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

Prepared By:

MAXXAM ANALYTICS INC.

Lakeland Industry & Community Assoc.
COLD LAKE
AMBIENT AIR MONITORING STATION

TABLE OF CONTENTS

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 – January 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	0.16	6	10	7	0.6	10	99.9
TRS (PPB)	-	-	-	-	0	1.0	23	11,21,22	0.1	23	99.9
NO_2 (PPB)	212	106	0	0	11.15	36	19	11	22.6	19	99.9
NO (PPB)	-	-	-	-	4.71	97	23	11	25.5	23	99.9
NOx (PPB)	-	-	-	-	16.07	129	23	11	45.9	23	99.9
O_3 (PPB)	82	-	0	-	20.64	47	25	16	39.1	28	99.9
THC (PPM)	-	-	-	-	2.24	7.7	7	19	4.6	7	99.9
PM 2.5 (UG/M^3)	-	30	-	0	2.3	20	20	11	5.5	19	99.1
TEMPERATURE (DEG C)	-	-	-	-	-9.03	7	25	14	-1.3	25	100.0
RELATIVE HUMIDITY (%)	-	-	-	-	75.05	95	23	8	93	22	100.0
VECTOR WS (KPH)	-	-	-	-	5.86	23.8	10	10	16	10	99.9
VECTOR WD (DEGREES)	-	-	-	-	SSW	-	-	-	-	-	99.9

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION
Passive Ambient Monitoring Network – January 2007

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION PASSIVE NETWORK			
NETWORK MAXIMUM (PPB)			NETWORK AVERAGE (PPB)
PARAMETER	STATION	READING	READING
NO_2	8.5	25	3.8
SO_2	24	2.1	0.91
H_2S	13	0.26	0.15
O_3	3	34.7	28.5

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

SO2

- Analyzer make / model TECO 43A

The analyzer was working well throughout the month. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information. The analog outputs were adjusted so the analyzer and DAS are reading the same. Communications were lost at the start of the calibration therefore the calibration chart is missing the "As Found" points and the start of the monthly calibration. One hour of data on January 12th was invalidated due to datalogger maintenance.

TRS

- Analyzer make / model TECO 43A
  CD NOVA CDN 101 H_2S Converter

The analyzer was working well throughout the month. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information. One hour of data on January 12th was invalidated due to datalogger maintenance.

THC

- Analyzer make / model TECO 51C-LT

The initial calibration discovered that the analyzer was reading about 40% low. Flows were checked and optimized. The zero was found to be slightly low during the calibration, this was diagnosed as a potential leak in the pump diaphragm, parts are ordered and the diaphragm was replaced as soon as parts arrived. On January 15th the analyzer was calibrated and pump parts replaced. It was noted that during the January 15th calibration the zero air supply was not maintaining a steady pressure. The zero air supply is owned by the previous contractor and is due to be removed in February, a Maxxam owned zero air supply will be temporarily installed until the original zero air equipment, supplied by Alberta Environment, is repaired. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information One hour of data on January 12th was invalidated due to datalogger maintenance.

NOx

- Analyzer make / model TECO 42

The analyzer converter efficiency is below the manufacturers guidelines, a second GPT was performed with a different calibrator in order to confirm, the second GPT was better but still the converter efficiency is low. AENV has been contacted in regards to a replacement converter. The inlet filter was changed before the monthly calibration was started. Data was corrected using daily zero information. One hour of data on January 12th was invalidated due to datalogger maintenance.

O_3

- Analyzer make / model TECO 49

On January 5th the initial "As Found" points were showing the analyzer to be reading low by about 18 percent, the attempt to calibrate the analyzer was aborted, with no adjustments made to the analyzer. It was assumed the zero air being used to calibrate was too dry, which caused irregular readings with the analyzer. A second calibration was completed on January 15th using a different setup, the same results occurred. It was determined the calibration equipment was working correctly and the analyzer was reading low, the analyzer was adjusted and calibrated. Data was corrected using daily zero information. One hour of data on January 12th was invalidated due to datalogger maintenance.

PM 2.5

- Analyzer make / model TEOM 1400A

Initial calibration involved full audit of equipment. The K_o factor and a full leak check were completed. There was five hours of equipment instability after the calibration occurred, the K_o factor audit can cause instability after the audit, which is, required a minimum every six months according to the manufacturer. On January 8th there was one hour of instability in the analyzer therefore data was invalidated. Data for the month was corrected using Alberta Environment procedures. One hour of data on January 12th was invalidated due to datalogger maintenance.

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. One hour of data on January 12th was invalidated due to datalogger maintenance.

Relative Humidity

- System make / model Rotronic Hygroclip-S3

No operational issues observed during the month. Installation of sensor occurred on January 22nd.

Temperature

- System make / model Rotronic Hygroclip-S3

No operational issues observed during the month. Installation of sensor occurred on January 22nd.

Datalogger

- System make / model ESC 8832

Disconnected the previous contractor's data system and installed new ESC 8832 data system. Installation of router and connected to the ESC 8832 in order to connect with DSL connection. Logger was configured for daily calibrations. Maintenance on January 12th for one hour caused all data to be invalidated.

Trailer

General comments from technician during monthly calibration:

- Trailer inventory completed.

LICA - COLD LAKE SITE

MONTHLY SUMMARIES, GRAPHS & WIND ROSES

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

AIR QUALITY INDEX (AQI)

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	8	6	8	6	**U**	7	6	4	4	4	8	13	14	15	15	15	15	14	13	12	10	9	7	6	15
	O3	O3	O3	O3	**U**	O3	O3	O3	NO2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
2	5	5	6	1	4	4	4	5	5	8	6	5	5	8	10	6	5	6	10	11	11	10	12	13	13
	O3	O3	O3	PM2	NO2	NO2	NO2	NO2	NO2	PM2	NO2	NO2	NO2	O3	O3	O3	NO2	NO2	O3	O3	O3	O3	O3	O3	O3
3	12	12	0	12	14	14	14	17	17	17	16	16	15	14	13	11	10	11	11	11	11	12	10	12	17
	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
4	13	0	14	13	13	13	12	12	11	11	12	12	13	1	1	13	11	8	3	11	11	11	11	12	14
	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	PM2	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3
5	13	15	15	15	16	15	15	15	15	15	16	16	16	15	14	**U**	**U**	**U**	1	2	2	10	9	11	16
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	**U**	**U**	**U**	NO2	NO2	NO2	O3	O3	O3	O3
6	11	10	7	10	9	8	8	8	4	7	9	11	14	16	16	16	8	15	15	15	16	16	16	16	16
	O3	O3	O3	O3	O3	O3	O3	O3	NO2	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3
7	16	16	16	16	15	13	10	8	5	5	6	11	12	12	12	0	14	13	12	12	12	11	11	11	16
	O3	O3	O3	O3	O3	O3	O3	O3	NO2	NO2	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3
8	11	10	11	10	11	11	12	10	7	9	13	14	13	13	1	12	10	11	10	4	5	5	5	6	14
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	NO2	NO2	NO2	NO2	NO2	O3
9	6	6	5	6	7	6	7	6	6	5	5	6	11	**U**	12	11	12	12	13	13	14	14	15	15	15
	NO2	NO2	NO2	NO2	NO2	NO2	NO2	NO2	NO2	NO2	NO2	O3	O3	**U**	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
10	16	16	16	15	15	16	17	17	17	16	17	17	1	18	18	17	17	17	17	17	17	16	16	15	18
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
11	14	13	12	10	10	8	5	5	6	9	11	4	12	14	14	11	6	6	9	10	9	8	6	5	14
	O3	O3	O3	O3	O3	O3	O3	NO2	NO2	O3	O3	PM2	O3	O3	O3	O3	NO2	NO2	O3	O3	O3	O3	NO2	O3	O3
12	6	6	4	5	5	5	7	6	5	5	7	8	10	**U**	9	9	7	7	5	6	6	5	10	9	10
	O3	O3	O3	O3	O3	NO2	NO2	O3	NO2	PM2	PM2	O3	O3	**U**	O3	O3	O3	O3	NO2	NO2	O3	NO2	O3	O3	O3
13	8	8	8	8	8	15	14	14	15	1	16	16	16	16	16	15	12	7	7	7	6	7	6	7	16
	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	NO2	NO2	NO2	NO2	NO2	NO2	O3
14	7	7	7	7	7	7	6	8	1	12	14	14	14	14	13	12	7	5	6	5	5	5	5	6	14
	NO2	NO2	NO2	NO2	NO2	NO2	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	NO2	NO2	NO2	NO2	NO2	NO2	O3	O3
15	4	5	5	5	5	5	6	5	7	8	8	9	9	8	8	3	4	4	4	4	4	5	5	5	9
	NO2	NO2	NO2	NO2	NO2	NO2	NO2	PM2	NO2	PM2	O3	O3	O3	O3	O3	NO2	NO2	NO2	NO2	NO2	NO2	O3	NO2	NO2	O3
16	5	6	6	5	6	6	6	6	11	13	15	17	19	18	19	19	17	18	18	17	17	17	18	18	19
	NO2	NO2	NO2	NO2	NO2	NO2	PM2	NO2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
17	18	18	18	18	18	1	17	16	17	18	19	19	20	20	20	19	19	19	17	16	16	15	14	11	20
	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
18	10	10	9	5	**U**	5	5	5	5	5	5	9	11	11	11	11	6	7	7	7	7	7	7	7	11
	O3	O3	O3	O3	**U**	O3	NO2	NO2	NO2	NO2	O3	O3	O3	O3	O3	O3	NO2	NO2	NO2	NO2	NO2	NO2	NO2	PM2	O3
19	6	6	6	5	6	6	6	8	8	10	13	13	7	8	10	9	7	5	9	7	8	7	8	11	13
	NO2	NO2	NO2	PM2	PM2	NO2	NO2	NO2	PM2	PM2	PM2	PM2	O3	O3	O3	O3	O3	NO2	O3	O3	O3	O3	O3	O3	PM2
20	8	7	1	7	5	5	5	5	5	8	17	9	9	9	12	10	9	7	5	6	6	7	7	6	17
	O3	O3	PM2	O3	NO2	NO2	NO2	NO2	NO2	PM2	PM2	PM2	O3	O3	O3	O3	O3	O3	NO2	O3	O3	O3	O3	O3	PM2
21	5	4	11	10	8	7	6	6	6	8	9	12	12	12	11	10	9	9	10	11	10	11	10	8	12
	NO2	PM2	O3	O3	O3	O3	O3	NO2	NO2	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
22	2	5	5	5	5	5	8	6	6	5	5	8	8	12	13	8	10	10	10	9	8	8	4	4	13
	PM2	NO2	NO2	O3	O3	NO2	O3	O3	NO2	NO2	NO2	NO2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3
23	6	6	7	9	7	4	4	5	6	10	16	6	11	13	11	11	6	6	6	6	9	8	9	9	16
	O3	O3	O3	O3	O3	NO2	NO2	NO2	NO2	PM2	PM2	NO2	O3	O3	O3	O3	NO2	NO2	NO2	NO2	PM2	PM2	PM2	PM2	PM2
24	7	4	4	4	3	4	4	6	7	11	11	11	12	13	12	9	6	5	5	4	4	2	5	5	13
	PM2	NO2	O3	O3	NO2	NO2	NO2	O3	O3	O3	O3	O3	O3	O3	O3	O3	NO2	NO2	NO2	O3	NO2	PM2	NO2	NO2	O3
25	5	4	3	5	8	5	5	4	4	5	9	10	19	23	23	**24**	23	22	21	22	**U**	22	22	22	24
	NO2	NO2	NO2	O3	O3	O3	NO2	NO2	NO2	NO2	PM2	O3	O3	O3	O3	**O3**	O3	O3	O3	O3	**U**	O3	O3	O3	O3
26	21	22	22	22	22	22	21	21	20	20	18	19	19	19	19	18	19	18	18	1	18	15	11	10	22
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3
27	6	6	8	8	7	7	7	5	5	8	15	16	17	18	18	18	17	16	1	14	13	13	13	12	18
	O3	O3	O3	O3	O3	O3	O3	O3	NO2	PM2	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3
28	12	11	13	14	18	19	21	21	21	22	22	22	22	23	23	23	22	1	21	22	22	21	21	21	23
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3
29	21	21	20	19	10	9	6	7	7	10	10	15	18	19	20	17	1	7	5	11	16	16	14	10	21
	O3	O3	O3	O3	O3	O3	NO2	NO2	NO2	PM2	O3	O3	O3	O3	O3	O3	PM2	NO2	NO2	O3	O3	O3	O3	O3	O3
30	11	14	13	12	12	14	17	19	20	20	20	21	20	20	20	1	20	20	20	20	20	20	18	16	21
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3
31	17	17	19	20	20	19	20	20	19	19	18	18	18	18	1	20	20	19	21	21	20	20	20	20	21
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	PM2	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3
PEAK	21	22	22	22	22	22	21	21	21	22	22	22	22	23	23	24	23	22	21	22	22	22	22	22	
	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	O3	

STATUS FLAG CODES

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
U	- UNAVAILABLE		

AQI SUMMARY

AQI CLASS	FREQ	O3		PM 2.5		NO2		SO2	
VERY POOR (101 - 255)	0	-		-		-		-	
POOR (51 - 100)	0	-		-		-		-	
FAIR (26 - 50)	0	-		-		-		-	
GOOD (1 - 25)	0 98.5%	533 72.7%	hrs	49 6.7%	hrs	151 20.6%	hrs	- 0.0%	hrs
UNAVAILABLE	11 1.5%								

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

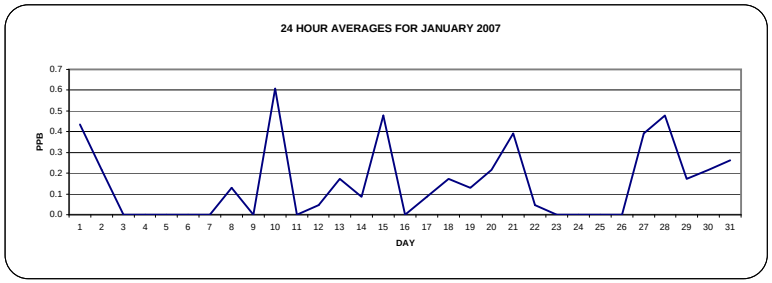
SULPHUR DIOXIDE (SO_2) hourly averages in ppb

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

STATUS FLAG CODES

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

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



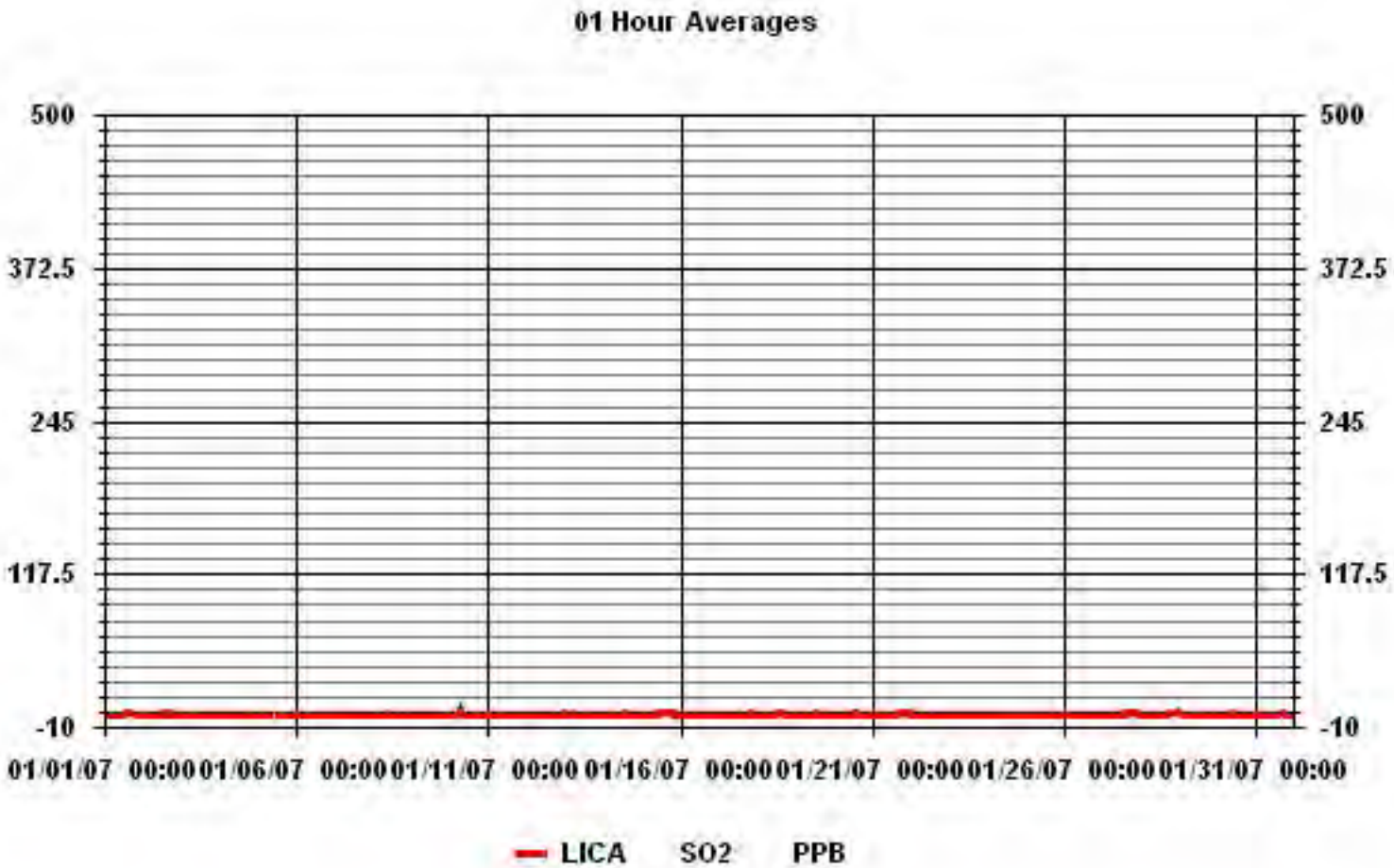
MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	89					
MAXIMUM 1-HR AVERAGE:	6	PPB	@ HOUR(S)	7	ON DAY(S)	10
MAXIMUM 24-HR AVERAGE:	0.6	PPB			ON DAY(S)	10

IZS CALIBRATION TIME:	35	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	4	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	0.48		MONTHLY AVERAGE:	0.16	PPB

Maxxam Analytics Inc

MOUNTAIN STANDARD TIME


01 Hour Averages
500
372.5
245
117.5
-10
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA SO2 PPB

LICA
SO2 / WD Joint Frequency Distribution (Percent)

January 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	1.56	2.13	4.83	4.12	4.69	6.82	6.97	3.98	2.98	3.55	14.36	17.49	9.53	6.40	4.69	5.83	100.00
< 60	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 170	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 340	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	1.56	2.13	4.83	4.12	4.69	6.82	6.97	3.98	2.98	3.55	14.36	17.49	9.53	6.40	4.69	5.83	

Calm : .00 %

Total # Operational Hours : 703

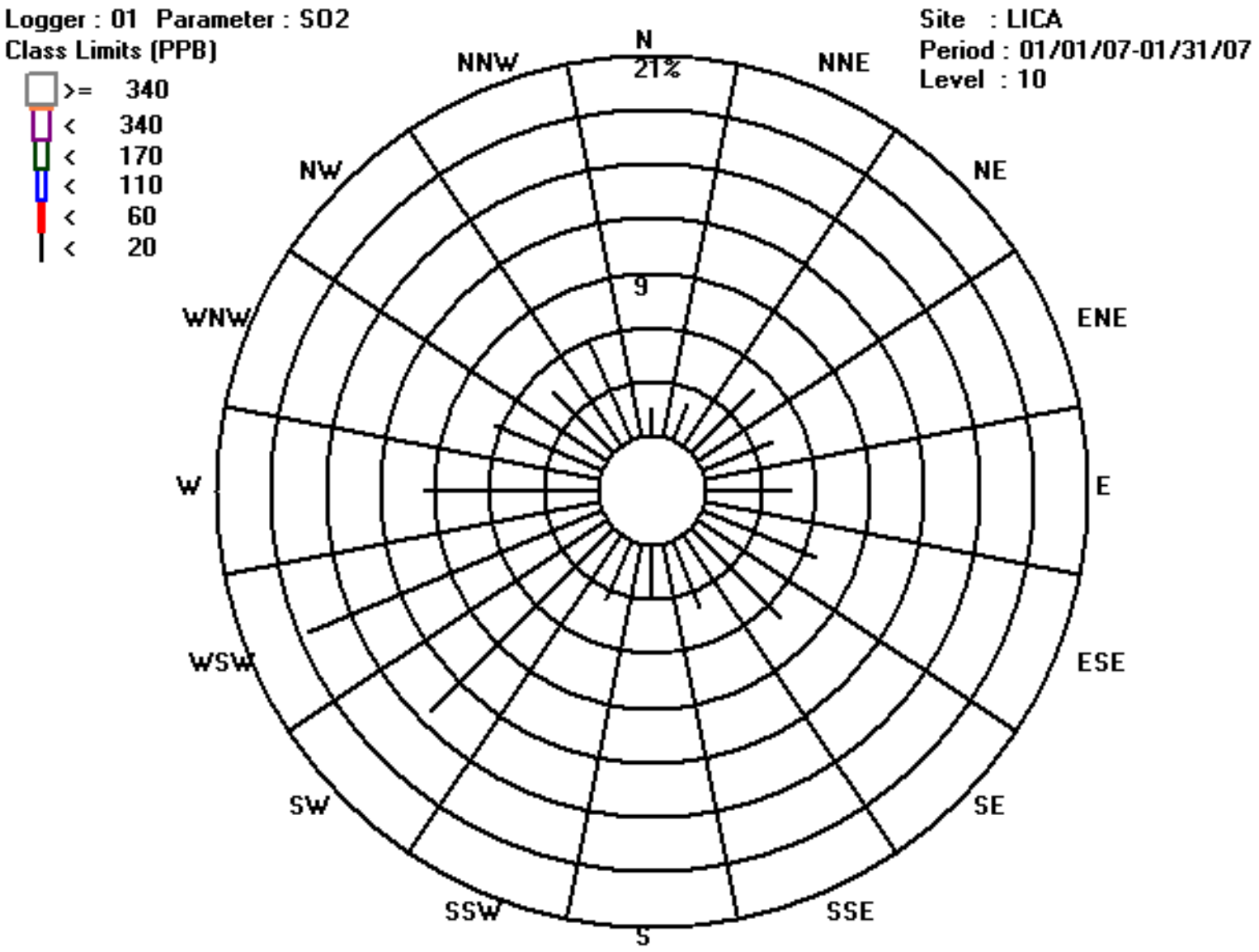
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 20	11	15	34	29	33	48	49	28	21	25	101	123	67	45	33	41	703
< 60																	
< 110																	
< 170																	
< 340																	
>= 340																	
Totals	11	15	34	29	33	48	49	28	21	25	101	123	67	45	33	41	

Calm : .00 %

Total # Operational Hours : 703


Logger : 01 Parameter : SO2
Class Limits (PPB)
>= 340
< 340
< 170
< 110
< 60
< 20
Site : LICA
Period : 01/01/07-01/31/07
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

SULPHUR DIOXIDE MAX instantaneous maximum in ppb

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

STATUS FLAG CODES

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

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	346					
MAXIMUM INSTANTANEOUS VALUE:	8	PPB	@ HOUR(S)	7	ON DAY(S)	10

IZS CALIBRATION TIME:	35	HRS	OPERATIONAL TIME:	740	HRS
MONTHLY CALIBRATION TIME:	4	HRS			
STANDARD DEVIATION:	0.81				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

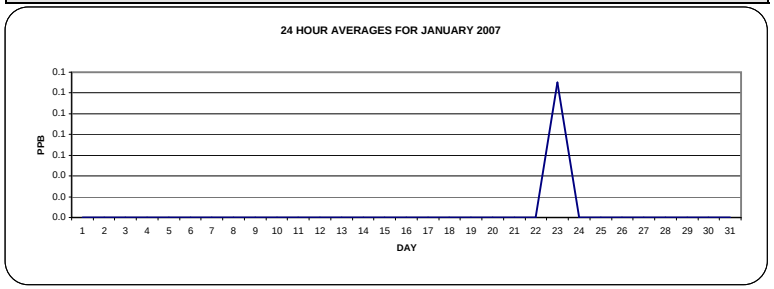
TOTAL REDUCED SULPHUR (TRS) hourly averages in ppb

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

STATUS FLAG CODES

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

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



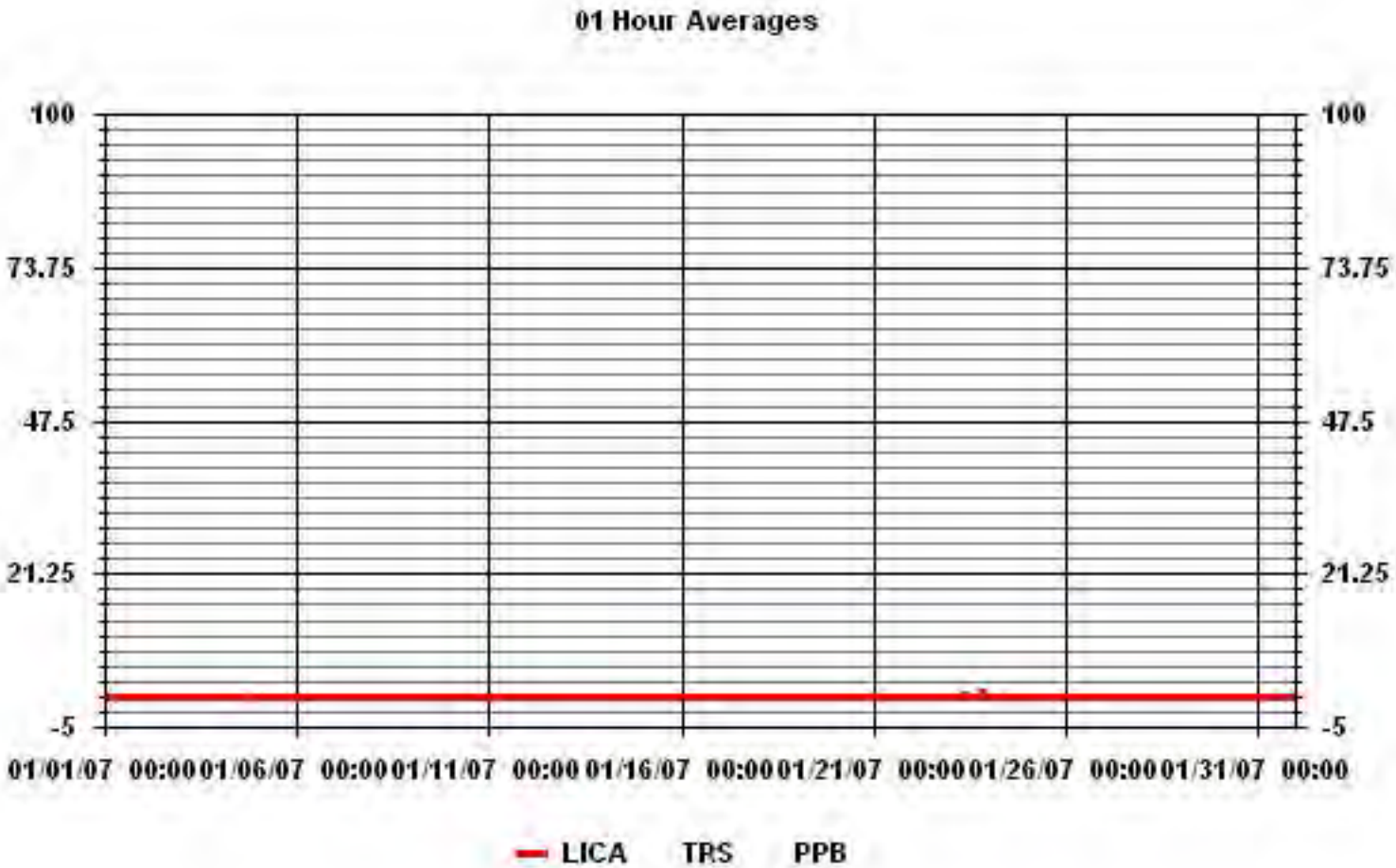
MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	3					
MAXIMUM 1-HR AVERAGE:	1	PPB	@ HOUR(S)	11,21,22	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:	0.1	PPB			ON DAY(S)	23

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	5	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	0.07		MONTHLY AVERAGE:	0.00	PPB

Maxxam Analytics Inc

MOUNTAIN STANDARD TIME


01 Hour Averages
100
73.75
47.5
21.25
-5
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA TRS PPB

LICA
TRS / WD Joint Frequency Distribution (Percent)

January 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	1.56	2.13	4.82	4.11	4.68	6.81	6.96	3.97	2.98	3.55	14.20	17.75	9.51	6.39	4.68	5.82	100.00
< 10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
< 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	1.56	2.13	4.82	4.11	4.68	6.81	6.96	3.97	2.98	3.55	14.20	17.75	9.51	6.39	4.68	5.82	

Calm : .00 %

Total # Operational Hours : 704

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3	11	15	34	29	33	48	49	28	21	25	100	125	67	45	33	41	704
< 10																	
< 50																	
>= 50																	
Totals	11	15	34	29	33	48	49	28	21	25	100	125	67	45	33	41	

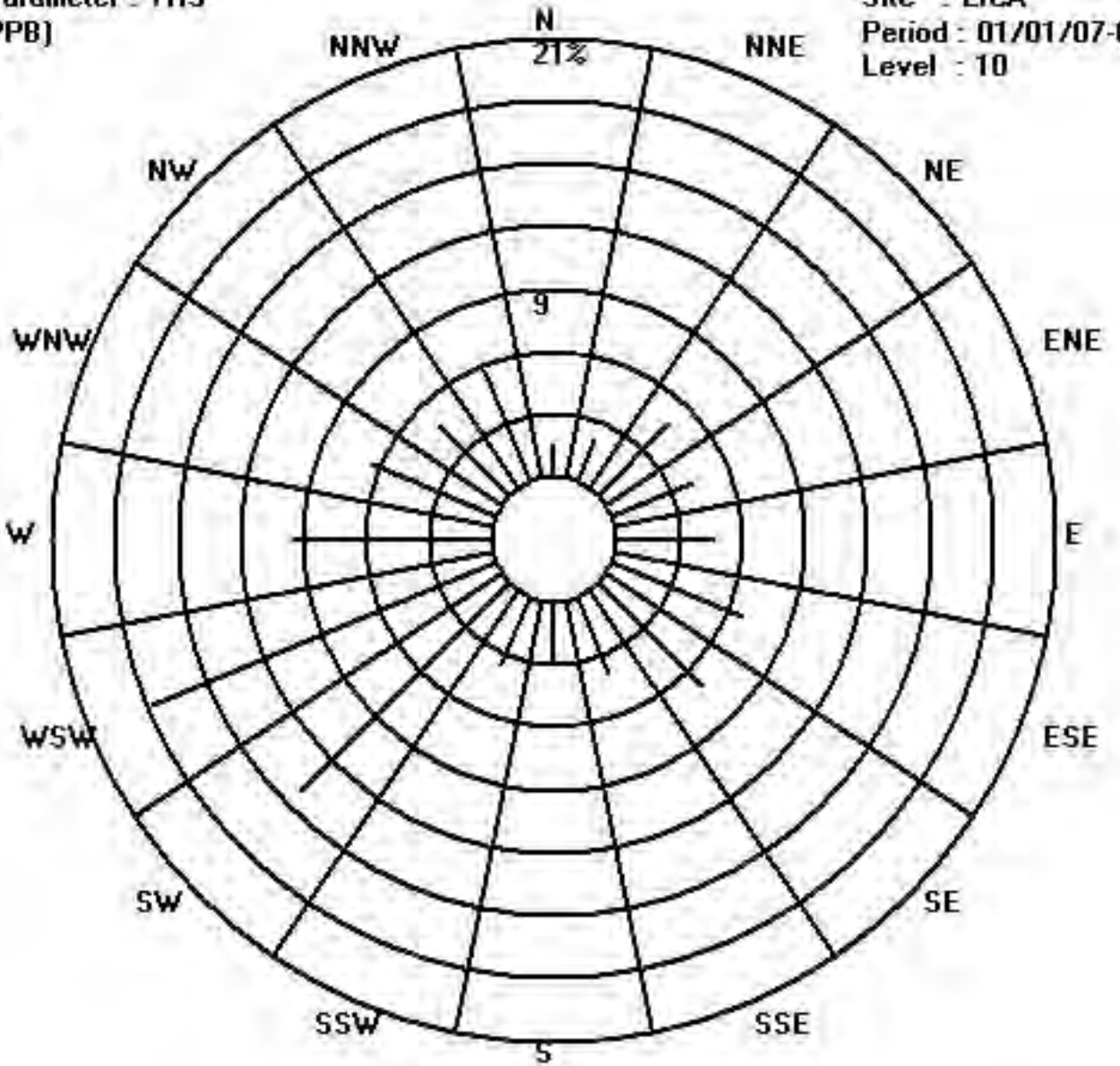
Calm : .00 %

Total # Operational Hours : 704

Logger : 01 Parameter : TRS
Class Limits (PPB)

>= 50
< 50
< 10
< 3

Site : LICA
Period : 01/01/07-01/31/07
Level : 10



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

TOTAL REDUCED SULPHUR MAX instantaneous maximum in ppb

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

STATUS FLAG CODES

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

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	351					
MAXIMUM INSTANTANEOUS VALUE:	3	PPB	@ HOUR(S)	0	ON DAY(S)	27

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	741	HRS
MONTHLY CALIBRATION TIME:	5	HRS			
STANDARD DEVIATION:	0.51				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

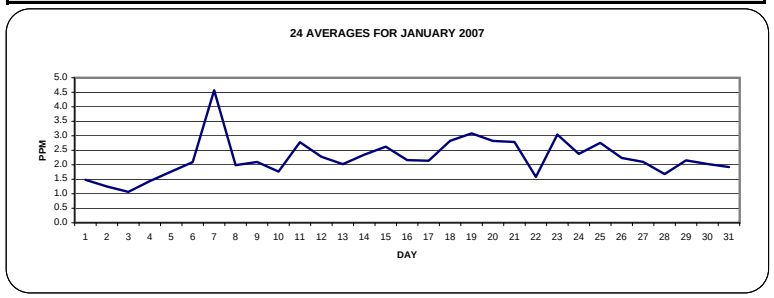
JANUARY 2007

TOTAL HYDROCARBONS (THC) hourly averages in ppm

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.
DAY																									
1	1.7	1.7	1.7	1.7	**IZS**	1.7	1.8	1.7	1.8	1.8	1.7	1.5	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.5	1.3	1.8
2	1.3	1.3	1.3	**IZS**	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.1	1.1	1.3	1.3	1	0.8	1.4
3	0.8	0.8	**IZS**	1	1	1	1	1	1	1	1	1	1	1.1	1.1	1	1.1	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3
4	1.3	**IZS**	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	2	2	2.0
5	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.6	1.6	1.6	1.6	1.7	1.8	1.7	**IZS**	1.8	1.9	1.8	1.8	1.8	1.6	1.9
6	1.6	1.6	1.7	1.8	1.7	1.7	1.8	1.9	2.5	2.1	2	1.8	1.7	1.8	1.9	2	**IZS**	1.3	2	2.3	3.7	3.2	3	3	3.7
7	2.8	2.3	2.3	2.3	2.6	2.5	2.7	2.7	2.9	2.8	2.4	3.5	3.9	5.9	6.8	**IZS**	7.2	7.2	**7.7**	7.3	6.9	6.9	6.7	6.8	7.7
8	3	1.4	1.3	1.5	1.5	1.5	1.6	1.7	1.9	1.9	1.9	2	2	2.1	**IZS**	2.1	2.3	2.4	2.3	2.2	2.3	2.3	2.2	2.3	3.0
9	2.3	2.4	2.4	2.4	2.6	2.5	2.8	2.4	2.5	2.4	2.4	1.9	1.9	**IZS**	2	2	1.9	1.9	1.8	1.6	1.7	1.6	1.5	1.3	2.8
10	1.2	1.2	1.1	1.1	1	1.2	1.3	1.1	1.2	1.3	1.5	1.5	**IZS**	2	2.1	2.1	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.6	2.7
11	2.6	2.7	2.9	3	3.2	3.3	3.3	3.4	3.4	3.5	3.6	**IZS**	2.2	2.3	2.4	2.4	2.4	2.4	2.6	2.5	2.4	2.5	2.4	2.5	3.6
12	2.5	2.3	2.3	2.3	2.4	2.5	2.4	2.4	2.8	3	**IZS**	2.9	2.3	**S**	2.1	1.9	2	2.3	2	2.1	2.1	2	1.9	1.6	3.0
13	1.6	1.5	1.6	1.7	1.7	1.2	1.3	1.3	1.4	**IZS**	2.1	2.3	2.3	2.2	2.3	2.2	2.4	2.4	2.6	2.5	2.5	2.5	2.5	2.4	2.6
14	2.6	2.8	2.7	2.8	3	3	2.8	2.6	**IZS**	2.1	1.8	1.9	1.8	1.9	2	2	2.1	2.3	2.3	2.4	2.3	2.3	2.3	2.2	3.0
15	2.2	2.2	2.3	2.3	2.3	2.3	2.4	**IZS**	3.3	3	2.7	2.6	2.7	2.7	2.7	**C**	**C**	**C**	**C**	**C**	**IZS**	2.9	3	3	3.3
16	2.8	3	2.9	2.9	3.2	3.3	**IZS**	2.8	2.4	2.1	2	2.1	2.1	1.8	1.5	1.6	1.7	1.8	1.8	1.6	1.7	1.5	1.5	1.6	3.3
17	1.4	1.3	1.4	1.4	1.5	**IZS**	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.1	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.7
18	2.7	2.7	2.7	2.5	**IZS**	1.9	2	2.2	2.4	2.4	2.6	2.8	3.7	4.1	3.6	2.7	2.8	3	3.1	3.1	3.2	3	2.8	3	4.1
19	3.2	3.2	3	**IZS**	2.9	3.2	3.3	4.1	4.3	4	3.7	3.2	2.8	2.6	2.6	2.6	2.8	2.9	3	3	2.8	2.6	2.5	2.6	4.3
20	2.8	2.9	**IZS**	2.4	2.7	2.9	2.6	2.9	3	2.9	3.2	3.2	3.2	3.3	2.3	2.5	2.6	2.7	2.7	2.6	2.9	2.8	2.9	2.9	3.3
21	3	**IZS**	2.2	2.2	2.3	2.2	2.3	2.8	2.8	2.9	2.3	2	2.1	2.2	2.9	3.2	3.4	3.6	3.5	3.3	3.3	3.4	3.2	3	3.6
22	**IZS**	2.4	2.5	2.5	2.6	1.9	1.5	1.7	2.1	1.8	2	2.3	1.7	2.3	1	0.8	0.6	0.9	0.8	0.7	0.8	0.9	1	**IZS**	2.6
23	2.7	2.8	2.6	2.6	2.5	2.7	2.6	2.8	2.8	3.1	3.5	3.3	2.6	2.6	2.6	2.9	3.3	3.6	3.6	3.7	4.1	4	**IZS**	3	4.1
24	2.5	2	1.8	1.9	1.9	2	2	2	2.1	1.9	2.1	2.1	2.2	2.2	2.3	2.4	2.7	2.6	2.7	2.6	2.6	**IZS**	4	4	4.0
25	4.1	4	3.7	3.4	3.2	3.3	3.5	3.4	3.5	3.6	3.4	2.8	2.3	1.9	1.8	1.9	2	2	2	2.2	**IZS**	1.8	1.8	1.8	4.1
26	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2	2.1	2.2	2.4	2.4	2.5	2.6	2.6	2.7	2.8	3	3	**IZS**	1.9	2	2	2	3.0
27	2	2.2	2.2	2.1	2	2.1	2.3	2.3	2.3	2.5	2.6	2.7	2.5	2.4	2.3	2.3	2.3	2.2	**IZS**	1.4	1.4	1.5	1.4	1.3	2.7
28	1.1	1.1	1.1	1.1	1.3	1.3	1.6	1.8	1.5	1.7	1.8	1.8	1.9	2	1.7	1.9	1.9	**IZS**	1.8	2	2.1	1.9	1.9	2.3	2.3
29	1.4	1.5	1.5	1.3	2	2.1	2.3	2.3	2.2	2.3	2.7	2.5	2.2	2.3	2.1	2.2	**IZS**	2.2	2.3	2.5	2.4	2.4	2.4	2.4	2.7
30	2.6	2.6	2	1.9	2.1	1.9	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	2	**IZS**	1.9	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.6
31	2.3	2.3	2.1	2	1.8	1.8	1.8	1.7	1.7	1.6	1.5	1.5	1.5	1.4	**IZS**	1.7	1.9	1.9	1.9	2.1	2.1	2.4	2.5	2.7	2.7
HOURLY MAX	4.1	4.0	3.7	3.4	3.2	3.3	3.5	4.1	4.3	4.0	3.7	3.5	3.9	5.9	6.8	3.2	7.2	7.2	7.7	7.3	6.9	6.9	6.7	6.8	
HOURLY AVG	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.1	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	

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



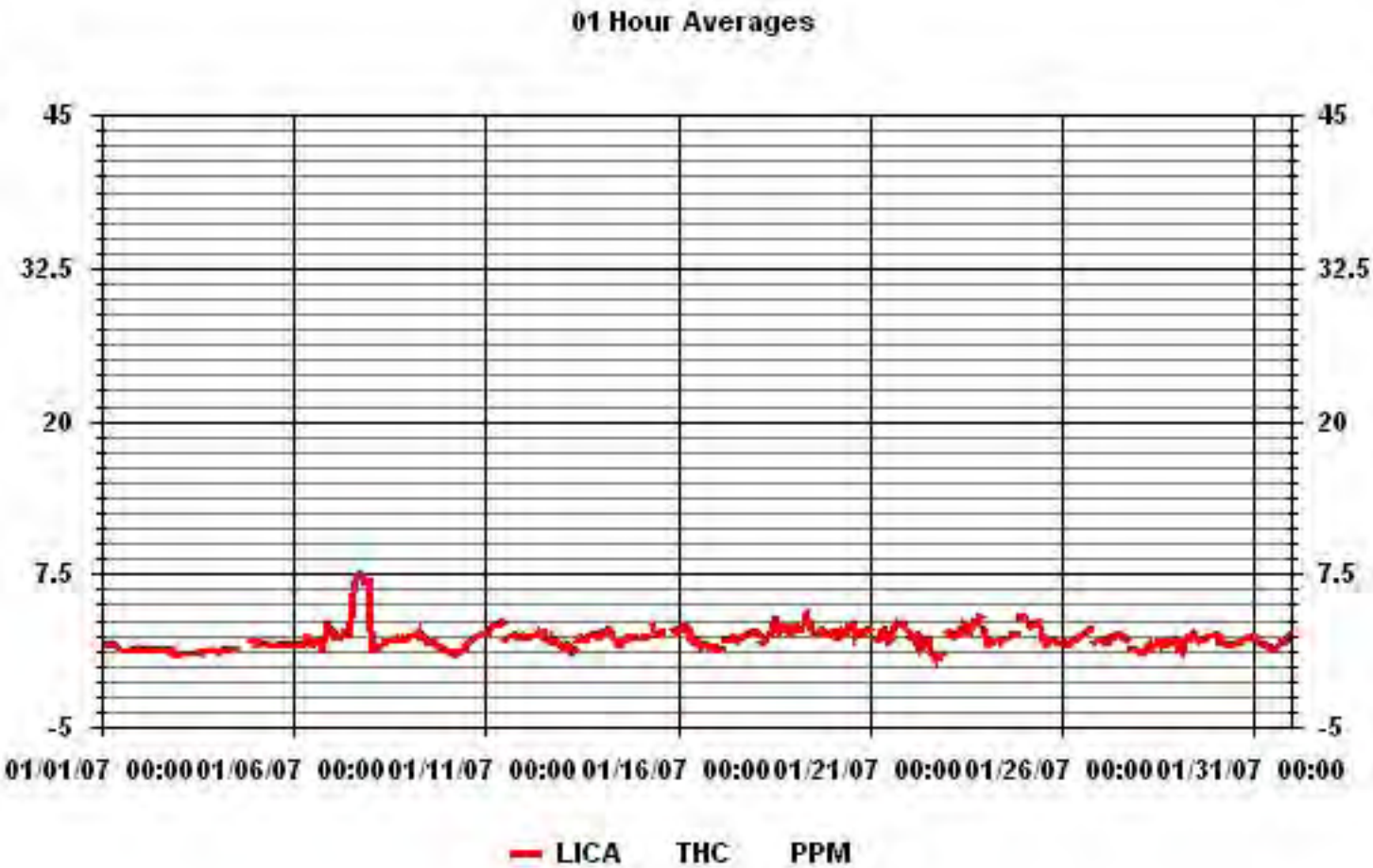
MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	696				
MAXIMUM 1-HR AVERAGE:	7.7	PPM	@ HOUR(S)	19	ON D/
MAXIMUM 24-HR AVERAGE:	4.6	PPM			ON D/

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	
MONTHLY CALIBRATION TIME:	13	HRS	AMD OPERATION UPTIME:	
STANDARD DEVIATION:	0.88		MONTHLY AVERAGE:	

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc


01 Hour Averages
45
32.5
20
7.5
-5
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA THC PPM

LICA
THC / WD Joint Frequency Distribution (Percent)

January 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	1.29	2.01	3.74	3.16	4.02	5.17	4.89	3.16	2.73	3.16	12.23	16.40	8.63	5.75	4.60	5.17	86.18
< 10.0	.28	.14	1.15	1.00	.71	1.43	1.58	.86	.28	.43	1.87	1.43	1.00	.71	.14	.71	13.81
< 50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 50.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	1.58	2.15	4.89	4.17	4.74	6.61	6.47	4.02	3.02	3.59	14.10	17.84	9.64	6.47	4.74	5.89	

Calm : .00 %

Total # Operational Hours : 695

Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 3.0	9	14	26	22	28	36	34	22	19	22	85	114	60	40	32	36	599
< 10.0	2	1	8	7	5	10	11	6	2	3	13	10	7	5	1	5	96
< 50.0																	
>= 50.0																	
Totals	11	15	34	29	33	46	45	28	21	25	98	124	67	45	33	41	

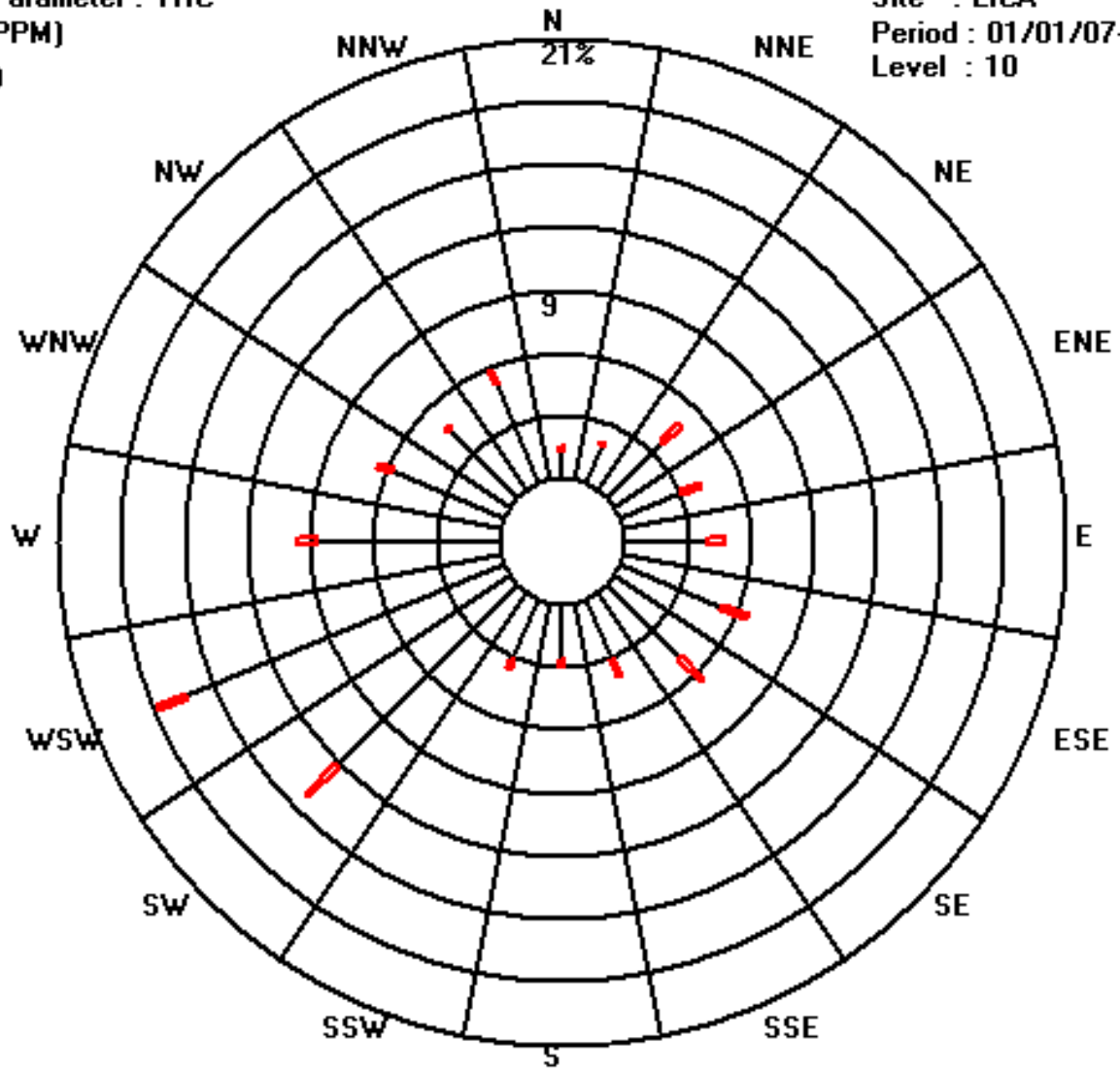
Calm : .00 %

Total # Operational Hours : 695

Logger : 01 Parameter : THC
Class Limits (PPM)

>= 50.0
< 50.0
< 10.0
< 3.0

Site : LICA
Period : 01/01/07-01/31/07
Level : 10



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

TOTAL HYDROCARBONS MAX instantaneous maximum in ppm

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY 24-HOUR		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4.6	4.6	4.7	4.6	**IZS**	4.7	4.8	4.6	4.7	4.7	4.6	4.4	4.2	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.2	4.4	4.3	4.8	4.4	24
2	4.2	4.2	4.2	**IZS**	4.3	4.2	4.3	4.3	4.3	4.4	4.3	4.2	4.2	4.3	4.3	4.5	4.3	4.2	4.1	4.1	4.2	4.2	4.1	3.7	4.5	4.2	24
3	3.7	3.8	**IZS**	3.7	3.8	3.8	3.8	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.9	3.8	4	4	4	4	4.1	4.1	4	4	4.1	3.9	24
4	4.1	**IZS**	4	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.3	4.2	4.3	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	1.6	1.7	4.3	3.8	24
5	1.6	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.3	1.3	1.3	1.3	1.4	1.5	1.4	1.5	**IZS**	1.4	1.5	**P**	1.3	1.3	1.2	1.6	1.4	23
6	1.1	1.1	1.2	1.4	1.3	1.3	1.8	1.6	2.4	1.9	1.7	1.5	1.5	1.4	1.5	1.7	**IZS**	3.7	4.8	6	5.5	4.9	4.7	4.7	6	2.6	24
7	4.6	3.8	4	4	4.2	3.9	4.4	4.2	4.6	4.5	5.4	5.4	5.7	9.1	8.5	**IZS**	9.1	9.2	**9.7**	9.5	9.1	9	8.5	9.2	9.7	6.5	24
8	8	2.9	2.8	2.9	3	2.9	3.1	3.2	3.5	3.3	3.4	3.5	3.5	3.5	**IZS**	3.9	4	4.1	4.1	4	4.1	4.1	3.9	4	8	3.7	24
9	4	4	4.1	4.1	4.3	4.2	4.8	4.4	5.9	4.1	4.3	3.7	4.8	**IZS**	3.7	3.3	3.2	3.1	3.1	2.9	2.9	2.9	2.9	2.6	5.9	3.8	24
10	2.5	2.7	2.7	2.3	2.3	2.4	2.6	2.4	2.5	2.5	2.7	2.7	**IZS**	2.9	2.9	3	3.1	3.2	3.3	3.2	3.3	3.5	3.6	3.4	3.6	2.9	24
11	3.5	3.6	3.9	3.8	4.2	4.2	4.2	4.2	4.5	4.8	4.6	**IZS**	4.5	4.5	4.5	4.4	4.5	4.5	4.7	4.6	4.5	4.6	4.6	4.6	4.8	4.3	24
12	4.5	4.4	4.3	4.4	4.4	4.6	4.6	4.5	4.9	5.2	**IZS**	5.4	4.6	**S**	4.2	4	4.1	3.9	4.1	4.1	4.1	4.1	3.9	3.7	5.4	4.4	23
13	3.6	3.6	3.7	3.7	3.8	3.4	3.4	3.6	3.5	**IZS**	3.7	3.9	3.9	3.7	3.9	3.9	4.3	4	4.2	4.1	4.1	4.2	4.2	4	4.3	3.8	24
14	4.2	4.7	4.4	4.3	4.6	4.6	4.5	4.2	**IZS**	4.2	3.7	3.8	3.6	4.2	3.9	4	4	5.2	4.5	4.3	4.2	4.2	4.3	4.1	5.2	4.2	24
15	4.1	4.2	4.1	4.3	4.2	4.2	4.3	**IZS**	6	4.6	4	3.9	4.1	4	4.2	**C**	**C**	**C**	**C**	**C**	**IZS**	2.3	2.3	2.3	6	3.9	24
16	2.2	2.3	2.3	2.3	2.6	2.6	**IZS**	2.5	1.6	1.3	1.2	**P**	**P**	1	0.6	0.7	0.9	1	0.9	0.6	0.7	0.6	0.6	0.7	2.6	1.4	22
17	0.7	0.6	0.7	0.8	0.9	**IZS**	1	1.1	1.1	1	1.3	1.3	1.3	1	1.4	1.3	1.2	1.3	1.4	1.5	1.5	1.5	1.7	1.6	1.7	1.2	24
18	1.6	1.7	1.6	1.5	**IZS**	1.7	2	2.2	2.8	2.1	2.7	2.9	3.7	3.9	3.8	2.7	2.9	2.9	2.9	4.6	3	2.9	2.6	2.7	4.6	2.7	24
19	2.9	3.1	2.8	**IZS**	3.3	3.3	3.5	7.9	4.7	4.1	3.7	3.4	3	2.6	2.7	2.7	2.9	3	3	3.2	2.8	2.7	2.7	2.6	7.9	3.3	24
20	3.1	2.9	**IZS**	3.1	3.4	3.4	3.3	3.5	4.4	3.7	3.9	4.1	4.2	4.4	2.9	3.2	3.3	3.3	3.3	3.3	3.6	3.5	3.7	3.6	4.4	3.5	24
21	3.6	**IZS**	3.3	3.2	3.2	3.2	3.5	5.7	4.1	4.3	3.5	3.1	3.1	3.3	4	4.3	4.5	4.6	4.6	4.2	4.3	4.3	4.3	4	5.7	3.9	24
22	**IZS**	4.2	4.5	4.3	4.4	4.1	3.4	3.6	4.3	3.7	4	4.3	3.6	3.1	2.7	2.6	2.4	2.7	2.7	2.4	2.7	2.8	2.7	**IZS**	4.5	3.4	24
23	3.2	3.1	3.1	3	3	3.2	3	5.4	3.4	3.9	4	3.9	3.4	3.2	3.1	3.4	4.2	4.1	4.7	4.4	5	4.6	**IZS**	4.5	5.4	3.8	24
24	4.3	3.6	3.3	3.4	3.4	4.3	3.4	3.5	3.5	3.3	3.5	3.7	3.6	3.6	4.1	3.9	4.3	4.1	8.5	4.1	4.4	**IZS**	5.6	5.6	8.5	4.1	24
25	5.9	5.8	5.4	5	4.9	5.3	5.3	5	5.3	5.5	5.4	4.4	3.9	3.5	3.5	3.4	3.5	3.6	3.6	3.9	**IZS**	3.9	3.8	3.9	5.9	4.5	24
26	4.3	3.9	4	4	4	4.5	4	4.1	4.4	4.2	4.7	4.6	4.6	4.8	4.9	4.9	5	5.1	5.1	**IZS**	5.5	5.4	5.5	5.4	5.5	4.6	24
27	5.4	5.5	5.5	5.5	5.5	5.7	5.7	5.7	5.7	6.4	6	6	5.9	5.8	5.6	5.6	5.7	5.5	**IZS**	4.9	4.9	5	4.9	4.9	6.4	5.5	24
28	4.6	4.8	4.7	4.7	4.8	4.8	5.1	5.3	5.1	5.3	5.3	5.3	5.4	5.5	5.3	5.4	5.4	**IZS**	5.9	5.7	5.9	5.7	5.9	6.1	6.1	5.3	24
29	6.2	6.3	6.4	6.2	5.9	6	6.9	6.2	6.1	6.2	6.7	6.5	6	6.2	5.9	6	**IZS**	6.4	6.2	6.4	6.5	6.4	6.3	6.4	6.9	6.3	24
30	6.5	6.5	6	5.8	6	5.8	5.6	5.5	5.6	5.6	5.6	5.7	5.6	5.7	6	**IZS**	6	6.3	6.3	6.4	6.4	6.5	6.4	6.5	6.5	6.0	24
31	6.4	6.4	6.3	6.2	5.9	5.9	5.9	6.1	5.8	5.8	5.7	5.6	5.5	5.5	**IZS**	5.7	5.7	5.7	5.7	6.1	6	6.3	6.5	6.6	6.6	6.0	24
HOURLY MAX	8	7	6	6	6	6	7	8	6	6	7	7	6	9	9	6	9	9	10	10	9	9	9	9			
HOURLY AVG	4.0	3.8	3.8	3.7	3.8	3.9	3.9	4.1	4.1	4.0	4.0	4.0	4.0	3.9	3.8	3.6	4.0	4.2	4.3	4.2	4.4	4.1	4.1	4.1			

STATUS FLAG CODES

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

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	693					
MAXIMUM INSTANTANEOUS VALUE:	9.7	PPM	@ HOUR(S)	19	ON DAY(S)	7

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	740	HRS
MONTHLY CALIBRATION TIME:	13	HRS			
STANDARD DEVIATION:	1.52				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

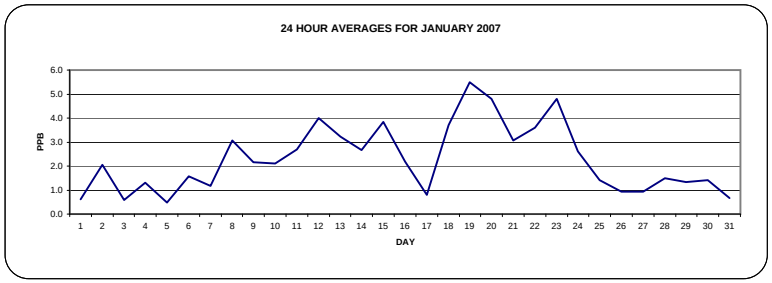
PARTICULATE MATTER 2.5 (PM2.5) hourly averages in ug/m^3

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0.2	0	0.4	2.1	0	0	0	0	1	3.5	4	0	0	0	0	0.1	0	0.3	0.6	0.9	0	1	0.5	0	4	0.6	24
2	2.5	2.6	1.5	1.7	4	2.3	2.2	1.8	3.1	10.1	6.1	2.3	3.5	0	0	0.2	0	0.9	0.4	0	0	1	3	0	10	2.1	24
3	0	0	0.3	0	0	0.7	0.4	1.3	0.9	1.8	0	0	0.7	0.8	0.8	1.3	1	1	0.8	0.8	0	0.4	0.8	0.2	2	0.6	24
4	0.8	0.3	0.9	0.4	0.9	1.4	1.4	0	0	0.9	1	0.2	1.1	0.9	0.9	2	2.4	2	3.5	2.8	2.9	2.2	1.8	0.5	4	1.3	24
5	0.9	1.8	0.5	0.3	0	0.7	1	0.6	0	0.1	0.5	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**D**	**D**	**D**	0	**D**	2	0.5	20
6	**D**	0	0	0	0	0	0	0.2	1.9	2.5	3.6	3.7	3	1.3	3.3	3.9	9	1.4	0.2	0.6	0.9	0	0	0.5	9	1.6	23
7	0	0	0	0	0	0	0	0	1.2	3	4.3	0	0	0	0.8	0.4	1.5	1.1	2.4	1.6	2.7	3.5	2.4	3.1	4	1.2	24
8	3	3.9	3.8	4.7	7.3	5.6	5.8	5	6.8	5.5	3.4	1.4	1.6	1.7	1.4	1.6	1.4	1.7	0	**D**	0.3	0	0.5	3.9	7	3.1	23
9	4.1	4.1	4.1	4.1	4.1	2.5	3.4	6.6	3.6	4.2	5.1	3.7	0	0	0	0.6	0	1.1	0	0.2	0.3	0	0.1	0.1	7	2.2	24
10	0.4	0.7	1.2	0	1	0.9	2.4	1.7	2.7	2.6	3.9	3.1	1.4	2.4	3	3.5	3.1	3.3	5.6	2.3	1.8	1.8	0.5	1.2	6	2.1	24
11	0	0	1.6	1.6	0.9	0.5	1.3	3.7	4.4	8.6	5.8	4.2	2.3	4.7	5.1	2.9	1.3	2.7	3.8	1.7	1	1.8	2.1	2.5	9	2.7	24
12	2.1	1.8	3	2.6	2.8	4.3	5	4.1	4.1	6.4	8.3	6.5	6.2	**M**	7	3.2	1.8	2.9	3.4	1.6	3.5	4.1	3.5	4	8	4.0	23
13	3.8	3.5	4.4	4.3	4.4	2.9	1.9	2.2	2	1.7	2.6	1.9	1.5	2.7	1.9	1	12.5	5.8	4.1	2	2.1	1.6	3	3.4	13	3.2	24
14	4.1	4.3	4.7	5.3	4.8	4.3	3.1	1.7	0.6	4.6	1.2	4.1	2.5	1.4	1.4	0.7	0	1.4	1.6	2.8	3.1	2.7	2.1	1.6	5	2.7	24
15	3.1	3.2	3.2	3.1	2.7	3.2	3.8	6.5	7.8	9.8	7.1	4.2	2	3.1	4.3	3.9	2	1.9	3.1	2.8	3.7	1.7	2.7	3.4	10	3.8	24
16	2.4	4.9	3.7	3.3	5.4	6.1	6.8	7.4	2.6	5.2	3.4	0.5	0.1	0	0	0	0.2	0	0	0.2	0	0	0	0	7	2.2	24
17	0	0.3	0.6	0.5	1	0.7	1.4	1.7	2.1	2.6	1.4	0.5	0	0.5	0.3	0.9	1	0.7	0	1.1	1	0.6	0	0	3	0.8	24
18	0	0.3	1.6	1.1	0	0.4	0.7	1.5	3.1	5.4	5.9	3.9	5.5	7.6	4.6	4.8	5.4	5	4.5	4	4.7	5.1	6.1	7.9	8	3.7	24
19	5.8	7	6.7	6.3	7.5	6.5	5.8	6.8	9.4	11.9	15.1	15	4.1	0.8	0.6	3.2	3.1	1.1	4	2.4	3.1	2.4	2	1	15	**5.5**	24
20	1	0	1.4	1.2	2.4	2.4	2.6	2.4	4.7	9.9	**20**	11	2	5.1	4.5	4.3	4.6	4.7	5.5	5.9	5.7	5.9	3.1	4.7	20	4.8	24
21	4.9	4.8	4.8	1.3	2.7	2.4	2.3	3.8	5.8	9.7	5	3.6	1.7	1.5	3.4	4	3.1	2.2	0.9	0.7	0.7	0.4	1.3	2.4	10	3.1	24
22	2.4	2.3	2.8	0.6	3.5	5.6	5.1	3.2	3.5	4.3	6	9.1	4.8	2.2	3	4.4	3.5	2.5	2	3.1	2.1	2.5	3.8	4.3	9	3.6	24
23	5.6	3.1	4	2.2	1.3	0	1	1.4	4.2	12.3	19.4	6.5	1.7	1.3	1.8	1.6	1.3	2.6	0	1.8	10.7	9.5	10.5	11.2	19	4.8	24
24	8.9	3.1	1.3	0	0.8	3	3.1	4.4	1.6	1.8	2.4	1.3	0.7	1.7	1.6	6.3	3.2	1.2	1.7	2.2	1.2	2.8	4.7	3.4	9	2.6	24
25	1.6	1	2.9	1.4	1.2	0	0.6	0	4.5	4.7	10.6	0	0	0	0.2	0	1.3	2.9	0	0	0	0	0	0.8	11	1.4	24
26	0.1	0	0	0	2.6	0	0.8	0	0	1.2	2.6	0.5	1	1.3	2.1	2	2	1.8	1.3	1.2	1.3	0.4	0	0	3	0.9	24
27	0.5	0	0.3	0.1	0	0	0	1.1	4.2	9.5	0	0.1	0	0	0	0	0	0	0.8	0.8	0.6	0.1	1.9	2.2	10	0.9	24
28	2.6	2.9	4.3	3.5	3.3	2.7	2.1	0.8	0	0.9	1	1	0.4	0.3	1.7	0.8	1.5	0.9	1.1	0.4	1.2	0.6	1.1	0.7	4	1.5	24
29	0	0	0	0	0	0	0	2	2.8	11.8	9.5	0.6	1.7	0.7	0	0.1	0.8	0	0	0.8	0.2	0	0	0.9	12	1.3	24
30	0	2.4	4.7	3.6	3.4	3.3	1.7	0.7	0	0.4	0	0.6	0.2	0.1	1.2	0.6	2	2	1.6	1.6	1	1.1	0.2	1.4	5	1.4	24
31	1.5	1.2	0	0	0	0	0	0	0	0	1.1	0.7	1.4	2.1	1.7	2.1	0.7	0.4	0	0.1	1.1	0	1.7	0.4	2	0.7	24
HOURLY MAX	9	7	7	6	8	7	7	7	9	12	20	15	6	8	7	6	13	6	6	6	11	10	11	11			
HOURLY AVG	2.1	1.9	2.2	1.8	2.2	2.0	2.1	2.3	2.9	5.1	5.2	2.9	1.7	1.5	1.9	2.0	2.3	1.9	1.8	1.6	1.9	1.8	1.9	2.2			

STATUS FLAG CODES

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

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



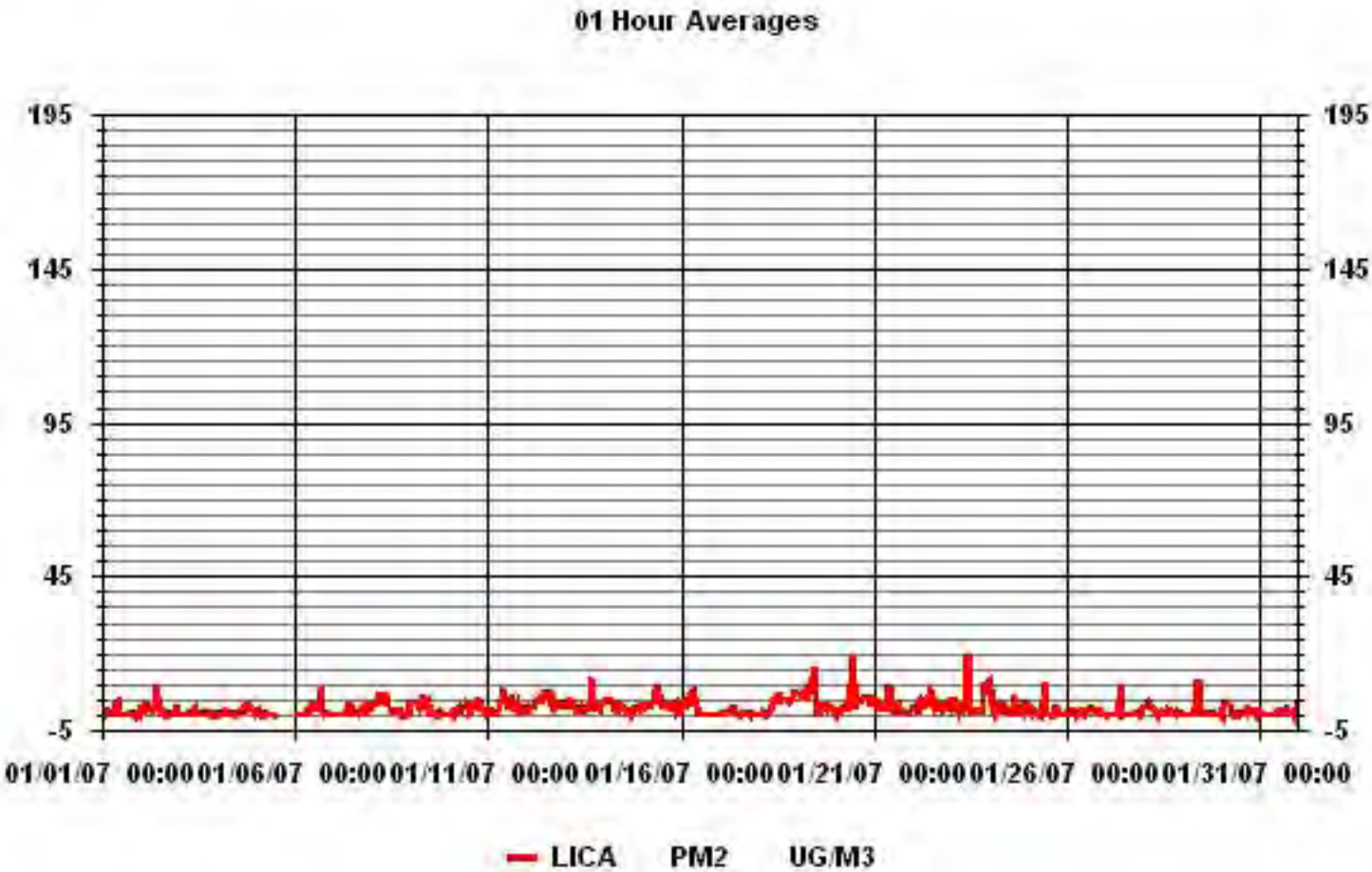
MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	-					
NUMBER OF 24-HR EXCEEDENCES:	0		PROPOSED GUIDELINE			
NUMBER OF NON-ZERO READINGS:	592					
MAXIMUM 1-HR AVERAGE:	20	UG/M^3	@ HOUR(S)	11	ON DAY(S)	20
MAXIMUM 24-HR AVERAGE:	5.5	UG/M^3			ON DAY(S)	19

IZS CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	737	HRS
MONTHLY CALIBRATION TIME:	7	HRS	AMD OPERATION UPTIME:	99.1	%
STANDARD DEVIATION:	2.57		MONTHLY AVERAGE:	2.30	UG/M^3

Maxxam Analytics Inc

MOUNTAIN STANDARD TIME


01 Hour Averages
195
145
95
45
-5
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA PM2 UG/M3

LICA
PM2 / WD Joint Frequency Distribution (Percent)

January 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	1.50	2.32	4.65	4.38	4.79	6.57	6.30	3.69	2.87	3.56	14.52	18.49	9.31	6.30	4.79	5.89	100.00
<	60.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	80.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	120.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	240.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	240.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	1.50	2.32	4.65	4.38	4.79	6.57	6.30	3.69	2.87	3.56	14.52	18.49	9.31	6.30	4.79	5.89	

Calm : .00 %

Total # Operational Hours : 730

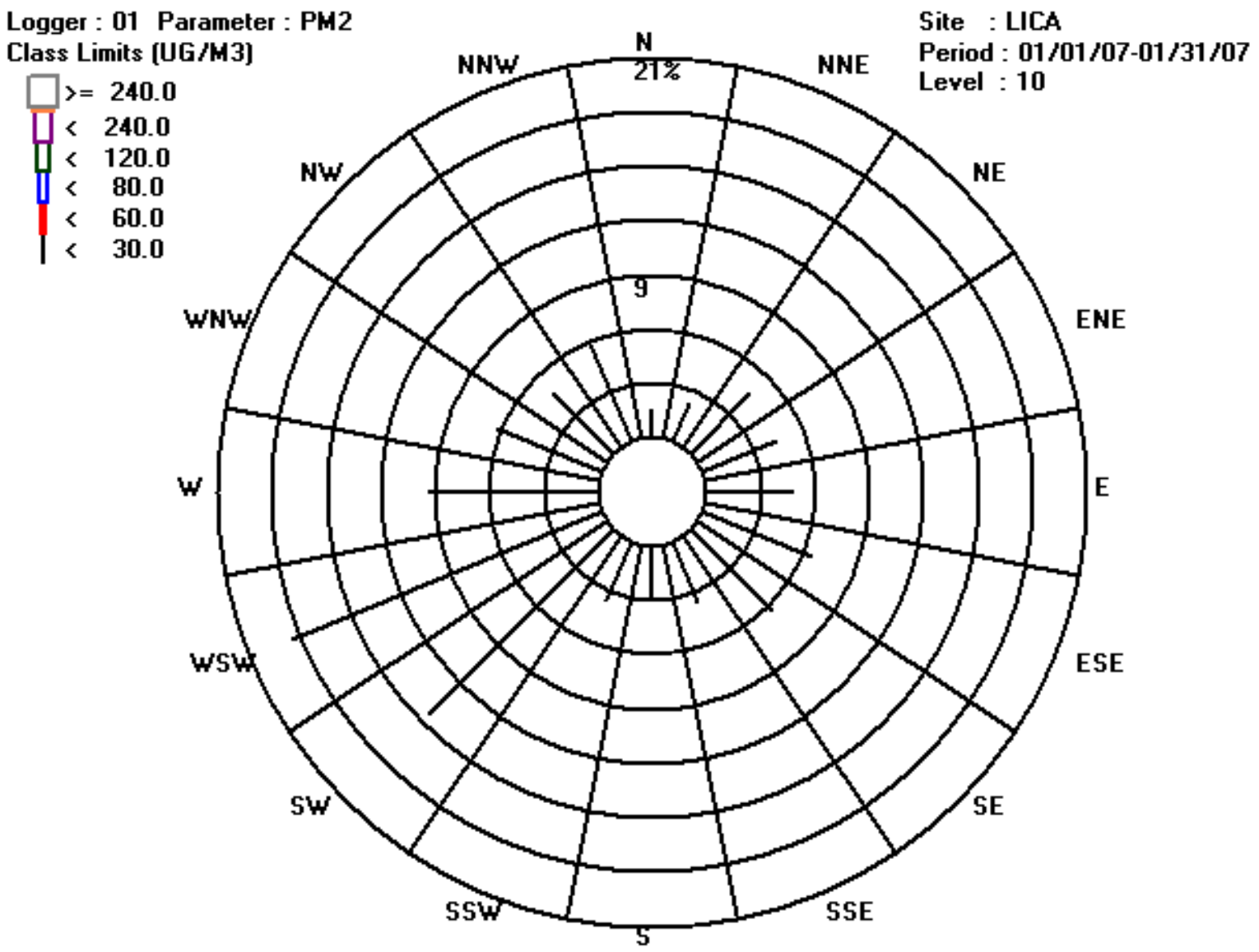
Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	30.0	11	17	34	32	35	48	46	27	21	26	106	135	68	46	35	43	730
<	60.0																	
<	80.0																	
<	120.0																	
<	240.0																	
>=	240.0																	
	Totals	11	17	34	32	35	48	46	27	21	26	106	135	68	46	35	43	

Calm : .00 %

Total # Operational Hours : 730


Logger : 01 Parameter : PM2
Class Limits (UG/M3)
>= 240.0
< 240.0
< 120.0
< 80.0
< 60.0
< 30.0
Site : LICA
Period : 01/01/07-01/31/07
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

PARTICULATE MATTER 2.5 MAX instantaneous maximum in ug/r^3

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	4.2	3.5	4.1	9.6	4.3	3.9	2.9	4.5	4.9	7.3	7.8	7.6	1.7	2.9	1.7	3.6	4.4	3.1	5.3	5	3.8	4.9	3.6	3	9.6	4.5	24
2	6.6	6.1	5.5	5.2	9.6	7.9	5.7	8.2	8.4	16.7	14.8	8.6	7.3	2.8	0.3	3.6	2.7	4.2	7.1	3.3	3.9	4.4	6.3	3	16.7	6.3	24
3	0.7	3.1	3.2	2.5	2.2	3.3	3.8	4.3	4	4.8	1.9	1.8	3	3.4	3.6	3.9	3.5	3	2.9	3.3	1.9	3.6	3.1	2.5	4.8	3.1	24
4	3.9	3.6	3.5	3.3	3.4	4.4	3.4	3.2	2.7	3.1	4	3	4.3	4	5.1	4.2	5.1	4.9	6.2	5.5	7.2	4.3	5.1	4.6	7.2	4.3	24
5	4.1	5.1	4.2	2.9	3.2	3.5	3.7	3.4	2.6	2.9	3.5	3	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**D**	**D**	**D**	0.8	**D**	5.1	3.3	20
6	**D**	0.1	1.7	2.6	3.1	2.4	2.7	3.7	5.5	6.3	6.2	6.2	5.2	4.1	6.6	7.2	13.9	9.4	3.6	3.5	2.9	2.9	3.5	3.3	13.9	4.6	23
7	3.2	2	2.5	2.3	1.2	2.5	2.2	1.9	4.5	7.3	9.6	3.4	3.5	4	4.1	5.1	4.4	4.1	5.3	4.5	6.2	6.4	6.8	5.8	9.6	4.3	24
8	6.3	6.6	6.1	7.9	10.5	9.5	8.7	8	10.2	9.8	7.4	4.7	5.2	5.1	4.2	5.1	4.3	5.7	2	D	3.1	3.9	3.6	9.3	10.5	6.4	23
9	8.4	8.5	7.9	8.1	8	5.7	6.9	15.7	9.4	8.1	9.7	9.1	1.8	4	2.9	3.9	2.9	4.1	3.4	3.1	3.6	2.4	3.6	3.2	15.7	6.0	24
10	3.1	3.6	4.5	2.9	3.6	4.1	5.5	5.4	5.7	6.1	7.1	6.3	5.3	5.2	6.8	7.1	6.3	7.1	9.7	6.1	5.7	6.1	4.5	5.6	9.7	5.6	24
11	4	3.9	6.3	7.7	5.4	5	5.1	9.1	10.5	11.3	9.2	10.8	7.6	10.2	8.6	6.3	5.6	5.5	7.9	5.1	4.2	5.1	6.2	6.4	11.3	7.0	24
12	6.8	6.2	6.9	6.8	6.8	8.5	8.4	8.5	8.1	13.4	13.3	11.7	11.6	**M**	10.6	7.4	5.1	6.5	6.9	5.1	7.1	8.4	7.4	6.8	13.4	8.2	23
13	7.3	6.8	7.4	7.6	7.3	6.4	5.2	5.2	6.3	5.3	6.5	5.7	6.6	7.6	5.3	4.5	**39.3**	21.7	7.4	5.8	7.2	6	7.2	7.3	39.3	8.5	24
14	8.7	7.9	8.3	9.4	10.8	9.8	8.3	7.7	5.8	9.7	4.5	7.4	6.3	5.8	6.2	4.1	3.1	6.4	5.6	6.8	6.5	6.5	6.2	5.8	10.8	7.0	24
15	8.6	7.6	8.7	7.2	7.4	7	7.7	12.1	13.5	14.4	14.4	10.7	6.1	6.6	9.8	6.7	5.6	5.5	6.4	6.2	6.6	3.9	5.8	7.4	14.4	8.2	24
16	6.2	10	7.2	6	9.1	9.2	14.7	13.8	6.6	14.4	6.7	**P**	**P**	3	1	2.9	2.9	1.6	1.9	1.9	1.7	1.6	2.2	2.1	14.7	5.8	22
17	2.4	2.5	3.1	3.9	3.7	3.4	3.6	4	4.2	5.1	4.4	3.1	2.5	2.6	3.6	3.2	3.2	4.1	2	4	3.3	3.7	2.6	2.3	5.1	3.4	24
18	2.7	4.5	5	5	4.5	3.5	4.7	5.8	7.3	10.2	12.5	8.8	9.8	12.3	7.4	8.3	8.3	8.1	7.6	7.8	7.8	8.7	11.3	13.8	13.8	7.7	24
19	10	11.3	11.6	10.3	11.7	11.7	9	10.6	17.6	16.5	18.9	18.3	17.3	6.2	4.1	6.4	5.7	4.3	8.6	5.2	6.3	5.3	6.3	4.8	18.9	9.9	24
20	3.9	3.6	5.8	4.9	6.3	5.6	6.6	7.1	8.2	19.5	33.1	15.5	7.7	7.9	7.9	7.2	7.3	7.4	8.2	8.7	8.5	9.5	7.2	8.6	33.1	9.0	24
21	11.8	8.9	9.7	4.8	6.1	5.8	6.1	8.5	11.1	16.7	16.5	7.2	6.6	4.2	7.1	7.7	6.2	6	3.7	3.5	4.1	2.5	4.2	5.3	16.7	7.3	24
22	6.7	5.3	7.2	6.1	6.7	9.2	8.3	5.7	8.2	7.1	9.2	12.7	10.1	4.9	6.1	7.8	9	6.7	5.7	6.3	5.1	4.9	6.7	7.1	12.7	7.2	24
23	7.8	6.6	9.5	6.1	6.2	4	4.8	5.3	7.7	19.3	24.4	18.9	7.5	5.1	4.8	4.1	5.2	5.8	3	7.7	15.2	19.4	16.8	15.6	24.4	9.6	24
24	23.6	8.4	5.1	4.8	4.5	7.2	5.6	14.2	4.6	6.7	5.7	5.5	5.3	6.2	7.2	10.2	5.9	4.9	7.7	5	4.2	5.7	7.8	7.2	23.6	7.2	24
25	6.1	6	11.4	6.7	5.7	4.2	4.4	2.9	9.7	9.6	20.4	2.7	2.9	2.6	3	2.3	3.5	9.6	7.2	4.6	1.3	2.3	1.3	3.2	20.4	5.6	24
26	3.4	3.7	3	3.2	8.3	5	5.7	4.7	2.8	5.3	15	3.6	3.8	4.2	4.7	6.5	5.1	5	5.5	6.1	5.7	5.8	5.1	4.7	15	5.2	24
27	5.7	4.6	5.5	4	3.5	5.2	1.9	6.3	10.7	20.1	4.4	4.9	4.2	3.1	3.9	4.4	4.8	3.5	5.9	8.1	6.7	4.1	11.1	6.3	20.1	6.0	24
28	6.6	7.6	7.9	8	6.8	5.9	6	3.9	3.2	4.3	4.9	4.5	3.8	3.9	4.2	5.2	4.1	3.7	4.5	3.2	4.2	3.7	3.9	4.2	8	4.9	24
29	4.3	3.4	4.1	4	3.1	5.5	3.5	6.2	9.3	16.3	17.6	4.3	5.3	6.6	1.7	3.1	5.2	3.6	3.1	5.1	4.4	3.9	4.3	5.3	17.6	5.6	24
30	3.1	6.9	8.5	6.5	6.8	6.3	5.1	4.5	3.6	2.4	2.3	5.2	5.3	4.7	5.7	3.9	6.6	5.2	5	5.3	4.3	4.3	3.6	5.3	8.5	5.0	24
31	5.7	4.5	3.4	2.2	1	1.2	1.1	2.5	1.4	2.4	4.4	4	4.9	5.1	6.8	5.7	7.1	5.2	3.5	4.1	4.5	3.2	5.6	4.7	7.1	3.9	24
HOURLY MAX	24	11	12	10	12	12	15	16	18	20	33	19	17	12	11	10	39	22	10	9	15	19	17	16			
HOURLY AVG	6.2	5.6	6.1	5.6	5.8	5.7	5.5	6.7	7.0	9.8	10.3	7.3	5.9	5.1	5.2	5.4	6.5	5.9	5.4	5.2	5.2	5.2	5.6	5.8			

STATUS FLAG CODES

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

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	728					
MAXIMUM INSTANTANEOUS VALUE:	39.3	UG/M^3	@ HOUR(S)	17	ON DAY(S)	13

IZS CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	735	HRS
MONTHLY CALIBRATION TIME:	7	HRS			
STANDARD DEVIATION:	3.77				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

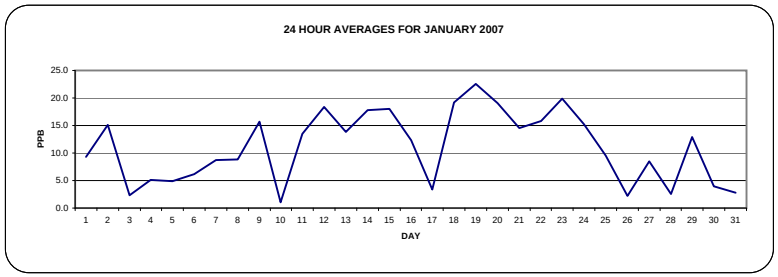
NITROGEN DIOXIDE hourly averages in ppb

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	12	12	10	13	**IZS**	9	10	12	17	12	9	7	6	6	6	6	6	6	7	9	10	10	10	9	17	9.3	24
2	12	10	11	**IZS**	18	18	15	19	22	20	27	23	20	14	11	20	22	26	11	8	7	7	5	3	27	15.2	24
3	3	4	**IZS**	5	4	4	7	3	2	2	2	1	1	1	1	1	2	2	2	1	1	1	2	1	7	2.3	24
4	1	**IZS**	1	2	1	2	2	3	5	6	5	5	4	**M**	**IZS**	7	10	15	**IZS**	8	7	7	6	5	15	5.1	24
5	4	3	3	2	2	2	3	3	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	4	8	8	7	12	7	12	4.9	24
6	6	8	14	7	7	9	9	8	18	10	8	5	2	1	2	2	**IZS**	3	4	5	4	3	4	4	18	6.2	24
7	4	4	3	4	3	7	8	10	22	21	20	12	10	8	8	**IZS**	5	7	9	8	7	8	8	5	22	8.7	24
8	4	6	5	6	4	4	4	6	10	7	3	3	2	1	**IZS**	4	8	8	10	18	21	20	23	26	26	8.8	24
9	25	25	23	24	29	27	28	27	25	21	21	23	12	**IZS**	8	10	8	7	4	4	4	3	2	2	29	15.7	24
10	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	2	1	1	1	1	2	2	1.1	24
11	3	4	6	8	10	10	17	23	27	18	12	**IZS**	7	5	6	9	26	27	14	10	13	13	24	19	27	13.5	24
12	16	14	16	14	14	23	29	19	20	20	**IZS**	14	12	**S**	14	16	20	20	23	26	21	23	13	17	29	18.4	23
13	18	18	17	16	16	4	3	3	2	**IZS**	1	1	1	1	2	4	16	23	30	30	27	30	26	29	30	13.8	24
14	30	30	30	30	28	28	19	14	**IZS**	8	5	4	4	4	4	6	16	23	24	23	23	22	21	12	30	17.7	24
15	17	21	20	21	20	23	25	**IZS**	30	26	14	10	8	10	13	14	16	16	16	16	16	18	22	22	30	18.0	24
16	20	24	24	23	25	26	**IZS**	26	14	11	8	6	5	6	5	5	9	7	7	8	8	6	5	5	26	12.3	24
17	4	4	3	5	4	**IZS**	6	8	5	3	2	1	1	1	1	1	1	2	3	4	3	4	5	7	8	3.4	24
18	6	4	7	12	**IZS**	11	19	21	23	20	17	13	17	18	13	15	25	31	29	28	28	28	28	27	31	19.1	24
19	25	25	26	**IZS**	26	26	27	32	31	31	**36**	35	17	14	12	13	20	23	17	19	18	18	17	12	36	**22.6**	24
20	15	12	**IZS**	10	21	23	19	19	20	23	32	31	14	16	13	15	18	20	22	21	20	18	18	18	32	19.0	24
21	19	**IZS**	10	11	11	12	15	24	27	26	13	9	10	11	13	14	15	16	13	12	13	12	12	15	27	14.5	24
22	**IZS**	20	19	14	15	23	14	16	24	21	23	32	22	9	8	16	11	10	9	9	10	10	13	**IZS**	32	15.8	24
23	14	13	13	10	13	15	16	22	27	27	32	27	9	5	10	11	24	26	26	27	29	30	**IZS**	31	32	19.9	24
24	25	18	14	13	13	16	18	24	15	7	7	8	6	4	7	13	25	20	22	15	17	**IZS**	22	21	25	15.2	24
25	19	18	14	13	8	12	21	17	16	20	25	15	6	1	1	2	2	2	2	1	**IZS**	2	1	1	25	9.5	24
26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	**IZS**	2	6	12	11	12	2.2	24
27	17	16	10	10	11	10	10	14	19	17	4	3	2	2	2	3	4	5	**IZS**	6	7	7	7	8	19	8.4	24
28	8	8	8	6	4	3	2	2	2	1	1	1	1	1	1	1	1	**IZS**	2	1	1	2	2	1	8	2.6	24
29	1	1	1	1	15	14	24	30	29	29	22	9	4	4	3	8	**IZS**	29	23	13	6	7	8	15	30	12.9	24
30	14	8	9	9	8	7	4	3	2	3	3	1	1	1	1	**IZS**	1	1	1	1	1	2	3	6	14	3.9	24
31	4	5	2	3	2	3	3	2	4	4	5	5	6	5	**IZS**	2	3	3	1	0	1	0	0	0	6	2.7	24
HOURLY MAX	30	30	30	30	29	28	29	32	31	31	36	35	22	18	14	20	26	31	30	30	29	30	28	31			
HOURLY AVG	11.6	11.6	11.1	10.1	11.5	12.4	12.6	13.7	15.9	14.3	12.4	10.6	7.3	5.6	6.2	7.9	11.3	13.1	11.7	11.3	11.1	10.8	11.1	11.4			

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 212 PPB 24-HR 106 PPB



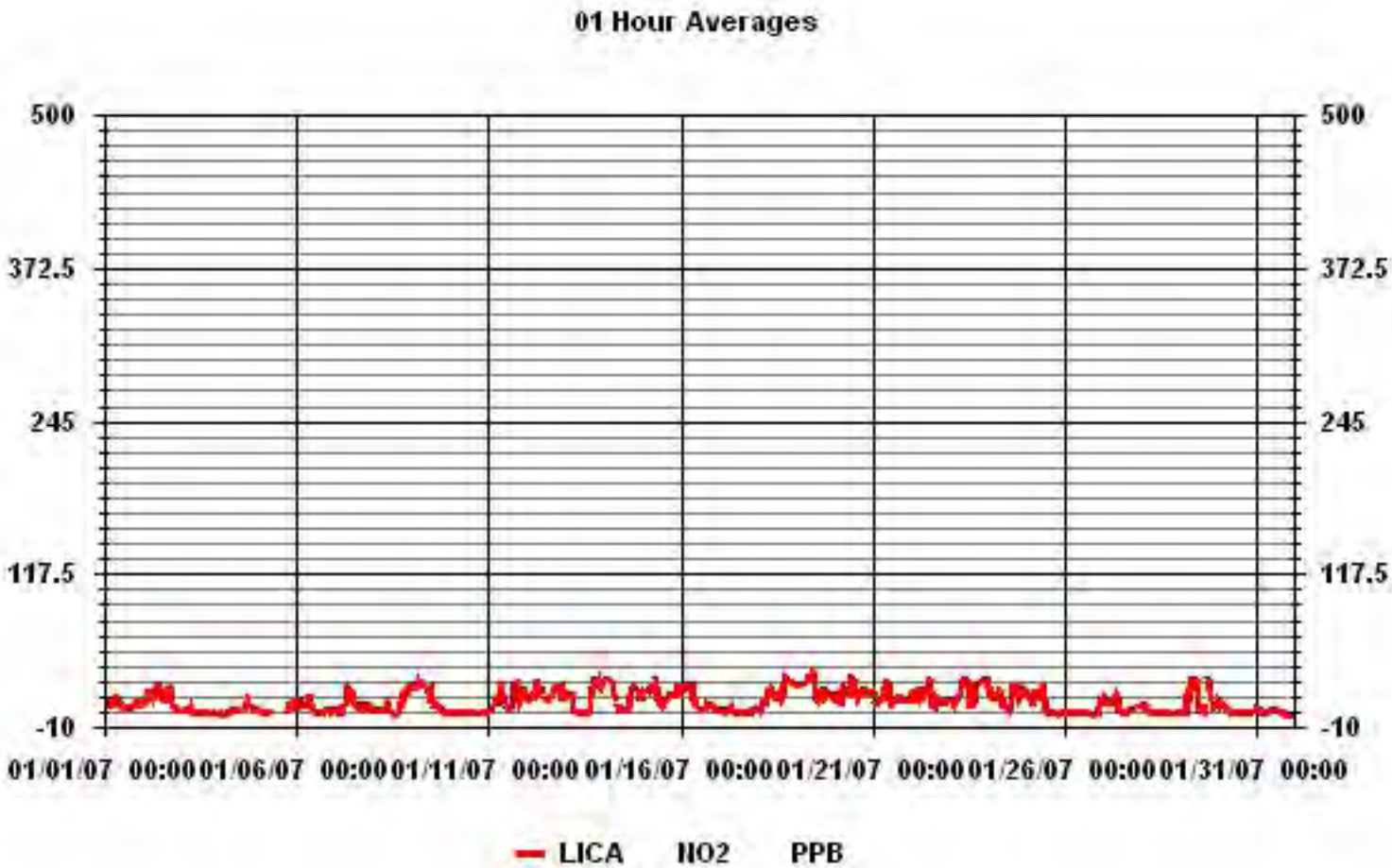
MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF 24-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	695					
MAXIMUM 1-HR AVERAGE:	36	PPB	@ HOUR(S)	11	ON DAY(S)	19
MAXIMUM 24-HR AVERAGE:	22.6	PPB			ON DAY(S)	19

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	8.86		MONTHLY AVERAGE:	11.15	PPB

Maxxam Analytics Inc

MOUNTAIN STANDARD TIME


01 Hour Averages
500
372.5
245
117.5
-10
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA NO2 PPB

LICA
NO2 / WD Joint Frequency Distribution (Percent)

January 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	1.57	2.14	4.86	4.14	4.72	6.86	6.86	4.00	3.00	3.57	14.16	17.59	9.44	6.43	4.72	5.86	100.00
<	110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	1.57	2.14	4.86	4.14	4.72	6.86	6.86	4.00	3.00	3.57	14.16	17.59	9.44	6.43	4.72	5.86	

Calm : .00 %

Total # Operational Hours : 699

Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	11	15	34	29	33	48	48	28	21	25	99	123	66	45	33	41	699
<	110																	
<	210																	
>=	210																	
	Totals	11	15	34	29	33	48	48	28	21	25	99	123	66	45	33	41	

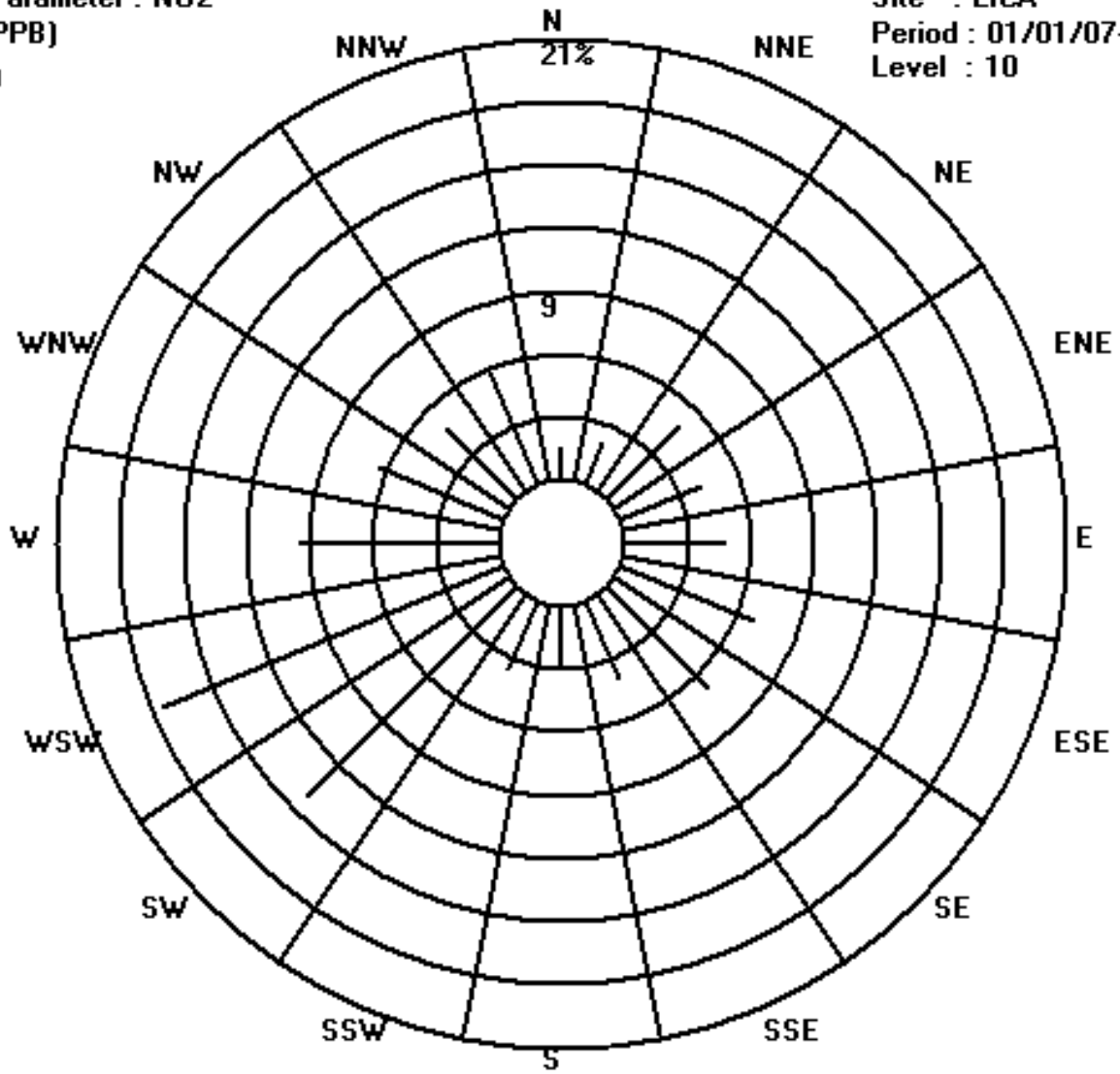
Calm : .00 %

Total # Operational Hours : 699

Logger : 01 Parameter : NO2
Class Limits (PPB)

>= 210
< 210
< 110
< 50

Site : LICA
Period : 01/01/07-01/31/07
Level : 10



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

NITROGEN DIOXIDE MAX instantaneous maximum in pp

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	20	21	14	30	**IZS**	10	15	25	24	18	12	9	7	9	11	7	7	7	8	11	13	14	21	16	30	14.3	24
2	22	15	18	**IZS**	27	31	25	26	33	30	34	40	25	24	21	45	29	30	30	9	8	9	6	5	45	23.6	24
3	4	7	**IZS**	9	5	5	12	5	3	2	2	2	2	2	2	2	2	2	3	2	3	3	4	2	12	3.7	24
4	3	**IZS**	3	4	3	5	3	6	7	8	6	8	5	**M**	**IZS**	10	12	20	**IZS**	10	8	15	9	8	20	7.7	24
5	7	5	4	3	3	4	4	5	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	11	13	**P**	26	20	10	26	8.8	23
6	12	16	22	12	12	12	16	12	25	15	11	6	4	2	3	4	**IZS**	5	6	6	5	4	5	5	25	9.6	24
7	9	14	6	10	5	46	16	19	28	26	36	21	14	13	12	**IZS**	7	12	12	27	9	13	12	7	46	16.3	24
8	5	11	9	8	5	4	4	9	11	10	6	4	3	3	**IZS**	8	14	12	22	28	50	25	31	30	50	13.6	24
9	28	27	27	30	34	33	31	37	36	26	25	40	20	**IZS**	22	17	10	9	8	11	5	5	3	2	40	21.1	24
10	2	2	2	1	1	1	3	2	3	2	2	2	**IZS**	2	2	2	3	2	7	5	3	2	4	7	7	2.7	24
11	6	6	10	14	15	15	34	64	38	25	16	**IZS**	11	7	10	16	45	33	30	25	20	24	35	43	64	23.6	24
12	21	19	22	19	20	32	33	25	24	23	**IZS**	18	14	**S**	38	20	26	27	27	33	26	34	21	19	38	24.6	23
13	20	20	19	20	19	8	4	4	5	**IZS**	2	3	2	3	9	13	47	40	39	38	36	34	31	42	47	19.9	24
14	34	33	34	33	33	32	32	25	**IZS**	11	8	7	6	13	6	11	26	35	29	33	29	25	26	20	35	23.5	24
15	28	25	28	26	25	28	29	**IZS**	37	37	18	16	10	13	28	16	29	19	18	18	21	22	26	25	37	23.6	24
16	25	26	25	24	26	31	**IZS**	34	22	14	12	**P**	**P**	17	9	7	14	8	8	14	8	12	6	6	34	16.6	22
17	5	5	5	6	6	**IZS**	9	11	7	7	8	3	1	2	8	2	2	2	5	6	5	8	8	11	11	5.7	24
18	10	6	17	16	**IZS**	19	41	30	30	34	21	20	20	21	14	18	35	38	33	33	31	32	33	29	41	25.3	24
19	28	28	28	**IZS**	31	29	32	44	41	43	43	39	28	19	16	15	25	30	21	21	20	21	20	13	44	27.6	24
20	24	16	**IZS**	15	30	36	28	23	32	60	63	44	20	19	16	17	20	23	26	24	22	19	19	23	63	26.9	24
21	24	**IZS**	11	17	13	17	26	33	35	41	25	11	12	12	15	21	17	20	15	15	15	13	13	24	41	19.3	24
22	**IZS**	25	29	17	22	53	16	21	38	28	38	45	44	12	13	22	20	14	13	14	16	16	23	**IZS**	53	24.5	24
23	18	15	18	18	20	27	23	37	33	51	50	67	33	9	17	20	29	29	33	107	39	40	**IZS**	36	107	33.4	24
24	31	23	19	15	17	22	46	**255**	20	13	18	11	10	5	15	19	39	34	48	22	20	**IZS**	26	24	255	32.7	24
25	21	20	18	17	11	18	83	20	25	64	35	20	15	3	2	3	3	3	2	2	**IZS**	3	2	1	83	17.0	24
26	1	1	1	1	2	1	1	1	2	1	3	2	1	2	2	2	2	3	3	**IZS**	5	17	16	14	17	3.7	24
27	19	20	15	20	20	20	13	27	27	30	6	5	3	4	9	7	10	5	**IZS**	8	11	8	8	9	30	13.2	24
28	8	9	8	7	6	4	3	4	3	3	3	2	2	2	1	2	2	**IZS**	2	2	2	2	3	2	9	3.6	24
29	4	2	4	8	29	24	31	37	33	40	33	16	6	5	5	14	**IZS**	40	28	24	7	8	11	18	40	18.6	24
30	17	10	10	11	9	8	6	4	3	4	4	2	2	2	1	**IZS**	2	8	2	2	2	3	9	13	17	5.8	24
31	5	7	4	5	3	4	4	4	6	6	7	13	8	7	**IZS**	3	4	4	2	1	1	1	1	1	13	4.4	24
HOURLY MAX	34	33	34	33	34	53	83	255	41	64	63	67	44	24	38	45	47	40	48	107	50	40	35	43			
HOURLY AVG	15.4	15.0	14.8	14.3	15.6	19.3	20.8	28.3	21.8	23.2	18.9	17.0	11.7	8.6	11.4	12.3	17.2	17.7	16.9	18.8	15.2	15.3	15.1	15.5			

STATUS FLAG CODES

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

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	696					
MAXIMUM INSTANTANEOUS VALUE:	255	PPB	@ HOUR(S)	8	ON DAY(S)	24

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	740	HRS
MONTHLY CALIBRATION TIME:	9	HRS			
STANDARD DEVIATION:	16.02				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

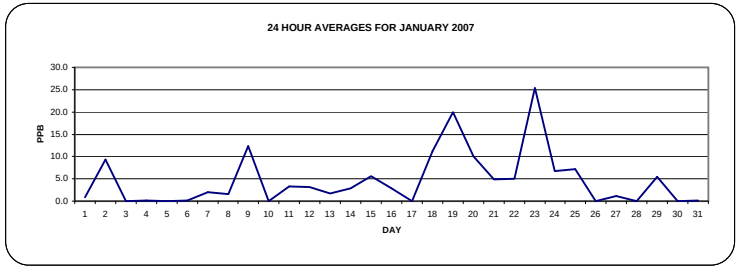
JANUARY 2007

NITRIC OXIDE hourly averages in ppb

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	0	0	0	1	**IZS**	0	0	1	2	5	4	2	2	1	1	0	0	0	0	0	0	0	0	0	5	0.8	24
2	0	0	0	**IZS**	4	3	5	11	23	29	48	37	30	8	2	4	3	8	1	0	0	0	0	0	48	9.4	24
3	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
4	0	**IZS**	0	0	0	0	0	0	0	0	1	2	1	**M**	**IZS**	0	0	0	**IZS**	0	0	0	0	0	2	0.2	24
5	0	0	0	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	0	0	0	1	0	0	1	0.1	24
6	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	**IZS**	0	0	0	0	0	0	0	1	0.1	24
7	0	0	0	0	0	0	0	0	7	14	12	5	3	3	2	**IZS**	0	0	0	0	0	0	0	0	14	2.0	24
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	8	1	7	19	19	1.6	24
9	17	18	20	23	36	25	23	27	27	18	20	19	6	**IZS**	2	2	0	0	0	0	0	0	0	0	36	12.3	24
10	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	0.0	24
11	0	0	0	0	0	0	2	9	15	7	8	**IZS**	4	2	2	2	7	5	1	2	1	0	6	4	15	3.3	24
12	0	0	0	0	0	3	8	0	2	10	**IZS**	15	11	**S**	9	4	1	0	1	2	0	2	0	0	15	3.1	23
13	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	1	1	4	5	6	7	5	5	2	5	7	1.8	24
14	3	5	7	10	5	7	2	0	**IZS**	2	2	2	2	2	1	1	1	3	2	4	3	0	2	0	10	2.9	24
15	2	1	0	0	0	1	8	**IZS**	41	31	11	8	6	5	6	3	2	1	1	0	0	0	1	2	41	5.7	24
16	1	4	4	4	8	15	**IZS**	19	0	1	2	2	2	2	1	0	0	0	0	0	0	0	0	0	19	2.8	24
17	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.0	24
18	0	0	0	0	**IZS**	0	7	14	24	27	19	11	12	12	7	3	6	16	9	15	10	20	27	18	27	11.2	24
19	17	15	15	**IZS**	21	24	30	54	54	65	71	66	11	8	3	2	1	1	0	0	0	0	0	0	71	19.9	24
20	0	0	**IZS**	0	10	9	5	4	18	33	69	50	12	14	5	3	0	0	0	0	0	0	0	0	69	10.1	24
21	1	**IZS**	0	0	0	0	1	15	31	42	10	3	3	2	2	2	0	0	0	0	0	0	0	0	42	4.9	24
22	**IZS**	0	0	0	0	6	0	0	11	18	22	35	12	2	1	3	0	0	0	0	0	0	0	**IZS**	35	5.0	24
23	0	0	0	0	0	3	5	13	34	65	**97**	58	11	2	4	2	5	3	16	42	83	77	**IZS**	66	97	**25.5**	24
24	28	3	1	1	0	5	10	15	2	1	4	4	3	1	3	4	16	9	16	3	3	**IZS**	11	12	28	6.7	24
25	10	10	2	0	0	0	10	10	16	39	54	12	2	0	0	0	0	0	0	0	**IZS**	0	0	0	54	7.2	24
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0.0	24
27	0	0	0	0	0	0	0	1	6	18	2	1	0	0	0	0	0	0	**IZS**	0	0	0	0	0	18	1.2	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	0.0	24
29	0	0	0	0	0	0	2	17	26	39	23	7	2	1	0	1	**IZS**	6	2	0	0	0	0	0	39	5.5	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0.0	24
31	0	0	0	0	0	0	0	0	0	0	1	1	1	1	**IZS**	0	0	0	0	0	0	0	0	0	1	0.2	24
HOURLY MAX	28	18	20	23	36	25	30	54	54	65	97	66	30	14	9	4	16	16	16	42	83	77	27	66			
HOURLY AVG	2.6	1.9	1.7	1.3	2.9	3.4	3.9	7.0	11.7	16.0	16.6	11.8	4.7	2.4	2.0	1.3	1.6	2.0	1.9	2.5	3.8	3.5	1.9	4.2			

STATUS FLAG CODES

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



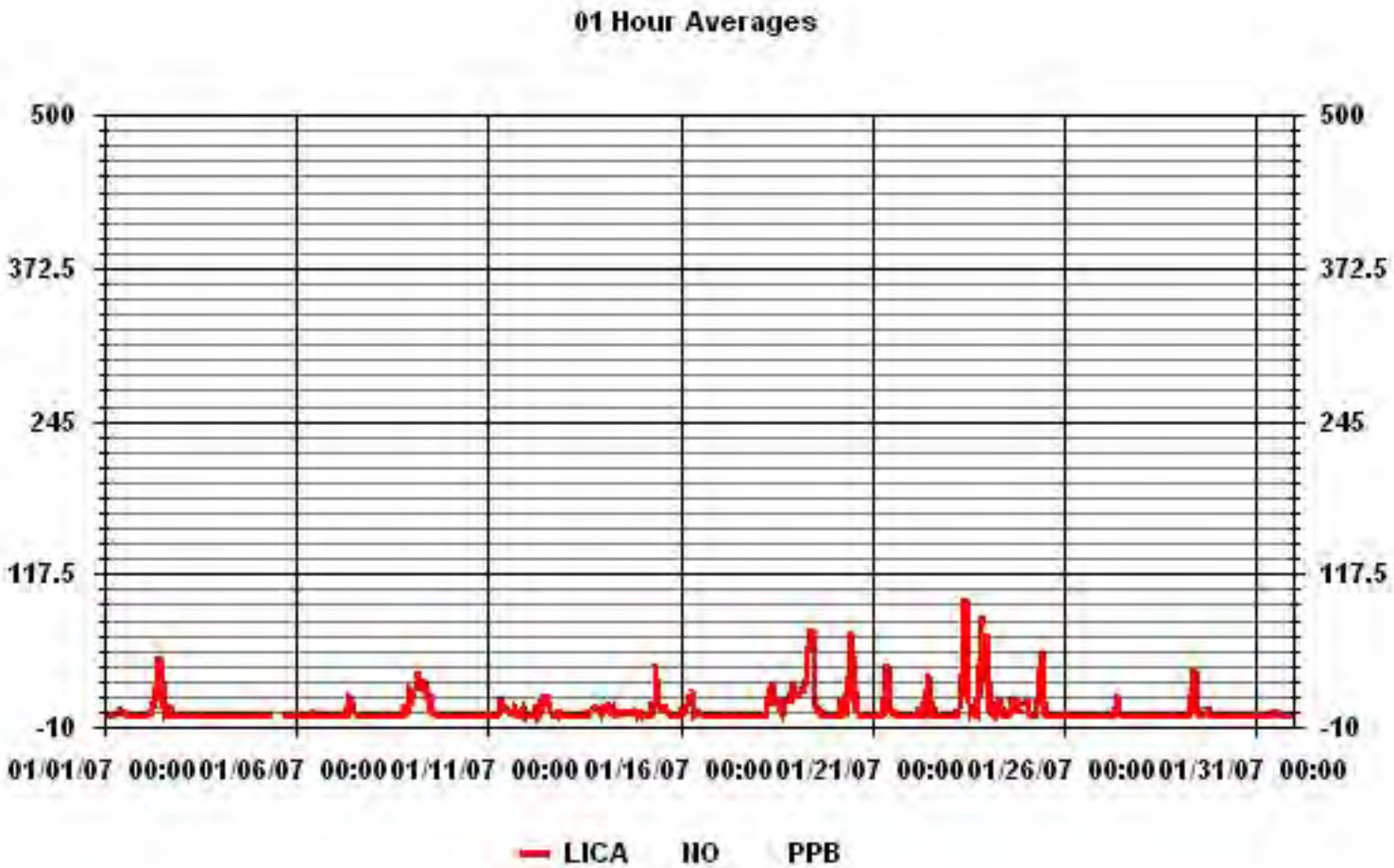
MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	284					
MAXIMUM 1-HR AVERAGE:	97	PPB	@ HOUR(S)	11	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:	25.5	PPB			ON DAY(S)	23

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	11.59		MONTHLY AVERAGE:	4.71	PPB

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc


01 Hour Averages
500
372.5
245
117.5
-10
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA NO PPB

LICA
NO / WD Joint Frequency Distribution (Percent)

January 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	1.57	2.14	4.29	3.71	4.57	6.72	6.72	4.00	3.00	3.57	14.02	17.45	9.44	6.43	4.57	5.72	97.99
< 110	.00	.00	.57	.42	.14	.14	.14	.00	.00	.00	.14	.14	.00	.00	.14	.14	2.00
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	1.57	2.14	4.86	4.14	4.72	6.86	6.86	4.00	3.00	3.57	14.16	17.59	9.44	6.43	4.72	5.86	

Calm : .00 %

Total # Operational Hours : 699

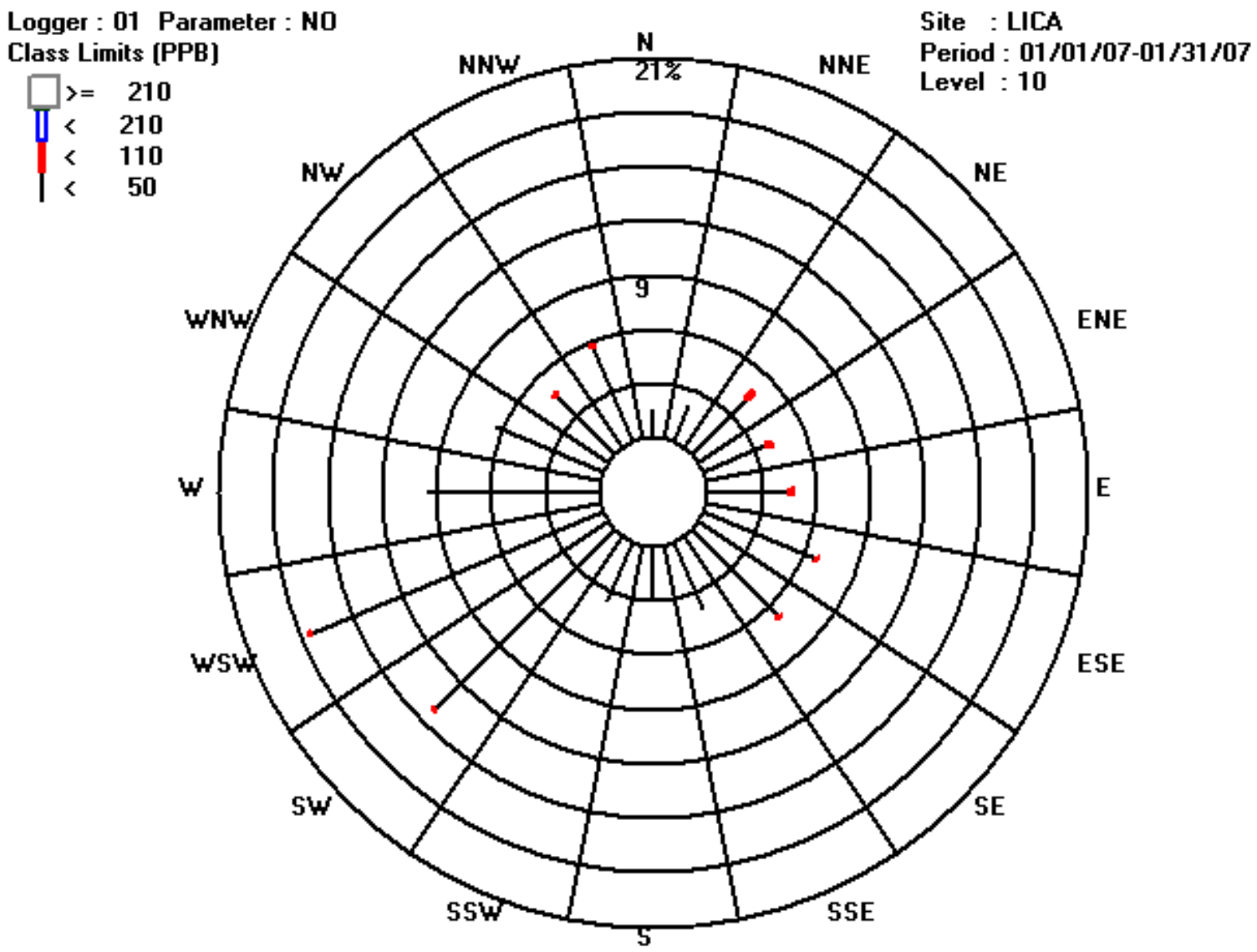
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	11	15	30	26	32	47	47	28	21	25	98	122	66	45	32	40	685
< 110			4	3	1	1	1				1	1			1	1	14
< 210																	
>= 210																	
Totals	11	15	34	29	33	48	48	28	21	25	99	123	66	45	33	41	

Calm : .00 %

Total # Operational Hours : 699


Logger : 01 Parameter : NO
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 01/01/07-01/31/07
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

NITRIC OXIDE MAX instantaneous maximum in pp

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	6	3	2	8	**IZS**	2	3	10	10	11	7	5	3	3	2	0	0	0	0	0	0	3	4	4	11	3.7	24
2	5	4	10	**IZS**	16	30	32	25	55	62	74	69	47	28	6	59	13	19	17	0	0	0	0	0	74	24.8	24
3	0	0	**IZS**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	3	0.2	24
4	0	**IZS**	0	0	0	0	0	0	0	1	2	4	2	**M**	**IZS**	3	4	1	**IZS**	0	0	12	0	1	12	1.5	24
5	0	0	3	0	0	0	0	0	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	3	6	**P**	43	2	1	43	4.5	23
6	4	1	2	3	1	0	11	0	8	2	2	2	1	0	0	0	**IZS**	0	1	0	0	2	0	0	11	1.7	24
7	21	4	2	5	0	3	2	5	19	45	40	14	6	9	8	**IZS**	1	1	2	8	1	1	2	0	45	8.7	24
8	0	0	0	0	0	0	0	0	0	0	0	1	1	1	**IZS**	3	1	2	1	14	58	9	36	36	58	7.1	24
9	27	26	27	34	48	35	38	57	50	28	26	43	29	**IZS**	6	4	2	1	6	4	1	1	0	0	57	21.4	24
10	0	0	1	0	0	0	4	1	1	1	1	1	**IZS**	2	4	2	3	1	9	2	3	0	0	1	9	1.6	24
11	2	4	1	1	5	1	21	61	42	10	11	**IZS**	8	4	5	2	31	14	16	43	8	12	23	41	61	15.9	24
12	2	11	3	3	2	13	14	1	14	14	**IZS**	19	14	**S**	42	12	3	5	7	9	2	12	3	1	42	9.4	23
13	0	0	0	1	0	1	1	1	8	**IZS**	1	3	1	3	4	11	81	27	21	23	22	13	10	19	81	10.9	24
14	8	12	12	16	11	11	11	2	**IZS**	4	4	6	4	13	3	10	4	16	9	14	20	4	6	2	20	8.8	24
15	14	4	5	4	2	4	23	**IZS**	69	57	16	15	22	7	14	7	10	2	4	3	6	2	5	7	69	13.1	24
16	7	7	7	7	13	23	**IZS**	48	1	3	6	**P**	**P**	23	8	2	2	0	0	0	3	4	0	0	48	7.8	22
17	0	0	0	0	0	**IZS**	0	0	1	0	7	2	0	0	14	0	0	0	0	0	0	3	0	0	14	1.2	24
18	2	3	2	3	**IZS**	7	48	50	41	50	26	24	17	15	9	5	40	32	22	29	19	43	49	27	50	24.5	24
19	21	20	22	**IZS**	29	27	48	75	77	95	86	88	36	20	12	11	2	7	1	0	0	0	3	0	95	29.6	24
20	6	1	**IZS**	1	34	20	18	14	51	85	120	86	22	21	8	5	2	1	4	0	0	0	0	3	120	21.8	24
21	15	**IZS**	0	2	1	2	18	39	53	67	43	4	7	3	4	11	4	4	1	1	0	1	0	3	67	12.3	24
22	**IZS**	1	4	1	6	50	1	2	39	39	65	78	26	4	4	7	4	1	2	1	1	1	7	IZS	78	15.6	24
23	0	0	1	4	1	17	18	82	81	138	154	144	62	5	7	4	13	15	40	144	141	121	**IZS**	79	154	55.3	24
24	65	9	15	3	2	30	124	**303**	9	7	99	7	15	3	12	12	56	45	87	9	7	**IZS**	21	17	303	41.6	24
25	17	14	12	1	1	3	181	23	51	117	89	24	15	0	0	0	0	0	0	0	**IZS**	0	0	0	181	23.8	24
26	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	7	0	**IZS**	0	0	3	3	7	0.7	24
27	1	0	2	1	1	2	1	5	17	39	5	3	1	7	8	1	2	1	**IZS**	0	45	0	0	0	45	6.2	24
28	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	**IZS**	0	0	0	0	0	0	1	0.1	24
29	0	0	1	0	4	4	7	48	57	76	44	14	4	3	3	7	**IZS**	40	9	6	0	0	0	0	76	14.2	24
30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	**IZS**	0	0	0	1	0	0	0	0	3	0.2	24
31	0	0	0	0	0	0	0	0	1	1	1	11	3	2	**IZS**	0	0	0	0	0	0	0	0	1	11	0.9	24
HOURLY MAX	65	26	27	34	48	50	181	303	81	138	154	144	62	28	42	59	81	45	87	144	141	121	49	79			
HOURLY AVG	7.4	4.3	4.6	3.4	6.1	9.5	20.8	28.4	26.0	32.8	32.1	23.8	12.4	6.6	6.9	6.4	9.9	8.3	9.0	10.6	11.6	9.7	5.8	8.2			

STATUS FLAG CODES

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

MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	478					
MAXIMUM INSTANTANEOUS VALUE:	303	PPB	@ HOUR(S)	8	ON DAY(S)	24

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	740	HRS
MONTHLY CALIBRATION TIME:	9	HRS			
STANDARD DEVIATION:	26.14				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

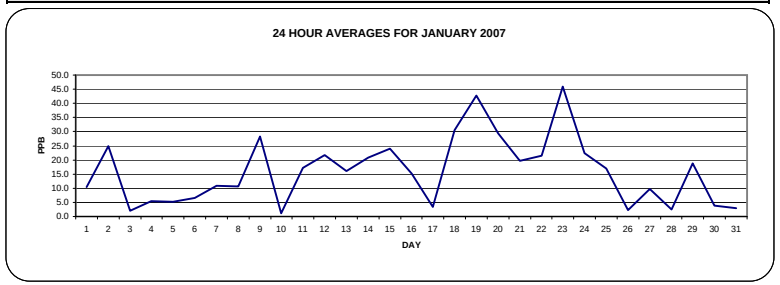
JANUARY 2007

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	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	12	13	10	14	**IZS**	9	10	13	19	17	13	10	8	7	7	7	6	6	7	9	10	10	11	9	19	10.3	24
2	13	10	11	**IZS**	22	21	21	30	45	50	75	60	51	22	14	25	26	34	13	8	7	6	5	3	75	24.9	24
3	3	4	**IZS**	5	3	3	6	2	2	1	2	1	1	1	1	1	2	2	2	1	1	1	2	1	6	2.1	24
4	1	**IZS**	1	2	1	2	2	3	5	6	7	8	6	**M**	**IZS**	7	10	15	**IZS**	8	6	8	6	5	15	5.5	24
5	4	3	3	2	2	2	3	3	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	5	9	8	8	13	7	13	5.1	24
6	6	8	14	8	7	9	10	8	20	11	9	6	3	1	2	2	**IZS**	3	4	5	4	3	4	4	20	6.6	24
7	4	3	3	4	3	7	8	11	29	36	32	18	14	11	11	**IZS**	5	7	9	8	7	9	8	5	36	11.0	24
8	4	6	5	6	4	4	3	6	10	8	4	3	2	2	**IZS**	5	8	9	10	20	29	21	31	45	45	10.7	24
9	42	43	43	47	65	52	51	54	53	39	42	42	18	**IZS**	11	12	9	7	5	4	4	3	2	2	65	28.3	24
10	1	1	1	1	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	1	2	1	1	1	1	2	2	1.1	24
11	3	4	6	8	10	10	20	32	42	26	20	**IZS**	12	8	9	11	34	32	16	12	14	14	31	23	42	17.3	24
12	16	14	16	14	15	26	38	20	22	30	**IZS**	29	23	**S**	23	21	22	21	24	28	21	25	13	16	38	21.7	23
13	18	18	17	16	16	4	4	3	2	**IZS**	1	2	1	2	3	6	20	29	36	38	32	35	29	35	38	16.0	24
14	34	35	37	40	34	35	21	14	**IZS**	10	6	6	7	6	6	7	18	26	26	27	26	23	23	12	40	20.8	24
15	20	22	21	22	21	24	33	**IZS**	71	57	25	18	15	15	20	17	19	17	17	16	17	19	23	24	71	24.0	24
16	21	28	28	27	33	42	**IZS**	46	15	12	11	8	7	9	6	6	9	6	6	7	7	6	4	5	46	15.2	24
17	4	3	3	5	4	**IZS**	6	8	5	4	3	2	1	1	2	1	1	1	3	4	3	4	5	7	8	3.5	24
18	6	4	7	12	**IZS**	11	27	35	47	47	36	24	29	30	20	18	31	48	39	44	39	48	55	45	55	30.5	24
19	43	41	41	**IZS**	48	50	58	86	85	96	108	101	28	22	15	16	21	25	17	19	18	18	17	12	108	42.8	24
20	16	12	**IZS**	10	31	33	25	23	39	56	101	82	26	30	19	19	19	20	23	21	20	18	18	18	101	29.5	24
21	21	**IZS**	10	11	11	12	16	40	58	69	23	13	13	13	16	17	16	16	13	12	13	12	12	16	69	19.7	24
22	**IZS**	20	20	14	15	30	14	16	36	40	46	68	35	11	10	20	12	11	10	9	10	10	14	**IZS**	68	21.4	24
23	14	13	13	10	13	19	21	36	61	93	**129**	86	21	8	14	14	30	30	42	70	113	107	**IZS**	98	129	**45.9**	24
24	53	22	15	14	13	22	28	39	17	8	11	12	9	5	11	18	41	30	39	18	20	**IZS**	34	34	53	22.3	24
25	29	29	16	13	8	12	31	28	33	60	80	28	8	1	1	2	2	2	1	1	**IZS**	1	1	1	80	16.9	24
26	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	**IZS**	2	6	12	11	12	2.3	24
27	17	16	10	10	11	10	10	15	25	35	6	5	3	3	3	3	4	4	**IZS**	6	8	7	7	8	35	9.8	24
28	8	8	8	6	4	3	2	2	2	1	1	1	1	1	1	1	1	**IZS**	1	1	1	1	2	1	8	2.5	24
29	1	1	1	1	15	14	26	47	56	69	46	16	7	5	4	10	**IZS**	36	26	14	6	7	8	14	69	18.7	24
30	14	8	9	9	8	7	4	3	2	3	3	1	2	1	1	**IZS**	1	1	1	1	1	2	3	6	14	4.0	24
31	4	5	2	2	2	3	3	2	4	5	7	7	8	7	**IZS**	2	2	3	1	0	1	0	0	0	8	3.0	24
HOURLY MAX	53	43	43	47	65	52	58	86	85	96	129	101	51	30	23	25	41	48	42	70	113	107	55	98			
HOURLY AVG	14.4	13.6	12.8	11.5	14.5	15.9	16.8	20.9	27.8	30.7	29.3	22.7	12.4	8.3	8.6	9.6	13.3	15.3	13.8	14.0	15.0	14.4	13.1	15.6			

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



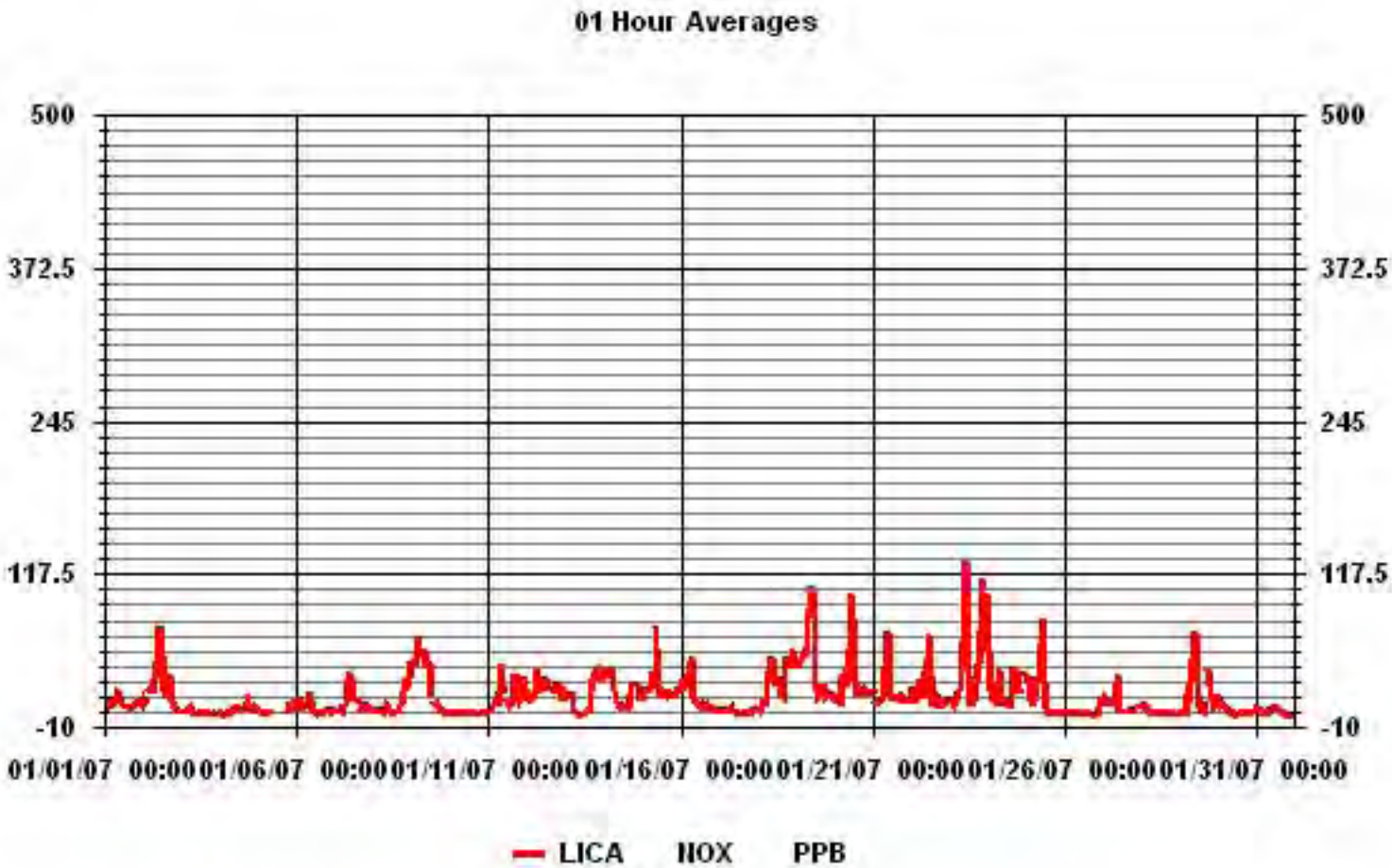
MONTHLY SUMMARY

NUMBER OF NON-ZERO READINGS:	695					
MAXIMUM 1-HR AVERAGE:	129	PPB	@ HOUR(S)	11	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:	45.9	PPB			ON DAY(S)	23

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	9	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	18.56		MONTHLY AVERAGE:	16.07	PPB

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc


01 Hour Averages
500
372.5
245
117.5
-10
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA NOX PPB

LICA
NOX / WD Joint Frequency Distribution (Percent)

January 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	1.57	2.14	4.00	3.00	3.86	6.58	6.43	3.86	2.86	3.43	14.02	17.02	9.15	6.29	4.57	5.72	94.56
< 110	.00	.00	.85	1.14	.85	.28	.42	.14	.14	.14	.00	.57	.28	.14	.00	.14	5.15
< 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.14	.00	.28
>= 210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	1.57	2.14	4.86	4.14	4.72	6.86	6.86	4.00	3.00	3.57	14.16	17.59	9.44	6.43	4.72	5.86	

Calm : .00 %

Total # Operational Hours : 699

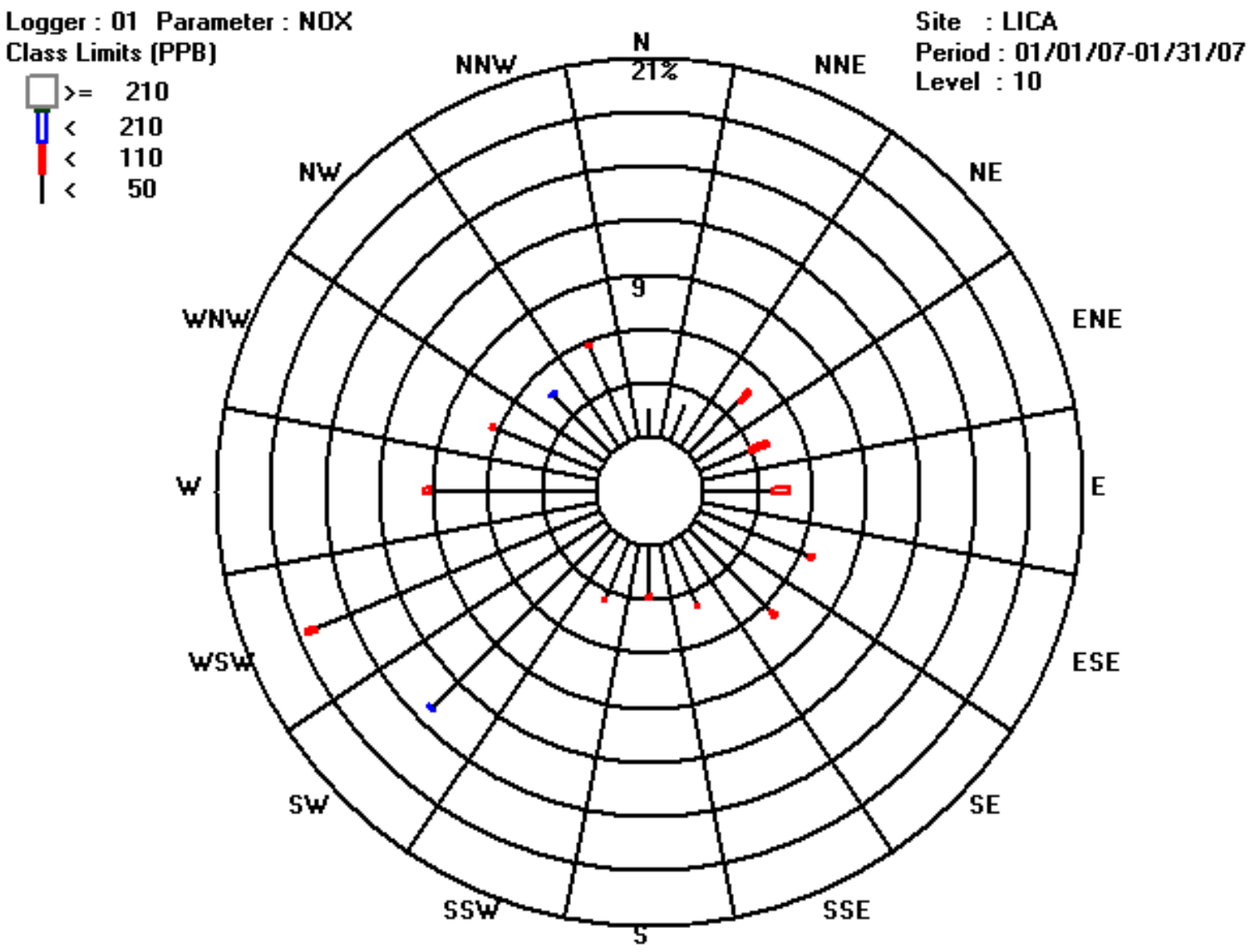
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 50	11	15	28	21	27	46	45	27	20	24	98	119	64	44	32	40	661
< 110			6	8	6	2	3	1	1	1		4	2	1		1	36
< 210											1				1		2
>= 210																	
Totals	11	15	34	29	33	48	48	28	21	25	99	123	66	45	33	41	

Calm : .00 %

Total # Operational Hours : 699


Logger : 01 Parameter : NOX
Class Limits (PPB)
>= 210
< 210
< 110
< 50
Site : LICA
Period : 01/01/07-01/31/07
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

OXIDES OF NITROGEN MAX instantaneous maximum in pp

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	24	24	15	39	**IZS**	11	17	32	30	29	18	14	10	12	13	8	7	7	8	11	13	16	25	19	39	17.5	24
2	28	15	26	**IZS**	40	56	54	50	83	91	107	101	71	48	26	93	42	48	44	9	9	8	6	6	107	46.1	24
3	3	7	**IZS**	9	5	5	12	5	3	2	2	2	2	2	2	2	2	2	3	2	2	5	4	2	12	3.7	24
4	3	**IZS**	3	5	3	5	4	6	8	9	8	12	7	**M**	**IZS**	11	15	20	**IZS**	10	8	24	9	9	24	9.0	24
5	7	5	5	3	3	3	4	5	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	12	18	**P**	50	21	10	50	11.2	23
6	14	16	22	14	13	11	26	11	34	15	13	8	5	2	3	5	**IZS**	5	6	6	5	6	4	5	34	10.8	24
7	30	18	8	15	5	49	18	22	45	65	71	34	19	18	15	**IZS**	8	13	13	35	10	14	13	8	71	23.7	24
8	5	11	9	9	5	4	4	8	11	10	6	5	4	4	**IZS**	11	14	13	22	38	84	34	66	63	84	19.1	24
9	54	51	52	59	80	67	67	91	83	53	51	72	34	**IZS**	26	21	12	10	12	12	6	5	3	3	91	40.2	24
10	2	2	3	2	2	2	5	2	3	3	3	4	**IZS**	2	4	3	5	3	17	7	5	2	4	7	17	4.0	24
11	8	6	10	15	18	16	55	123	76	35	27	**IZS**	19	11	15	18	66	46	40	42	28	26	58	74	123	36.2	24
12	23	28	24	22	22	45	47	26	35	36	**IZS**	37	27	**S**	66	31	29	32	29	40	27	46	22	20	66	32.5	23
13	20	20	20	22	19	8	5	5	5	**IZS**	3	5	3	5	12	24	125	67	55	56	57	46	40	60	125	29.7	24
14	41	44	46	48	43	42	41	27	**IZS**	14	11	11	10	20	9	18	30	48	39	46	49	29	31	20	49	31.2	24
15	42	28	33	30	26	30	52	**IZS**	100	87	35	31	22	20	42	24	39	20	20	20	27	23	30	32	100	35.3	24
16	32	31	33	31	39	54	**IZS**	82	23	15	17	**P**	**P**	38	11	8	15	8	8	14	11	16	6	6	82	23.7	22
17	5	5	5	6	6	**IZS**	9	11	8	7	11	4	2	2	19	2	2	2	5	6	5	11	8	11	19	6.6	24
18	10	9	19	19	**IZS**	23	89	78	64	71	48	45	37	36	24	22	68	66	55	59	48	74	82	55	89	47.9	24
19	48	47	50	**IZS**	61	55	77	111	110	138	127	126	63	33	27	21	28	37	22	21	20	21	22	13	138	55.6	24
20	31	17	**IZS**	17	58	47	44	36	74	144	180	130	42	40	23	21	20	24	30	24	22	20	20	24	180	47.3	24
21	38	**IZS**	11	19	13	19	43	69	87	100	69	15	20	16	19	33	22	22	15	17	14	13	12	28	100	31.0	24
22	**IZS**	26	34	17	27	102	17	23	76	58	91	124	66	15	17	29	24	15	16	15	17	17	29	**IZS**	124	38.9	24
23	18	16	18	19	20	44	40	106	112	190	201	185	90	16	24	25	41	42	64	208	179	155	**IZS**	114	208	83.8	24
24	97	31	33	19	20	48	164	**500**	27	19	84	17	21	8	23	31	82	79	129	29	26	**IZS**	47	41	500	68.5	24
25	37	35	29	19	11	21	252	42	64	181	125	42	30	4	2	3	2	3	2	1	**IZS**	3	2	1	252	39.6	24
26	1	1	1	1	1	1	1	1	1	1	4	2	2	2	3	3	2	7	3	**IZS**	5	17	19	15	19	4.1	24
27	21	20	18	22	21	21	15	34	45	66	9	7	4	4	13	8	11	5	**IZS**	8	24	9	8	9	66	17.5	24
28	8	9	8	7	6	5	3	6	3	3	3	2	1	2	1	2	2	**IZS**	2	2	1	2	3	2	9	3.6	24
29	4	3	4	8	34	24	38	81	82	109	78	31	11	6	7	21	**IZS**	77	37	28	7	8	11	18	109	31.6	24
30	17	10	10	11	9	8	6	4	3	4	4	2	2	2	2	**IZS**	2	8	2	3	2	3	9	13	17	5.9	24
31	5	7	4	5	3	4	3	3	6	7	9	22	11	9	**IZS**	4	4	4	1	1	1	1	1	2	22	5.1	24
HOURLY MAX	97	51	52	59	80	102	252	500	112	190	201	185	90	48	66	93	125	79	129	208	179	155	82	114			
HOURLY AVG	22.5	18.7	19.1	17.7	21.1	27.7	40.4	53.3	44.9	53.9	48.8	38.9	22.7	14.0	16.6	17.9	25.7	25.3	24.5	26.3	24.6	23.5	20.5	23.0			

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:	696					
MAXIMUM INSTANTANEOUS VALUE:	500	PPB	@ HOUR(S)	8	ON DAY(S)	24

IZS CALIBRATION TIME:	34	HRS	OPERATIONAL TIME:	740	HRS
MONTHLY CALIBRATION TIME:	9	HRS			
STANDARD DEVIATION:	37.64				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

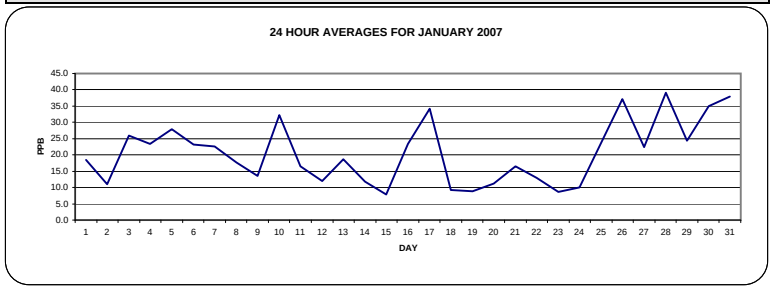
OZONE (O_3) hourly averages in ppb

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	15	12	15	11	**IZS**	14	12	8	4	8	16	25	28	30	30	29	29	28	26	23	19	17	13	12	30	18.4	24
2	9	10	11	**IZS**	4	2	3	1	1	5	5	9	9	16	19	11	5	1	19	21	21	20	23	26	26	10.9	24
3	24	23	**IZS**	24	27	28	27	33	34	34	32	31	29	28	25	22	20	21	22	21	22	24	20	24	34	25.9	24
4	26	**IZS**	27	25	26	26	24	23	22	22	24	24	26	**M**	**IZS**	25	22	16	**IZS**	21	22	22	22	23	27	23.4	24
5	26	29	29	30	31	30	30	30	30	30	31	31	31	30	28	**C**	**C**	**C**	**C**	**C**	**IZS**	19	17	22	31	28.0	24
6	22	19	13	19	18	15	16	15	6	14	17	22	27	31	31	32	**IZS**	30	30	29	31	32	31	32	32	23.1	24
7	32	32	32	31	30	26	19	15	4	6	12	21	24	24	24	**IZS**	28	25	23	23	24	22	22	22	32	22.7	24
8	22	20	21	20	21	21	24	19	14	18	25	27	26	26	**IZS**	24	20	21	19	7	4	5	1	0	27	17.6	24
9	0	1	0	1	1	0	1	2	2	5	8	12	21	**IZS**	23	22	24	24	25	26	27	28	29	29	29	13.5	24
10	31	31	31	29	30	31	33	33	33	32	33	34	**IZS**	35	35	33	33	33	34	33	33	32	31	30	35	32.3	24
11	28	25	23	19	20	15	9	6	3	17	21	**IZS**	23	27	27	22	6	2	18	20	18	15	5	10	28	16.5	24
12	11	12	8	10	10	6	3	11	9	10	**IZS**	16	19	**S**	18	17	14	13	10	7	12	10	19	17	19	11.9	23
13	15	15	15	15	15	29	28	28	29	**IZS**	32	32	32	32	31	30	24	13	5	1	3	0	2	2	32	18.6	24
14	0	0	1	1	3	2	12	15	**IZS**	24	27	28	27	27	26	24	14	7	5	5	5	5	4	11	28	11.9	24
15	8	4	5	3	4	2	1	**IZS**	2	9	15	17	18	16	15	**C**	**C**	**C**	**C**	**C**	**IZS**	9	4	2	18	7.9	24
16	2	0	0	0	0	0	**IZS**	6	21	26	29	34	37	36	37	37	33	35	35	34	33	34	35	35	37	23.4	24
17	36	36	36	35	35	**IZS**	33	31	33	35	37	38	39	39	39	38	38	37	33	31	31	29	27	22	39	34.3	24
18	20	20	17	10	**IZS**	10	3	1	1	5	10	17	22	21	22	21	10	1	1	0	0	0	0	0	22	9.2	24
19	0	0	0	**IZS**	0	0	0	1	2	3	5	6	14	16	19	18	13	10	17	14	15	14	16	21	21	8.9	24
20	15	14	**IZS**	14	2	0	2	1	2	6	7	11	18	18	23	20	17	14	10	11	12	14	13	12	23	11.1	24
21	7	**IZS**	22	19	16	14	11	1	1	5	18	24	24	24	22	19	17	17	20	21	20	21	20	16	24	16.5	24
22	**IZS**	8	6	9	9	3	15	12	4	5	10	11	15	24	25	16	20	19	19	18	16	15	8	**IZS**	25	13.0	24
23	11	12	13	17	13	6	3	4	1	4	5	8	21	25	22	21	6	4	1	0	1	1	**IZS**	1	25	8.7	24
24	2	4	7	7	5	2	0	12	13	21	22	21	24	26	23	17	5	4	2	8	6	**IZS**	1	0	26	10.1	24
25	0	0	4	10	16	10	1	0	1	2	6	19	37	45	46	**47**	45	43	42	43	**IZS**	43	43	43	47	23.7	24
26	42	43	43	44	43	43	42	41	40	40	35	37	37	37	37	36	37	36	36	**IZS**	35	29	21	20	44	37.1	24
27	12	11	16	16	14	14	13	10	6	15	29	31	34	35	35	36	33	31	**IZS**	28	25	25	25	23	36	22.5	24
28	23	22	25	28	35	38	41	42	42	43	43	43	44	45	45	45	44	**IZS**	42	43	43	42	41	41	45	**39.1**	24
29	41	41	39	37	20	18	8	2	3	9	19	30	36	38	39	34	**IZS**	6	9	22	32	31	28	19	41	24.4	24
30	21	27	25	24	24	28	34	38	40	39	40	42	40	40	40	**IZS**	39	39	39	39	40	39	36	31	42	35.0	24
31	34	33	38	39	39	38	39	39	37	37	36	35	35	35	**IZS**	40	39	38	41	42	40	40	40	40	42	38.0	24
HOURLY MAX	42	43	43	44	43	43	42	42	42	43	43	43	44	45	46	47	45	43	42	43	43	43	43	43			
HOURLY AVG	17.8	17.4	18.0	18.9	17.6	15.7	16.2	16.0	14.7	17.6	21.6	24.5	27.2	29.5	28.8	27.3	23.5	20.3	21.6	21.1	21.1	21.2	19.9	19.5			

STATUS FLAG CODES

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

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



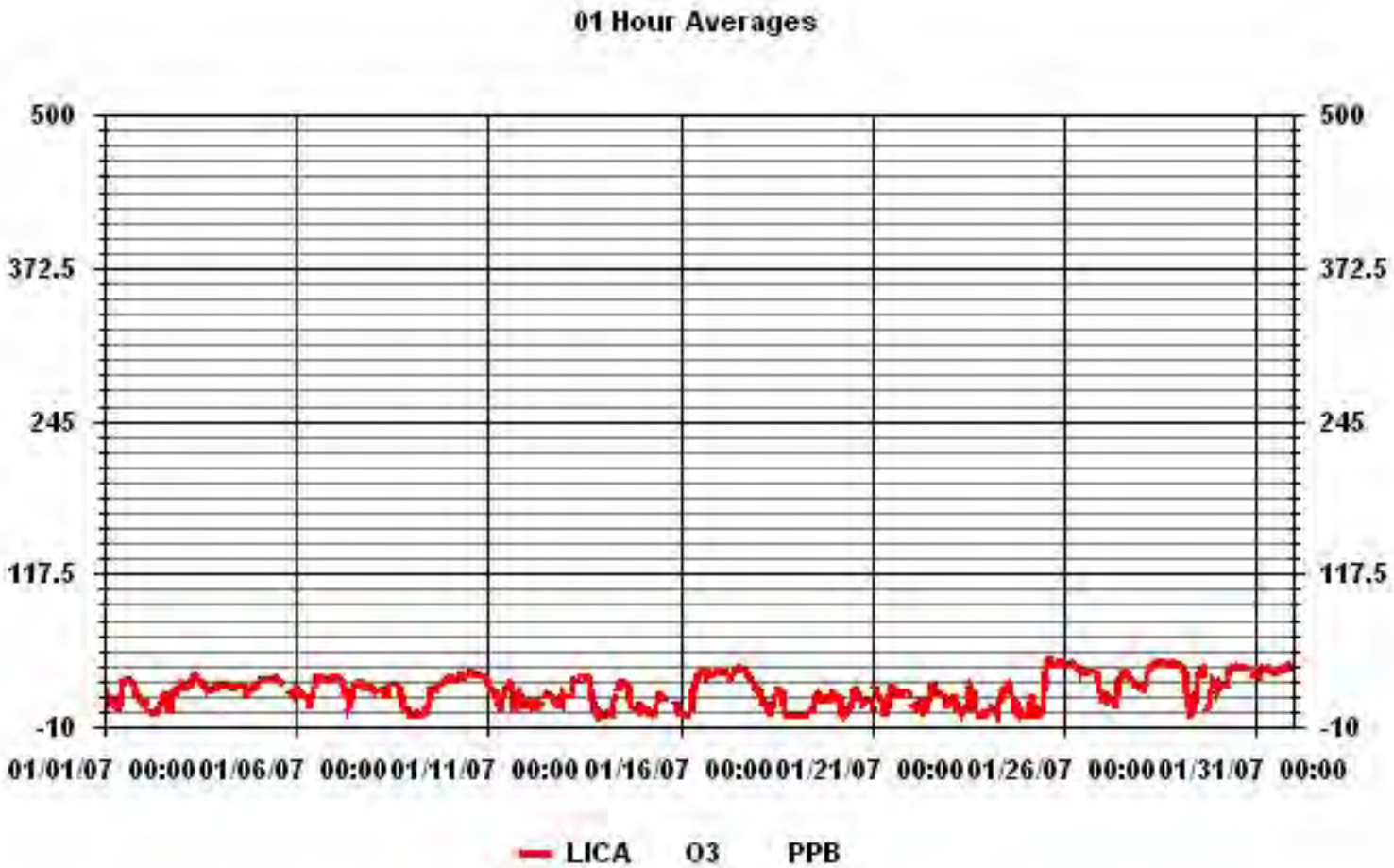
MONTHLY SUMMARY

NUMBER OF 1-HR EXCEEDENCES:	0					
NUMBER OF NON-ZERO READINGS:	667					
MAXIMUM 1-HR AVERAGE:	47	PPB	@ HOUR(S)	16	ON DAY(S)	25
MAXIMUM 24-HR AVERAGE:	39.1	PPB			ON DAY(S)	28

IZS CALIBRATION TIME:	35	HRS	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	10	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	12.76		MONTHLY AVERAGE:	20.64	PPB

Maxxam Analytics Inc

MOUNTAIN STANDARD TIME


01 Hour Averages
500
372.5
245
117.5
-10
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA O3 PPB

LICA
O3 / WD Joint Frequency Distribution (Percent)

January 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	1.57	2.15	4.87	4.16	4.73	6.59	6.02	3.87	3.01	3.58	14.92	17.93	9.46	6.45	4.73	5.88	100.00
<	110	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
<	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>=	210	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	Totals	1.57	2.15	4.87	4.16	4.73	6.59	6.02	3.87	3.01	3.58	14.92	17.93	9.46	6.45	4.73	5.88	

Calm : .00 %

Total # Operational Hours : 697

Distribution By Samples

Direction

	Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
<	50	11	15	34	29	33	46	42	27	21	25	104	125	66	45	33	41	697
<	110																	
<	210																	
>=	210																	
	Totals	11	15	34	29	33	46	42	27	21	25	104	125	66	45	33	41	

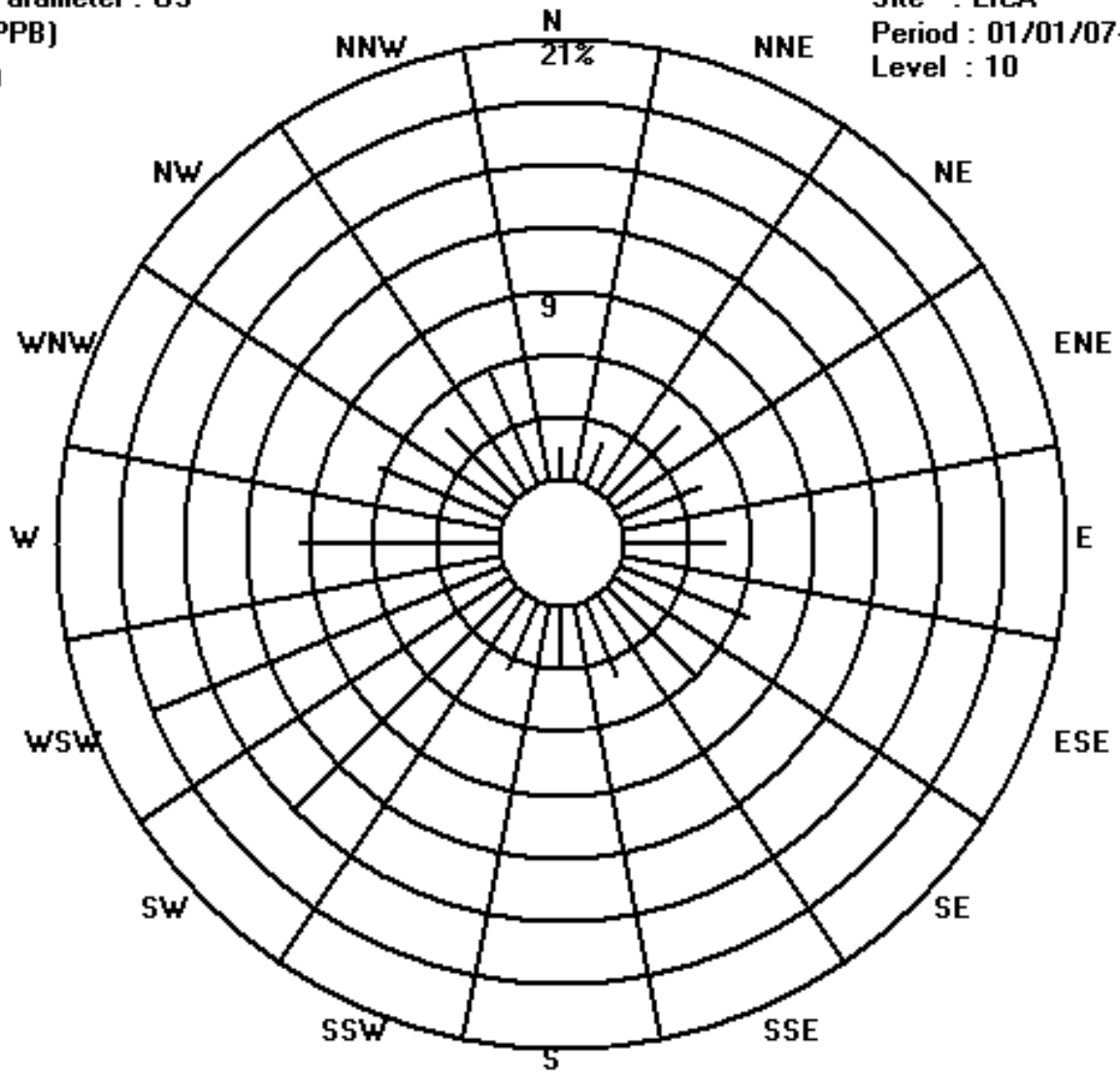
Calm : .00 %

Total # Operational Hours : 697

Logger : 01 Parameter : O3
Class Limits (PPB)

>= 210
< 210
< 110
< 50

Site : LICA
Period : 01/01/07-01/31/07
Level : 10



LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

OZONE MAX instantaneous maximum in pp

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	21	23	21	21	**IZS**	21	16	13	8	18	23	27	30	32	32	31	31	30	28	25	22	22	16	15	32	22.9	24
2	13	13	17	**IZS**	15	5	8	3	3	14	9	19	17	22	23	19	16	3	24	22	22	22	27	27	27	15.8	24
3	25	26	**IZS**	26	28	31	31	35	36	35	34	33	31	30	28	24	21	23	23	23	24	25	23	25	36	27.8	24
4	28	**IZS**	29	28	28	28	26	25	24	24	25	27	27	**M**	**IZS**	27	25	19	**IZS**	23	24	23	25	28	29	25.7	24
5	29	33	30	32	32	32	32	32	31	32	33	33	33	32	30	**C**	**C**	**C**	**C**	**C**	**C**	**IZS**	22	27	33	30.9	24
6	24	22	20	22	20	17	18	17	12	17	21	24	29	33	33	33	**IZS**	32	33	31	32	34	33	33	34	25.7	24
7	34	34	34	33	32	30	24	19	12	19	22	27	26	26	26	**IZS**	29	29	25	25	26	26	24	23	34	26.3	24
8	23	23	22	21	21	23	26	24	16	21	28	29	28	27	**IZS**	26	24	24	26	13	12	12	4	2	29	20.7	24
9	2	2	2	2	2	2	3	5	7	7	12	16	24	**IZS**	25	25	26	26	26	28	28	30	30	30	30	15.7	24
10	32	33	33	31	32	33	34	35	34	34	36	36	**IZS**	37	36	35	34	35	36	35	34	34	33	33	37	34.1	24
11	35	31	31	27	23	17	17	11	10	22	25	**IZS**	26	29	29	26	18	12	24	24	22	19	17	16	35	22.2	24
12	17	21	10	13	14	10	6	16	15	16	**IZS**	18	21	**S**	20	19	17	17	13	13	18	22	22	21	22	16.3	23
13	17	17	17	17	22	31	29	30	33	**IZS**	34	34	34	34	32	32	42	23	18	9	7	3	6	6	42	22.9	24
14	2	3	2	3	9	7	27	25	**IZS**	28	29	30	29	32	28	27	25	14	11	11	10	9	15	15	32	17.0	24
15	15	6	6	5	6	3	3	**IZS**	9	15	17	19	19	18	16	**C**	**C**	**C**	**C**	**C**	**IZS**	11	8	4	19	10.6	24
16	5	4	1	1	1	1	**IZS**	17	26	29	33	**P**	**P**	38	38	39	36	37	37	36	34	35	36	37	39	24.8	22
17	38	38	38	36	38	**IZS**	37	35	36	39	39	40	40	40	40	40	39	38	36	33	34	31	31	27	40	36.7	24
18	24	24	21	15	**IZS**	26	8	8	3	9	14	22	25	24	24	24	17	4	5	7	1	1	1	3	26	13.5	24
19	2	2	2	**IZS**	1	1	2	5	8	6	6	9	15	21	21	19	17	17	19	18	16	17	21	23	23	11.7	24
20	23	19	**IZS**	22	9	2	8	4	5	11	10	18	21	24	24	22	19	16	13	14	13	15	15	16	24	14.9	24
21	14	**IZS**	24	23	21	21	19	12	3	8	25	25	25	25	24	23	18	19	22	24	22	22	22	19	25	20.0	24
22	**IZS**	15	10	12	13	14	18	16	9	9	15	17	21	26	27	24	24	23	21	20	19	17	11	**IZS**	27	17.3	24
23	14	16	18	24	19	18	8	17	2	5	8	14	26	29	27	26	11	11	6	4	2	3	**IZS**	6	29	13.7	24
24	10	8	9	10	8	5	1	22	23	25	25	24	27	27	26	21	14	11	7	15	18	**IZS**	9	9	27	15.4	24
25	3	1	13	15	17	16	4	2	4	6	12	35	41	47	48	**49**	47	45	44	45	**IZS**	45	45	45	49	27.3	24
26	43	43	45	45	45	44	43	42	42	41	41	39	39	39	38	38	38	37	38	**IZS**	37	34	27	28	45	39.4	24
27	22	16	24	20	20	19	17	16	10	30	31	34	37	36	37	37	36	32	**IZS**	30	28	26	27	25	37	26.5	24
28	25	23	27	33	38	40	43	43	44	45	45	45	45	47	47	47	45	**IZS**	44	44	43	43	42	42	47	40.9	24
29	42	42	42	41	33	26	14	7	7	13	31	34	40	43	40	38	**IZS**	16	19	33	33	34	33	26	43	29.9	24
30	30	30	28	26	26	31	38	39	41	41	42	43	42	42	41	**IZS**	40	40	40	40	41	40	39	35	43	37.2	24
31	36	37	41	41	40	40	40	40	39	38	38	37	37	37	**IZS**	41	41	40	42	43	41	41	41	41	43	39.7	24
HOURLY MAX	43	43	45	45	45	44	43	43	44	45	45	45	45	47	48	49	47	45	44	45	43	45	45	45			
HOURLY AVG	21.6	20.9	21.3	22.2	21.1	19.8	20.0	20.5	18.4	21.9	25.4	27.9	29.5	32.0	30.7	30.1	27.8	24.0	25.2	24.6	23.7	24.0	23.5	22.9			

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:	694					
MAXIMUM INSTANTANEOUS VALUE:	49	PPB	@ HOUR(S)	ALL	ON DAY(S)	ALL

IZS CALIBRATION TIME:	35	HRS	OPERATIONAL TIME:	741	HRS
MONTHLY CALIBRATION TIME:	11	HRS			
STANDARD DEVIATION:	11.86				

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

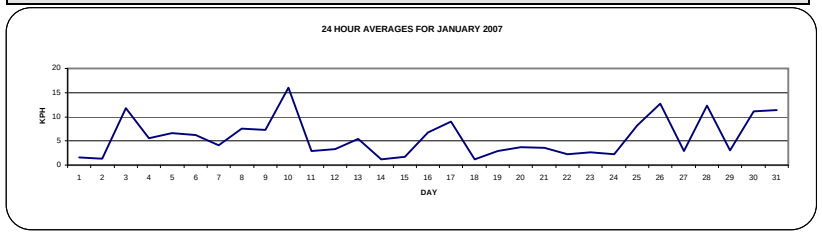
VECTOR WIND SPEED (WS) hourly averages (km/hr)

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	1.6	1.2	1.4	0.9	1.4	1.2	0.5	1.2	0.5	1.3	0.9	2.7	3.3	2.6	3.2	3.7	5.3	3.3	3.4	3.2	2.3	0.9	0.2	0.8	5.3	1.6	24
2	0.8	0.8	1.5	0.7	0.2	1.2	0.3	1.3	0.2	3.2	1.6	0.5	1.4	2.9	3.3	0.8	1.6	2.3	9.4	8.5	4.8	1.8	8.5	5.9	9.4	1.3	24
3	7	10.9	13	13.7	14.4	14.3	10.4	12.9	15.1	18.8	15.6	17.1	16.1	15.4	14.6	12.6	12.5	11.7	9.9	9.1	11	9.1	6.6	7.4	18.8	11.8	24
4	6.8	7.8	6.3	5.8	7.2	4.2	5.7	6.8	7	7.8	6.2	7.1	5.7	6.2	5.9	6.2	6.1	4.8	5.8	6	5.7	6	4.6	4	7.8	5.6	24
5	5.1	8.3	7.3	6.5	8.1	8.1	9.6	9.3	10.6	10.9	12.2	13.5	11.6	10.9	6.3	1.6	2.7	3.4	2.4	2.7	0.5	1.8	2.4	3.3	13.5	6.6	24
6	5.2	1	1.4	2.4	0.3	1.7	0.7	3.1	5.3	8	7.6	8	11.8	15.4	11.3	8.1	7.2	7.6	7.3	7	7.6	7.7	6.8	7.1	15.4	6.2	24
7	8.4	6	5.5	6.6	5.9	2.8	0.7	1.1	0.9	2.3	1.5	3.4	3.4	4.9	5	9	8.6	5	4	3.7	3.3	2.3	1.3	1.8	9.0	4.1	24
8	2.2	3.8	5.3	7.8	10.9	13.4	15.5	14.2	13.8	13.5	16	10	9.4	9.4	10	6.8	4.4	6.5	2.7	1.1	1.4	0.7	1.1	0.8	16.0	7.5	24
9	0.2	0.2	3.8	0.5	0.6	0.4	1.1	0.8	0.7	0.9	0.1	2.4	5.3	5.1	6.9	8.4	10.2	12.4	12.9	16.9	18.9	20.4	21.7	23.6	23.6	7.3	24
10	21.9	20	18	19.1	21	22	19.3	20.7	22.8	**23.8**	21.7	19.6	18.8	17.1	14.8	16.2	13.2	12.9	11.1	9.2	10.4	8.8	1.7	0.7	23.8	**16.0**	24
11	2.5	2.7	10.3	2.1	3.9	0.3	1.3	0.6	1.7	2.9	4	5.5	5.7	5.4	4.6	3.8	3.1	0.4	2.5	2.3	2.8	0.4	0.4	1.7	10.3	3.0	24
12	0.6	0.2	0.2	0.6	1	1.1	1.1	2.6	2.7	1.7	3.9	5.8	5.3	**S**	6.9	6.2	5.2	5.2	5.1	3.7	3	3.2	4.7	6.8	6.9	3.3	23
13	6	3.3	3.7	4.1	2.4	11.4	10.2	11	11.7	11.8	11.6	8.9	9.1	7.3	6.5	4.8	3.1	0.7	0.9	0.3	0.2	0.3	1.5	0.5	11.8	5.5	24
14	0.6	1.2	0.2	0.2	0.1	0.3	0.9	1	0.8	2.3	5	3.3	1.1	2.9	3.7	1.8	0.5	0.8	0.2	0.2	0.6	0.2	0.7	0.4	5.0	1.2	24
15	0.9	0.7	0.3	0.6	0.2	0.9	0.4	0.4	0.5	1.5	3	3.5	5.6	2.7	2.7	2.3	4.2	4	2.3	2.3	1.5	0.6	1.1	0.3	5.6	1.8	24
16	0.7	1.1	0.1	0.6	2.2	0.4	1.2	4.3	7	8.7	8.5	9	8.9	11.9	10.8	11.6	10.9	11.1	10.8	10	8.8	8.1	6.9	9	11.9	6.8	24
17	7.8	9.1	10.6	10	9.5	10.6	8.6	8	6.3	7.2	9.3	10.9	14.8	13.5	15.8	16.4	12.9	11.6	7.8	5.4	6.1	2.9	0.5	0.8	16.4	9.0	24
18	0	0.4	0.6	0.4	0.6	0.6	0.4	0.6	0.7	0.7	0.7	1.3	2.4	3.4	5.2	5.4	1.6	1.1	0.1	0.7	0.3	0.8	0.3	0.7	5.4	1.2	24
19	0.5	0.5	1.7	0.3	0.3	0.2	0.1	1.4	0.4	0.3	0.8	2	1.6	4.4	4.7	2	3.4	1.8	6.3	7.2	8.9	7.5	7.5	5.6	8.9	2.9	24
20	1.9	0.7	2.7	3.5	0.2	0.6	0.6	0.1	0.3	0.4	0.3	0.4	4.3	5.8	9.6	8.1	6.9	6	6.5	7	8.4	7.5	3.2	3.9	9.6	3.7	24
21	2.1	6.2	6.9	3.5	4.4	3.6	4.1	0.4	0.6	0.6	5.7	5.1	5.2	5	2.3	1.8	1.7	2.2	0.9	1.5	4.8	4.8	6.5	6.9	6.9	3.6	24
22	4.2	0.5	0.2	1.4	1.9	1.5	4	3.1	0.1	0.6	1.2	1.3	2.7	4.4	4.3	2.9	3.6	4.1	4.2	2.1	2	1	1	2.1	4.4	2.3	24
23	5.9	3.2	5.1	5.6	3.9	0.3	3	0.9	2	0.4	0.9	1.3	3.6	3.6	4.8	5.4	3.5	4.5	0.5	0.2	1.4	1	1.8	0.2	5.9	2.6	24
24	1.8	1.6	1	1.4	0.7	0.3	1.2	2.9	3.5	3.4	3.9	3.2	4.9	6.1	4.5	2.4	1.2	1.4	1.3	1.5	1.7	1.3	0.8	0.7	6.1	2.2	24
25	1.4	0.7	1	0.9	1.4	0.7	0.5	2.4	1.3	0.6	0.3	3.1	8.2	19.7	17.3	18.3	14.3	13.7	16.8	16.2	10.4	12.1	14.7	19.6	19.7	8.2	24
26	17.3	15.7	16.8	19.3	12.8	17.2	18.1	19.8	18.7	19.2	12.1	13.9	15.1	14.1	13.8	13.8	13.6	9.8	5.8	4.7	4.7	3.5	3.3	1.5	19.8	12.7	24
27	1.7	0	0.5	1.2	0.3	0.5	0.2	0	2.3	2	5.8	5.8	6.2	5.6	5.4	4.2	4.5	4.9	3.2	2.3	0.4	1.5	5.7	7.3	7.3	3.0	24
28	7	6.4	6.1	5.3	6.1	6.4	6.3	6.4	7.3	9.8	11.5	22	22.4	22.2	18.7	20.9	15.8	17.8	14	17.6	14.5	14	9.6	7.5	22.4	12.3	24
29	5.1	4.6	2.8	3.3	17.1	1.5	0.2	1.6	1.2	0.7	0.5	3.6	3.7	2.9	5	3.8	1.7	1.4	1.3	2.3	2.1	1.7	1.7	2.1	17.1	3.0	24
30	2.4	5.8	10.5	11.2	9.6	7.6	7.6	11.5	15.7	10.4	14.3	17.9	19.7	21.1	14.2	15.2	12.7	13.9	8.2	9.5	10.3	9.8	3.2	4.6	21.1	11.1	24
31	4.5	3.8	5.1	6.5	7.3	6	6.8	8.4	9.4	8.5	10.9	10	9.3	7.3	13	17.7	22	20.8	21.3	20.1	16.5	18	8.4	12.8	22.0	11.4	24
HOURLY MAX	21.9	20.0	18.0	19.3	21.0	22.0	19.3	20.7	22.8	23.8	21.7	22.0	22.4	22.2	18.7	20.9	22.0	20.8	21.3	20.1	18.9	20.4	21.7	23.6			
HOURLY AVG	4.3	4.1	4.8	4.7	5.0	4.6	4.5	5.1	5.5	5.9	6.4	7.2	8.0	8.6	8.2	7.8	7.0	6.7	6.1	6.0	5.7	5.2	4.5	4.9			

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

LAST CALIBRATION: NA



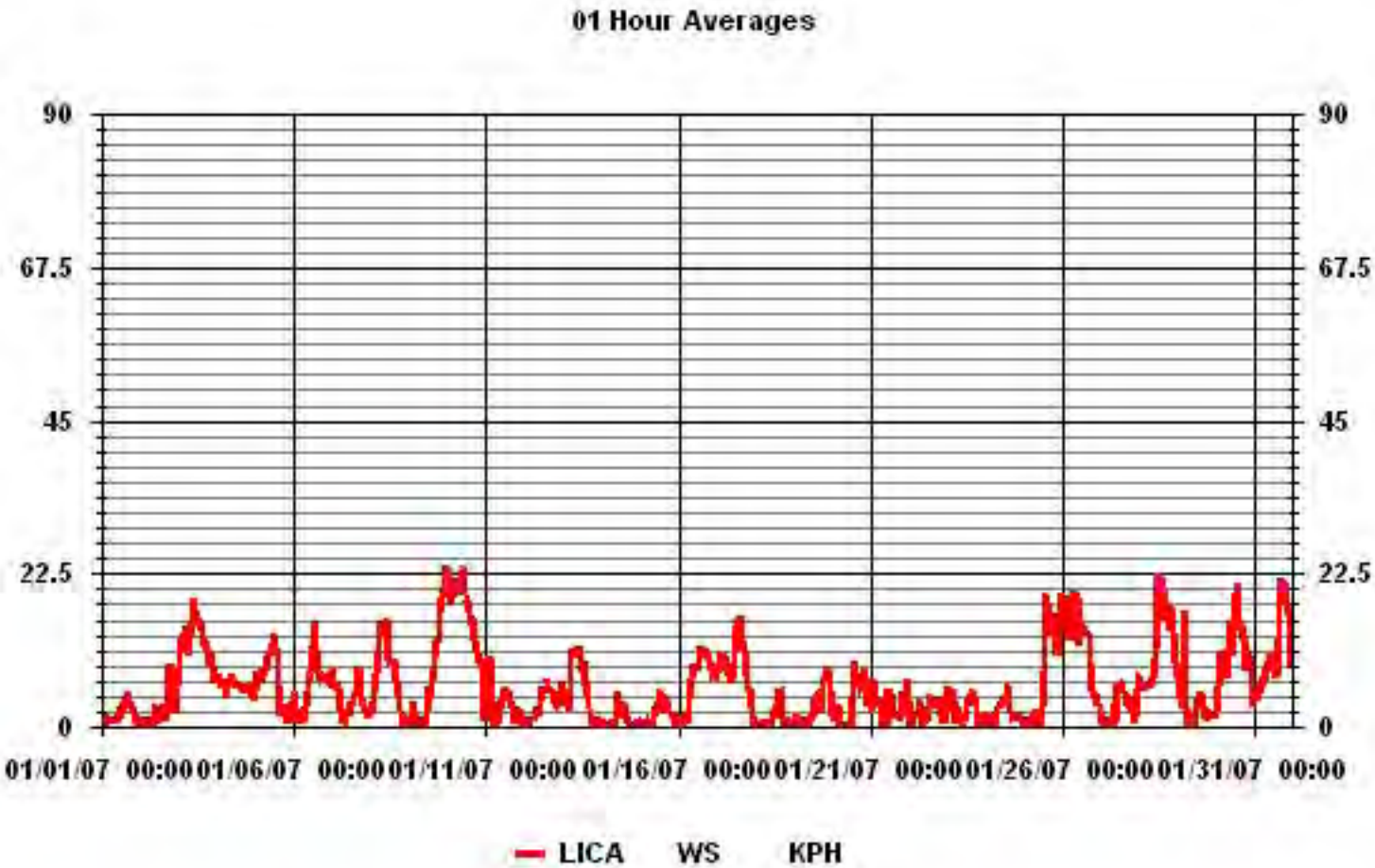
MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:	23.8	KPH	@ HOUR(S)	10	ON DAY(S)	10
MAXIMUM 24-HR AVERAGE:	16.0	KPH			ON DAY(S)	10

CALMS (≤ 0 KPH)	6.72	%	OPERATIONAL TIME:	743	HRS
MONTHLY CALIBRATION TIME:	0	HRS	AMD OPERATION UPTIME:	99.9	%
STANDARD DEVIATION:	5.56		MONTHLY AVERAGE:	5.86	KPH

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc


01 Hour Averages
90
67.5
45
22.5
0
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA WS KPH

LICA
WS / WD Joint Frequency Distribution (Percent)

January 2007

Distribution By % Of Samples

Logger Id : 01
Site Name : LICA
Parameter : WS
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	.53	.26	2.42	3.23	2.96	5.92	5.78	2.82	2.55	2.96	6.86	9.69	4.44	1.48	1.34	1.34	54.64
< 12.0	.67	1.07	.26	.13	.26	.00	.67	.13	.00	.00	7.13	6.86	3.23	1.88	.26	1.21	23.82
< 20.0	.26	.94	.40	.13	.53	.00	.00	.00	.00	.00	.26	1.21	1.21	2.42	2.42	2.28	12.11
< 29.0	.00	.00	.80	.13	.53	.00	.00	.00	.00	.00	.00	.00	.00	.00	.53	.67	2.69
< 39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
>= 39.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Totals	1.48	2.28	3.90	3.63	4.30	5.92	6.46	2.96	2.55	2.96	14.26	17.76	8.88	5.78	4.57	5.51	

Calm : 6.72 %

Total # Operational Hours : 743

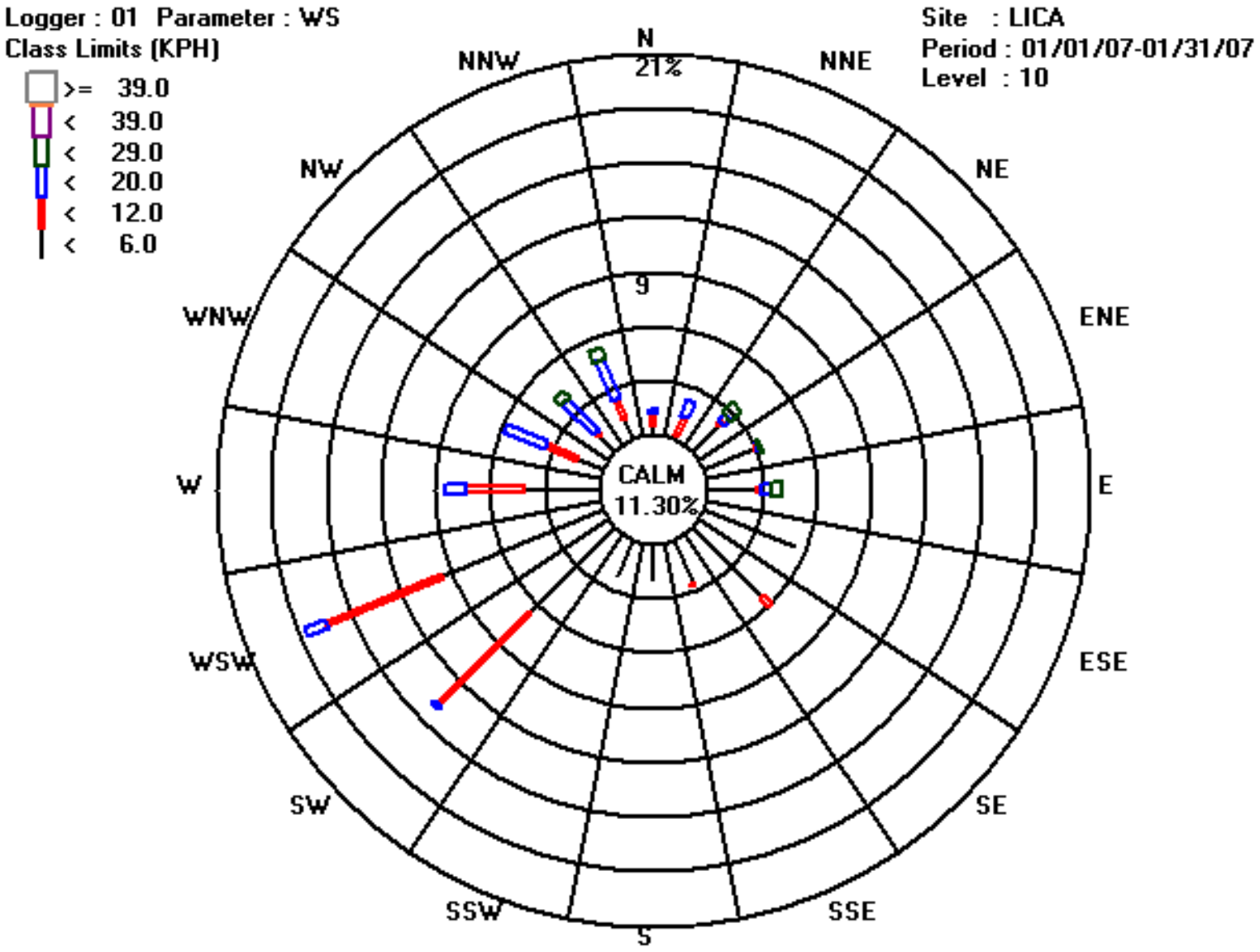
Distribution By Samples

Direction

Limit	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Freq
< 6.0	4	2	18	24	22	44	43	21	19	22	51	72	33	11	10	10	406
< 12.0	5	8	2	1	2		5	1			53	51	24	14	2	9	177
< 20.0	2	7	3	1	4						2	9	9	18	18	17	90
< 29.0			6	1	4										4	5	20
< 39.0																	
>= 39.0																	
Totals	11	17	29	27	32	44	48	22	19	22	106	132	66	43	34	41	

Calm : 6.72 %

Total # Operational Hours : 743


Logger : 01 Parameter : WS
Class Limits (KPH)
>= 39.0
< 39.0
< 29.0
< 20.0
< 12.0
< 6.0
Site : LICA
Period : 01/01/07-01/31/07
Level : 10
N
21%
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
9
CALM
11.30%

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 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	24-HOUR AVG	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	AVG.	QUANDRANT	RDGS.
DAY																											
1	163	207	194	159	220	244	277	112	57	144	153	187	142	188	149	173	205	206	203	226	211	209	149	179	186	S	24
2	110	240	225	221	62	127	102	109	323	268	98	183	298	122	113	142	42	56	124	129	137	167	232	232	157	SSE	24
3	214	232	243	246	244	244	238	246	249	250	257	261	260	261	264	272	280	281	275	278	292	293	283	280	259	WSW	24
4	284	288	273	270	279	280	265	235	227	230	235	245	231	239	221	228	233	233	230	233	229	236	225	246	245	WSW	24
5	240	233	229	230	243	240	233	233	238	236	241	233	234	232	234	265	135	138	156	134	129	141	111	122	228	SW	24
6	126	72	127	117	232	358	357	248	251	255	270	267	292	299	289	281	262	250	238	234	234	237	226	230	260	WSW	24
7	230	227	238	243	236	231	110	86	63	347	59	89	77	62	92	125	128	108	102	109	113	82	111	301	144	SE	24
8	283	268	262	282	292	299	307	312	305	305	305	298	266	255	253	222	221	221	223	145	154	81	245	31	284	WNW	24
9	303	140	209	48	82	237	52	58	75	49	327	49	66	60	72	87	90	90	97	89	85	85	82	82	84	E	24
10	80	73	63	45	46	44	45	41	42	44	41	38	33	26	19	13	13	13	16	1	359	4	275	118	38	NE	24
11	315	265	48	7	38	266	346	273	170	29	131	224	236	241	244	226	333	71	137	131	121	228	176	212	233	SW	24
12	140	95	156	234	181	248	187	157	241	247	256	258	253	S	231	238	229	234	228	229	244	239	228	231	233	SW	23
13	231	273	258	259	332	20	23	20	5	12	11	23	14	28	34	45	57	320	260	166	50	129	42	206	11	NNE	24
14	247	223	240	118	282	193	118	119	139	122	127	122	161	133	253	200	113	108	120	217	268	139	133	160	151	SSE	24
15	252	177	157	261	212	227	210	127	152	92	98	110	128	120	98	124	127	123	114	130	134	210	264	282	126	SE	24
16	293	154	184	242	270	47	58	238	237	239	222	230	234	234	229	231	236	234	238	244	235	241	240	247	235	SW	24
17	222	226	244	246	255	251	253	256	263	276	271	281	295	284	301	312	303	311	303	307	330	332	326	211	278	W	24
18	336	211	76	187	94	165	111	266	250	226	291	301	287	251	232	228	230	148	42	224	222	234	210	134	233	SW	24
19	127	200	157	123	77	145	239	57	85	36	56	57	91	108	136	152	236	254	240	235	242	245	251	251	224	SW	24
20	239	193	237	237	255	108	321	79	166	86	144	338	269	242	225	225	228	238	229	236	236	240	238	242	235	SW	24
21	268	241	238	238	235	244	250	276	66	274	247	246	238	229	242	138	146	143	193	168	215	223	232	243	232	SW	24
22	247	205	84	238	253	230	242	242	279	241	50	71	116	126	119	80	126	116	129	115	165	171	246	242	161	SSE	24
23	259	262	240	246	248	192	247	286	258	40	319	248	248	272	249	247	239	249	218	78	221	49	66	60	251	WSW	24
24	45	44	46	57	78	47	76	115	82	99	100	73	115	128	101	107	108	143	101	139	119	95	115	106	100	E	24
25	73	43	146	133	190	343	114	259	5	102	115	235	256	293	282	266	268	286	308	300	273	280	286	302	284	WNW	24
26	298	294	294	300	285	299	305	314	321	325	19	356	344	344	339	327	327	348	339	317	302	279	240	241	317	NW	24
27	235	63	111	242	154	191	185	275	220	112	138	135	147	166	180	152	183	210	207	234	212	217	229	239	183	S	24
28	243	238	232	232	246	259	278	264	276	284	293	313	317	321	325	330	340	332	330	330	327	324	335	328	311	NW	24
29	313	333	311	332	214	187	44	241	133	83	281	295	268	269	238	237	248	185	276	149	178	226	244	282	251	WSW	24
30	219	242	251	262	266	257	277	299	310	307	311	326	336	344	352	345	336	332	337	335	337	334	305	220	315	NW	24
31	242	259	239	250	250	233	224	238	237	239	253	250	247	268	321	319	326	336	336	337	335	331	334	334	301	WNW	24
HOURLY AVG	336	333	311	332	332	358	357	314	323	347	327	356	344	344	352	345	340	348	339	337	359	334	335	334			

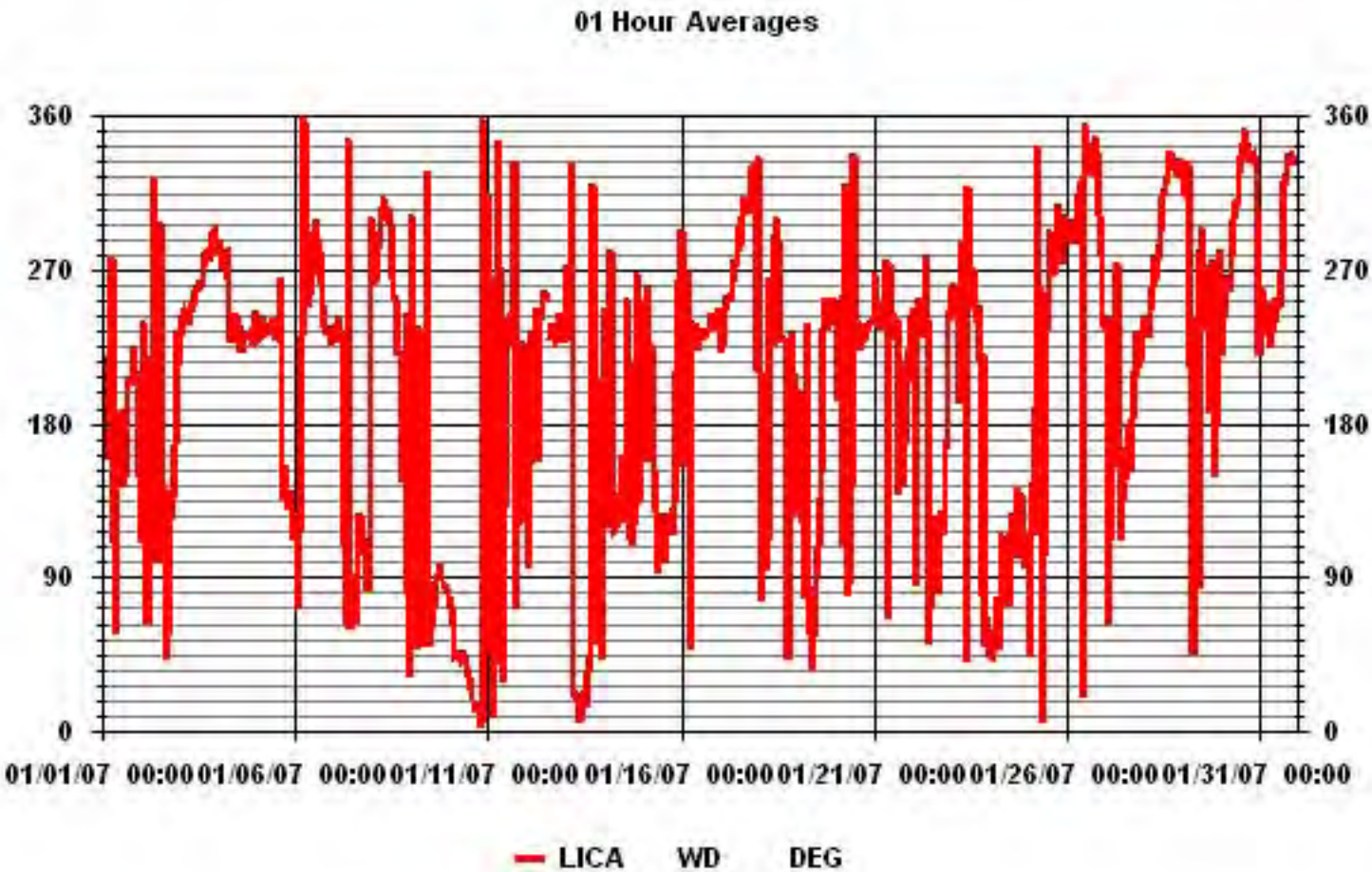
STATUS FLAG CODES

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:	743	HRS
STANDARD DEVIATION	87.84		AMD OPERATION UPTIME	99.9	%
			MONTHLY AVERAGE	202.82	DEG

MOUNTAIN STANDARD TIME


01 Hour Averages
360
270
180
90
0
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA WD DEG

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

JANUARY 2007

STANDARD DEVIATION WIND DIRECTION (STDWDIR) 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
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	46	64	37	56	54	45	77	33	62	42	66	48	35	44	43	42	29	33	40	22	33	60	88	48
2	63	84	70	67	86	43	86	41	100	60	44	85	40	37	30	72	37	24	17	16	38	52	30	24
3	20	18	15	15	14	15	15	15	16	15	17	17	17	17	17	19	18	17	19	17	16	17	18	18
4	17	17	20	19	21	20	21	21	15	14	16	15	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	17	17	15	17	16	18	50	23	35	56	44	N	66	25	29
6	28	70	41	41	99	49	68	29	28	19	17	18	17	14	17	20	19	12	14	17	14	15	15	16
7	16	14	11	13	12	62	47	37	32	40	35	26	34	23	23	15	12	27	20	21	23	28	54	38
8	28	27	17	17	13	14	12	13	12	12	12	21	18	19	15	16	20	15	28	47	52	62	30	86
9	102	74	71	79	69	94	55	39	44	36	91	16	19	15	18	18	18	18	20	17	17	16	22	16
10	19	19	18	15	15	15	15	16	15	15	16	16	17	17	21	17	19	18	19	20	16	18	50	69
11	47	45	74	58	77	46	58	74	60	64	58	24	25	25	29	24	70	52	40	28	25	81	60	59
12	64	91	73	82	75	54	45	71	45	37	36	30	31	P	17	15	12	15	11	14	35	31	17	14
13	15	39	29	29	40	18	17	16	19	18	17	21	18	19	16	18	17	84	48	67	92	75	74	66
14	76	61	68	55	64	76	44	39	63	34	13	26	47	34	40	48	38	48	84	83	77	89	69	72
15	45	70	74	89	89	75	96	65	75	38	32	28	14	27	36	30	17	21	26	31	56	81	54	90
16	64	65	90	58	40	84	58	66	17	19	17	P	P	17	17	16	16	16	16	15	15	13	12	12
17	15	16	14	12	14	12	12	15	16	21	18	18	16	18	16	14	14	12	11	20	13	29	93	48
18	79	78	42	82	83	72	73	50	47	66	59	41	30	41	20	15	58	48	82	56	72	69	92	75
19	68	86	94	90	90	90	99	28	71	91	74	32	69	34	28	65	25	56	13	12	12	9	13	12
20	76	72	26	18	84	78	78	103	91	63	92	80	26	22	16	14	14	12	9	10	10	10	23	15
21	40	12	13	17	13	26	25	99	54	82	17	12	17	15	42	44	51	50	64	56	20	15	12	12
22	22	91	93	33	70	79	16	16	98	69	45	35	23	17	22	31	25	22	21	47	56	76	62	40
23	25	46	22	11	17	80	17	69	26	81	41	49	19	28	15	10	10	13	73	92	67	56	52	94
24	21	18	40	22	45	74	53	41	26	51	31	31	30	15	20	27	45	68	40	60	51	35	60	67
25	57	70	97	94	76	82	80	30	80	78	85	42	18	16	19	17	17	25	15	15	19	17	17	17
26	15	15	14	15	20	18	15	13	14	14	22	20	20	19	18	17	13	18	18	16	31	47	38	76
27	75	66	56	55	63	89	73	88	94	58	23	21	30	37	36	34	39	28	33	55	90	56	24	14
28	15	12	12	17	14	20	25	23	23	19	17	16	14	14	14	17	17	14	16	14	14	13	17	14
29	12	17	36	45	65	55	62	48	88	60	85	16	32	47	24	31	27	45	51	50	57	48	44	37
30	24.4	16.6	15.3	15.7	16.4	14.8	22.5	14.5	12	13.6	14	13.3	17.5	18.2	19.9	18	21.8	14.4	16.7	15.8	17.3	20.8	50.8	14.4
31	27.1	24.6	20.2	19.5	14.8	20.2	15.8	15.4	17.4	16.3	14.2	14.6	13.7	20.5	17.3	14	14.1	20.5	16.1	16.1	16.1	16.1	15.7	15.3

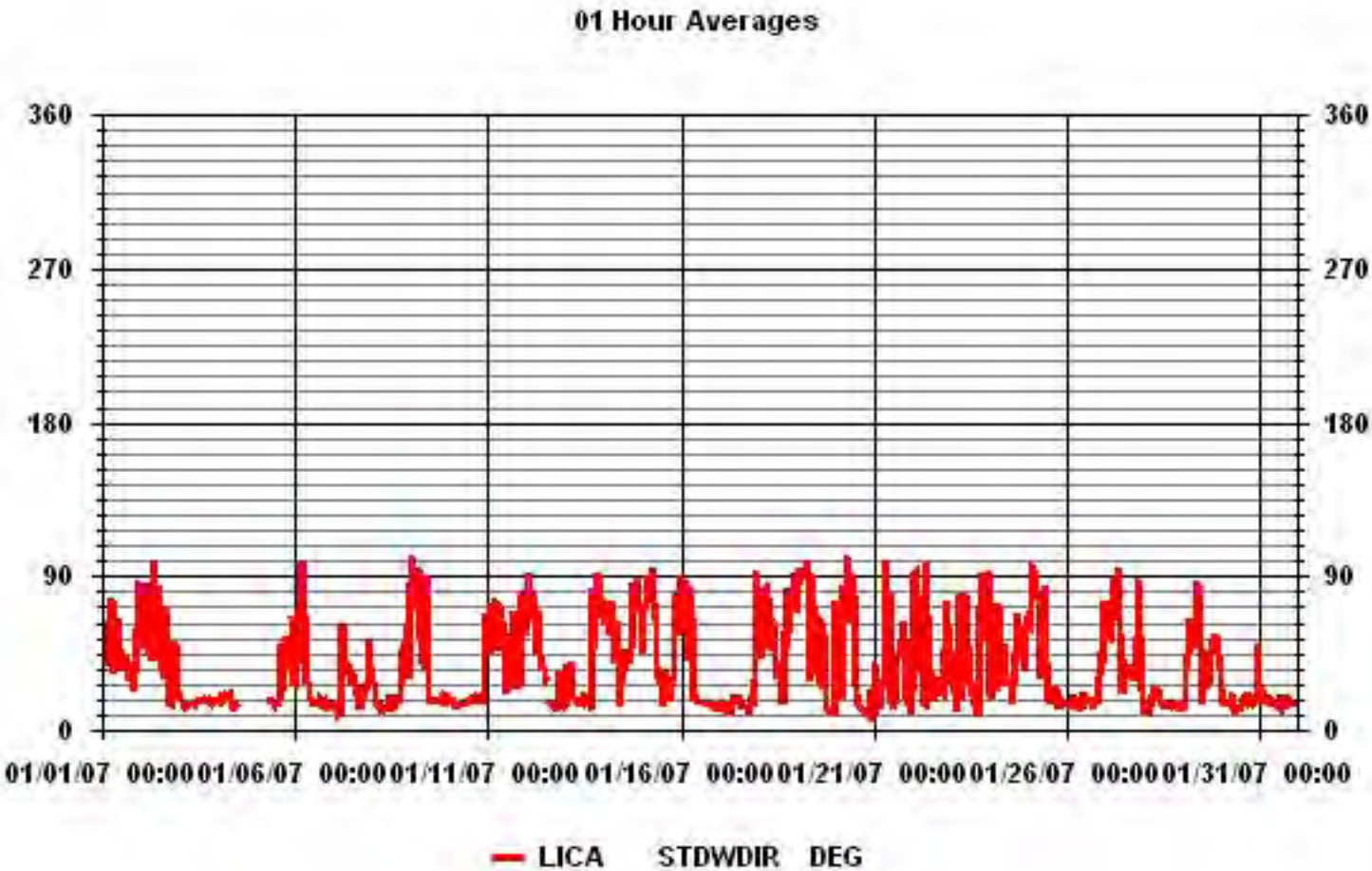
STATUS FLAG CODES

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

LAST CALIBRATION:	NA

Maxxam Analytics Inc

MOUNTAIN STANDARD TIME


01 Hour Averages
360
270
180
90
0
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA STDWDIR DEG

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

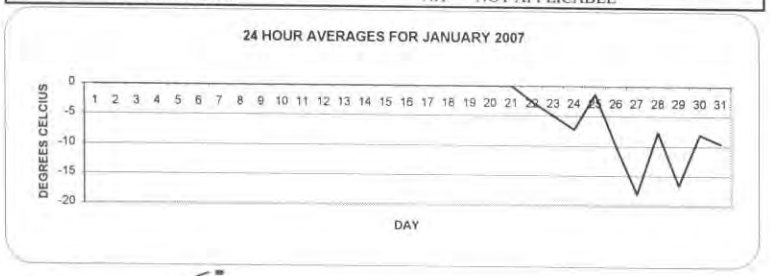
JANUARY 2007

AMBIENT TEMPERATURE hourly averages (Degrees C)

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY	24-HOUR	
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
2	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
3	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
4	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
5	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
6	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
7	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
8	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
9	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
10	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
11	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
12	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
13	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
14	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
15	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
16	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
17	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
18	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
19	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
20	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
21	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
22	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	-2.2	-2.3	-2.6	-2.7	-2.6	-2.5	-3	-3	-2.2	-2.6	8
23	-1.4	-1.4	-2.2	-2.9	-4.2	-6.9	-9	-10.2	-11.5	-10.7	-7.1	-1.8	1.7	2.3	2	0.3	-1.2	-2.5	-4.4	-6.7	-8.7	-9.6	-11	-10.8	2.3	-4.9	24
24	-10.6	-11.7	-12.6	-12.9	-13.6	-12.5	-10.7	-7.5	-6.2	-5.9	-5.1	-4.6	-3.5	-2.2	-2.2	-2.2	-3.3	-4.8	-6.3	-6.7	-7.1	-7.6	-7.2	-6.6	-2.2	-7.2	24
25	-7	-7.3	-6.9	-4.4	-2.8	-4.1	-5.4	-6.5	-6.4	-5.2	-2	2.9	6	7	6.8	5.6	4.2	2.9	0.8	-0.6	-1.8	-2.4	-2.6	-2.8	7.0	**-1.3**	24
26	-2.9	-3	-3.1	-3.6	-4.4	-5.2	-6.2	-7.3	-7.6	-8.1	-10.3	-10.8	-10.9	-11.4	-11.6	-11.7	-12.1	-13	-14.1	-15.4	-14.6	-15.6	-17.7	-20.1	-2.9	-10.0	24
27	-21.4	-22.9	-23.8	-25.1	-25.8	-26.4	-27.2	**-27.4**	-27.1	-22.4	-19.1	-16.6	-13.7	-11.8	-11.2	-11.1	-11.7	-12.7	-12.9	-12.8	-12.7	-12.4	-12.7	-12.3	-11.1	-18.1	24
28	-11.8	-12.1	-11.6	-12	-10.5	-9.2	-7.2	-6.5	-6.8	-6	-4.5	-2.9	-3	-3.1	-3.3	-3.9	-5.3	-6.3	-7.1	-7.8	-8.9	-9.8	-10.8	-12	-2.9	-7.6	24
29	-13.3	-14.2	-16.5	-17.4	-19.9	-22	-23.1	-24.4	-24.8	-21	-16.1	-16.1	-13.5	-11.7	-10.4	-10.3	-11.7	-16.1	-18.2	-17.2	-15.5	-15	-15.4	-15.6	-10.3	-16.6	24
30	-14.2	-11.8	-8.7	-8.4	-8.4	-7.6	-6.1	-5	-4.5	-4.3	-3.7	-3.6	-4.1	-5.3	-6.7	-7.9	-8.5	-9.3	-10	-10.3	-10.3	-10.7	-11.4	-12.3	-3.6	-8.0	24
31	-11	-10.6	-10	-9.5	-9.3	-9.3	-9.3	-9.4	-9.5	-9.4	-8.9	-8.2	-7.3	-6.1	-4.6	-4.8	-6	-7	-8.3	-10.6	-12.5	-14.7	-16.3	-17.1	-4.6	-9.6	24
HOURLY MAX	-1.4	-1.4	-2.2	-2.9	-2.8	-4.1	-5.4	-5.0	-4.5	-4.3	-2.0	2.9	6.0	7.0	6.8	5.6	4.2	2.9	0.8	-0.6	-1.8	-2.4	-2.6	-2.8			
HOURLY AVG	-10.4	-10.6	-10.6	-10.7	-11.0	-11.5	-11.6	-11.6	-11.6	-10.3	-8.5	-6.9	-5.4	-4.7	-4.6	-5.1	-5.8	-7.1	-8.3	-9.1	-9.5	-10.0	-10.8	-11.3			

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



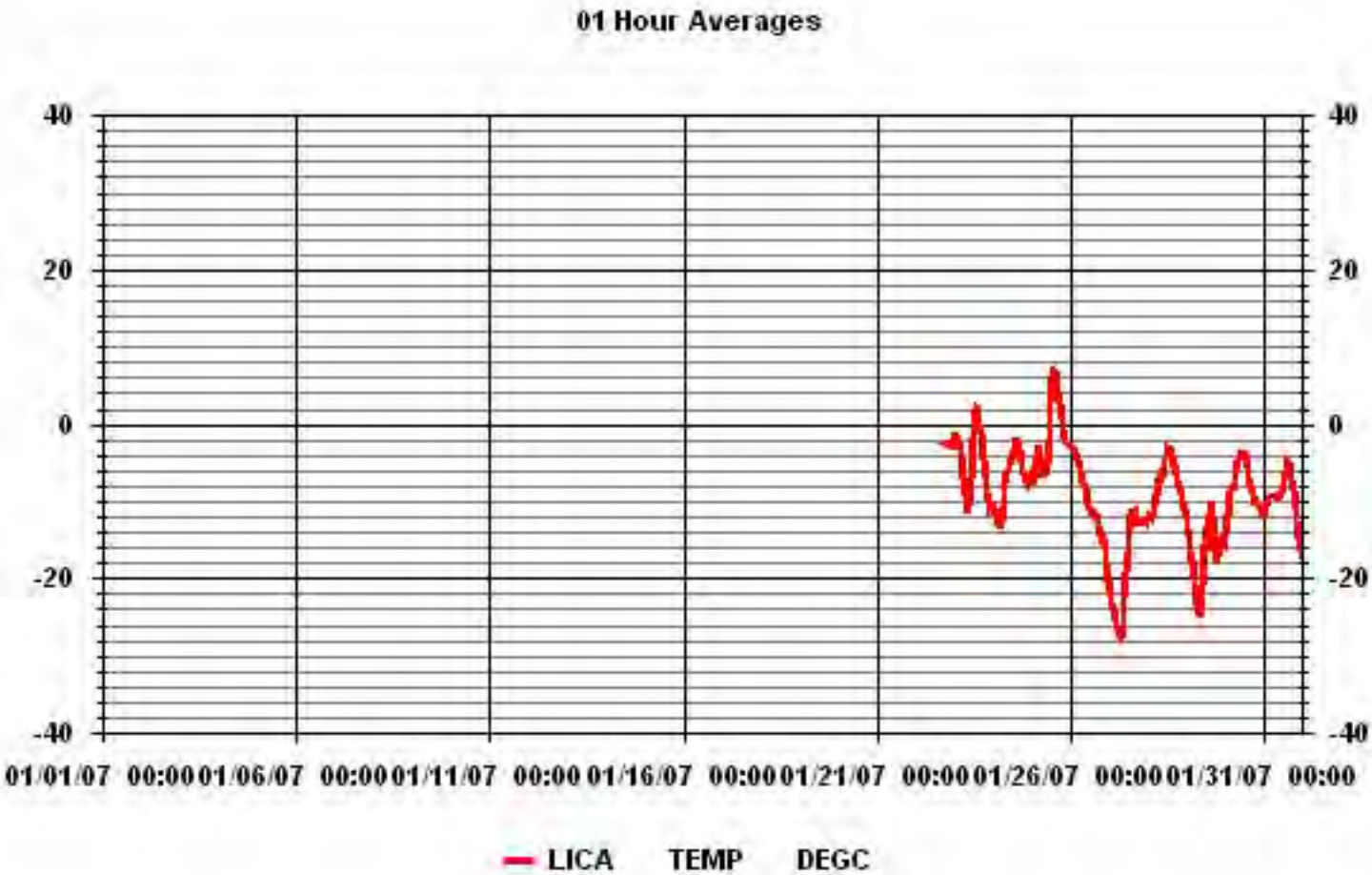
MONTHLY SUMMARY

MINIMUM 1-HR AVERAGE:	-27.4	°C	@ HOUR(S)	8	ON DAY(S)	27
MAXIMUM 1-HR AVERAGE:	7.0	°C	@ HOUR(S)	14	ON DAY(S)	25
MAXIMUM 24-HR AVERAGE:	-1.3	°C			ON DAY(S)	25

CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	224	HRS
			AMD OPERATION UPTIME:	100.0	%
STANDARD DEVIATION:	6.52		MONTHLY AVERAGE:	-9.03	°C

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc


01 Hour Averages
40
20
0
-20
-40
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA TEMP DEGC

LAKELAND INDUSTRY & COMMUNITY ASSOCIATION - *COLD LAKE*

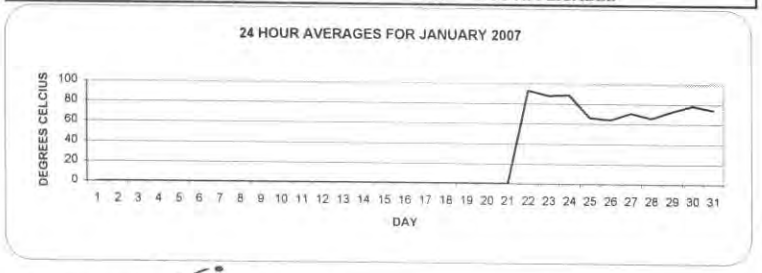
JANUARY 2007

RELATIVE HUMIDITY hourly averages (%)

HOUR START	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DAILY 24-HOUR		
HOUR END	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00	MAX.	AVG.	RDGS.
DAY																											
1	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
2	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
3	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
4	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
5	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
6	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
7	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
8	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
9	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
10	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
11	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
12	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
13	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
14	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
15	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
16	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
17	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
18	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
19	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
20	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
21	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
22	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NA	NA	0
23	87	87	89	91	92	93	91	**95**	93	90	85	75	75	75	75	83	87	92	94	93	91	91	93	94	94	**93.0**	8
24	92	90	88	87	86	87	89	92	93	92	91	90	86	80	80	81	86	90	93	92	91	91	90	89	95	88.0	24
25	90	90	90	87	83	88	90	90	89	84	72	56	44	39	38	36	43	53	62	55	53	53	50	50	93	88.6	24
26	53	53	53	54	68	70	75	69	61	61	75	62	58	60	60	61	60	63	65	70	67	71	76	80	90	66.0	24
27	79	77	77	74	75	74	73	74	72	72	73	69	63	60	61	62	64	67	70	71	72	73	74	75	80	64.4	24
28	72	71	70	74	74	74	69	68	70	68	65	61	60	58	60	58	60	61	62	61	64	65	66	70	79	70.9	24
29	73	76	81	81	81	77	77	74	74	69	67	73	66	61	57	56	61	75	78	78	77	78	79	80	74	65.9	24
30	83	87	89	88	88	87	84	81	77	78	76	72	72	66	73	70	70	73	75	77	77	78	80	83	81	72.9	24
31	82	83	83	83	83	83	83	83	84	81	78	76	74	71	71	75	75	65	57	56	64	62	67	66	89	78.5	24
HOURLY MAX	92	90	90	91	92	93	91	95	93	92	91	90	86	80	80	83	94	94	94	94	92	91	93	94	84	74.4	24
HOURLY AVG	79.0	79.3	80.0	79.9	81.1	81.4	81.2	80.7	79.2	77.2	75.8	70.4	66.4	63.3	63.9	64.7	70.0	73.3	75.0	74.7	74.8	75.3	76.8	77.9			

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



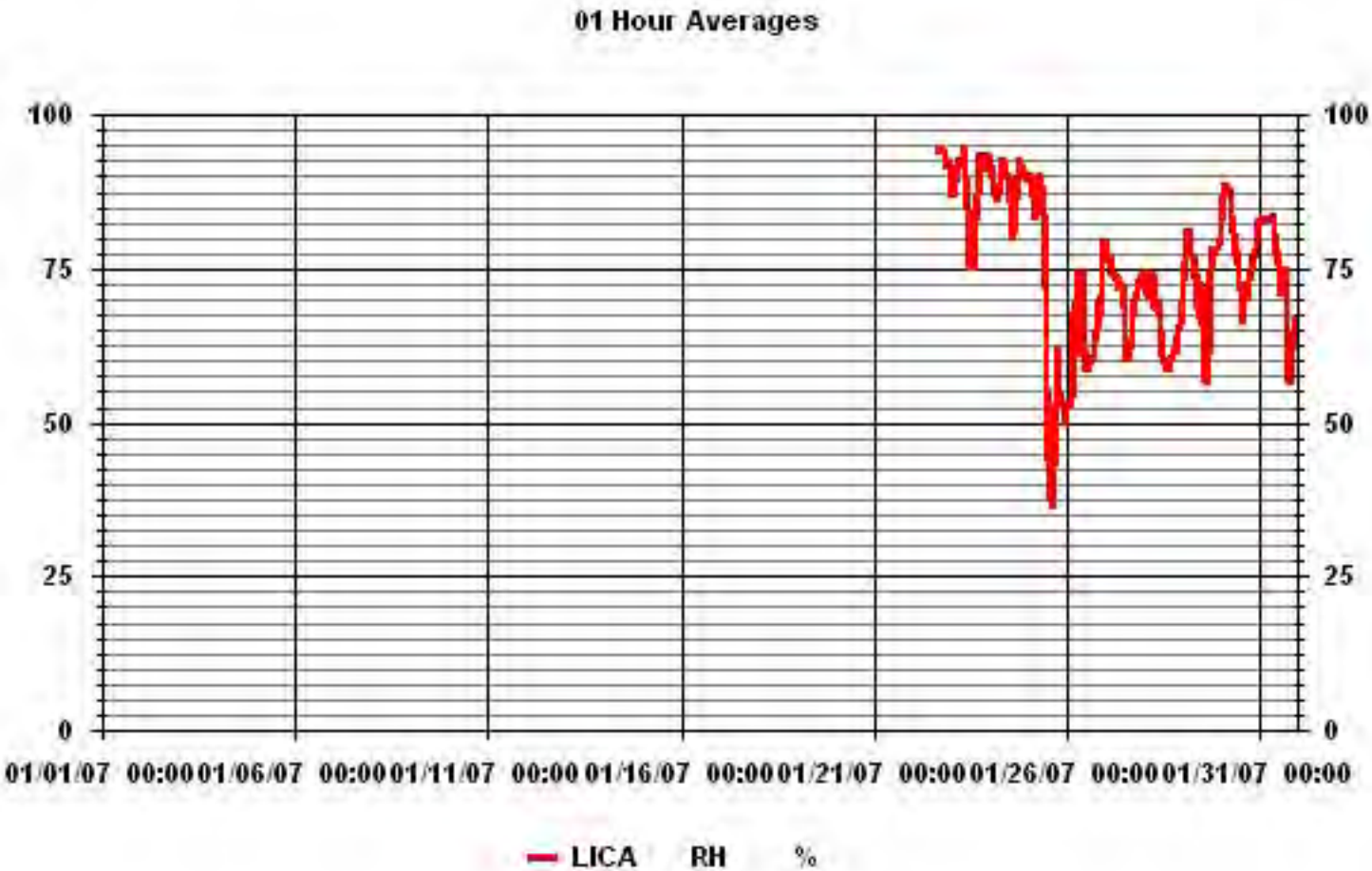
MONTHLY SUMMARY

MAXIMUM 1-HR AVERAGE:	95	%	@ HOUR(S)	8	ON DAY(S)	23
MAXIMUM 24-HR AVERAGE:	93.0	%			ON DAY(S)	22

CALIBRATION TIME:	0	HRS	OPERATIONAL TIME:	224	HRS
			AMD OPERATION UPTIME:	100.0	%
STANDARD DEVIATION:	12.75		MONTHLY AVERAGE:	75.05	%

MOUNTAIN STANDARD TIME

Maxxam Analytics Inc


01 Hour Averages
100
75
50
25
0
01/01/07 00:00
01/06/07 00:00
01/11/07 00:00
01/16/07 00:00
01/21/07 00:00
01/26/07 00:00
01/31/07 00:00
LICA RH %

JANUARY 2007
CALIBRATION REPORTS

LICA – COLD LAKE

SO_2 Calibration Report

Station Information

Calibration Date	January 5, 2007	Previous Calibration	-
Company	**Lakeland Industry and Community Associaton**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	8:00	End Time (MST)	13:00
Reason:	Monthly Calibration		
Barometric Pressure	705 mmHg	Station Temperature	22 Deg C
Cal Gas	47.6 ppm	Cal Gas Expiry date	06/23/2007
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

	Before Calibration				After Calibration			
Concentration Range	0 - 500 ppb							
Sample Flow / Box Temp	700	ccm	OK	Deg C	700	ccm	OK	Deg C
HVPS / Lamp Setting	OK		848		OK		847	
PMT / RxCell Temp	OK	Deg C	OK	50	OK	Deg C	OK	Deg C
Converter / IZS Temp	-	Deg C	OK	40	-	Deg C	OK	Deg C
Offset / Slope	98		865		98		849	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
ZERO	ZERO	0	0	-
5949	50.4	400	398	1.0047
ZERO	ZERO	0	0	-
5949	50.4	400	398	1.0047
5949	50.4	400	402	0.9947
5974	25.2	200	203	0.9850
5987	12.6	100	103	0.9706
ZERO	ZERO	0	0	-
			Sum of Least Squares	0.9917
			New Correction Factor	0.9947

	Before Calibration	After Calibration
Auto Zero	0	0
Auto Span	352	353
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		N/A

Notes: Adjusted analog outputs so analyzer and DAS read the same. Analyzer was about 4 ppb higher on the upper span point

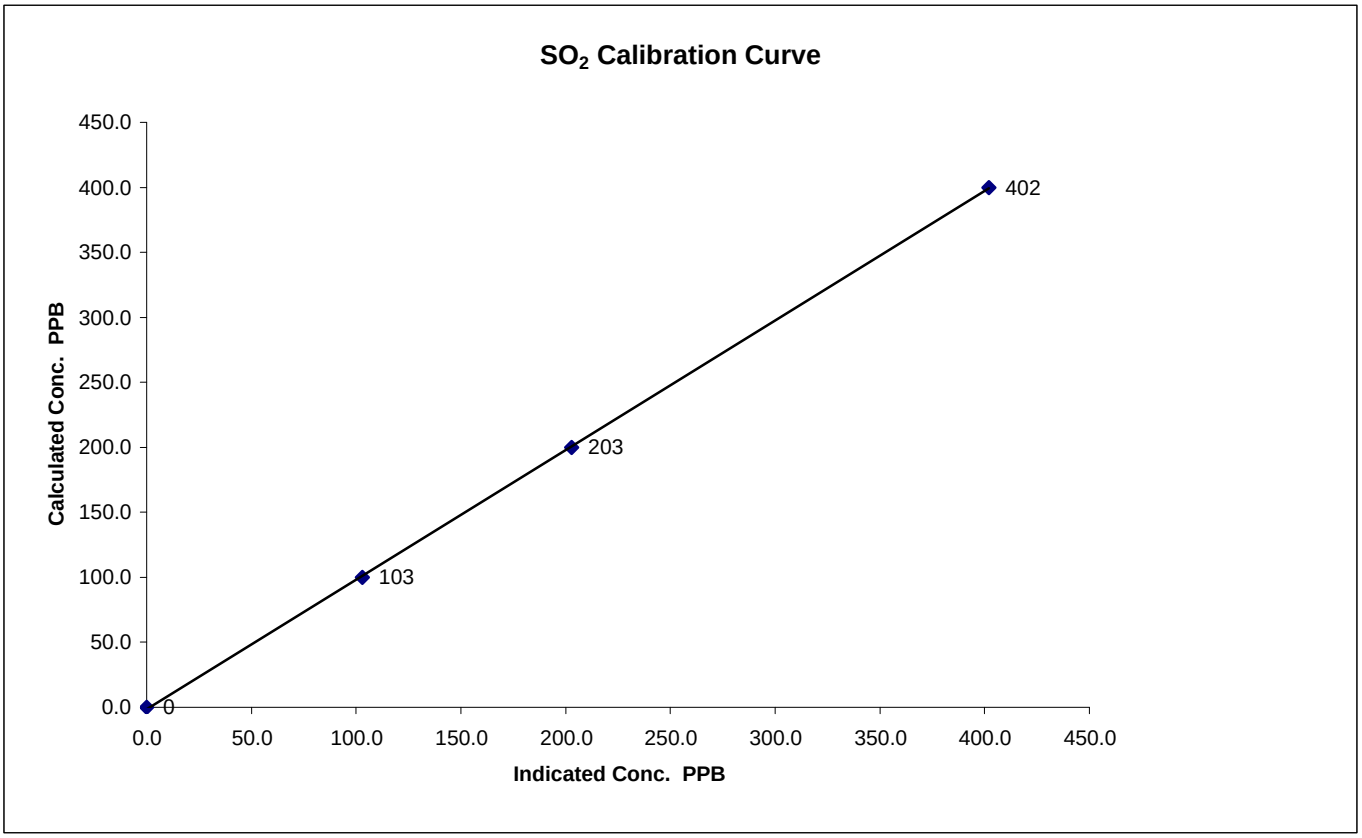
Calibration Performed by: Shea Beaton

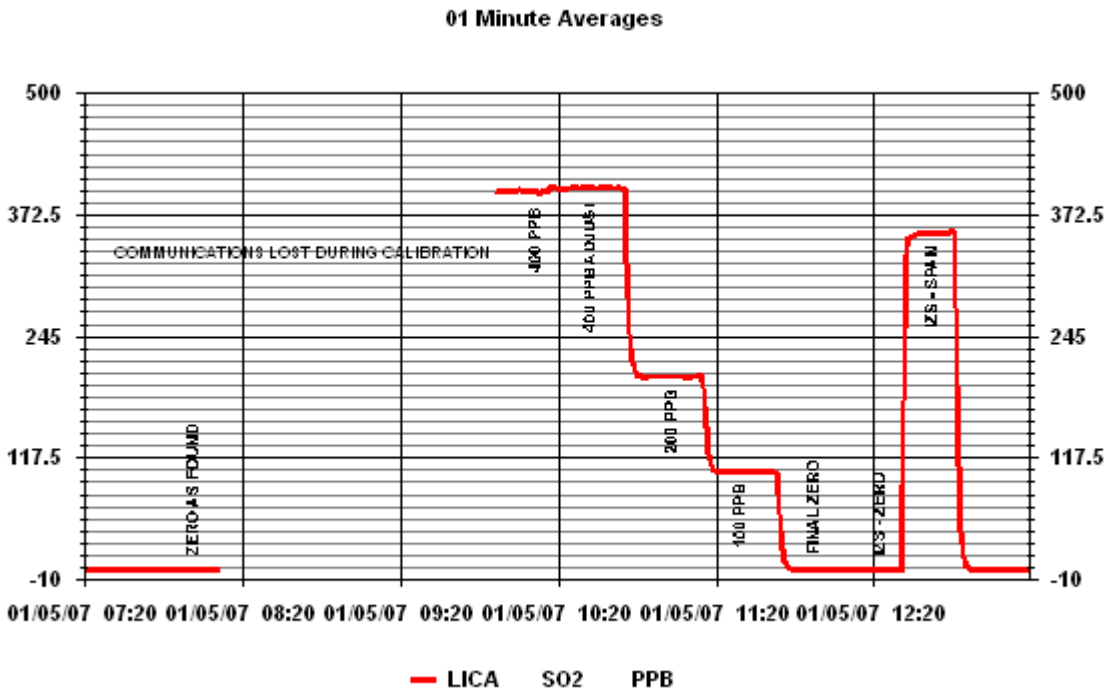
SO_2 Calibration Curve

Calibration Date	January 5, 2007		
Company	**Lakeland Industry and Community Associaton**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	8:00	End Time (MST)	13:00

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
100	103	0.9706
200	203	0.9850
400	402	0.9947

Correlation Coefficient	(≥ 0.995)	0.999944
Slope	(0.85 to 1.15)	1.003725
Intercept	(± 3% F.S.)	1.399996




01 Minute Averages
500
372.5
245
117.5
-10
COMMUNICATIONS LOST DURING CALIBRATION
ZERO AS FOUND
400 PPB
400 PPB ALDUS 1
200 PPB
100 PPB
FINAL ZERO
IZS - ZERO
IZS - SPAN
01/05/07 07:20
01/05/07 08:20
01/05/07 09:20
01/05/07 10:20
01/05/07 11:20
01/05/07 12:20
LICA SO2 PPB

TRS Calibration Report

Station Information

Calibration Date	January 4, 2007		Previous Calibration	-	
Company	**Lakeland Industry and Community Associaton**				
Plant / Location	**LICA 1 - Cold Lake South**				
Start Time (MST)	17:00		End Time (MST)	21:25	
Reason:	Monthly Calibration				
Barometric Pressure	702	mmHg	Station Temperature	22	Deg C
Cal Gas	10.2	ppm	Cal Gas Expiry date	09/05/2007	
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:	Environics 2000	S/N :	1991	Method:	Dilution
DAS Make / Model:	ESC 8832	S/N :	263		
Flow Meter:	Environics 2000	S/N :	1991		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range	0 - 100 ppb							
Sample Flow / Box Temp	425	ccm	OK	Deg C	425	ccm	OK	Deg C
HVPS / Lamp Setting	OK		886		OK		886	
PMT / RxCell Temp	OK	Deg C	OK	50	OK	Deg C	OK	Deg C
Converter / IZS Temp	850	Deg C	OK	40	850	Deg C	OK	Deg C
Offset / Slope	781		891		781		763	

Calibration Data

Dilution Flow Rate	Source Gas Flow Rate	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
ZERO	ZERO	0	0	-
5000	40	81	84	0.9637
ZERO	ZERO	0	0	-
5000	40	81	81	0.9994
5000	20	41	41	0.9912
5000	10	20	21	0.9695
ZERO	ZERO	0	0	-
			Sum of Least Squares	0.9963
			New Correction Factor	0.9994

	Before Calibration	After Calibration
Auto Zero	-	0
Auto Span	-	83
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		N/A

Notes:

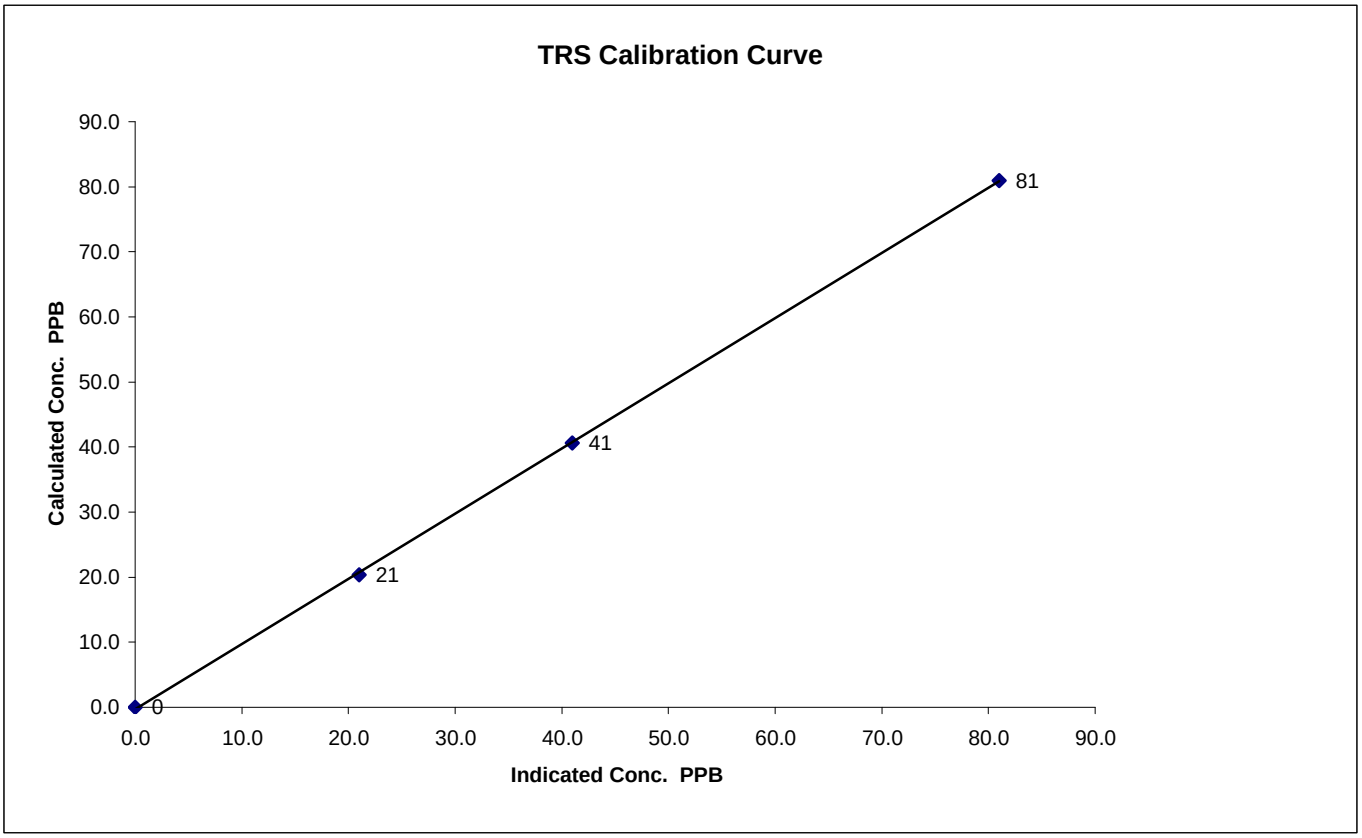
Calibration Performed by: Shea Beaton

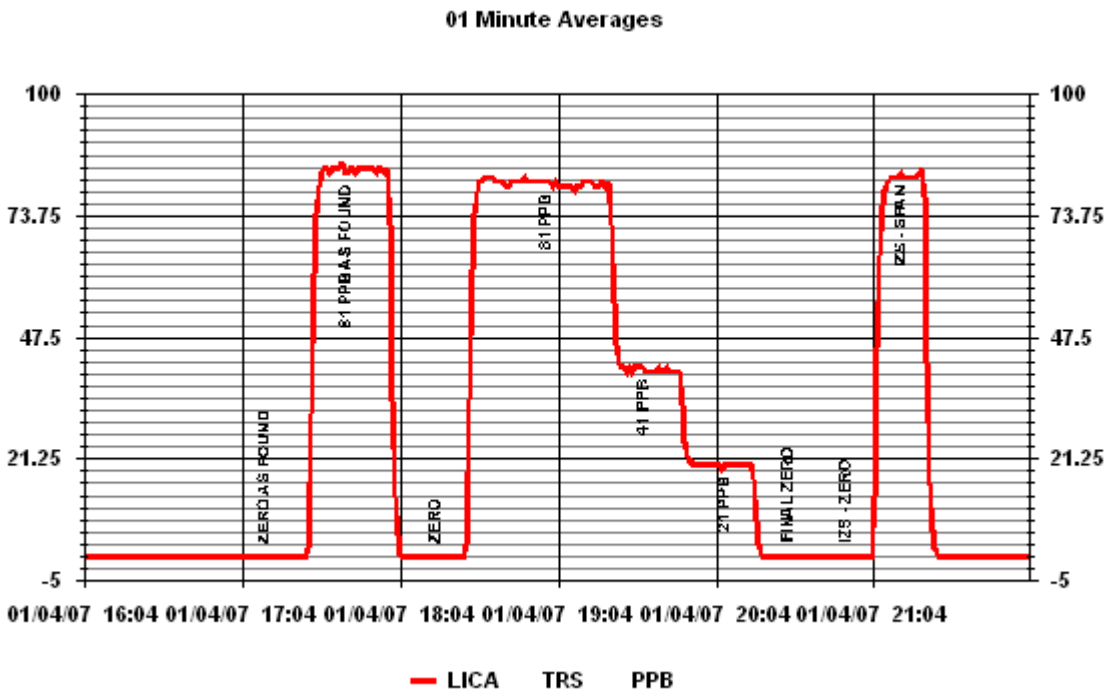
TRS Calibration Curve

Calibration Date	January 4, 2007		
Company	**Lakeland Industry and Community Associaton**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	17:00	End Time (MST)	21:25

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
20	21	0.9695
41	41	0.9912
81	81	0.9994

Correlation Coefficient	(≥ 0.995)	0.999927
Slope	(0.85 to 1.15)	0.998420
Intercept	(± 3% F.S.)	0.318805




01 Minute Averages
100
73.75
47.5
21.25
-5
ZERO AS FOUND
81 PPB AS FOUND
ZERO
81 PPB
41 PPB
21 PPB
FINAL ZERO
IZS - ZERO
ZCS - SPAN
01/04/07 16:04
01/04/07 17:04
01/04/07 18:04
01/04/07 19:04
01/04/07 20:04
01/04/07 21:04
LICA TRS PPB

O_3 Calibration Report

Station Information

Calibration Date	January 5, 2007	Previous Calibration	-
Company	**Lakeland Industry and Community Associaton**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	16:00	End Time (MST)	18:30
Reason:	Monthly Calibration		
Barometric Pressure	705 mmHg	Station Temperature	22 Deg C
DAS Output Voltage	0 - 10 Volts		

Equipment Information

Analyzer Make / Model:	TECO 49	S/N :	AOM-13892-143	Method:	Fluorescent
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

	Before Calibration		After Calibration	
Concentration Range	0 - 500 ppb			
Box Temp	OK		OK	
O_3 Set Level	2.39		2.39	
Sample Flow A/B	1.0 LPM	1.0 LPM	1.0 LPM	1.0 LPM
Offset / Slope	50	0.586	50	0.586

Calibration Data

Dilution Flow Rate	Ozone Set Point	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
ZERO	ZERO	0	-1	-
5000	250	307	259	1.1853
ZERO	ZERO	0	-	-
5000	250	307	-	-
5000	125	190	-	-
5000	75	96	-	-
ZERO	ZERO	0	-	-
			Sum of Least Squares	-
			New Correction Factor	-

	Before Calibration	After Calibration
Auto Zero	-	-
Auto Span	-	-
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		-

Notes: Initially API zero air module was used and the zero air supply, but the air provided was too dry and the analyzer concentration dropped to -150. Switched to pump with charcoal and silica gel. Calibration halted, span too low, suspect catalytic converter, will replace when part available. No adjustments made to analyzer before and after calibration was aborted.

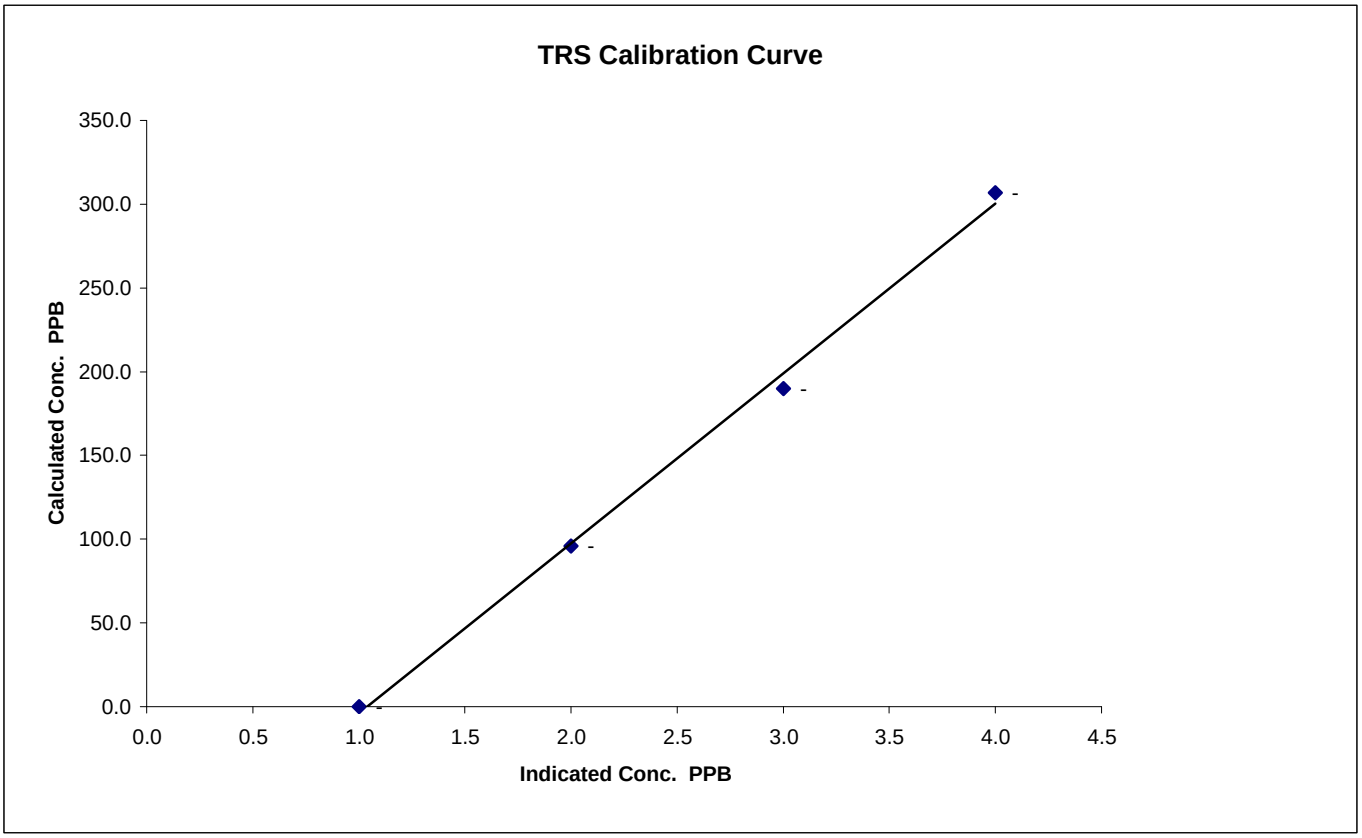
Calibration Performed by: Shea Beaton

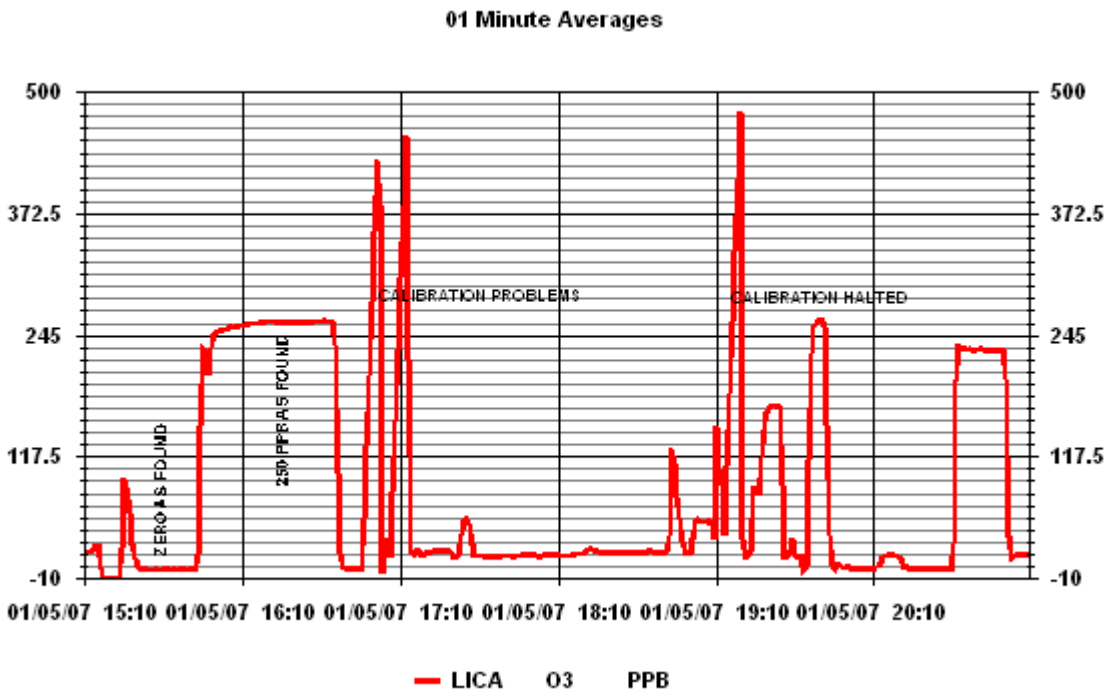
O_3 Calibration Curve

Calibration Date	January 5, 2007		
Company	**Lakeland Industry and Community Associaton**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	16:00	End Time (MST)	18:30

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	-	n/a
96	-	#VALUE!
190	-	#VALUE!
307	-	#VALUE!

Correlation Coefficient	**(≥ 0.995)**	#DIV/0!
Slope	**(0.85 to 1.15)**	#DIV/0!
Intercept	**(± 3% F.S.)**	#DIV/0!




01 Minute Averages
500
372.5
245
117.5
-10
ZERO IS FOUND
250 PPB IS FOUND
CALIBRATION PROBLEMS
CALIBRATION HALTED
01/05/07 15:10
01/05/07 16:10
01/05/07 17:10
01/05/07 18:10
01/05/07 19:10
01/05/07 20:10
LICA O3 PPB

O_3 Calibration Report

Station Information

Calibration Date	January 15, 2007	Previous Calibration	-
Company	**Lakeland Industry and Community Associaton**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	15:20	End Time (MST)	20:30
Reason:		Monthly Calibration	
Barometric Pressure	712 mmHg	Station Temperature	20 Deg C
DAS Output Voltage	0 - 10 Volts		

Equipment Information

Analyzer Make / Model:	TECO 49	S/N :	AOM-13892-143	Method:	Fluorescent
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

	Before Calibration		After Calibration	
Concentration Range	0 - 500 ppb			
Box Temp	OK		OK	
O_3 Set Level	2.39		3.75	
Sample Flow A/B	1.0 LPM	1.0 LPM	1.0 LPM	1.0 LPM
Offset / Slope	50	0.586	50	0.690

Calibration Data

Dilution Flow Rate	Ozone Set Point	Calculated Concentration	Indicated Conc. (DAS)	Correction Factor
ZERO	ZERO	0	0	-
5000	250	307	263	1.1673
ZERO	ZERO	0	0	-
5000	250	307	307	1.0000
5000	150	190	190	1.0000
5000	75	96	95	1.0105
ZERO	ZERO	0	0	-
			Sum of Least Squares	1.0007
			New Correction Factor	1.0000

	Before Calibration	After Calibration
Auto Zero	0	0
Auto Span	-1	281
Sample Lines Connected		**YES**
Percent Change from Previous Calibration		-

Notes: Accidently pressed test A on Analyzer at 18:15, this caused fluctuation in calibration value.

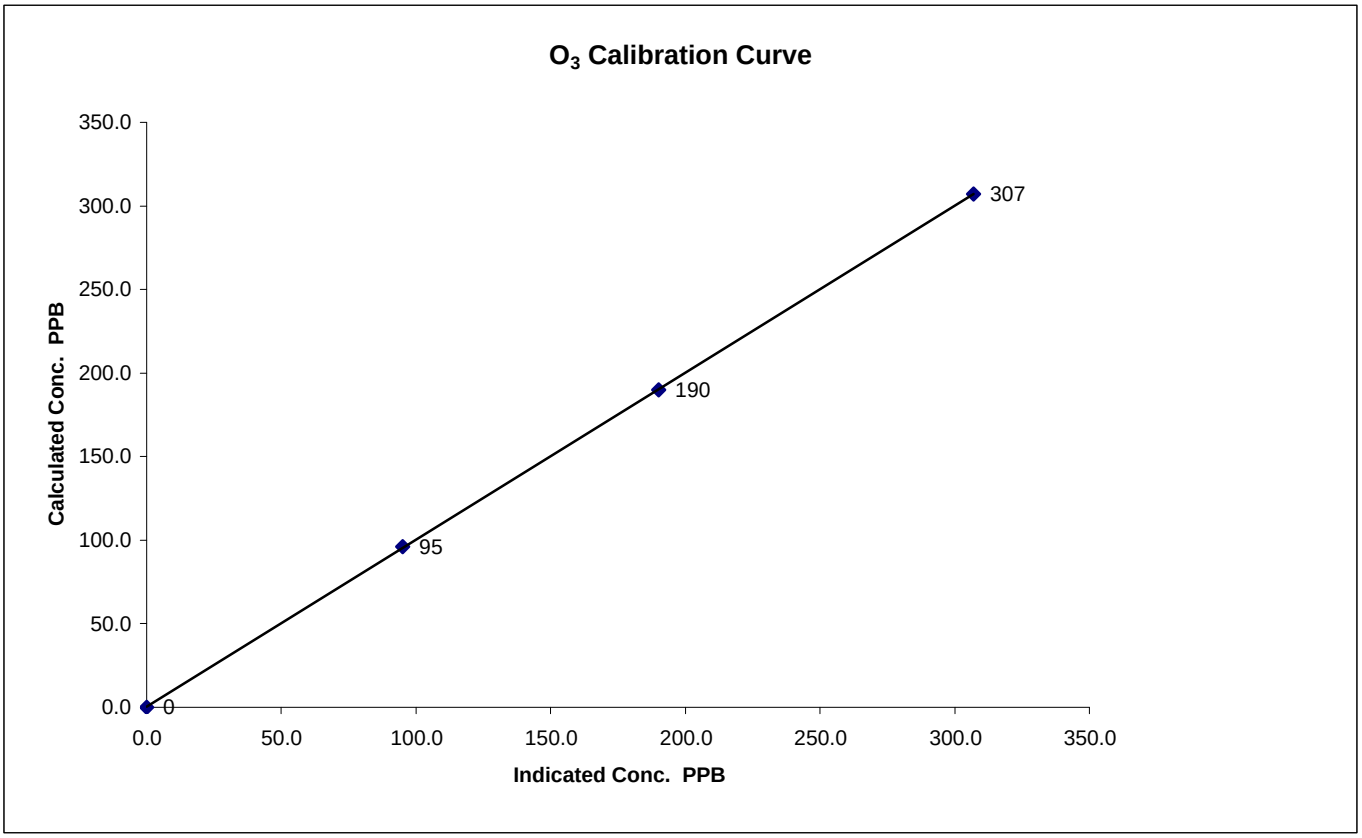
Calibration Performed by: Shea Beaton

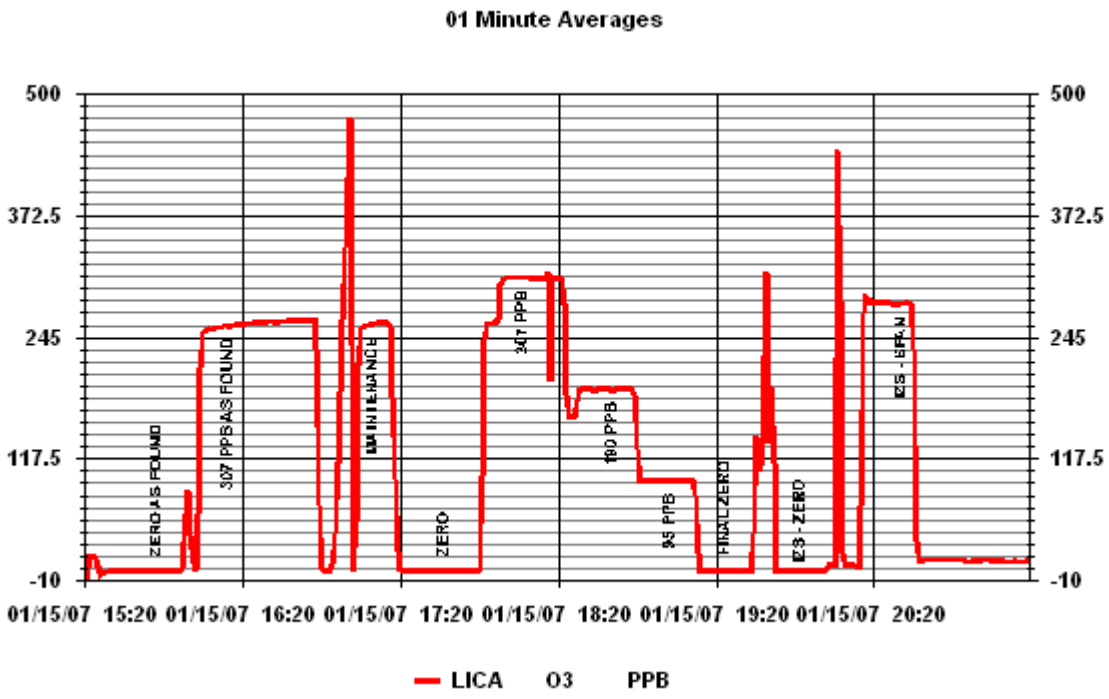
O_3 Calibration Curve

Calibration Date	January 15, 2007		
Company	**Lakeland Industry and Community Associaton**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	15:20	End Time (MST)	20:30

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	n/a
96	95	1.0105
190	190	1.0000
307	307	1.0000

Correlation Coefficient	**(≥ 0.995)**	0.999987
Slope	**(0.85 to 1.15)**	1.001012
Intercept	**(± 3% F.S.)**	-0.399964




01 Minute Averages
500
372.5
245
117.5
-10
01/15/07 15:20
01/15/07 16:20
01/15/07 17:20
01/15/07 18:20
01/15/07 19:20
01/15/07 20:20
ZERO AS FOUND
307 PPB AS FOUND
MAINTENANCE
ZERO
347 PPB
180 PPB
85 PPB
FINAL ZERO
ES - ZERO
ES - EPA M
LICA O3 PPB

NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	January 5, 2007	Previous Calibration	-
Company	**Lakeland Ind & Comm. Assoc.**	Plant/Location	**LICA 1 - Cold Lake South**
Start Time (MST)	8:00	End Time (MST)	14:00
Reason:		Monthly Calibration	
Barometric Pressure	705 mmHg	Station Temperature	23.0 Deg C
Cal Gas Concentration	NOx 52.7 ppm NO 52.2 ppm	Cal Gas Expiry date	23/06/2007
DAS Output Voltage	0 - 5 Volts		

Equipment Information

Analyzer Make / Model:	TECO 42	S/N :	42-33684-247	Method:	Chemiluminescent
Calibrator Make / Model:	API 700	S/N:	690		
DAS Make / Model:	ESC 8832	S/N :	263		
Flow Meter:	BIOS Dry Cal DC-2	S/N :	1193		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range				0 - 500		ppb		
Sample Flow/Conv. Temp	637	ccm	335	Deg C	637	ccm	334	Deg C
Ozone Flow / Vacuum	OK	ccm	-24	"Hg-A	OK	ccm	-24	"Hg-A
HVPS	OK		Volts		OK		Volts	
Rx/ Temp / PMT Temp	50.4	Deg C	-2.9	Deg C	50.4	Deg C	-2.9	Deg C
Box Temp / IZS Temp	30.3	Deg C	-	Deg C	30.3	Deg C	-	Deg C
Offset	2.9	NOx	2.4	NO	2.6	NOx	2.6	NO
Slope	1.001	NOx	0.731	NO	1.008	NOx	0.758	NO

Gas Phase Titration Calibration Data

Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration		Indicated Concentration			Correction Factor	
			NOx	NO	NOx	NO	NO2	NOx	NO
ZERO	-	-	0	0	0	0	0	-	-
4961	38.3	-	404	400	391	391	0	1.0326	1.0228
ZERO	-	-	0	0	0	0	0	-	-
4961	38.3	-	404	400	388	387	1	1.0406	1.0334
4961	38.3	-	404	400	404	400	4	0.9994	0.9998
								Converter Efficiency	
4961	76.6	250	801	N/A	365	93	272	87%	
4961	76.6	150	801	N/A	392	210	183	94%	
4961	76.6	75	801	N/A	401	304	97	97%	
4961	76.6	-	801	794	402	398	4	-	
								Correction Factor	
4980	19.2	-	202	200	195	194	2	1.0380	1.0334
4990	9.6	-	101	100	96	95	1	1.0541	1.0551
ZERO	N/A	-	0	0	0	0	0	-	-

Linearity OK?	**Yes**	No	Sum of Least Squares	1.0090	1.0086
Flows Checked on-site?	**Yes**	No	New Correction Factor	1.0406	1.0334
			Average Converter Efficiency	93%	

	Before Calibration				After Calibration			
Auto Zero	0	NOx	0	NO2	0	NOx	0	NO2
Auto Span	131	NOx	118	NO2	143	NOx	136	NO2
Sample Lines Connected					**YES**			
Percent Change from Previous Calibration					*NOx*	-	*NO*	-

Notes: Converter efficiency low (92.5%) and should be above 96%. Will verify with another calibrator.

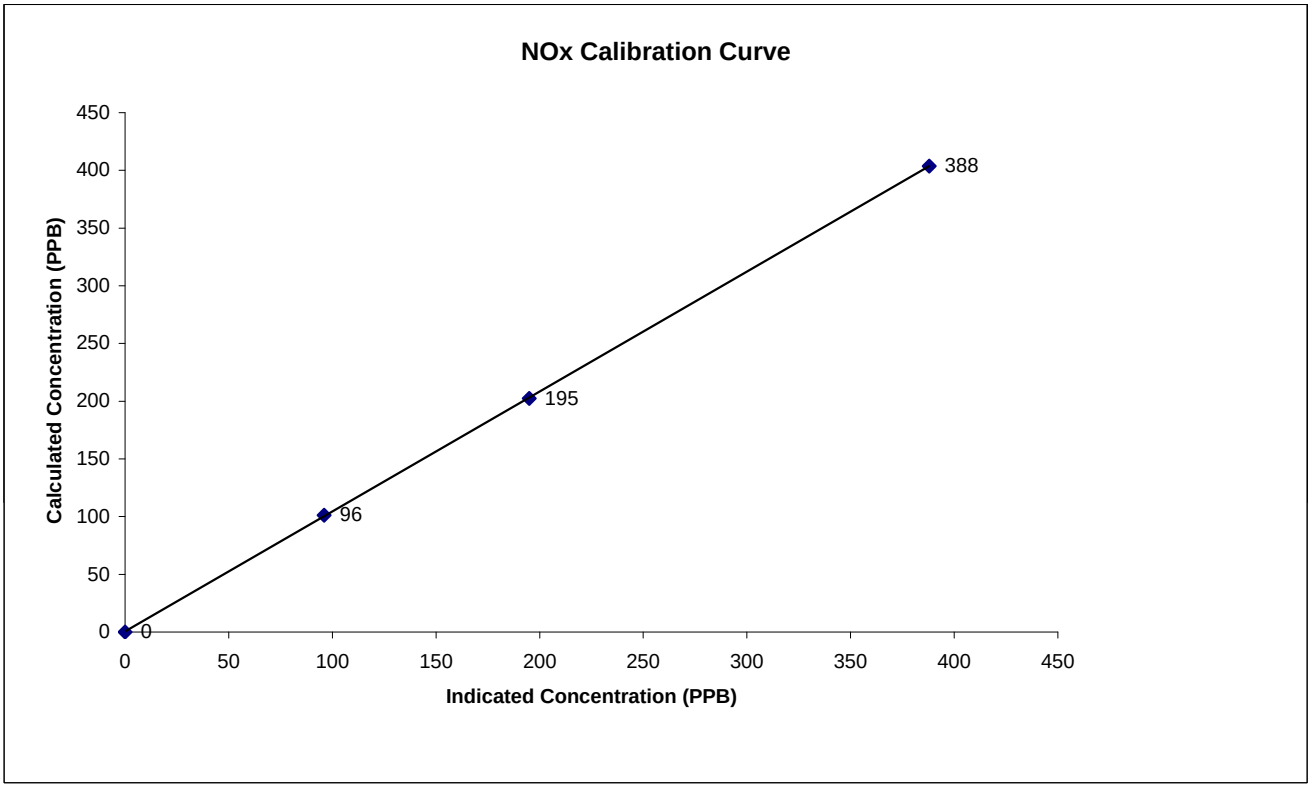
Calibration Performed by: Shea Beaton

NOx Calibration Curve

Calibration Date	January 5, 2007		
Company	**Lakeland Ind & Comm. Assoc.**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	8:00	End Time (MST)	14:00

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	N/A
101	96	1.0541
202	195	1.0380
404	388	1.0406

Correlation Coefficient	**(≥ 0.995)**	0.999982
Slope	**(0.85 to 1.15)**	0.962217
Intercept	**(± 3% F.S.)**	-0.401495

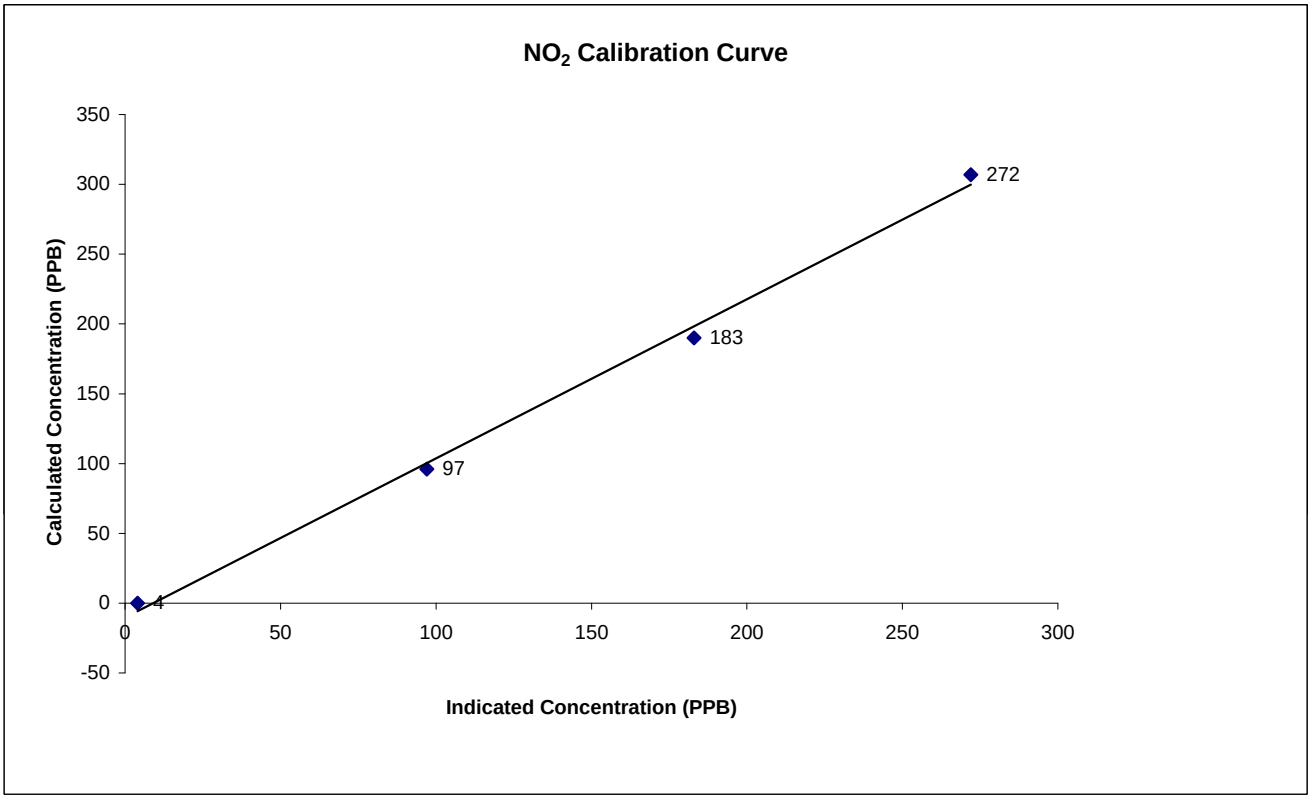


NO_2 Calibration Curve

Calibration Date	January 5, 2007		
Company	**Lakeland Ind & Comm. Assoc.**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	8:00	End Time (MST)	14:00

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	4	N/A
96	97	0.9897
190	183	1.0383
307	272	1.1287

Correlation Coefficient	**(≥ 0.995)**	0.996659
Slope	**(0.85 to 1.15)**	0.874281
Intercept	**(± 3% F.S.)**	9.387893

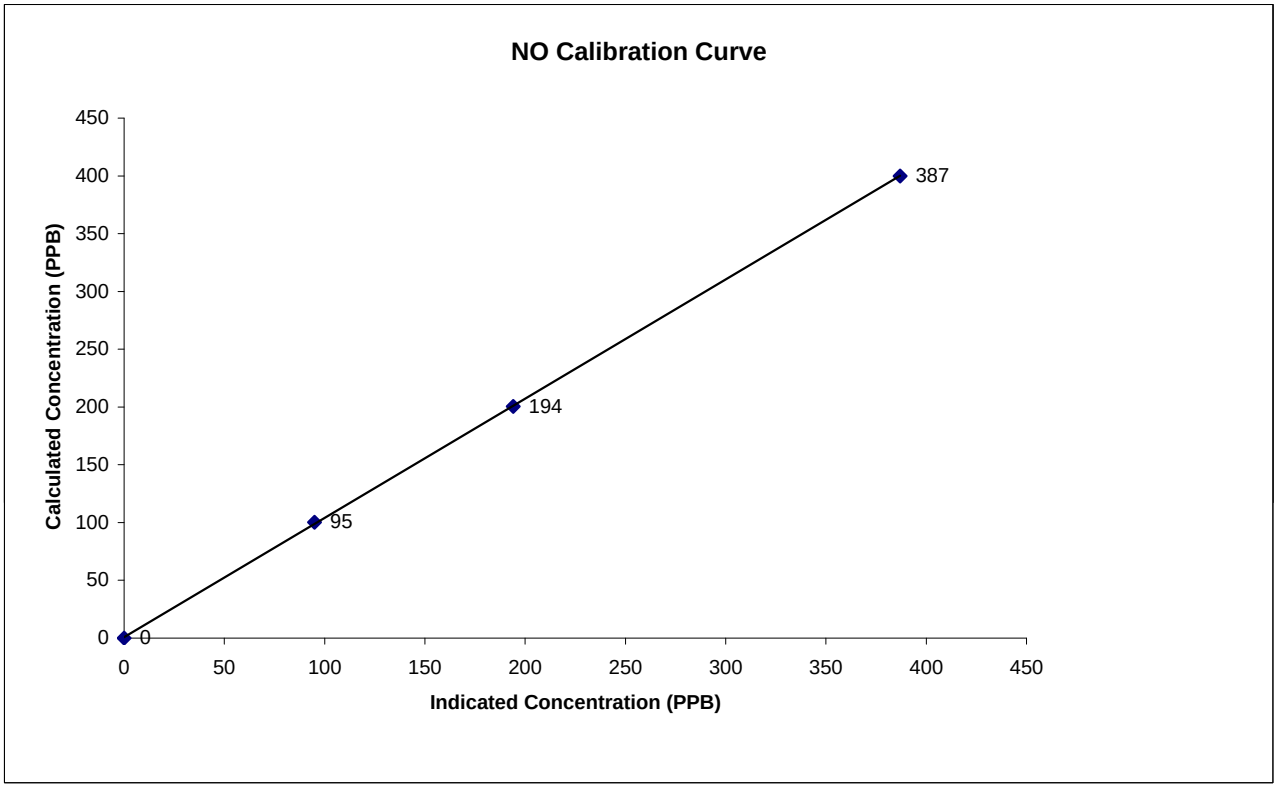


NO Calibration Curve

Calibration Date	January 5, 2007		
Company	**Lakeland Ind & Comm. Assoc.**		
Plant / Location	**LICA 1 - Cold Lake South**		
Start Time (MST)	8:00	End Time (MST)	14:00

Calculated Conc. ppb	Indicated Response ppb	Correction Factor
0	0	N/A
100	95	1.0551
200	194	1.0334
400	387	1.0334

Correlation Coefficient	**(≥ 0.995)**	0.999967
Slope	**(0.85 to 1.15)**	0.969431
Intercept	**(± 3% F.S.)**	-0.800666



NOx - NO- NO_2 Calibration Report

Station Information

Calibration Date	January 5, 2007	Previous Calibration	January 5, 2007
Company	**Lakeland Ind & Comm. Assoc.**	Plant/Location	**LICA 1 - Cold Lake South**
Start Time (MST)	14:20	End Time (MST)	17:40
Reason:		GPT - Converter Check	
Barometric Pressure	705 mmHg	Station Temperature	23.0 Deg C
Cal Gas Concentration	NOx 52.7 ppm NO 52.2 ppm	Cal Gas Expiry date	23/06/2007
DAS Output Voltage	0 - 5 Volts		

Equipment Information

Analyzer Make / Model:	TECO 42	S/N :	42-33684-247	Method:	Chemiluminescent
Calibrator Make / Model:	Environics 2000	S/N:	1991		
DAS Make / Model:	ESC 8832	S/N :	263		
Flow Meter:	BIOS Dry Cal DC-2	S/N :	1193		

Analyzer Settings

	Before Calibration				After Calibration			
Concentration Range				0 - 500		ppb		
Sample Flow/Conv. Temp	637	ccm	335	Deg C	637	ccm	334	Deg C
Ozone Flow / Vacuum	OK	ccm	-24	"Hg-A	OK	ccm	-24	"Hg-A
HVPS	OK		Volts		OK		Volts	
Rx/ Temp / PMT Temp	50.4	Deg C	-2.9	Deg C	50.4	Deg C	-2.9	Deg C
Box Temp / IZS Temp	30.3	Deg C	-	Deg C	30.3	Deg C	-	Deg C
Offset	2.6	NOx	2.6	NO	2.6	NOx	2.6	NO
Slope	1.008	NOx	0.758	NO	1.008	NOx	0.758	NO

Gas Phase Titration Calibration Data

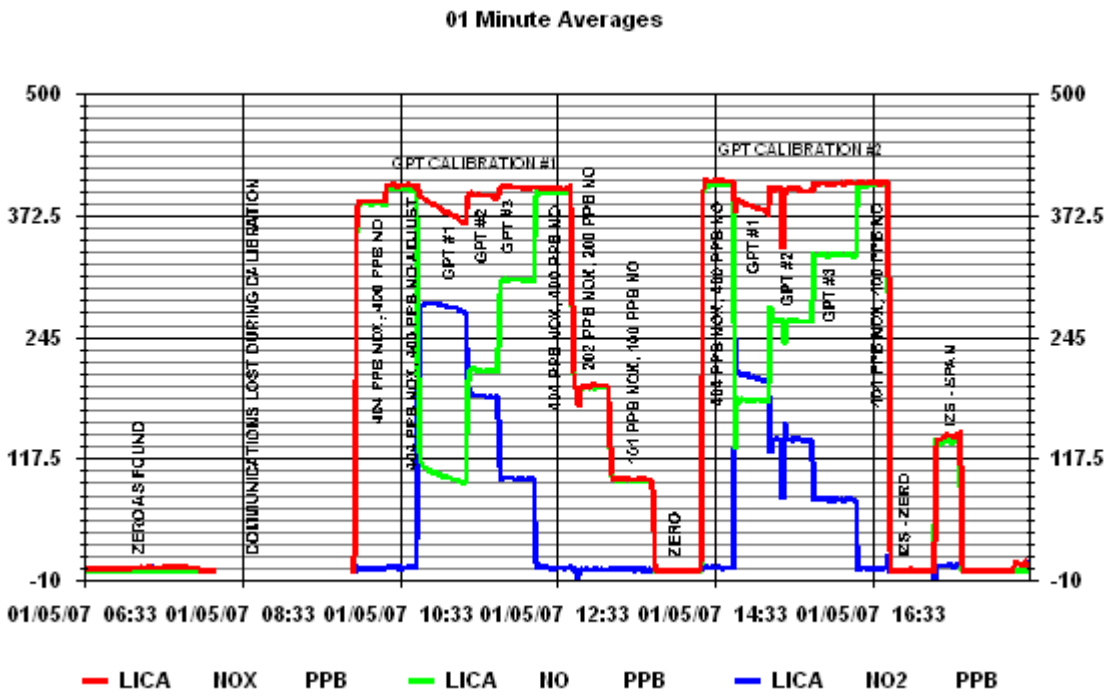
Dilution Air Flow Rate	Source Flow Rate	O3 Set Point	Calculated Concentration		Indicated Concentration			Correction Factor	
			NOx	NO	NOx	NO	NO2	NOx	NO
ZERO	-	-	0	0	0	0	0	-	-
6946	53.6	-	404	400	409	405	3	0.9867	0.9870
								Converter Efficiency	
6946	53.6	250	404	N/A	378	188	199	90%	
6946	53.6	150	404	N/A	399	262	138	94%	
6946	53.6	75	404	N/A	407	331	76	99%	
6946	53.6	-	404	400	408	405	3	-	
								Correction Factor	
ZERO	-	-	0	0	0	0	0	-	-
Linearity OK?			**Yes**	No	Sum of Least Squares			-	-
Flows Checked on-site?			**Yes**	No	New Correction Factor			-	-
					Average Converter Efficiency			94%	

	Before Calibration				After Calibration			
Auto Zero	0	NOx	0	NO2	0	NOx	0	NO2
Auto Span	131	NOx	118	NO2	143	NOx	136	NO2
Sample Lines Connected					**YES**			
Percent Change from Previous Calibration					*NOx*	-	*NO*	-

Notes: During second GPT point cal gas flow was lost briefly.

Converter efficiency low. This check was completed to verify low Converter Efficiency

Calibration Performed by: Shea Beaton


01 Minute Averages
500
372.5
245
117.5
-10
01/05/07 06:33
01/05/07 08:33
01/05/07 10:33
01/05/07 12:33
01/05/07 14:33
01/05/07 16:33
ZERO AS FOUND
COMMUNICATIONS LOST DURING CALIBRATION
GPT CALIBRATION #1
GPT CALIBRATION #2
GPT #1
GPT #2
GPT #3
ZERO
ZS - ZERO
LICA NOX PPB
LICA NO PPB
LICA NO2 PPB

THC Calibration Report

Station Information

Calibration Date:	January 4, 2007	Previous Calibration	-
Company:	**Lakeland Industry and Community Association**		
Plant / Location:	**LICA 1 - Cold Lake**		
Start Time (MST)	17:00	End Time (MST)	21:40
Reason:	Monthly Calibration		
Barometric Pressure:	702 mmHg	Station Temperature:	22 Deg C
Calibrator:	API 700	S/N:	690
Cal Gas Concentration:	998 ppm	Cal Gas Expiry Date:	March 11, 2008
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	13	psi	13	psi
Air Pressure	19	psi	19	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
ZERO	ZERO	0.0	3.1	-
2000	80	38.4	24.1	1.593
ZERO	ZERO	0.0	-0.1	-
2000	80	38.4	38.4	1.000
2000	60	29.1	28.9	1.006
2000	30	14.7	14.2	1.039
ZERO	ZERO	0.0	-0.5	-
			Correction Factor:	0.9996

Percent Change

Previous Calibration Correction Factor:	-
Current Correction Factor Before Span Adjust:	-
Percent Change:	-

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	-	-0.5
Auto Span	-	18.3
Sample Lines Connected		**YES**

Notes: Cylinder Pressures

Span	1300	psi
Hydrogen	700	psi
Zero Air	Unlimited	psi

Focus-owned zero air supply with catalytic oxidizer

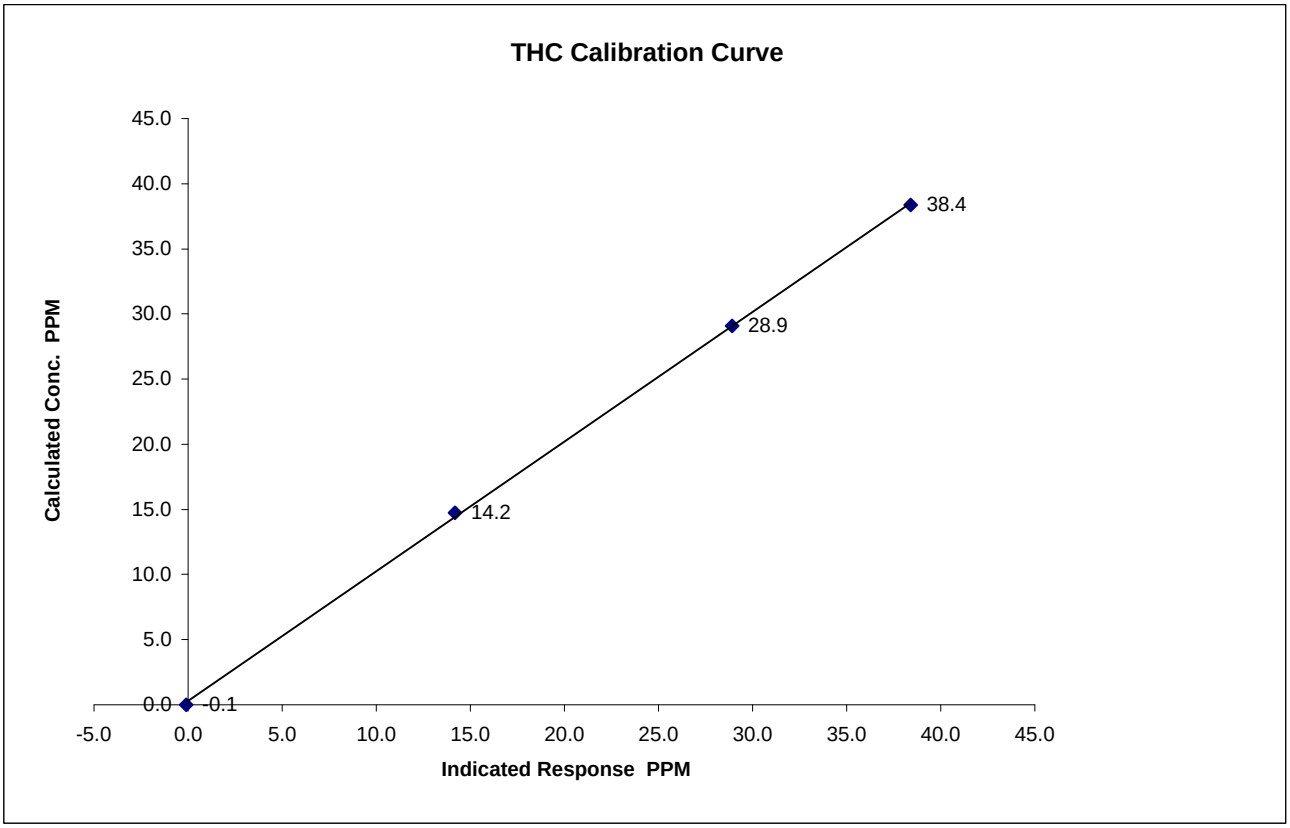
Calibration Performed by: Shea Beaton

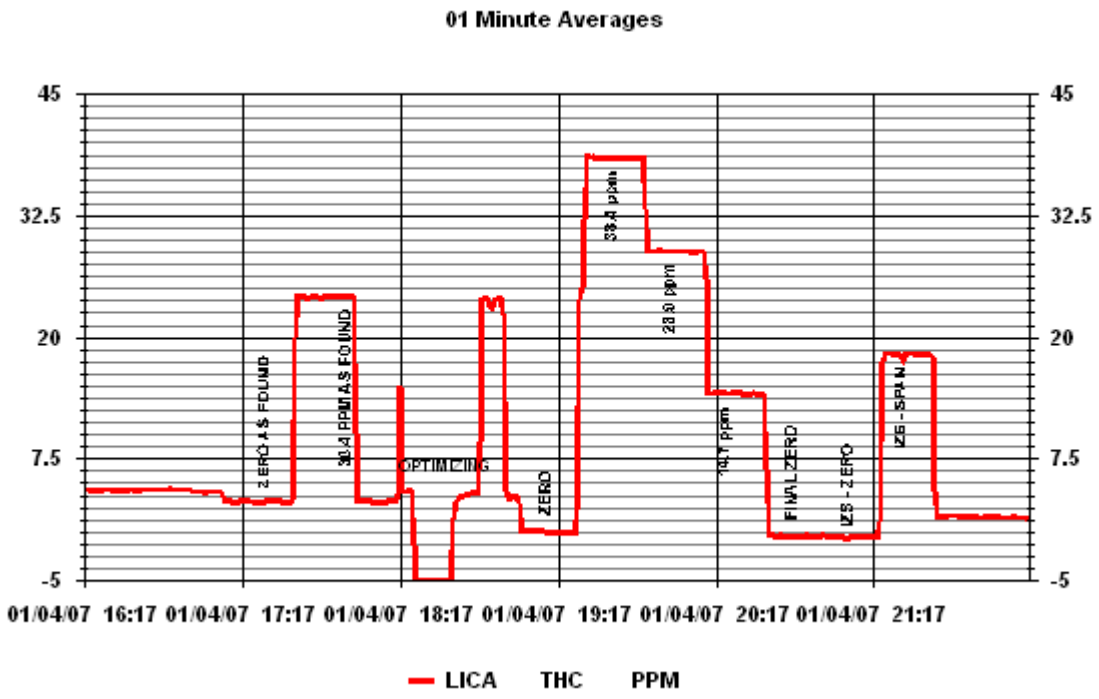
THC Calibration Curve

Calibration Date	January 4, 2007				
Company	**Lakeland Industry and Community Association**				
Plant / Location	**LICA 1 - Cold Lake**				
Start Time (MST)	17:00	End Time	(MST)	21:40	

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	-0.1	
14.7	14.2	1.0386
29.1	28.9	1.0058
38.4	38.4	0.9996

Correlation Coefficient	**(≥ 0.995)**	0.999814
Slope	**(0.85 to 1.15)**	1.004822
Intercept	**(± 3% F.S.)**	-0.29944




01 Minute Averages
45
32.5
20
7.5
-5
ZERO AS FOUND
30.4 PPM AS FOUND
OPTIMIZING
ZERO
39.4 ppm
28.0 ppm
19.7 ppm
FINAL ZERO
IZS - ZERO
IZS - SPAN
01/04/07 16:17
01/04/07 17:17
01/04/07 18:17
01/04/07 19:17
01/04/07 20:17
01/04/07 21:17
LICA THC PPM

THC Calibration Report

Station Information

Calibration Date:	January 15, 2007	Previous Calibration	January 4, 2007
Company:	**Lakeland Industry and Community Association**		
Plant / Location:	**LICA 1 - Cold Lake**		
Start Time (MST)	15:20	End Time (MST)	20:25
Reason:	Monthly Calibration		
Barometric Pressure:	712 mmHg	Station Temperature:	20 Deg C
Calibrator:	Environics 2000	S/N:	1991
Cal Gas Concentration:	998 ppm	Cal Gas Expiry Date:	March 11, 2008
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	13	psi	13	psi
Air Pressure	19	psi	19	psi

Calibration Data

Dilution Flow	Source Gas Flow	Calculated Concentration	Indicated Concentration	Correction Factor
ZERO	ZERO	0.0	1.5	-
2000	80	38.4	41.1	0.934
ZERO	ZERO	0.0	-0.1	-
2000	80	38.4	38.4	1.000
2000	60	29.1	28.8	1.009
2000	30	14.7	14.2	1.039
ZERO	ZERO	0.0	-0.9	-
			Correction Factor:	0.9996

Percent Change

Previous Calibration Correction Factor:	0.9996
Current Correction Factor Before Span Adjust:	0.9339
Percent Change:	7.0%

IZS Calibration Data

	Before Calibration	After Calibration
Auto Zero	1.2	-0.9
Auto Span	20.3	17.7
Sample Lines Connected		**YES**

Notes: Cylinder Pressures

Span	1000	psi
Hydrogen	500	psi
Zero Air	Unlimited	psi

Focus-owned zero air supply with catalytic oxidizer

*Noticed during calibration that when zero air supply turns on the values on the analyzer will decrease, this becomes more noticeable as the span concentration drops.

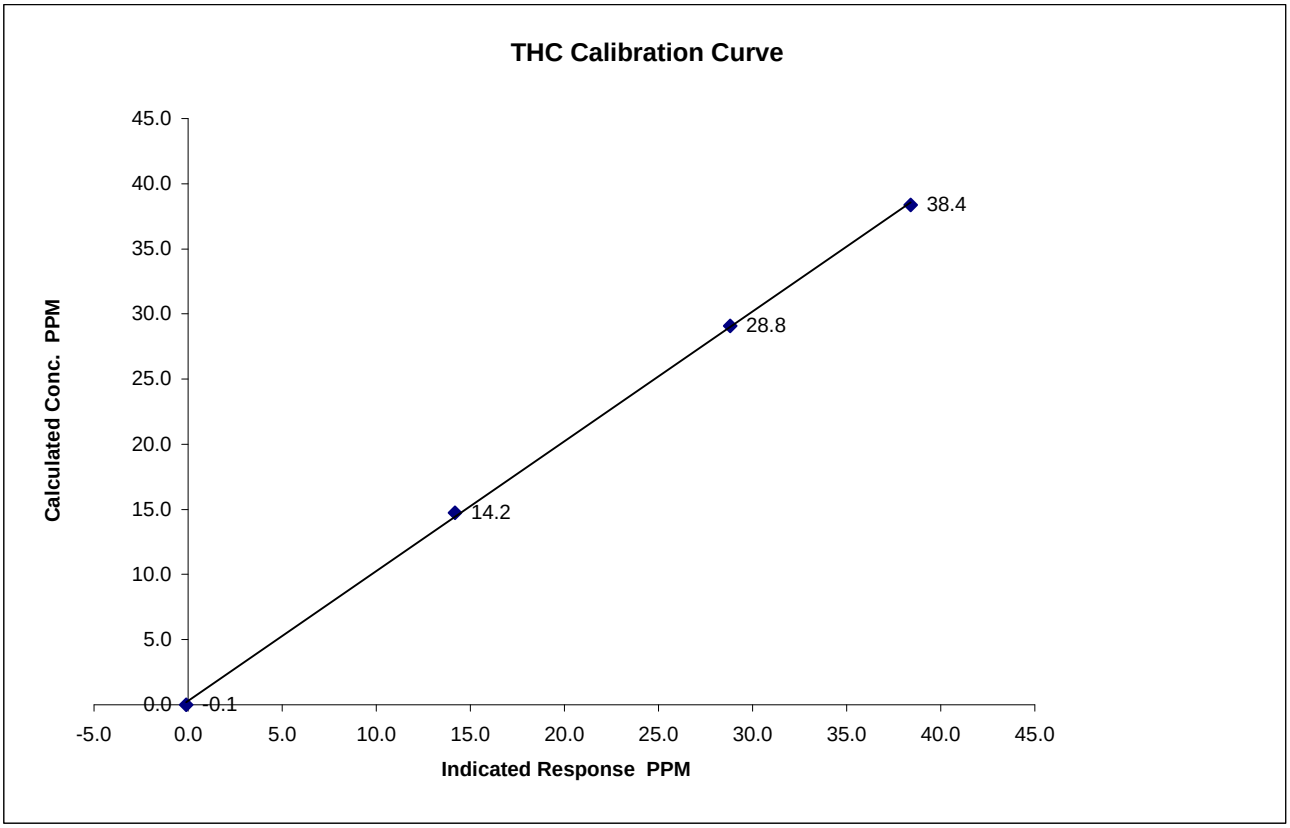
Calibration Performed by: Shea Beaton

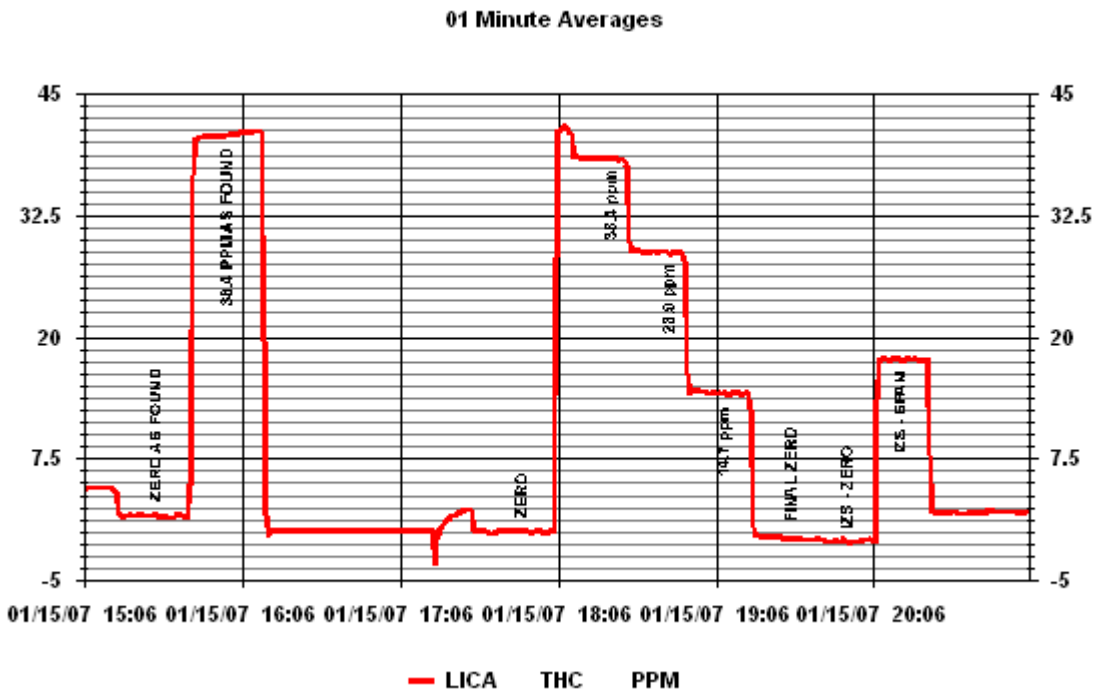
THC Calibration Curve

Calibration Date	January 15, 2007				
Company	**Lakeland Industry and Community Association**				
Plant / Location	**LICA 1 - Cold Lake**				
Start Time (MST)	15:20	End Time	(MST)	20:25	

Calculated Conc. ppm	Indicated Response ppm	Correction Factor
0.0	-0.1	
14.7	14.2	1.0386
29.1	28.8	1.0093
38.4	38.4	0.9996

Correlation Coefficient	**(≥ 0.995)**	0.999803
Slope	**(0.85 to 1.15)**	1.003816
Intercept	**(± 3% F.S.)**	-0.30376

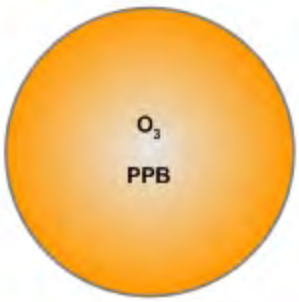



01 Minute Averages
45
32.5
20
7.5
-5
ZERO GAS FOUND
38.4 PPM AS FOUND
ZERO
38.3 ppm
28.0 ppm
19.7 ppm
FINAL ZERO
ZS - ZERO
ZS - 50PPM
01/15/07 15:06
01/15/07 16:06
01/15/07 17:06
01/15/07 18:06
01/15/07 19:06
01/15/07 20:06
LICA THC PPM

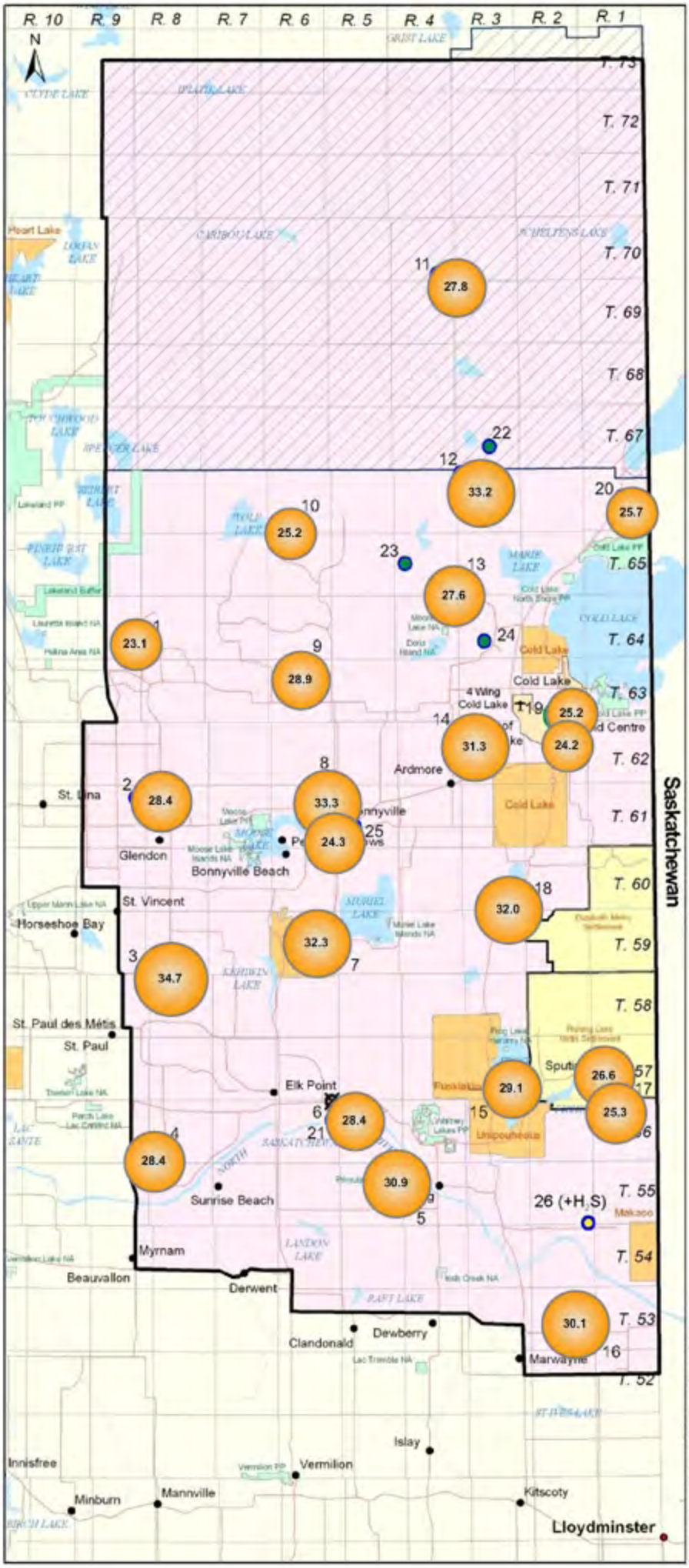
JANUARY 2007
LICA
PASSIVE BUBBLE MAPS

LICA
Lakeland Industry & Community Association

PASSIVE BUBBLE MAP

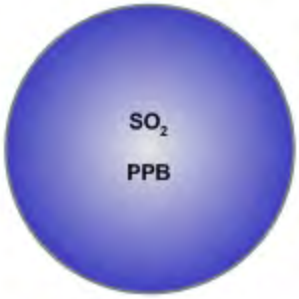


Maxxam Analytics Inc

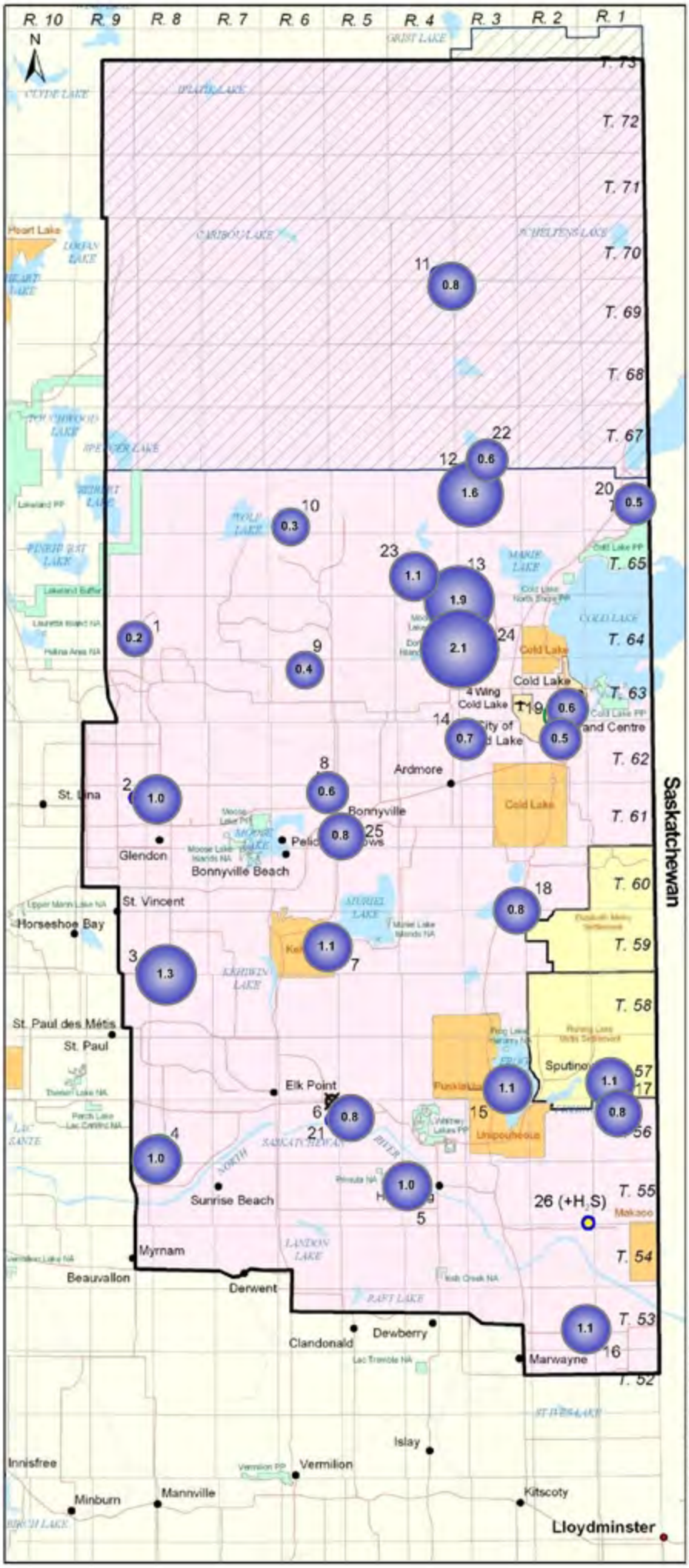


LICA
Lakeland Industry & Community Association

PASSIVE BUBBLE MAP



Maxxam Analytics Inc

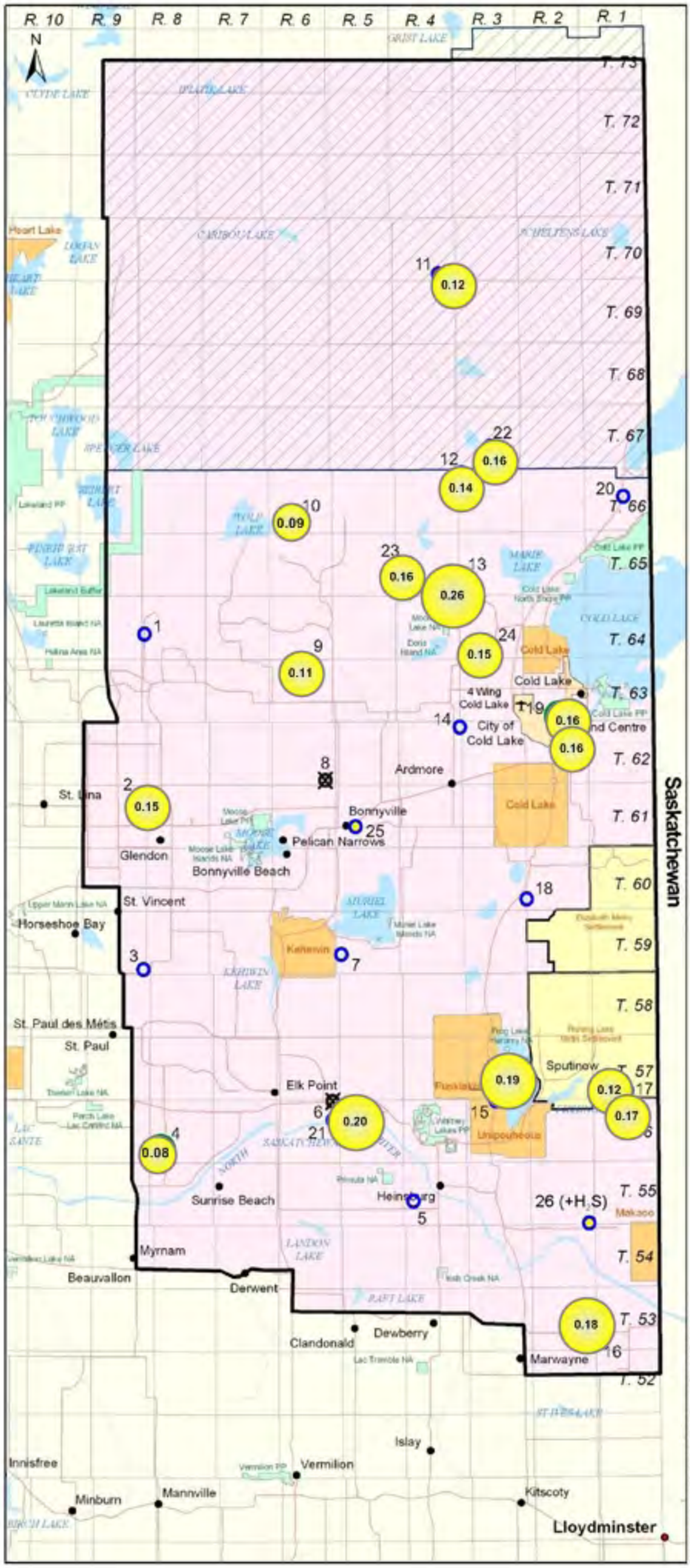


LICA
Lakeland Industry & Community Association

PASSIVE BUBBLE MAP

H_2S

PPB

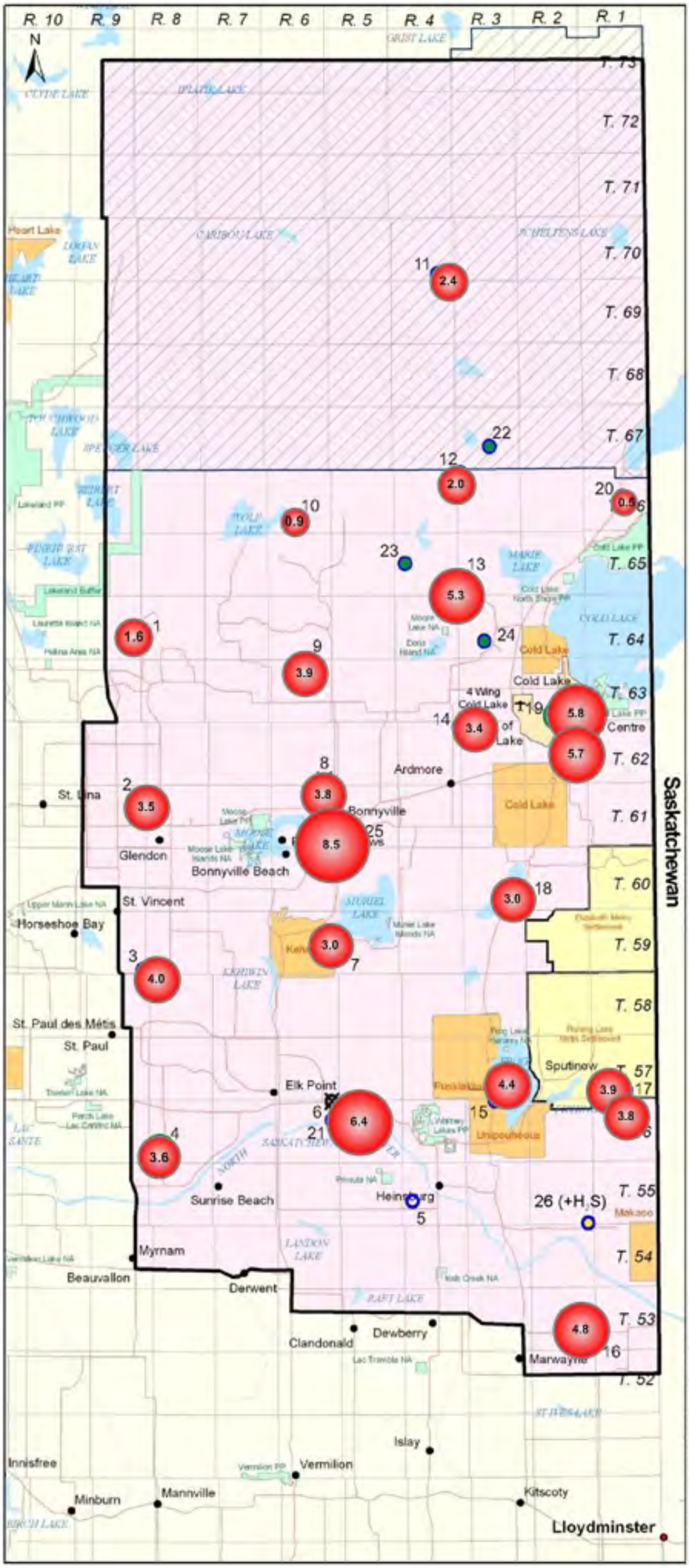


Maxxam Analytics Inc

LICA
Lakeland Industry & Community Association

PASSIVE BUBBLE MAP

Maxxam Analytics Inc



JANUARY 2007
LICA PASSIVE NETWORK
LAB ANALYSIS

Maxxam Analytics Inc

Your Project #: JANUARY 2007
Site: LICA

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

Report Date: 2007/03/01

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A705063
Received: 2007/02/05, 9:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis (1)	1	2007/02/27	2007/02/27		EDM SOP-0320
NO2 Passive Analysis (1)	1	2007/02/27	2007/02/27		EDM SOP-0318
O3 Passive Analysis (1)	1	2007/02/27	2007/02/28		EDM SOP-0317
SO2 Passive Analysis (1)	1	2007/02/27	2007/02/28		EDM SOP-0319

Sample Matrix: Air
Samples Received: 25

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
H2S Passive Analysis (1)	16	2007/02/27	2007/02/27		EDM SOP-0320
NO2 Passive Analysis (1)	22	2007/02/27	2007/02/27		EDM SOP-0318
O3 Passive Analysis (1)	20	2007/02/27	2007/02/27		EDM SOP-0317
O3 Passive Analysis (1)	2	2007/02/27	2007/02/28		EDM SOP-0317
SO2 Passive Analysis (1)	23	2007/02/27	2007/02/27		EDM SOP-0319
SO2 Passive Analysis (1)	2	2007/02/27	2007/02/28		EDM SOP-0319

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

../2

Your Project #: JANUARY 2007
Site: LICA

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

Report Date: 2007/03/01

CERTIFICATE OF ANALYSIS

Encryption Key

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

JODI HANSON,
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 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

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

Maxxam Job Number : PA705063
Report Date : 2007/03/01

Sample Description	Set Number	Matrix	Date Sampled	Calculated H2S ppb	Calculated NO2 ppb	Calculated O3 ppb
1	E36091	Air	2007/01/02	N/A	1.6	23.1
2	E36092	Air	2007/01/02	0.15	3.5	28.4
3	E36093	Air	2007/01/03	N/A	4.0	34.7
4	E36094	Air	2007/01/03	0.08	3.6	28.4
5	E36095	Air	2007/01/03	N/A	MISSING	30.9
7	E36096	Air	2007/01/03	N/A	3.0	32.3
8	E36097	Air	2007/01/02	N/A	3.8	33.3
9	E36098	Air	2007/01/02	0.11	3.9	28.9
10	E36099	Air	2007/01/02	0.09	0.9	25.2
11	E36100	Air	2007/01/02	0.12	2.4	27.8
12	E36101	Air	2007/01/02	0.14	2.0	33.2
13	E36102	Air	2007/01/02	0.26	5.3	27.6
14	E36103	Air	2007/01/02	N/A	3.4	31.3
15	E36104	Air	2007/01/02	0.19	4.4	29.1
16	E36105	Air	2007/01/03	0.18	4.8	30.1
17	E36106	Air	2007/01/03	0.12	3.9	26.6
18	E36107	Air	2007/01/03	N/A	3.0	32.0
19	E36108	Air	2007/01/02	0.16	5.8	25.2
20	E36109	Air	2007/01/02	N/A	0.5	25.7
21	E36110	Air	2007/01/03	0.20	6.4	28.4
19A	E36111	Air	2007/01/02	0.16	5.7	24.2
17A	E36112	Air	2007/01/03	0.17	3.8	25.3
22	E36115	Air	2007/01/02	0.15	N/A	N/A
23	E36116	Air	2007/01/02	0.16	N/A	N/A
24	E36117	Air	2007/01/02	0.15	N/A	N/A
25	E36118	Air	2007/01/03	N/A	8.5	24.3

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

Maxxam Job Number : PA705063
Report Date : 2007/03/01

Sample Description	Set Number	Matrix	Date Sampled	Calculated SO2 ppb
1	E36091	Air	2007/01/02	0.2
2	E36092	Air	2007/01/02	1.0
3	E36093	Air	2007/01/03	1.3
4	E36094	Air	2007/01/03	1.0
5	E36095	Air	2007/01/03	1.0
7	E36096	Air	2007/01/03	1.1
8	E36097	Air	2007/01/02	0.6
9	E36098	Air	2007/01/02	0.4
10	E36099	Air	2007/01/02	0.3
11	E36100	Air	2007/01/02	0.8
12	E36101	Air	2007/01/02	1.6
13	E36102	Air	2007/01/02	1.9
14	E36103	Air	2007/01/02	0.7
15	E36104	Air	2007/01/02	1.1
16	E36105	Air	2007/01/03	1.1
17	E36106	Air	2007/01/03	1.1
18	E36107	Air	2007/01/03	0.8
19	E36108	Air	2007/01/02	0.6
20	E36109	Air	2007/01/02	0.5
21	E36110	Air	2007/01/03	0.8
19A	E36111	Air	2007/01/02	0.5
17A	E36112	Air	2007/01/03	0.8
22	E36115	Air	2007/01/02	0.6
23	E36116	Air	2007/01/02	1.1
24	E36117	Air	2007/01/02	2.1
25	E36118	Air	2007/01/03	0.8

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

Quality Assurance Report

Maxxam Job Number: PA705063

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1497302	AB7	Calibration Check	Calculated H2S	2007/02/27		100	%	80 - 120
1497304	DF4	Calibration Check	Calculated NO2	2007/02/27		99	%	76 - 118
		BLANK	Calculated NO2	2007/02/27	ND, RDL=0.1		ppb	
1497305	DF4	Calibration Check	Calculated O3	2007/02/27		102	%	91 - 107
		SPIKE	Calculated O3	2007/02/27		100	%	N/A
		BLANK	Calculated O3	2007/02/27	ND, RDL=0.1		ppb	
1497310	DF4	Calibration Check	Calculated SO2	2007/02/27		100	%	95 - 105
		SPIKE	Calculated SO2	2007/02/27		100	%	N/A
		BLANK	Calculated SO2	2007/02/27	ND, RDL=0.1		ppb	

ND = Not detected
N/A = Not Applicable

JANUARY 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	01/02/07	07:10	01/29/07	07:40	
$H_2S/SO_2/NO_2/O_3$	2	01/02/07	06:30	01/29/07	07:02	
$SO_2/NO_2/O_3$	3	01/03/07	12:10	01/30/07	13:20	
$H_2S/SO_2/NO_2/O_3$	4	01/03/07	11:30	01/30/07	12:18	
$SO_2/NO_2/O_3$	5	01/03/07	10:15	01/30/07	11:05	NO_2 SAMPLE MISSING
$SO_2/NO_2/O_3$	7	01/03/07	13:05	01/30/07	14:25	
$SO_2/NO_2/O_3$	8	01/02/07	15:50	01/29/07	15:55	
$H_2S/SO_2/NO_2/O_3$	9	01/02/07	07:55	01/29/07	08:20	
$H_2S/SO_2/NO_2/O_3$	10	01/02/07	08:30	01/29/07	08:50	
$H_2S/SO_2/NO_2/O_3$	11	01/02/07	09:45	01/29/07	10:00	
$H_2S/SO_2/NO_2/O_3$	12	01/02/07	11:30	01/29/07	11:45	
$H_2S/SO_2/NO_2/O_3$	13	01/02/07	12:20	01/29/07	12:30	
$SO_2/NO_2/O_3$	14	01/02/07	15:20	01/29/07	15:20	
$H_2S/SO_2/NO_2/O_3$	15	01/03/07	08:40	01/30/07	09:40	
$H_2S/SO_2/NO_2/O_3$	16	01/03/07	09:30	01/30/07	10:25	
$H_2S/SO_2/NO_2/O_3$	17	01/03/07	07:50	01/29/07	09:00	
$SO_2/NO_2/O_3$	18	01/03/07	06:45	01/30/07	08:05	
$H_2S/SO_2/NO_2/O_3$	19	01/02/07	14:35	01/29/07	14:35	
$SO_2/NO_2/O_3$	20	01/02/07	13:45	01/29/07	13:50	
$H_2S/SO_2/NO_2/O_3$	21	01/03/07	10:45	01/30/07	11:45	
H_2S/SO_2	22	01/02/07	11:10	01/29/07	11:30	
H_2S/SO_2	23	01/02/07	12:05	01/29/07	12:13	
H_2S/SO_2	24	01/02/07	12:45	01/29/07	12:45	
$SO_2/NO_2/O_3$	25	01/03/07	13:40	01/30/07	15:00	
$H_2S/SO_2/NO_2/O_3$	19A	01/02/07	14:35	01/29/07	14:35	
$H_2S/SO_2/NO_2/O_3$	17A	01/03/07	07:50	01/30/07	09:40	