	1	1	2	1	1	1	3	1.6	24				
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	1	1	1	1	1	1	1	1	1	1.0	24				
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	2	2	2	2	1	1	1	1	1	1.2	24					
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	1	1	1	2	2	2	1	1	1	2	1.2	24				
13	1	1	1	1	1	1	1	1	3	3	IZS	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1.3	24			
14	1	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			
15	1	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			
16	1	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			
17	1	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			
18	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	1	1	1	1.0	24		
19	1	1	1	1	1	1	1	IZS	1	1	1	C	C	C	IZS	17	1	1	1	1	1	1	1	1	1	1	1	1	1	17	1.8	24
20	1	1	1	1	1	1	1	IZS	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	4	3	3	2	4	1.6	24		
21	2	2	IZS	2	2	2	3	3	2	2	2	2	2	2	3	2	2	2	2	2	2	1	1	1	1	1	3	1.9	24			
22	1	IZS	1	1	1	1	1	1	1	1	1	2	1	2	2	1	1	1	1	2	1	1	1	2	2	2	1.3	24				
23	IZS	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	2	2	1	1	1	1	IZS	2	1.2	24				
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24			
25	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	1	2	2	1.1			
26	2	3	5	4	3	2	2	2	2	1	3	4	4	3	2	2	2	2	2	2	1	2	IZS	2	2	2	5	2.5	24			
27	2	2	2	2	2	2	1	2	2	2	1	2	2	2	2	2	2	2	2	2	1	2	IZS	1	1	2	1	1.7	24			
28	2	2	2	2	2	2	3	4	3	2	2	2	2	2	2	2	2	2	2	1	2	IZS	2	2	2	1	2	2.1	24			
29	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	IZS	2	2	2	2	2	2.0	24			
30	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.0	24			
HOURLY MAX	2	3	5	4	3	3	4	3	3	3	4	17	3	2	2	9	7	3	3	4	3	3	2									
HOURLY AVG	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.9	1.4	1.3	1.3	1.6	1.5	1.3	1.3	1.4	1.4	1.3	1.3	1.3									

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

MONTHLY SUMMARY

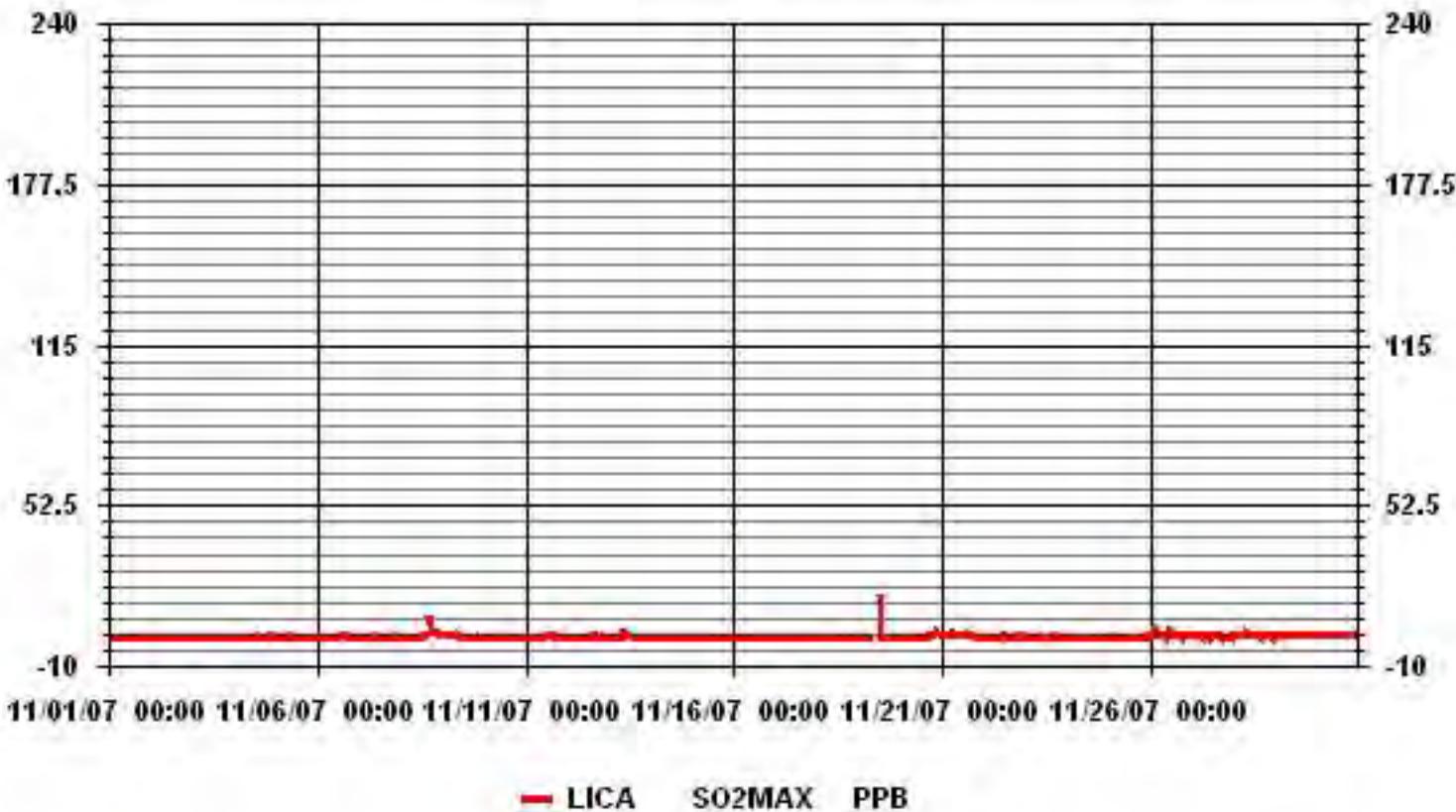
NUMBER OF NON-ZERO READINGS:	685
MAXIMUM INSTANTANEOUS VALUE:	17 PPB @ HOUR(S) 13 ON DAY(S) 19

Izs Calibration Time:	32 HRS	Operational Time:	720 HRS
Monthly Calibration Time:	3 HRS		
Standard Deviation:	0.91		

MOUNTAIN STANDARD TIME



01 Hour Averages



TRS

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

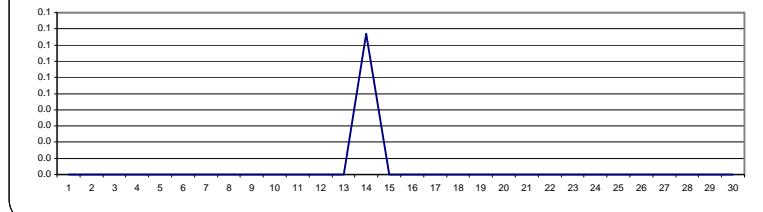
TOTAL REDUCED SULPHUR (TRS) hourly averages in ppb

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

STATUS FLAG CODES

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

24 HOUR AVERAGES FOR NOVEMBER 2007



OBJECTIVE LIMIT:

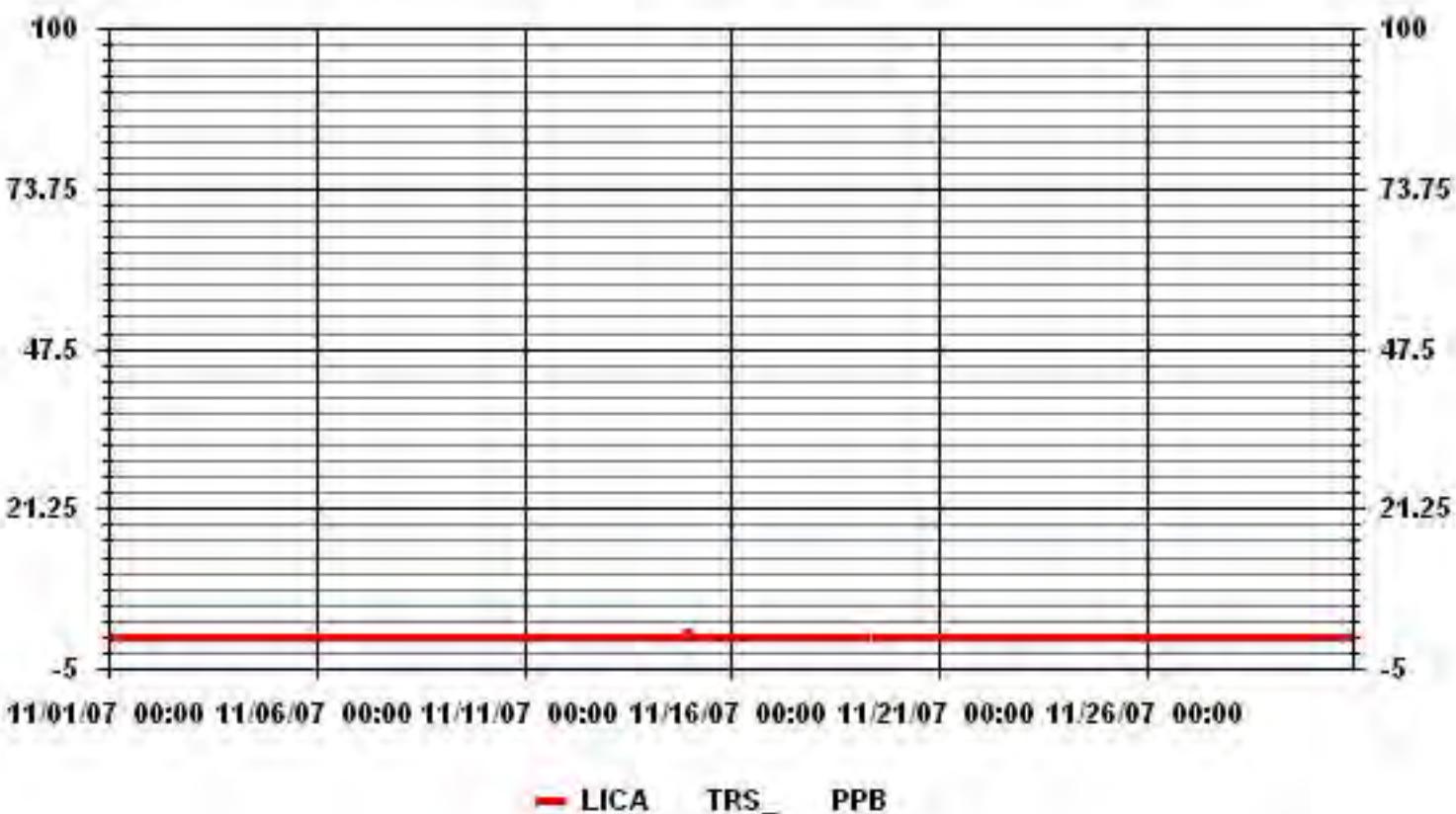
ALBERTA ENVIRONMENT: 1-HR 172 PPB 24-HR 57 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0
NUMBER OF 24-HR EXCEEDENCES:	0
NUMBER OF NON-ZERO READINGS:	2
MAXIMUM 1-HR AVERAGE:	1 PPB @ HOUR(S) 23,0 ON DAY(S) 14
MAXIMUM 24-HR AVERAGE:	0.1 PPB ON DAY(S) 14
VAR-VARIOUS	
Izs CALIBRATION TIME:	34 HRS OPERATIONAL TIME: 720 HRS
MONTHLY CALIBRATION TIME:	3 HRS AMD OPERATION UPTIME: 100.0 %
STANDARD DEVIATION:	0.05 MONTHLY AVERAGE: 0.00 PPB

MOUNTAIN STANDARD TIME

01 Hour Averages



LICA
 TRS_ / WD Joint Frequency Distribution (Percent)

November 2007

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	.87	.43	.87	1.02	8.93	10.98	8.34	1.75	1.61	2.92	12.44	19.61	12.29	6.88	8.34	2.63	100.00
< 10	.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	
>= 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
Totals	.87	.43	.87	1.02	8.93	10.98	8.34	1.75	1.61	2.92	12.44	19.61	12.29	6.88	8.34	2.63	

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	6	3	6	7	61	75	57	12	11	20	85	134	84	47	57	18	683
< 10																	
< 50																	
>= 50																	
Totals	6	3	6	7	61	75	57	12	11	20	85	134	84	47	57	18	

Calm : .00 %

Total # Operational Hours : 683

Logger : 01 Parameter : TRS_

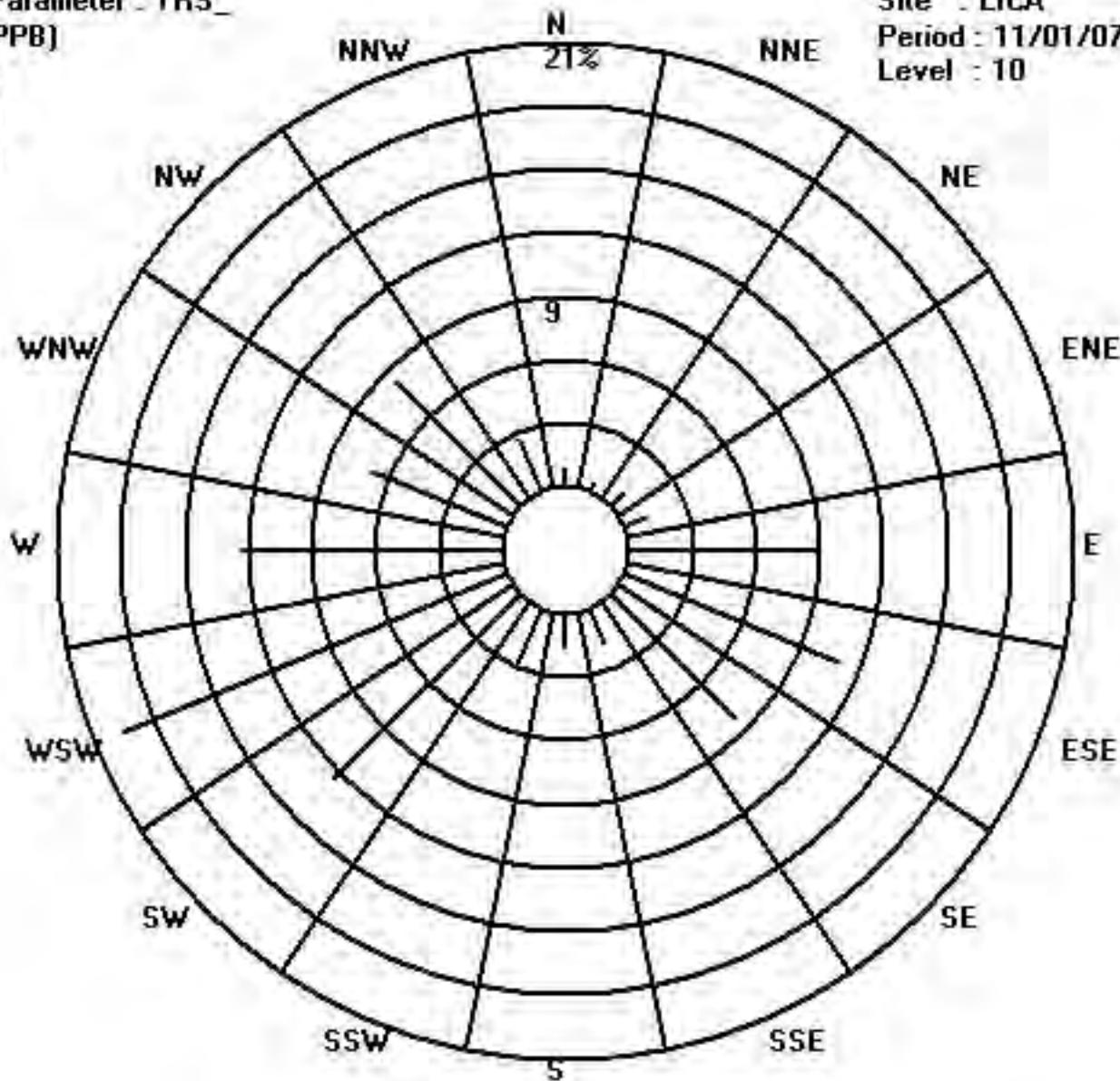
Class Limits (PPB)



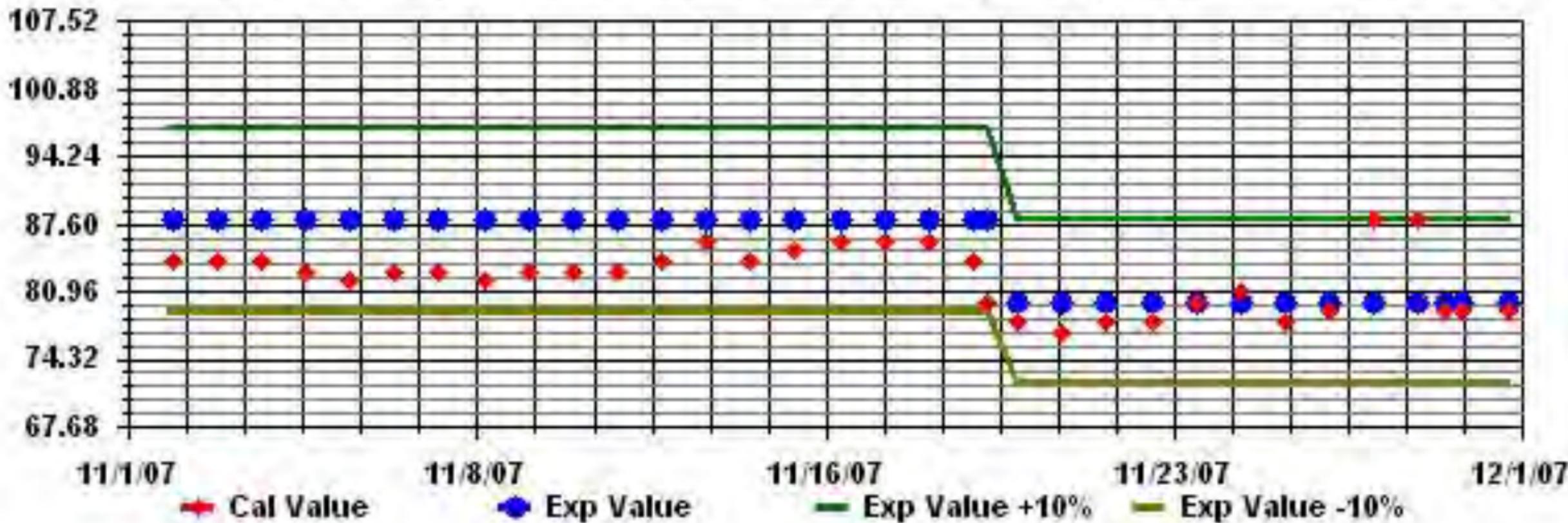
Site : LICA

Period : 11/01/07-11/30/07

Level : 10



Calibration Graph for Site: LICA Parameter: TRS_ Sequence: TRS Phase: SPAN



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

TOTAL REDUCED SULPHUR MAX instantaneous maximum in ppt

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	DAILY MAX. MAX.	24-HOUR AVG.	RDGS.		
DAY																												
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24	
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1.0	24	
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24	
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24	
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24	
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	1	1	1	1	1	1	1.0	24	
7	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	
8	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	
9	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	
10	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	
11	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	
12	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	
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	1	1	1	1	1	1	1	1	1	IZS	1	1	1	1	1	1	1	1.0	24	
15	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	
16	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	
17	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	
18	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	
19	1	1	1	1	1	1	1	1	1	C	C	C	C	IZS	1	1	1	1	1	1	1	1	1	1	1	1	1.0	24
20	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	
21	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	
22	1	IZS	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	
23	IZS	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	
24	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	
25	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	
26	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	
27	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	
28	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	
29	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	
30	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	
HOURLY MAX	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
HOURLY AVG	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			

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:	682
MAXIMUM INSTANTANEOUS VALUE:	1 PPB @ HOUR(S)
VAR ON DAY(S) VAR	

VAR-VARIOUS

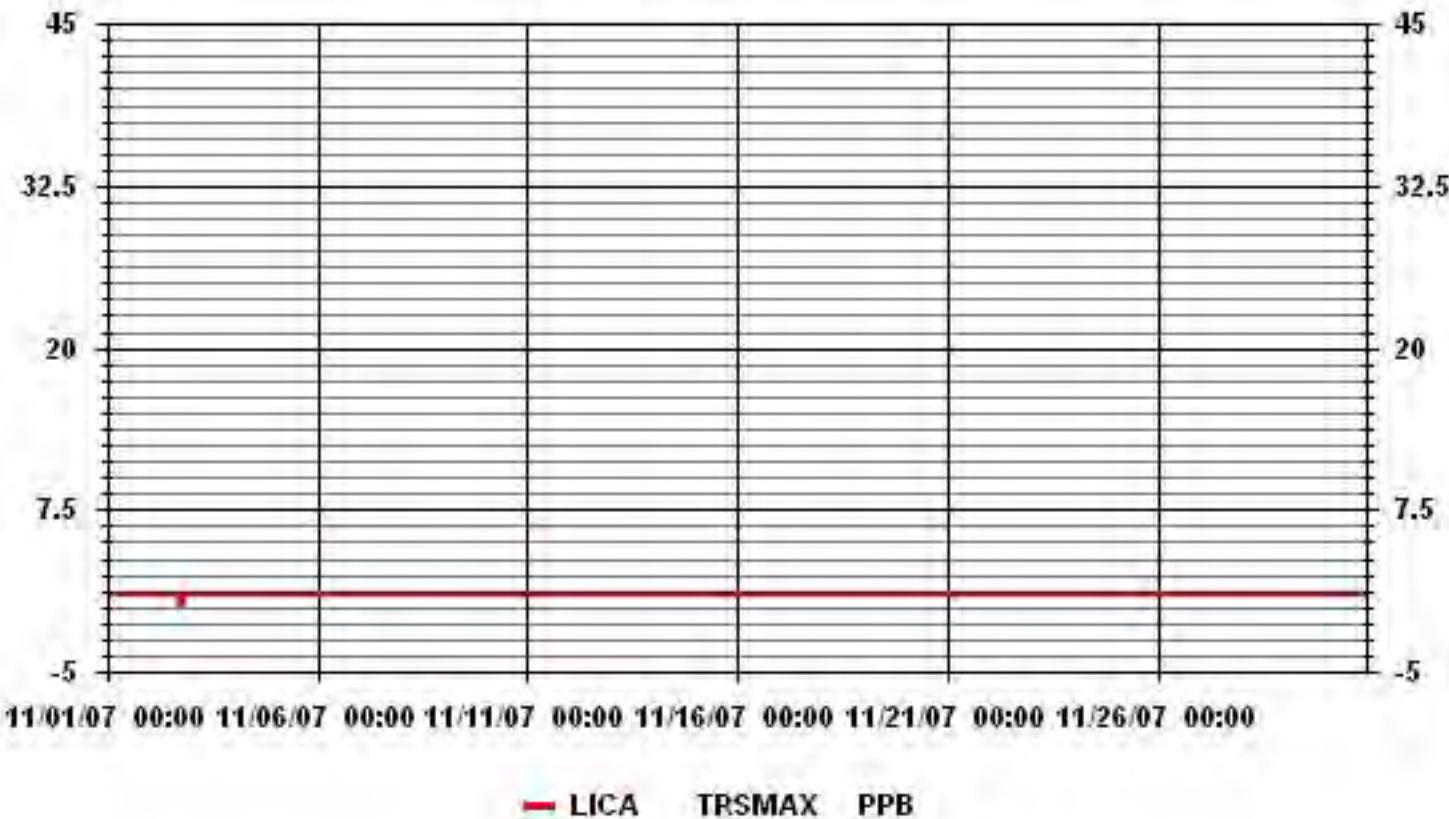
IZS CALIBRATION TIME:	34 HRS	OPERATIONAL TIME:	720 HRS
MONTHLY CALIBRATION TIME:	3 HRS		

STANDARD DEVIATION: 0.04

MOUNTAIN STANDARD TIME



01 Hour Averages



THC

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

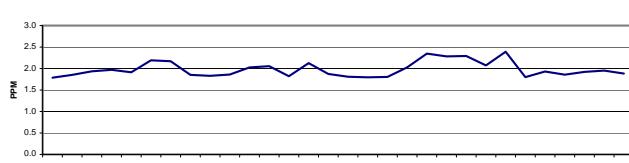
TOTAL HYDROCARBONS (THC) hourly averages in ppm

	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 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	MAX.	Avg.	RDGS.		
DAY																													
1	2	2	2	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	IZS	1.7	2.0	1.8	24
2	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2	2	2	IZS	2	2.2	2.2	1.9	24		
3	2.1	2	2	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.9	2	2.1	IZS	2.1	2.2	3.5	3.5	1.9	24			
4	3	2.8	2.1	2.1	2.1	2.1	2.1	1.9	1.9	1.9	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	IZS	1.8	1.8	1.8	1.8	3.0	2.0	24		
5	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.5	1.9	1.8	1.9	1.8	1.9	1.9	1.9	1.9	2.1	2	IZS	1.9	1.9	2	2	2.1	2.5	1.9	24		
6	2	2.1	2.2	2.1	2.1	2	2	2	2	2	2	2	2	2	2	2.6	IZS	2.4	2.5	2.6	2.7	3	2.2	3.0	2.2	24			
7	2.7	2	2.1	2.2	2.1	3.4	3.1	3.4	3.1	2.3	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	IZS	1.8	1.8	1.8	1.8	1.8	1.8	3.4	2.2	24	
8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.9	2.1	2.1	2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	IZS	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.1	24	
9	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2	2	2	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	IZS	1.7	1.8	1.7	1.7	1.8	1.8	1.8	2.0	24	
10	1.8	1.8	2.1	2.2	2.1	2.3	2	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	1.7	1.8	1.7	1.8	1.8	1.8	2.3	1.9	24
11	1.8	1.9	2	1.8	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	1.8	IZS	1.8	1.9	1.9	2	2.4	2.7	2.9	2.0	24	
12	2.1	2.2	2.2	2.1	2.2	2.2	2.3	2.4	2.3	2.2	2.1	IZS	M	2	2	2	1.9	1.9	1.8	1.8	1.9	1.8	2	2.4	2.1	2.1	24		
13	1.8	1.8	2.1	2	1.9	1.9	1.9	1.8	1.9	1.9	1.9	IZS	1.8	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.1	1.8	24	
14	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	IZS	1.8	1.8	1.8	1.8	1.8	2	2.4	2.9	2.8	3.6	2.7	2.3	2.4	3.6	2.1	24	
15	2.5	2.1	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.3	2.5	1.9	24	
16	2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.8	24	
17	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.8	24	
18	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	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	1.7	1.8	2.0	24	
19	1.8	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	C	C	C	IZS	1.9	1.8	1.8	1.8	1.9	2.1	2.7	3.3	3	3.3	2.0	24		
20	2.8	3.1	2.6	IZS	2.7	2.7	2.9	2.9	3	3.1	2.9	2.7	2.1	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.1	2.3	24	
21	2	2	IZS	1.9	1.9	2	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2	2.1	2.2	2.1	2.1	2.3	3.2	3.1	4.1	3.2	4.1	2.3	24		
22	4.1	IZS	4.1	3.4	3.1	2.7	2.4	2.2	2.1	2.1	2	2	2.1	2	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	4.1	2.3	24	
23	IZS	1.8	1.9	2	2.3	2.4	2	2.1	2.4	2.1	2	1.9	1.9	2	2	2.5	2	2	2.2	2.1	2.1	IZS	2.5	2.1	2.1	2.1	24		
24	2.6	2.3	2.2	2.3	2.6	3.1	2.6	2.7	3	2.8	2.8	2.4	2.3	2.3	2.2	2.2	2.1	2	2.2	2.4	2.1	2	IZS	1.8	3.1	2.4	24		
25	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	24	
26	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	2	2.1	2.1	2.2	IZS	2	1.9	1.9	2.2	24	
27	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.1	2.1	1.9	24	
28	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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	24	
29	1.9	1.9	1.9	2	2.1	2	2.4	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	2	IZS	2	1.9	1.9	1.9	1.9	2.4	2.0	2.0	24
30	1.9	1.9	1.9	1.9	2	2.1	2	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	1.8	1.8	1.8	2.1	1.9	2.1	24	
HOURLY MAX	4.1	3.1	4.1	3.4	3.1	3.4	3.1	3.4	3.1	3.1	2.9	2.7	2.3	2.3	2.3	2.2	2.6	2.4	2.9	3.2	3.6	3.0	4.1	3.5					
HOURLY AVG	2.1	2.0	2.0	2.0	2.1	2.0	2.0	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	2.1	2.1	2.1	2.1	2.1	2.1	24	

STATUS FLAG CODES

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

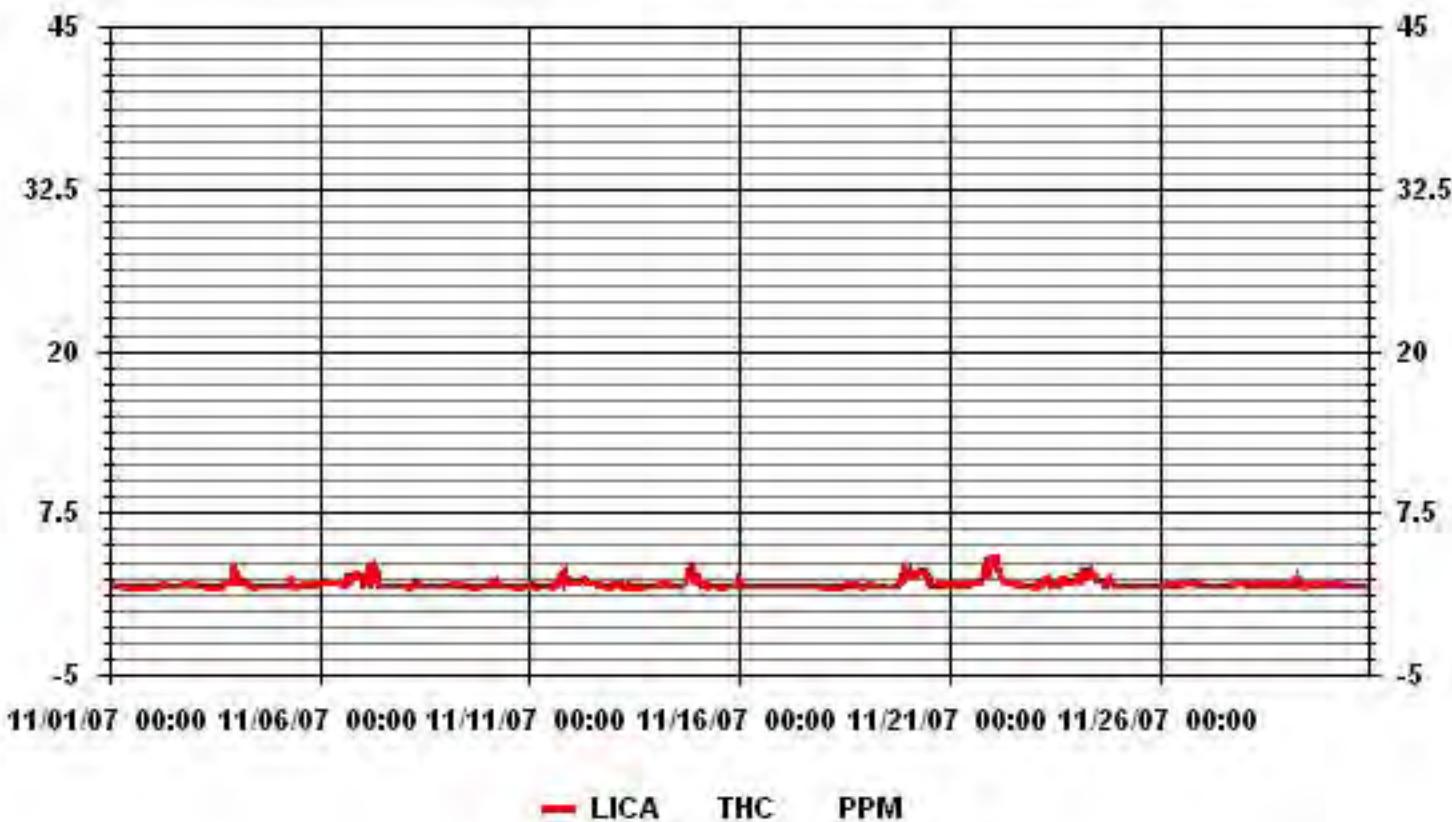
24 AVERAGES FOR NOVEMBER 2007



MOUNTAIN STANDARD TIME

IZS CALIBRATION TIME:	32	HRS	OPERATIONAL TIME:	720	HRS
MONTHLY CALIBRATION TIME:	3	HRS	AMD OPERATION UPTIME:	100.0	%
STANDARD DEVIATION:	0.34		MONTHLY AVERAGE:	1.98	PPM

01 Hour Averages



LICA
THC / WD Joint Frequency Distribution (Percent)

November 2007

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	.87	.43	.87	1.02	8.77	10.81	8.33	1.75	1.60	2.19	10.38	19.29	12.13	7.01	8.33	2.63	96.49
< 10.0	.00	.00	.00	.00	.14	.00	.00	.00	.00	.73	2.04	.43	.14	.00	.00	.00	3.50
< 50.0	.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	
Totals	.87	.43	.87	1.02	8.91	10.81	8.33	1.75	1.60	2.92	12.42	19.73	12.28	7.01	8.33	2.63	

Calm : .00 %

Total # Operational Hours : 684

Distribution By Samples

Direction

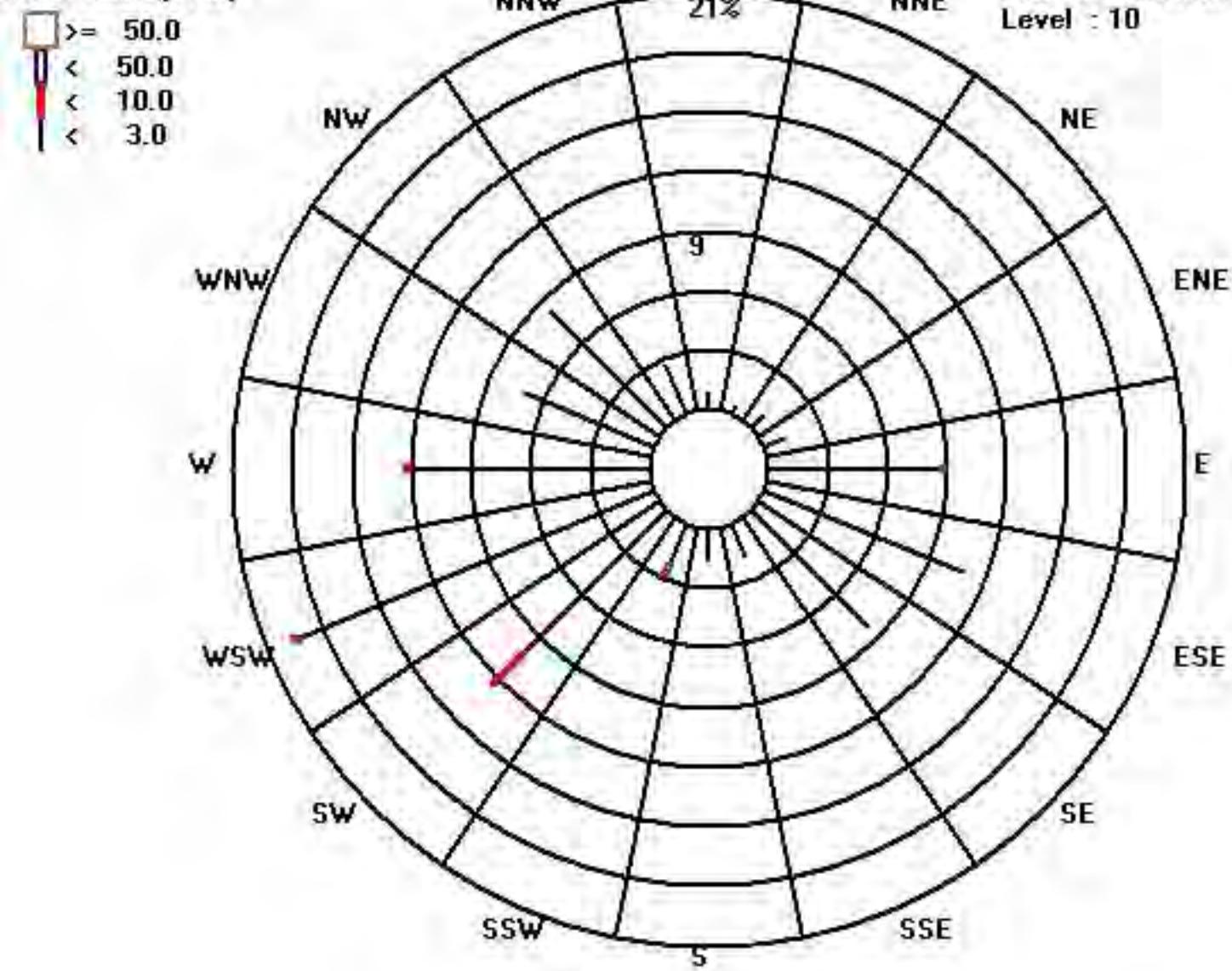
Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3.0	6	3	6	7	60	74	57	12	11	15	71	132	83	48	57	18	660
< 10.0					1					5	14	3	1				24
< 50.0																	
>= 50.0																	
Totals	6	3	6	7	61	74	57	12	11	20	85	135	84	48	57	18	

Calm : .00 %

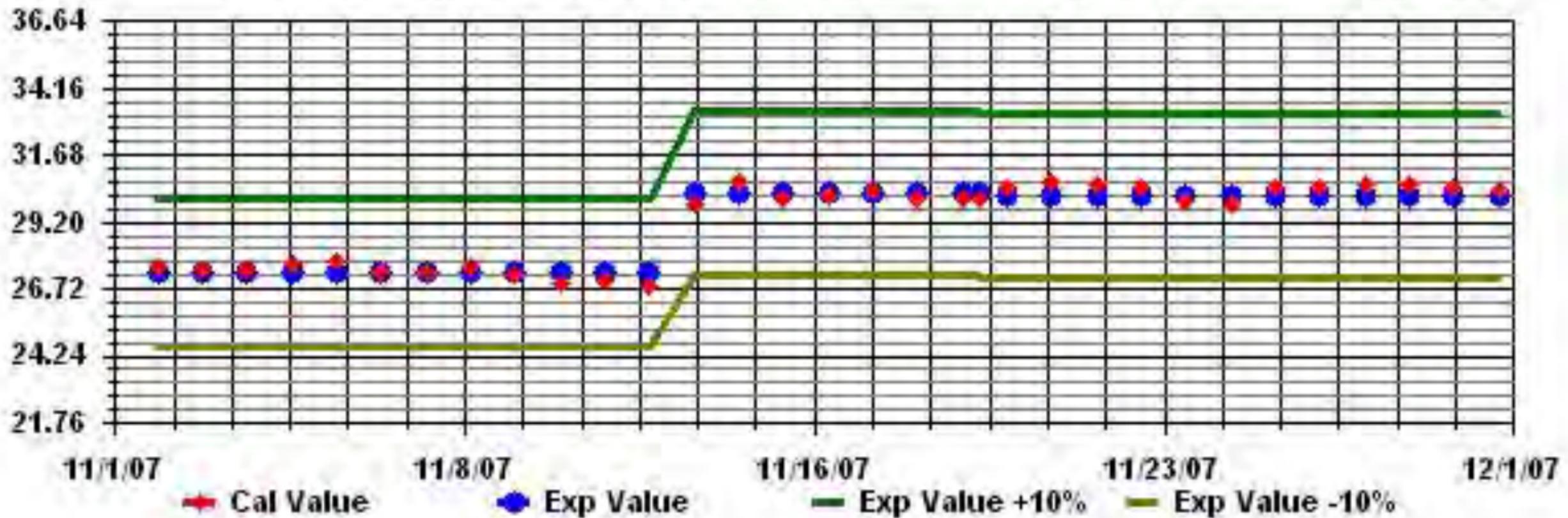
Total # Operational Hours : 684

Logger : 01 Parameter : THC

Class Limits (PPM)



Calibration Graph for Site: LICA Parameter: THC Sequence: THC Phase: SPAII



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX. AVG.	24-HOUR RDGS.		
DAY																												
1	2.1	2.1	2.2	2.1	2	1.9	2	1.9	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.7	IZS	1.7	2.2	1.9	24			
2	1.7	1.8	1.8	1.8	1.9	1.9	2	1.9	1.9	1.9	1.9	1.8	1.8	1.8	2	1.9	2.1	2.1	2.1	IZS	2.2	3	3	2.0	24			
3	2.9	2.3	2.1	1.9	1.8	1.8	1.9	1.9	1.8	1.8	1.7	1.8	1.8	1.8	2	2.1	2.3	2.3	IZS	2.3	2.7	8	8	2.3	24			
4	7.7	7.6	2.5	2.4	2.3	2.2	2.4	2.1	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	IZS	1.8	1.8	1.8	1.8	7.7	2.5	24		
5	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.6	3.4	2	1.9	1.9	1.9	1.9	2.1	2.3	2.7	2.5	IZS	2	2	2	2.1	2.2	3.4	2.1	24	
6	2.2	2.2	2.2	2.2	2.1	2.1	2	2.1	2.1	2.1	2.1	2.1	2	2.1	2.2	5	IZS	2.8	4.4	4.2	7.2	11.2	3.1	11.2	3.1	24		
7	7	2.1	2.2	2.3	2.8	7.1	4.9	4.5	4.5	3.2	2.1	1.9	1.9	1.8	1.8	IZS	1.8	1.8	1.8	1.8	1.8	1.8	1.8	7.1	2.8	24		
8	1.8	1.8	1.9	1.9	2	2.4	2.7	2.3	2.1	2.1	1.9	1.8	1.8	1.9	IZS	1.9	1.9	1.8	1.8	1.9	1.9	2	2.7	2.0	24			
9	1.9	1.9	1.9	1.8	2	2.1	2.1	2.1	2	2	2	1.9	1.8	IZS	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	2.1	1.9	24			
10	1.8	2	3.9	3.2	2.2	3.1	3.3	1.9	1.9	1.9	1.8	1.8	1.8	IZS	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.9	2.1	24			
11	1.9	2	2.1	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	IZS	1.9	2.3	2.3	2.5	5.2	5.1	4.8	2.1	3.4	5.6	2.7	5.6	2.6	24		
12	2.2	2.4	2.2	2.9	2.3	2.3	2.4	2.6	3	2.3	2.2	IZS	M	2.1	2.1	2	2	1.9	1.9	1.9	1.9	2	2	2.1	3	2.2	24	
13	2	1.9	2.1	2.1	1.9	1.9	1.9	2	1.9	IZS	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	2.1	1.9	24		
14	1.9	2.1	2	2	1.9	2.1	2	1.9	1.9	IZS	1.9	1.9	1.8	1.8	1.8	1.9	2.4	6.1	5.5	5.7	5.9	3.8	2.9	2.5	6.1	2.8	24	
15	3.2	4	1.9	2	1.9	2	1.9	1.9	1.9	IZS	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	3.3	7.7	7.7	2.3	24		
16	4.2	1.8	1.8	1.8	1.8	1.8	1.8	IZS	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	4.2	1.9	24		
17	1.8	1.8	1.8	1.8	1.8	1.8	IZS	1.8	1.8	2.3	2	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	2.3	1.9	24	
18	1.8	1.8	1.8	1.8	IZS	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2	2	1.9	2	2	2	1.9	1.9	1.8	1.8	2	1.9	24		
19	1.8	1.9	1.9	1.9	IZS	1.9	1.9	1.9	1.9	1.8	C	C	C	IZS	2	1.9	1.9	1.8	2.6	3.6	4.6	6.2	5.3	6.2	2.6	2.8	24	
20	5.8	6.6	2.9	IZS	3.1	3.2	3.2	3.2	3.5	3.4	3.4	2.8	2.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	6.6	2.8	24		
21	2.3	2.3	IZS	2.5	2.2	2.3	2	2	1.9	2	2	2	2.1	2	2.1	2.5	2.7	2.3	3.5	5.9	5	4.8	6.1	7.7	7.7	3.1	24	
22	7.2	IZS	17	5.1	4.4	3	2.7	2.4	2.2	2.2	2.1	2.1	2	2	1.9	2	2	1.9	1.8	1.8	1.8	1.9	1.9	1.9	17	3.2	24	
23	IZS	1.9	4.5	2.1	4.1	4	2.1	2.1	6.6	2.3	2.1	2	1.9	2.1	2.1	2.1	6.7	2.3	2.1	2.3	5	2.7	2.3	IZS	6.7	3.0	24	
24	5.1	3.4	3.5	2.5	7.1	5.2	3.4	4.9	7.2	3.2	3.2	2.5	2.5	2.4	2.3	3.1	5.1	2.7	2.2	3.5	2.1	2.1	IZS	1.8	7.2	3.5	24	
25	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	24		
26	1.9	1.9	1.9	1.9	2	2	2	2	2.3	1.9	2	1.9	1.9	2.1	2.1	2.3	2	2.5	2.8	4	IZS	2	2	2	4	2.1	24	
27	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2	1.9	1.8	1.8	1.8	1.9	1.9	2	2	2	2.1	IZS	2.1	2.3	2.2	2	2.3	2.0	24		
28	2.1	2	2	1.9	1.9	1.9	2	2	2.4	2	1.9	1.9	1.9	2	2	1.9	1.9	1.9	1.9	IZS	2	2	2	3.3	2	3.3	2.0	24
29	1.9	2.6	2.3	2.1	2.8	2.6	4	2.5	2	1.9	1.9	1.9	1.9	1.9	2	2	2.1	IZS	2.1	2	2	2	1.9	2	4	2.2	24	
30	2	2.1	2.4	2	2.3	2.8	2.1	4.7	2.3	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	4.7	2.1	24		
HOURLY MAX	8	8	17	5	7	7	5	5	7	3	3	3	3	3	2	2	3	7	6	6	6	7	11	8				
HOURLY AVG	2.9	2.5	2.8	2.2	2.4	2.5	2.3	2.4	2.5	2.1	2.0	1.9	1.9	1.9	2.0	2.4	2.2	2.3	2.5	2.4	2.5	2.8	2.8					

STATUS FLAG CODES

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

MONTHLY SUMMARY

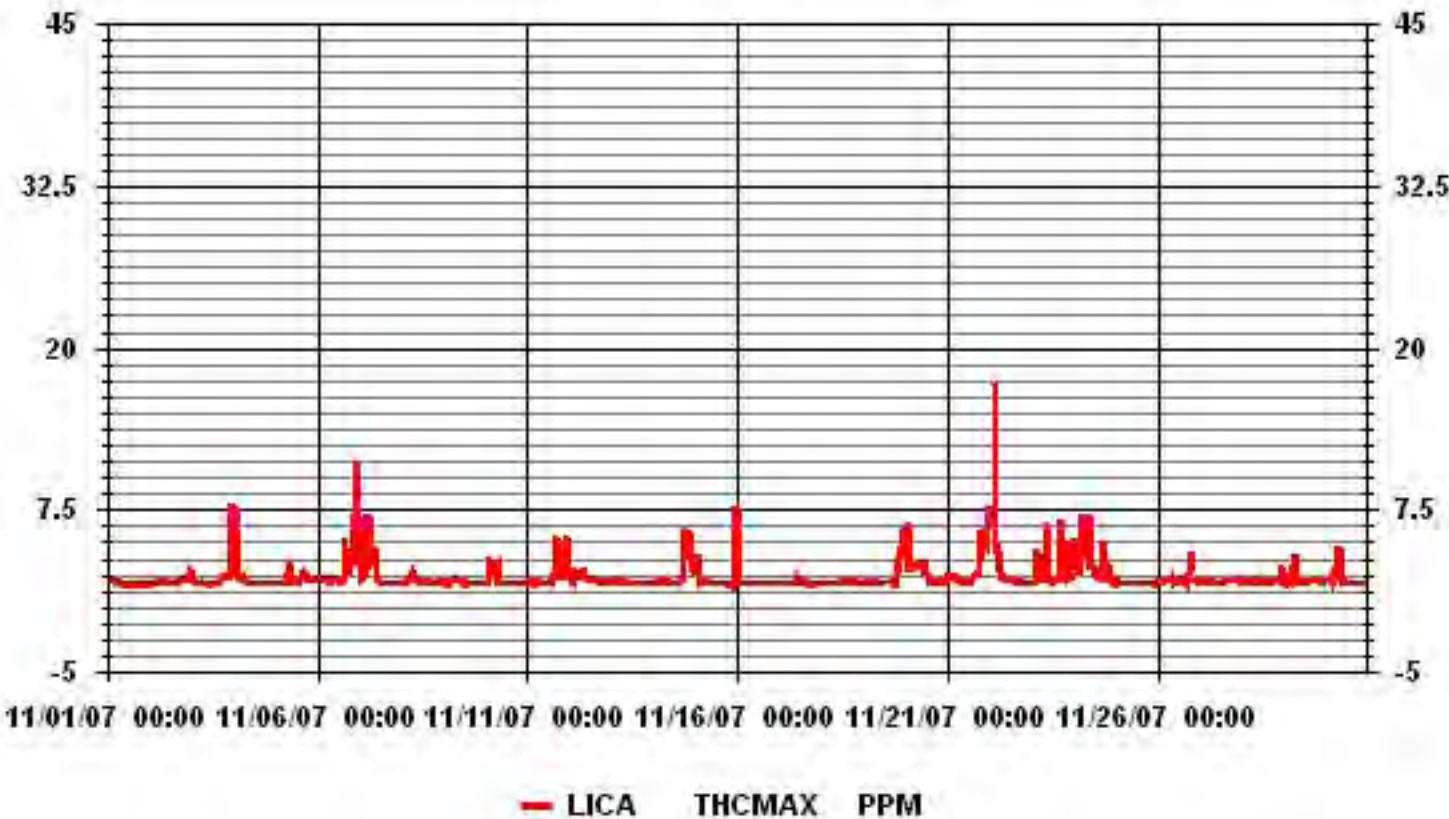
NUMBER OF NON-ZERO READINGS:	684
MAXIMUM INSTANTANEOUS VALUE:	17.0 PPM @ HOUR(S) 3 ON DAY(S) 22

IZS CALIBRATION TIME:	32 HRS	OPERATIONAL TIME:	720 HRS
MONTHLY CALIBRATION TIME:	3 HRS		
STANDARD DEVIATION:	1.23		

MOUNTAIN STANDARD TIME



01 Hour Averages



PARTICULATE MATTER

2.5

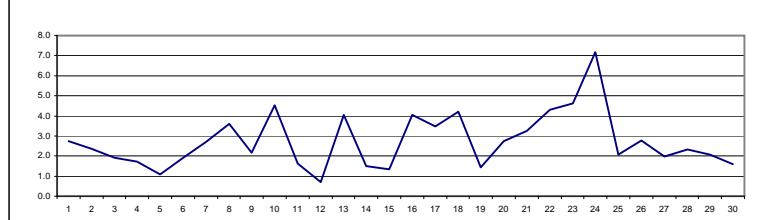
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

PARTICULATE MATTER 2.5 (PM2.5) hourly averages in ug/n³

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
DAY																												
1	7	5.7	4.8	4.4	3.4	3.4	2.6	3.2	3.6	2.8	1.3	0.6	0.5	0.6	0.4	2.8	3.5	2.7	2.3	0.8	2.8	3	1.7	1.8	7.0	2.7	24	
2	0.9	1	0.9	0.3	0.2	0.3	0.4	1.5	3.1	3.5	1.2	2	4.3	4.5	1.8	1.4	2.6	4.4	2	3.1	5.8	4.2	3.4	3.7	5.8	2.4	24	
3	2.7	4.4	4.8	4.4	2.5	2.9	2.4	2.6	3.5	3.8	3	0	0	0	0	0	0	0.4	1.6	0.8	0.9	1.5	1.7	1.9	4.8	1.9	24	
4	1.9	1.8	1.8	2.4	3	2.1	1.8	1.9	3.4	3.3	1.8	0.1	0.8	0.9	2.8	1.7	2	1.1	0.9	1.3	1.1	1.2	1.5	0.8	3.4	1.7	24	
5	1.4	0.6	0.6	0.4	1.5	1.4	1.9	1.1	2.9	2.1	1.2	0.9	0.2	0	0	0	0	2.1	2.2	1.6	0.7	2.3	0.8	0.4	2.9	1.1	24	
6	0	0	0	0	0	0	0	0	0	0.3	0.6	1	0.4	1.4	1.6	2.1	2.1	3.3	4.1	3.9	3.8	4.7	7.2	5.8	5.7	7.2	1.9	24
7	2.5	2	2.1	2.4	1.8	1.4	2.5	7.2	8.4	7	1.7	1.9	0	0.7	0.1	1.1	1.9	4.2	4.6	2.5	2.1	2.2	2.1	2.6	8.4	2.7	24	
8	2.2	2.8	2.9	2.4	2.1	3.1	3.6	4.5	5.4	4.5	0.5	1.6	2.4	3.7	5	6	6.3	4.7	3.7	3.5	5.2	3.5	3.8	3.2	6.3	3.6	24	
9	3.8	3	2.9	2.6	2.8	3.4	3.7	2.8	3.2	2.2	0.7	1.2	1.2	0	0.2	2.7	0.7	0.1	2.6	2.3	2.4	2	2.4	2.9	3.8	2.2	24	
10	3.1	3.6	2.9	1.9	2.7	5.3	5.9	4.8	4.6	2.7	2.4	3.9	2.2	3.7	2.4	3.8	4.7	4.3	5	6.8	9.1	7.9	7.3	7.5	9.1	4.5	24	
11	7.2	6.9	5.7	1.5	1.5	0	0	0	0.7	1.5	1.3	0.8	1.1	1.8	0.7	1.7	0.5	0.8	0.9	1.2	1.4	1.1	0.5	0	7.2	1.6	24	
12	0	0.3	0	0.5	0	0.7	0	0	0	1.3	0	0	0	0	0	0	0.4	0.8	0	0	0.9	1.9	2.5	3.8	3.5	3.8	0.7	24
13	5	4.3	6.5	8.1	9	5.4	3.8	2.7	5.1	4.5	6.2	3.9	2.1	3.5	3.1	3.4	3.1	2.8	2.6	2.9	2.7	2.6	1.4	2.3	9.0	4.0	24	
14	2.5	1.9	1.3	2.3	1.9	2.3	2.7	1.5	2.4	2.4	2.6	2	0.8	0.5	0.3	0.1	1.8	0.8	-0.5	-0.9	-0.9	1.2	2.8	3.9	3.9	1.5	24	
15	2.6	1.3	0	0	0	0	0	0	0.9	2.2	1.2	1.7	0.9	2.8	1.7	3.3	1.3	2.6	1	2.5	2.5	1.6	1.3	0.8	3.3	1.3	24	
16	4	2	1.4	3.7	3.5	4.2	3.7	4.3	3.7	4	3.7	3.9	4	4.7	3.8	4.4	4.2	4.9	5	5.3	5.2	4.8	4.8	3.9	5.3	4.0	24	
17	4.8	5.2	4.6	4.2	3.7	3.9	3	2.9	3.6	2.3	2	2.2	3.2	3.4	3.7	3.3	2.9	2.1	1.1	3.4	4.7	3.5	4.7	4.8	5.2	3.5	24	
18	5.4	5	6	7.2	6.7	4.4	4.3	3.3	3.6	3.9	4.1	3.1	3.7	3.5	3.2	3	2.9	4.8	5.1	5.7	4.9	3.6	1.4	1.8	7.2	4.2	24	
19	1.9	1.8	2.4	2.2	0.7	1	1.5	2.5	1	2.7	2	1.5	C	C	C	C	C	C	C	C	0	0	0	0	1.8	2.7	1.4	24
20	2.1	2.7	3	2.7	3.2	3.6	4.1	4.5	4.7	5.8	4.2	4.4	0.3	0	0	0.1	1.8	2.1	2.1	3.1	3.3	3.7	2.6	2	5.8	2.8	24	
21	2.1	1.7	1.7	2	2.9	2.8	1.2	3.3	3.2	3.6	5	3.1	4	4.4	4.1	4	3.3	4.5	3.9	4.5	3.7	3.7	2.4	3.3	5.0	3.3	24	
22	2.6	3.4	3	4	4.8	8	6.5	5.6	6.7	9.1	6.8	5.9	5.6	5.1	5	4.4	4.5	3.9	3	1.9	1.6	1.1	0.1	0.9	9.1	4.3	24	
23	0.7	0.1	0	0.7	0.3	0	1.9	2.2	3.2	4.3	4.4	2.9	2.4	1.7	2	2.7	3	8.2	11.2	13.8	12.2	12.4	11.2	9.5	13.8	4.6	24	
24	10.3	9.8	10.1	8.6	7.2	7.7	8.5	7.2	7.9	7.4	9.4	8.8	6.8	4.9	5.8	6.8	6.1	4.1	4.9	5.1	6.8	6.2	5.3	6.1	10.3	7.2	24	
25	6.3	6.2	6.8	0	0	0.6	0.9	1.1	0.8	1.9	1.5	0.4	1.9	2.2	1.7	1.7	1.4	1.4	1.6	1.9	2.1	2.2	2.7	2.4	6.8	2.1	24	
26	2.6	3.3	4.6	4.4	3.8	3.7	2.3	2.2	3.5	3.2	1.7	2.9	2.5	1.1	1.5	1.4	2.7	2.3	2.8	2.1	3.1	3.2	3.5	1.8	4.6	2.8	24	
27	0.2	0.4	0.6	0.6	1	1.4	2.4	2.1	2.6	2.3	2.3	0.8	2.5	2.6	2.2	2.3	2.7	3.5	2.4	2.7	2.8	3	2.1	2.1	3.5	2.0	24	
28	3.5	2.2	2.7	1.5	2.3	2.7	2.6	2.8	6	4.3	2.8	1.4	1.3	1.3	1.5	1.5	1.2	1.9	2.7	2.3	1.6	1.6	2	2.3	6.0	2.3	24	
29	1.7	1.9	1.2	1	1.4	2.2	2.8	3	3.5	2.9	1.8	0.7	1.4	1.2	0.9	1.5	1.4	1.6	1.7	2.2	2.5	3.4	4	4.1	4.1	2.1	24	
30	2.4	3.3	0.6	2.3	2	1.5	2.3	3.4	4.5	4.2	2.7	2	1.6	0.5	0.8	0.4	0	0.5	0.2	1.2	0.8	0	0.7	4.5	1.6	24		
HOURLY MAX	10	10	10	9	9	8	9	9	7	8	9	9	9	7	5	6	7	6	8	11	14	12	12	11	10			
HOURLY AVG	3.1	3.0	2.9	2.6	2.5	2.6	2.6	2.8	3.5	3.5	2.7	2.2	2.0	2.1	1.9	2.3	2.4	2.8	2.8	3.0	3.3	3.2	2.9	3.0				

24 HOUR AVERAGES FOR NOVEMBER 2007



Maxxam
Analytics Inc

OBJECTIVE LIMIT:

ALBERTA ENVIRONMENT: 1-HR - PPB 24-HR 30 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	-	PROPOSED GUIDELINE
NUMBER OF 24-HR EXCEEDENCES:	0	
NUMBER OF NON-ZERO READINGS:	654	
MAXIMUM 1-HR AVERAGE:	13.8 UG/M ³	@ HOUR(S) 20 ON DAY(S) 23
MAXIMUM 24-HR AVERAGE:	7.2 UG/M ³	ON DAY(S) 24

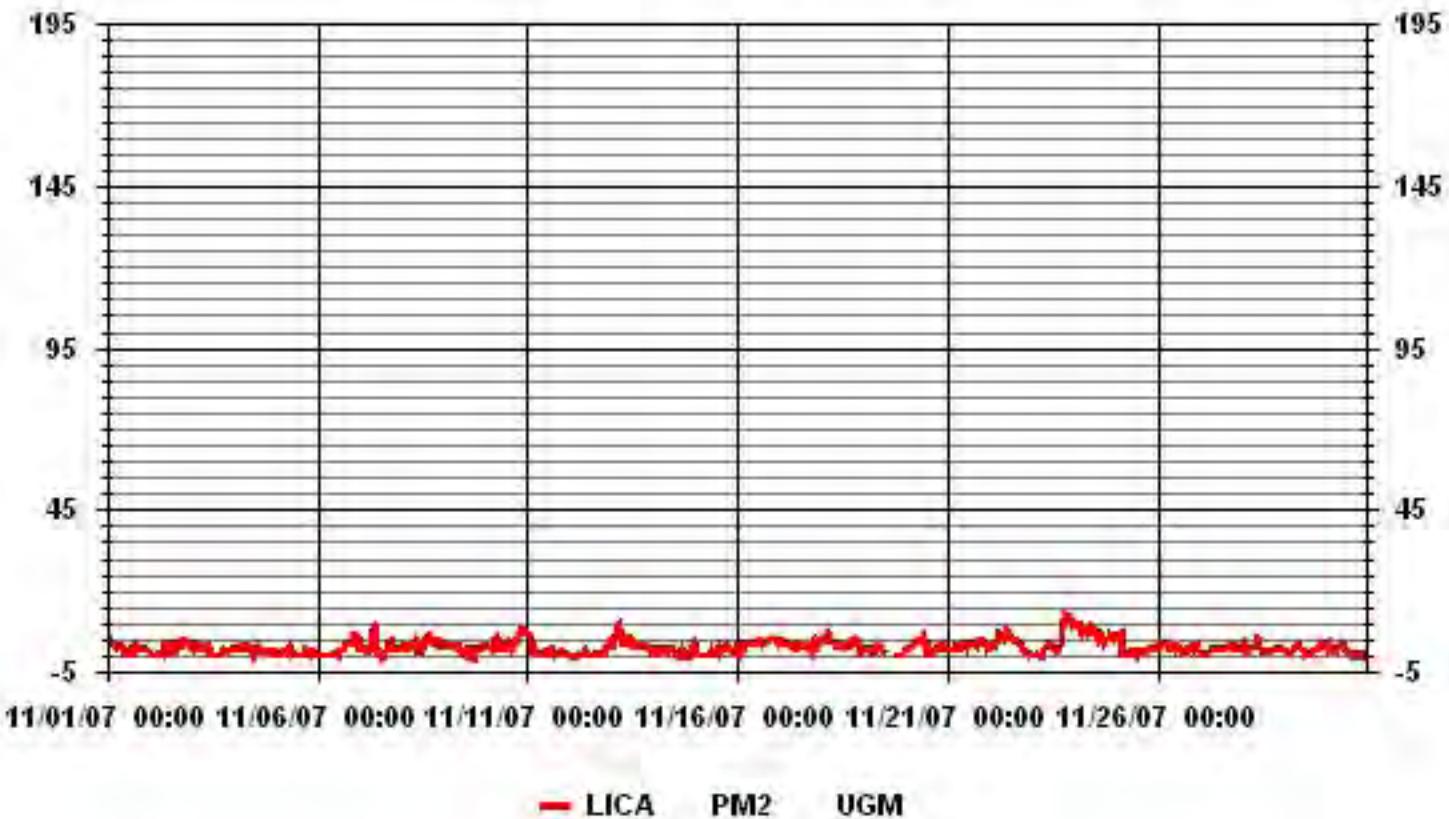
Izs Calibration Time: 0 Hrs Operational Time: 720 Hrs

Monthly Calibration Time: 8 Hrs Am Operation Uptime: 100.0 %

Standard Deviation: 2.13 Monthly Average: 2.75 UG/M³

MOUNTAIN STANDARD TIME

01 Hour Averages



LICA
PM2 / WD Joint Frequency Distribution (Percent)

November 2007

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	.84	.42	.84	1.12	8.98	10.95	8.42	1.68	1.54	2.94	12.50	19.52	11.65	7.16	8.70	2.66	100.00
< 60.0	.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	
< 120.0	.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	
>= 240.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
Totals	.84	.42	.84	1.12	8.98	10.95	8.42	1.68	1.54	2.94	12.50	19.52	11.65	7.16	8.70	2.66	

Calm : .00 %

Total # Operational Hours : 712

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 30.0	6	3	6	8	64	78	60	12	11	21	89	139	83	51	62	19	712
< 60.0																	
< 80.0																	
< 120.0																	
< 240.0																	
>= 240.0																	
Totals	6	3	6	8	64	78	60	12	11	21	89	139	83	51	62	19	

Calm : .00 %

Total # Operational Hours : 712

Logger : 01 Parameter : PM2

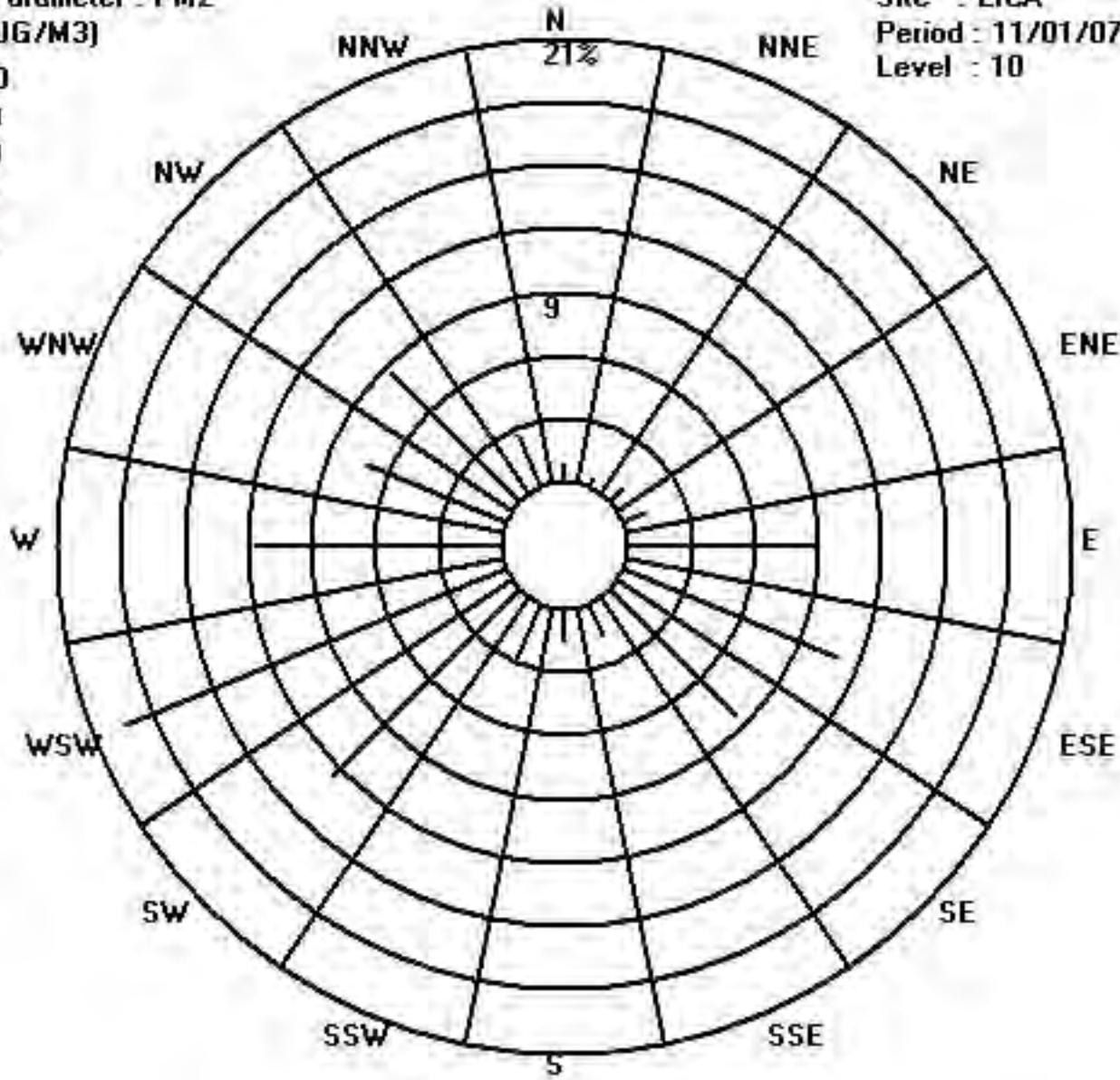
Class Limits (UG/M3)



Site : LICA

Period : 11/01/07-11/30/07

Level : 10



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

PARTICULATE MATTER 2.5 MAX instantaneous maximum in ug/m³

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
DAY																												
1	10.8	9.4	9.1	8.8	7.2	6.5	7	7.2	6.5	6.6	4.1	2.2	2.9	2.8	1.8	5.6	6.9	7.2	5.9	4.6	6.7	6.4	6.1	5.4	10.8	6.2	24	
2	5.3	5	5.4	4.4	4.7	3.9	3.6	4.8	6.9	7.8	5.3	5.1	8.1	6.4	3.7	4.2	5.8	9.1	6.4	6.9	11.3	10.2	8.2	7	11.3	6.2	24	
3	6.9	9.7	9.3	8.6	6.1	7.5	5.5	5.8	7.1	6.7	6.1	2.6	1.1	0.3	0.4	1.7	4.3	5.4	5.9	4.4	6.5	5.4	4.9	4.3	9.7	5.3	24	
4	4.9	5.3	5.8	7.2	6.6	5.1	5.1	4.9	6.4	6.7	6	3.2	4.3	5	6.1	4.9	4.9	3.9	4.2	6.4	4.7	4.8	4.4	3.9	7.2	5.2	24	
5	4.9	4.3	4.4	3.3	4.5	4.2	4.9	4.8	5.8	5.4	3.9	3.8	3.2	2.8	2.6	3.6	4.4	6.6	7.5	5.6	4.5	8.2	5.6	4.8	4.7	24		
6	4.1	3.7	2.7	3.5	3.1	3.3	3.3	4.5	4.5	3.1	6.2	7.3	5.3	7.3	5.8	7	7.9	8.9	9.5	8.4	9	11.9	9.6	9.9	11.9	6.2	24	
7	7	6.6	5.4	6.8	8	6.7	6.7	21.3	14.7	13.8	7	11.5	5.4	4.9	4.8	5.8	6.1	9.8	8.1	7.4	6	6.7	6.6	7.1	21.3	8.1	24	
8	6	8.1	6.9	6.6	6.2	8.3	8.2	8.2	10.3	10.2	6.2	5.1	6.1	8	8.8	8.9	10.3	8.2	9.1	7.1	9.8	7.5	7.3	7.5	10.3	7.9	24	
9	8.1	6.7	7	6.9	7.4	8.4	7.8	5.9	7.1	6.6	4.4	6.6	5.8	1.1	4.2	7	7.5	3.3	9.4	8.2	6.2	5.6	7	6.2	9.4	6.4	24	
10	7	11.6	8	7	9.3	9.9	10.4	9.3	8.5	6.9	7.8	8.1	8.3	9.4	6.2	8.1	10.1	8.9	8.9	9.9	18	13.8	14.9	11.4	18	9.7	24	
11	11.4	10.4	11.6	5.5	5.3	4.2	3.3	3.4	5	5.3	4.9	4.9	4.2	5.5	3.7	7.3	5.4	5.6	5.6	4.9	4.7	5.5	5.3	3.3	11.6	5.7	24	
12	5.8	4.6	3.3	4.4	4.4	4.3	3.6	3.8	3.9	4.5	2.7	5.5	3.2	3.3	5.4	6.1	4.5	4.8	3.4	4.3	6.7	5.8	7.1	8.8	8.8	4.8	24	
13	8.7	6.7	11.3	11.1	15.6	11	8.7	6.9	9.4	8.3	10.3	8.1	5.6	6.2	5.7	7.8	6.5	6.1	5.5	6.7	5.5	5.6	4.7	5.4	15.6	7.8	24	
14	6	5.5	4.2	6.4	5.6	6.7	6	5.3	5.8	6.2	6.5	6.1	4.5	4.4	4.1	3.5	5.5	4.3	4.8	2.7	2.2	5	7.6	8.3	8.3	5.3	24	
15	5.6	6.2	2	3.1	1.1	1.8	2.5	3.2	6.5	7.6	4.9	7.5	4.5	6.5	5.6	7.2	5.1	6.6	4.2	6	6.7	4.9	5	6.1	7.6	5.0	24	
16	7.6	6	4.8	7.6	8.2	8	6.4	8.2	7.8	8.3	7	6.9	7.5	8.7	6.6	8.2	8.8	8.6	8	8.7	8.9	8	8.2	7.6	8.9	7.7	24	
17	7.7	8.8	7.6	7.8	7.4	7.3	7.6	6.4	8.1	6	4.8	6.4	7.8	7.1	7	7.1	6.2	5.3	5.8	8.4	9.4	7.1	7.6	7.6	9.4	7.2	24	
18	9.2	8.7	9.8	10.9	10	8	7.8	6.1	6.5	7.5	7.5	7.1	7	6.7	6.2	7	6.9	9.3	8.5	9	9.2	7.3	5.3	5.5	10.9	7.8	24	
19	6.8	5.7	6	5.9	5.3	5.4	5.5	6.6	6	5.6	5.5	3.4	C	C	C	C	C	C	C	C	C	1.1	0.6	1.5	4.4	6.8	4.7	24
20	4.2	5.4	5.4	5.5	6.1	6.3	7.3	7.1	8.4	8.6	7.1	7.4	5.5	1.7	2.3	3.2	4.2	4.5	4.4	5.5	6	6.2	6	4.7	8.6	5.5	24	
21	5	3.9	6.4	5	5.6	6.5	4.5	6.1	6.2	6.7	8.3	6.5	6.3	7.8	6.9	7.4	7	7.3	6.9	7.5	6.5	7.9	6.3	6.7	8.3	6.5	24	
22	6.1	6.7	6.5	7.5	8.9	11	10.9	8.8	12.1	13.3	10.6	8.9	9	9.5	10.1	7.3	7.1	7.1	6.5	4.9	4.5	3.4	3.3	13.3	7.9	24		
23	6	3.4	2.2	3.9	4.1	3.1	4.5	5.5	7.2	9	7.4	6.4	5.1	6.6	5.4	5	7	13	13.7	16.3	14.8	14.4	12.1	16.3	8.0	24		
24	14.2	14	13	11	10.4	11.5	11.6	10.3	11.9	10.4	12.2	12	10.3	7.8	9.6	9.9	9.3	6.4	7.5	9.7	8.9	8.6	8.2	9.1	14.2	10.3	24	
25	9.5	9.4	11.3	2.9	3.2	3.3	3.8	3.6	3.3	4.7	4.3	2.9	5.1	4.2	4.5	6.1	4.7	4.3	5	5.1	5.3	5.5	6.6	5	11.3	5.2	24	
26	5	6.7	8.7	7.7	7	6.4	5.6	6.4	7.6	8.6	4.4	6.5	6	8.1	4.3	5.1	6.7	5.9	6.4	8.9	9.5	6.7	6.4	5	9.5	6.7	24	
27	2.8	2.9	4.5	3.4	4.2	4.1	5.5	5.4	6.7	5.1	5.1	4.6	5.6	4.5	5.5	5.9	6.1	5.9	5.5	5.3	6.2	6.9	4.3	4.5	6.9	5.0	24	
28	7	4.3	6.9	4.5	5	5.6	5.5	8.1	11.7	8.9	6.2	4.7	4.7	3.8	4.8	5	3.6	5.3	5.8	5.9	4.4	4.8	4.5	5.4	11.7	5.7	24	
29	5	5	4.3	3.8	5.4	5.4	8	6.7	7.8	5.8	6.1	4.5	4.2	3.9	4.3	4.7	4.3	4.9	4.8	4.8	5.3	6.6	7	7	8	5.4	24	
30	6.6	5.9	5	6.1	4.8	4.8	6.4	6.7	7.4	6.7	5.8	5.3	4.5	3.2	3.7	3.1	4.2	3.1	3.2	3.1	4.4	3.6	3.7	3.9	7.4	4.8	24	
HOURLY MAX	14	14	13	11	16	12	21	15	14	12	10	10	10	10	10	13	14	16	18	15	15	12						
HOURLY AVG	6.8	6.7	6.6	6.2	6.4	6.3	6.3	6.7	7.6	7.4	6.0	5.6	5.4	5.2	6.0	6.3	6.5	6.6	6.8	7.1	6.9	6.6	6.4					

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

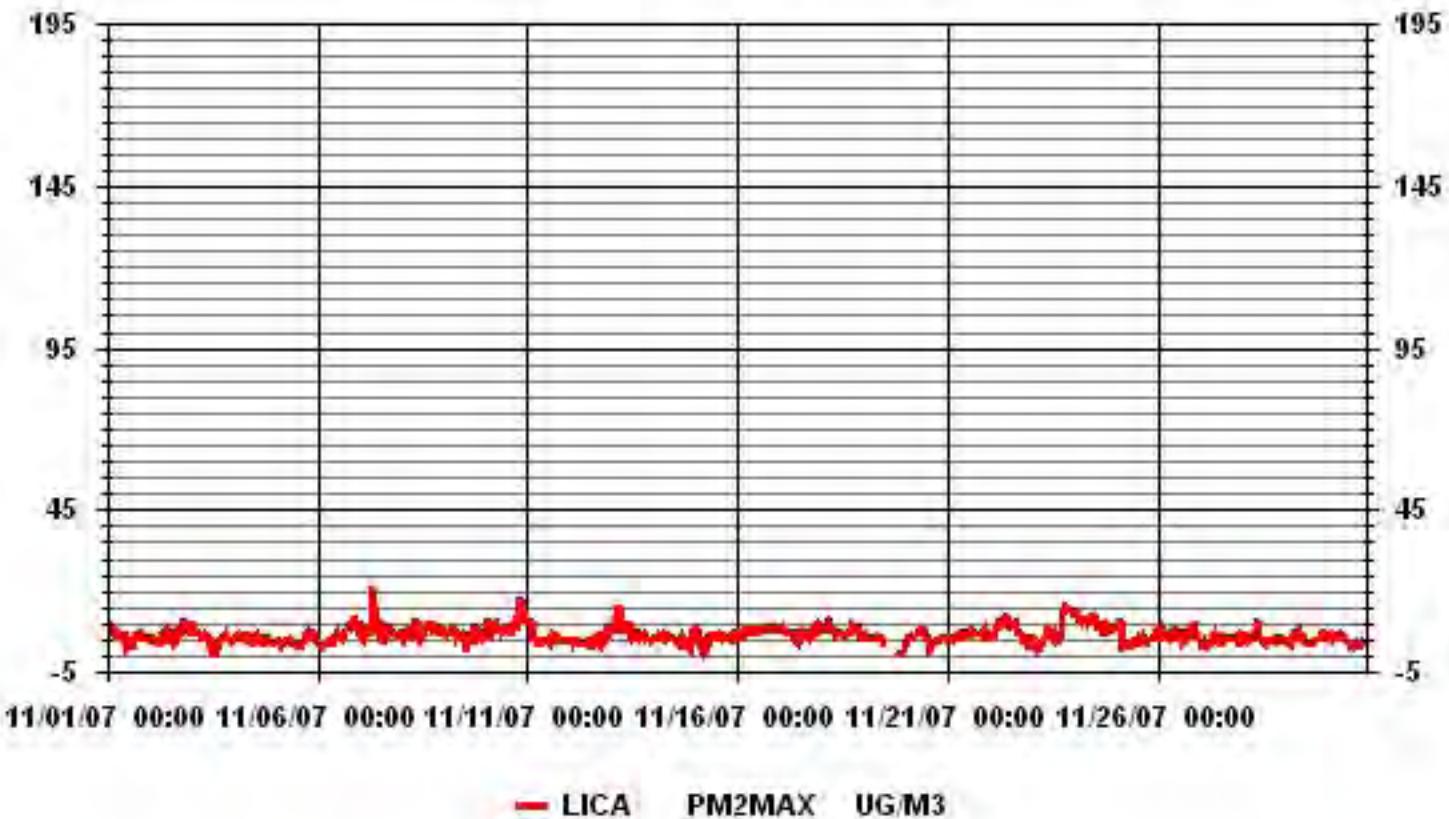
MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	712
MAXIMUM INSTANTANEOUS VALUE:	21.3 UG/M ³ @ HOUR(S) 8 ON DAY(S) 7

Izs CALIBRATION TIME:	0 HRS	OPERATIONAL TIME:	720 HRS
MONTHLY CALIBRATION TIME:	8 HRS		

MOUNTAIN STANDARD TIME

01 Hour Averages



NO₂

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

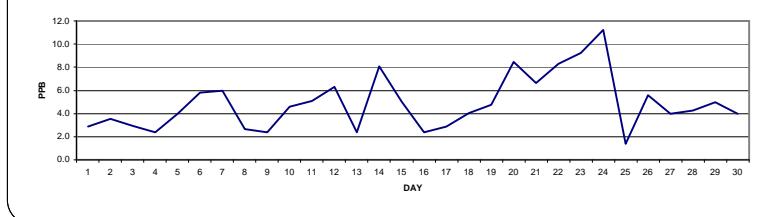
NITROGEN DIOXIDE hourly averages in pp_t

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
DAY																												
1	6	6	6	5	4	5	6	7	4	2	2	1	1	1	1	1	1	1	1	2	1	1	Izs	1	7	2.9	24	
2	0	0	1	1	2	2	4	4	5	3	2	1	2	2	2	3	5	8	7	6	13	Izs	5	4	13	3.6	24	
3	5	4	5	4	2	2	3	2	2	2	1	0	0	0	1	1	2	3	4	5	Izs	6	8	6	8	3.0	24	
4	5	4	4	4	8	4	4	6	3	2	1	0	0	1	1	1	1	1	1	Izs	1	1	1	1	8	2.4	24	
5	0	1	1	1	0	0	3	8	16	5	2	3	1	1	1	2	13	20	Izs	4	3	2	2	3	20	4.0	24	
6	2	2	2	2	2	2	2	2	2	3	3	3	3	4	8	15	Izs	16	13	11	12	10	12	16	5.8	24		
7	11	7	8	9	8	9	11	14	14	12	4	4	2	1	2	5	Izs	5	2	2	2	2	1	14	6.0	24		
8	1	1	1	1	1	1	3	8	5	4	1	1	1	2	3	Izs	6	4	3	2	3	4	3	2	8	2.7	24	
9	2	1	2	2	2	2	2	3	3	2	2	2	3	2	Izs	2	2	3	3	4	4	3	2	2	4	2.4	24	
10	2	4	4	5	11	11	10	4	3	3	3	3	3	3	Izs	3	4	3	5	4	4	4	4	5	4	11	4.6	24
11	4	5	4	3	4	4	3	3	3	2	2	2	Izs	4	5	5	6	8	18	10	5	5	5	6	18	5.1	24	
12	11	8	11	7	5	8	10	15	11	6	4	Izs	4	5	5	4	4	5	7	3	2	2	3	15	6.3	24		
13	4	4	5	4	3	3	3	3	5	5	Izs	3	1	1	1	1	1	1	1	1	1	1	2	5	2.4	24		
14	3	5	3	4	5	4	4	4	5	Izs	2	2	2	1	2	6	8	15	13	17	15	21	24	21	8.1	24		
15	15	4	5	5	4	4	4	3	Izs	4	3	3	3	3	5	5	5	5	10	8	4	5	7	4	15	5.0	24	
16	3	2	1	1	2	3	Izs	3	2	1	2	2	2	3	5	4	3	4	3	2	2	2	2	5	2.4	24		
17	2	2	2	2	2	3	Izs	4	8	3	2	2	2	2	3	5	3	3	3	2	3	3	3	8	2.9	24		
18	3	3	4	4	4	Izs	6	5	4	5	4	4	4	4	4	3	4	5	7	5	4	3	2	2	7	4.0	24	
19	2	3	3	3	Izs	2	2	2	C	C	C	C	C	C	Izs	2	3	3	3	3	11	13	11	10	13	4.8	24	
20	11	13	12	Izs	16	16	21	15	18	17	14	12	5	1	3	1	2	2	2	3	2	3	3	3	21	8.5	24	
21	6	Izs	3	3	4	3	3	2	3	2	2	2	3	4	5	13	6	11	16	13	15	14	13	16	6.6	24		
22	11	Izs	10	12	11	13	15	17	17	11	8	7	7	7	7	6	11	11	3	1	1	2	1	2	17	8.3	24	
23	Izs	5	5	10	3	4	5	8	11	6	3	3	3	4	5	9	21	15	16	17	18	15	17	Izs	21	9.2	24	
24	19	15	12	15	16	12	13	15	15	13	15	11	8	8	10	8	8	8	8	10	9	7	Izs	3	19	11.2	24	
25	6	5	5	2	2	2	2	1	1	2	1	0	0	0	0	1	1	0	0	0	Izs	0	1	6	1.4	24		
26	2	2	3	3	4	3	5	6	9	4	3	6	3	4	4	5	9	15	14	Izs	9	8	3	15	5.6	24		
27	3	3	2	2	6	4	5	5	5	5	2	2	2	4	3	3	3	4	6	Izs	8	8	4	3	8	4.0	24	
28	3	3	3	3	4	6	9	13	6	4	2	2	2	3	4	5	4	Izs	4	4	3	3	5	13	4.3	24		
29	4	4	5	7	9	7	8	11	4	2	2	1	2	2	3	6	6	Izs	8	6	5	5	4	3	11	5.0	24	
30	4	5	4	3	4	5	8	19	14	4	4	3	2	1	1	3	Izs	1	1	1	1	1	1	19	4.0	24		
HOURLY MAX	19	15	12	15	16	16	21	19	18	17	15	12	8	8	10	9	21	20	18	17	18	21	24	21				
HOURLY AVG	5.2	4.4	4.6	4.4	5.0	4.9	6.0	7.1	7.3	4.9	3.5	3.0	2.5	2.5	3.1	3.8	5.8	5.6	6.3	6.1	5.4	5.6	5.4	4.3				

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

24 HOUR AVERAGES FOR NOVEMBER 2007



OBJECTIVE LIMIT:

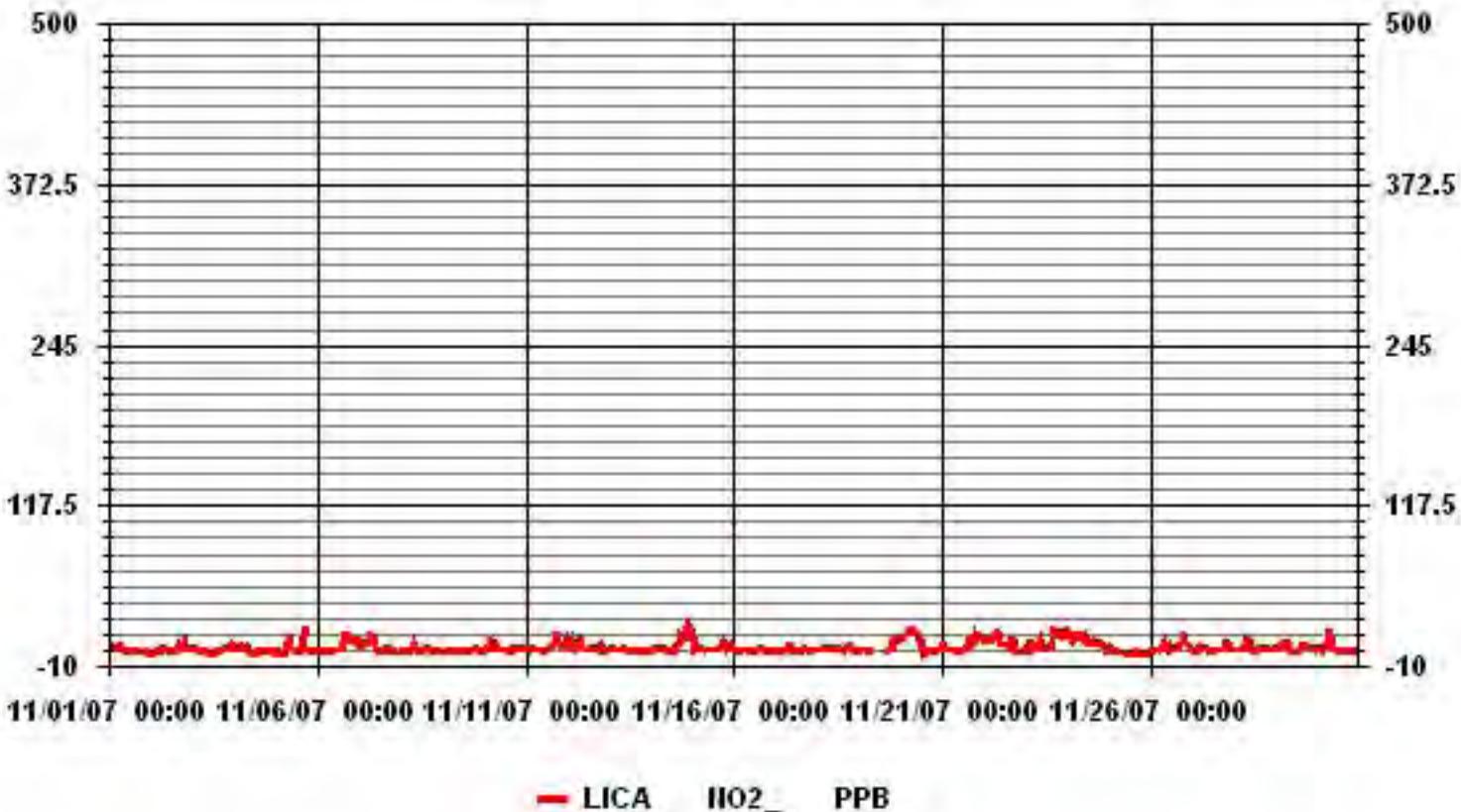
ALBERTA ENVIRONMENT: 1-HR 212 PPB 24-HR 106 PPB

MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0
NUMBER OF 24-HR EXCEEDENCES:	0
NUMBER OF NON-ZERO READINGS:	663
MAXIMUM 1-HR AVERAGE:	24 PPB @ HOUR(S)
MAXIMUM 24-HR AVERAGE:	11.2 PPB ON DAY(S)
Izs CALIBRATION TIME:	32 HRS AMD OPERATION UPTIME:
MONTHLY CALIBRATION TIME:	6 HRS STANDARD DEVIATION:
STANDARD DEVIATION:	4.27 MONTHLY AVERAGE:
	4.87 PPB

MOUNTAIN STANDARD TIME

01 Hour Averages



LICA
NO2_ / WD Joint Frequency Distribution (Percent)

November 2007

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	.87	.43	.87	1.02	8.94	10.99	8.35	1.75	1.61	2.93	12.46	19.79	12.31	6.74	8.21	2.63	100.00
< 110	.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	
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
Totals	.87	.43	.87	1.02	8.94	10.99	8.35	1.75	1.61	2.93	12.46	19.79	12.31	6.74	8.21	2.63	

Calm : .00 %

Total # Operational Hours : 682

Distribution By Samples

Direction

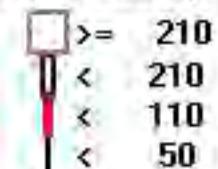
Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	6	3	6	7	61	75	57	12	11	20	85	135	84	46	56	18	682
< 110																	
< 210																	
>= 210																	
Totals	6	3	6	7	61	75	57	12	11	20	85	135	84	46	56	18	

Calm : .00 %

Total # Operational Hours : 682

Logger : 01 Parameter : NO₂

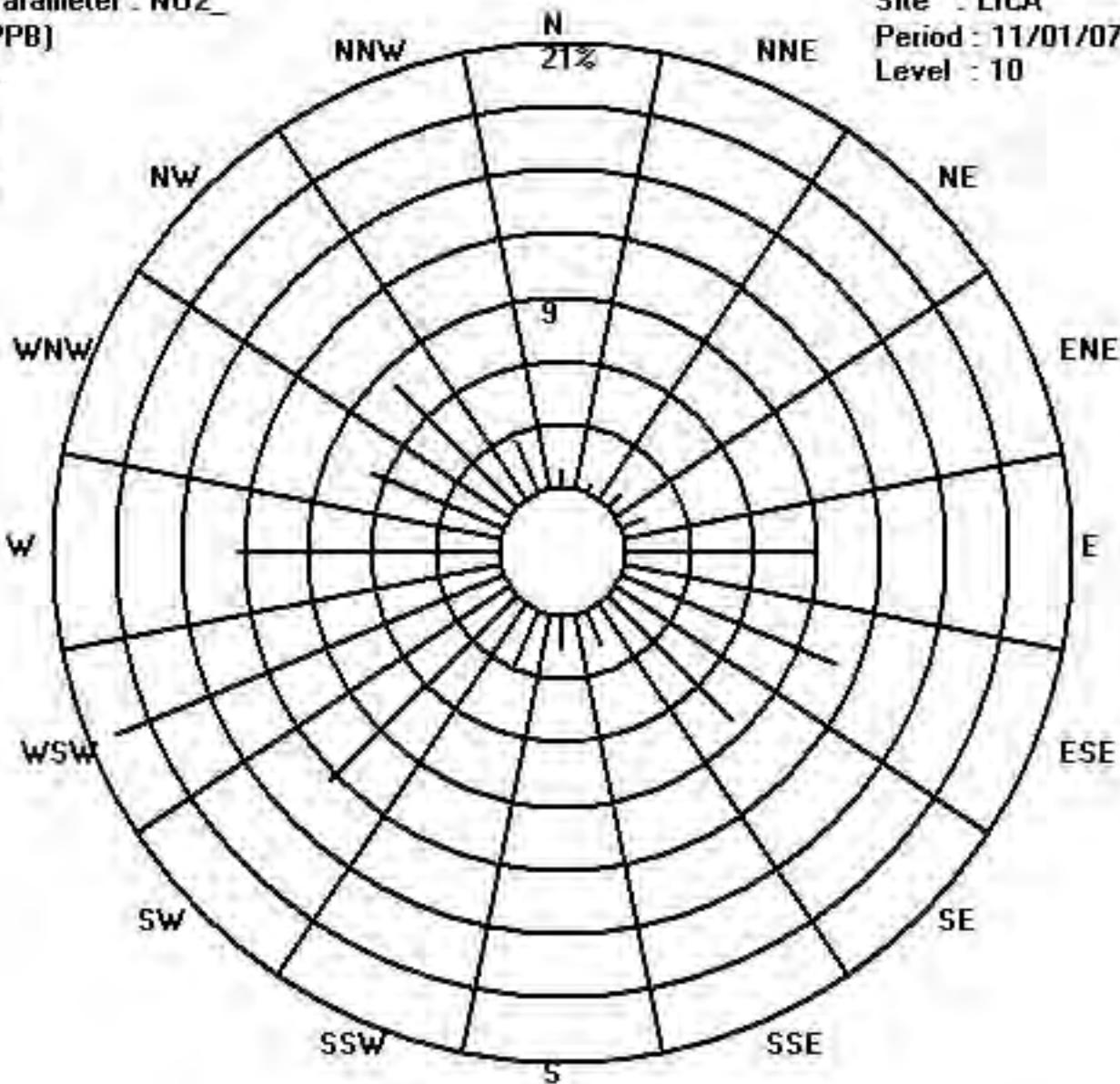
Class Limits (PPB)



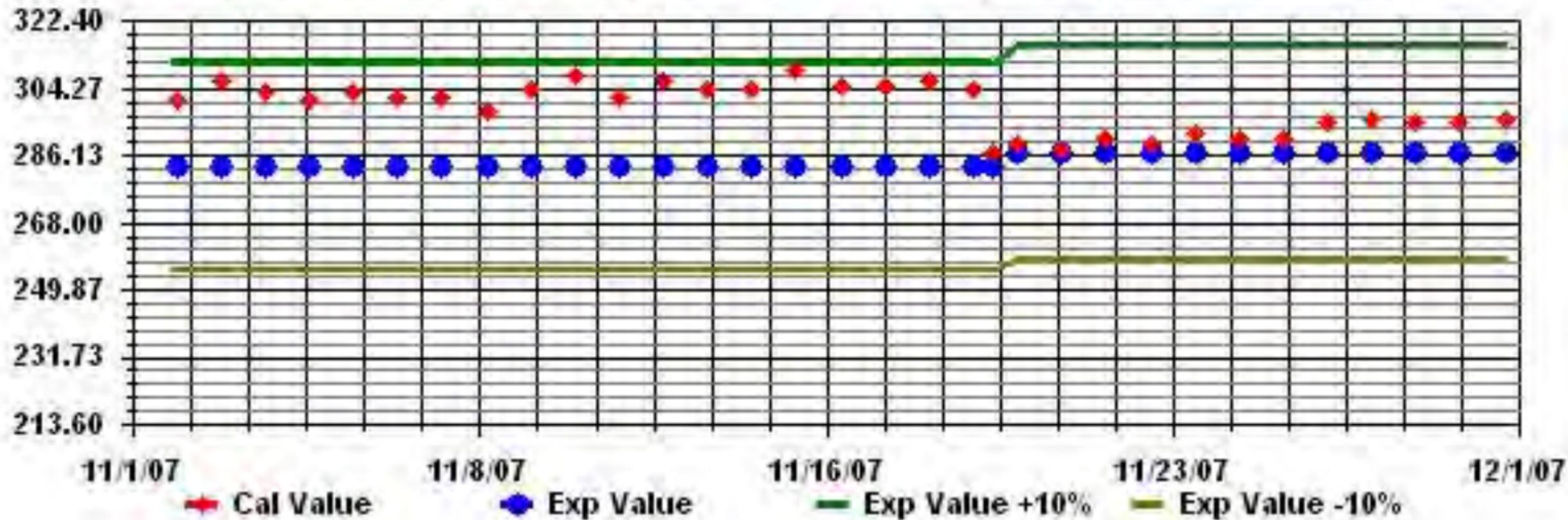
Site : LICA

Period : 11/01/07-11/30/07

Level : 10



Calibration Graph for Site: LICA Parameter: NO2 Sequence: NO2 Phase: SPAN



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

NITROGEN DIOXIDE MAX instantaneous maximum in ppt

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
DAY																												
1	6	7	7	5	31	6	8	12	5	3	3	4	1	1	1	1	1	2	4	1	2	IZS	1	31	4.9	24		
2	1	1	1	1	3	3	6	5	7	5	4	4	3	2	7	7	10	14	10	10	22	IZS	8	5	22	6.0	24	
3	5	5	5	6	3	3	6	5	3	3	1	1	1	1	2	4	3	4	6	6	IZS	10	13	13	4.7	24		
4	7	7	5	6	11	7	8	10	4	3	3	1	1	6	1	5	1	1	1	IZS	2	1	1	11	4.0	24		
5	1	1	1	1	1	1	13	21	22	13	3	4	2	2	3	6	27	33	IZS	9	5	4	4	4	33	7.9	24	
6	3	3	2	3	2	2	3	4	5	4	4	19	4	4	6	13	22	IZS	19	18	15	14	15	16	22	8.7	24	
7	14	10	11	12	12	12	16	19	19	17	8	6	4	9	5	16	IZS	7	8	6	4	3	10	2	19	10.0	24	
8	2	2	2	2	2	5	5	13	7	5	2	2	2	5	4	IZS	7	6	3	3	4	5	3	3	13	4.1	24	
9	2	2	2	2	3	6	8	4	11	3	5	4	6	3	IZS	5	8	7	6	6	5	4	4	12	12	5.1	24	
10	3	8	8	9	14	14	14	8	15	4	5	4	4	4	IZS	4	5	5	10	6	5	6	8	7	9	15	7.6	24
11	7	7	6	5	5	7	4	4	4	4	3	2	IZS	5	6	6	11	12	28	17	7	6	11	11	28	7.7	24	
12	21	14	20	13	7	15	18	20	31	10	4	IZS	7	6	15	8	6	9	7	13	4	3	4	4	31	11.3	24	
13	7	5	6	5	4	3	4	3	7	6	IZS	3	2	1	1	1	1	1	1	1	1	2	3	7	3.0	24		
14	5	7	6	9	8	5	6	6	7	IZS	3	2	2	2	3	11	13	24	21	23	21	27	40	26	40	12.0	24	
15	23	9	10	11	7	7	18	5	IZS	21	8	7	5	7	6	10	8	8	22	12	7	6	10	7	23	10.2	24	
16	5	3	2	2	2	4	13	IZS	11	6	3	3	9	13	5	15	6	6	5	10	4	5	4	3	15	6.0	24	
17	5	4	4	4	4	5	IZS	6	22	11	10	6	4	6	5	10	11	5	5	4	3	4	5	4	22	6.4	24	
18	4	4	5	5	8	IZS	8	7	6	6	5	5	13	9	7	4	6	7	8	6	4	3	4	2	13	5.9	24	
19	3	3	3	3	3	IZS	2	2	3	C	C	C	C	C	IZS	3	9	4	4	8	18	18	15	13	18	6.9	24	
20	14	16	16	IZS	18	21	24	19	20	19	18	13	12	3	6	2	3	3	2	5	3	4	4	5	24	10.9	24	
21	8	9	IZS	4	5	6	5	4	4	6	2	3	7	3	7	9	28	8	16	19	17	18	17	16	28	9.6	24	
22	13	IZS	15	14	14	26	18	19	20	14	11	9	9	9	8	9	16	69	6	2	2	2	2	7	69	13.7	24	
23	IZS	8	8	17	4	6	8	17	27	9	5	4	4	5	8	15	29	17	17	19	25	16	22	IZS	29	13.2	24	
24	23	17	18	19	23	19	16	23	28	20	21	17	10	9	17	10	11	11	11	14	13	8	IZS	5	28	15.8	24	
25	7	6	6	3	3	3	3	3	2	5	2	1	1	1	1	1	1	0	0	0	IZS	1	2	7	2.3	24		
26	3	4	4	4	5	4	6	11	11	9	4	28	6	5	5	6	8	14	21	20	IZS	14	12	7	28	9.2	24	
27	4	3	4	4	13	5	12	9	22	12	13	5	4	10	7	10	6	5	7	IZS	9	11	9	4	22	8.2	24	
28	4	3	4	4	4	4	10	21	20	9	8	3	4	4	5	7	8	5	IZS	5	6	4	4	8	21	6.7	24	
29	9	6	9	11	13	14	13	25	7	3	2	2	3	4	5	10	10	IZS	12	8	7	6	5	4	25	8.2	24	
30	5	6	7	3	11	6	21	27	20	7	7	5	3	1	3	5	IZS	2	2	2	2	2	1	2	27	6.5	24	
HOURLY MAX	23	17	20	19	31	26	24	27	31	21	21	28	13	13	17	16	29	69	28	23	25	27	40	26				
HOURLY AVG	7.4	6.2	6.8	6.4	8.3	7.6	10.2	11.5	13.1	8.5	6.0	6.0	4.8	4.9	5.5	7.4	9.8	10.5	9.2	9.1	7.8	7.5	8.5	6.9				

STATUS FLAG CODES

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

MONTHLY SUMMARY

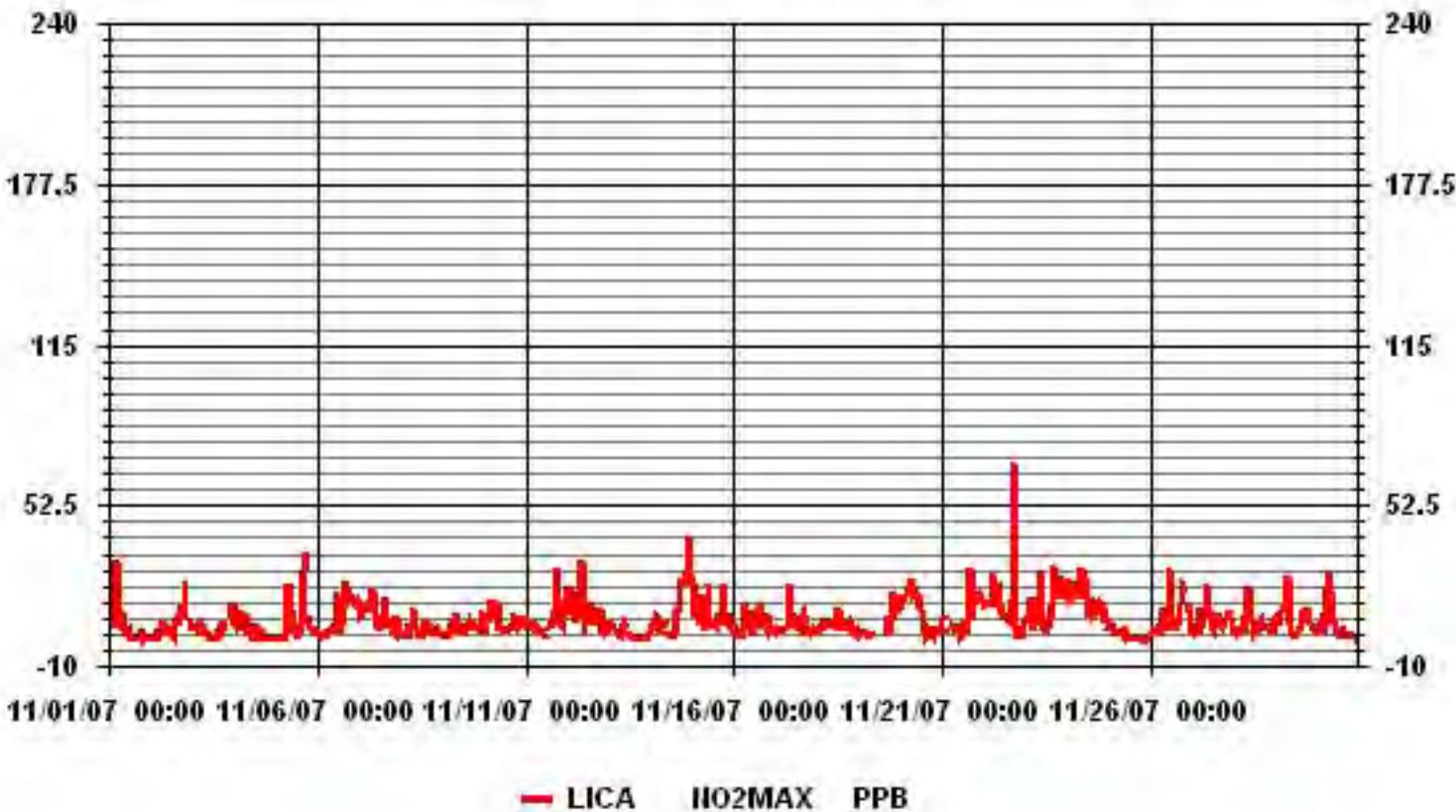
NUMBER OF NON-ZERO READINGS:	680
MAXIMUM INSTANTANEOUS VALUE:	69 PPB @ HOUR(S) 18 ON DAY(S) 22

Izs Calibration Time:	32 HRS	Operational Time:	720 HRS
Monthly Calibration Time:	6 HRS		
Standard Deviation:	6.77		

MOUNTAIN STANDARD TIME



01 Hour Averages



NO

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

NITRIC OXIDE hourly averages in ppt

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.		
DAY																													
1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	2	0.1	24	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	IZS	0	0	1	0.0	24			
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0.0	24			
4	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			
5	0	0	0	0	0	0	0	1	6	1	0	1	0	0	0	0	0	0	0	3	IZS	0	0	0	0	24			
6	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	6	IZS	25	16	8	13	11	10	25	4.1	24			
7	2	0	0	0	0	0	1	11	16	30	11	2	1	0	1	0	0	IZS	0	0	0	0	0	0	30	3.3	24		
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0.0	24			
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	IZS	0	1	0	1	0	0	0	0.1	24			
10	0	0	0	0	8	9	4	0	1	1	2	1	2	1	2	IZS	1	1	0	1	0	0	0	0	9	1.3	24		
11	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	IZS	1	1	0	0	4	0	0	0	0.3	24			
12	1	0	1	0	0	0	1	2	4	3	2	IZS	2	1	2	0	0	0	0	0	0	0	0	0	0	0.8	24		
13	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			
14	0	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0	0	0	0	2	3	18	29	33	33	3.7	24		
15	9	0	0	0	0	0	0	1	0	IZS	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0.6	24			
16	0	0	0	0	0	0	1	0	IZS	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.1	24			
17	0	0	0	0	0	0	0	0	IZS	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	24			
18	0	0	0	0	1	IZS	0	0	0	1	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0.4	24			
19	0	0	0	0	0	IZS	0	0	0	C	C	C	C	C	C	IZS	0	0	0	0	0	0	0	0	0.0	24			
20	0	0	0	0	IZS	0	0	1	0	3	8	9	9	2	0	1	0	0	0	0	0	0	0	0	9	1.4	24		
21	0	0	0	IZS	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	2	0	7	4	2	7	0.9	24		
22	0	IZS	1	3	0	0	1	0	1	3	4	3	3	2	2	1	0	0	5	0	0	0	0	0	5	1.3	24		
23	IZS	0	0	0	0	0	0	0	2	1	1	1	1	1	1	2	0	0	0	0	0	0	0	IZS	2	0.5	24		
24	0	0	0	0	1	0	0	2	4	5	10	4	2	1	2	0	0	0	0	0	0	0	IZS	0	10	1.3	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	24			
26	0	0	0	0	0	0	0	0	0	0	0	1	5	2	1	0	0	0	0	0	0	0	IZS	1	0	0	0.4	24	
27	0	0	0	0	2	0	1	1	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0.4	24
28	0	0	0	0	0	0	0	0	2	1	2	1	1	1	0	0	0	0	0	0	0	0	0	IZS	0	0	0	0.3	24
29	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0.2	24		
30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	24		
HOURLY MAX	9	0	1	3	8	9	11	16	30	11	10	9	2	2	2	1	6	5	25	16	8	18	29	33					
HOURLY AVG	0.4	0.0	0.1	0.1	0.5	0.4	0.7	0.9	2.2	1.4	1.3	1.1	0.8	0.5	0.4	0.1	0.4	0.3	1.1	0.7	0.4	1.4	1.6	1.6					

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

NUMBER OF NON-ZERO READINGS:

149

MAXIMUM 1-HR AVERAGE:

33

PPB

@ HOUR(S)

0

ON DAY(S)

14

MAXIMUM 24-HR AVERAGE:

4.1

PPB

ON DAY(S)

6

IZS CALIBRATION TIME:

32

HRS

OPERATIONAL TIME:

720

HRS

MONTHLY CALIBRATION TIME:

6

HRS

AMD OPERATION UPTIME:

100.0

%

STANDARD DEVIATION:

2.90

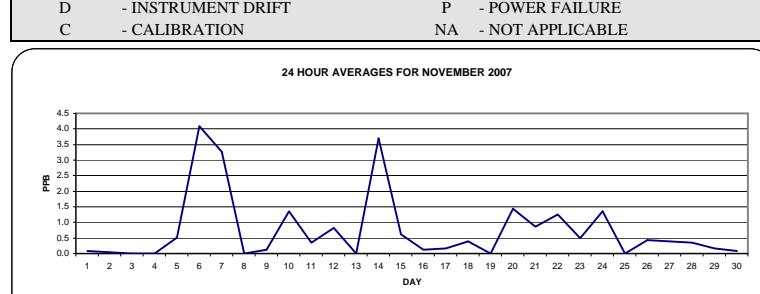
PPB

MONTHLY AVERAGE:

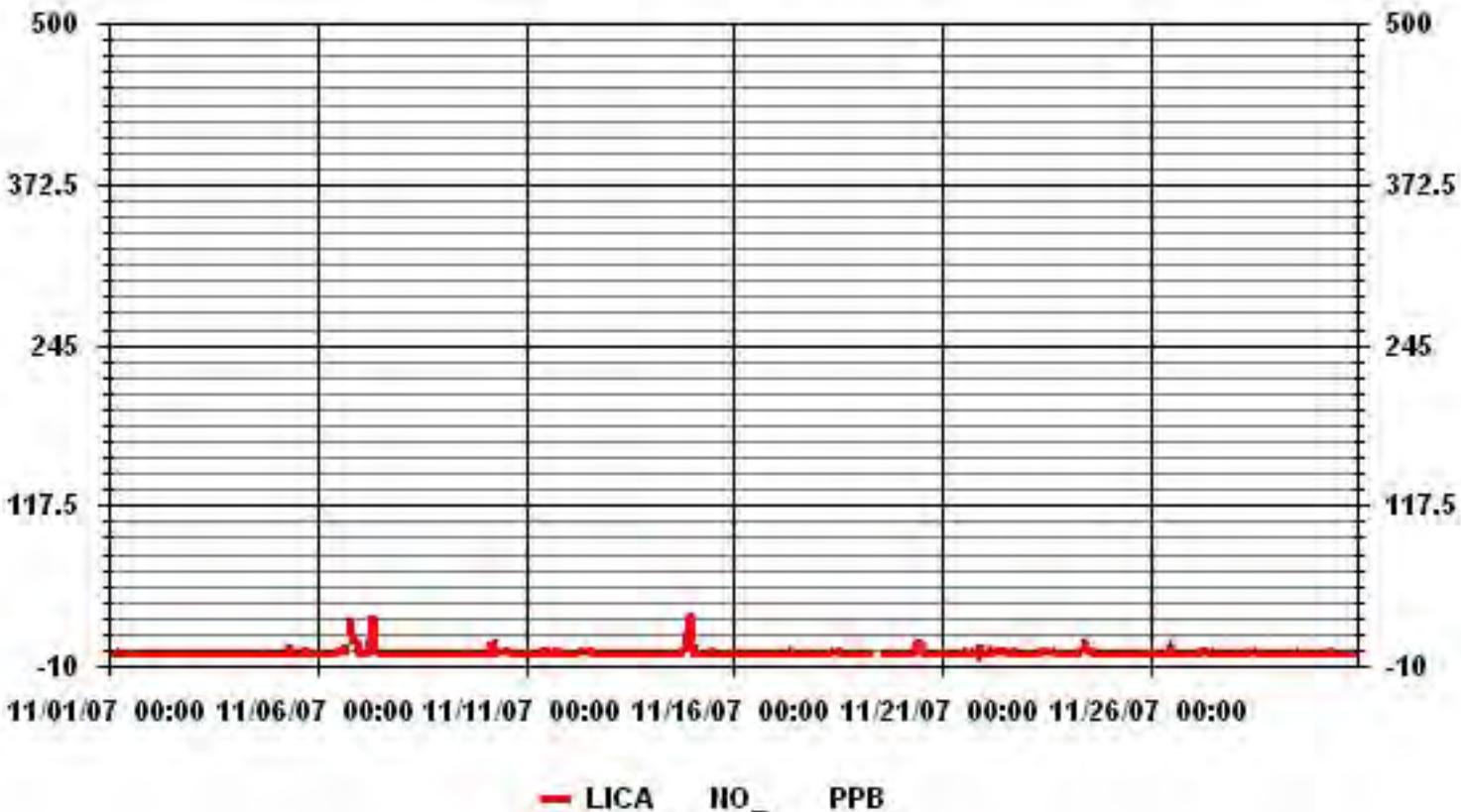
0.76

PPB

MOUNTAIN STANDARD TIME



01 Hour Averages



LICA
NO_{_} / WD Joint Frequency Distribution (Percent)

November 2007

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	.87	.43	.87	1.02	8.94	10.99	8.35	1.75	1.61	2.93	12.46	19.79	12.31	6.74	8.21	2.63	100.00
< 110	.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	
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
Totals	.87	.43	.87	1.02	8.94	10.99	8.35	1.75	1.61	2.93	12.46	19.79	12.31	6.74	8.21	2.63	

Calm : .00 %

Total # Operational Hours : 682

Distribution By Samples

Direction

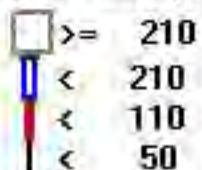
Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	6	3	6	7	61	75	57	12	11	20	85	135	84	46	56	18	682
< 110																	
< 210																	
>= 210																	
Totals	6	3	6	7	61	75	57	12	11	20	85	135	84	46	56	18	

Calm : .00 %

Total # Operational Hours : 682

Logger : 01 Parameter : NO_x

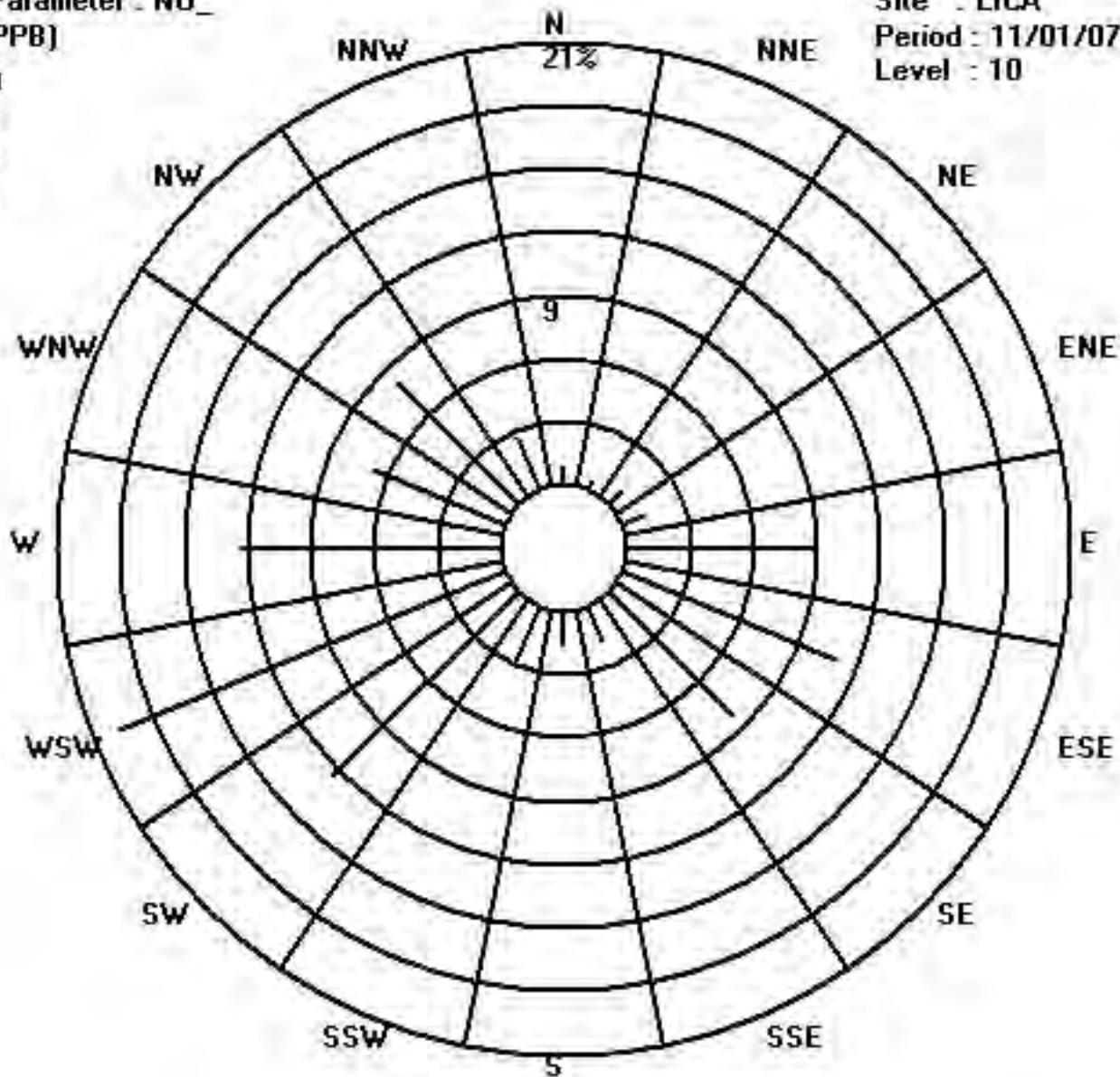
Class Limits (PPB)



Site : LICA

Period : 11/01/07-11/30/07

Level : 10



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

NITRIC OXIDE MAX instantaneous maximum in ppt

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.		
DAY																													
1	0	0	0	0	55	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	IZS	0	55	2.5	24
2	0	0	0	0	0	0	0	1	1	1	1	3	0	5	2	0	1	1	0	0	8	IZS	0	0	8	1.0	24		
3	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0	IZS	0	1	3	3	0.3	24		
4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4	0	0	0	0	IZS	0	0	0	0	4	0.3	24	
5	0	0	0	0	0	0	0	9	13	5	0	1	0	0	1	0	5	23	IZS	5	0	4	0	0	0	23	2.9	24	
6	0	0	0	0	0	0	0	8	3	2	2	2	13	2	1	1	10	20	IZS	50	48	17	20	22	20	50	10.5	24	
7	4	4	5	0	2	3	56	36	44	27	4	3	1	15	14	5	IZS	5	5	10	1	0	2	0	56	10.7	24		
8	0	0	0	0	0	3	1	1	1	0	0	0	0	0	0	0	IZS	0	0	0	2	0	0	0	0	0.4	24		
9	0	0	0	0	0	13	26	0	6	0	15	8	12	1	IZS	1	16	3	3	1	2	1	2	10	26	5.2	24		
10	0	2	6	5	13	13	9	3	9	2	4	4	7	IZS	2	3	2	8	1	4	2	0	0	1	13	4.3	24		
11	0	0	0	0	0	0	0	0	0	1	1	IZS	2	1	0	1	4	15	2	0	0	4	1	15	1.4	24			
12	8	1	11	6	1	5	7	9	21	13	3	IZS	9	2	16	5	0	2	13	5	6	0	2	0	21	6.3	24		
13	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		
14	0	0	0	0	0	0	0	0	0	0	IZS	0	0	1	0	0	1	1	2	7	7	14	30	51	41	51	6.7	24	
15	22	2	1	1	1	2	10	3	IZS	27	1	2	2	2	1	4	1	3	31	5	1	1	1	0	31	5.4	24		
16	0	0	0	0	0	16	6	IZS	6	1	5	1	3	2	1	18	1	3	3	2	2	0	7	0	18	3.3	24		
17	7	0	1	1	0	3	IZS	3	17	2	16	14	1	8	4	2	6	17	1	0	0	1	5	1	17	4.8	24		
18	0	1	0	1	9	IZS	1	1	0	1	3	7	6	4	2	1	2	1	0	0	0	0	0	0	9	1.7	24		
19	0	0	0	0	IZS	0	0	0	C	C	C	C	C	C	IZS	0	0	0	0	0	0	1	1	2	0	2	0.3	24	
20	0	1	0	IZS	2	1	4	0	10	10	12	10	7	7	7	4	0	0	0	0	0	0	0	0	12	3.3	24		
21	1	0	IZS	0	0	0	0	0	0	0	1	4	1	7	1	14	0	2	10	2	27	10	7	27	3.8	24			
22	2	IZS	8	6	3	26	2	2	7	5	5	3	3	3	3	0	1	83	0	0	0	0	0	0	0	83	7.0	24	
23	IZS	0	0	1	0	0	0	0	16	2	1	1	2	2	12	3	9	2	0	0	5	0	0	0	IZS	16	2.5	24	
24	2	2	0	2	4	4	8	13	50	13	22	17	4	2	6	1	8	5	1	0	0	0	0	IZS	0	50	7.1	24	
25	0	0	0	0	1	1	0	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0.5	24			
26	0	0	0	0	0	0	0	0	1	1	2	37	5	3	0	7	1	1	1	2	IZS	3	1	0	37	2.8	24		
27	1	1	0	0	8	1	12	3	14	8	5	46	1	4	2	5	1	0	0	IZS	0	0	0	0	46	4.9	24		
28	0	0	0	0	0	0	4	4	4	4	2	6	2	1	1	1	0	IZS	0	0	0	0	0	0	6	1.3	24		
29	1	1	0	3	3	37	8	21	0	0	0	0	1	1	2	1	IZS	0	0	0	0	0	0	0	37	3.5	24		
30	0	0	0	0	12	0	0	25	2	3	2	4	0	0	0	0	IZS	0	0	0	0	0	0	0	25	2.1	24		
HOURLY MAX	22	4	11	6	55	37	56	36	50	27	22	46	12	15	16	18	20	83	50	48	17	30	51	41					
HOURLY AVG	1.7	0.5	1.1	0.9	3.9	4.4	5.4	4.7	8.0	4.9	3.9	6.3	2.9	2.3	3.1	2.8	3.3	5.8	4.8	3.7	2.2	3.1	3.9	2.9					

STATUS FLAG CODES

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

MONTHLY SUMMARY

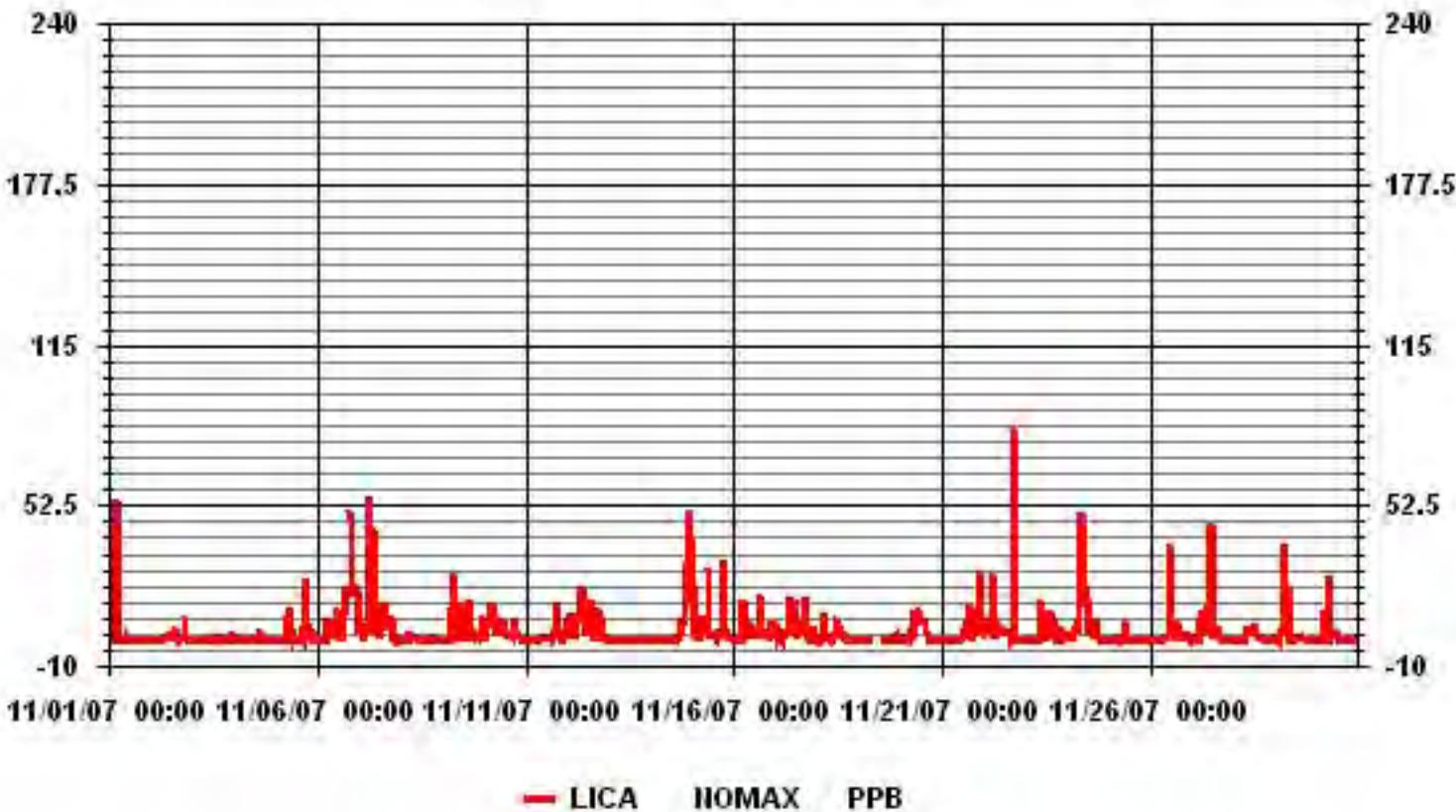
NUMBER OF NON-ZERO READINGS:	356
MAXIMUM INSTANTANEOUS VALUE:	83 PPB @ HOUR(S) 18 ON DAY(S) 22

Izs Calibration Time:	32 HRS	Operational Time:	720 HRS
Monthly Calibration Time:	6 HRS		
Standard Deviation:	8.18		

MOUNTAIN STANDARD TIME



01 Hour Averages



NO_x

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

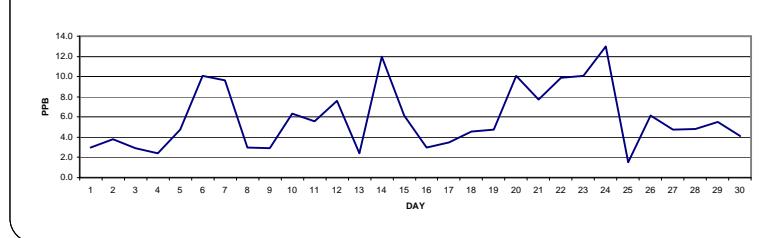
OXIDES OF NITROGEN hourly averages in ppb

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 MAX.	24-HOUR AVG.	RDGS.		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00					
DAY																													
1	6	6	6	5	6	5	6	7	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	IZS	1	7	3.0	24
2	0	0	1	1	2	2	4	4	6	4	3	2	2	2	3	5	8	7	6	14	IZS	5	4	14	3.8	24			
3	4	4	5	4	2	2	3	2	2	2	1	0	0	0	1	1	2	3	4	5	IZS	6	8	6	8	2.9	24		
4	5	4	4	4	8	4	4	6	3	3	1	0	1	1	1	1	1	0	IZS	1	1	1	0	8	2.4	24			
5	0	1	1	1	0	0	3	9	22	7	2	4	2	1	1	2	14	23	IZS	5	3	3	2	3	23	4.7	24		
6	2	2	2	2	2	2	3	2	2	2	3	5	4	4	5	9	21	IZS	41	29	20	25	22	23	41	10.1	24		
7	13	7	8	10	8	10	22	31	44	24	6	6	3	2	3	6	IZS	5	3	3	2	2	2	1	44	9.6	24		
8	1	1	1	1	1	2	3	9	6	4	2	1	2	3	4	IZS	6	4	3	2	3	4	3	2	9	3.0	24		
9	1	1	2	2	2	3	3	3	2	2	3	4	2	IZS	3	3	4	4	5	5	4	3	3	5	2.9	24			
10	2	4	5	5	20	21	14	4	5	4	5	4	5	IZS	4	5	4	6	5	4	5	5	4	21	6.3	24			
11	4	5	4	2	4	4	3	3	3	4	3	3	IZS	6	6	5	6	8	23	11	5	5	6	23	5.6	24			
12	12	8	12	7	5	9	12	18	16	10	6	IZS	7	6	7	6	5	5	6	8	3	2	2	3	18	7.6	24		
13	4	4	5	4	3	3	3	5	5	IZS	3	1	1	1	1	1	1	1	1	1	1	1	2	5	2.4	24			
14	3	5	3	4	5	4	4	4	5	IZS	2	2	2	2	2	7	8	15	14	20	19	39	53	54	54	12.0	24		
15	25	5	6	4	5	5	4	IZS	6	4	4	4	4	4	6	5	5	11	9	5	5	7	4	25	6.2	24			
16	3	2	2	1	1	3	4	IZS	4	3	2	2	3	3	4	7	4	4	4	3	2	3	3	2	7	3.0	24		
17	3	2	2	2	2	3	IZS	4	11	3	4	3	3	3	4	6	4	4	3	2	3	3	3	11	3.5	24			
18	3	3	4	4	5	IZS	6	6	4	6	5	6	6	6	5	4	4	5	7	5	4	3	2	2	7	4.6	24		
19	2	3	2	3	IZS	2	2	2	C	C	C	C	C	IZS	2	3	3	3	3	11	13	12	10	13	4.8	24			
20	11	13	12	IZS	16	16	22	15	22	26	24	21	8	2	4	1	2	2	1	3	2	3	3	3	26	10.1	24		
21	6	6	IZS	3	3	4	4	3	3	3	2	2	3	4	5	6	16	6	11	18	13	23	19	15	23	7.7	24		
22	11	IZS	12	15	12	14	16	18	20	16	12	10	10	9	8	7	11	17	3	1	1	1	1	2	20	9.9	24		
23	IZS	5	5	11	3	4	5	8	13	8	5	5	5	6	6	10	23	15	16	17	19	16	17	IZS	23	10.1	24		
24	19	16	12	16	17	13	14	17	19	19	25	16	11	10	13	9	8	8	8	10	9	7	IZS	3	25	13.0	24		
25	6	5	5	2	2	3	2	2	2	2	1	0	0	0	0	0	1	1	0	0	0	0	IZS	0	1	6	1.5	24	
26	2	2	3	3	4	3	5	6	9	5	4	11	5	5	5	5	9	15	15	IZS	10	8	3	15	6.2	24			
27	4	3	3	2	8	4	7	6	7	6	3	4	3	5	4	3	3	4	6	IZS	8	8	5	3	8	4.7	24		
28	3	3	3	3	3	4	6	10	15	8	6	3	3	4	4	5	5	4	7	IZS	4	4	3	3	5	15	4.8	24	
29	4	4	5	8	9	9	9	13	4	2	2	2	3	4	4	7	7	IZS	8	6	5	5	4	3	13	5.5	24		
30	4	5	4	3	4	5	8	21	15	5	4	3	2	1	1	3	IZS	1	1	1	1	1	1	21	4.1	24			
HOURLY MAX	25	16	12	16	20	21	22	31	44	26	25	21	11	10	13	10	23	23	41	29	20	39	53	54					
HOURLY AVG	5.6	4.4	4.8	4.6	5.6	5.6	7.0	8.3	9.8	6.9	5.0	4.5	3.7	3.5	3.9	4.4	6.4	6.1	7.5	7.1	6.0	7.2	7.1	5.9					

STATUS FLAG CODES

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

24 HOUR AVERAGES FOR NOVEMBER 2007



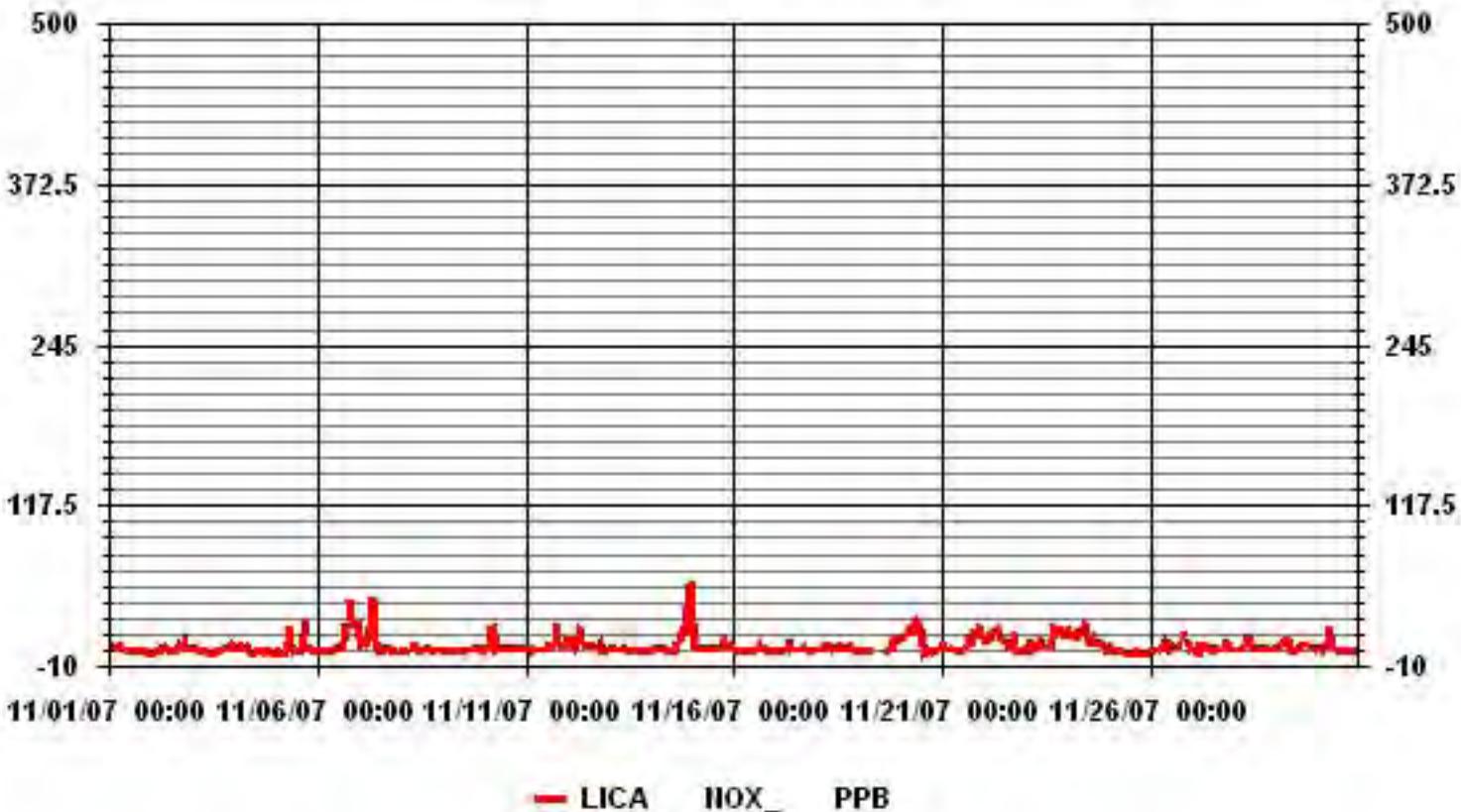
MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	662
MAXIMUM 1-HR AVERAGE:	54 PPB
MAXIMUM 24-HR AVERAGE:	13.0 PPB

Izs Calibration Time:	32 HRS	Operational Time:	720 HRS
Monthly Calibration Time:	6 HRS	AMD Operation Uptime:	100.0 %
Standard Deviation:	6.30	Monthly Average:	5.87 PPB

MOUNTAIN STANDARD TIME

01 Hour Averages



LICA
NOX_ / WD Joint Frequency Distribution (Percent)

November 2007

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	.87	.43	.87	1.02	8.65	10.99	8.35	1.75	1.61	2.93	12.46	19.79	12.31	6.74	8.21	2.63	99.70
< 110	.00	.00	.00	.00	.29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29
< 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	.87	.43	.87	1.02	8.94	10.99	8.35	1.75	1.61	2.93	12.46	19.79	12.31	6.74	8.21	2.63	

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
< 50	6	3	6	7	59	75	57	12	11	20	85	135	84	46	56	18	680
< 110					2												2
< 210																	
>= 210																	
Totals	6	3	6	7	61	75	57	12	11	20	85	135	84	46	56	18	

Calm : .00 %

Total # Operational Hours : 682

Logger : 01 Parameter : NOX

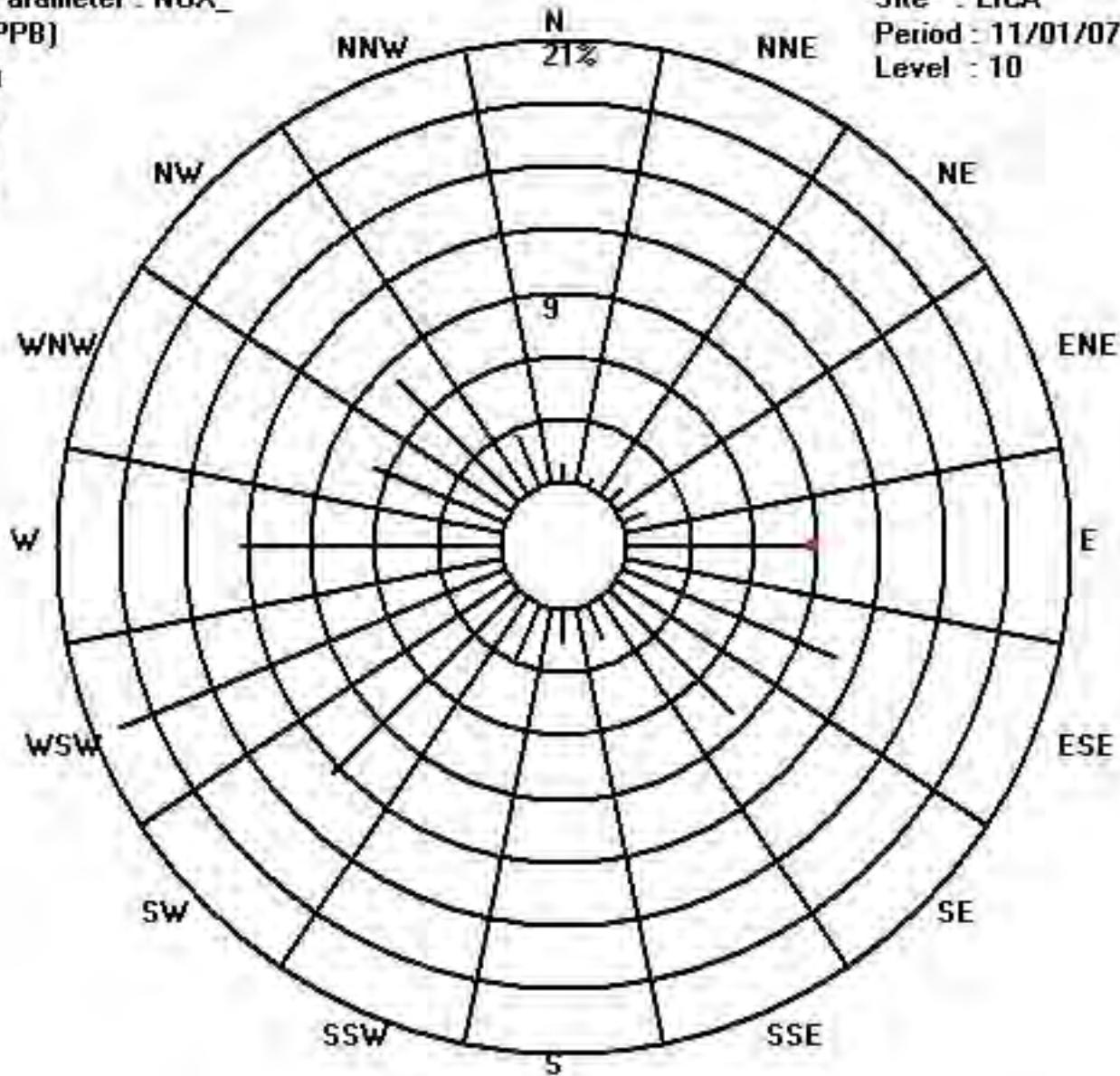
Class Limits (PPB)



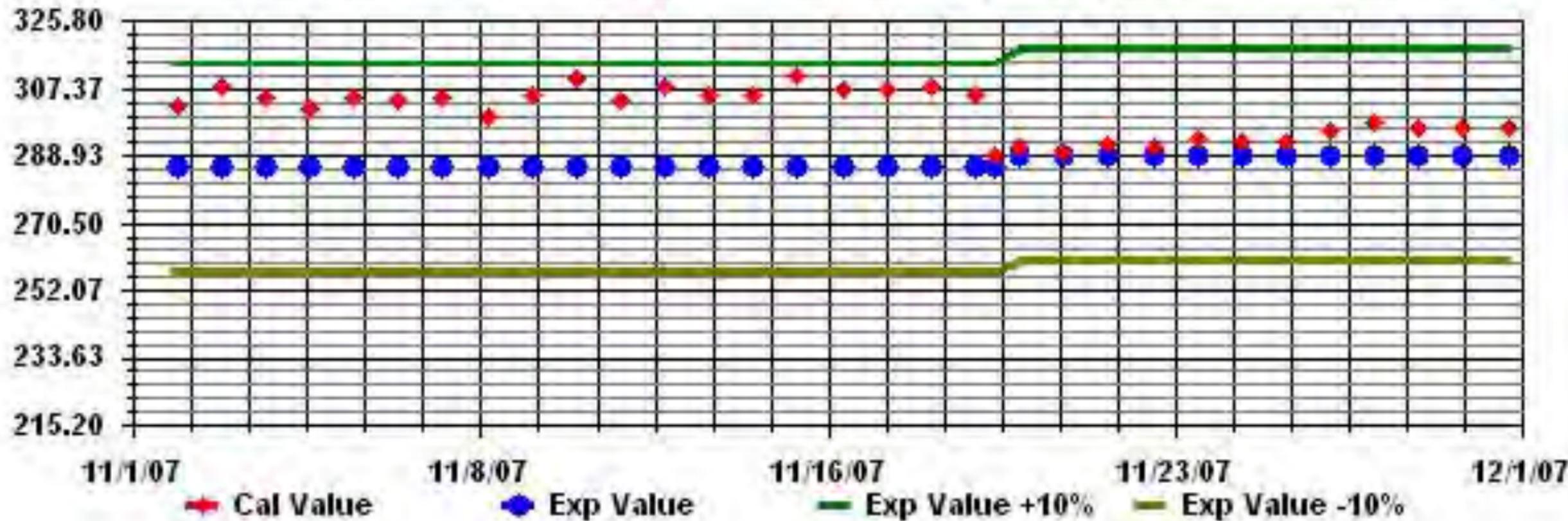
Site : LICA

Period : 11/01/07-11/30/07

Level : 10



Calibration Graph for Site: LICA Parameter: HOX_ Sequence: HO2 Phase: SPAN



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

OXIDES OF NITROGEN MAX instantaneous maximum in ppt

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.
DAY																											
1	6	7	7	5	74	6	8	12	6	4	5	5	2	1	1	1	1	2	4	1	2	IZS	1	74	7.0	24	
2	1	1	1	2	3	3	7	6	8	6	6	5	3	11	7	11	15	10	10	27	IZS	9	5	27	7.1	24	
3	5	5	5	6	3	3	6	5	4	5	2	1	3	1	3	4	5	4	7	6	IZS	10	14	13	14	5.2	24
4	7	7	5	6	10	7	8	10	4	4	3	1	1	8	1	10	1	1	1	IZS	2	1	1	1	10	4.3	24
5	1	1	1	1	1	2	14	29	35	18	4	5	3	2	5	7	33	54	IZS	10	5	8	4	4	54	10.7	24
6	4	3	3	3	3	3	5	8	6	6	5	27	6	6	8	22	41	IZS	63	61	28	35	31	33	63	17.8	24
7	17	11	13	12	14	14	57	54	62	43	13	9	5	15	16	21	IZS	12	13	13	5	4	12	2	62	19.0	24
8	2	3	2	3	3	7	6	14	8	7	3	2	3	6	5	IZS	7	6	4	3	4	5	4	3	14	4.8	24
9	3	3	3	3	3	9	21	4	14	4	15	7	15	4	IZS	7	9	9	10	7	7	5	5	20	21	8.1	24
10	3	8	13	14	28	27	21	8	25	7	9	8	10	IZS	6	8	6	18	7	9	8	9	7	10	28	11.7	24
11	7	7	6	5	5	7	4	4	5	5	4	4	IZS	7	8	7	12	14	43	18	8	6	14	12	43	9.2	24
12	28	16	32	19	8	17	25	27	53	18	7	IZS	11	8	30	13	6	11	14	17	8	3	6	4	53	16.6	24
13	7	5	6	5	4	4	4	3	7	7	IZS	4	3	1	2	2	1	1	1	1	1	2	3	7	3.3	24	
14	5	7	6	9	8	5	6	6	7	IZS	4	3	4	2	4	12	13	26	29	30	33	56	88	67	88	18.7	24
15	44	11	12	12	8	9	29	7	IZS	45	9	8	7	10	7	13	10	11	48	15	9	8	12	7	48	15.3	24
16	5	3	3	3	3	6	17	IZS	17	7	4	5	13	14	7	17	7	10	8	13	5	6	9	3	17	8.0	24
17	8	5	5	5	4	7	IZS	9	38	12	22	12	5	12	8	12	12	16	7	5	4	5	10	5	38	9.9	24
18	4	4	6	6	16	IZS	9	8	7	8	9	13	20	14	9	6	8	8	9	7	5	4	4	3	20	8.1	24
19	3	3	3	3	IZS	2	3	3	C	C	C	C	C	IZS	3	9	4	5	8	19	20	18	14	20	7.5	24	
20	14	16	16	IZS	21	22	28	20	30	30	29	24	20	10	11	4	3	3	2	5	3	4	4	5	30	14.1	24
21	8	9	IZS	4	6	6	5	4	4	7	3	4	12	5	15	10	42	8	19	29	20	45	26	23	45	13.7	24
22	15	IZS	24	21	17	51	20	22	26	18	17	12	12	12	11	10	17	146	7	2	2	2	2	7	146	20.6	24
23	IZS	8	8	18	4	6	8	17	41	11	7	6	6	7	15	17	39	18	18	19	30	17	23	IZS	41	15.6	24
24	24	19	19	21	27	20	22	34	79	32	42	33	15	11	24	11	19	17	12	14	13	9	IZS	5	79	22.7	24
25	7	6	6	3	5	4	4	4	4	11	3	1	1	1	1	1	1	1	1	1	1	IZS	1	2	11	3.0	24
26	3	4	4	4	5	5	6	11	13	11	6	49	10	9	6	11	8	15	23	22	IZS	17	13	7	49	11.4	24
27	5	5	5	4	17	7	24	12	33	20	18	20	6	14	10	16	8	5	7	IZS	9	11	9	4	33	11.7	24
28	5	3	4	4	4	4	11	26	23	13	12	6	7	7	6	8	9	5	IZS	5	6	5	4	8	26	8.0	24
29	9	7	9	15	14	50	22	46	8	3	3	3	5	6	6	13	11	IZS	13	8	7	6	5	4	50	11.9	24
30	5	6	7	3	21	6	21	29	21	10	10	3	1	3	5	IZS	3	3	3	3	2	1	29	7.7	24		
HOURLY MAX	44	19	32	21	74	51	57	54	79	45	42	49	20	15	30	22	42	146	63	61	33	56	88	67			
HOURLY AVG	8.8	6.7	8.1	7.6	11.7	11.0	14.5	15.2	21.0	13.3	9.8	10.3	7.6	7.0	8.5	9.6	12.5	15.8	13.8	12.3	9.8	10.9	12.1	9.6			

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

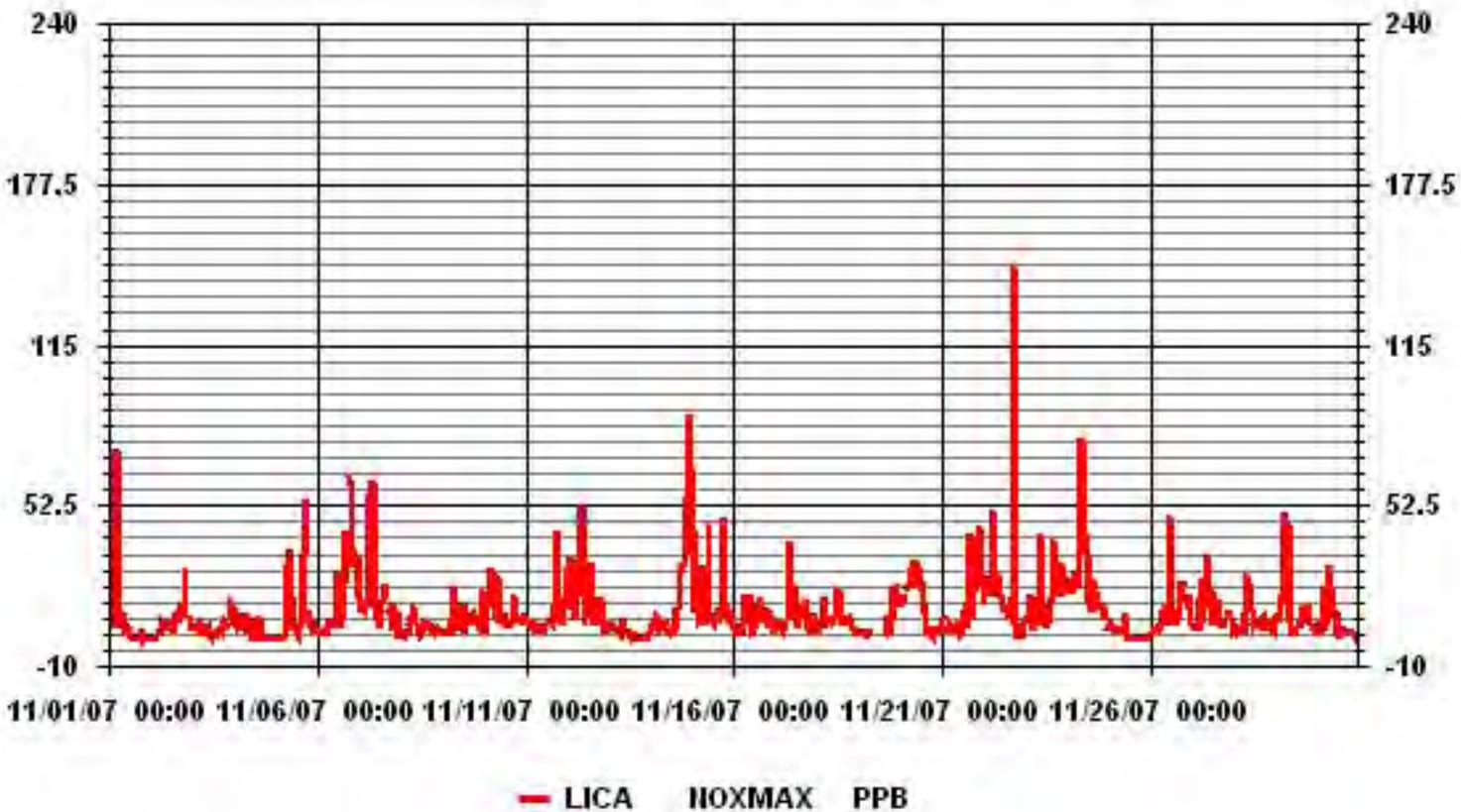
NUMBER OF NON-ZERO READINGS:	682
MAXIMUM INSTANTANEOUS VALUE:	146 PPB @ HOUR(S) 18 ON DAY(S) 22

Izs Calibration Time:	32 HRS	Operational Time:	720 HRS
Monthly Calibration Time:	6 HRS		
Standard Deviation:	12.62		

MOUNTAIN STANDARD TIME



01 Hour Averages



O₃

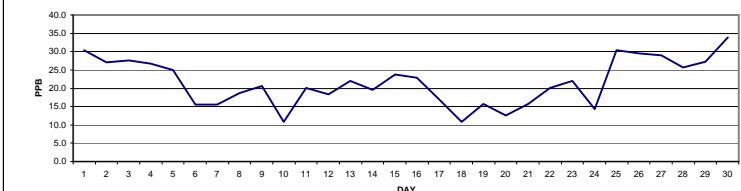
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

OZONE (O₃) hourly averages in ppb

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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	23	21	22	24	27	28	26	25	29	31	33	35	35	36	36	36	35	34	32	34	31	IZS	30	36	30.4	24	
	2	30	32	32	31	28	26	24	23	26	30	32	33	33	32	28	23	24	24	13	IZS	25	23	33	27.1	24		
	3	23	24	24	27	30	29	28	29	29	31	33	34	35	34	34	32	30	28	25	IZS	21	13	12	35	27.6	24	
	4	13	11	23	26	23	25	24	23	26	28	31	34	34	33	32	31	30	29	28	IZS	27	27	28	28	34	26.7	24
	5	28	28	28	29	28	28	24	17	9	24	28	30	32	32	31	19	9	IZS	26	26	26	24	22	32	25.0	24	
	6	23	24	24	24	24	23	22	23	23	21	21	21	19	15	6	IZS	1	0	0	0	0	1	24	15.6	24		
	7	3	6	5	4	6	3	1	0	1	9	21	24	26	27	27	24	IZS	24	26	24	23	24	24	27	15.5	24	
	8	23	22	21	20	18	17	13	7	10	11	17	20	20	20	18	IZS	17	21	23	22	21	22	24	24	18.7	24	
	9	23	24	23	23	22	21	20	20	20	21	21	21	22	22	IZS	23	22	21	21	19	17	16	16	15	24	20.6	24
	10	16	13	9	6	1	0	4	11	13	13	13	13	14	IZS	15	15	14	12	12	13	12	11	8	10	16	10.8	24
	11	10	9	14	23	20	20	22	24	25	25	27	28	IZS	28	27	26	25	18	4	12	22	20	17	18	28	20.2	24
	12	10	12	6	12	14	12	10	6	11	16	20	IZS	21	22	22	23	23	24	24	23	28	26	26	28	18.3	24	
	13	26	27	21	21	20	19	20	17	13	14	IZS	16	23	25	24	23	24	27	25	23	24	27	22.0	24			
	14	22	21	24	24	23	23	21	21	22	IZS	28	29	30	32	32	29	26	16	14	5	5	0	1	0	32	19.5	24
	15	4	23	24	24	25	25	27	IZS	26	26	28	29	29	27	26	25	20	21	25	23	20	15	29	23.7	24		
	16	20	23	24	24	23	23	22	IZS	22	23	23	22	23	23	21	23	24	23	24	23	22	23	24	22.8	24		
	17	22	22	21	20	19	18	IZS	18	16	19	18	17	17	17	17	16	14	15	15	14	13	13	13	22	16.9	24	
	18	13	13	12	12	11	IZS	10	8	9	8	9	10	11	9	8	8	8	8	6	5	7	8	15	24	27	10.9	24
	19	27	14	10	10	IZS	12	12	11	12	14	15	16	16	18	C	C	C	IZS	30	29	19	13	9	13	30	15.8	24
	20	11	9	14	IZS	10	8	3	8	5	6	9	11	17	20	18	20	18	16	16	14	15	14	13	20	12.7	24	
	21	11	12	IZS	17	16	15	19	21	22	23	24	24	24	24	22	12	19	14	6	8	2	1	2	24	15.7	24	
	22	3	IZS	2	0	3	7	8	7	11	17	22	25	25	26	28	29	23	31	35	34	35	35	33	35	20.1	24	
	23	IZS	28	27	20	27	27	27	24	20	25	28	29	29	29	29	23	11	18	16	14	10	13	11	IZS	29	22.0	24
	24	7	9	11	8	6	6	8	7	7	9	10	15	18	21	19	21	22	23	20	15	19	21	IZS	26	26	14.3	24
	25	21	20	18	25	28	28	28	29	30	30	31	33	34	35	35	35	34	34	35	35	35	35	35	30.5	24		
	26	35	34	33	32	32	32	31	30	27	32	32	30	32	32	31	31	30	26	20	18	IZS	24	26	30	35	29.6	24
	27	31	32	32	32	29	30	29	29	29	31	30	31	30	30	30	29	28	26	IZS	23	22	27	28	32	29.0	24	
	28	27	27	26	25	25	24	22	19	15	23	26	29	29	28	28	27	27	28	IZS	27	27	27	25	29	25.7	24	
	29	26	25	24	22	20	21	20	18	27	30	30	31	31	31	29	28	IZS	26	27	29	31	33	35	35	27.2	24	
	30	35	34	33	35	33	32	32	28	17	21	32	33	36	38	37	36	IZS	38	38	38	38	38	38	38	38	33.8	24
HOURLY MAX		35	34	33	35	33	32	31	30	30	32	33	35	36	38	37	36	36	38	38	38	38	38	38	38			
HOURLY AVG		19.5	20.7	20.2	20.7	20.4	20.1	19.0	17.9	18.2	21.2	23.6	24.7	25.7	26.8	26.4	25.6	22.5	22.7	21.4	20.5	20.8	20.1	20.1	21.1			

24 HOUR AVERAGES FOR NOVEMBER 2007



Maxxam
Analytics Inc

MOUNTAIN STANDARD TIME

Izs Calibration Time: 32 Hrs Operational Time: 720 Hrs

Monthly Calibration Time: 3 Hrs AMD Operation Uptime: 100.0 %

Standard Deviation: 8.69 Monthly Average: 21.65 ppb

Number of 1-hr Exceedences: 0

Number of Non-Zero Readings: 676

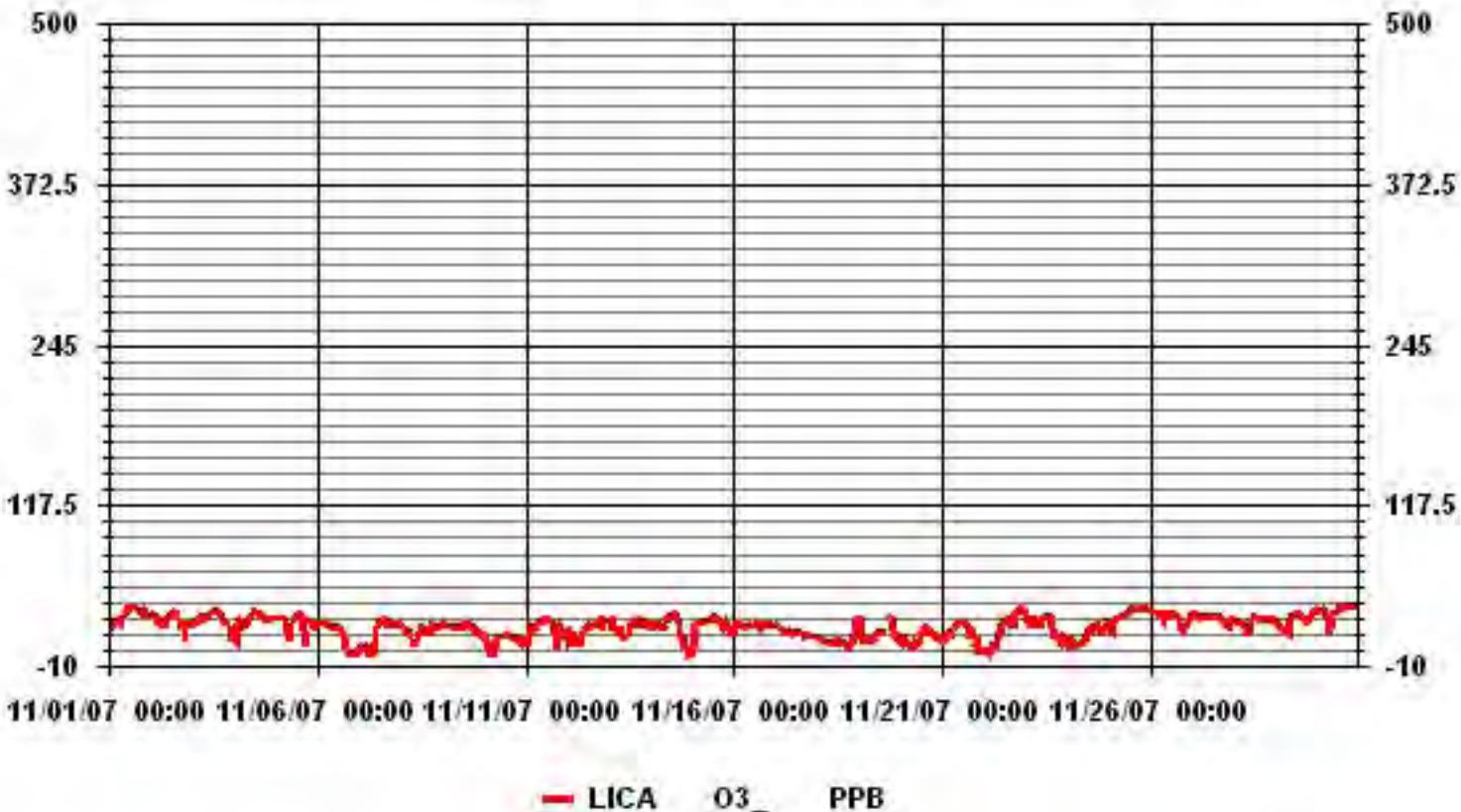
Maximum 1-hr Average:	38	PPB	@ Hour(s)	Var	On Day(s)	30
Maximum 24-hr Average:	33.8	PPB			On Day(s)	30
					VAR - VARIOUS	

Izs Calibration Time:	32	HRS	Operational Time:	720	HRS
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Monthly Calibration Time:	3	HRS	AMD Operation Uptime:	100.0	%
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Standard Deviation:	8.69	MONTHLY AVERAGE:	21.65	PPB
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01 Hour Averages



LICA
O3_ / WD Joint Frequency Distribution (Percent)

November 2007

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	.87	.43	.87	1.02	8.90	10.94	8.32	1.75	1.60	2.91	12.40	19.70	11.97	7.00	8.61	2.62	100.00
< 110	.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	
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
Totals	.87	.43	.87	1.02	8.90	10.94	8.32	1.75	1.60	2.91	12.40	19.70	11.97	7.00	8.61	2.62	

Calm : .00 %

Total # Operational Hours : 685

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	6	3	6	7	61	75	57	12	11	20	85	135	82	48	59	18	685
< 110																	
< 210																	
>= 210																	
Totals	6	3	6	7	61	75	57	12	11	20	85	135	82	48	59	18	

Calm : .00 %

Total # Operational Hours : 685

Logger : 01 Parameter : 03

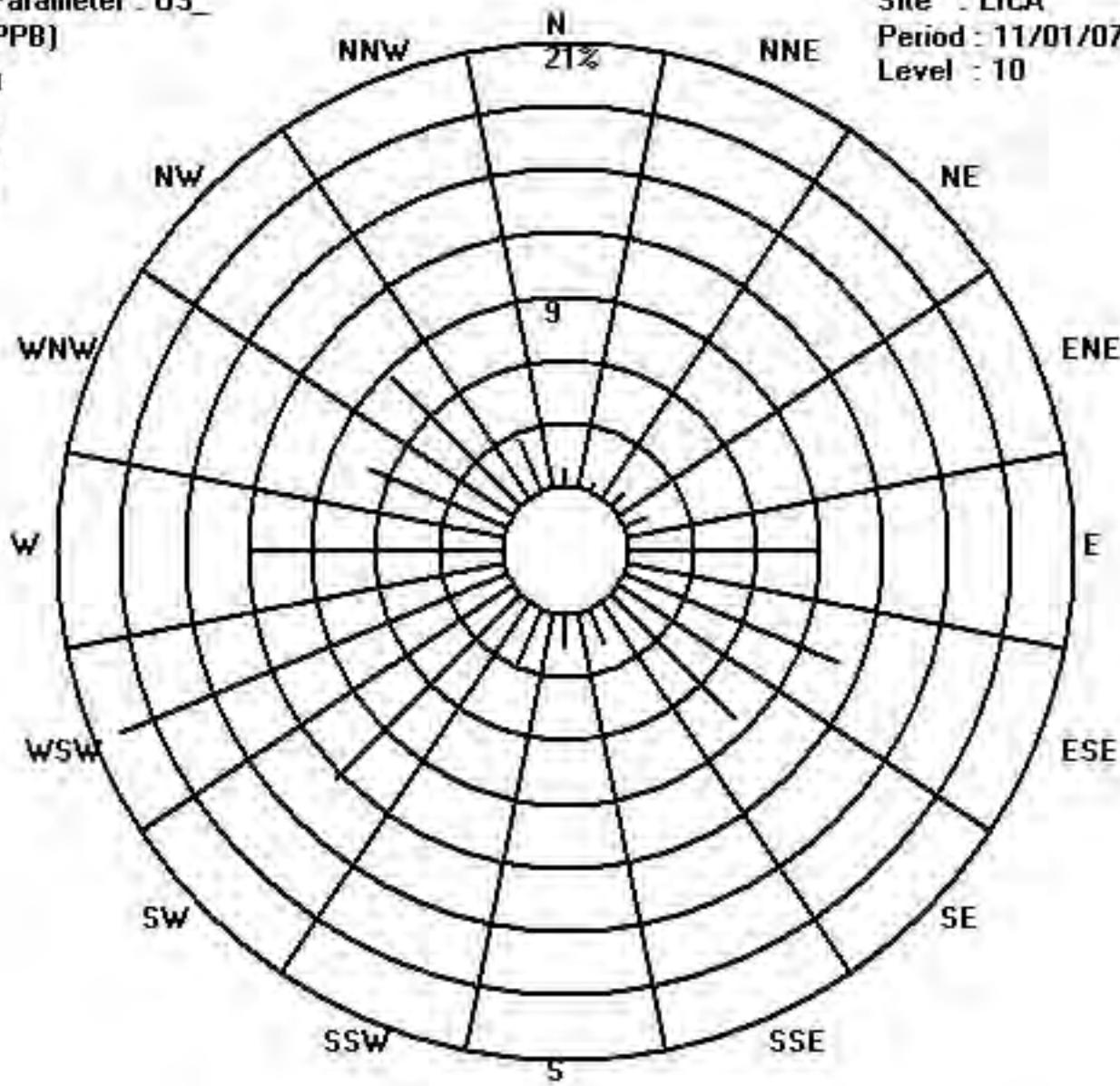
Class Limits (PPB)



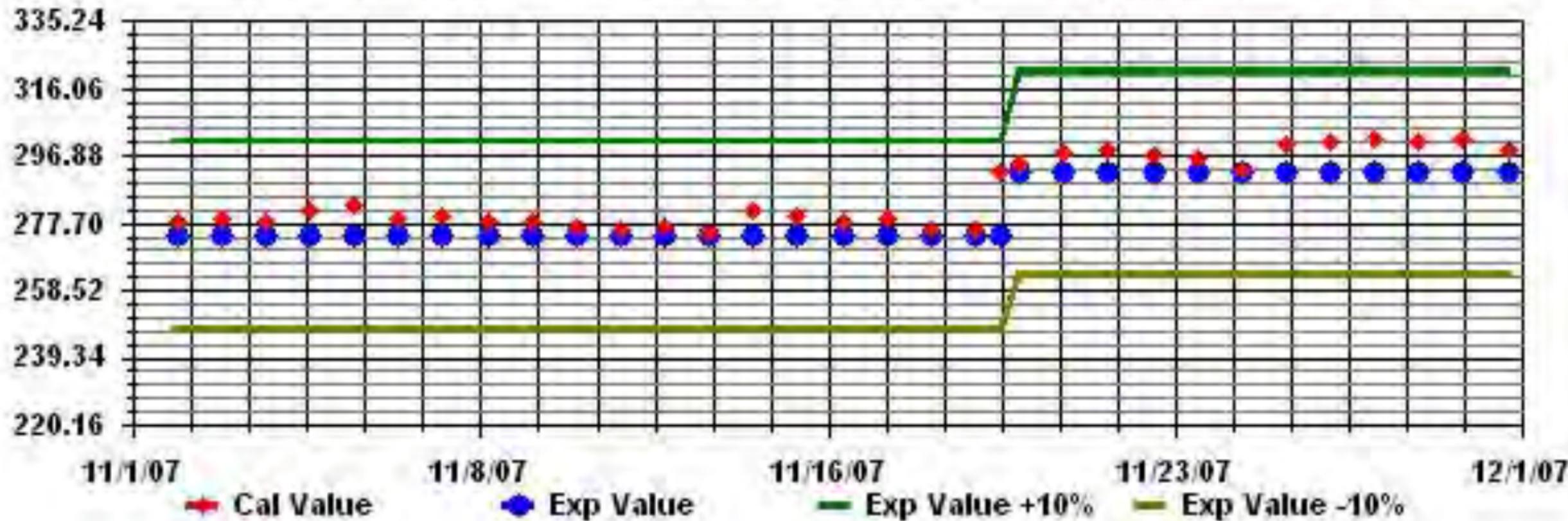
Site : LICA

Period : 11/01/07-11/30/07

Level : 10



Calibration Graph for Site: LICA Parameter: 03_ Sequence: 03 Phase: SPAll



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

OZONE MAX instantaneous maximum in ppb

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
DAY																												
1	25	23	24	26	28	29	28	28	30	32	35	35	36	36	37	37	36	36	35	34	34	33	IZS	31	37	31.7	24	
2	32	33	32	32	30	28	26	24	25	28	30	31	33	34	33	33	31	26	27	26	23	IZS	26	26	34	29.1	24	
3	24	25	25	30	30	29	30	30	33	34	35	36	35	35	34	31	29	26	IZS	24	16	16	36	29.0	24			
4	18	16	25	27	27	27	26	27	30	34	35	34	35	33	32	31	30	29	IZS	28	28	29	29	35	28.6	24		
5	29	29	29	29	28	27	25	18	28	29	30	32	33	33	32	28	16	IZS	27	27	26	23	33	27.5	24			
6	24	24	24	24	24	24	23	24	24	23	23	22	22	20	18	13	IZS	2	2	1	1	0	4	24	16.9	24		
7	6	9	7	10	13	4	5	2	3	16	25	26	27	28	28	27	IZS	27	27	25	25	24	24	24	17.9	24		
8	23	23	22	21	20	18	15	11	11	14	18	21	21	21	19	IZS	18	23	24	24	24	22	23	25	25	20.0	24	
9	24	24	24	24	23	22	21	20	21	21	22	22	23	23	IZS	24	23	22	22	20	18	17	17	16	24	21.4	24	
10	16	16	12	9	5	1	8	13	13	13	14	14	15	IZS	16	16	15	13	13	13	12	10	12	16	12.3	24		
11	12	10	22	24	23	22	24	25	26	26	28	29	IZS	29	28	28	24	12	23	24	23	20	21	29	23.1	24		
12	17	18	9	17	18	16	15	11	13	19	20	IZS	22	22	24	23	24	25	25	27	29	29	28	29	20.9	24		
13	27	29	25	21	21	20	20	15	16	IZS	20	26	26	24	24	26	28	26	24	25	26	26	24	29	23.5	24		
14	24	24	26	26	25	24	22	23	23	IZS	29	30	31	33	33	32	31	21	21	12	12	2	2	1	33	22.0	24	
15	22	26	26	26	27	26	26	28	IZS	29	28	29	30	30	31	29	28	28	24	26	24	22	19	31	26.4	24		
16	23	24	24	24	24	23	IZS	23	23	23	24	24	23	25	24	24	25	25	24	23	23	25	23.7	24				
17	23	23	22	21	20	19	IZS	19	20	20	19	18	18	18	17	16	16	16	15	15	14	14	14	23	18.0	24		
18	14	14	12	12	12	IZS	11	10	10	10	10	11	12	11	10	9	9	8	6	8	9	25	27	27	27	12.5	24	
19	27	26	11	11	IZS	13	12	12	13	15	17	17	16	20	C	C	C	IZS	31	31	24	18	15	16	31	18.2	24	
20	15	10	16	IZS	12	12	7	10	6	8	11	13	21	21	20	21	19	17	17	16	16	15	15	21	14.5	24		
21	13	15	IZS	21	18	17	21	22	23	24	25	24	25	25	26	24	20	20	17	12	11	8	3	4	26	18.2	24	
22	6	IZS	5	1	7	9	10	11	15	20	25	26	27	28	30	31	27	28	35	35	35	35	36	35	36	22.5	24	
23	IZS	29	29	28	30	29	28	28	24	28	29	29	30	30	31	28	17	19	19	15	13	15	13	IZS	31	24.6	24	
24	11	12	13	11	10	8	10	11	9	12	14	18	20	22	23	22	23	24	23	18	21	24	IZS	28	28	16.8	24	
25	24	21	25	27	28	28	29	29	30	31	32	34	34	35	36	36	34	35	36	36	36	36	IZS	35	35	36	31.5	24
26	36	36	34	33	33	33	33	33	29	34	33	32	32	33	32	32	31	29	25	24	IZS	27	28	32	36	31.5	24	
27	32	32	33	33	31	31	31	31	31	30	32	32	32	32	31	30	29	27	IZS	24	23	28	28	33	30.2	24		
28	28	27	26	26	26	25	24	25	22	26	29	29	29	30	30	29	28	IZS	28	28	28	28	26	30	27.3	24		
29	28	27	26	26	22	24	23	22	29	30	31	32	32	32	30	29	28	IZS	28	29	31	32	34	35	35	29.0	24	
30	36	35	35	35	34	33	34	33	34	33	33	34	38	38	37	IZS	38	39	39	38	38	38	38	38	35.4	24		
HOURLY MAX	36	36	35	35	35	34	33	33	31	34	35	35	38	38	38	37	36	38	39	39	38	38	38	38	38			
HOURLY AVG	22.0	22.8	22.2	22.6	22.4	21.6	21.1	20.6	20.4	23.1	25.2	25.9	26.8	27.8	27.7	27.3	25.0	24.6	23.5	22.8	22.7	22.1	21.7	22.6				

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

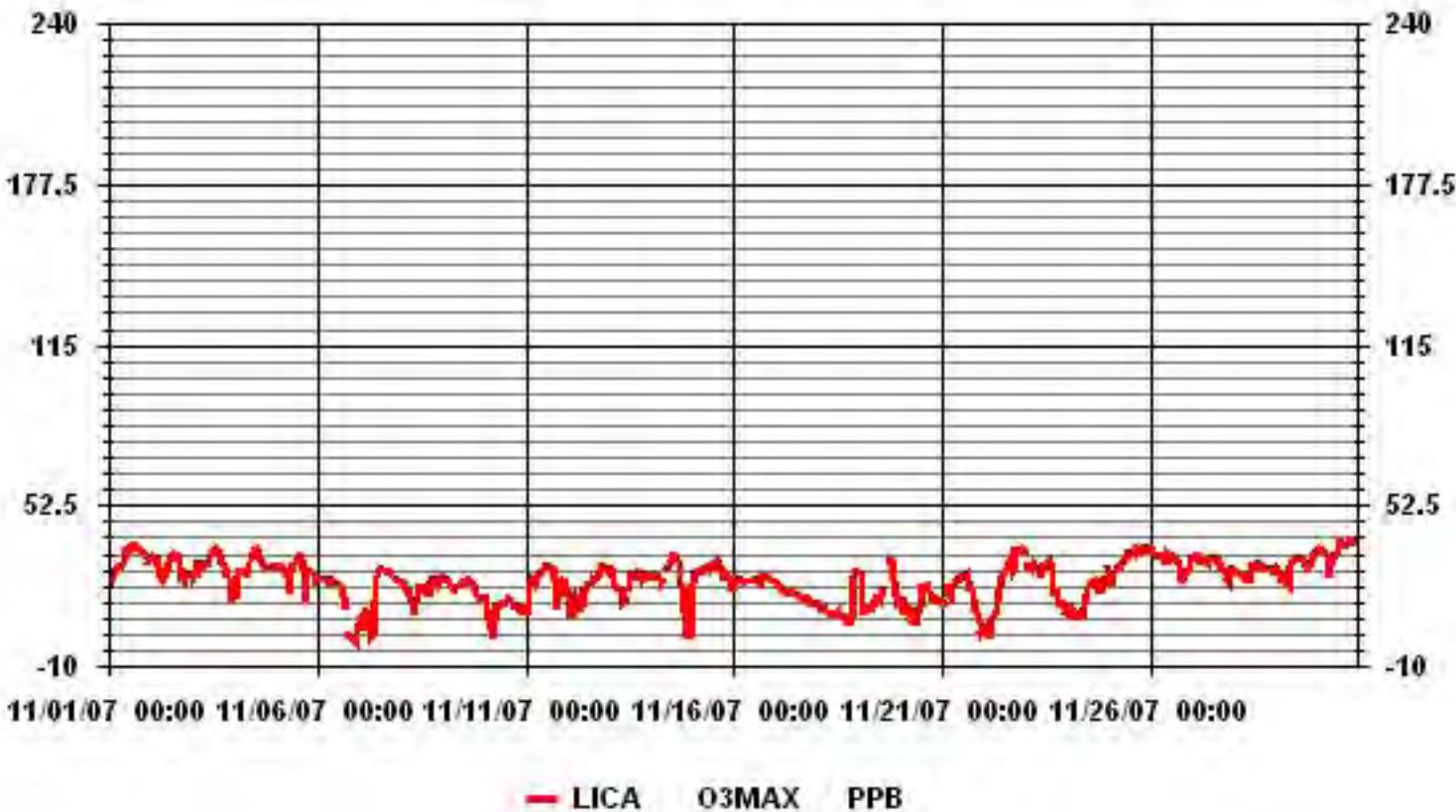
NUMBER OF NON-ZERO READINGS:	684
MAXIMUM INSTANTANEOUS VALUE:	39 PPB @ HOUR(S) 19,20 ON DAY(S) 30

Izs Calibration Time:	32 HRS	Operational Time:	720 HRS
Monthly Calibration Time:	3 HRS		
Standard Deviation:	8.17		

MOUNTAIN STANDARD TIME



01 Hour Averages



VECTOR WIND SPEED

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

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

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
DAY																												
1	6.8	6.2	5.8	5.9	6.8	7.8	7.1	8.5	11.8	13.7	16.9	19.4	19.4	19.7	19.5	19.5	20.5	16.5	13.8	12.2	16.1	14.5	15.3	15.4	20.5	12.7	24	
2	13.1	14.4	11.1	9.3	9.8	10.1	9.2	9.8	9.1	9.6	11.6	10.5	12	12.6	13.6	10.4	4.4	1.8	4.1	2	1.3	2.5	2	2.5	14.4	7.1	24	
3	5.3	6.9	7.9	10	9.9	11.8	9.7	12.6	13.1	12.9	14.6	14.5	10.2	10.3	12	11.7	7	7.2	6.1	5.1	3.6	1.1	1.2	1.2	14.6	8.1	24	
4	1.6	2.7	6.1	5.9	6.8	4.9	6	7.9	9	11	13.1	16.8	17.4	17.8	18.6	19.4	18.6	19.9	19.5	19	15.1	15.9	16.5	11.9	19.9	11.3	24	
5	12.4	13	10.6	10.8	7.3	4.7	2.4	1	1.2	0.9	2.2	3.8	2.6	2.4	2.4	3.3	1	1.2	3.4	5.5	5.8	6.4	6.6	8	13.0	5.0	24	
6	8.9	9.2	10.4	9.5	8.3	6.4	7.7	5.5	6.5	5.2	6.6	9.5	9.7	10.1	7.6	3	2.6	2.1	1	0.9	2.6	0.7	3.6	4	10.4	5.9	24	
7	4.6	4.5	3.8	4.5	3.4	3	1.2	1.9	0.5	2.5	1	2.5	2.5	4.2	5	5	6.9	7.6	8.2	7.6	7.3	7.3	10	6.6	10.0	4.7	24	
8	5.8	5.8	5.2	3.9	3.2	1.9	1.1	6.7	7.2	8.1	12.7	12.5	16.8	17.3	16.7	13.8	11.5	9.2	9.8	5.7	5	5.2	5.1	3.5	17.3	8.1	24	
9	2.7	4.3	3.6	4.3	5.7	7	7.9	9.4	10.8	12.4	11.8	11.7	10.1	11.1	10.9	10.4	7.9	8.6	8	6	7.2	8.4	5.7	2.9	12.4	7.9	24	
10	3.7	0.5	0.8	0.3	1.4	1	2.1	4.1	4.1	4.7	5.6	4.8	5.8	8	9.3	8.5	8.7	8	8.1	7.3	1.2	1	2.6	5.5	9.3	4.5	24	
11	6.5	8	9	9.1	10.1	9.1	9.8	10.2	8.8	7.1	8.9	10.8	9	6	3.4	4.3	0.9	0.5	2	2.4	1.3	0.7	2.3	10.8	6.3	24		
12	2.3	2.7	0.8	4	3.7	3	2.8	1.6	4.1	4.1	8	8.5	6	6.4	7.1	11	10.8	10.7	6.4	4.9	9.9	6	4.8	7.8	11.0	5.7	24	
13	10.1	13.2	13.7	15.3	12.7	13.4	12.4	15.8	16.3	17.1	15.4	16.1	22.6	18.5	18.8	15.7	18.1	17	20	18.5	14.7	12.2	11	5.6	22.6	15.2	24	
14	6.8	5.5	7.1	8.5	7.8	8.2	8	8.3	8.2	8.8	12.1	13.6	12.8	12.5	10.3	8.8	4	4.5	3.1	1.6	1	1	1.6	1.7	13.6	6.9	24	
15	2.5	5.6	4	4.4	6.3	8.5	8	8.8	10.9	7.1	7.9	7.1	10.3	7.7	8.7	9.1	8.5	7.8	4.9	4.7	5.8	5.8	3.3	1.4	10.9	6.6	24	
16	3.9	7.7	10.4	10.3	9.8	8.6	9.2	8.9	9.1	10.2	11.2	11.6	12.2	10	10.7	10.3	10	8.1	7.6	7.9	8.2	6.8	5.3	5.2	12.2	8.9	24	
17	5.1	4.5	3.4	3.5	4.6	4.3	5.4	3.6	3.3	6.3	5.9	5.1	5.4	6.2	5.6	2.9	3.8	5.4	5.6	6	6.2	4.8	5.3	6.5	6.5	4.9	24	
18	6.5	7.6	7.5	5.7	5.2	5	3.1	0.4	2.8	2.8	5.4	6	6.3	5.7	9.3	11.2	8.6	7.9	7.5	7.9	7.4	7.6	6.1	7.9	11.2	6.3	24	
19	8.4	9.4	9.3	9.9	11.5	10.4	8.4	7.6	10.5	10.9	11.2	9.5	6.9	6.9	8.3	4	2.9	5.8	5.1	4.9	4.7	1.8	1.4	2.7	11.5	7.2	24	
20	0.5	1.5	3.4	2.4	0.4	2.7	3.3	1.2	1.7	2.2	3	1.6	4.2	7.5	8.3	7	5.7	6.7	7.8	6.8	7.3	6.4	5	4.9	8.3	4.2	24	
21	1.1	4.1	1.7	3.4	4	4.6	7.9	9.4	9	8.7	7.1	7.9	7.9	7.7	7.3	5	3	6.4	4	2.2	2.4	0.5	0.6	1.4	9.4	4.9	24	
22	0.4	0.4	0.3	0.5	2.2	5.1	6	6.5	8.7	7	9	8.4	8.2	6.8	7.2	5.3	5	3.9	7.6	10	8.9	8.9	6.8	5.5	10.0	5.8	24	
23	5.2	4.7	3.9	4.9	1.7	4	7.7	3.8	5	6.7	8.5	9.7	9.9	7.8	5.6	5.2	3.9	6	5.9	5.7	5.8	7.7	6.4	4.9	9.9	5.9	24	
24	0.7	2.7	2.6	2	0.9	1.8	3.1	1.1	0.9	1.3	2.2	2.9	2.1	3.4	3.1	2.7	3.1	3.6	0.4	2.6	4.4	5.2	7.4	10.5	10.5	2.9	24	
25	12.7	11.1	9.7	5	6.5	6.5	7	7.5	8	7.2	9.1	12.2	11.4	10.2	9.4	7.2	9.4	9.7	10	11.5	11.5	11.8	9.2	11.1	12.7	9.4	24	
26	10.7	9.5	9.5	8.5	4.5	7	7.7	5.5	5.5	5.6	8.4	8.9	5.5	7.3	7.2	6.2	5.9	1.4	1.7	1.3	22.1	5.9	5.1	7.9	22.1	7.0	24	
27	8.5	8.9	8.7	7.6	8.5	7.8	6.9	6.3	5	5.7	6.1	6.1	4.8	3.8	3	2.3	2.3	5.6	5.7	4.9	5.5	5.7	7.5	7.6	8.9	6.0	24	
28	8.8	13.4	11.9	11.4	8.4	5.7	6.3	5.5	4.2	7.5	8.8	9.3	10.1	12	10.6	14.1	14.1	12.4	10	9.3	9.2	7.6	4	2.8	14.1	9.1	24	
29	3.6	4.4	6.3	5.2	5.8	5.4	3.9	2.9	6.6	10.8	11.7	12.2	9.1	11.2	13.5	12.3	12.6	10.1	9.2	10.9	9.8	11.8	15.6	15.8	9.2	24		
30	16.3	11	3.5	6.6	4.7	5.4	5.6	5.1	6.1	7	7.9	8.8	9.8	10.1	5.8	6.4	8.9	8.1	8.3	6.4	6.6	6.5	8.4	4.6	16.3	7.4	24	
HOURLY MAX	16.3	14.4	13.7	15.3	12.7	13.4	12.4	15.8	16.3	17.1	16.9	19.4	22.6	19.7	19.5	19.5	20.5	19.9	20.0	19.0	22.1	15.9	16.5	15.8				
HOURLY AVG	6.2	6.8	6.4	6.1	6.2	6.2	6.2	7.0	7.6	8.7	9.3	9.4	9.5	9.4	8.5	7.8	7.5	7.1	6.7	7.3	6.3	6.1	6.0					

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

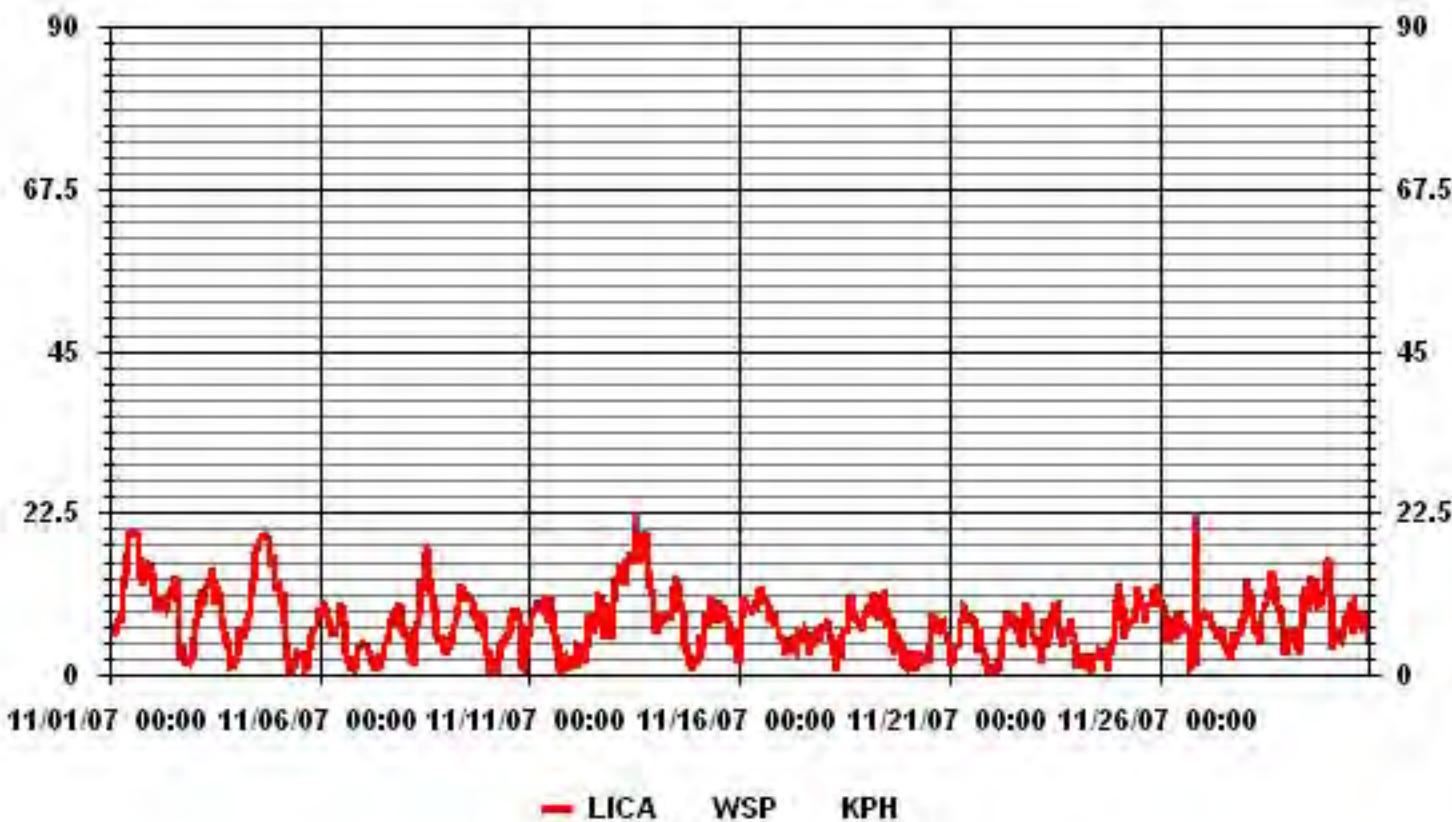
LAST CALIBRATION:

NA

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:	22.6	KPH	@ HOUR(S)	13	ON DAY(S)	13
MAXIMUM 24-HR AVERAGE:	15.2	KPH				
CALMS (<= 0 KPH)	0.28	%	OPERATIONAL TIME:			
MONTHLY CALIBRATION TIME:	0	HRS	AMD OPERATION UPTIME			
STANDARD DEVIATION	4.24		MOUNTAIN STANDARD TIME			
			720	HRS		
			100.0	%		
			7.28	KPH		

01 Hour Averages



LICA
WSP / WD Joint Frequency Distribution (Percent)

November 2007

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	.41	.00	.41	.83	2.63	5.83	4.86	1.52	1.52	2.63	6.25	7.50	4.72	.97	.83	.41	41.38
< 12.0	.41	.41	.41	.27	6.25	4.86	3.19	.13	.00	.13	5.69	9.86	3.47	3.61	5.27	1.94	45.97
< 20.0	.00	.00	.00	.00	.00	.13	.13	.00	.00	.00	.41	1.94	3.75	2.63	2.50	.27	11.80
< 29.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.27	.13	.00	.55
< 39.0	.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	
Totals	.83	.41	.83	1.11	8.88	10.83	8.19	1.66	1.52	2.77	12.36	19.30	12.08	7.50	8.75	2.63	

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	3		3	6	19	42	35	11	11	19	45	54	34	7	6	3	298
< 12.0	3	3	3	2	45	35	23	1		1	41	71	25	26	38	14	331
< 20.0						1	1			3	14	27	19	18	2	85	
< 29.0												1	2	1		4	
< 39.0																	
>= 39.0																	
Totals	6	3	6	8	64	78	59	12	11	20	89	139	87	54	63	19	

Calm : .27 %

Total # Operational Hours : 720

Logger : 01 Parameter : WSP

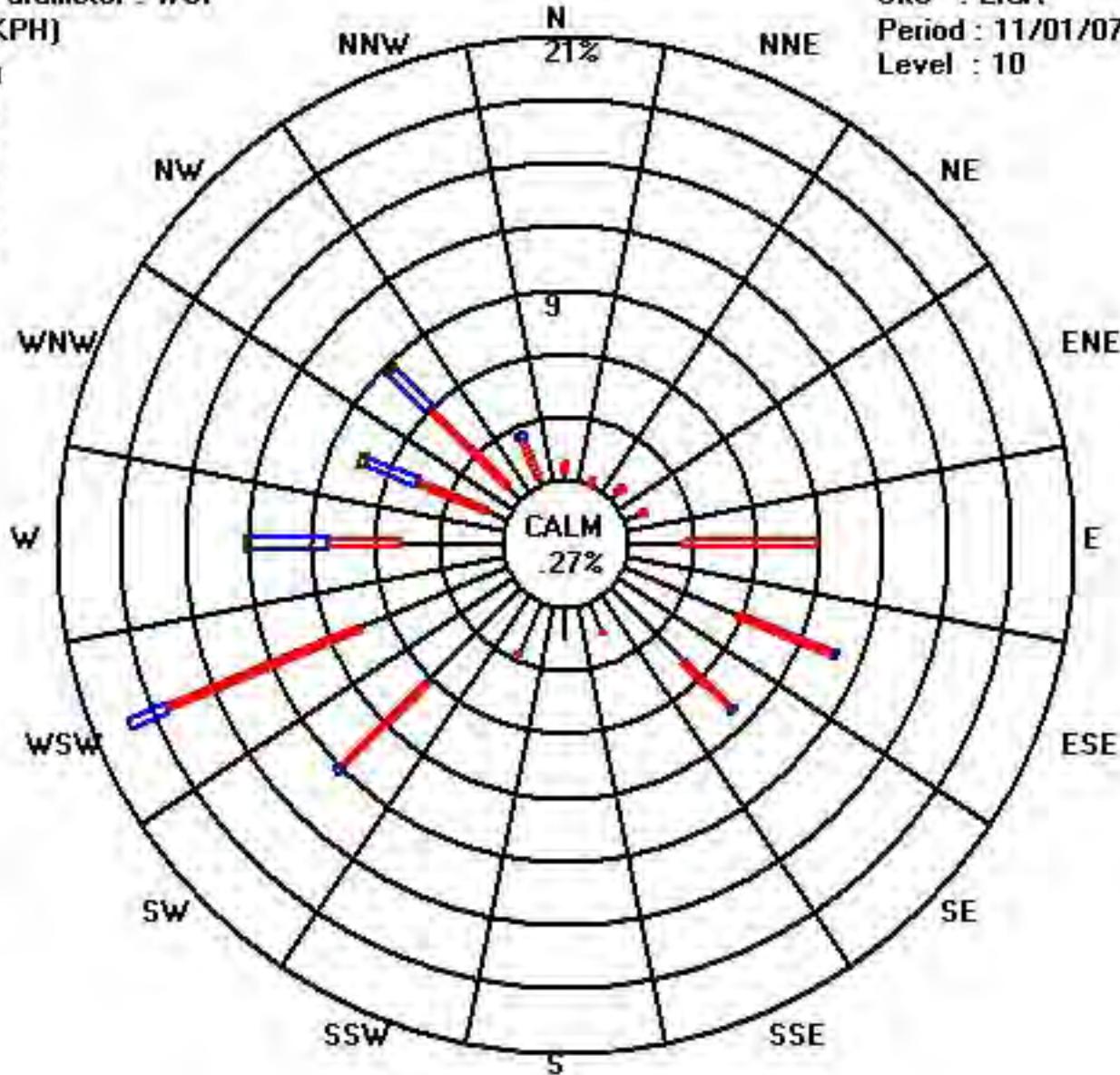
Class Limits (KPH)



Site : LICA

Period : 11/01/07-11/30/07

Level : 10



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

VECTOR WIND SPEED MAX instantaneous maximum in km/hr

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	
DAY	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	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		
1	11.6	11.5	9.4	8.2	10.1	12.1	10.2	14.5	16.7	20.2	27.6	29.8	29.4	27.9	30	26.8	34.7	26.5	23.1	27	22.7	22.2	24.2	26.7	34.7	
2	SW	SW	SW	WSW	WSW	SW	WSW	WSW	W	WSW	W	W	W	W	W	WNW	W	WNW	NW	WNW	W	WNW	NW	WNW	W	
3	20.9	23.6	16.9	15.1	14.4	14.7	12.1	11.8	15.2	18	15.3	18.6	20.5	18.6	15.7	8.1	4.1	8	3.9	4.3	7.4	5.2	7.2	23.6		
4	8.2	9.9	10.6	13.8	13.7	15.2	12.2	15.8	17.4	22.3	20.8	23	15.5	16.8	17.2	18	13	10.7	9.1	6.9	5.4	4.4	2.4	3	23	
5	SW	SSW	SW	WSW	WSW	WSW	WSW	WSW	W	WNW	W	W	WSW	WSW	SSW	SSW	-	E	SE	ESE	NW	WNW	W	WNW		
6	3.6	5.6	8.5	8.8	8.5	6.1	9.6	11.3	14.1	16.4	21.5	24.4	26.9	27.8	30.1	26.6	26.2	34.6	29.2	27.7	24.5	26.2	25.4	20.1	34.6	
7	SW	SW	WSW	W	WNW	WNW	NW	NW																		
8	19.8	18.9	14.7	16.7	9.7	7	4.7	4.3	3.2	5.6	7.2	8.2	8.1	7.2	8	8.4	2.2	3	6.1	7.4	8.1	8.8	9.2	10.7	19.8	
9	NW	NNW	WNW	NW	NW	NNW	N	SW	SW	NNW	WNW	WSW	WNW	-	SW	WSW	ESE	ESE	SE	SE	-	SE	SE	SE	NW	
10	13.3	12.3	14.6	13.9	12.9	10.4	10.8	10.4	12.7	14.5	11.7	16.3	15.2	13.7	12.6	7.1	4.4	4.7	2.9	2.8	4.4	6.1	6	6.4	16.3	
11	SE	-	-	SE	SW	SSW	SW	SW	-	-	W	SE	S	SW	NNE	W	WNW	SW								
12	5.5	5.4	5.4	5.4	6.1	6.2	4.7	2.6	3.2	2.3	4.4	4.5	7.7	8.7	8.4	9.1	9	11.1	12.3	13.1	12.4	10.8	11.5	14.6	11	14.6
13	WSW	WSW	WSW	WSW	W	SW	SW	SW	S	WSW	SE	-	ESE	SE	-	E	SE	ESE	SE	ESE	SE	ESE	SE	ESE		
14	9.2	8.8	8.2	6.7	6.4	5.7	3.7	13.1	11.2	17.5	19.2	21.4	23.1	24.2	26.2	19	18.2	14.1	15.2	10.7	7.5	8.1	7.3	8.4	26.2	
15	SE	ESE	SE	SE	E	E	ESE	E	ESE	E	E	E	E	E	E	E	E									
16	6.1	7.4	4.7	6.6	4.7	4.2	3.8	7.7	6.4	8	8.5	8.2	9.4	12.2	14.3	14.3	13.2	11.9	14.2	15.3	9.2	4.5	5.8	7.9	15.3	
17	-	WSW	E	E	NNE	SE	E	SE	E	ESE	E	E	ENE	E	E	E	E	E	E	E	W	W	WSW	W	E	
18	10.3	11.9	16.2	12.3	13.7	11.8	13.8	12.8	13.8	11.8	10.2	13.3	15.9	14.4	11.8	5.9	6.8	4.1	2.7	5	4.9	4.1	2.9	3.8	16.2	
19	W	WSW	WNW	-	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	SW	SW	-	SW	SW	SSW	SSW	SE	SE	SE	SE	SE	SE	
20	15.2	21.5	20.8	21.9	17.4	20.4	16.8	23.6	22.7	27.4	23.1	26	36	29	28.8	25.3	25	27.8	32.9	29	20.7	22.3	24.8	7.4	36	
21	WSW	W	W	W	W	W	W	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW		
22	9.6	8.5	9.1	10.9	10.4	11.9	10.2	10.5	10.9	12.9	19.3	20.2	18.8	18	15.2	13.1	8	5.8	6.2	5.4	5.5	2.9	3.5	4.1	20.2	
23	WSW	WSW	WSW	WSW	WSW	-	WSW	WSW	SSW	SSW	E	E	E	W	WSW											
24	4.8	10.1	6.2	6.9	8.9	12.6	13	12	17.3	11.1	11.9	11.5	17.5	14	15.8	15.6	14.2	9.7	8.3	11.2	8.4	6.2	4.9	17.5		
25	SE	ESE	ESE	ESE	SE	SE	ESE	ESE	SE	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
26	6.8	13.8	15.1	19.4	15.6	16.8	19.4	14.1	13.5	18.6	19.2	18.5	20.3	18.8	16.1	15.8	16.3	12.5	12	14.3	12.8	10.6	9.6	9.7	20.3	
27	E	E	E	SE	SE	SE	ESE	ESE	SE	SE	-	SE	ENE	E	E	ESE	E	E	E	E	E	E	ESE	ESE		
28	9.2	7.9	5.3	6.8	7.1	7	9.2	6.6	8.3	9.8	9.3	8.1	8	8.7	10.8	6.2	7.9	9	8.6	9.3	9.4	7.8	8.9	11.7	11.7	
29	E	E	E	ESE	ESE	SE	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	ESE	E		
30	10.6	11.7	11.5	9.6	9.1	9.1	6.2	3.4	4.6	4.9	8.8	9.2	9.6	8.9	14.1	20.3	16.7	10.7	11.7	11.5	11.9	11.3	8.4	12.6	20.3	
PEAK	13.3	14.9	13.9	15.2	21.1	16.2	12.5	10.9	16.9	19.2	17.9	15.7	13.3	11.3	12.5	7	7.3	8.8	7.3	8.8	6.4	4.1	4.4	4.8	21.1	
PEAK	21.2	23.6	20.8	21.9	21.1	20.4	19.4	23.6	22.7	27.4	27.6	29.8	36.0	29.0	30.1	26.8	34.7	36.9	32.9	29.0	50.3	49.3	25.4	26.7	WSW	

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

*INSTANTANEOUS MAXIMUM BASED ON ONE-MINUTE AVERAGES

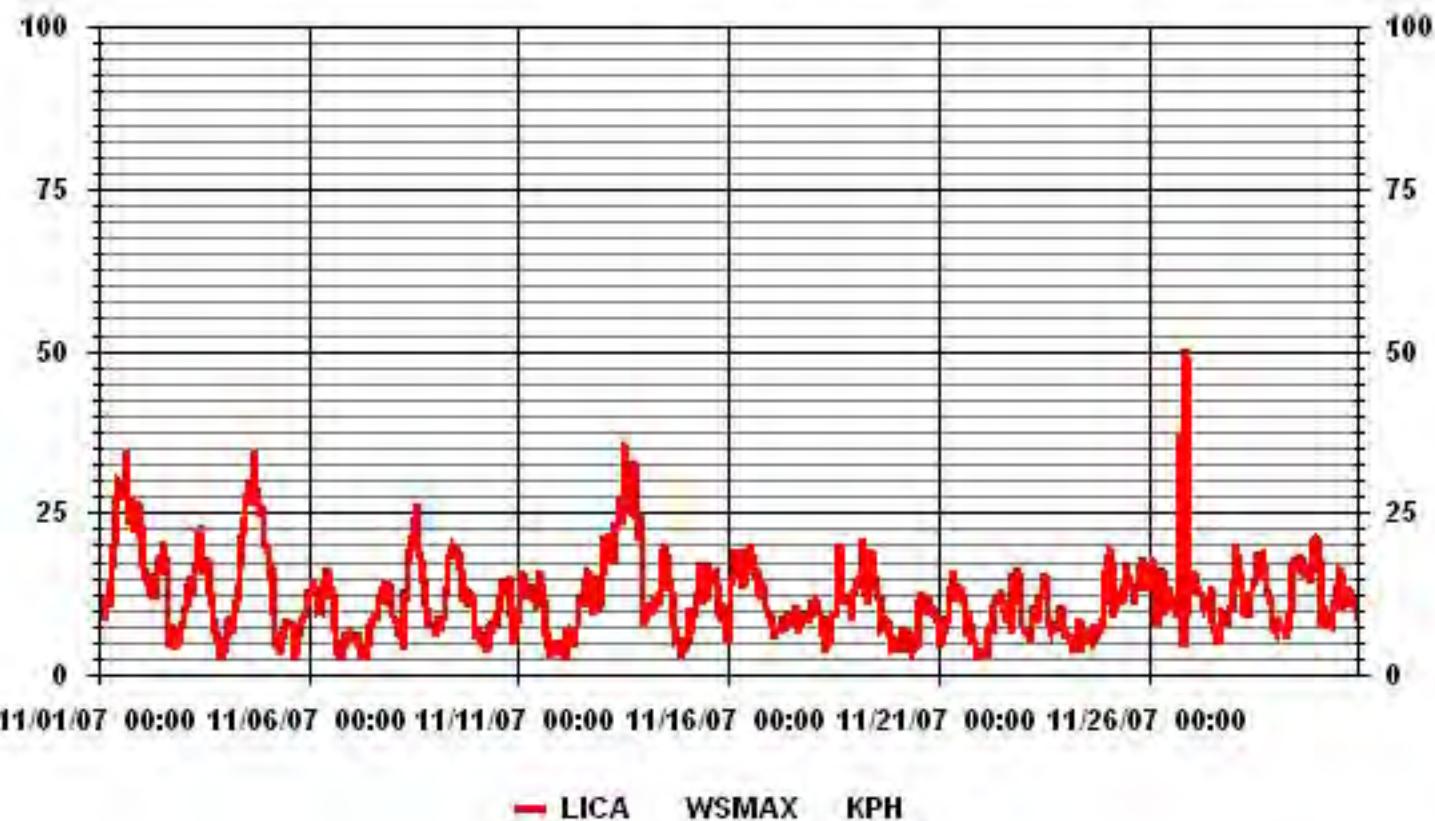
NOTE: WIND DIRECTION CORRESPONDS TO WIND SPEED MAXIMUMS

MONTHLY SUMMARY

MAXIMUM INSTANTANEOUS READING NW	KPH DEG	@ HOUR(S) ON DAY(S)	21 26
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01 Hour Averages



VECTOR WIND DIRECTION

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

VECTOR WIND DIRECTION (WD) hourly averages in degrees

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 AVG	24-HOUR AVG	QUADRANT	RDGS.	
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.	QUADRANT	RDGS.		
DAY																													
1	230	224	226	239	244	236	231	244	254	257	262	264	263	266	265	273	270	273	265	268	281	272	294	299	264	W	24		
2	294	291	277	264	262	266	257	252	249	248	252	250	233	231	233	230	213	184	206	207	83	128	125	200	250	WSW	24		
3	217	215	234	252	248	249	253	253	261	281	274	279	267	253	250	234	218	226	228	227	256	175	227	251	WSW	24			
4	243	236	238	245	249	253	247	250	252	257	275	287	281	307	315	311	312	306	315	312	313	317	319	315	295	WNW	24		
5	329	318	316	324	326	334	339	247	211	353	288	235	234	241	209	217	179	129	133	128	130	132	129	127	306	NW	24		
6	130	133	135	132	132	132	132	152	154	156	215	220	218	228	225	219	228	260	133	191	254	276	251	276	176	S	24		
7	239	246	247	245	247	228	214	231	203	252	11	125	149	140	119	114	89	91	119	114	106	112	125	119	136	SE	24		
8	121	123	128	128	134	158	203	257	265	274	284	279	287	301	307	306	315	329	321	315	277	254	238	204	288	WNW	24		
9	149	139	144	133	131	125	130	134	130	128	124	120	110	102	91	116	101	102	102	92	78	83	91	119	113	ESE	24		
10	122	139	118	133	43	124	106	112	103	105	86	95	76	80	82	84	79	82	82	90	40	296	259	269	88	E	24		
11	258	255	267	255	254	251	244	242	240	234	236	227	234	230	230	207	209	183	161	136	163	175	190	120	238	SW	24		
12	103	127	79	132	133	121	106	88	117	106	124	125	117	117	107	121	123	122	105	102	128	136	157	225	124	ESE	24		
13	241	262	268	266	267	266	268	288	309	305	298	301	303	302	301	299	295	300	302	307	304	297	299	275	291	WNW	24		
14	255	240	245	250	245	243	244	245	245	258	264	266	264	264	258	251	243	239	224	180	217	79	86	80	251	WSW	24		
15	120	120	108	98	93	89	96	101	109	89	72	83	83	81	84	86	93	82	76	64	89	81	95	218	90	E	24		
16	112	99	97	112	115	102	109	111	104	110	111	118	118	108	80	85	93	94	95	99	115	108	108	110	104	ESE	24		
17	91	97	105	114	115	116	113	108	112	130	127	119	127	128	129	117	108	113	107	106	128	111	104	93	113	ESE	24		
18	94	87	84	82	72	63	72	239	265	259	252	251	253	260	256	266	270	257	256	263	268	265	269	271	262	W	24		
19	272	300	294	299	297	293	291	290	295	299	305	308	305	289	292	289	265	261	259	265	235	214	223	235	288	WNW	24		
20	253	233	240	236	98	260	225	255	236	214	240	282	1	359	351	331	326	325	318	316	317	311	325	308	312	NW	24		
21	209	268	251	249	248	235	246	243	242	235	218	217	216	225	228	223	209	215	217	209	224	263	204	228	230	SW	24		
22	243	208	199	100	211	238	245	239	242	234	244	253	254	247	254	255	258	274	327	327	319	322	333	303	272	W	24		
23	279	260	254	260	246	230	252	251	218	227	236	229	233	233	232	249	240	237	242	242	240	243	248	244	241	WSW	24		
24	238	258	261	262	104	230	240	186	223	154	131	135	174	214	134	139	138	139	106	240	264	277	289	298	237	SW	24		
25	306	311	321	36	46	40	30	35	32	21	358	333	327	330	321	316	312	316	321	328	331	326	324	311	336	NNW	24		
26	317	314	318	305	275	292	298	283	255	280	304	267	269	235	225	230	233	236	130	129	314	324	315	119	287	WNW	24		
27	97	98	101	110	93	95	90	93	102	81	103	96	126	129	148	162	183	232	238	222	235	243	266	265	125	SE	24		
28	282	303	307	304	293	291	287	261	234	252	255	253	243	242	229	246	253	256	263	263	265	268	258	267	265	W	24		
29	260	263	253	263	248	241	233	248	282	289	292	291	270	255	248	251	252	240	232	231	238	243	246	251	255	WSW	24		
30	251	250	202	213	209	235	258	263	282	289	299	296	311	320	314	305	335	327	331	317	339	327	317	335	292	WNW	24		
HOURLY AVG	329	318	321	324	326	334	339	290	309	353	358	333	327	359	351	331	335	329	331	328	339	327	333	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

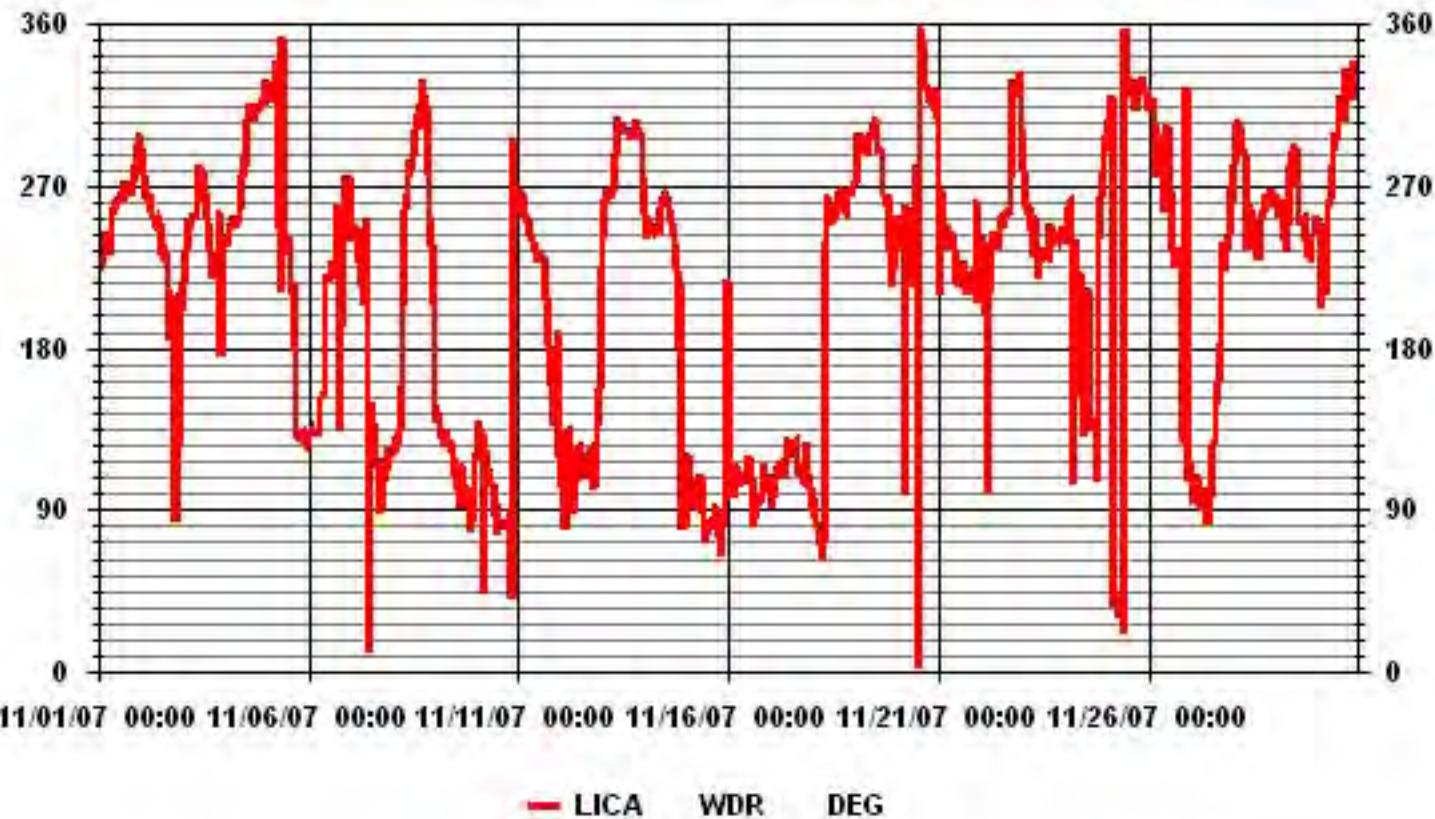
LAST CALIBRATION: NA
DECLINATION : 19 DEGREES FROM MAGNETIC NORTH

MONTHLY CALIBRATION TIME:	0 HRS	OPERATIONAL TIME:	720 HRS
STANDARD DEVIATION	79.73	AMD OPERATION UPTIME	100.0 %
		MONTHLY AVERAGE	262.00 DEG



MOUNTAIN STANDARD TIME

01 Hour Averages



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

STANDARD DEVIATION WIND DIRECTION (STDWDIR) hourly averages in degrees

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	
DAY																									
1	17	16	16	17	13	15	14	13	14	16	17	18	17	18	18	19	18	18	18	18	16	17	17	15	14
2	15	16	17	16	15	17	14	13	14	16	17	18	19	18	17	16	20	29	20	38	53	22	37	43	
3	14	15	15	13	14	13	13	14	15	17	19	18	21	20	18	15	14	14	14	15	16	67	40	47	
4	23	14	13	12	11	12	9	11	14	15	18	18	19	19	15	15	15	15	14	16	13	14	14	16	14
5	16	14	14	13	12	20	25	32	32	64	57	45	64	62	57	25	21	20	18	9	11	13	13	12	
6	12	14	16	16	14	13	15	33	36	39	25	20	20	18	18	25	19	28	42	54	20	51	10	18	
7	6	5	9	8	15	6	34	23	46	21	51	58	55	34	24	19	16	18	17	19	20	20	13	18	
8	16	15	15	17	41	48	47	22	16	18	16	18	15	13	14	13	13	14	15	17	16	15	14	25	
9	37	21	29	15	13	12	15	16	13	14	16	17	20	20	20	18	21	22	21	19	17	15	20	23	
10	18	56	42	46	48	54	26	18	23	21	19	24	19	17	16	17	16	15	16	19	48	52	22	16	
11	16	14	15	14	14	12	11	13	14	15	16	16	16	16	16	20	17	46	53	51	48	58	63	31	
12	18	17	44	19	21	32	22	24	13	21	16	13	19	17	19	14	14	14	19	18	12	16	35	15	
13	15	16	17	17	19	17	15	14	14	14	14	14	14	16	14	14	15	15	15	15	15	16	15	17	
14	14	13	11	11	10	11	11	11	11	17	17	18	17	18	17	13	27	10	22	40	66	43	23	21	
15	25	15	20	20	18	17	20	21	19	19	17	18	17	19	17	17	18	18	14	15	20	15	26	32	
16	20	20	19	18	18	21	20	20	21	20	18	18	18	16	18	18	20	19	20	18	21	21	21		
17	18	20	20	20	18	17	20	21	20	13	14	18	19	15	15	18	19	20	21	20	15	20	18		
18	19	18	15	17	18	17	22	41	17	19	15	16	16	19	16	16	17	15	15	16	17	16	17		
19	20	14	14	13	15	14	15	16	13	13	13	13	14	15	13	15	19	15	16	18	7	27	47	19	
20	46	60	31	50	39	23	24	49	41	21	26	23	27	18	17	14	12	12	11	12	11	11	16	18	
21	39	23	32	26	21	17	15	17	16	16	18	19	22	18	17	15	23	16	15	21	27	57	43		
22	56	50	73	58	52	13	9	12	12	12	14	15	14	14	16	14	13	17	15	14	13	13	16	14	
23	16	15	14	14	23	17	14	29	22	15	15	16	16	16	15	14	10	11	9	8	8	11	12	12	
24	42	32	17	24	31	28	41	38	47	35	33	24	37	27	36	23	21	21	55	30	16	16	15	13	
25	11	13	20	23	18	17	20	17	18	19	19	14	13	16	16	13	12	12	11	11	13	12	13		
26	13	12	12	12	30	14	13	31	31	29	16	19	28	17	17	18	16	42	30	36	33	30	21	16	
27	19	19	18	21	21	22	22	22	25	20	22	21	19	23	24	37	28	15	16	17	15	11	17	19	
28	16	12	12	12	16	17	22	29	18	18	16	16	16	15	16	14	14	13	17	16	16	20	26	35	
29	29	35	21	42	18	10	13	24	18	14	15	13	19	14	13	13	13	13	15	16	13	13	12	13	
30	13	13	20	18	18	11	29	33	17	14	14	13	15	13	15	13	17	13	17	14	20	12	12	19	

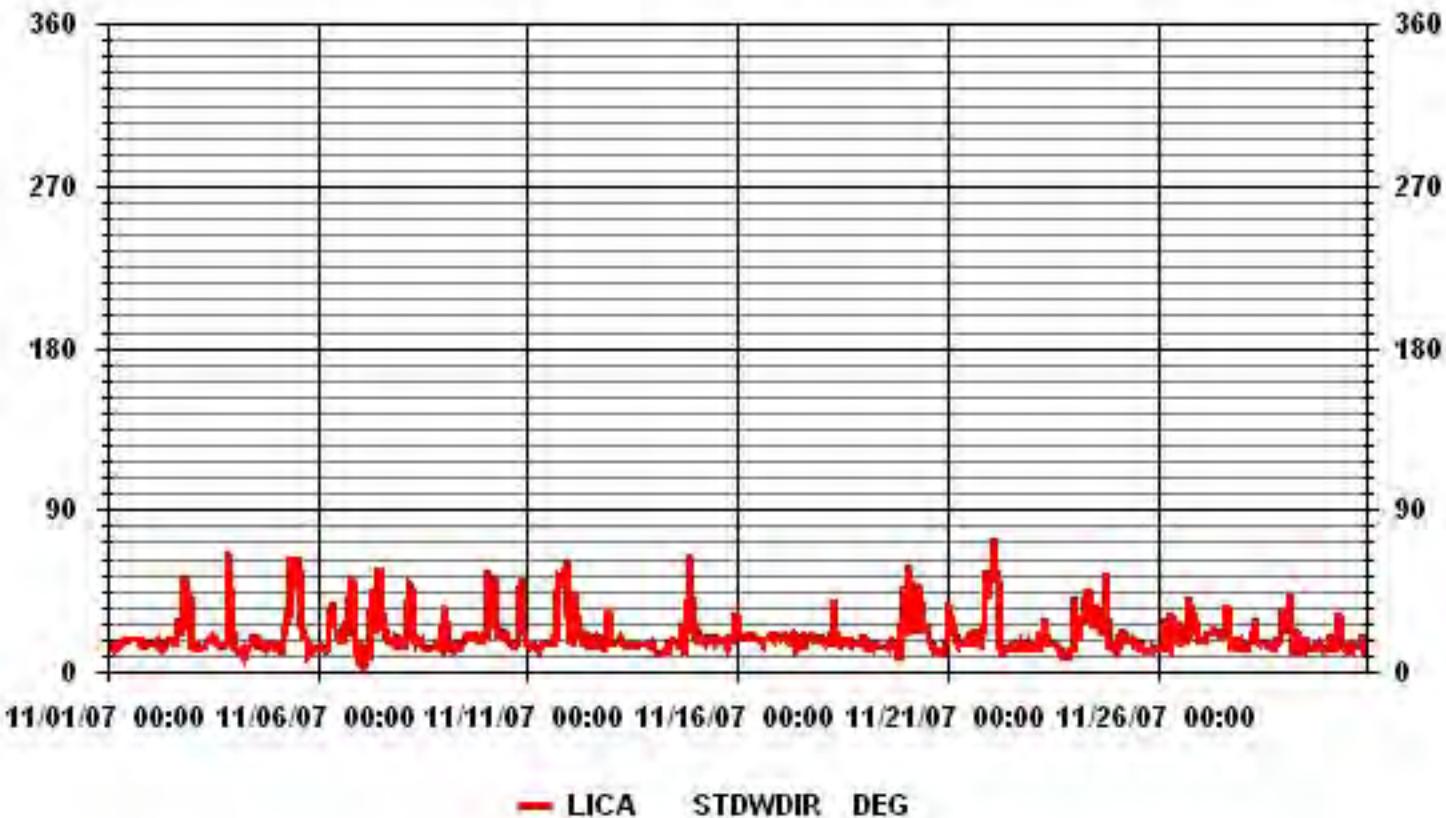
STATUS FLAG CODES

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: NA

CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 720 HRS

01 Hour Averages



TEMPERATURE

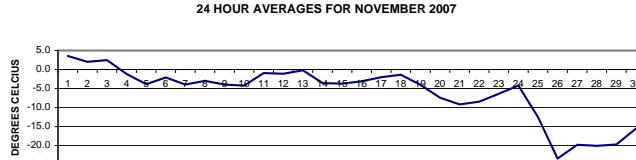
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

AMBIENT TEMPERATURE hourly averages (Degrees C)

	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 MAX.	24-HOUR AVG.	RDGS.
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	0:00		
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	3.8	3.7	3.5	3.1	2.7	2.8	2	1.4	2.8	4	5.1	5.9	6.4	6.3	5.6	4.6	3.7	2.5	2.4	2.3	1.2	1.6	1.7	6.4	3.6	24	
2	1.7	1.9	1.8	1	0.2	0	-0.7	-1.4	-0.6	1.1	2.4	3.9	4.7	5.1	5.2	4.7	3.1	2	2.4	2.4	1.7	1.7	2.2	2	5.2	2.0	24
3	2.7	2.7	2.2	1.7	1.9	1.8	0.8	0.6	1.3	2.9	4.7	5.6	6	6.5	6.4	5.3	3.7	2.8	2	1	0	-0.1	-1.2	-1.8	6.5	2.5	24
4	-2.2	-2.9	-0.9	-0.6	-1.2	-2.1	-2.8	-2.8	-1.9	-0.1	1.6	2.7	3.1	2.2	0.8	-0.3	-0.8	-1.4	-2	-2.6	-3.2	-3.4	-3.5	-3.5	3.1	-1.2	24
5	-3.8	-4.3	-4.8	-5.3	-6.2	-6.3	-6.2	-6.5	-6.2	-3.5	-3.1	-2.3	-1.3	-0.6	-0.3	-0.7	-2.4	-4.1	-4.7	-4	-4.1	-3.7	-3.9	-4.3	-0.3	-3.9	24
6	-4.5	-4.1	-3.6	-3.2	-2.8	-2.8	-2.9	-2.3	-2.3	-1.7	-1	0.2	0.8	2.3	2.6	3.1	1.2	-1.6	-2.7	-3.7	-4.5	-5.1	-6	-5.6	3.1	-2.1	24
7	-5.6	-6.8	-7.6	-8.1	-8.2	-8.9	-9.3	-8.6	-6.4	-3.5	-1.2	-0.9	-0.7	-0.1	-0.2	-0.3	-1	-1.6	-1.9	-2.6	-2.7	-2.8	-3	-2.9	-0.1	-4.0	24
8	-2.8	-2.7	-2.6	-2.5	-2.5	-2.6	-2.2	-1.9	-1.5	-0.7	-1.1	-1.9	-2.4	-3.1	-3.6	-3.7	-3.9	-4	-4.1	-4.2	-4.3	-4.4	-4.4	-4.4	-0.7	-3.0	24
9	-4.5	-4.6	-4.5	-4.6	-4.7	-4.8	-4.8	-4.7	-4.6	-4.4	-4.3	-4	-3.8	-3.7	-3.4	-3.1	-3.1	-3.3	-3.3	-3.3	-3.4	-3.4	-3.1	-4.0	-4.0	24	
10	-3.4	-4.1	-4.9	-6.6	-8.1	-8.8	-8	-6.6	-5.9	-5.4	-5.2	-4.5	-3.5	-3.1	-2.7	-2.6	-2.8	-2.9	-2.4	-2.1	-2	-1.9	-1.9	-1.9	-4.2	24	
11	-1.7	-1.3	-0.3	0.7	0.5	-0.5	-2	-2.8	-3.1	-2.1	-0.1	1.3	2	3	2.7	1.7	0.9	-1.9	-4.4	-4.6	-1.7	-2.3	-4	-2.3	3.0	-0.9	24
12	-4.4	-4.7	-6.1	-5.9	-5	-5	-5.5	-5.7	-4.8	-1.6	-0.2	0.3	1.3	1.7	1.4	1.4	1.6	1.7	1.5	1.5	2.7	2.7	2.1	2.3	2.7	-1.1	24
13	3.3	3.7	1.2	0.6	0.5	0.1	0.3	0.7	0	0	-0.3	0	-0.1	-0.2	-0.2	-0.3	-0.5	-1	-1.5	-1.8	-1.8	-2	-2.5	-3.1	3.7	-0.2	24
14	-3	-3.4	-4.5	-4.7	-4.6	-4.9	-5	-5.1	-4.5	-2.5	-1.1	-0.1	0.9	1.6	2	1.4	-0.6	-2.9	-4	-6.3	-7.6	-8.6	-8.9	-9.1	2.0	-3.6	24
15	-8.7	-6	-5.1	-4.8	-4.2	-4.4	-4.2	-3.7	-3.6	-4.2	-3.9	-2.8	-1.9	-1.5	-1.5	-1.4	-1.9	-2.4	-3.3	-3.6	-2.8	-3.1	-4	-6.2	-1.4	-3.7	24
16	-4.7	-3.7	-3.7	-3.6	-3.8	-3.8	-3.5	-3.4	-3.2	-2.8	-2.4	-2.2	-1.7	-1.4	-2.6	-2.9	-2.8	-3.1	-3.2	-3.2	-3.1	-3.2	-3.2	-3.2	-1.4	-3.1	24
17	-3.3	-3.2	-2.9	-2.8	-2.7	-2.8	-2.7	-2.6	-2.5	-2.4	-2	-1.6	-1.1	-1	-1.1	-0.9	-1.1	-1.5	-1.6	-1.7	-1.8	-1.7	-1.7	-1.7	-0.9	-2.0	24
18	-1.7	-1.8	-1.9	-2	-2	-2	-1.8	-1.6	-1.7	-1.5	-1.4	-1	-0.7	-0.6	-0.6	-1	-1.3	-1.4	-1.4	-1.3	-1.2	-1	-1.1	-1.1	-0.6	-1.4	24
19	-1.2	-1.4	-1.7	-1.9	-2.5	-3	-3.6	-3.5	-3.3	-3.3	-3.2	-2.9	-2.5	-2.3	-2.6	-2.6	-2.8	-3.3	-3.7	-5	-7	-9.3	-11.5	-12.1	-1.2	-4.0	24
20	-12.3	-10.7	-9.9	-10	-9	-8.8	-8.8	-8.7	-8.1	-7.6	-7	-5.7	-4.5	-4.8	-5.2	-5.6	-5.8	-5.9	-6.2	-6.4	-6.6	-6.7	-6.8	-6.9	-4.5	-7.4	24
21	-7	-7.2	-7.2	-7.4	-7.6	-7.7	-7.9	-8.4	-8.4	-8.1	-7.7	-7.3	-6.8	-5.7	-5.6	-6.1	-8.4	-9.3	-10.5	-12.5	-13.9	-15.3	-16.6	-17.7	-5.6	-9.2	24
22	-18.2	-18.6	-18.4	-14.5	-11.5	-11.3	-11.8	-10.8	-9.4	-7.3	-6.5	-5.6	-4.7	-3.4	-3.2	-4	-3.7	-3.2	-3.2	-3.4	-3.7	-4.5	-5.3	-3.2	-8.5	24	
23	-6.3	-7.5	-8.9	-9.5	-7.6	-7.3	-6.4	-6.2	-7.4	-7.5	-6.6	-5.6	-4.9	-3.8	-3.7	-4.5	-5.6	-5.6	-6.3	-6.6	-7.3	-6.5	-5.7	-5.7	-3.7	-6.4	24
24	-5.7	-5.8	-5.9	-5.5	-5.6	-6.6	-5.9	-5.7	-5	-4.4	-4.1	-3.7	-3.5	-3.5	-3.4	-3.1	-2.8	-2.7	-2.3	-2.1	-2.2	-2.5	-2.1	-4.2	-4.2	24	
25	-3	-3.2	-4	-6.6	-7.7	-8.2	-8.8	-9.7	-10.7	-11.5	-12.1	-13.4	-13.9	-14.2	-14.3	-14.9	-15.8	-16.7	-17.4	-17.9	-18.3	-18.8	-19.1	-19.9	-3.0	-12.5	24
26	-20.5	-21.2	-22.2	-23.3	-24	-24.8	-24.7	-25.2	-25.8	-24.7	-23.7	-22.9	-21.7	-21.6	-22.5	-22.9	-23.4	-23.6	-23.8	-24.8	-24.4	-23.2	-22	-20.5	-23.4	24	
27	-21.5	-21.4	-21.6	-21.9	-22.1	-22	-21.9	-21.3	-20.7	-20.5	-20.5	-20	-19.2	-18.6	-18.2	-18.3	-18.5	-18.4	-18.2	-18.1	-17.7	-17.5	-17.5	-19.8	-24	24	
28	-17.4	-17.5	-18.6	-19.8	-20.6	-21.3	-21.8	-22.7	-23.8	-23	-21.7	-20.3	-19.3	-18.6	-18.4	-18	-18.7	-19.2	-19.5	-19.9	-20.2	-20.4	-20.7	-20.2	-17.4	-20.1	24
29	-20	-20.4	-21.5	-22.6	-23.5	-23.3	-23.1	-22.3	-21.5	-20.5	-19.6	-18.6	-17.2	-16.7	-17	-17.8	-18.9	-19.7	-19.4	-19.4	-19	-18.1	-16.4	-16.4	-19.7	24	
30	-15.8	-15.7	-17.6	-18.3	-18.6	-18.8	-19.5	-19.7	-18.6	-16.2	-14.8	-13.7	-13	-12.8	-12.9	-13.1	-13.4	-13.9	-14.1	-14.1	-14.3	-14.6	-14.7	-14.7	-12.8	-15.5	24
HOURLY MAX	3.8	3.7	3.5	3.1	2.7	2.8	2.0	1.4	2.8	4.0	5.1	5.9	6.4	6.5	5.6	4.6	3.7	2.5	2.4	2.7	2.7	2.2	2.3				
HOURLY AVG	-6.4	-6.4	-6.7	-7.0	-7.1	-7.3	-7.4	-7.1	-6.2	-5.4	-4.7	-4.1	-3.8	-3.9	-4.1	-4.8	-5.5	-5.9	-6.3	-6.4	-6.7	-6.9	-7.0				

24 HOUR AVERAGES FOR NOVEMBER 2007

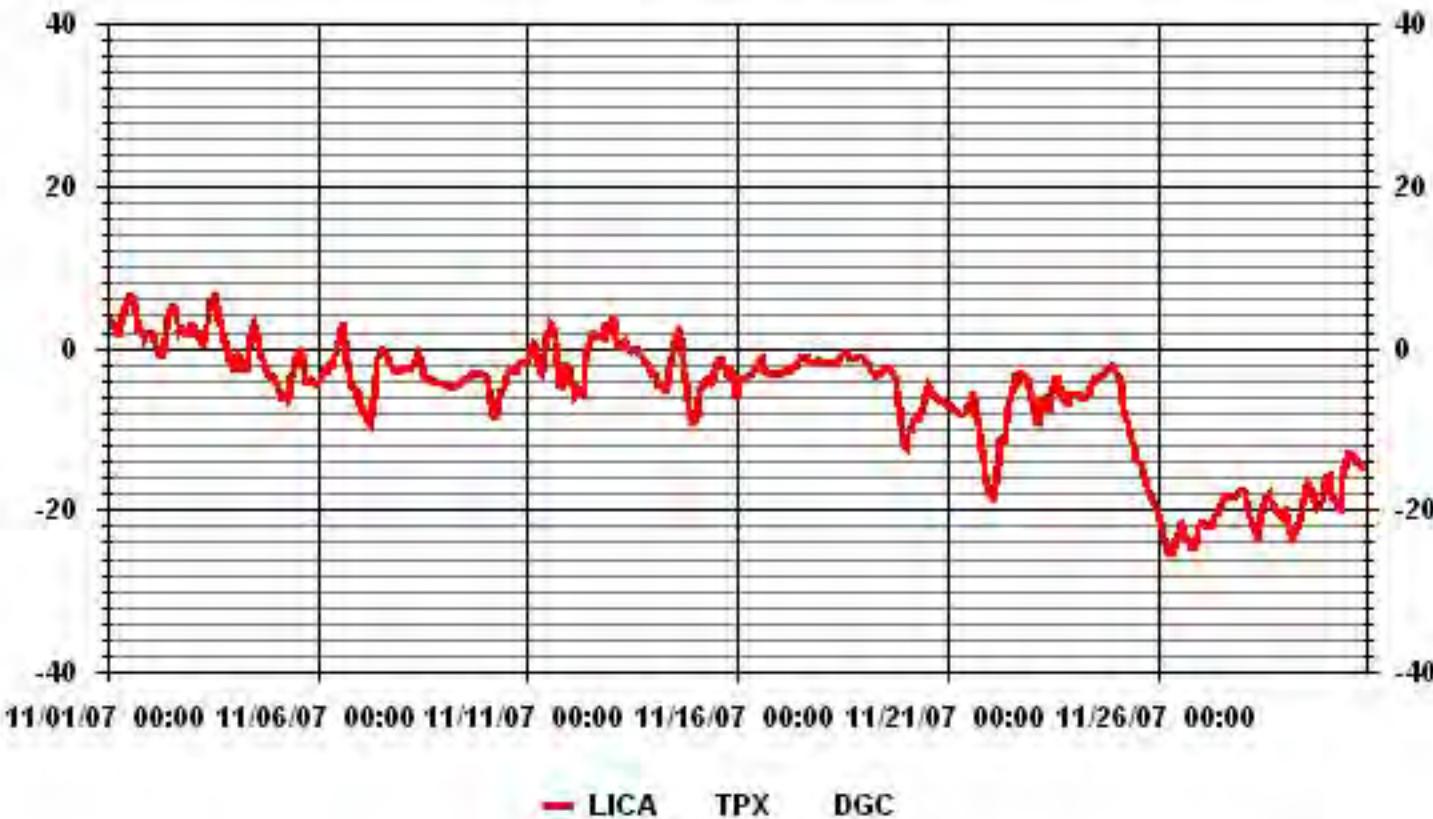


MOUNTAIN STANDARD TIME

MINIMUM 1-HR AVERAGE:	-25.8	°C	@ HOUR(S)	9	ON DAY(S)	26
MAXIMUM 1-HR AVERAGE:	6.5	°C	@ HOUR(S)	14	ON DAY(S)	3
MAXIMUM 24-HR AVERAGE:	3.6	°C			ON DAY(S)	1

CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	720	HRS
AMD OPERATION UPTIME:			100.0	%	
STANDARD DEVIATION:	7.40		MONTHLY AVERAGE:	-6.03	°C

01 Hour Averages



RELATIVE HUMIDITY

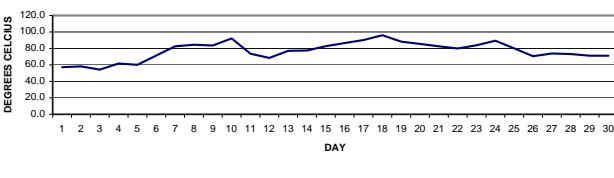
LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - COLD LAKE

NOVEMBER 2007

RELATIVE HUMIDITY hourly averages (%)

HOUR START HOUR END	0:00 1:00	1:00 2:00	2:00 3:00	3:00 4:00	4:00 5:00	5:00 6:00	6:00 7:00	7:00 8:00	8:00 9:00	9:00 10:00	10:00 11:00	11:00 12:00	12:00 13:00	13:00 14:00	14:00 15:00	15:00 16:00	16:00 17:00	17:00 18:00	18:00 19:00	19:00 20:00	20:00 21:00	21:00 22:00	22:00 23:00	23:00 0:00	DAILY MAX.	24-HOUR AVG.	RDGS.	
DAY																												
1	47.1	50.7	52.2	54.4	55.9	56.6	60.5	62.9	57.6	53.6	48.3	43.1	39.7	38.6	37.4	40.7	49.3	58.8	69.3	69.8	72.3	89.0	84.2	81.5	89.0	57.2	24	
2	79.9	74.7	74.9	77.6	77.4	73.3	71.4	70.7	66.4	59.7	53.9	48.1	45.4	42.3	40.5	41.1	46.3	50.4	49.2	49.4	55.1	53.9	47.2	48.2	79.9	58.2	24	
3	44.9	48.0	55.7	61.1	63.4	63.7	66.7	66.3	63.0	58.3	54.6	48.4	44.6	40.0	39.7	40.0	44.1	46.8	50.8	53.7	56.8	57.8	65.5	68.8	68.8	54.3	24	
4	71.5	75.6	59.5	62.2	66.9	70.4	72.5	71.9	69.1	61.3	54.8	50.9	48.6	49.0	53.6	56.2	57.6	56.0	56.9	60.5	63.0	64.2	63.5	64.2	75.6	61.7	24	
5	64.5	63.7	63.6	64.4	67.3	68.3	70.3	72.9	73.1	60.3	59.1	55.2	49.1	44.1	41.9	43.2	50.7	56.8	60.0	57.1	59.7	61.7	66.1	70.1	73.1	60.1	24	
6	70.2	69.8	67.8	65.6	65.0	65.7	65.8	62.9	69.1	68.8	68.0	62.0	60.7	58.2	59.4	59.4	68.6	79.3	83.1	84.4	87.9	88.6	90.8	93.2	93.2	71.4	24	
7	92.3	91.8	91.2	90.9	89.1	88.7	88.0	87.9	84.6	80.7	73.6	69.1	66.8	63.5	64.2	64.5	71.7	79.0	83.4	93.8	93.0	91.9	91.1	91.3	93.8	82.6	24	
8	92.5	91.7	91.9	92.5	92.9	93.5	93.2	95.1	95.2	92.4	84.4	79.2	77.3	78.1	76.8	77.1	77.0	76.7	76.7	77.4	78.2	79.6	79.4	78.7	95.2	84.5	24	
9	79.8	80.2	80.4	81.1	81.9	82.3	82.3	81.4	81.0	79.8	79.3	79.9	80.8	82.8	87.3	84.8	84.5	86.4	89.7	88.7	88.3	88.8	89.1	89.7	83.5	24		
10	89.4	91.3	92.9	93.5	93.5	92.8	93.2	94.2	94.3	94.5	94.5	94.7	94.6	93.2	88.8	87.6	89.4	90.3	89.8	89.7	89.5	92.0	93.3	95.2	95.2	92.2	24	
11	95.5	95.7	95.8	91.1	87.6	85.4	85.6	82.8	78.9	72.9	65.6	58.2	54.2	50.8	52.5	56.8	56.7	68.3	79.7	76.9	65.3	68.6	74.8	66.7	95.8	73.6	24	
12	75.9	75.8	82.3	81.2	77.4	77.3	79.6	81.0	75.8	63.5	58.4	58.4	57.3	57.9	60.2	62.8	64.7	65.4	66.8	68.1	62.2	62.9	65.1	63.6	82.3	68.5	24	
13	62.9	62.2	69.0	74.2	81.8	90.6	89.9	84.5	85.7	79.1	86.3	83.5	75.4	75.5	75.2	79.3	76.6	74.4	71.9	72.3	72.9	73.4	74.8	78.4	90.6	77.1	24	
14	80.7	83.8	87.2	87.0	85.1	86.2	87.3	86.9	83.3	75.5	70.1	65.8	61.8	59.0	56.2	57.0	64.9	73.2	76.7	82.6	85.1	87.6	88.2	88.3	77.5	24		
15	87.5	82.3	77.7	77.3	74.4	75.0	74.3	71.1	72.3	87.5	86.1	80.3	78.8	79.9	80.1	81.9	85.3	86.3	87.9	90.5	90.5	91.8	93.7	92.7	93.7	82.7	24	
16	95.2	94.8	92.5	91.2	91.9	91.6	90.1	89.3	87.7	85.0	82.4	80.2	77.8	78.0	84.5	85.5	83.2	82.9	83.7	83.8	84.1	85.2	87.9	88.4	95.2	86.5	24	
17	89.4	89.6	89.3	89.5	90.8	91.7	91.0	91.0	90.8	90.3	89.0	87.3	85.1	84.8	85.8	84.1	85.6	90.5	92.1	94.4	95.8	96.6	96.0	94.7	96.6	90.2	24	
18	95.0	96.4	97.3	97.7	97.8	97.3	96.6	96.4	96.3	95.8	95.4	94.6	94.0	94.3	95.0	95.6	96.1	96.4	96.5	96.4	96.3	95.9	96.2	96.2	97.8	96.1	24	
19	95.9	95.3	94.2	93.4	90.6	88.7	88.7	89.1	88.1	86.2	84.8	84.1	84.4	85.1	83.6	85.4	87.4	83.9	84.9	86.4	86.4	89.1	89.5	95.9	88.3	24		
20	88.1	89.2	90.2	90.0	89.7	89.6	89.4	89.0	89.1	89.3	87.7	84.8	81.4	79.2	76.5	82.4	81.8	79.1	80.9	81.1	83.5	85.3	85.8	90.2	85.5	24		
21	86.0	85.2	83.4	83.5	84.2	84.9	82.0	82.0	82.5	82.2	81.4	80.2	79.0	74.8	73.5	75.6	85.0	86.0	88.2	87.5	86.7	84.6	82.0	80.8	88.2	82.6	24	
22	80.1	79.9	80.5	81.9	84.4	85.8	85.3	84.7	81.6	80.1	75.6	75.3	76.7	76.3	73.5	74.7	80.7	82.3	81.4	79.4	80.3	79.0	78.4	81.1	85.8	80.0	24	
23	83.4	86.3	89.3	91.2	89.4	89.8	91.5	91.5	91.7	87.8	82.3	77.2	74.1	71.3	72.3	76.0	81.3	80.7	83.1	84.2	86.5	84.5	82.9	83.5	91.7	83.8	24	
24	84.9	86.3	86.6	85.7	87.6	90.0	88.3	88.4	88.3	85.6	82.9	81.8	84.2	86.9	90.2	92.4	93.8	94.6	94.7	95.1	95.3	95.0	94.0	92.2	95.3	89.4	24	
25	89.5	82.4	83.2	90.6	91.0	91.1	90.5	89.0	86.2	84.2	80.2	74.5	73.2	70.6	69.6	72.2	73.6	74.6	75.9	74.9	76.3	76.7	76.7	74.4	91.1	80.0	24	
26	71.3	71.4	67.5	70.0	71.6	72.9	72.3	73.8	70.6	66.9	65.8	63.0	63.4	66.7	68.1	68.8	70.5	73.9	75.8	75.0	75.8	74.4	71.3	75.8	70.6	24		
27	70.3	69.8	70.4	71.0	73.2	74.3	74.3	74.4	74.9	74.9	73.1	71.8	71.3	70.3	70.3	71.7	73.8	74.8	75.0	76.3	78.4	79.9	79.3	79.9	73.9	24		
28	77.8	71.7	71.4	71.7	72.4	74.1	74.5	75.4	75.8	73.1	69.7	66.8	65.0	65.5	65.7	68.6	72.5	74.5	77.0	78.4	79.0	79.1	78.8	77.2	79.1	73.2	24	
29	77.5	78.1	79.3	78.9	78.2	77.9	77.5	77.5	77.5	77.5	72.8	70.9	67.6	63.4	61.1	61.1	62.7	64.1	68.2	70.6	70.0	70.9	70.0	68.0	66.1	79.3	71.2	24
30	65.5	66.4	72.5	70.5	72.0	72.0	74.9	79.6	79.5	78.1	78.1	76.8	75.1	71.0	69.4	71.9	70.9	68.0	69.5	67.3	67.6	67.8	70.2	64.4	66.3	79.6	71.1	24
HOURLY MAX	95.9	96.4	97.3	97.7	97.8	97.3	96.6	96.4	96.3	95.8	95.4	94.7	94.6	94.3	95.0	95.6	96.1	96.4	96.3	96.6	96.2	96.2						
HOURLY AVG	79.5	79.3	79.7	80.4	80.8	81.4	81.6	81.4	80.4	77.5	74.6	71.6	69.4	68.2	68.6	69.7	72.8	75.2	77.1	78.2	78.8	79.9	80.0	79.9				

24 HOUR AVERAGES FOR NOVEMBER 2007



90

MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE: 97.8 % @ HOUR(S) 5 ON DAY(S) 18

MAXIMUM 24-HR AVERAGE: 96.1 % ON DAY(S) 18

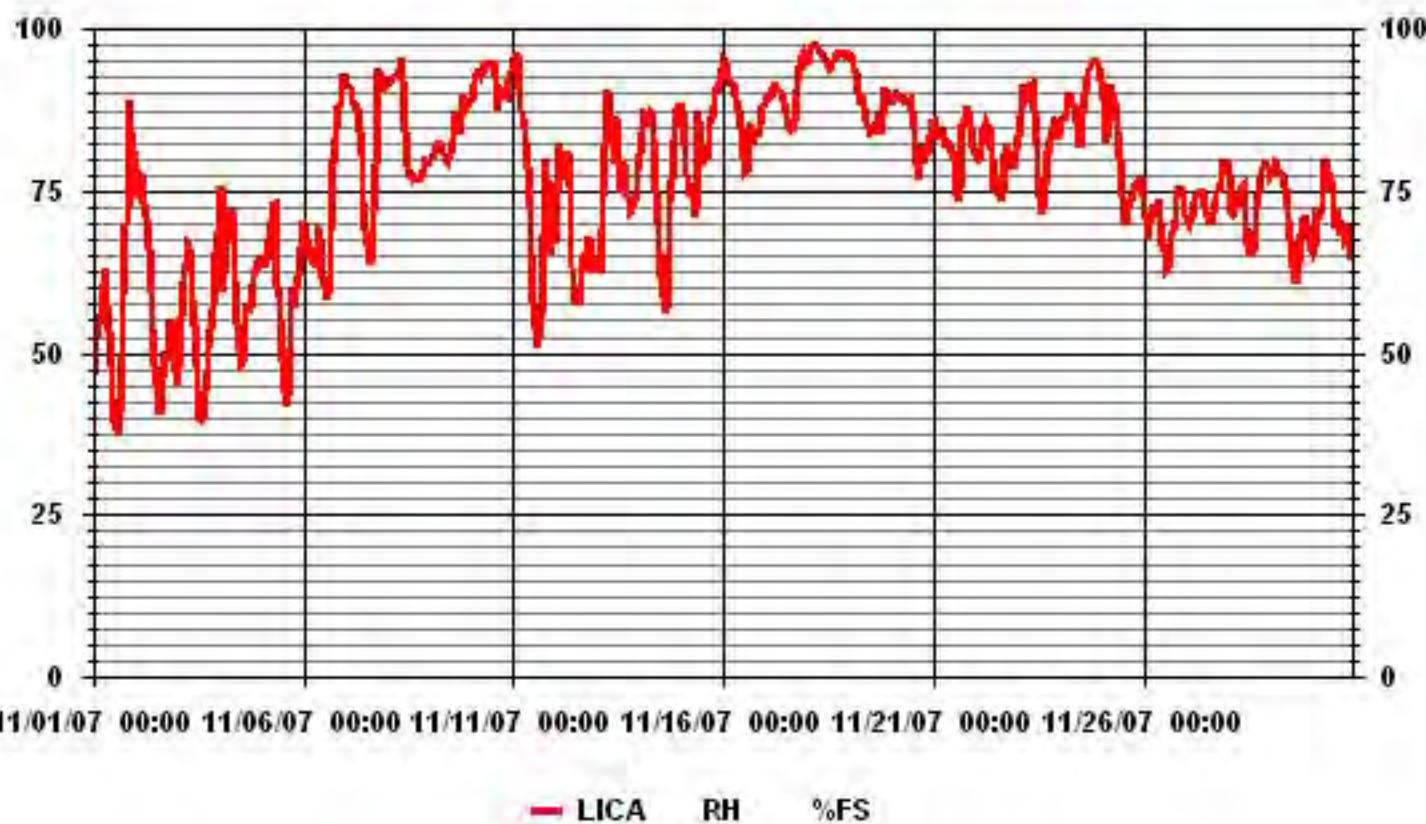
CALIBRATION TIME: 0 HRS OPERATIONAL TIME: 720 HRS

AMD OPERATION UPTIME: 100.0 %

STANDARD DEVIATION: 13.11 MONTHLY AVERAGE: 76.91 %

MOUNTAIN STANDARD TIME

01 Hour Averages



NOVEMBER 2007
CALIBRATION REPORTS

LICA – COLD LAKE

SO₂

SO₂ Calibration Report

Station Information

Calibration Date	November 19, 2007	Previous Calibration	October 1, 2007
Lakeland Industry & Community Association			
LICA 1 - Cold Lake South			
Start Time (MST)	8:00	End Time (MST)	12:05
Reason: Monthly Calibration			
Barometric Pressure	711 mmHg	Station Temperature	21 Deg C
Cal Gas	50.2 ppm	Cal Gas Expiry date	06/18/2009
DAS Output Voltage	0 - 10 Volts		

Equipment Information

Analyzer Make / Model:	TECO 43A	S/N :	43A-4468-272	Method:	Fluorescent
Converter Make / Model:	-	S/N :	-		
Calibrator Make / Model:	Environics 2000	S/N :	1991	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	263		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

Concentration Range	Before Calibration				After Calibration			
	700 ccm	OK	0 - 500	ppb	700 ccm	OK	845	Deg C
HVPS / Lamp Setting	OK		845		OK		845	
PMT / RxCell Temp	OK	Deg C	OK	50	OK	Deg C	OK	Deg C
Converter / IZS Temp	NA	Deg C	OK	40	NA	Deg C	OK	Deg C
Offset / Slope	98		878		98		906	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
ZERO	ZERO	0	1	N/A
4959	40.2	404	400	1.0092
4959	40.2	404	405	0.9967
4974	25.2	253	253	1.0002
4984	15.1	152	152	0.9976
ZERO	ZERO	0	1	N/A
Sum of Least Squares				0.9977
New Correction Factor				0.9967

Before Calibration

After Calibration

Auto Zero	0	0
Auto Span	340	340
Sample Lines Connected		
Percent Change from Previous Calibration		

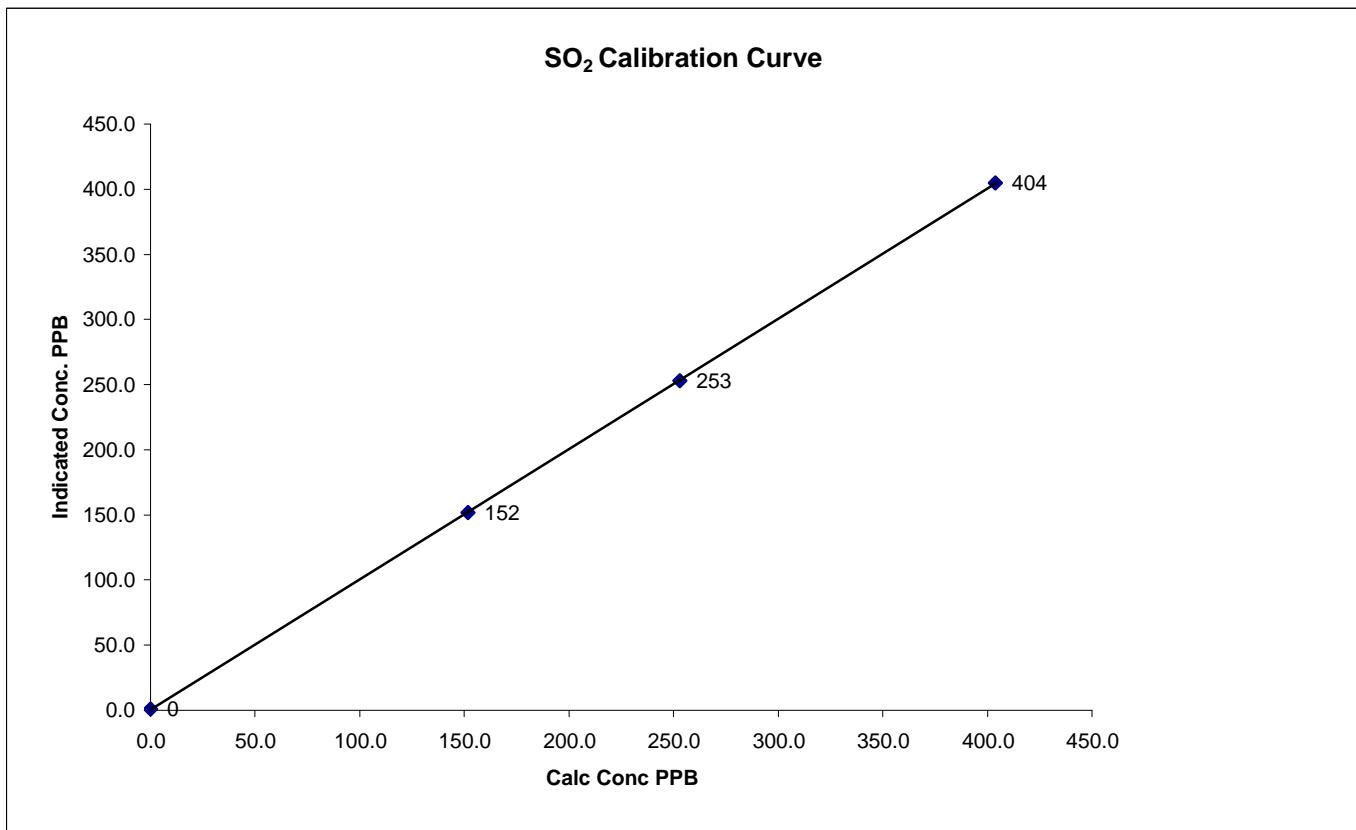
Notes:

Calibration Performed by: Shea Beaton

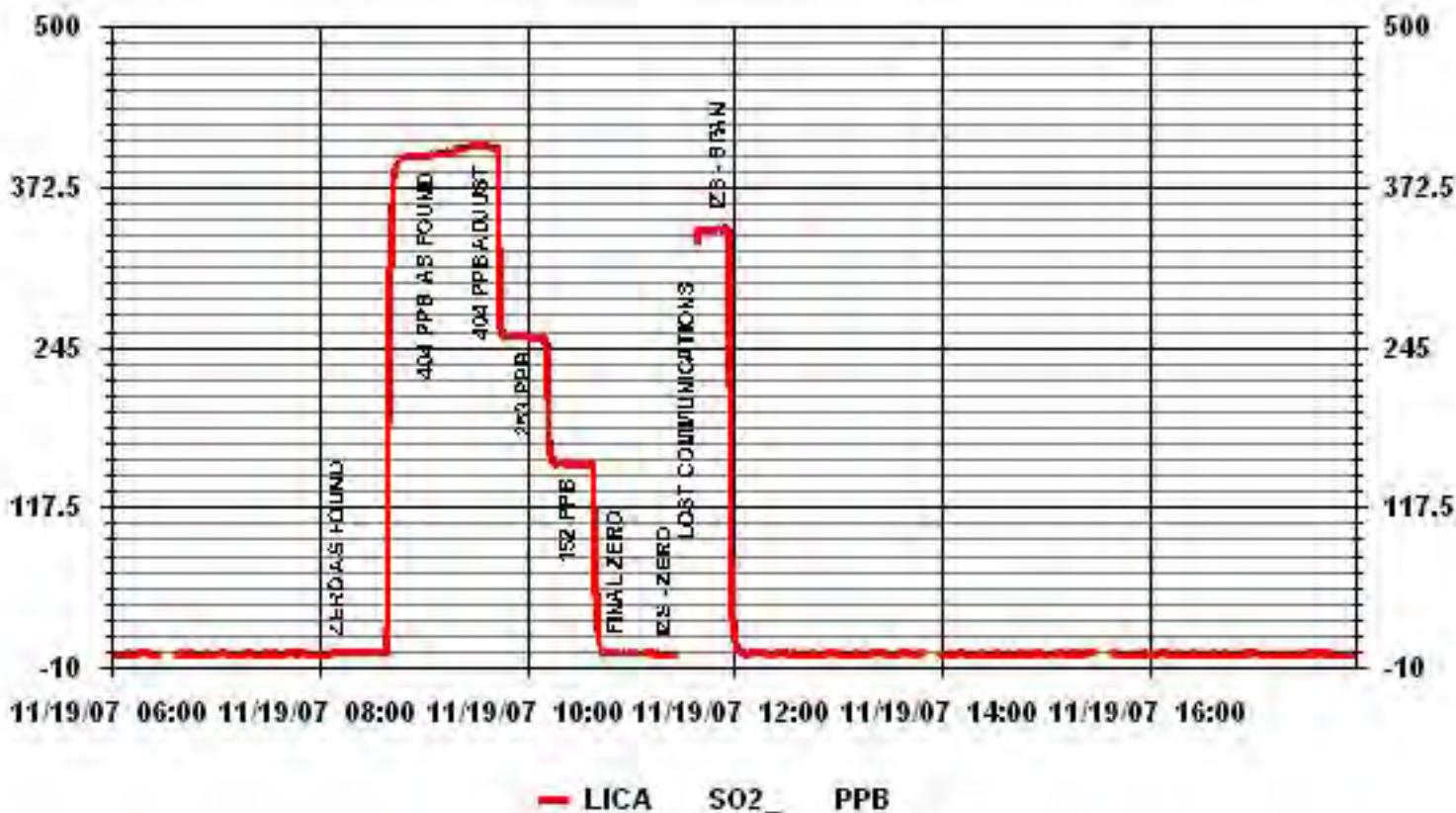
SO₂ Calibration Curve

Calibration Date	November 19, 2007		
Company	Lakeland Industry & Community Association		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	8:00	End Time (MST)	12:05

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995) (0.85 to 1.15)	0.999987
			Slope	(± 3% F.S.)	1.000513
			Intercept		0.558266
0	1	n/a			
152	152	0.9976			
253	253	1.0002			
404	405	0.9967			



01 Minute Averages



TRS

TRS Calibration Report

Station Information

Calibration Date	November 19, 2007	Previous Calibration	October 1, 2007
Company	Lakeland Industry & Community Association		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	8:00	End Time (MST)	12:00
Reason:	Monthly Calibration		
Barometric Pressure	711	mm Hg	Station Temperature 21 Deg C
Cal Gas	10.2	ppm	Cal Gas Expiry date 07/03/2008
DAS Output Voltage	0 - 10	Volts	

Equipment Information

Analyzer Make / Model:	TECO 43A	S/N :	43A-35786-254	Method:	Fluorescent
Converter Make / Model:	CD Nova CDN 101	S/N :	250		
Calibrator Make / Model:	API 700	S/N :	690	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	263		
Flow Meter:	API 700	S/N :	690		

Analyzer Settings

Parameter	Before Calibration			After Calibration		
	Setting	Unit	Status	Setting	Unit	Status
Concentration Range				0 - 100	ppb	
Sample Flow / Box Temp	400	ccm	OK	400	ccm	OK
HVPS / Lamp Setting	OK		882	OK		882
PMT / RxCell Temp	OK	Deg C	OK	OK	Deg C	OK
Converter / IZS Temp	850	Deg C	OK	850	Deg C	OK
Offset / Slope	850		874	850		764

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
ZERO	ZERO	0	0	N/A
4960	39.2	80	82	0.9754
4960	39.2	80	80	0.9998
4977	22.1	45	45	1.0020
4987	12.3	25	26	0.9652
ZERO	ZERO	0	0	N/A
				Sum of Least Squares 0.9978
				New Correction Factor 0.9998

Before Calibration

After Calibration

Auto Zero	0	0
Auto Span	84	80
Sample Lines Connected		YES
Percent Change from Previous Calibration		2.5%

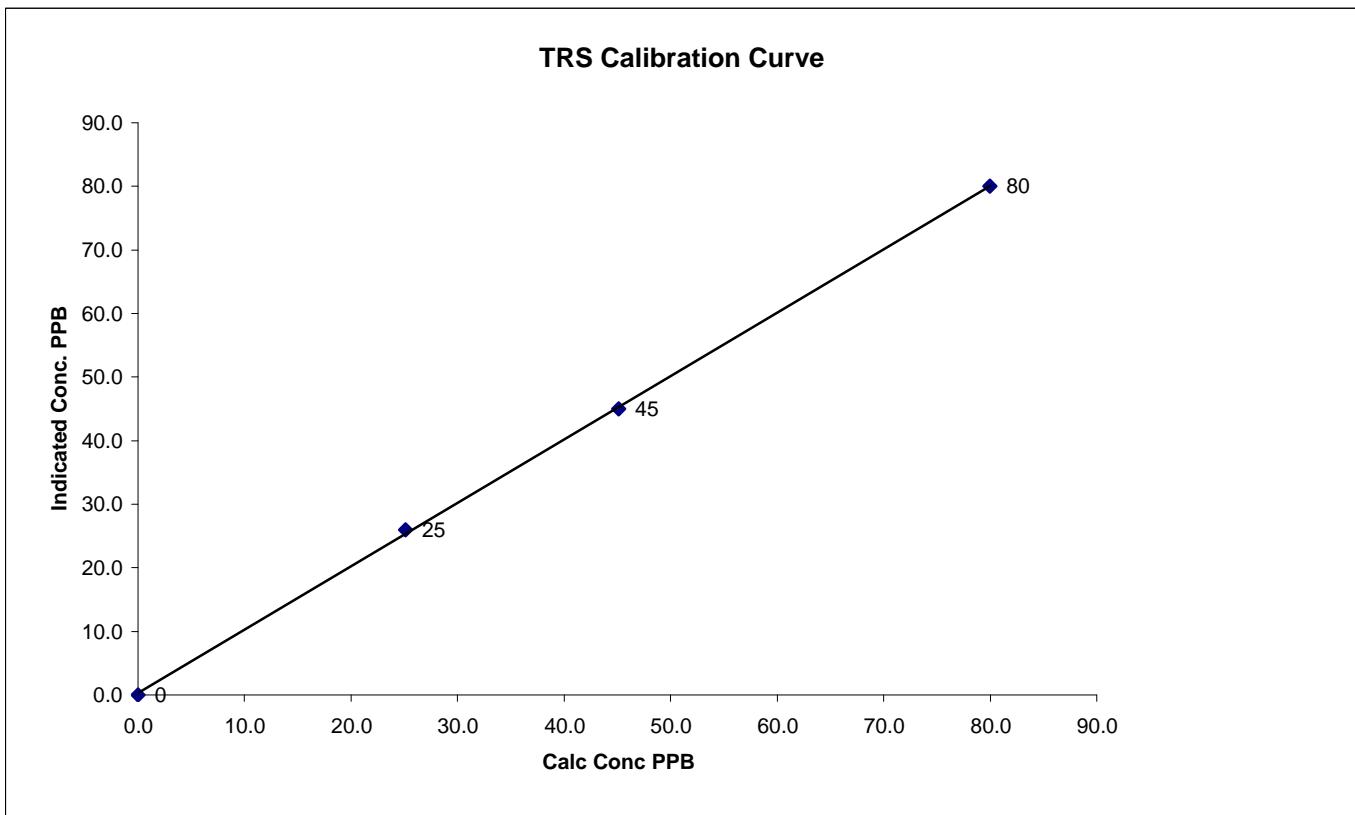
Notes:

Calibration Performed by: Shea Beaton

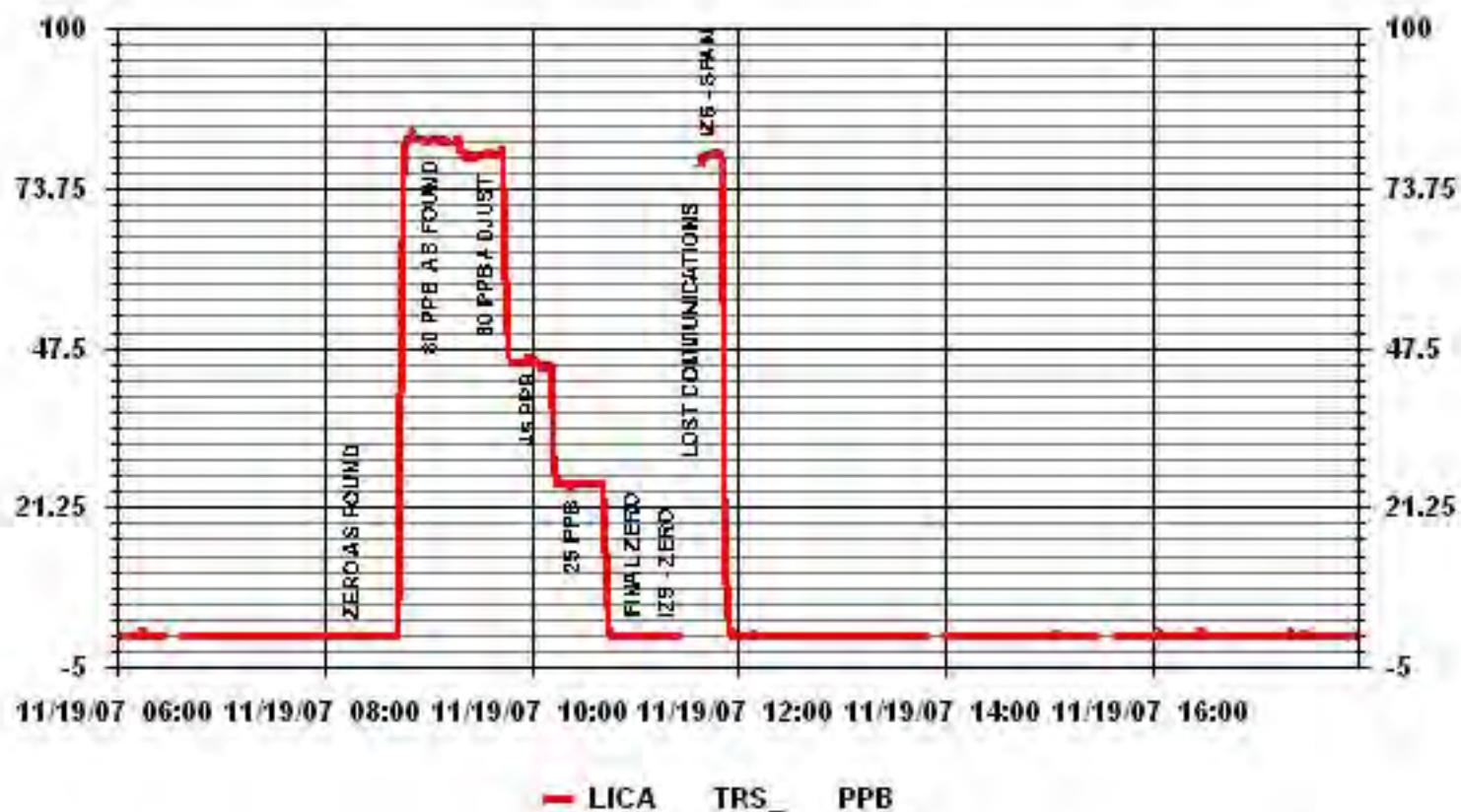
TRS Calibration Curve

Calibration Date	November 19, 2007		
Company	Lakeland Industry & Community Association		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	8:00	End Time (MST)	12:00

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient	(≥ 0.995) (0.85 to 1.15) ($\pm 3\%$ F.S.)	0.999818 0.996745 0.330076
0	0	n/a			
25	26	0.9652			
45	45	1.0020			
80	80	0.9998			



01 Minute Averages



THC

THC Calibration Report

Station Information

Calibration Date:	November 19, 2007	Previous Calibration	October 1, 2007
Company: Lakeland Industry and Community Association			
Plant / Location: LICA1/Cold Lake			
Start Time (MST)	11:15	End Time (MST)	14:05
Reason:	Monthly Calibration		
Barometric Pressure:	711 mmHg	Station Temperature:	21 Deg C
Calibrator:	API 700	S/N:	690
Cal Gas Concentration:	1010 ppm	Cal Gas Expiry Date:	Jan-10
DAS make & Model:	ESC 8832	S/N :	263
Output Voltage Range:	0 - 10 VDC		

Analyzer Information

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

	Before Calibration		After Calibration	
Concentration Range	0 - 50	ppm	0 - 50	ppm
Sample Pressure	6.5	psi	6.5	psi
Hydrogen Pressure	9	psi	9	psi
Air Pressure	18	psi	18	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
ZERO	ZERO	0.0	0.0	N/A
2000	80.0	38.8	39.0	0.9961
2000	40.0	19.8	19.4	1.0208
2000	20.0	10.0	9.8	1.0204
ZERO	ZERO	0.0	0.0	N/A
			Correction Factor:	0.9961

Percent Change

Previous Calibration Correction Factor:	0.9978
Current Correction Factor Before Span Adjust:	0.9961
Percent Change:	0.2%

IZS Calibration Data

	Before Calibration		After Calibration
Auto Zero	0.0		0.0
Auto Span	30.2		30.2
Sample Lines Connected			YES

Notes:	Cylinder Pressures	
	Span	1975 psi
	Hydrogen	650 psi
	Zero Air	Maxxam-owned API 701 zero air supply with catalytic oxidizer

Calibration Performed by: Shea Beaton

THC Calibration Curve

Calibration Date

November 19, 2007

Company

Lakeland Industry and Community Association

Plant / Location

LICA1/Cold Lake

Start Time

(MST)

11:15

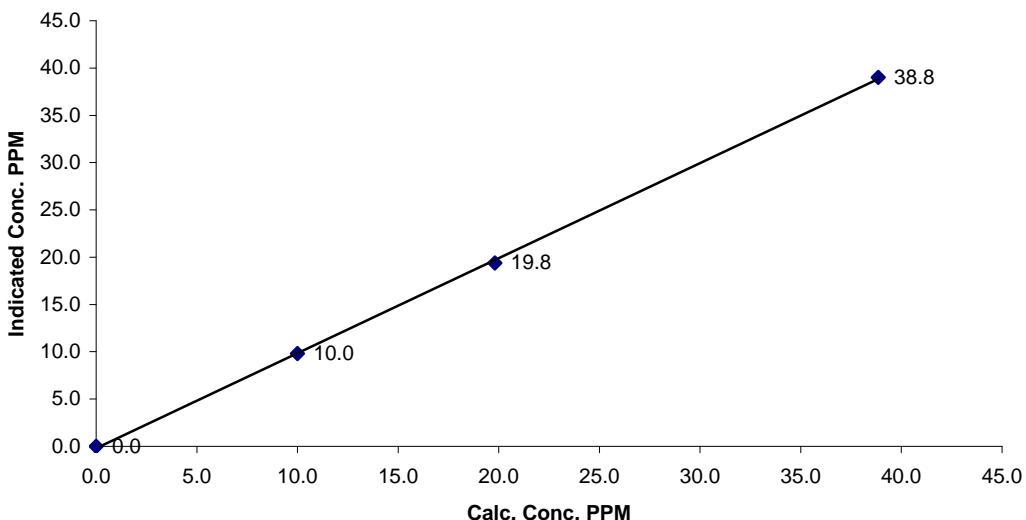
End Time

(MST)

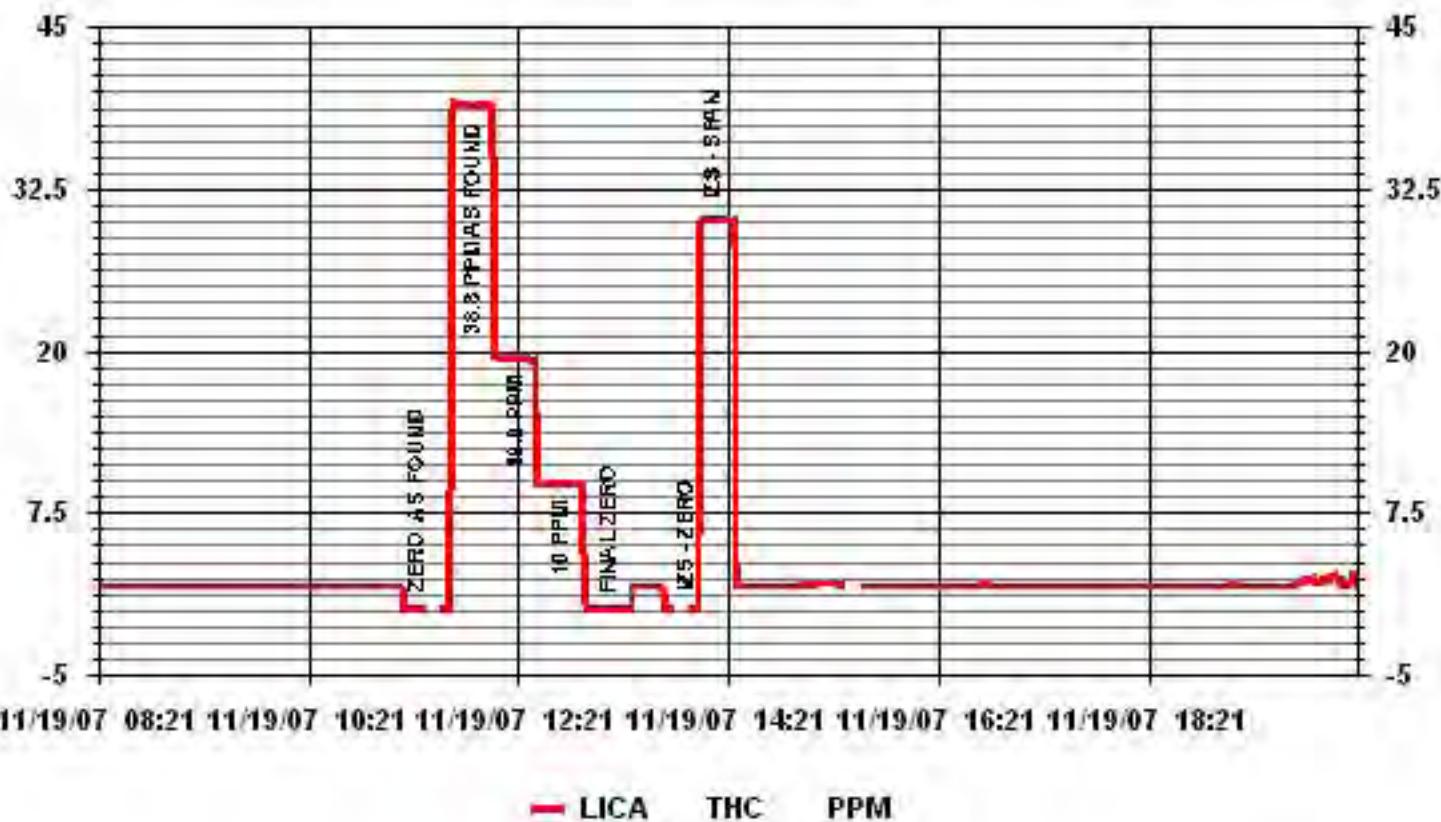
14:05

Calculated Conc. ppm	Indicated Response ppm	Correction Factor	Correlation Coefficient (≥ 0.995)	0.999808
0.0	0.0			
10.0	9.8	1.0204		
19.8	19.4	1.0208		
38.8	39.0	0.9961		

THC Calibration Curve



01 Minute Averages



PARTICULATE MATTER

2.5

TEOM® Calibration

Station

Date: November 19, 2007
 Station Name: LICA
 Location: Cold Lake - South
 Operator: Maxxam Analytics

Transfer Standard

Make/Model: Bios DC-2
 Serial Number: 1193
 Cell s/n: 2272
 Thermometer s/n: 2178

Sampler

Make/Model R & P Series 1400 a TEOM
 Unit # AMU 1494
 Control unit s/n 140AB213859701
 Transducer s/n 140AB213859701
 Parameter PM 2.5

Set-up and current Sampler readings

F-Main Set Pt (l/min)	3.00
F-Aux Set Pt (l/min)	13.67
Filter Load (%)	38
K _o Factor	11095
Temp (°C)	-3.6
Press (ATM)	0.937

Conversion from mmHg or "Hg to ATM (Atmospheres)

$$\text{ATM} = (\text{mmHg}) \times (1.316 \times 10^{-3}) \quad \text{or} \quad \text{ATM} = ("Hg) \times (3.34207 \times 10^{-2})$$

Note: Tolerances are noted as **BOLD** in Brackets

Calibration

Zero flow

Pump Off

F-Main (l/min) 0.07
 F-Aux (l/min) 0.17

Pump On (Time to reach set points)

(45-60 Sec)	37
(45-60 Sec)	61

Temperature/Pressure

Measured Temp ($\pm 1^\circ\text{C}$) -2.7
 Measured Press ($\pm 1.5\%$ ATM) 0.936

$\Delta^\circ\text{C}$	0.9
$\Delta \% \text{ ATM}$	-0.1%

Flow Audit

Indicated Main/Aux Flow (l/min)	3.00	/	13.65
Total Flow = Main + Aux (l/min)	16.65		
Measured Total Flow (l/min)	17.20		
Measured Main Flow (l/min)	3.02		

$\Delta \% \text{ from Set-pt}$

($\pm 2\%$)	0.0%	/	0.1%
($\pm 2\%$)	0.1%		
($\pm 1.0 \text{ l/min. (5.65\%)}$)	-3.2%		
($\pm 0.2 \text{ l/min. (6.25\%)}$)	-0.7%		

Leak Check

Main (< 0.15 l/min) 0.14
 Aux (< 0.15 l/min) 0.10

Actual leakage = Pump On - Pump Off

0.07

0.07

K_o Factor

Measured NA
 K_o Difference ($\pm 2.5\%$) NA

Start Time: 12:15

Finish Time:

16:00

Sample Inlet Cleaned:

YES

Sample Inlet Connected:

YES

Comments: After audit changed the V-ring seal in the sensor unit and adjusted the temp sensor.

Fadj Main = 0.945, Fadj Aux = 0.965

Changed the TEOM filter

Calibrator/s:

Shea Beaton

NO₂

NOx - NO- NO₂ Calibration Report

Station Information

Calibration Date	November 19, 2007	Previous Calibration	October 2, 2007
Company	Lakeland Ind & Comm. Assoc.	Plant/Location	LICA 1 - Cold Lake South
Start Time (MST)	8:00	End Time (MST)	14:50
Reason:	Monthly Calibration		
Barometric Pressure	711 mmHg	Station Temperature	21.0 Deg C
Cal Gas Concentration	NOx 49.8 ppm	NO 49.7 ppm	Cal Gas Expiry date 06/18/2009
DAS Output Voltage	0 - 5 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

Concentration Range	Before Calibration				After Calibration			
	741	ccm	317	Deg C	740	ccm	317	ppb
Sample Flow/Conv. Temp	OK	ccm	175.9	"Hg-A	OK	ccm	175.6	Deg C
Ozone Flow / Vacuum	-821	Volts			-821	Volts		"Hg-A
HVPS	49.9	Deg C	-2.5	Deg C	49.7	Deg C	-2.5	Deg C
Rx/ Temp / PMT Temp	27.9	Deg C	OK	Deg C	28.6	Deg C	OK	Deg C
Box Temp / IZS Temp	Offset	2.7	NOx	NO	2.5	NOx	2.6	NO
Slope	1	NOx	0.725	NO	1	NOx	0.690	NO

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O ₃ Set Point	Calculated Concentration		Indicated Concentration			Correction Factor	
			NOx	NO	NOx	NO	NO ₂	NOx	NO
ZERO	N/A	N/A	0	0	0	0	0	N/A	N/A
4959	40.2	N/A	400	400	420	420	0	0.9535	0.9516
4959	40.2	N/A	400	400	399	399	0	1.0036	1.0016
4959	40.2	N/A	400	400	397	396	0	1.0087	1.0092
								Converter Efficiency	
4959	40.2	275	400	N/A	395	144	251	100%	
4959	40.2	200	400	N/A	396	205	192	101%	
4959	40.2	100	400	N/A	396	300	96	100%	
4959	40.2	N/A	400	400	396	396	0	N/A	
								Correction Factor	
4974	25.2	N/A	251	251	250	249	1	1.0041	1.0061
4984	15.1	N/A	150	150	150	149	1	1.0028	1.0075
ZERO	N/A	N/A	0	0	0	0	0	N/A	N/A
Linearity OK?			Yes	No	Sum of Least Squares			1.0070	1.0083
Flows Checked on-site?			Yes	No	New Correction Factor			1.0087	1.0092
					Average Converter Efficiency			100%	

Before Calibration

After Calibration

Auto Zero	0	NOx	0	NO ₂	1	NOx	0	NO ₂
Auto Span	306	NOx	304	NO ₂	289	NOx	287	NO ₂
YES								
Percent Change from Previous Calibration								

Notes: Power supply voltages +15 @ 15.1v, +5 @ 5.0v, -15 @ -15.1v, battery at 0.6v

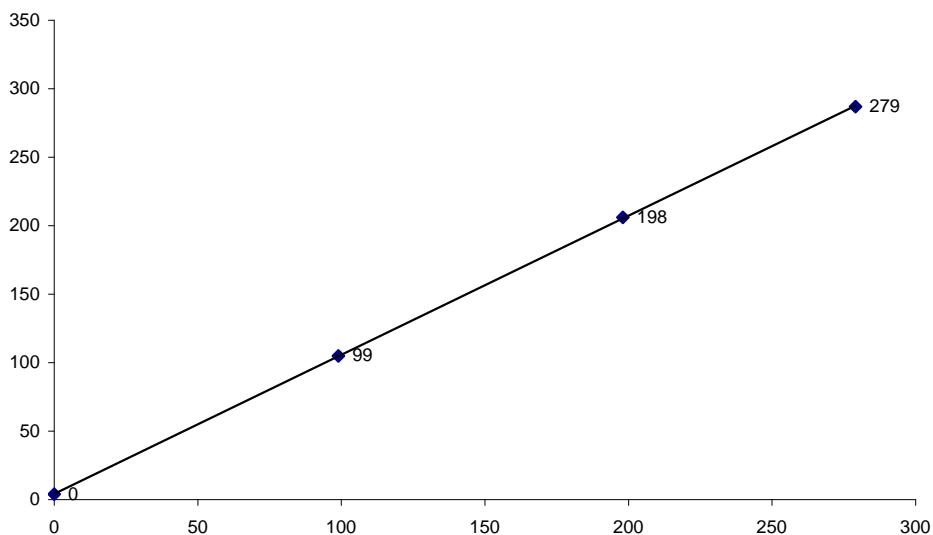
Calibration Performed by: Shea Beaton

NO₂ Calibration Curve

Calibration Date	November 19, 2007		
Company	Lakeland Ind & Comm. Assoc.		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	8:00	End Time (MST)	14:50

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995) Slope Intercept	0.999948 0.998332 $\pm 3\%$ F.S.)
0	0	N/A		
96	96	1.0000		
191	192	0.9948		
252	251	1.0040		

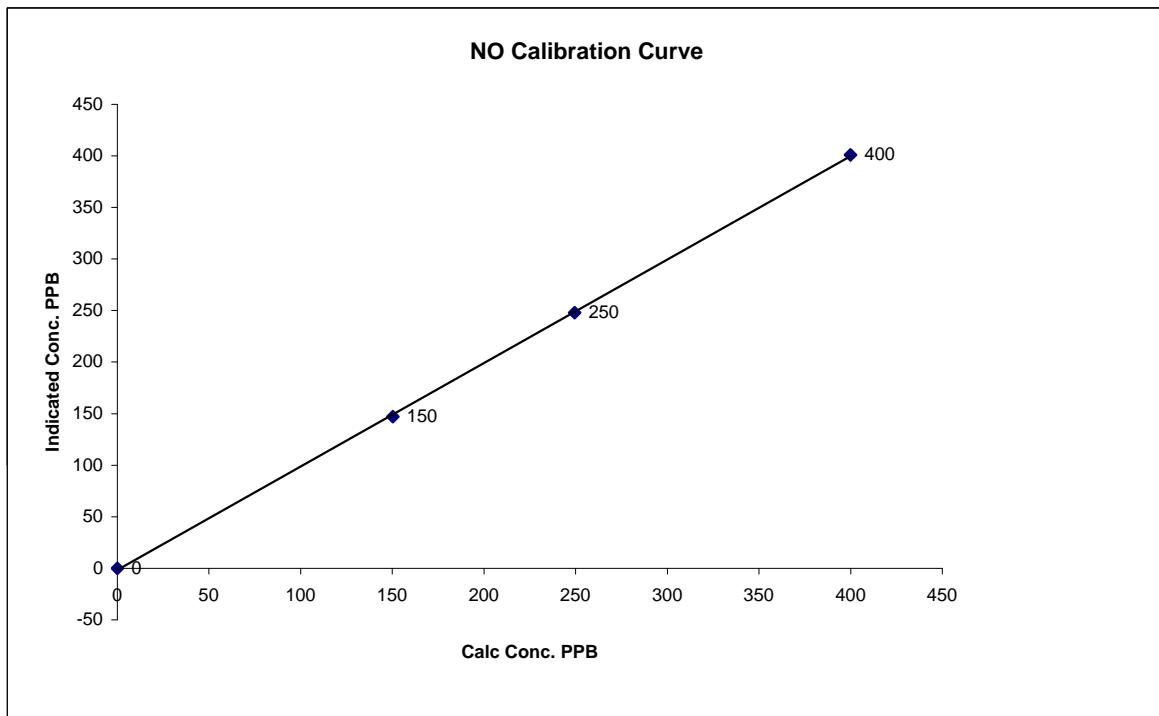
NO₂ Calibration Curve



NO Calibration Curve

Calibration Date	November 19, 2007		
Company	Lakeland Ind & Comm. Assoc.		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	8:00	End Time (MST)	14:50

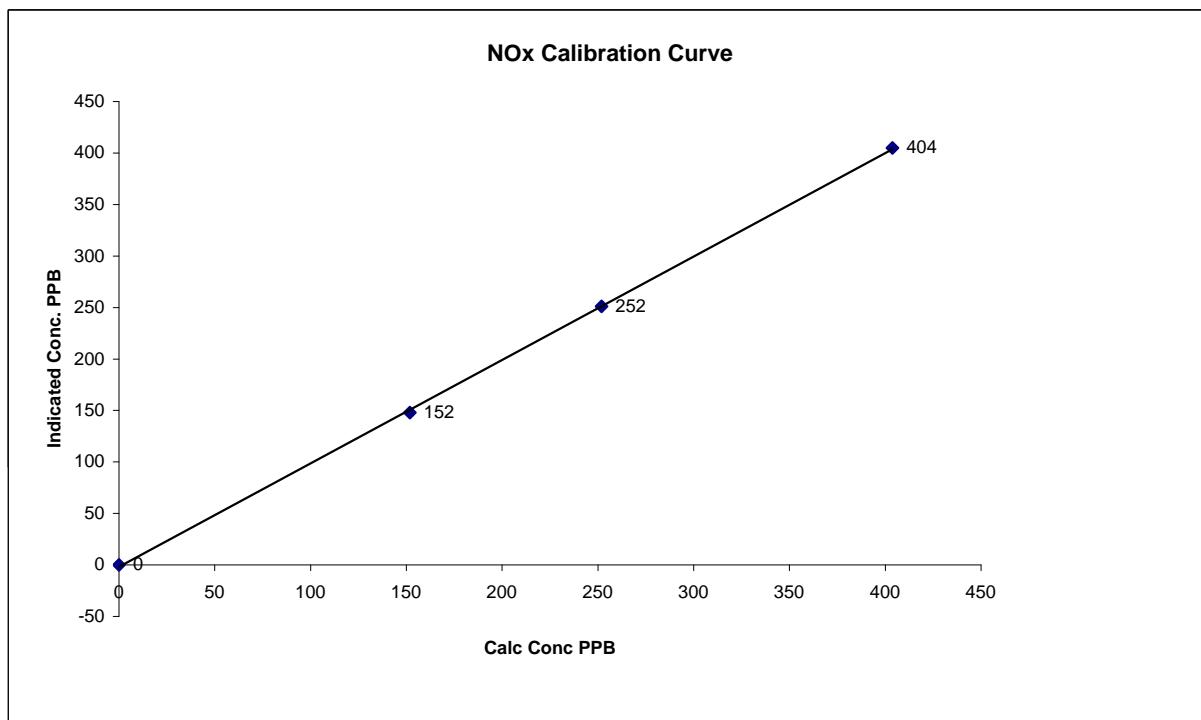
Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995) Slope Intercept	0.999988 0.998219 ($\pm 3\%$ F.S.)
0	0	N/A		
150	149	1.0075		
251	249	1.0061		
400	399	1.0016		



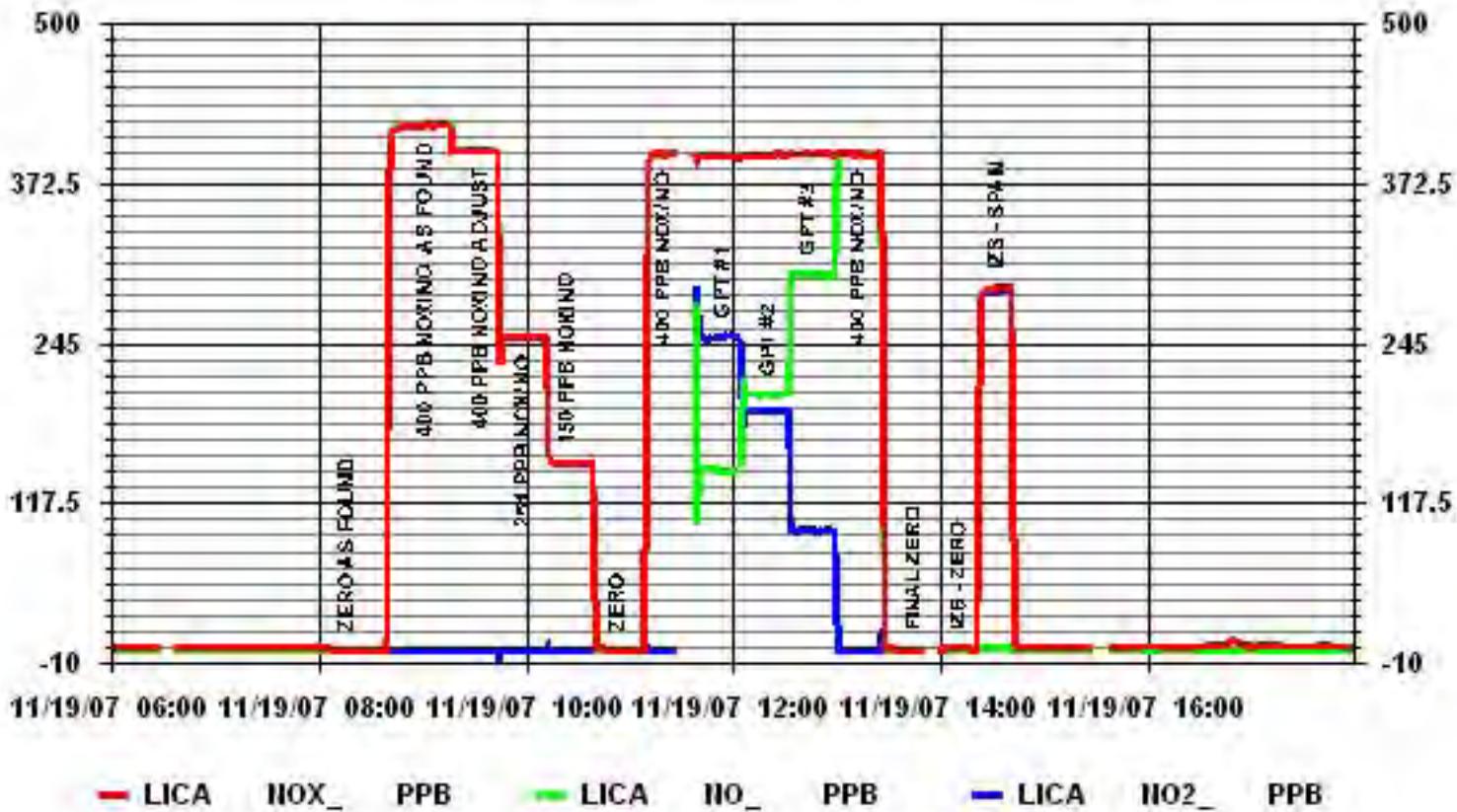
NOx Calibration Curve

Calibration Date	November 19, 2007		
Company	<u>Lakeland Ind & Comm. Assoc.</u>		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	8:00	End Time (MST)	14:50

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995) Slope Intercept	1.000000 0.996220 $(\pm 3\% \text{ F.S.})$ 0.029894
0	0	N/A		
150	150	1.0028		
251	250	1.0041		
400	399	1.0036		



01 Minute Averages



OZONE

O₃ Calibration Report

Station Information

Calibration Date	November 19, 2007	Previous Calibration	October 2, 2007
Company			
LICA 1 - Cold Lake South			
Plant / Location			
Start Time (MST)	13:50	End Time (MST)	17:20
Reason:		Monthly Calibration	
Barometric Pressure	711 mm Hg	Station Temperature	21 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:	Dilution
DAS Make / Model:	ESC 8832	S/N :	263		

Analyzer Settings

	Before Calibration		After Calibration	
			0 - 500 ppb	
Bench Temp/ Pressure	28.2	678.4	28.1	678.4
O ₃ Set Level	29%		29%	
Bench Lamp/O ₃ Lamp	53.7	67.7	53.7	67.7
Sample Flow A/B	0.723 LPM	0.734 LPM	0.738 LPM	0.749 LPM
Offset / Slope	0.7	1.005	0.7	1.058

Calibration Data

Dilution Flow Rate	Ozone Set Point	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
ZERO	ZERO	0	0	N/A
5000	275	263	250	1.0520
5000	275	263	263	1.0000
5000	200	196	196	1.0000
5000	100	95	96	0.9896
ZERO	ZERO	0	0	N/A
				N/A
				1.0000

Before Calibration

After Calibration

Auto Zero	0	0
Auto Span	276	292
Sample Lines Connected		YES
Percent Change from Previous Calibration		-4.9%

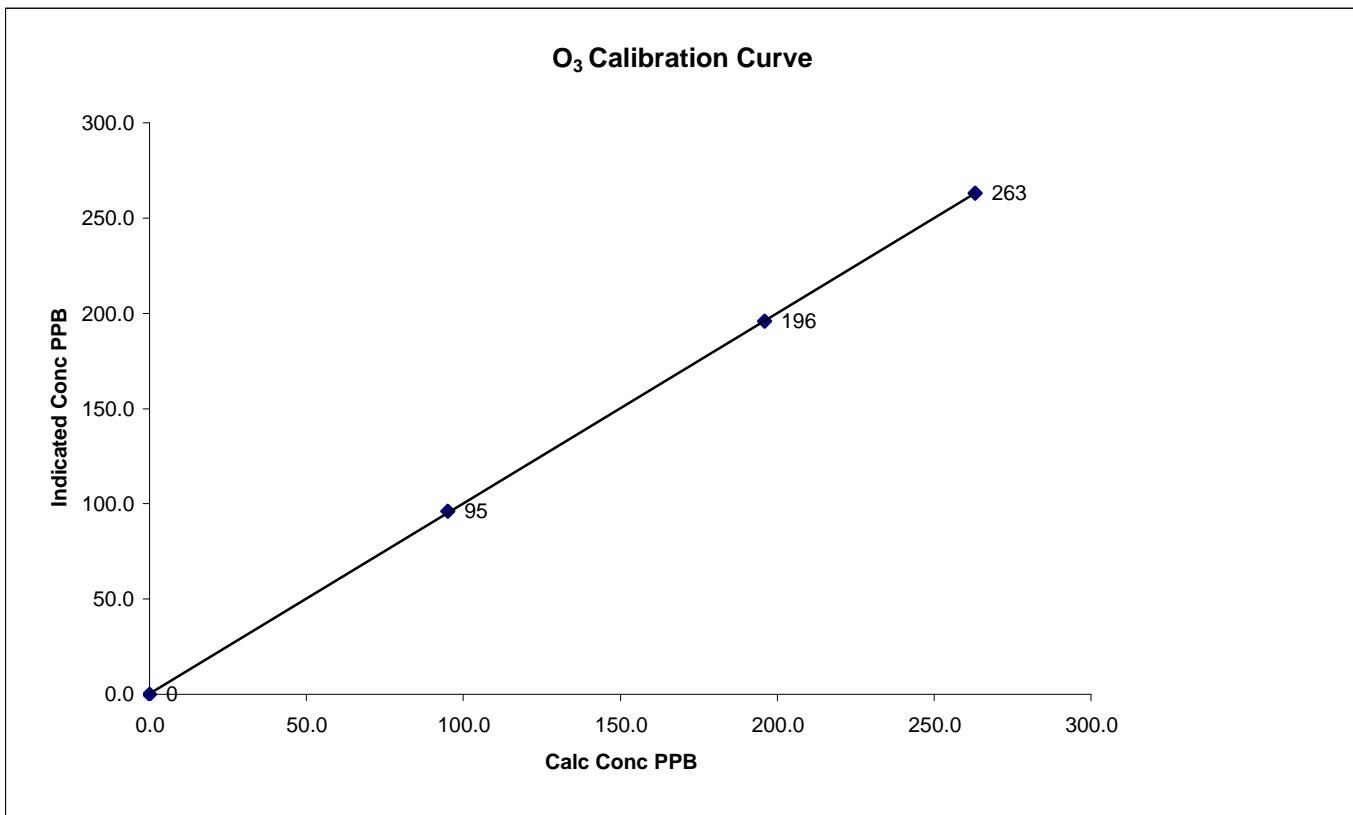
Notes:

Calibration Performed by: Shea Beaton

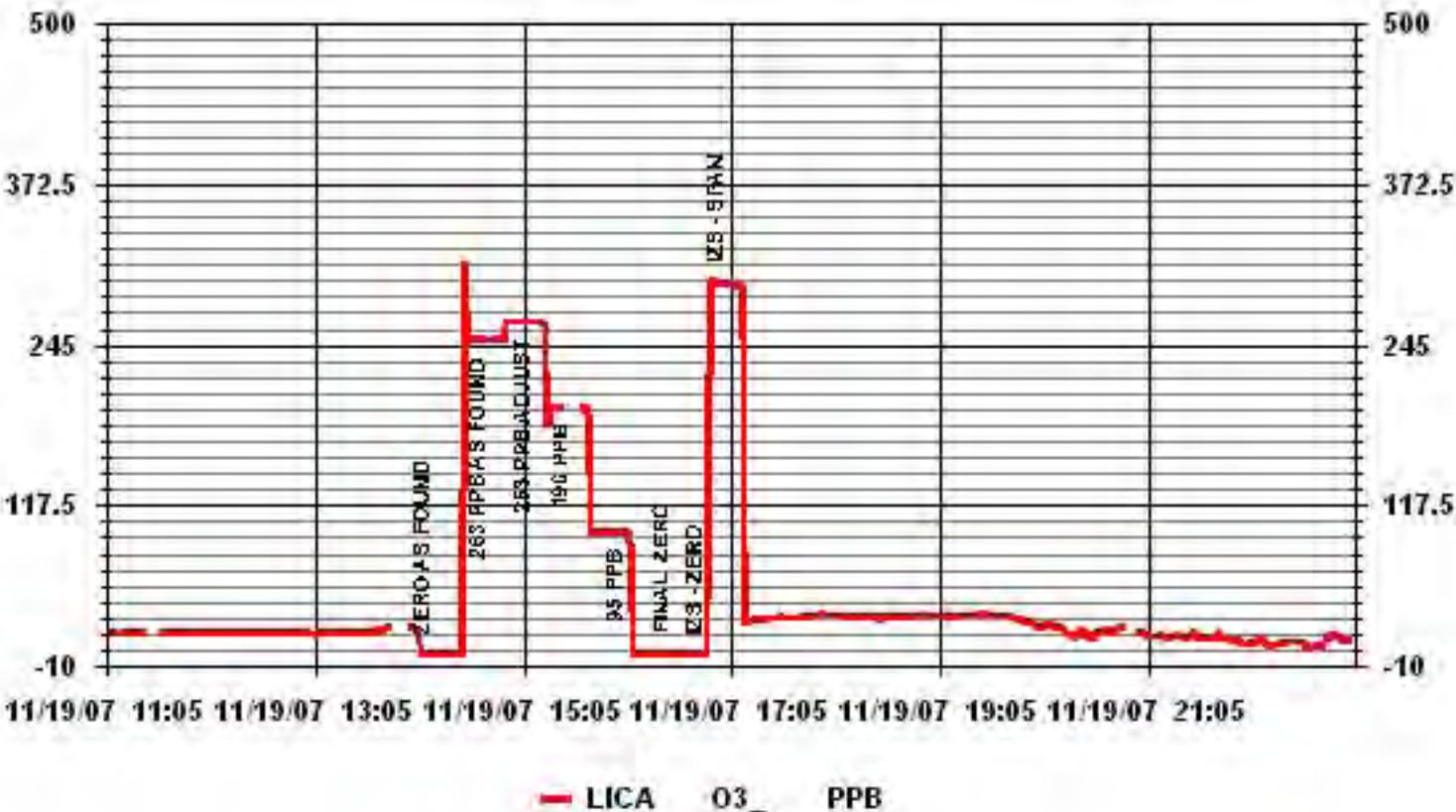
O₃ Calibration Curve

Calibration Date	November 19, 2007		
Company	Lakeland Industry & Community Association		
Plant / Location	LICA 1 - Cold Lake South		
Start Time (MST)	13:50	End Time (MST)	17:20

Calculated Conc. ppb	Indicated Response ppb	Correction Factor	Correlation Coefficient (≥ 0.995) Slope Intercept	0.999982 0.998909 (± 3% F.S.) 0.401068
0	0	n/a		
95	96	0.9896		
196	196	1.0000		
263	263	1.0000		



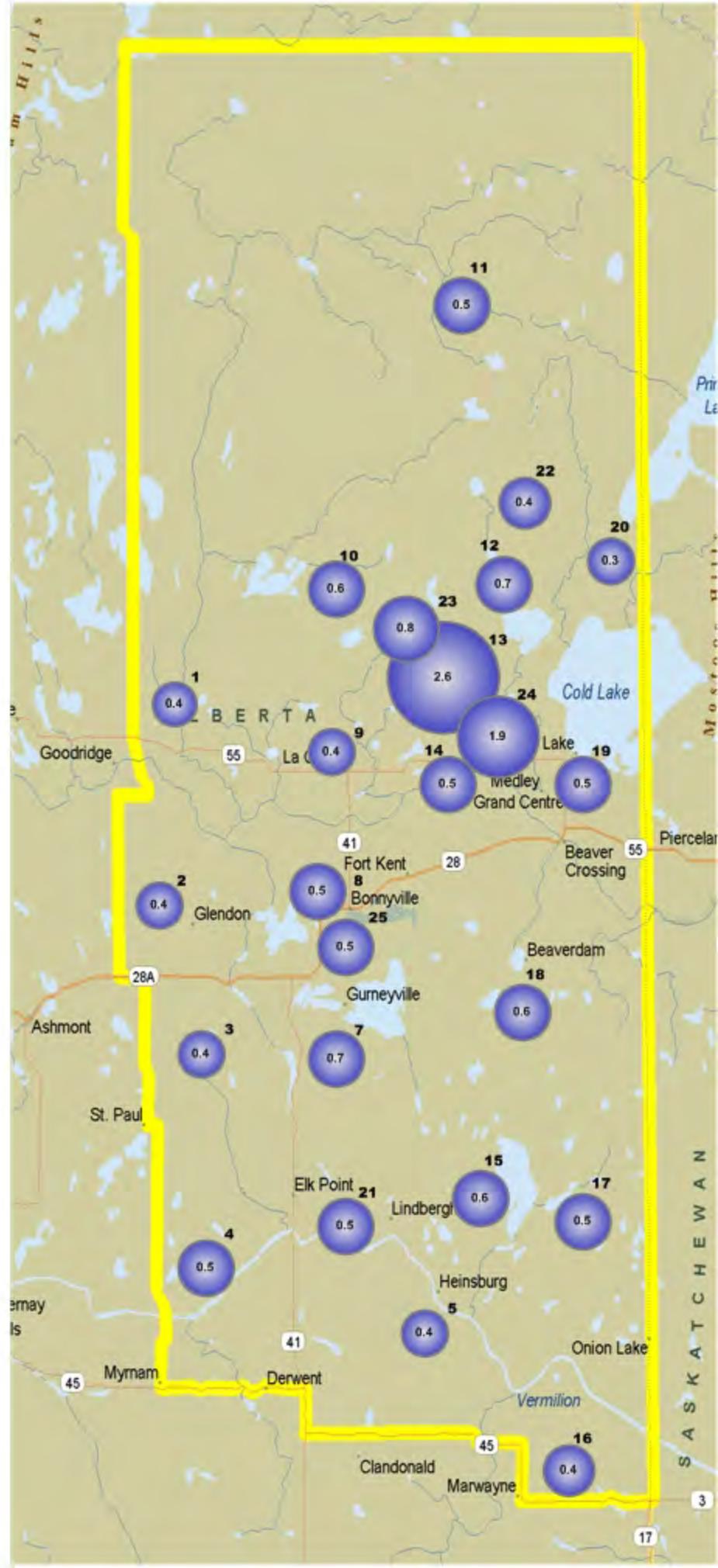
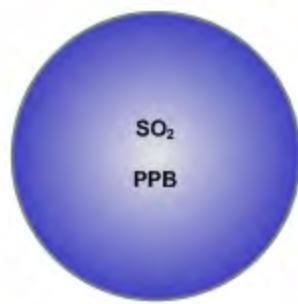
01 Minute Averages



NOVEMBER 2007
LICA
PASSIVE BUBBLE MAPS

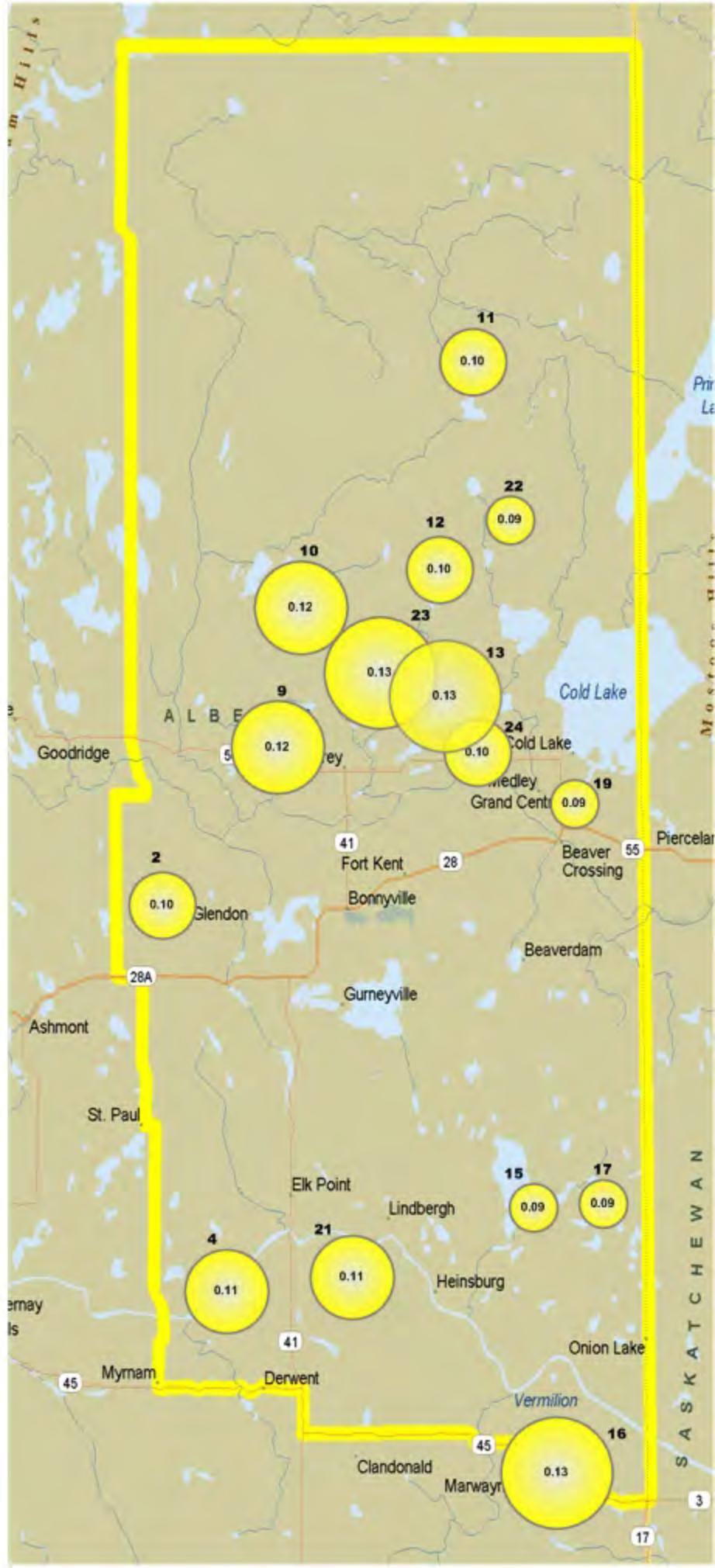
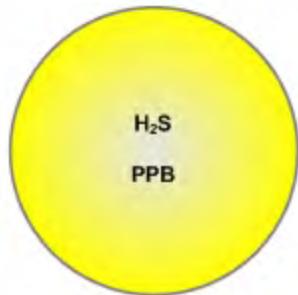
PASSIVE BUBBLE MAP

November 2007



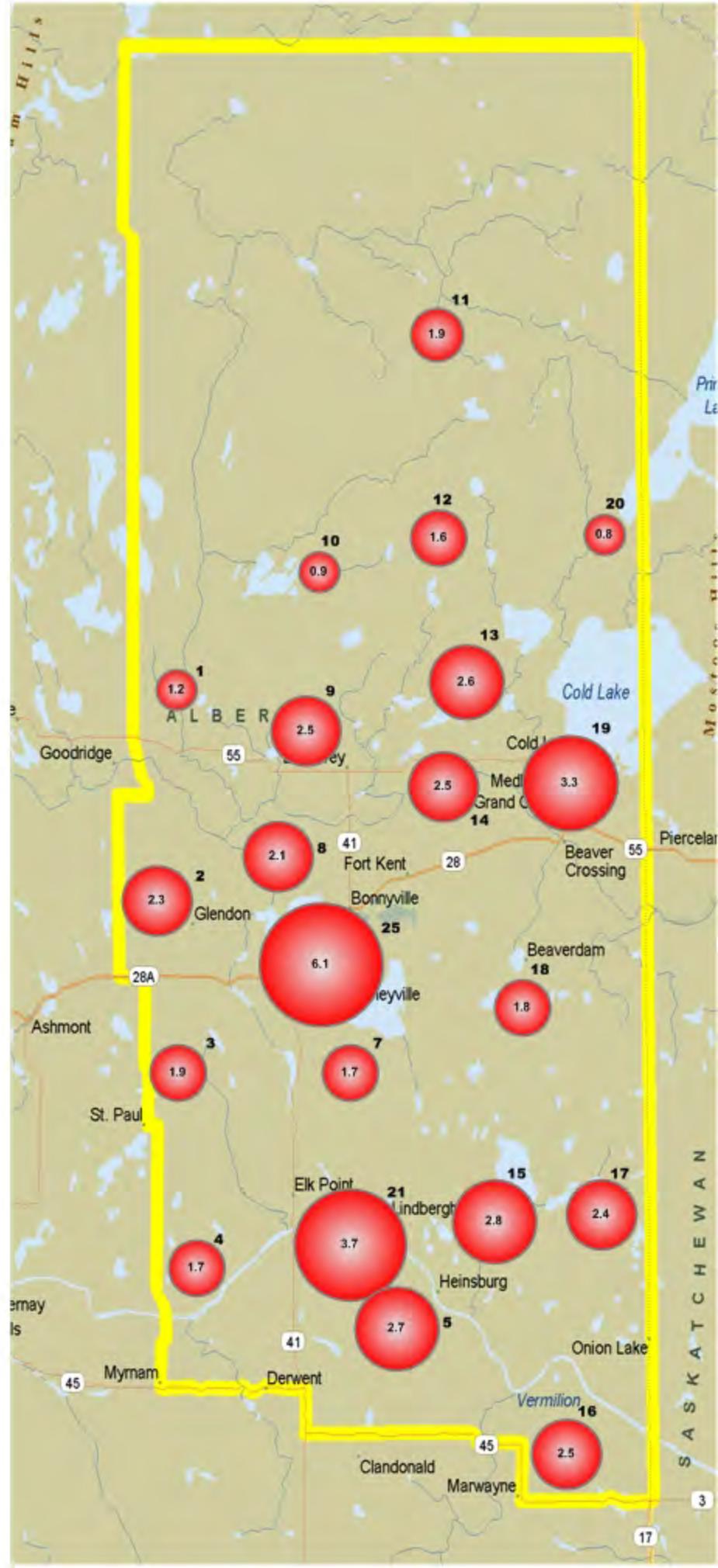
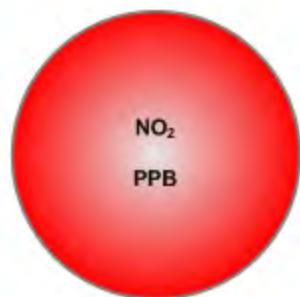
PASSIVE BUBBLE MAP

November 2007



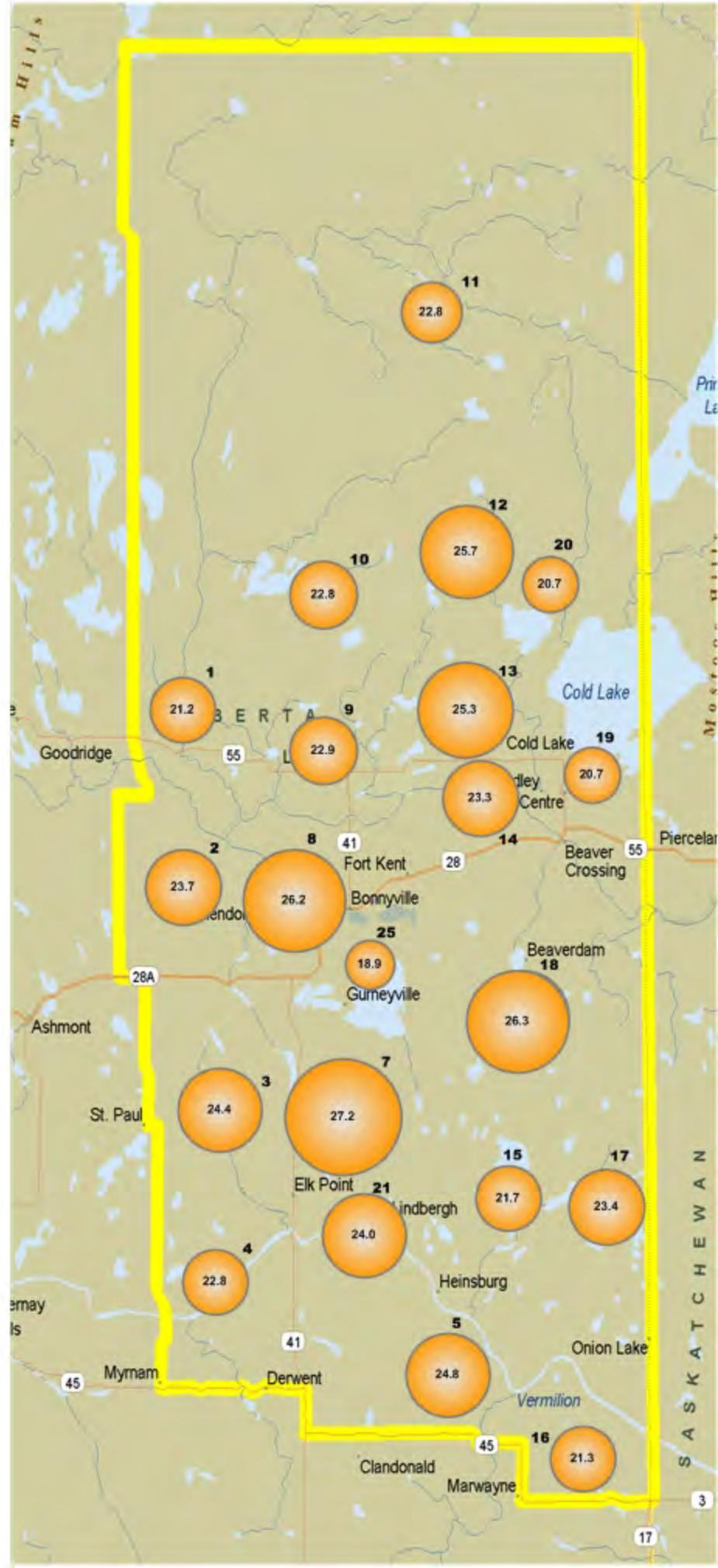
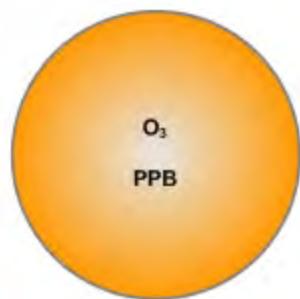
PASSIVE BUBBLE MAP

November 2007



PASSIVE BUBBLE MAP

November 2007



NOVEMBER 2007

LICA PASSIVE NETWORK

LAB ANALYSIS

Attention: MICHAEL BISAGA

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
PO BOX 8237
5006 - 50TH AVENUE
BONNYVILLE, AB
CANADA T9N 2J5

Report Date: 2007/12/11

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A760310

Received: 2007/12/04, 12:47

Sample Matrix: Air

Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis (1)	1	2007/12/10	2007/12/11		EDM SOP-0320
NO2 Passive Analysis (1)	1	2007/12/10	2007/12/11		EDM SOP-0318
O3 Passive Analysis (1)	1	2007/12/06	2007/12/06		EDM SOP-0317
SO2 Passive Analysis (1)	1	2007/12/10	2007/12/11		EDM SOP-0319

Sample Matrix: Air

Samples Received: 25

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis (1)	16	2007/12/10	2007/12/11		EDM SOP-0320
NO2 Passive Analysis (1)	22	2007/12/10	2007/12/11		EDM SOP-0318
O3 Passive Analysis (1)	22	2007/12/06	2007/12/06		EDM SOP-0317
SO2 Passive Analysis (1)	25	2007/12/10	2007/12/11		EDM SOP-0319

(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.

JODI HANSON, Project Manager, Customer Service
Email: jodi.hanson@maxxamanalytics.com
Phone# (780) 468-3500

=====

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

Attention: MICHAEL BISAGA

LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
PO BOX 8237
5006 - 50TH AVENUE
BONNYVILLE, AB
CANADA T9N 2J5

Report Date: 2007/12/11

CERTIFICATE OF ANALYSIS

-2-

5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 2

Edmonton: 9331 - 48th Street T6B 2R4 Telephone(780) 468-3500 FAX(780) 466-3332



LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Attention: MICHAEL BISAGA
Client Project #: NOVEMBER 2007
P.O. #:
Site Reference: LICA

Maxxam Job Number : PA760310
Report Date : 2007/12/11

Sample Description	Set Number	Matrix	Date Sampled	Calculated H2S ppb	Calculated NO2 ppb	Calculated O3 ppb
1	I22395	Air	2007/10/28	N/A	1.2	21.2
2	I22396	Air	2007/10/28	0.10	2.3	23.7
3	I22398	Air	2007/10/29	N/A	1.9	24.4
4	I22418	Air	2007/10/29	0.11	1.7	22.8
5	I22436	Air	2007/10/29	N/A	2.7	24.8
7	I22437	Air	2007/10/29	N/A	1.7	27.2
8	I22438	Air	2007/10/28	N/A	2.1	26.2
9	I22439	Air	2007/10/28	0.12	2.5	22.9
10	I22440	Air	2007/10/28	0.15	0.8	23.3
11	I22441	Air	2007/10/28	0.09	1.8	23.0
12	I22442	Air	2007/10/28	0.10	1.6	25.7
13	I22443	Air	2007/10/28	0.13	2.6	25.3
14	I22444	Air	2007/10/28	N/A	2.5	23.3
15	I22445	Air	2007/10/29	0.09	2.8	21.7
16	I22446	Air	2007/10/29	0.13	2.5	21.3
17	I22447	Air	2007/10/29	0.09	2.4	23.4
18	I22448	Air	2007/10/29	N/A	1.8	26.3
19	I22449	Air	2007/10/28	0.09	3.3	20.7
20	I22450	Air	2007/10/29	N/A	0.8	20.7
21	I22451	Air	2007/10/29	0.11	3.7	24.0
10A	I22452	Air	2007/10/28	0.08	0.9	22.3
11A	I22453	Air	2007/10/28	0.10	1.9	22.7
22	I22456	Air	2007/10/28	0.09	N/A	N/A
23	I22457	Air	2007/10/28	0.13	N/A	N/A
24	I22458	Air	2007/10/28	0.10	N/A	N/A
25	I22459	Air	2007/10/28	N/A	6.1	18.9



LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Attention: MICHAEL BISAGA
Client Project #: NOVEMBER 2007
P.O. #:
Site Reference: LICA

Maxxam Job Number : PA760310
Report Date : 2007/12/11

Sample Description	Set Number	Matrix	Date Sampled	Calculated SO2 ppb
1	I22395	Air	2007/10/28	0.4
2	I22396	Air	2007/10/28	0.4
3	I22398	Air	2007/10/29	0.4
4	I22418	Air	2007/10/29	0.5
5	I22436	Air	2007/10/29	0.4
7	I22437	Air	2007/10/29	0.7
8	I22438	Air	2007/10/28	0.5
9	I22439	Air	2007/10/28	0.4
10	I22440	Air	2007/10/28	0.5
11	I22441	Air	2007/10/28	0.5
12	I22442	Air	2007/10/28	0.7
13	I22443	Air	2007/10/28	2.6
14	I22444	Air	2007/10/28	0.5
15	I22445	Air	2007/10/29	0.6
16	I22446	Air	2007/10/29	0.4
17	I22447	Air	2007/10/29	0.5
18	I22448	Air	2007/10/29	0.6
19	I22449	Air	2007/10/28	0.5
20	I22450	Air	2007/10/29	0.3
21	I22451	Air	2007/10/29	0.5
10A	I22452	Air	2007/10/28	0.6
11A	I22453	Air	2007/10/28	0.4
22	I22456	Air	2007/10/28	0.4
23	I22457	Air	2007/10/28	0.8
24	I22458	Air	2007/10/28	1.9
25	I22459	Air	2007/10/28	0.5



LAKELAND INDUSTRY AND COMMUNITY ASSOCIATION
Attention: MICHAEL BISAGA
Client Project #: NOVEMBER 2007
P.O. #:
Site Reference: LICA

Quality Assurance Report

Maxxam Job Number: PA760310

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
2005844 LM1	Calibration Check	Calculated O3	2007/12/06		101	%	91 - 107
	SPIKE	Calculated O3	2007/12/06		102	%	N/A
2009979 SE1	Calibration Check	Calculated H2S	2007/12/10		106	%	80 - 120
	SPIKE	Calculated H2S	2007/12/10		100	%	N/A
2009980 DF4	Calibration Check	Calculated NO2	2007/12/10		99	%	76 - 118
	SPIKE	Calculated NO2	2007/12/10		101	%	N/A
	BLANK	Calculated NO2	2007/12/10	<0.1		ppb	
2009984 DF4	Calibration Check	Calculated SO2	2007/12/10		103	%	95 - 105
	SPIKE	Calculated SO2	2007/12/10		100	%	N/A
	BLANK	Calculated SO2	2007/12/10	<0.1		ppb	

N/A = Not Applicable

NOVEMBER 2007

PASSIVE FIELD DATA

**LAKELAND INDUSTRY & COMMUNITY
ASSOCIATION
PASSIVE FIELD DATA**

SAMPLER	ID	START		END		NOTES
		DATE	TIME	DATE	TIME	
SO ₂ /NO ₂ /O ₃	1	10/28/07	11:05	11/29/07	10:50	
H ₂ S/SO ₂ /NO ₂ /O ₃	2	10/28/07	10:30	11/29/07	10:10	
SO ₂ /NO ₂ /O ₃	3	10/29/07	15:25	11/30/07	15:40	
H ₂ S/SO ₂ /NO ₂ /O ₃	4	10/29/07	14:55	11/30/07	15:05	
SO ₂ /NO ₂ /O ₃	5	10/29/07	13:40	11/30/07	13:50	
SO ₂ /NO ₂ /O ₃	7	10/29/07	16:10	11/30/07	16:25	
SO ₂ /NO ₂ /O ₃	8	10/28/07	09:55	11/29/07	09:35	
H ₂ S/SO ₂ /NO ₂ /O ₃	9	10/28/07	15:50	11/29/07	11:35	
H ₂ S/SO ₂ /NO ₂ /O ₃	10	10/28/07	12:15	11/29/07	12:15	
H ₂ S/SO ₂ /NO ₂ /O ₃	11	10/28/07	14:00	11/29/07	14:00	
H ₂ S/SO ₂ /NO ₂ /O ₃	12	10/28/07	17:15	11/29/07	15:35	SAMPLER REPLACED
H ₂ S/SO ₂ /NO ₂ /O ₃	13	10/28/07	18:15	11/29/07	17:10	
SO ₂ /NO ₂ /O ₃	14	10/28/07	09:05	11/29/07	08:40	
H ₂ S/SO ₂ /NO ₂ /O ₃	15	10/29/07	12:10	11/30/07	12:30	
H ₂ S/SO ₂ /NO ₂ /O ₃	16	10/29/07	12:55	11/30/07	13:10	
H ₂ S/SO ₂ /NO ₂ /O ₃	17	10/29/07	11:20	11/30/07	11:50	
SO ₂ /NO ₂ /O ₃	18	10/29/07	10:30	11/30/07	11:00	
H ₂ S/SO ₂ /NO ₂ /O ₃	19	10/28/07	08:15	11/29/07	07:45	
SO ₂ /NO ₂ /O ₃	20	10/29/07	09:15	11/30/07	09:30	
H ₂ S/SO ₂ /NO ₂ /O ₃	21	10/29/07	14:10	11/30/07	14:25	
H ₂ S/SO ₂	22	10/28/07	17:05	11/29/07	15:15	
H ₂ S/SO ₂	23	10/28/07	18:00	11/29/07	16:30	
H ₂ S/SO ₂	24	10/28/07	18:35	11/29/07	17:35	
SO ₂ /NO ₂ /O ₃	25	10/28/07	09:40	11/29/07	09:10	
H ₂ S/SO ₂ /NO ₂ /O ₃	10A	10/28/07	12:15	11/29/07	12:15	
H ₂ S/SO ₂ /NO ₂ /O ₃	11A	10/28/07	14:00	11/29/07	14:00	