

Month End Report

UPM-Kymmene (UK)

Permit Reference PP3936SQ
Installation Shotton Paper

To
Matthew Kelk
Natural Resources Wales
Chester Road
Buckley
Flintshire
CH7 3AJ

Fax - 01244 548805
Email north.wales.ppc@naturalresourceswales.gov.uk

Please find enclosed graphs / reports for Continuously Monitored Emissions to Air A2 to A8 for the period ending 30th April 2017.

During the period there have not been any reportable exceedances.

You will note that there are no readings from the 18th April until 22nd April, this was as result of initially a leak on the boiler furnace and then a leak on Economiser #1.

Solid fuel was off the Boiler from 14.00 Tuesday 18th April until 19.00 Saturday 22nd April

Indicated also are invalid averages on 22nd April during the start period attached also is App1 which shows the period of invalid average was at the start of the reporting day prior to any combustion taking place

If you require any further information or clarification please let me know

Best Regards



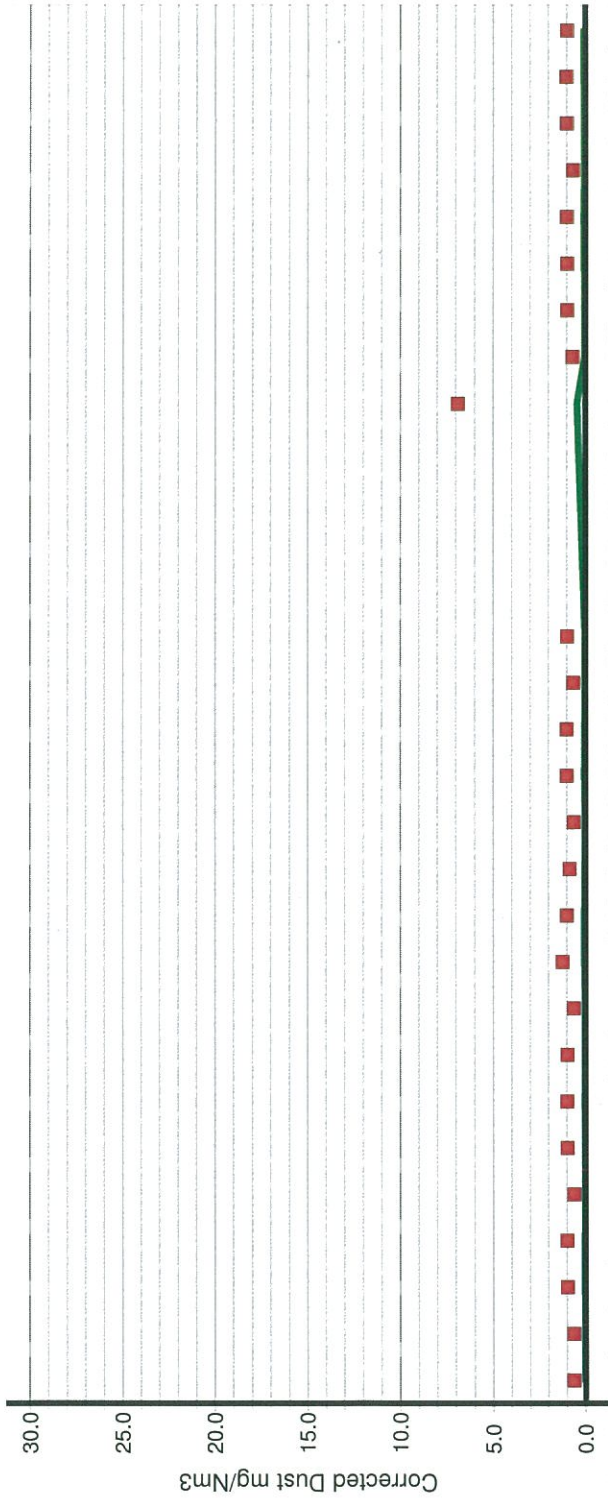
Kevin Smith
Utilities Manager
UPM (UK) Shotton

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Permit Reference Number: PP3936SQ
Installation: Shotton Paper Mill

Operator: UPM-Kymmene (UK) Ltd
Form Number: Agency Form / PP3936SQ /A2 /Form Dated May 06

Reporting of Continuously Monitored Emissions to Air for Particulates Emission Point A20 for the month of April 2017



Monthly summary		Date																																				
30 min average ELV1																																						
30 min Average	Monthly maximum	6.89																																				
	Monthly mean	0.07																																				
	Monthly minimum	0.00																																				
	Total invalid results	2																																				
Total exceedances		0																																				
Daily average ELV1																																						
24 hour Average	Monthly maximum	0.46																																				
	No. invalid days	4																																				
Value exceeds ELV1?		0																																				

Date: 01/03/17

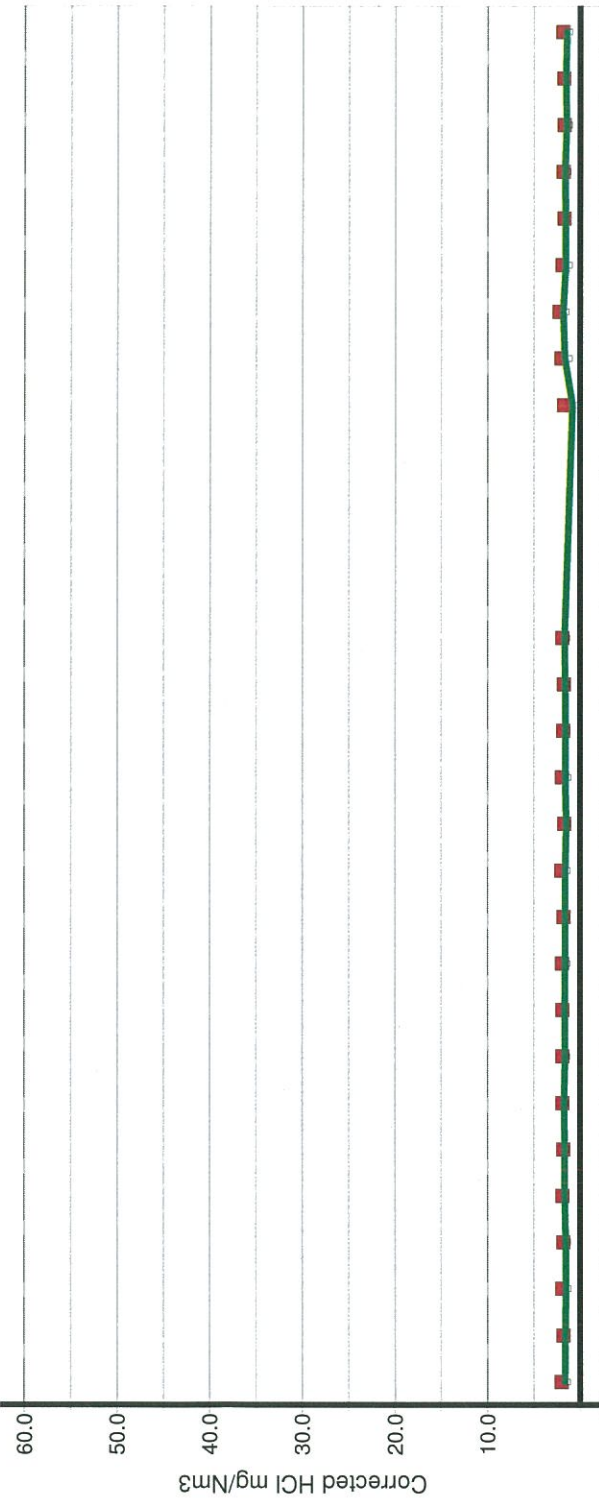
Signed: (Authorised to sign as representative of Operator)

Reporting of Continuously Monitored Emissions to Air for Hydrogen Chloride Emission Point A20 for the month of April 2017

Daily and 30 min

Average monitoring

- 30 min average ELV1
- Maximum 30 min average
- Mean 30 min average
- Minimum 30 min average
- Daily average ELV1
- Daily average

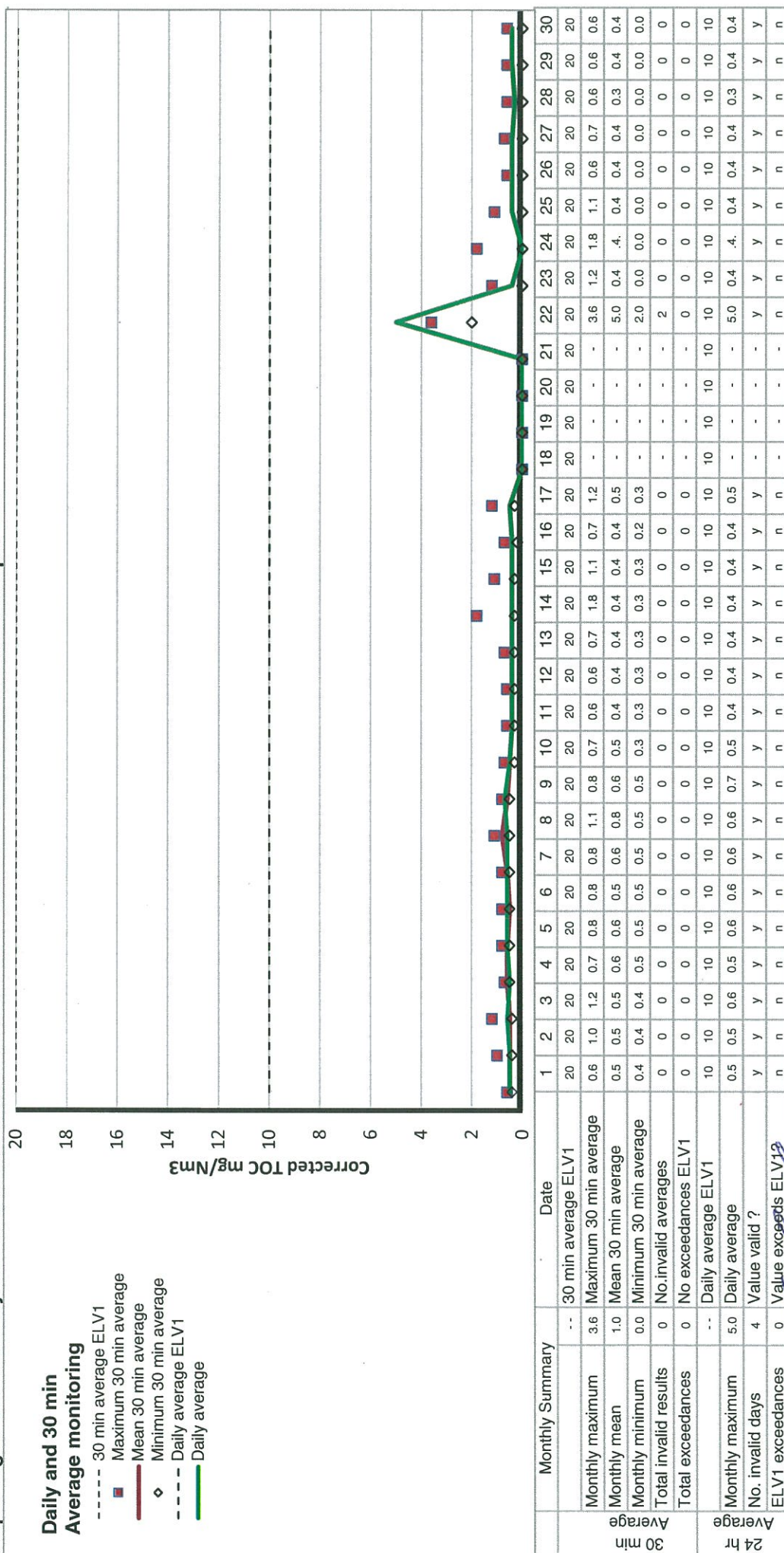


	Monthly summary	Date																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
30 min Average	Monthly maximum	--	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	Maximum 30 min average	2.2	2.0	1.8	1.9	1.8	1.9	1.8	1.9	1.9	1.9	2.0	1.8	2.0	1.7	1.9	1.8	1.7	1.9	--	--	--	--	1.7	2.0	2.2	1.9	1.7	1.8	1.7	1.7	1.8
	Monthly mean	1.6	1.6	1.5	1.6	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.7	--	--	--	--	0.8	1.6	1.8	1.5	1.5	1.6	1.4	1.5	1.4
	Monthly minimum	0.2	1.4	1.3	1.4	1.5	1.5	1.6	1.4	1.5	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.4	--	--	--	--	0.2	1.2	1.5	1.2	1.3	1.3	1.2	1.3	1.2
	Total invalid results	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	2	0	0	0	0	0	0	0	0
24 hour Average	Total exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0	0	0	0	0	0	0	0	0
	Monthly maximum	--	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	Daily average	1.8	1.6	1.5	1.6	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.7	--	--	--	--	0.8	1.6	1.8	1.5	1.5	1.6	1.4	1.5	1.4
	No. invalid days	4	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	--	--	--	--	y	y	y	y	y	y	y	y	y
	ELV1 exceedances	0	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	--	--	--	--	n	n	n	n	n	n	n	n	n

[Signature]

Signed Date: 11/8/17
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Reporting of Continuously Monitored Emissions to Air for TOC Emission Point A20 for the month of April 2017



Signed

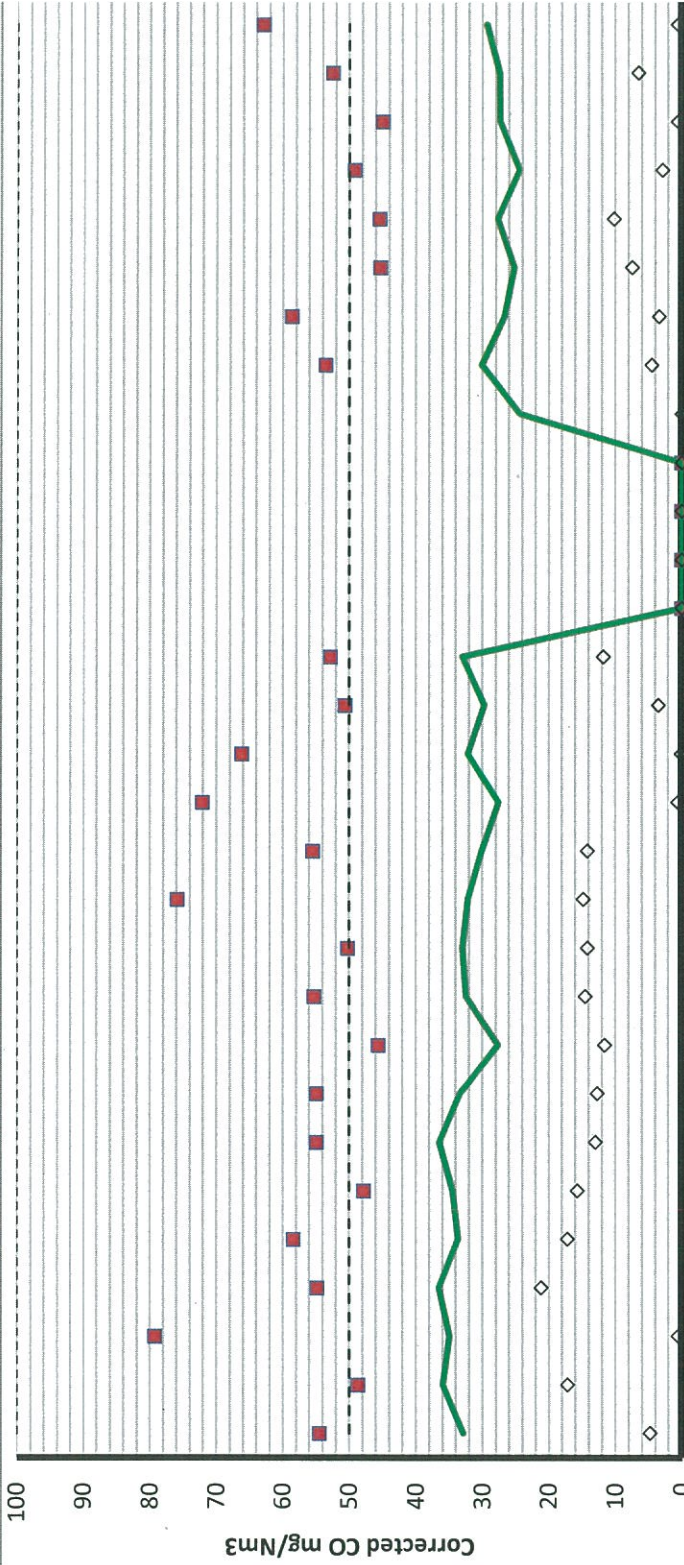
Date.....

(Authorised to sign as representative of Operator)

Reporting of Continuously Monitored Emissions to Air for Carbon Monoxide Emission Point A20 for the month of April 2017

Daily and 30 min
Average monitoring

- 30 min average ELV1
- Maximum 30 min average
- ◇ Minimum 30 min average
- Daily average ELV1
- Daily average



Monthly Summary		Date																															
30 min Average	- -																																
	Monthly maximum	253.6	54.5	48.7	79.3	54.8	58.4	47.8	54.9	54.9	55.5	72.1	66.2	50.6	52.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Monthly mean	31.2	32.9	36.0	35.0	36.6	33.7	34.5	36.5	33.4	27.7	32.5	33.0	32.2	30.1	27.6	32.2	29.7	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Monthly minimum	0.0	4.8	17.2	0.6	21.2	17.2	15.7	13.0	12.7	11.6	14.5	14.2	14.8	14.2	0.6	0.1	3.5	11.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total invalid results	0	0	0	0	0	0	0	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 hr Average	Total exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	--																																
	Monthly maximum	36.6	32.9	36.0	35.0	36.6	33.7	34.5	36.5	33.4	27.7	32.5	33.0	32.2	30.1	27.6	32.2	29.7	33.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No. invalid days	4	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	-	-	-	-	-	-	-	-	-	-	-	-	-
	ELV1 exceedances	0	Value exceeds ELV1?																														

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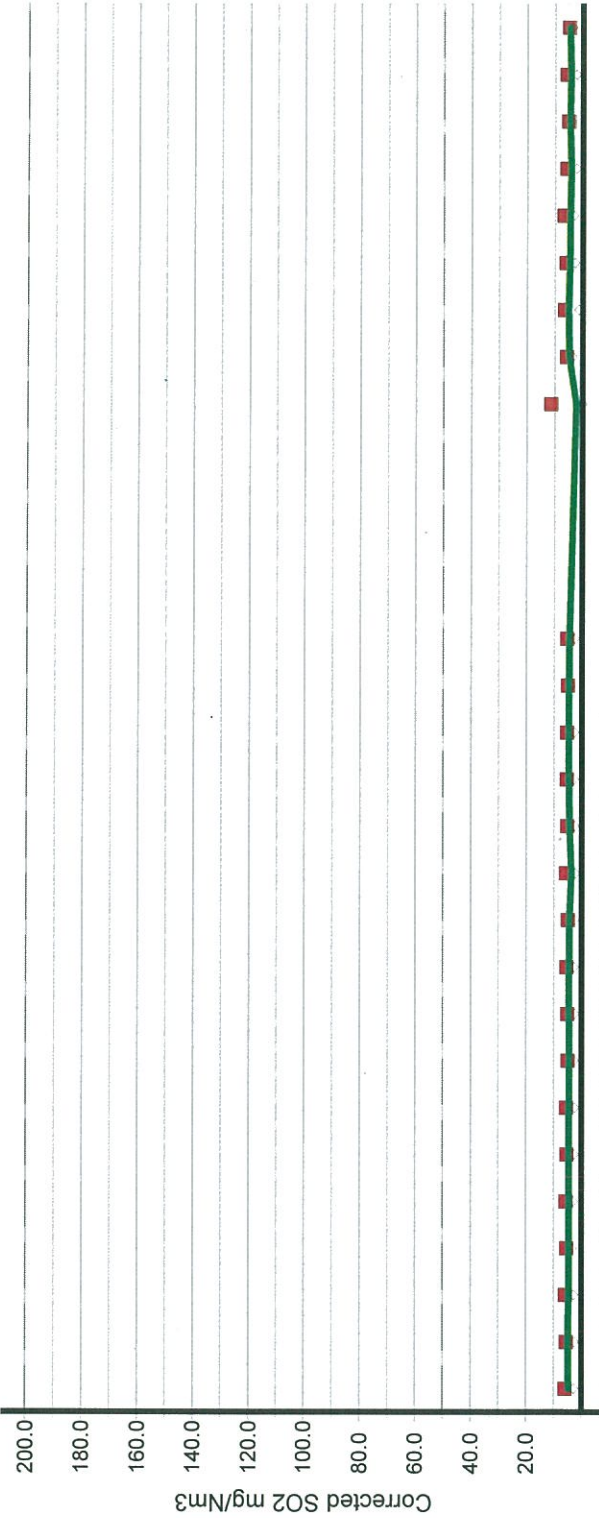
Date: 11/3/17

Reporting of Continuously Monitored Emissions to Air for Sulphur Dioxide Emission Point A20 for the month of April 2017

Daily and 30 min

Average monitoring

- 30 min average ELV1
- Maximum 30 min average
- Mean 30 min average
- Minimum 30 min average
- Daily average ELV1
- Daily average



Average	30 min	Monthly summary																																
		Date		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
30 min Average		--	30 min average	ELV1	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	Monthly maximum	11.3	Maximum 30 min average	6.0	5.5	5.8	5.4	5.6	5.3	5.5	5.0	5.0	5.5	5.0	5.7	5.2	5.4	5.3	5.1	5.2	--	--	--	--	--	11.3	5.7	6.5	5.8	6.7	5.6	5.1	5.6	4.8
	Monthly mean	4.5	Mean 30 min average	4.9	4.9	4.7	4.7	4.6	4.6	4.6	4.5	4.6	4.6	4.5	3.8	4.5	4.8	4.7	4.8	4.7	--	--	--	--	--	2.3	4.8	5.1	4.6	4.5	4.2	4.6	4.3	4.5
	Monthly minimum	0.1	Minimum 30 min average	2.8	2.7	2.9	3.3	3.0	2.7	2.6	2.8	2.6	2.8	2.7	2.3	2.7	2.9	2.8	3.8	2.7	--	--	--	--	--	0.1	3.7	1.4	2.9	3.4	2.3	4.2	2.4	3.8
24 hour Average	Total invalid results	2	No. invalid averages	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	2	0	0	0	0	0	0	0	0
	Total exceedances	0	No. exceedances	ELV1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	0	0	0	0	0	0	0	0	0
	Monthly maximum	--	Daily average	ELV1	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
	No. invalid days	5.1	Daily average	Value valid?	4.9	4.9	4.7	4.7	4.6	4.6	4.5	4.6	4.6	4.5	3.8	4.5	4.8	4.7	4.8	4.7	--	--	--	--	--	2.3	4.8	5.1	4.6	4.5	4.2	4.6	4.3	4.5
ELV1 exceedances		0	Value exceeds ELV1?		n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	--	--	--	--	--	n	n	n	n	n	n	n	n	n

[Signature]

Signed Date 15/8/17
(Authorised to sign as representative of Operator)

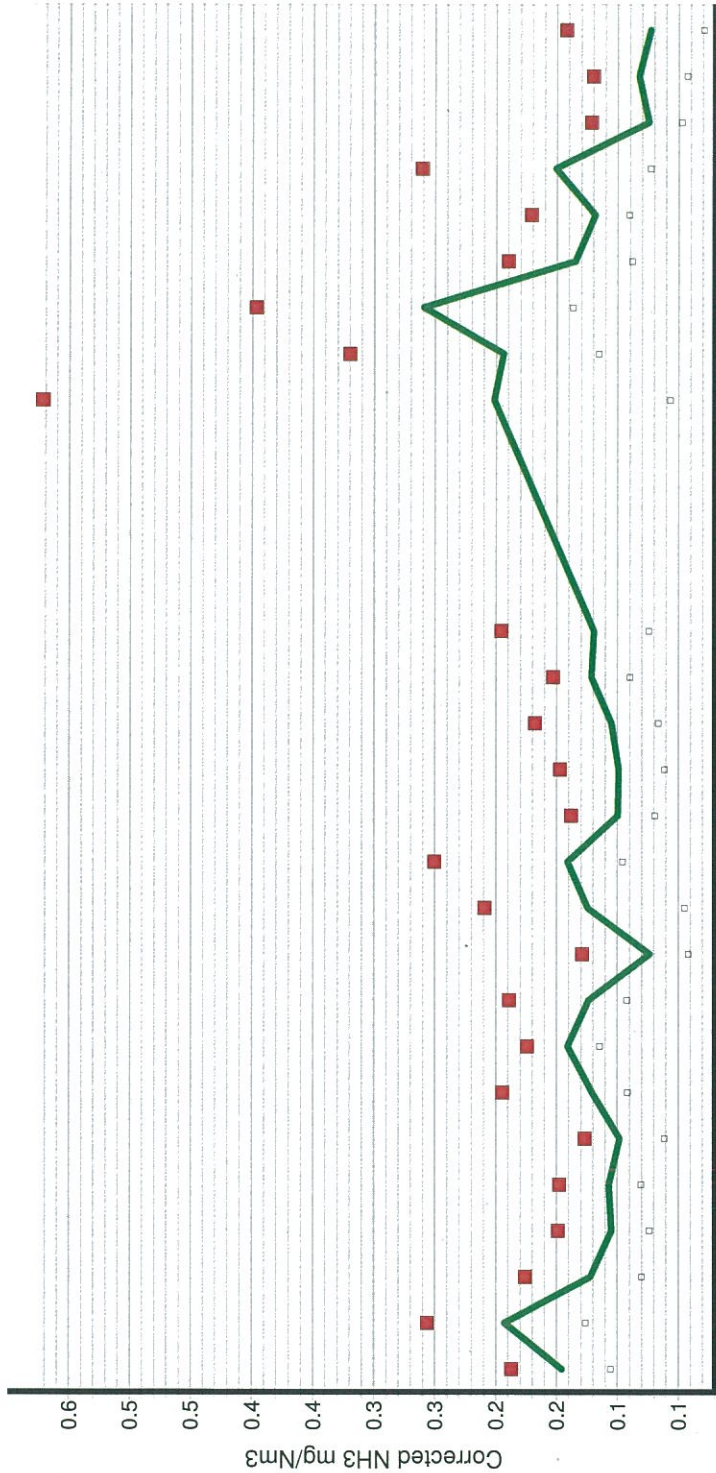
Permit Reference Number: PP3936SQ
Installation: Shotton Paper Mill

Operator: UPM-Kymmene (UK) Ltd
Form Number: Agency Form / PP3936SQ / A7 / Form Dated May 06

Reporting of Continuously Monitored Emissions to Air for Ammonia Emission Point A20 for the month of April 2017

Daily and 30 min
Average monitoring

- Maximum 30 min average
- Mean 30 min average
- Minimum 30 min average
- Daily average

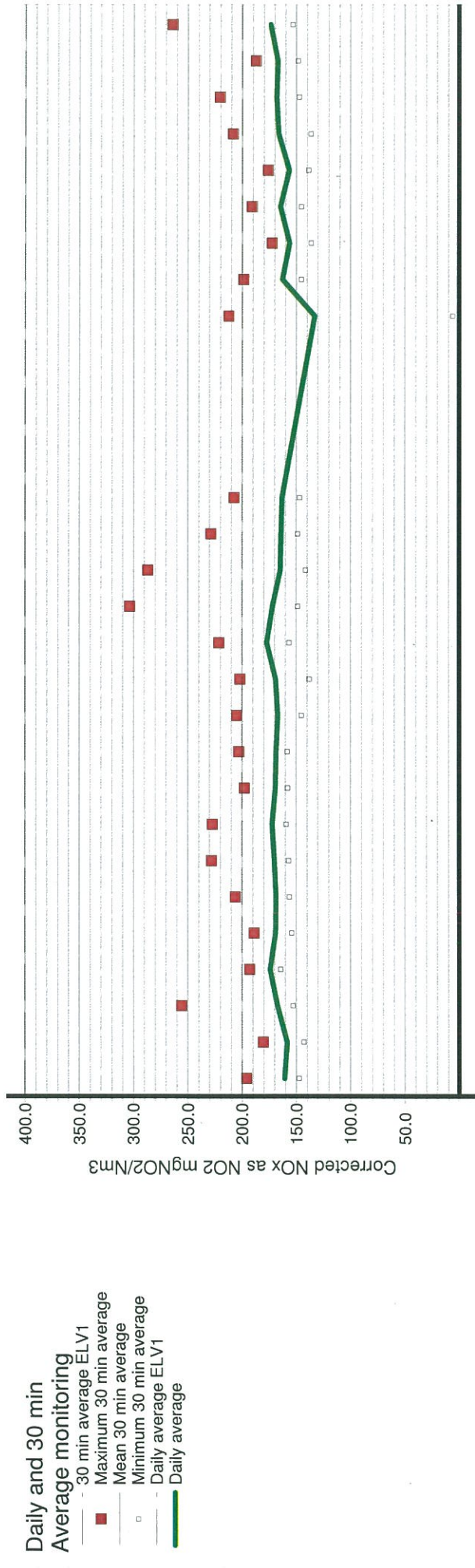


Monthly summary		Date																													
Monthly maximum	0.6	Maximum 30 min average		0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Monthly mean	0.2	Mean 30 min average		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Monthly minimum	0.1	Minimum 30 min average		0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total invalid results	2	No. invalid averages		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly maximum	0.3	Daily average		0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
No. invalid days	4	Value valid?		y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y

Signed
(Authorised to sign as representative of Operator)

Date: 11/8/17

Reporting of Continuously Monitored Emissions to Air for Oxides of Nitrogen Emission Point A20 for the month of April 2017



Monthly summary		Date		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
30 min Average	Monthly maximum	--	30 min average ELV1	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
	Monthly mean	303.7	Maximum 30 min average	195.8	180.5	255.6	192.9	188.9	206.4	228.2	227.5	197.9	203.1	205.0	201.8	221.5	303.7	286.8	228.6	207.3	--	--	--	--	212.3	198.6	172.4	191.1	176.0	208.3	220.5	187.2	263.8
	Monthly minimum	165.5	Mean 30 min average	160.7	158.4	167.2	174.1	169.1	168.7	170.4	172.4	169.4	168.8	167.1	169.2	177.3	172.1	164.9	164.2	163.2	--	--	--	--	132.9	162.8	156.1	164.5	156.4	166.2	167.9	166.8	173.5
	Monthly minimum	5.9	Minimum 30 min average	147.4	143.0	152.9	164.3	154.3	156.2	157.0	159.3	158.0	158.1	145.3	138.1	156.6	148.8	141.5	148.6	147.0	--	--	--	--	5.9	145.3	136.1	145.2	138.7	136.3	147.4	148.3	153.3
24 hour Average	Total invalid results	2	No. invalid averages	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	2	0	0	0	0	0	0	0	0
	Total exceedances	0	No. exceedances ELV1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0	0	0	0	0	0	0	0	0
	Monthly maximum	177.3	Daily average ELV1	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	No. invalid days	4	Daily average	160.7	158.4	167.2	174.1	169.1	168.7	170.4	172.4	169.4	168.8	167.1	169.2	177.3	172.1	164.9	164.2	163.2	--	--	--	--	132.9	162.8	156.1	164.5	156.4	166.2	167.9	166.8	173.5
ELV1 exceedances		0	Value valid?	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	--	--	--	--	y	y	y	y	y	y	y	y	y
		0	Value exceeds ELV1?	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	--	--	--	--	n	n	n	n	n	n	n	n	n

Signed Date: 11/8/17

(Authorised to sign as representative of Operator)

App 1

Daily report for the period ending Sunday 23 April 2017 00:00:00

SHUT DOWN NO SOLID FUEL

Date/Time	Corrected CO 30min averages, mg/Nm3	Corrected SO2 30min averages, mg/Nm3	Corrected HCl 30min averages, mg/Nm3	Corrected TOC 30min averages, mgC/Nm3	Corrected NOx as NO2 30min averages, mgNO2/Nm3	Corrected D _s 30min average mg/Nm3
22/04/2017 00:30:00						
22/04/2017 01:00:00						
22/04/2017 01:30:00	29.66 (30)	1.43 (30)	0.21 (30)	17.76 (30)	5.92 (30)	0.02 (30)
22/04/2017 02:00:00	178.86 (30)	9.40 (30)	0.25 (30)	44.47 (30)	10.30 (30)	0.11 (30)
22/04/2017 02:30:00	253.56 (30)	11.27 (30)	0.41 (30)	53.56 (30)	22.76 (30)	0.02 (30)
22/04/2017 03:00:00	210.24 (30)	7.96 (30)	0.31 (30)	49.16 (30)	43.85 (30)	0.03 (30)
22/04/2017 03:30:00	136.22 (30)	4.76 (30)	0.98 (30)	28.27 (30)	74.24 (30)	0.08 (30)
22/04/2017 04:00:00	64.33 (30)	2.28 (30)	0.80 (30)	7.57 (30)	94.26 (30)	0.01 (30)
22/04/2017 04:30:00	13.59 (30)	1.31 (30)	0.58 (30)	2.03 (30)	109.50 (30)	0.01 (30)
22/04/2017 05:00:00	8.78 (30)	1.27 (30)	0.50 (30)	1.82 (30)	111.17 (30)	0.00 (30)
22/04/2017 05:30:00	6.62 (30)	1.28 (30)	0.52 (30)	1.79 (30)	119.73 (30)	0.00 (30)
22/04/2017 06:00:00	3.89 (30)	1.18 (30)	0.63 (30)	1.55 (30)	115.33 (30)	0.00 (30)
22/04/2017 06:30:00	0.69 (30)	1.12 (30)	0.52 (30)	1.29 (30)	113.17 (30)	1.19 (30)
22/04/2017 07:00:00	0.00 (30)	1.29 (30)	0.55 (30)	1.24 (30)	120.68 (30)	0.11 (30)
22/04/2017 07:30:00	0.00 (30)	1.36 (30)	0.29 (30)	1.01 (30)	98.07 (30)	0.68 (30)
22/04/2017 08:00:00	0.00 (30)	1.12 (30)	0.49 (30)	1.14 (30)	123.33 (30)	0.31 (30)
22/04/2017 08:30:00	0.00 (30)	1.19 (30)	0.50 (30)	1.08 (30)	117.78 (30)	0.60 (30)
22/04/2017 09:00:00	0.00 (30)	1.15 (30)	0.43 (30)	1.02 (30)	124.63 (30)	0.23 (30)
22/04/2017 09:30:00	0.00 (30)	0.63 (30)	0.42 (30)	0.84 (30)	130.22 (30)	0.11 (30)
22/04/2017 10:00:00	0.00 (30)	0.49 (30)	0.47 (30)	0.77 (30)	122.41 (30)	1.68 (30)
22/04/2017 10:30:00	0.00 (30)	0.56 (30)	0.49 (30)	0.67 (30)	129.49 (30)	1.93 (30)
22/04/2017 11:00:00	0.00 (30)	0.27 (30)	0.58 (30)	0.65 (30)	132.57 (30)	4.82 (30)
22/04/2017 11:30:00	0.00 (30)	0.32 (30)	0.58 (30)	0.65 (30)	135.71 (30)	1.36 (30)
22/04/2017 12:00:00	0.00 (30)	0.30 (30)	0.60 (30)	0.63 (30)	140.10 (30)	0.00 (30)
22/04/2017 12:30:00	0.00 (30)	0.26 (30)	0.62 (30)	0.62 (30)	142.51 (30)	0.00 (30)
22/04/2017 13:00:00	0.00 (30)	0.29 (30)	0.57 (30)	0.57 (30)	142.37 (30)	0.00 (30)
22/04/2017 13:30:00	0.00 (30)	0.38 (30)	0.58 (30)	0.59 (30)	152.64 (30)	0.00 (30)
22/04/2017 14:00:00	0.00 (30)	0.23 (30)	0.61 (30)	0.58 (30)	155.05 (30)	0.00 (30)
22/04/2017 14:30:00	0.00 (30)	0.16 (30)	0.71 (30)	0.62 (30)	166.71 (30)	0.72 (30)
22/04/2017 15:00:00	0.00 (30)	0.35 (30)	0.73 (30)	0.65 (30)	173.26 (30)	0.00 (30)
22/04/2017 15:30:00	0.00 (30)	0.26 (30)	0.69 (30)	0.64 (30)	170.85 (30)	0.00 (30)
22/04/2017 16:00:00	0.00 (30)	0.19 (30)	0.71 (30)	0.62 (30)	165.14 (30)	0.00 (30)
22/04/2017 16:30:00	0.00 (30)	0.29 (30)	0.68 (30)	0.64 (30)	159.28 (30)	0.00 (30)
22/04/2017 17:00:00	0.00 (30)	0.09 (30)	0.64 (30)	0.59 (30)	148.62 (30)	0.00 (30)
22/04/2017 17:30:00	0.00 (30)	0.20 (30)	0.71 (30)	0.64 (30)	159.38 (30)	0.00 (30)
22/04/2017 18:00:00	0.00 (30)	0.17 (30)	0.68 (30)	0.44 (30)	156.99 (30)	0.00 (30)
22/04/2017 18:30:00	0.00 (30)	0.91 (30)	0.91 (30)	0.50 (30)	164.68 (30)	0.00 (30)
22/04/2017 19:00:00	0.14 (30)	3.67 (30)	0.91 (30)	0.37 (30)	212.28 (30)	0.00 (30)
22/04/2017 19:30:00	5.98 (30)	4.37 (30)	1.51 (30)	0.32 (30)	178.96 (30)	0.00 (30)
22/04/2017 20:00:00	18.80 (30)	4.64 (30)	1.56 (30)	0.46 (30)	176.36 (30)	0.00 (30)
22/04/2017 20:30:00	12.85 (30)	4.74 (30)	1.46 (30)	0.42 (30)	169.83 (30)	0.00 (30)
22/04/2017 21:00:00	23.55 (30)	5.15 (30)	1.55 (30)	0.45 (30)	148.27 (30)	0.00 (30)
22/04/2017 21:30:00	26.20 (30)	4.86 (30)	1.45 (30)	0.47 (30)	166.06 (30)	0.00 (30)
22/04/2017 22:00:00	37.33 (30)	4.93 (30)	1.50 (30)	0.43 (30)	170.92 (30)	0.00 (30)
22/04/2017 22:30:00	16.38 (30)	4.98 (30)	1.51 (30)	0.39 (30)	166.02 (30)	0.67 (30)
22/04/2017 23:00:00	27.35 (30)	4.49 (30)	1.69 (30)	0.66 (30)	150.00 (30)	0.00 (30)
22/04/2017 23:30:00	24.25 (30)	3.51 (30)	1.72 (30)	0.46 (30)	159.72 (30)	0.00 (30)
23/04/2017 00:00:00	23.57 (30)	4.88 (30)	1.58 (30)	0.37 (30)	160.53 (30)	0.00 (30)
Maximum	253.56	11.27	1.72	53.56	212.28	4.82
Minimum	0.00	0.09	0.21	0.32	5.92	0.00
Mean	24.41	2.30	0.79	5.03	132.86	0.32
Invalid points	2	2	2	2	2	2

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