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MEMORANDUM

DATE:	2020-03-30	RWDI Reference No.: 1402090
TO:	William Bowden	EMAIL: William.Bowden@baffinland.com
	Connor Devereaux	EMAIL: Connor.Devereaux@baffinland.com
CC:	Mike Lepage	EMAIL: Mike.Lepage@rwdi.com
	Victoria Latam	EMAIL: Victoria.Latam@rwdi.com
FROM:	Alain Carrière	EMAIL: Alain.Carriere@rwdi.com
RE:	Summary of AQ Monitoring Results for 2019 Baffinland AQ Monitoring Mary River and Milne Inlet	

Dear William and Connor,

This report briefly summarizes the 2019 continuous ambient air quality monitoring results at the Mary River mine site and the Milne Inlet port site.

This is the fifth report for this program, which was set up to meet conditions of the Project Certificate 005 (item 7) from the Early Revenue Phase (ERP) permit, and to support Phase 2 of the ERP (ERP2). Continuous ambient air quality monitoring has been conducted for nitrogen oxides (NO_x) and sulphur dioxide (SO₂). Sampling commenced in November of 2014 through December of 2015 and was discontinued after that. The monitoring program resumed at the Milne Inlet site in March 2017 and at the Mary River site in November 2017 and is currently ongoing in both locations. The location of the monitoring station inside the Accommodations Building at each site is indicated in Figures 1 and 2.

The Accommodations Buildings were selected as they represent the most sensitive receptors for these sites. The Mary River monitoring station is in an electrical room in the southern most section on the east side. The Milne Inlet monitoring station is in an electrical room in the most northern section on the west side of the complex.

Both stations contain the following equipment: a Teledyne T200 Nitrogen Oxide (NO_x) analyzer, Teledyne T100 Sulphur Dioxide (SO₂) analyzer, and a Teledyne T700 Diluter. The NO_x and SO₂ analyzers are zero and span checked daily using the internal zero and span (IZS) system and calibrated once a month using EPA protocol spans gases and a dilution system.



The monitoring program has been operating successfully since it was initiated at both stations. Complete datasets for both sites have been reviewed by RWDI for quality control.

Overall, monitored SO₂ levels at both the Mary River and Milne Inlet sites were very low. The highest measured SO₂ concentration represented 6% or less of the applicable standard.

Overall, monitored NO₂ levels at both the Mary River and Milne Inlet sites were moderate. The highest measured NO₂ concentration represented 76% or less of the applicable standard.

In summary, the results of the monitoring during 2019 at the Mary River site are as follows:

- The Mary River site had a minimum of 97.8% valid data for the 2019 sampling year. Sampling was conducted January 1st, 2019 to December 31st, 2019.
- NO₂ and SO₂ levels did not exceed the 1-hour, 24-hour or annual limits in 2019.
- NO₂ levels peaked during the colder months (October to April) and were significantly lower during the warmer months (May to September).
- The maximum 1-hour NO₂ concentration was 66% of the AAQS
- The maximum 24-hour NO₂ concentration was 76% of the AAQS
- The annual NO₂ arithmetic mean was 60% of the AAQS
- The maximum 1-hour SO₂ concentration was 5% of the AAQS
- The maximum 24-hour SO₂ concentration was 5% of the AAQS
- The annual SO₂ arithmetic mean was 6% of the AAQS

In summary, the results of the monitoring during 2019 at the Milne Inlet site are as follows:

- The Milne Inlet site had a minimum of 97.8% valid data for the 2019 sampling year. Sampling was conducted January 1st, 2019 to December 31st, 2019.
- NO₂ and SO₂ levels did not exceed the 1-hour, 24-hour or annual limits in 2019.
- NO₂ levels peaked during the colder months (October to April) and were significantly lower during the warmer months (May to September).
- The maximum 1-hour NO₂ concentration was 61% of the AAQS
- The maximum 24-hour NO₂ concentration was 56% of the AAQS
- The annual NO₂ arithmetic mean was 46% of the AAQS
- The maximum 1-hour SO₂ concentration was 3% of the AAQS
- The maximum 24-hour SO₂ concentration was 3% of the AAQS
- The annual SO₂ arithmetic mean was 4% of the AAQS



William Bowden and Connor Devereaux
Baffinland Iron Mines Corporation
RWDI#1402090
MARCH 30, 2020

Table A1 and **A2** in the Attachments summarize the continuous monitoring statistics undertaken by Baffinland at the Milne Inlet and Mary River sites during the 2019 year. The edit logs outlining all edited data is presented as **Table B1** through **B4** in the Attachments. The zero and span trend graphs are presented for both stations in Attachment C.

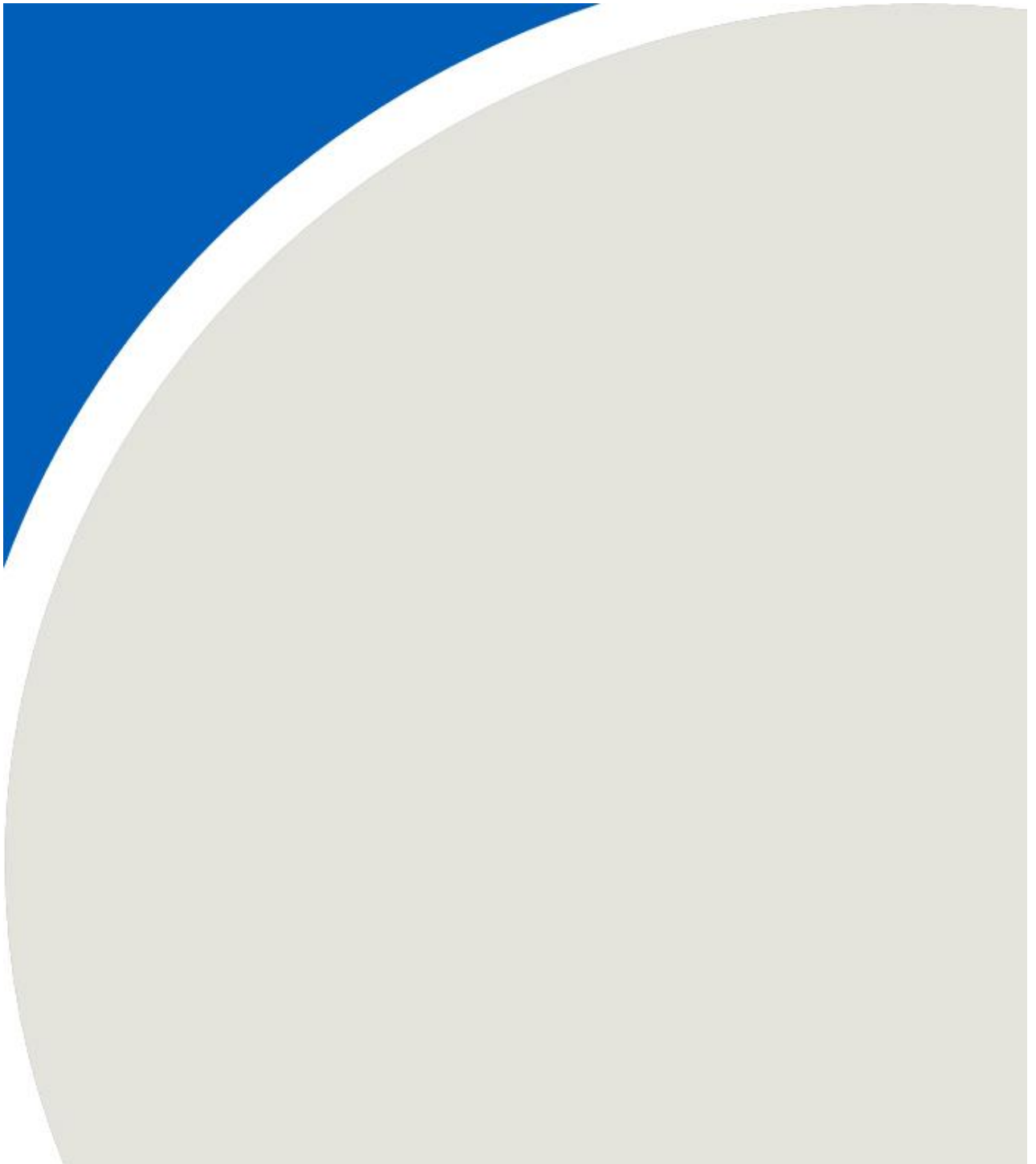
Yours very truly,
RWDI

A handwritten signature in black ink, appearing to read 'Alain Carrière', with a stylized flourish at the end.

Alain Carrière
Senior Project Manager / Associate

AJC/klm

FIGURES





Monitoring Location at Mary River Site

Baffinland Mary River Project - Nunavut

Figure No. 1

Project #1402090

Date: March 22, 2019





AQ Monitoring Station

Monitoring Location at Milne Inlet Site

Baffinland Mary River Project - Nunavut

Figure No. 2

Project #1402090

Date: March 22, 2019



ATTACHMENT A

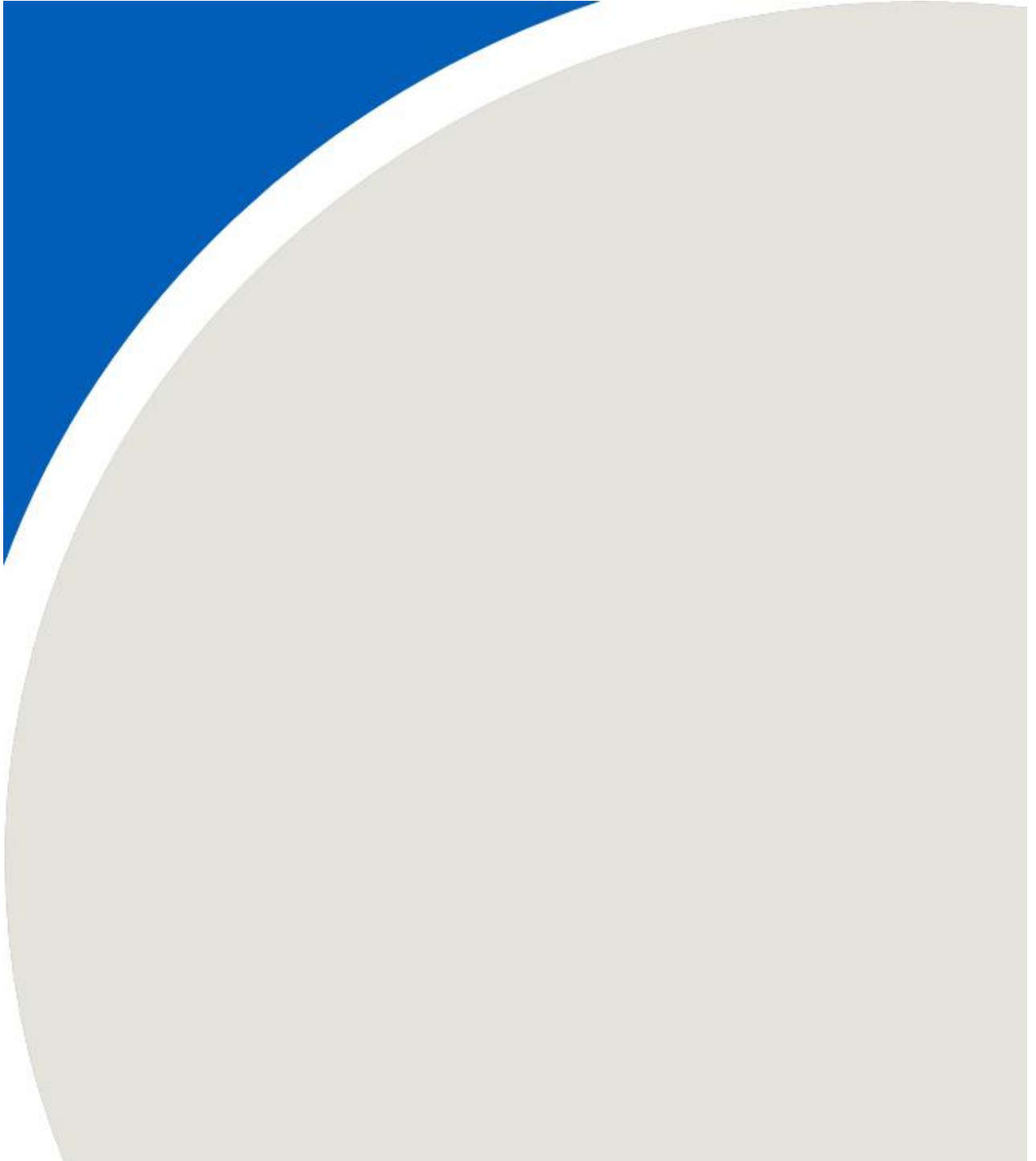


Table A1: 2019 Summary Statistics for Baffinland Mary River and Milne Inlet Sites

Summary of Data for Mary River Site (Baffinland)

Units=ppb	Maximum 1 hr Mean				Maximum 24 hr Mean				Annual Arithmetic Mean				Number of Valid Hours				% Valid Data				
	NO _x	NO	NO ₂	SO ₂	NO _x	NO	NO ₂	SO ₂	NO _x ^[1]	NO ^[1]	NO ₂	SO ₂	NO _x	NO	NO ₂	SO ₂	NO _x	NO	NO ₂	SO ₂	
Q1 - 2019	436.6	311.5	140.7	7.4	216.1	144.2	80.1	2.8					2126	2126	2126	2105	98.4%	98.4%	98.4%	97.5%	
Q2 - 2019	730.0	599.6	130.1	9.2	161.4	126.0	35.5	2.3					2169	2169	2169	2169	99.3%	99.3%	99.3%	99.3%	
Q3 - 2019	191.5	157.8	33.6	2.9	26.5	19.2	11.3	0.8					2191	2191	2191	2191	99.2%	99.2%	99.2%	99.2%	
Q4 - 2019	334.1	235.4	98.7	4.0	144.8	85.8	59.3	1.7					2105	2105	2105	2105	95.3%	95.3%	95.3%	95.3%	
2019												19.2	0.7					98.1%	98.1%	98.1%	97.8%

Summary of Events > AAQS for Mary River Site (Baffinland)

Units=ppb	Events > 1 hr AAQS				Events > 24 hr AAQS				Events > Annual AAQS			
	NO _x ^[2]	NO ^[2]	NO ₂	SO ₂	NO _x ^[1]	NO ^[1]	NO ₂	SO ₂	NO _x ^[1]	NO ^[1]	NO ₂	SO ₂
AAQS (ppb)			213	172			106	57			32	11
Q1 - 2019			0	0			0	0				
Q2 - 2019			0	0			0	0				
Q3 - 2019			0	0			0	0				
Q4 - 2019			0	0			0	0				
2019											0	0

Summary of Data for Milne Inlet Site (Baffinland)

Units=ppb	Maximum 1 hr Mean				Maximum 24 hr Mean				Annual Arithmetic Mean				Number of Valid Hours				% Valid Data				
	NO _x	NO	NO ₂	SO ₂	NO _x	NO	NO ₂	SO ₂	NO _x ^[1]	NO ^[1]	NO ₂	SO ₂	NO _x	NO	NO ₂	SO ₂	NO _x	NO	NO ₂	SO ₂	
Q1 - 2019	256.1	167.7	96.0	3.0	128.8	75.0	57.5	1.5					2147	2147	2147	2147	99.4%	99.4%	99.4%	99.4%	
Q2 - 2019	241.7	164.8	76.9	3.3	58.3	41.4	23.5	1.0					2167	2167	2167	2167	99.2%	99.2%	99.2%	99.2%	
Q3 - 2019	124.7	92.3	37.2	3.9	47.3	28.0	19.2	0.7					2077	2077	2077	2191	94.1%	94.1%	94.1%	99.2%	
Q4 - 2019	268.9	173.4	130.1	4.5	144.1	88.0	59.3	1.8					2172	2172	2172	2156	98.4%	98.4%	98.4%	97.6%	
2019												14.7	0.4					97.8%	97.8%	97.8%	98.9%

Summary of Events > AAQS for Milne Inlet Site (Baffinland)

Units=ppb	Events > 1 hr AAQS				Events > 24 hr AAQS				Events > Annual AAQS			
	NO _x ^[1]	NO ^[1]	NO ₂	SO ₂	NO _x ^[1]	NO ^[1]	NO ₂	SO ₂	NO _x ^[1]	NO ^[1]	NO ₂	SO ₂
AAQS (ppb)			213	172			106	57			32	11
Q1 - 2019			0	0			0	0				
Q2 - 2019			0	0			0	0				
Q3 - 2019			0	0			0	0				
Q4 - 2019			0	0			0	0				
2019											0	0

Notes: [1] - No standards available
 RED=over the AAQS for Nunavut

Table A2: Summary of Monthly Averages for 2019 (Baffinland)

Units = ppb	Mary River Site				Milne Inlet Site			
	NO _x	NO	NO ₂	SO ₂	NO _x	NO	NO ₂	SO ₂
January	96.8	57.5	39.4	1.3	56.6	28.4	28.2	0.6
February	143.8	87.5	56.3	1.7	67.0	34.4	32.6	0.7
March	68.6	37.9	30.7	0.9	55.0	29.9	25.1	0.6
April	36.6	22.7	13.9	0.4	25.7	16.8	8.9	0.5
May	13.0	5.8	7.3	0.1	7.5	3.6	3.9	0.2
June	15.2	9.4	5.8	0.3	7.2	3.6	3.6	0.2
July	10.3	5.1	5.1	0.2	8.7	4.9	3.8	0.1
August	11.6	5.9	5.7	0.3	13.5	7.2	6.3	0.3
September	11.5	5.8	5.7	0.6	22.5	12.3	10.3	0.3
October	23.0	12.0	11.0	1.0	21.1	11.1	10.0	0.3
November	41.4	18.1	23.3	1.1	37.9	19.3	18.7	0.3
December	61.2	31.7	29.5	0.4	49.9	25.5	24.4	0.6

ATTACHMENT B

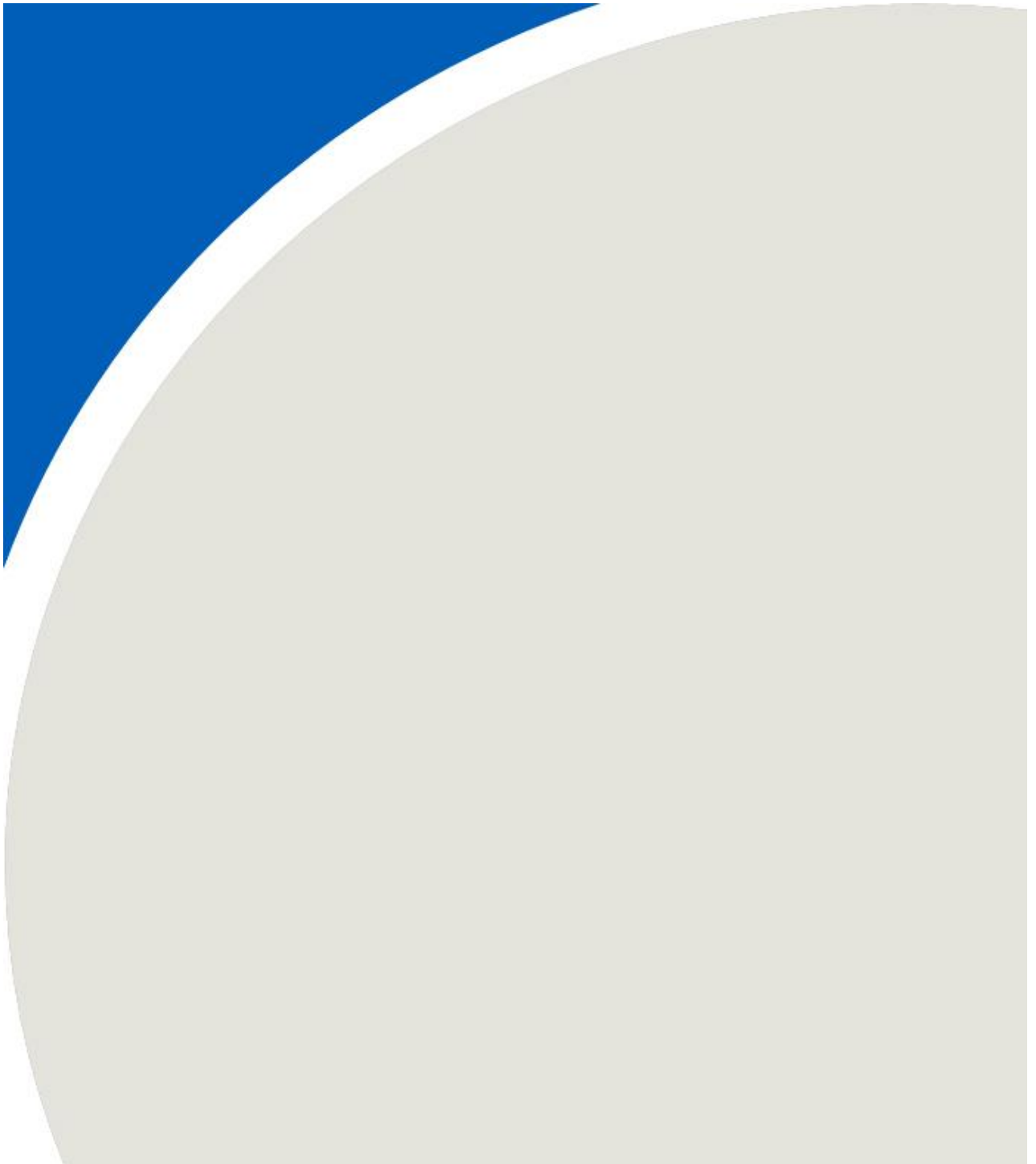


Table B1: 2019 Edit Log for NO_x at Mary River

Emitter's Name: Baffinland			Station Name: Mary River				
Contact	Name: Mr. William Bowden		Phone: (416) 364-8820 x6016		Email: william.bowden@baffinland.com		
Pollutants or Parameter: NO _x		Instrument Make & Model: Teledyne Nitrogen Oxide Analyzer Model T200				s/n: 1578	
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019			All testing done in EST	
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
1	KB/NC	Deleted Hours	19/01/2019	15:00	19/01/2019	18:00	Monthly Calibration
2	QMI	Deleted Hours	25/01/2019	16:00	25/01/2019	18:00	Power failure
3	KB	Deleted Hours	29/01/2019	16:00	29/01/2019	17:00	Takeout calibration for SO ₂ analyzer before pump rebuild
4	KB	Deleted Hours	30/01/2019	14:00	30/01/2019	17:00	Calibration after SO ₂ analyzer pump was rebuilt
5	KB/SJS	Deleted Hours	19/02/2019	15:00	19/02/2019	17:00	Monthly Calibration
6	QMI	Zero Drift Correction	03/03/2018	02:00	04/03/2018	02:00	Zero Drift Correction
7	QMI	Deleted Hours	04/03/2019	19:00	05/03/2019	09:00	Power failure
8	QMI	Deleted Hours	11/03/2019	14:00	11/03/2019	16:00	Power failure
9	CP	Deleted Hours	21/03/2019	13:00	21/03/2019	20:00	Monthly Calibration
10	CP	Deleted Hours	20/04/2019	15:00	20/04/2019	20:00	Monthly Calibration
11	QMI	Deleted Hours	30/04/2019	17:00	30/04/2019	18:00	Intermittent power outages
12	QMI	Zero Correction	01/01/2019	00:00	30/04/2019	23:00	Correcting values <0 to 0
13	CP/LM	Deleted Hours	21/05/2019	15:00	21/05/2019	20:00	Monthly Calibration
14	QMI	Zero Correction	01/05/2019	00:00	31/05/2019	23:00	Correcting values <0 to 0
15	CP	Deleted Hours	17/06/2019	12:00	17/06/2019	15:00	Monthly Calibration
16	QMI	Deleted Hours	21/06/2019	09:00	21/06/2019	10:00	Power failure
17	QMI	Zero Correction	01/06/2019	00:00	30/06/2019	23:00	Correcting values <0 to 0
18	CP	Deleted Hours	13/07/2019	15:00	13/07/2019	18:00	Monthly Calibration
19	QMI	Zero Correction	01/07/2019	00:00	31/07/2019	23:00	Correcting values <0 to 0
20	CP	Deleted Hours	04/08/2019	15:00	04/08/2019	18:00	Monthly Calibration

Table B1: 2019 Edit Log for NO_x at Mary River

Emitter's Name: Baffinland			Station Name: Mary River				
Contact	Name: Mr. William Bowden	Phone: (416) 364-8820 x6016	Email: william.bowden@baffinland.com				
Pollutants or Parameter: NO _x		Instrument Make & Model: Teledyne Nitrogen Oxide Analyzer Model T200			s/n: 1578		
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019		All testing done in EST		
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
21	QMI	Deleted Hours	04/08/2019	18:00	05/08/2019	02:00	CALS was left on after the calibration which was reset after the overnight IZS sequence
22	QMI	Zero Correction	01/08/2019	00:00	31/08/2019	23:00	Correcting values <0 to 0
23	LM	Deleted Hours	14/09/2019	12:00	14/09/2019	15:00	Monthly Calibration
24	QMI	Zero Correction	01/09/2019	00:00	30/09/2019	23:00	Correcting values <0 to 0
25	LM	Deleted Hours	02/10/2019	09:00	02/10/2019	13:00	Monthly Calibration
26	QMI	Deleted Hours	22/10/2019	06:00	25/10/2019	08:00	Power failure
27	QMI	Zero Correction	01/10/2019	00:00	31/10/2019	23:00	Correcting values <0 to 0
28	LM	Deleted Hours	25/11/2019	16:00	25/11/2019	20:00	Attempted Calibration
29	LM	Deleted Hours	30/11/2019	16:00	30/11/2019	19:00	Monthly Calibration
30	QMI	Zero Correction	01/11/2019	00:00	30/11/2019	23:00	Correcting values <0 to 0
31	LM	Deleted Hours	25/12/2019	08:00	25/12/2019	11:00	Monthly Calibration
32	VML	Deleted Hours	25/12/2019	11:00	26/12/2019	02:00	CALS was left on after the calibration which was reset after the overnight IZS sequence
33	VML	Zero Correction	01/12/2019	00:00	31/12/2019	23:00	Correcting values <0 to 0

Table B2: 2019 Edit Log for NO_x at Milne Inlet

Emitter's Name: Baffinland			Station Name: Milne Inlet				
Contact	Name: Mr. William Bowden	Phone: (416) 364-8820 x6016	Email: william.bowden@baffinland.com				
Pollutants or Parameter: NO _x		Instrument Make & Model: Teledyne Nitrogen Oxide Analyzer Model T200				s/n: 1577	
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019			All testing done in EST	
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
1	DR/CP	Deleted Hours	21/01/2019	14:00	21/01/2019	18:00	Monthly calibration
2	SS	Deleted Hours	27/02/2019	08:00	27/02/2019	12:00	Monthly calibration
3	CP	Deleted Hours	20/03/2019	10:00	20/03/2019	15:00	Monthly calibration
4	SS	Deleted Hours	27/04/2019	15:00	27/04/2019	19:00	Monthly calibration
5	QMI	Zero Correction	01/01/2019	00:00	30/04/2019	23:00	Correcting values <0 to 0
6	SS	Deleted Hours	24/05/2019	08:00	24/05/2019	13:00	Monthly calibration
7	QMI	Zero Correction	01/05/2019	00:00	31/05/2019	23:00	Correcting values <0 to 0
8	SS	Deleted Hours	23/06/2019	09:00	23/06/2019	17:00	Monthly calibration
9	QMI	Zero Correction	01/06/2019	00:00	30/06/2019	23:00	Correcting values <0 to 0
10	CP	Deleted Hours	15/07/2019	08:00	15/07/2019	11:00	Power failure
11	QMI	Deleted Hours	17/07/2019	08:00	17/07/2019	10:00	Power failure
12	QMI	Deleted Hours	22/07/2019	07:00	22/07/2019	08:00	Suspected calibration check
13	QMI	Zero Correction	01/07/2019	00:00	31/07/2019	23:00	Correcting values <0 to 0
14	QMI	Deleted Hours	08/08/2019	13:00	13/08/2019	09:00	Unit shut off and turned back on. During diluter troubleshooting the unit malfunctioned and the data was invalidated during this period.
15	CP	Deleted Hours	13/08/2019	09:00	13/08/2019	12:00	Monthly calibration
16	QMI	Deleted Hours	16/08/2019	17:00	16/08/2019	18:00	Power failure
17	QMI	Zero Correction	01/08/2019	00:00	31/08/2019	23:00	Correcting values <0 to 0
18	LM	Deleted Hours	06/09/2019	10:00	06/09/2019	15:00	Monthly calibration
19	QMI/VML	Zero Correction	01/09/2019	00:00	30/09/2019	23:00	Correcting values <0 to 0
20	DJR	Deleted Hours	09/10/2019	10:00	09/10/2019	14:00	Monthly calibration
21	VML	Zero Offset Adjustment	23/09/2019	02:00	09/10/2019	10:00	Zero offset adjustment
22	QMI/VML	Zero Correction	01/10/2019	00:00	31/10/2019	23:00	Correcting values <0 to 0
23	LC/SS	Deleted Hours	02/11/2019	15:00	02/11/2019	18:00	Monthly calibration

Table B2: 2019 Edit Log for NO_x at Milne Inlet

Emitter's Name: Baffinland			Station Name: Milne Inlet				
Contact	Name: Mr. William Bowden	Phone: (416) 364-8820 x6016			Email: william.bowden@baffinland.com		
Pollutants or Parameter: NO _x		Instrument Make & Model: Teledyne Nitrogen Oxide Analyzer Model T200				s/n: 1577	
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019			All testing done in EST	
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
24	LC/SS	Deleted Hours	09/11/2019	09:00	09/11/2019	13:00	Calibration check
25	QMI	Deleted Hours	14/11/2019	13:00	15/11/2019	09:00	Power failure
26	QMI	Zero Correction	01/11/2019	00:00	30/11/2019	23:00	Correcting values <0 to 0
27	CP	Deleted Hours	03/12/2019	14:00	03/12/2019	19:00	Monthly calibration
28	VML	Zero Correction	01/12/2019	00:00	31/12/2019	23:00	Correcting values <0 to 0

Table B3: 2019 Edit Log for SO₂ at Mary River

Emitter's Name: Baffinland			Station Name: Mary River				
Contact	Name: Mr. William Bowden	Phone: (416) 364-8820 x6016			Email: william.bowden@baffinland.com		
Pollutants or Parameter: SO ₂		Instrument Make & Model: Teledyne Sulphur Dioxide Analyzer Model T100				s/n: 1313	
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019			All testing done in EST	
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
1	KB/NC	Deleted Hours	19/01/2019	15:00	19/01/2019	18:00	Monthly Calibration
2	QMI	Deleted Hours	25/01/2019	16:00	25/01/2019	18:00	Power failure
3	KB	Deleted Hours	29/01/2019	16:00	29/01/2019	17:00	Takeout calibration for SO ₂ analyzer before pump rebuild
4	KB	Deleted Hours	29/01/2019	17:00	29/01/2019	20:00	Maintenance: SO ₂ pump rebuild
5	KB	Deleted Hours	30/01/2019	14:00	30/01/2019	17:00	Calibration after SO ₂ analyzer pump was rebuild
6	QMI	Deleted Hours	18/02/2019	18:00	18/02/2019	19:00	Power failure
7	KB/SJS	Deleted Hours	19/02/2019	15:00	19/02/2019	17:00	Monthly Calibration
8	QMI	Deleted Hours	04/03/2019	19:00	05/03/2019	09:00	Power failure
9	QMI	Deleted Hours	11/03/2019	14:00	11/03/2019	16:00	Power failure
10	VML	Deleted Hours	13/03/2019	9:00	14/03/2019	02:00	CALZ was left on and was reset after the overnight IZS sequence
11	CP	Deleted Hours	21/03/2019	13:00	21/03/2019	20:00	Monthly Calibration
12	CP	Deleted Hours	20/04/2019	15:00	20/04/2019	20:00	Monthly Calibration
13	QMI	Deleted Hours	30/04/2019	17:00	30/04/2019	18:00	Intermittent power outages
14	QMI	Zero Correction	01/01/2019	00:00	30/04/2019	23:00	Correcting values <0 to 0
15	CP/LM	Deleted Hours	21/05/2019	15:00	21/05/2019	20:00	Monthly Calibration
16	QMI	Zero Correction	01/05/2019	00:00	31/05/2019	23:00	Correcting values <0 to 0
17	CP	Deleted Hours	17/06/2019	12:00	17/06/2019	15:00	Monthly Calibration
18	QMI	Deleted Hours	21/06/2019	09:00	21/06/2019	10:00	Power failure
19	QMI	Zero Correction	01/06/2019	00:00	30/06/2019	23:00	Correcting values <0 to 0
20	CP	Deleted Hours	13/07/2019	15:00	13/07/2019	18:00	Monthly Calibration
21	QMI	Zero Correction	01/07/2019	00:00	31/07/2019	23:00	Correcting values <0 to 0

Table B3: 2019 Edit Log for SO₂ at Mary River

Emitter's Name: Baffinland			Station Name: Mary River				
Contact	Name: Mr. William Bowden	Phone: (416) 364-8820 x6016			Email: william.bowden@baffinland.com		
Pollutants or Parameter: SO ₂		Instrument Make & Model: Teledyne Sulphur Dioxide Analyzer Model T100				s/n: 1313	
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019			All testing done in EST	
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
22	CP	Deleted Hours	04/08/2019	15:00	04/08/2019	18:00	Monthly Calibration
23	QMI	Deleted Hours	04/08/2019	18:00	05/08/2019	02:00	CALS was left on after the calibration which was reset after the overnight IZS sequence
24	QMI	Zero Correction	01/08/2019	00:00	31/08/2019	23:00	Correcting values <0 to 0
25	LM	Deleted Hours	14/09/2019	12:00	14/09/2019	15:00	Monthly Calibration
26	QMI	Zero Correction	01/09/2019	00:00	30/09/2019	23:00	Correcting values <0 to 0
27	LM	Deleted Hours	02/10/2019	09:00	02/10/2019	13:00	Monthly Calibration
28	QMI	Deleted Hours	22/10/2019	06:00	25/10/2019	08:00	Power failure
29	QMI	Zero Correction	01/10/2019	00:00	31/10/2019	23:00	Correcting values <0 to 0
30	LM	Deleted Hours	25/11/2019	16:00	25/11/2019	20:00	Attempted Calibration
31	LM	Deleted Hours	30/11/2019	16:00	30/11/2019	19:00	Monthly Calibration
32	QMI/VML	Zero Correction	01/11/2019	00:00	30/11/2019	23:00	Correcting values <0 to 0
33	VML	Zero Offset Adjustment	30/11/2019	19:00	31/12/2019	23:00	Zero offset adjustment
34	LM	Deleted Hours	25/12/2019	08:00	25/12/2019	11:00	Monthly Calibration
35	VML	Deleted Hours	25/12/2019	11:00	26/12/2019	02:00	CALS was left on after the calibration which was reset after the overnight IZS sequence
36	VML	Zero Correction	01/12/2019	00:00	31/12/2019	23:00	Correcting values <0 to 0

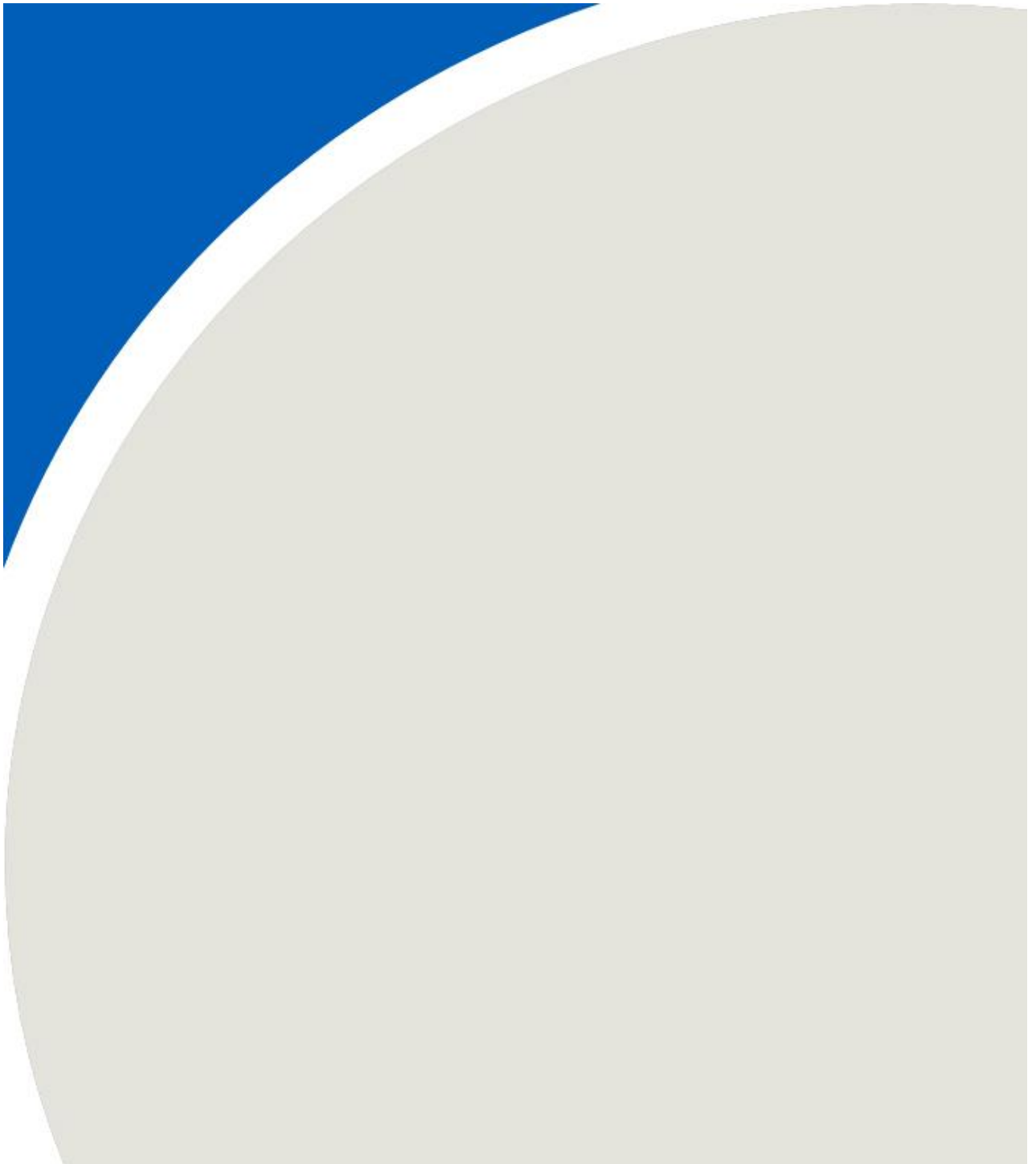
Table B4: 2019 Edit Log for SO₂ at Milne Inlet

Emitter's Name: Baffinland			Station Name: Milne Inlet				
Contact	Name: Mr. William Bowden	Phone: (416) 364-8820 x6016			Email: william.bowden@baffinland.com		
Pollutants or Parameter: SO ₂		Instrument Make & Model: Teledyne Sulphur Dioxide Analyzer Model T100				s/n: 1314	
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019			All testing done in EST	
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
1	DR/CP	Deleted Hours	21/01/2019	14:00	21/01/2019	18:00	Monthly calibration
2	SS	Deleted Hours	27/02/2019	08:00	27/02/2019	12:00	Monthly calibration
3	CP	Deleted Hours	20/03/2019	10:00	20/03/2019	15:00	Monthly calibration
4	SS	Deleted Hours	27/04/2019	15:00	27/04/2019	19:00	Monthly calibration
5	QMI	Zero Correction	01/01/2019	00:00	30/04/2019	23:00	Correcting values <0 to 0
6	SS	Deleted Hours	24/05/2019	08:00	24/05/2019	13:00	Monthly calibration
7	QMI	Zero Correction	01/05/2019	00:00	31/05/2019	23:00	Correcting values <0 to 0
8	SS	Deleted Hours	23/06/2019	09:00	23/06/2019	17:00	Monthly calibration
9	QMI	Zero Correction	01/06/2019	00:00	30/06/2019	23:00	Correcting values <0 to 0
10	CP	Deleted Hours	15/07/2019	08:00	15/07/2019	11:00	Power failure
11	QMI	Deleted Hours	17/07/2019	08:00	17/07/2019	10:00	Power failure
12	QMI	Deleted Hours	22/07/2019	07:00	22/07/2019	08:00	Suspected calibration check
13	QMI	Zero Correction	01/07/2019	00:00	31/07/2019	23:00	Correcting values <0 to 0
14	QMI	Deleted Hours	08/08/2019	13:00	08/08/2019	15:00	Unit shut off and turned back on
15	CP	Deleted Hours	13/08/2019	09:00	13/08/2019	12:00	Monthly calibration
16	QMI	Deleted Hours	16/08/2019	17:00	16/08/2019	18:00	Power failure
17	QMI	Zero Correction	01/08/2019	00:00	31/08/2019	23:00	Correcting values <0 to 0
18	LM	Deleted Hours	06/09/2019	10:00	06/09/2019	15:00	Monthly calibration
19	QMI/VML	Zero Correction	01/09/2019	00:00	30/09/2019	23:00	Correcting values <0 to 0
20	DJR	Deleted Hours	09/10/2019	10:00	09/10/2019	14:00	Monthly calibration
21	VML	Zero Offset Adjustment	23/09/2019	02:00	09/10/2019	10:00	Zero offset adjustment
22	QMI/VML	Zero Correction	01/10/2019	00:00	31/10/2019	23:00	Correcting values <0 to 0
23	LC/SS	Deleted Hours	02/11/2019	15:00	02/11/2019	18:00	Monthly calibration
24	LC/SS	Deleted Hours	08/11/2019	10:00	08/11/2019	12:00	Maintenance: Pump rebuild
25	LC/SS	Deleted Hours	09/11/2019	09:00	09/11/2019	13:00	Calibration check after pump repair

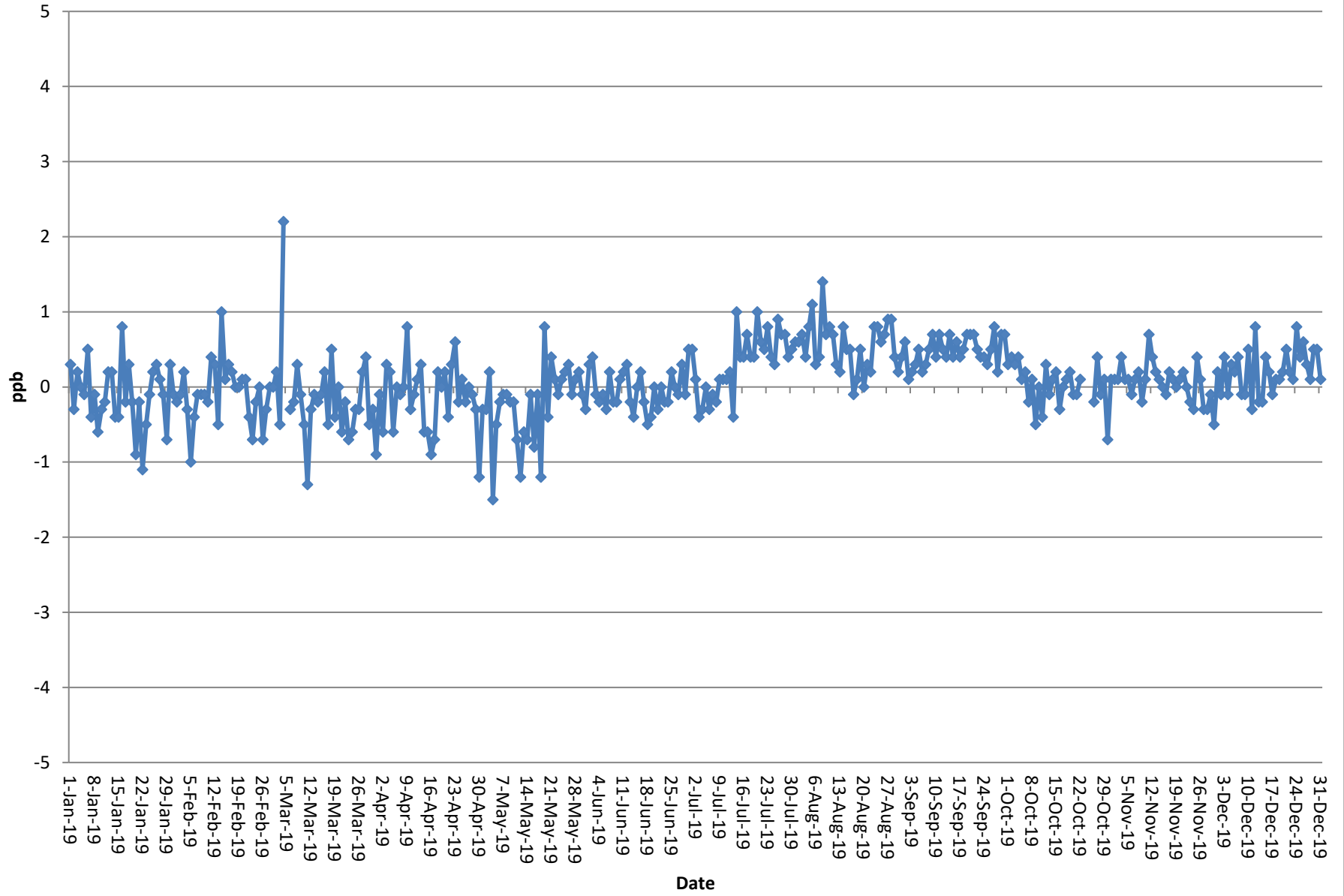
Table B4: 2019 Edit Log for SO₂ at Milne Inlet

Emitter's Name: Baffinland			Station Name: Milne Inlet				
Contact	Name: Mr. William Bowden	Phone: (416) 364-8820 x6016			Email: william.bowden@baffinland.com		
Pollutants or Parameter: SO ₂		Instrument Make & Model: Teledyne Sulphur Dioxide Analyzer Model T100				s/n: 1314	
Data Edit Period	Start Date: January 1, 2019		End Date: December 31, 2019			All testing done in EST	
Edit #	Editor's Name	Edit Action	Starting		Ending		Reason
			Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
26	QMI	Deleted Hours	14/11/2019	13:00	15/11/2019	09:00	Power failure
27	QMI	Zero Correction	01/11/2019	00:00	30/11/2019	23:00	Correcting values <0 to 0
28	CP	Deleted Hours	03/12/2019	14:00	03/12/2019	19:00	Monthly calibration
29	VML	Deleted Hours	15/12/2019	20:00	16/12/2019	10:00	Erroneous values; suspected analyzer issue
30	VML	Zero Correction	01/12/2019	00:00	31/12/2019	23:00	Correcting values <0 to 0

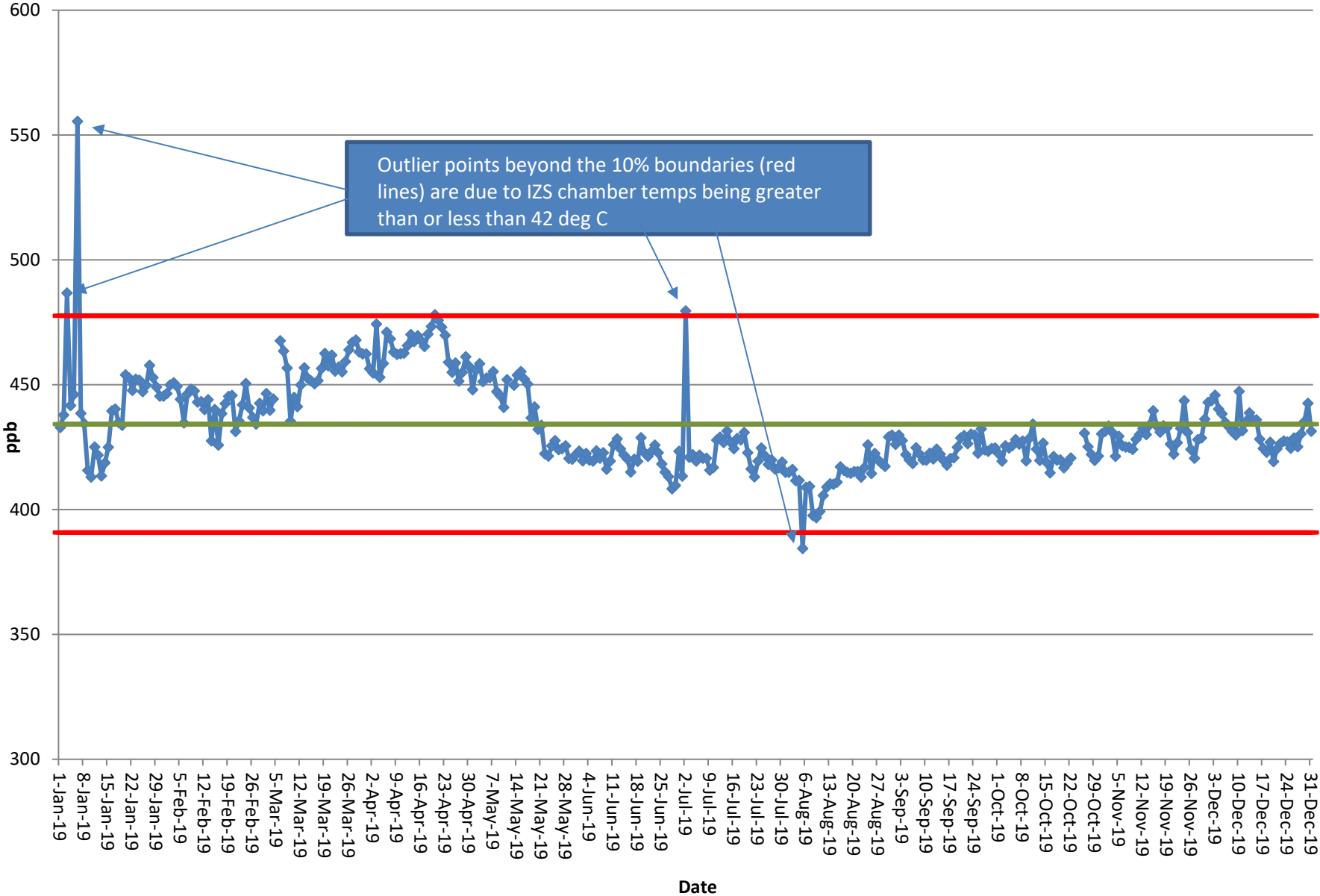
ATTACHMENT C



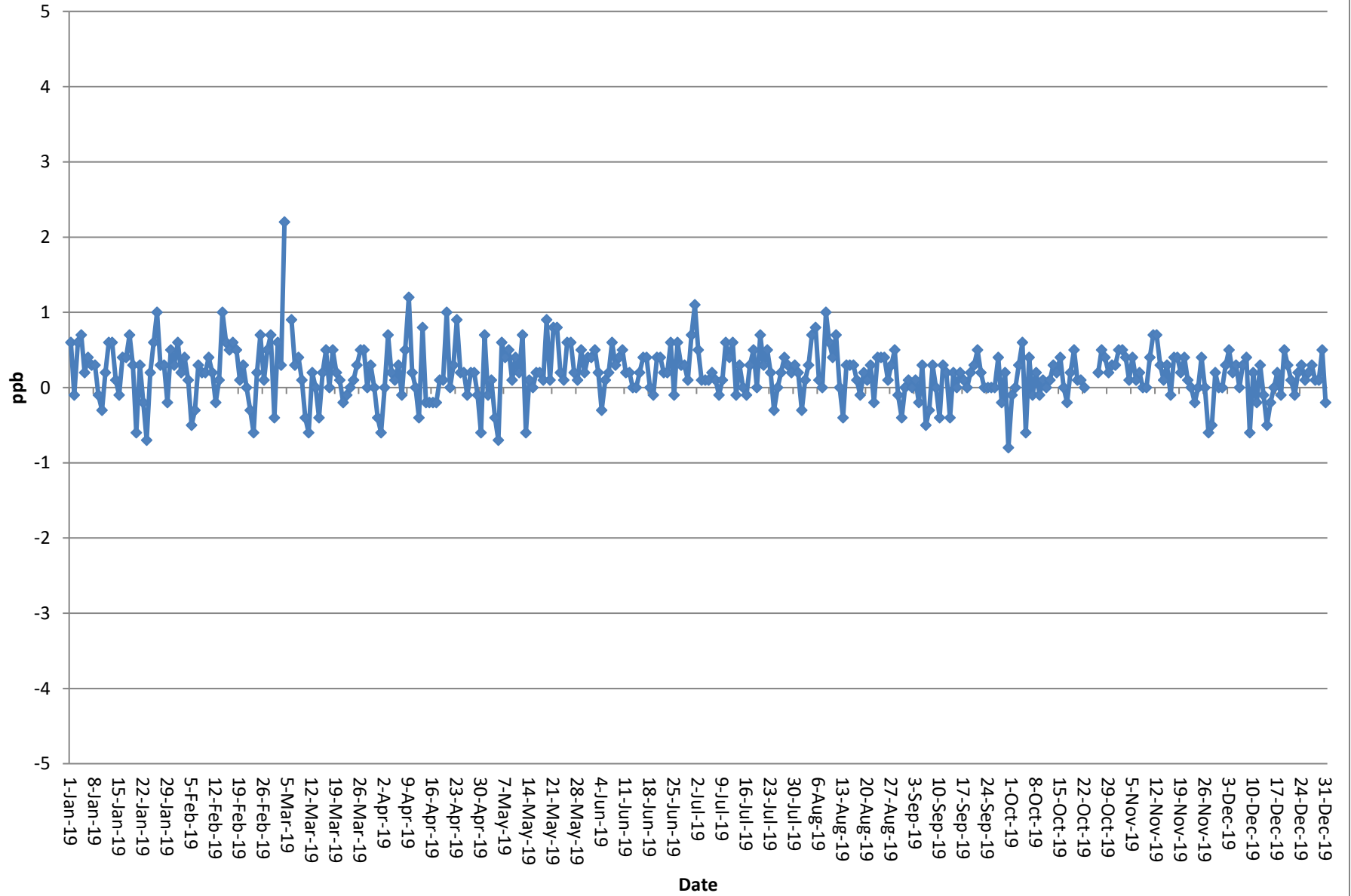
NO_x Zeros (Mary River)



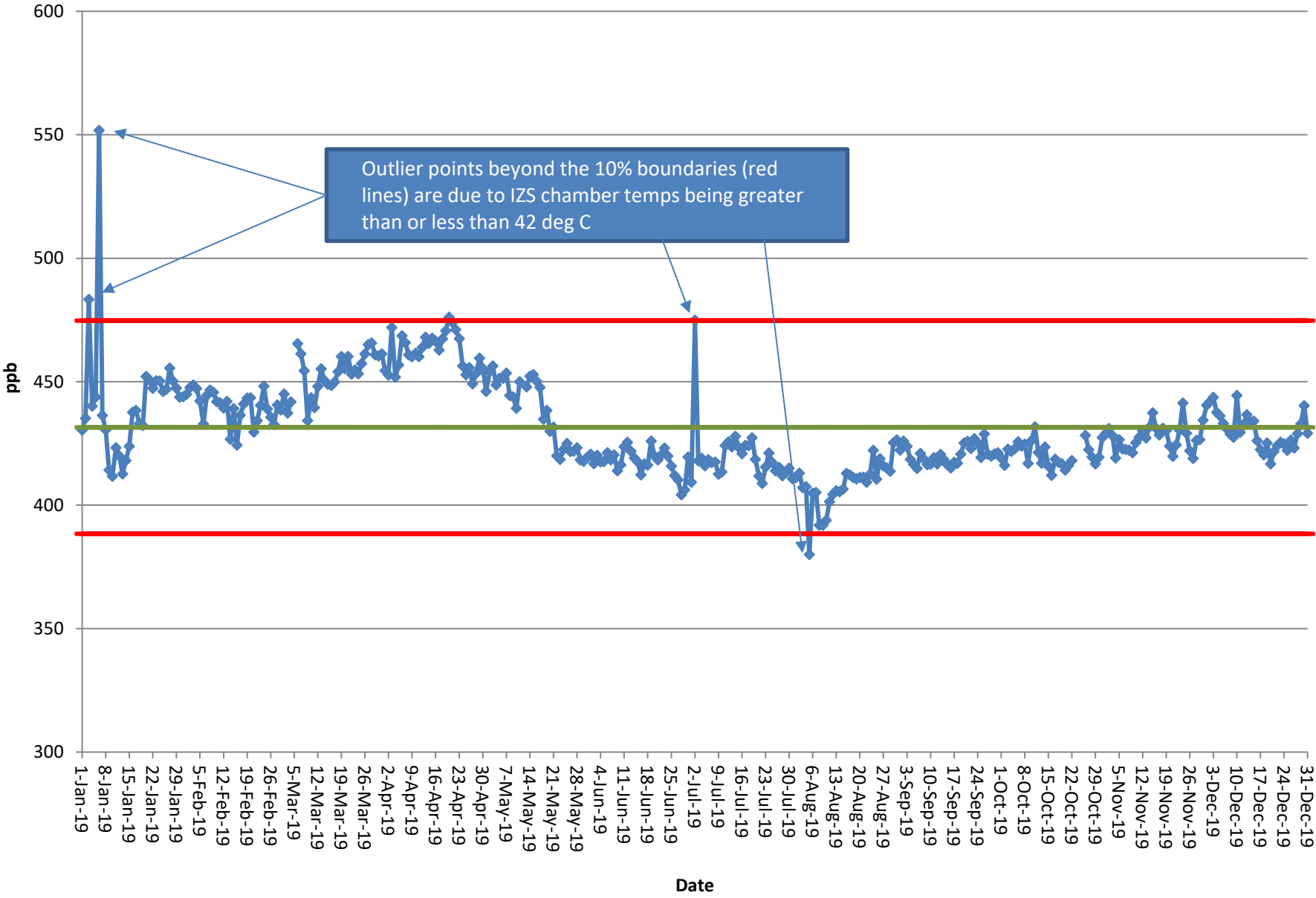
NO_x Spans (Mary River)



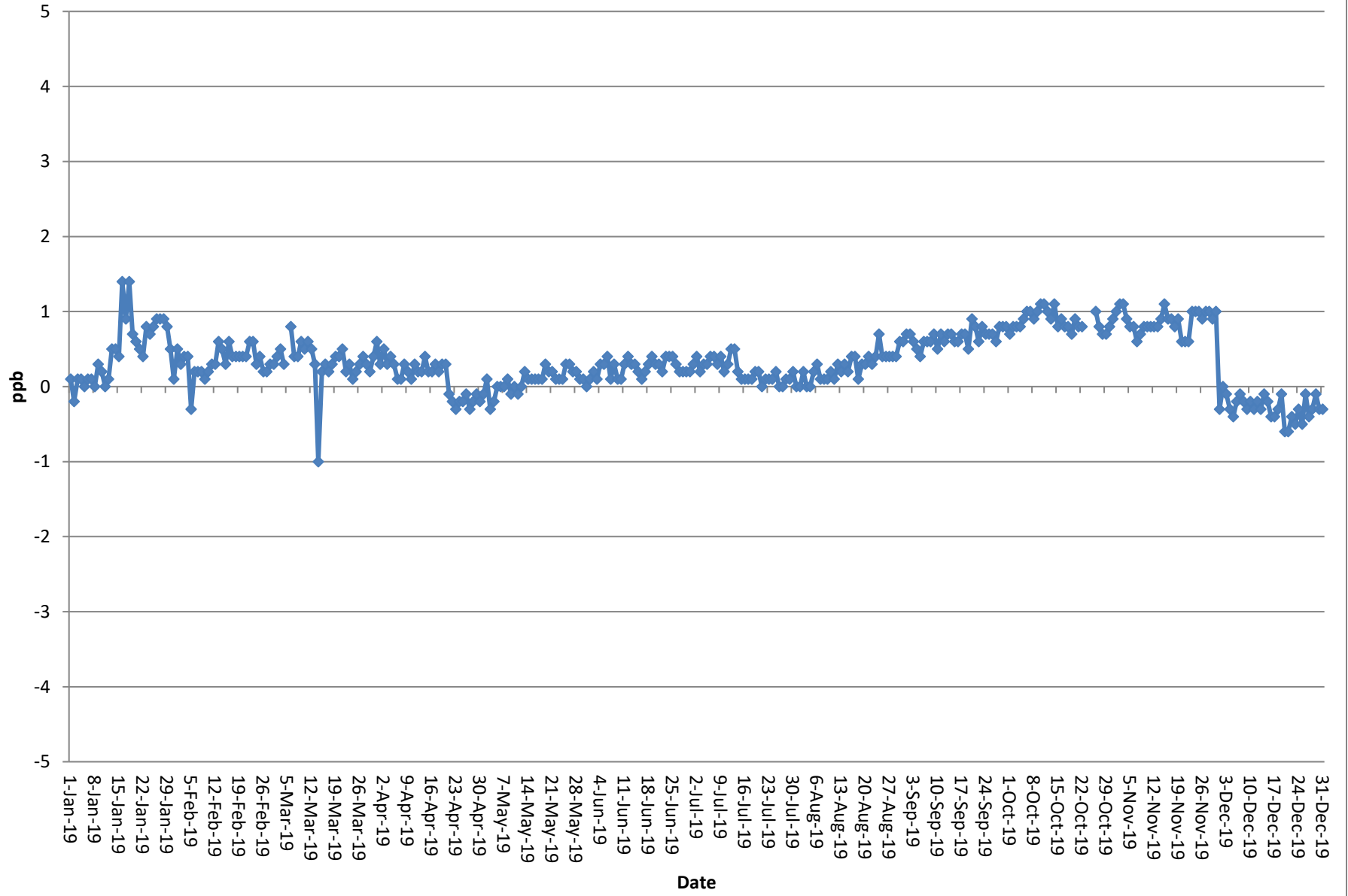
NO₂ Zeros (Mary River)



NO₂ Spans (Mary River)



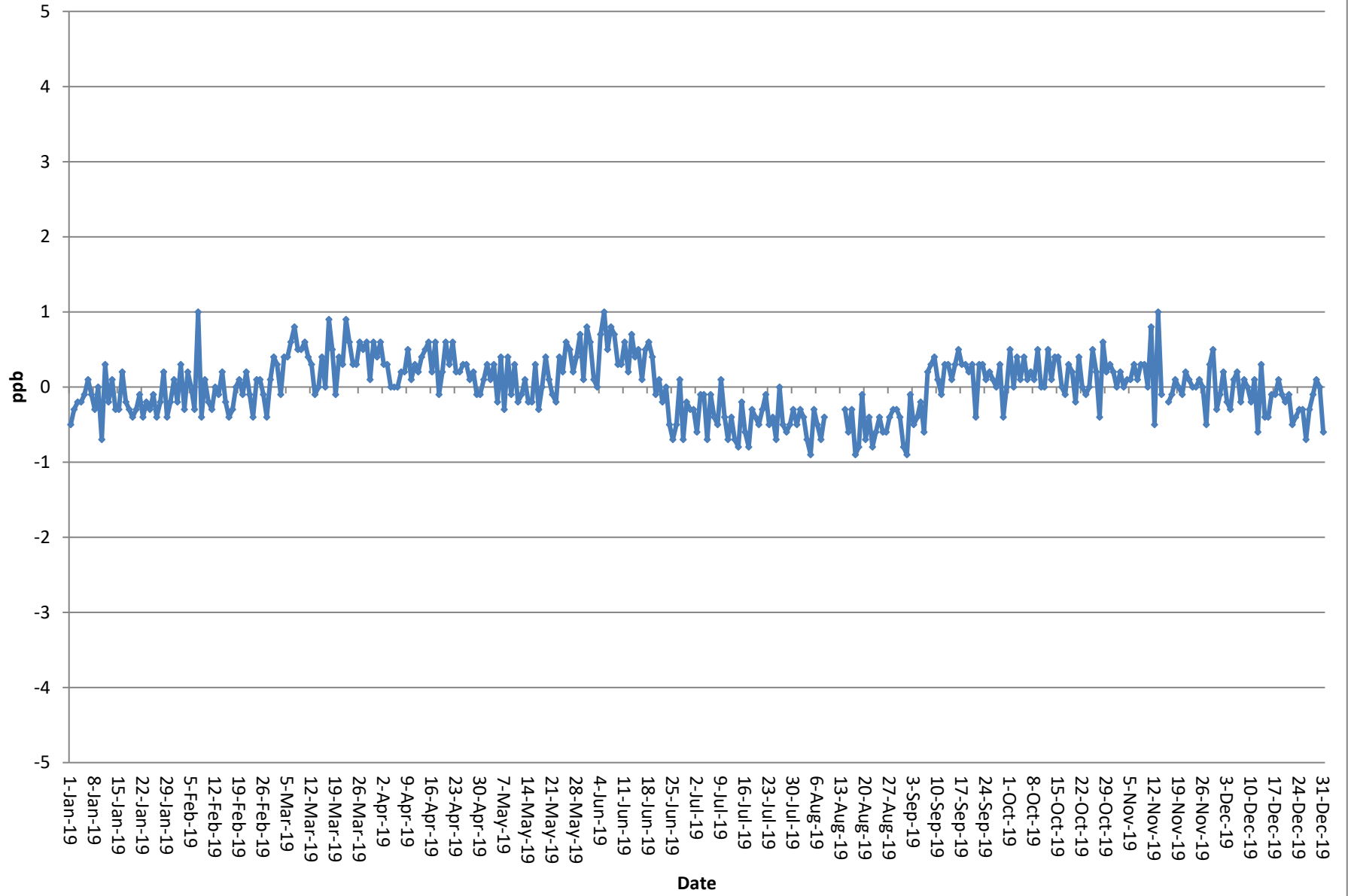
SO₂ Zeros (Mary River)



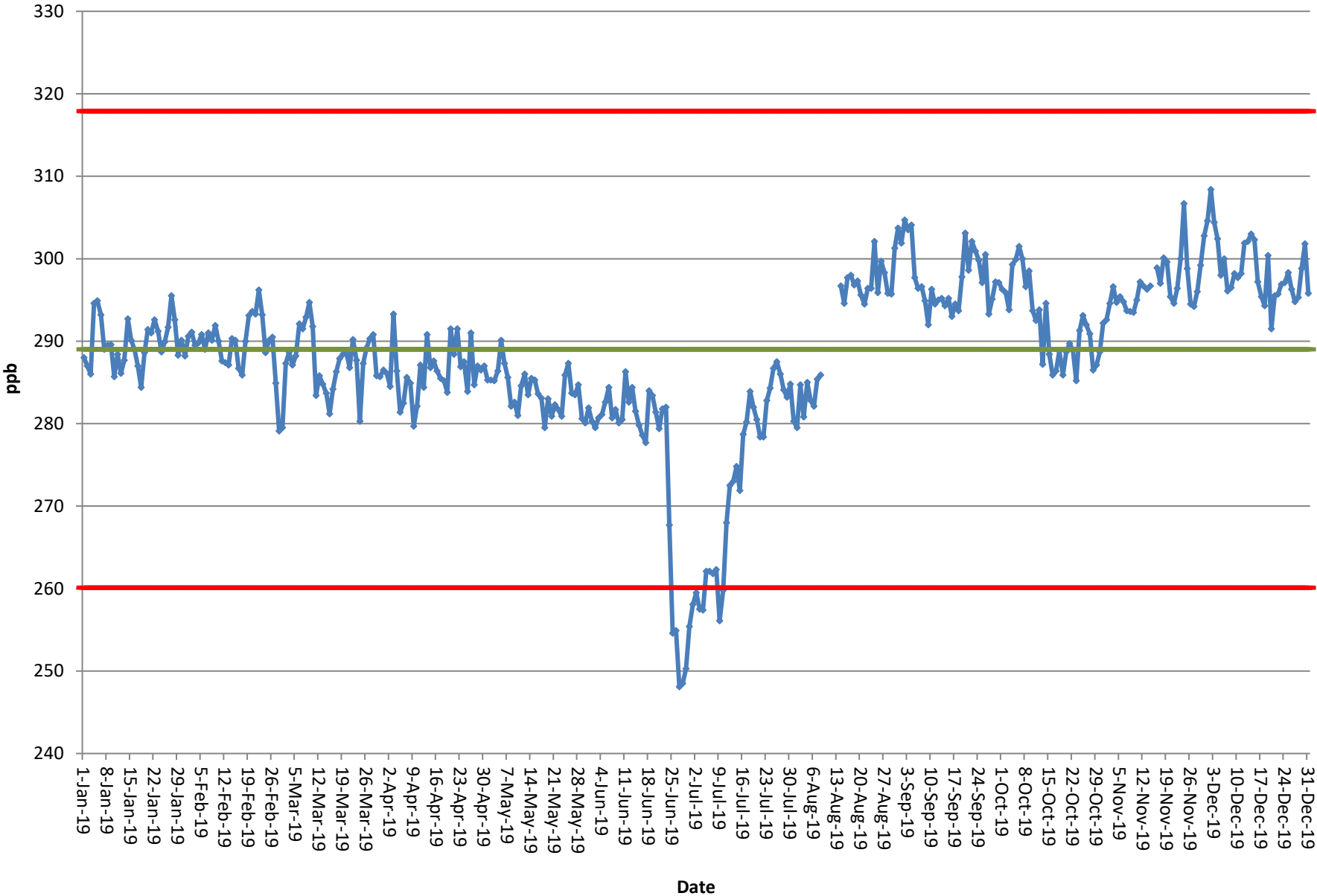
SO₂ Spans (Mary River)



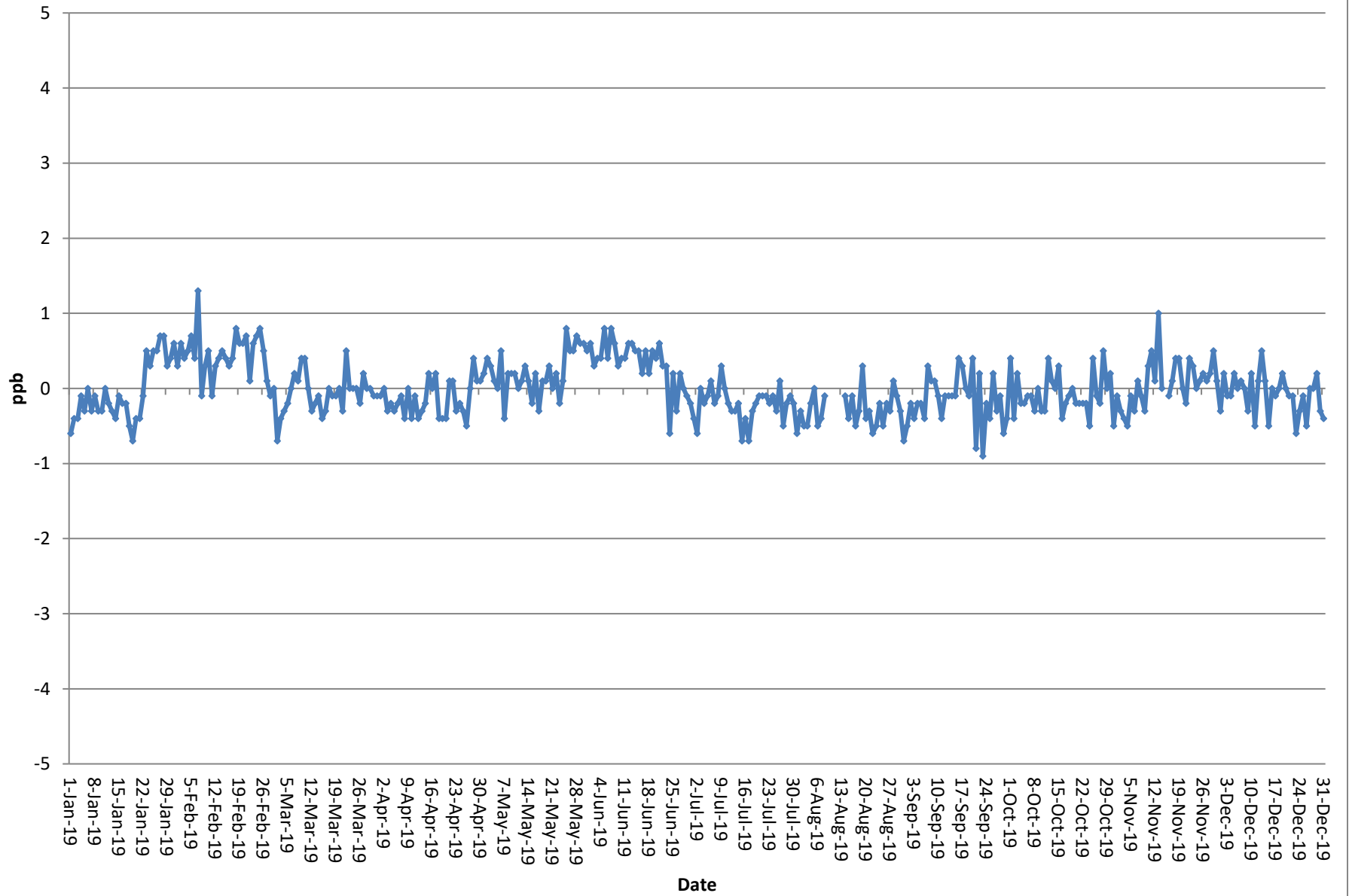
NO_x Zeros (Milne Inlet)



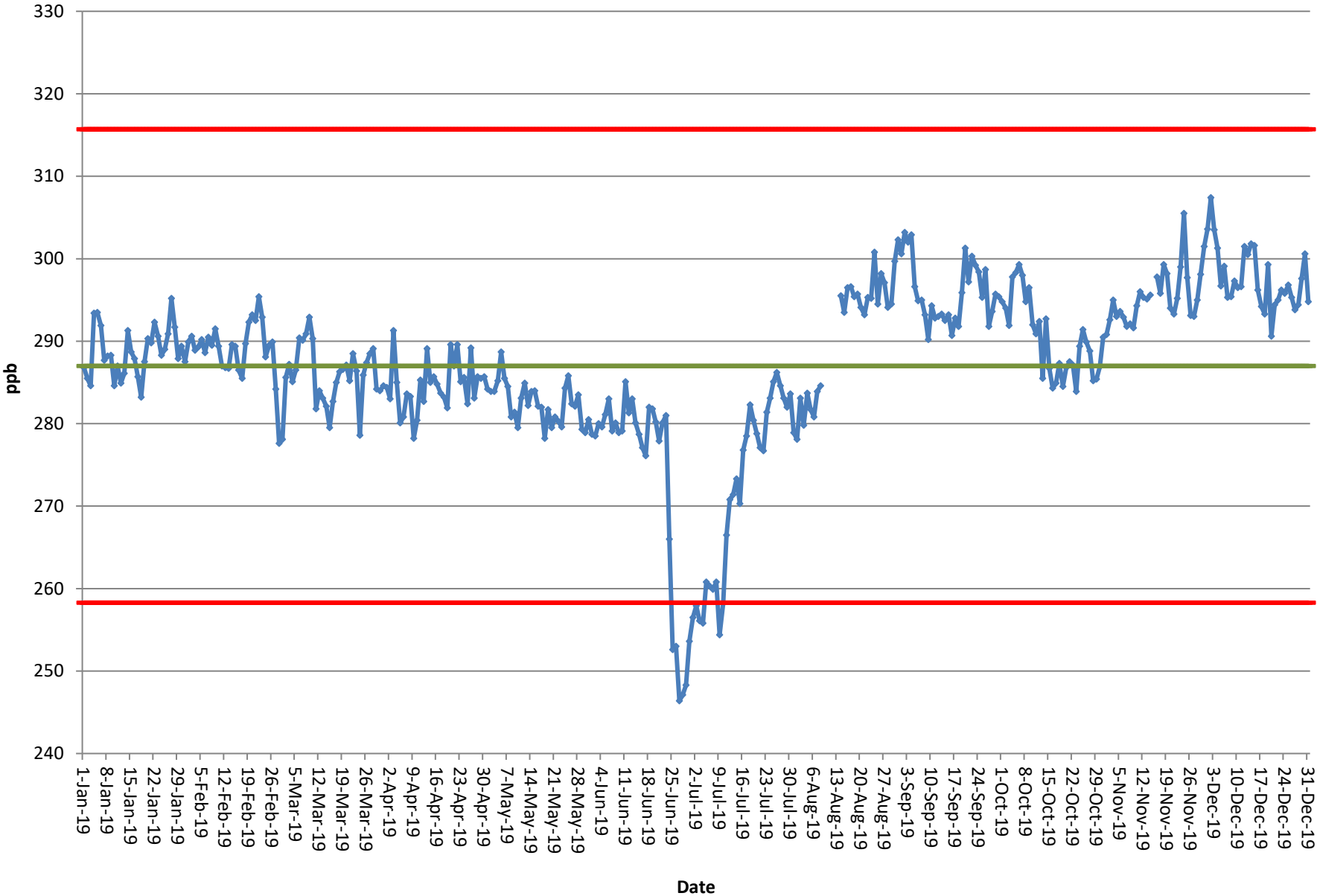
NO_x Spans (Milne Inlet)



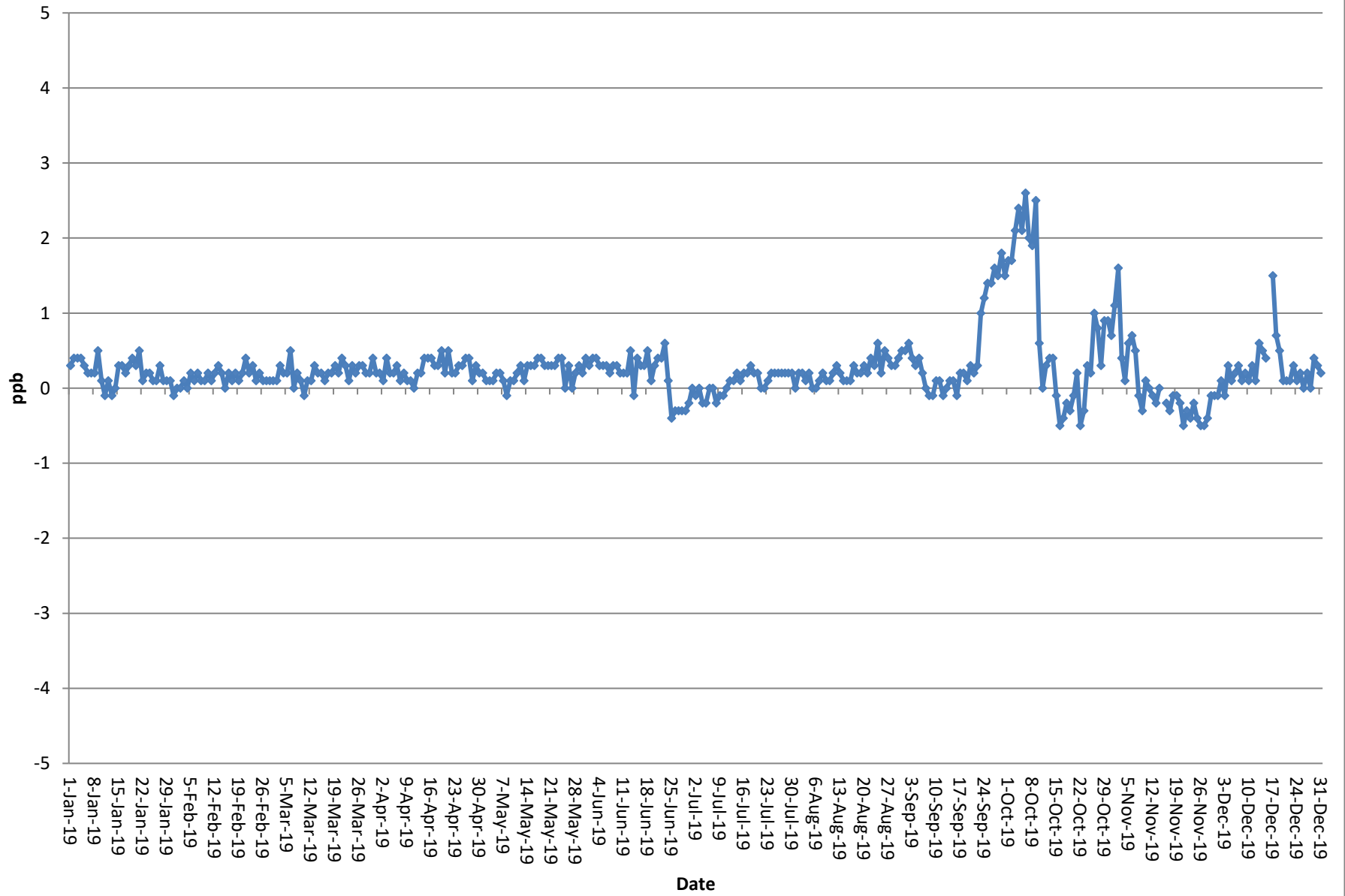
NO₂ Zeros (Milne Inlet)



NO₂ Spans (Milne Inlet)



SO₂ Zeros (Milne Inlet)



SO₂ Spans (Milne Inlet)

