



Nakkaş - Başakşehir Motorway Project

BACKGROUND AIR QUALITY MEASUREMENT REPORT

S-21-00013

15.06.2021



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Test Report

AB-1361-T

S-21-00013

06.2021

Customer Name/Address	AIRS Hava Kalitesi Yönetim Hizmetleri Ltd Şti Ankara
Order No.	S-21-00013
Name and identity of test item	Immission (Air Quality)
The date of receipt of test item	04.03.2021 / 04.04.2021 / 04.05.2021 / 04.06.2021
Remarks	-
Date of Test	01-02-04-08.06.2021
Number of Pages of the Report	49 Pages
Test Method	TS EN 12341, EPA 40 CFR PART 50, TS 2342, TS EN 13528-1, 2, 3
Test results	The test results are given in the measurement result tables.
Environmental conditions	Environmental conditions during the measurement are given in the measurement result tables.
Measurement uncertainty	Measurement uncertainties are not given in the report since they are not requested by the customer.
Comments	-
Results obtained from the external supplier laboratory should be clearly marked.	PM ₁₀ and PM _{2.5} measurements were made by the subcontractor laboratory, and passive sampling analyzes were made by the collaborative laboratory.

SİGMA Environmental Laboratory Measurement and Analysis Services Trading Company accredited by TÜRKAK under registration number AB-1361-T for TS EN ISO/IEC 17025 as test laboratory.

Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.

Seal	Person in charge of test	Reporter and Approval
	Engin TUNCA – İmran KÖKERER Field Staff	Hakan BEDEL Laboratory Manager

S-PR65/30.09.2017/Rev02/16.07.2019

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1. INTRODUCTION

TS EN 12341 “Ambient Air - Standard Gravimetric Measurement Method for Determination of PM₁₀ and PM_{2.5} Mass Concentrations of Suspended Granular”, EPA 40 CFR Part 50 Appendix J and M “Reference Method for Determining Particulate Matter in Atmosphere as PM₁₀”, TS 2342 “Methods for The Measurement of Air Pollution Methods for The Installation and The Use of The Directional Dust Gauges The”, TS EN 13528-1 “Ambient air quality - Diffusive samplers for the determination of concentrations of gases and vapours - Requirements and test methods - Part 1: General requirements”, TS EN 13528-2 “Ambient air quality - Diffusive samplers for the determination of concentrations of gases and vapours - Requirements and test methods - Part 2: Specific requirements and test methods” and TS EN 13528-3 “Ambient air quality - Diffusive samplers for the determination of concentrations of gases and vapours - Requirements and test methods - Part 3: Guide to selection, use and maintenance” methods were used in the measurements.

2. LOCATION OF SAMPLING POINTS ON SATELLITE IMAGE

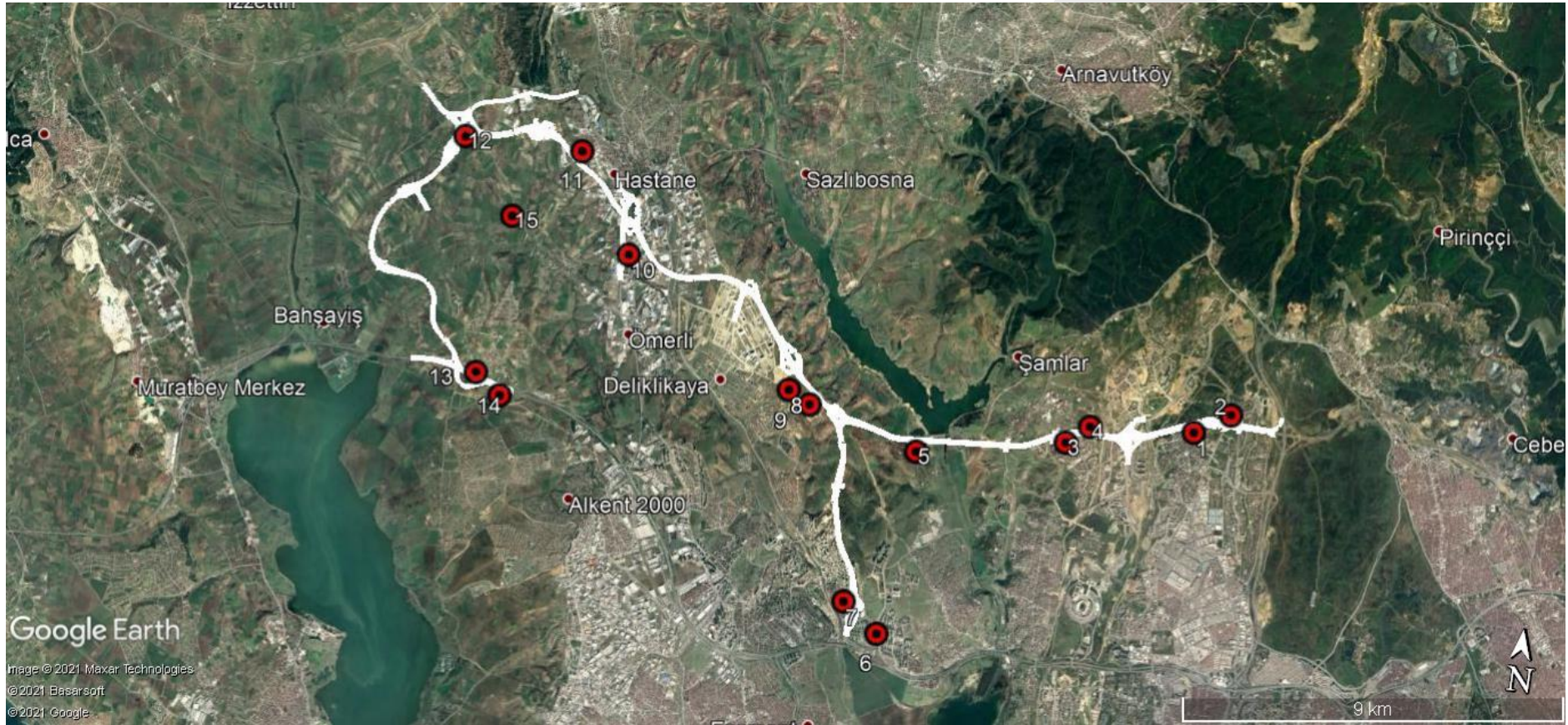


Figure 1 Sampling Points on satellite Map

3. RESULTS

Table 1 Sampling Point Coordinates and Sampling dates

Location	Coordinates		Sampling Dates	
			Parameter	
	East	North	VOC, BTEX, NO ₂ , SO ₂ Dust Deposition, VOC, BTEX, NO ₂ , SO ₂	PM ₁₀ -PM _{2.5}
1	41.114485°	28.790382°	03.02.2021 – 03.04.2021	03.02.2021 – 03.03.2021
2	41.119227°	28.800095°	03.02.2021 – 03.04.2021	03.02.2021 – 03.03.2021
3	41.108593°	28.755052°	03.02.2021 – 03.04.2021	03.02.2021 – 03.03.2021
4	41.112649°	28.761244°	03.03.2021 – 03.05.2021	03.03.2021 – 03.04.2021
5	41.102255°	28.713745°	03.03.2021 – 03.05.2021	03.03.2021 – 03.04.2021
6	41.062912°	28.709867°	03.03.2021 – 03.05.2021	03.03.2021 – 03.04.2021
7	41.068713°	28.699457°	03.03.2021 – 03.05.2021	03.03.2021 – 03.04.2021
8	41.111449°	28.675857°	03.04.2021 – 03.06.2021	03.04.2021 – 03.05.2021
9	41.108968°	28.682187°	03.04.2021 – 03.06.2021	03.04.2021 – 03.05.2021
10	41.134971°	28.625849°	03.04.2021 – 03.06.2021	03.04.2021 – 03.05.2021
11	41.155279°	28.608765°	03.04.2021 – 03.06.2021	03.04.2021 – 03.05.2021
12	41.154953°	28.575614°	03.04.2021 – 03.06.2021	03.05.2021 – 03.06.2021
13	41.105773°	28.587966°	03.04.2021 – 03.06.2021	03.05.2021 – 03.06.2021
14	41.101598°	28.595475°	03.04.2021 – 03.06.2021	03.05.2021 – 03.06.2021
15	41.139617°	28.591788°	03.04.2021 – 03.06.2021	03.05.2021 – 03.06.2021

Table 2 Results Of The Dust Deposition Measurement

Location	Parameter	Results (mg/ m ² -gün)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPOI ¹	EU	WHO	Other Guidelines
1	Dust Deposition	73.02	133.80	103.4	210	-	-	-
2		64.82	121.51	93.2				
3		59.99	115.94	88.0				
4		118.64	169.48	144.1				
5		103.14	146.45	124.8				
6		146.30	196.99	171.6				
7		134.75	174.31	154.5				
8		132.16	180.58	156.4				
9		123.05	170.61	146.8				
10		167.30	211.17	189.2				
11		92.96	127.68	110.3				
12		90.50	134.72	112.6				
13		203.75	225.64	214.7				
14		214.27	228.42	221.3				
15		95.32	121.93	108.6				

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

Table 3 Results Of The NO₂ Measurement

Location	Parameter	Results (µg/m ³)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPOI ¹	EU ²	WHO ³	Other Guidelines
1	NO ₂	33.07	32.63	32.9	40	40	40	-
2		28.76	28.40	28.6				
3		28.85	28.76	28.8				
4		36.94	32.20	34.6				
5		24.62	21.27	22.9				
6		40.99	35.82	38.4				
7		6.37	21.33	13.9				
8		24.94	21.43	23.2				
9		24.96	21.39	23.2				
10		42.79	36.59	39.7				
11		32.32	27.58	30.0				
12		28.61	24.63	26.6				
13		8.47	27.43	18.0				
14		32.12	27.80	30.0				
15		25.11	21.46	23.3				

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 4 Results of The SO₂ Measurement

Location	Parameter	Results (µg/m ³)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPOI ¹	EU ²	WHO ³	Other Guidelines
1	SO ₂	46.32	38.25	42.3	60	20	20	-
2		40.95	38.57	39.8				
3		41.13	38.32	39.7				
4		49.31	43.80	46.6				
5		33.26	29.47	31.4				
6		54.88	49.31	52.1				
7		33.28	29.41	31.3				
8		34.14	40.23	37.2				
9		34.42	39.96	37.2				
10		58.15	68.75	63.5				
11		44.08	51.89	48.0				
12		39.13	45.64	42.4				
13		43.72	51.14	47.4				
14		43.91	51.30	47.6				
15		34.02	39.82	36.9				

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC” as daily

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide” as daily

Table 5 Results Of The VOC Measurement

Location	Parameter	Results (µg/m ³)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPOI ¹	EU	WHO	Other Guidelines
1	VOC	28.76	25.28	26.99	70	-	-	-
2		22.78	21.93	22.58				
3		27.92	28.10	28.09				
4		41.47	39.24	40.37				
5		14.15	12.93	13.57				
6		30.80	27.30	29.08				
7		30.35	27.14	28.83				
8		33.79	35.70	34.83				
9		34.73	35.05	34.91				
10		36.23	38.87	37.54				
11		37.41	38.91	38.12				
12		27.82	29.34	28.63				
13		25.96	27.40	26.69				
14		26.00	27.59	26.85				
15		21.80	21.79	21.78				

¹ Limit Values Stipulated in "Regulation on the Control of Air Pollution Originating from Industry"

Table 6 Results Of The Benzene Measurement

Location	Parameter	Results (µg/m ³)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPO	EU ¹	WHO	Other Guidelines
1	Benzene	4.47	4.07	4.27	-	5	-	-
2		4.23	4.01	4.12				
3		5.21	4.78	5.00				
4		5.99	6.34	6.17				
5		3.11	2.9	3.01				
6		4.45	4.13	4.29				
7		4.37	4.08	4.23				
8		4.78	5.39	5.09				
9		5.47	5.32	5.40				
10		5.37	5.87	5.62				
11		5.51	5.79	5.65				
12		4.84	5.33	5.09				
13		4.97	5.08	5.03				
14		5.14	4.9	5.02				
15		3.82	3.97	3.90				

¹ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 7 Results Of The Toluene Measurement

Location	Parameter	Results (µg/m ³)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPO	EU	WHO ¹	Other Guidelines
1	Toluene	3.37	2.87	3.12	-	-	260	-
2		3.33	3.08	3.21				
3		4.05	4.13	4.09				
4		4.98	4.56	4.77				
5		2.62	2.21	2.42				
6		3.7	3.36	3.53				
7		3.67	3.18	3.43				
8		4.11	4.34	4.23				
9		4.25	4.32	4.29				
10		4.26	4.62	4.44				
11		4.37	4.46	4.42				
12		4.39	4	4.20				
13		3.57	3.98	3.78				
14		3.54	4.09	3.82				
15		3.16	3.01	3.09				

¹WHO WHO air quality guidelines for Europe, Chapter 5.14

Table 8 Results Of The Ethylbenzene Measurement

Location	Parameter	Results (µg/m ³)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPO	EU	WHO	Other Guidelines ¹
1	Ethylbenzene	1.55	1.3	1.43	-	-	-	350,000
2		1.39	1.34	1.37				
3		1.84	1.71	1.78				
4		2.26	2.17	2.22				
5		1.07	1.05	1.06				
6		1.67	1.43	1.55				
7		1.68	1.38	1.53				
8		1.7	1.89	1.80				
9		1.73	1.79	1.76				
10		1.93	1.97	1.95				
11		2.06	1.94	2.00				
12		1.78	1.98	1.88				
13		1.52	1.83	1.68				
14		1.61	1.68	1.65				
15		1.36	1.4	1.38				

¹OSHA PEL, NIOSH REL

Table 9 Results Of The Xylene (m,p,o) Measurement

Location	Parameter	Results (µg/m ³)			Limit Values			
		1 st Period	2 nd Period	Average	RCAPO	EU	WHO	Other Guidelines ¹
1	Xylene (m,p,o)	6.08	5.37	5.73	-	-	-	350,000
2		5.91	5.46	5.69				
3		7.3	6.95	7.13				
4		8.91	8.28	8.60				
5		4.53	4.25	4.39				
6		6.71	5.96	6.34				
7		6.58	5.73	6.16				
8		7.37	7.45	7.41				
9		7.36	7.52	7.44				
10		7.6	8.12	7.86				
11		8.02	8.38	8.20				
12		7.13	7.44	7.29				
13		6.48	6.75	6.62				
14		6.48	6.86	6.67				
15		5.54	5.49	5.52				

¹OSHA PEL, NIOSH REL

Table 10 Results Of The PM₁₀ Measurement at Location 1

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
1 st Point	PM ₁₀	3.02.2021	71.01	50	50	50
		4.02.2021	110.33			
		5.02.2021	110.14			
		6.02.2021	78.08			
		7.02.2021	83.51			
		8.02.2021	51.99			
		9.02.2021	50.18			
		10.02.2021	90.40			
		11.02.2021	36.05			
		12.02.2021	28.08			
		13.02.2021	9.60			
		14.02.2021	10.87			
		15.02.2021	10.87			
		16.02.2021	17.93			
		17.02.2021	30.62			
		18.02.2021	36.78			
		19.02.2021	62.86			
		20.02.2021	25.72			
		21.02.2021	55.98			
		22.02.2021	156.34			
		23.02.2021	55.25			
		24.02.2021	40.94			
		25.02.2021	45.65			
		26.02.2021	99.82			
		27.02.2021	32.07			
		28.02.2021	44.02			
		1.03.2021	14.49			
2.03.2021	37.50					
	Average	53.47	40	40	20	

¹ Limit Values Stipulated in "Regulation on the Control of Air Pollution Originating from Industry"

² Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

³ Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 11 Results Of The PM₁₀ Measurement at Location 2

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
2 nd Point	PM ₁₀	3.02.2021	54.89	50	50	50
		4.02.2021	78.80			
		5.02.2021	74.46			
		6.02.2021	56.34			
		7.02.2021	58.70			
		8.02.2021	37.86			
		9.02.2021	39.13			
		10.02.2021	67.75			
		11.02.2021	27.36			
		12.02.2021	20.47			
		13.02.2021	6.52			
		14.02.2021	7.61			
		15.02.2021	8.33			
		16.02.2021	13.41			
		17.02.2021	22.64			
		18.02.2021	26.45			
		19.02.2021	43.48			
		20.02.2021	17.57			
		21.02.2021	42.21			
		22.02.2021	107.79			
		23.02.2021	38.04			
		24.02.2021	28.80			
		25.02.2021	32.61			
		26.02.2021	71.74			
		27.02.2021	24.09			
		28.02.2021	30.25			
1.03.2021	9.96					
2.03.2021	27.54					
	Average	38.39	40	40	20	

¹ Limit Values Stipulated in "Regulation on the Control of Air Pollution Originating from Industry"

² Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

³ Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 12 Results Of The PM₁₀ Measurement at Location 3

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
3 rd Point	PM ₁₀	3.02.2021	54.35	50	50	50
		4.02.2021	76.99			
		5.02.2021	79.35			
		6.02.2021	59.42			
		7.02.2021	56.16			
		8.02.2021	38.04			
		9.02.2021	40.04			
		10.02.2021	67.93			
		11.02.2021	27.72			
		12.02.2021	21.92			
		13.02.2021	6.70			
		14.02.2021	8.15			
		15.02.2021	8.33			
		16.02.2021	13.41			
		17.02.2021	22.64			
		18.02.2021	26.63			
		19.02.2021	44.75			
		20.02.2021	18.66			
		21.02.2021	44.20			
		22.02.2021	112.86			
		23.02.2021	39.31			
		24.02.2021	28.26			
		25.02.2021	34.42			
		26.02.2021	78.26			
		27.02.2021	23.37			
		28.02.2021	30.62			
1.03.2021	9.78					
2.03.2021	28.80					
	Average	39.32	40	40	20	

¹ Limit Values Stipulated in "Regulation on the Control of Air Pollution Originating from Industry"

² Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

³ Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 13 Results Of The PM₁₀ Measurement at Location 4

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
4 th Point	PM ₁₀	03.03.2021	63.59	50	50	50
		04.03.2021	70.29			
		05.03.2021	36.59			
		06.03.2021	14.86			
		07.03.2021	57.61			
		08.03.2021	62.14			
		09.03.2021	45.83			
		10.03.2021	24.09			
		11.03.2021	43.3			
		12.03.2021	67.03			
		13.03.2021	77.54			
		14.03.2021	93.3			
		15.03.2021	24.09			
		16.03.2021	13.77			
		17.03.2021	29.53			
		18.03.2021	35.51			
		19.03.2021	32.43			
		20.03.2021	11.05			
		21.03.2021	30.62			
		22.03.2021	13.04			
		23.03.2021	16.3			
		24.03.2021	21.2			
		25.03.2021	36.41			
		26.03.2021	57.79			
		27.03.2021	67.21			
		28.03.2021	45.29			
		29.03.2021	37.32			
		30.03.2021	32.79			
31.03.2021	33.51					
01.04.2021	51.81					
02.04.2021	45.29					
	Average	41.65	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 14 Results Of The PM₁₀ Measurement at Location 5

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
5 th Point	PM ₁₀	3.03.2021	48.37	50	50	50
		4.03.2021	52.72			
		5.03.2021	28.26			
		6.03.2021	11.41			
		7.03.2021	43.84			
		8.03.2021	49.09			
		9.03.2021	36.05			
		10.03.2021	17.93			
		11.03.2021	36.78			
		12.03.2021	53.26			
		13.03.2021	59.06			
		14.03.2021	69.75			
		15.03.2021	18.66			
		16.03.2021	10.51			
		17.03.2021	23.01			
		18.03.2021	27.36			
		19.03.2021	26.45			
		20.03.2021	8.88			
		21.03.2021	24.46			
		22.03.2021	10.69			
		23.03.2021	12.32			
		24.03.2021	16.85			
		25.03.2021	28.62			
		26.03.2021	43.12			
		27.03.2021	50.18			
		28.03.2021	36.05			
		29.03.2021	30.43			
		30.03.2021	27.17			
31.03.2021	23.91					
01.04.2021	38.77					
02.04.2021	36.23					
	Average	32.26	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 15 Results Of The PM₁₀ Measurement at Location 6

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
6 th Point	PM ₁₀	3.03.2021	72.64	50	50	50
		4.03.2021	77.36			
		5.03.2021	40.58			
		6.03.2021	16.67			
		7.03.2021	61.78			
		8.03.2021	64.86			
		9.03.2021	50.18			
		10.03.2021	27.17			
		11.03.2021	49.82			
		12.03.2021	71.20			
		13.03.2021	83.70			
		14.03.2021	101.45			
		15.03.2021	25.54			
		16.03.2021	15.04			
		17.03.2021	33.33			
		18.03.2021	38.59			
		19.03.2021	37.14			
		20.03.2021	12.50			
		21.03.2021	32.79			
		22.03.2021	15.22			
		23.03.2021	16.85			
		24.03.2021	23.01			
		25.03.2021	43.66			
		26.03.2021	61.23			
		27.03.2021	75.00			
		28.03.2021	49.46			
		29.03.2021	40.22			
		30.03.2021	38.22			
31.03.2021	34.24					
01.04.2021	59.24					
02.04.2021	50.54					
	Average	45.78	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 16 Results Of The PM₁₀ Measurement at Location 7

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
7 th Point	PM ₁₀	3.03.2021	41.30	50	50	50
		4.03.2021	47.10			
		5.03.2021	25.00			
		6.03.2021	9.60			
		7.03.2021	36.96			
		8.03.2021	42.03			
		9.03.2021	30.07			
		10.03.2021	16.67			
		11.03.2021	30.80			
		12.03.2021	42.75			
		13.03.2021	50.36			
		14.03.2021	59.24			
		15.03.2021	15.76			
		16.03.2021	9.42			
		17.03.2021	20.65			
		18.03.2021	23.91			
		19.03.2021	21.20			
		20.03.2021	7.25			
		21.03.2021	20.65			
		22.03.2021	9.06			
		23.03.2021	10.87			
		24.03.2021	14.67			
		25.03.2021	23.91			
		26.03.2021	37.50			
		27.03.2021	46.38			
		28.03.2021	30.43			
		29.03.2021	26.27			
		30.03.2021	23.37			
31.03.2021	22.10					
01.04.2021	33.88					
02.04.2021	29.53					
	Average	27.70	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 17 Results Of The PM₁₀ Measurement at Location 8

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
8 th Point	PM ₁₀	3.04.2021	18.97	50	50	50
		4.04.2021	22.53			
		5.04.2021	73.15			
		6.04.2021	39.55			
		7.04.2021	8.95			
		8.04.2021	18.60			
		9.04.2021	18.28			
		10.04.2021	18.20			
		11.04.2021	39.55			
		12.04.2021	58.50			
		13.04.2021	43.07			
		14.04.2021	21.61			
		15.04.2021	24.75			
		16.04.2021	22.27			
		17.04.2021	18.96			
		18.04.2021	25.03			
		19.04.2021	31.62			
		20.04.2021	38.32			
		21.04.2021	41.26			
		22.04.2021	54.28			
		23.04.2021	39.23			
		24.04.2021	15.12			
		25.04.2021	25.66			
		26.04.2021	61.43			
		27.04.2021	51.02			
		28.04.2021	32.00			
		29.04.2021	63.17			
		30.04.2021	80.03			
1.05.2021	58.24					
2.05.2021	51.62					
	Average	37.17	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 18 Results Of The PM₁₀ Measurement at Location 9

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
9 th Point	PM ₁₀	3.04.2021	28.80	50	50	50
		4.04.2021	36.59			
		5.04.2021	119.20			
		6.04.2021	61.78			
		7.04.2021	13.22			
		8.04.2021	29.53			
		9.04.2021	28.08			
		10.04.2021	29.71			
		11.04.2021	60.69			
		12.04.2021	93.30			
		13.04.2021	67.93			
		14.04.2021	33.70			
		15.04.2021	38.41			
		16.04.2021	34.60			
		17.04.2021	29.53			
		18.04.2021	37.68			
		19.04.2021	50.00			
		20.04.2021	57.07			
		21.04.2021	64.67			
		22.04.2021	80.80			
		23.04.2021	56.52			
		24.04.2021	23.19			
		25.04.2021	42.03			
		26.04.2021	100.00			
		27.04.2021	83.51			
		28.04.2021	52.36			
		29.04.2021	101.81			
30.04.2021	130.62					
1.05.2021	92.93					
2.05.2021	80.98					
	Average	58.64	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 19 Results Of The PM₁₀ Measurement at Location 10

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
10 th Point	PM ₁₀	3.04.2021	30.98	50	50	50
		4.04.2021	40.76			
		5.04.2021	132.07			
		6.04.2021	70.47			
		7.04.2021	14.31			
		8.04.2021	32.25			
		9.04.2021	32.25			
		10.04.2021	32.43			
		11.04.2021	66.30			
		12.04.2021	98.37			
		13.04.2021	77.72			
		14.04.2021	36.96			
		15.04.2021	42.75			
		16.04.2021	36.96			
		17.04.2021	35.33			
		18.04.2021	42.39			
		19.04.2021	55.07			
		20.04.2021	62.14			
		21.04.2021	69.02			
		22.04.2021	92.93			
		23.04.2021	66.12			
		24.04.2021	25.54			
		25.04.2021	45.47			
		26.04.2021	103.44			
		27.04.2021	85.69			
		28.04.2021	58.51			
		29.04.2021	109.60			
		30.04.2021	141.49			
1.05.2021	100.00					
2.05.2021	89.31					
	Average	64.22	40	40	20	

¹ Limit Values Stipulated in "Regulation on the Control of Air Pollution Originating from Industry"

² Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

³ Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 20 Results Of The PM₁₀ Measurement at Location 11

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
11 th Point	PM ₁₀	3.04.2021	17.93	50	50	50
		4.04.2021	23.73			
		5.04.2021	75.36			
		6.04.2021	42.21			
		7.04.2021	8.51			
		8.04.2021	18.48			
		9.04.2021	18.84			
		10.04.2021	19.02			
		11.04.2021	38.04			
		12.04.2021	57.25			
		13.04.2021	45.11			
		14.04.2021	22.64			
		15.04.2021	23.55			
		16.04.2021	22.28			
		17.04.2021	19.02			
		18.04.2021	23.91			
		19.04.2021	32.07			
		20.04.2021	35.69			
		21.04.2021	40.94			
		22.04.2021	51.45			
		23.04.2021	38.22			
		24.04.2021	14.86			
		25.04.2021	25.00			
		26.04.2021	63.95			
		27.04.2021	53.08			
		28.04.2021	31.88			
		29.04.2021	60.51			
30.04.2021	84.06					
1.05.2021	56.16					
2.05.2021	54.71					
	Average	37.28	40	40	20	

¹ Limit Values Stipulated in "Regulation on the Control of Air Pollution Originating from Industry"

² Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

³ Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 21 Results Of The PM₁₀ Measurement at Location 12

Location	Parameter	Sampling Date	Results (µg/m ³)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
12 th Point	PM ₁₀	3.05.2021	51.27	50	50	50
		4.05.2021	61.78			
		5.05.2021	84.24			
		6.05.2021	109.78			
		7.05.2021	59.78			
		8.05.2021	25.18			
		9.05.2021	35.33			
		10.05.2021	35.33			
		11.05.2021	26.09			
		12.05.2021	37.68			
		13.05.2021	43.30			
		14.05.2021	44.20			
		15.05.2021	31.52			
		16.05.2021	50.36			
		17.05.2021	49.09			
		18.05.2021	51.99			
		19.05.2021	88.41			
		20.05.2021	25.36			
		21.05.2021	26.27			
		22.05.2021	59.42			
		23.05.2021	91.49			
		24.05.2021	50.00			
		25.05.2021	44.57			
		26.05.2021	40.22			
		27.05.2021	44.38			
		28.05.2021	26.09			
		29.05.2021	60.33			
		30.05.2021	86.96			
		31.05.2021	49.64			
		1.06.2021	40.76			
02.06.2021	39.13					
	Average	50.64	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 22 Results Of The PM₁₀ Measurement at Location 13

Location	Parameter	Sampling Date	Results (µg/m ³)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
13 th Point	PM ₁₀	3.05.2021	36.05	RCAPO ¹	EU ²	WHO ³
		4.05.2021	40.40			
		5.05.2021	58.33			
		6.05.2021	69.75			
		7.05.2021	39.31			
		8.05.2021	17.21			
		9.05.2021	22.46			
		10.05.2021	23.01			
		11.05.2021	17.57			
		12.05.2021	23.19			
		13.05.2021	28.44			
		14.05.2021	28.80			
		15.05.2021	22.64			
		16.05.2021	32.61			
		17.05.2021	30.43			
		18.05.2021	35.51			
		19.05.2021	57.79			
		20.05.2021	17.75			
		21.05.2021	16.30			
		22.05.2021	41.85			
		23.05.2021	60.51			
		24.05.2021	35.69			
		25.05.2021	31.88			
		26.05.2021	26.81			
		27.05.2021	29.89			
		28.05.2021	17.21			
		29.05.2021	39.31			
		30.05.2021	61.96			
31.05.2021	35.33					
1.06.2021	27.36					
02.06.2021	25.91					
	Average	33.91	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 23 Results Of The PM₁₀ Measurement at Location 14

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
14 th Point	PM ₁₀	3.05.2021	34.60	50	50	50
		4.05.2021	39.86			
		5.05.2021	55.07			
		6.05.2021	69.57			
		7.05.2021	40.40			
		8.05.2021	16.49			
		9.05.2021	23.55			
		10.05.2021	23.73			
		11.05.2021	18.48			
		12.05.2021	24.82			
		13.05.2021	29.35			
		14.05.2021	30.25			
		15.05.2021	21.74			
		16.05.2021	32.79			
		17.05.2021	32.43			
		18.05.2021	34.60			
		19.05.2021	56.88			
		20.05.2021	17.39			
		21.05.2021	15.94			
		22.05.2021	40.94			
		23.05.2021	57.61			
		24.05.2021	34.96			
		25.05.2021	29.89			
		26.05.2021	26.99			
		27.05.2021	28.44			
		28.05.2021	17.03			
		29.05.2021	39.13			
		30.05.2021	57.61			
31.05.2021	33.88					
1.06.2021	26.09					
02.06.2021	25.72					
	Average	33.43	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 24 Results Of The PM₁₀ Measurement at Location 15

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO ¹	EU ²	WHO ³
15 th Point	PM ₁₀	3.05.2021	30.62	50	50	50
		4.05.2021	35.51			
		5.05.2021	48.73			
		6.05.2021	64.31			
		7.05.2021	32.97			
		8.05.2021	14.31			
		9.05.2021	19.38			
		10.05.2021	20.83			
		11.05.2021	16.12			
		12.05.2021	20.83			
		13.05.2021	25.36			
		14.05.2021	27.36			
		15.05.2021	19.57			
		16.05.2021	28.26			
		17.05.2021	26.81			
		18.05.2021	28.99			
		19.05.2021	53.08			
		20.05.2021	14.31			
		21.05.2021	13.95			
		22.05.2021	34.96			
		23.05.2021	51.09			
		24.05.2021	29.35			
		25.05.2021	27.90			
		26.05.2021	23.01			
		27.05.2021	26.81			
		28.05.2021	14.49			
		29.05.2021	36.23			
		30.05.2021	55.07			
		31.05.2021	28.62			
		1.06.2021	22.83			
02.06.2021	22.46					
	Average	29.49	40	40	20	

¹ Limit Values Stipulated in “Regulation on the Control of Air Pollution Originating from Industry”

² Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

³ Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 25 Results Of The PM_{2.5} Measurement at Location 1

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
1 st Point	PM _{2.5}	3.02.2021	30.98	-	50	40
		4.02.2021	34.42			
		5.02.2021	47.64			
		6.02.2021	25.36			
		7.02.2021	28.99			
		8.02.2021	14.13			
		9.02.2021	20.65			
		10.02.2021	31.88			
		11.02.2021	15.94			
		12.02.2021	8.70			
		13.02.2021	<3.80			
		14.02.2021	<3.80			
		15.02.2021	4.71			
		16.02.2021	5.07			
		17.02.2021	8.33			
		18.02.2021	10.33			
		19.02.2021	26.63			
		20.02.2021	7.97			
		21.02.2021	23.55			
		22.02.2021	55.62			
		23.02.2021	16.49			
		24.02.2021	11.78			
		25.02.2021	15.76			
		26.02.2021	25.54			
		27.02.2021	13.41			
		28.02.2021	17.57			
		1.03.2021	5.07			
2.03.2021	15.76					
	Average	20.09	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 26 Results Of The PM_{2.5} Measurement at Location 2

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
2 nd Point	PM _{2.5}	3.02.2021	15.04	-	50	40
		4.02.2021	33.88			
		5.02.2021	22.46			
		6.02.2021	14.67			
		7.02.2021	14.13			
		8.02.2021	16.30			
		9.02.2021	15.94			
		10.02.2021	19.38			
		11.02.2021	11.41			
		12.02.2021	8.33			
		13.02.2021	<3.80			
		14.02.2021	<3.80			
		15.02.2021	<3.80			
		16.02.2021	5.62			
		17.02.2021	9.42			
		18.02.2021	11.41			
		19.02.2021	17.57			
		20.02.2021	7.07			
		21.02.2021	11.05			
		22.02.2021	43.66			
		23.02.2021	10.14			
		24.02.2021	10.51			
		25.02.2021	8.15			
		26.02.2021	31.88			
		27.02.2021	7.25			
		28.02.2021	13.95			
1.03.2021	4.53					
2.03.2021	8.51					
	Average	14.89	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 27 Results Of The PM_{2.5} Measurement at Location 3

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
3 rd Point	PM _{2.5}	3.02.2021	19.02	-	50	40
		4.02.2021	22.83			
		5.02.2021	28.99			
		6.02.2021	19.38			
		7.02.2021	20.83			
		8.02.2021	12.14			
		9.02.2021	11.59			
		10.02.2021	16.12			
		11.02.2021	6.70			
		12.02.2021	7.07			
		13.02.2021	<3.80			
		14.02.2021	<3.80			
		15.02.2021	<3.80			
		16.02.2021	3.80			
		17.02.2021	8.51			
		18.02.2021	6.34			
		19.02.2021	16.30			
		20.02.2021	4.35			
		21.02.2021	10.33			
		22.02.2021	25.00			
		23.02.2021	11.78			
		24.02.2021	7.25			
		25.02.2021	7.25			
		26.02.2021	26.99			
		27.02.2021	5.98			
		28.02.2021	10.87			
1.03.2021	<3.80					
2.03.2021	8.70					
	Average	13.26	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 28 Results Of The PM_{2.5} Measurement at Location 4

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
4 th Point	PM _{2.5}	3.03.2021	26.81	-	50	40
		4.03.2021	18.66			
		5.03.2021	13.41			
		6.03.2021	5.25			
		7.03.2021	20.83			
		8.03.2021	25.54			
		9.03.2021	20.65			
		10.03.2021	9.96			
		11.03.2021	14.86			
		12.03.2021	28.62			
		13.03.2021	21.38			
		14.03.2021	25.00			
		15.03.2021	8.33			
		16.03.2021	5.43			
		17.03.2021	9.06			
		18.03.2021	10.51			
		19.03.2021	11.41			
		20.03.2021	4.53			
		21.03.2021	11.41			
		22.03.2021	3.80			
		23.03.2021	6.70			
		24.03.2021	6.70			
		25.03.2021	13.77			
		26.03.2021	16.67			
		27.03.2021	19.57			
		28.03.2021	13.95			
		29.03.2021	14.13			
		30.03.2021	8.70			
31.03.2021	13.41					
01.04.2021	15.58					
02.04.2021	18.66					
	Average	14.30	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 29 Results Of The PM_{2.5} Measurement at Location 5

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
5 th Point	PM _{2.5}	3.03.2021	21.56	-	50	40
		4.03.2021	16.12			
		5.03.2021	10.33			
		6.03.2021	<3.80			
		7.03.2021	12.14			
		8.03.2021	15.58			
		9.03.2021	11.05			
		10.03.2021	6.52			
		11.03.2021	15.04			
		12.03.2021	13.41			
		13.03.2021	26.45			
		14.03.2021	22.28			
		15.03.2021	6.16			
		16.03.2021	<3.80			
		17.03.2021	10.87			
		18.03.2021	11.05			
		19.03.2021	10.69			
		20.03.2021	<3.80			
		21.03.2021	6.16			
		22.03.2021	3.80			
		23.03.2021	<3.80			
		24.03.2021	6.52			
		25.03.2021	10.14			
		26.03.2021	19.02			
		27.03.2021	13.95			
		28.03.2021	15.22			
		29.03.2021	12.14			
		30.03.2021	8.70			
31.03.2021	7.97					
01.04.2021	16.12					
02.04.2021	15.04					
	Average	12.74	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 30 Results Of The PM_{2.5} Measurement at Location 6

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
6 th Point	PM _{2.5}	3.03.2021	26.99	-	50	40
		4.03.2021	25.36			
		5.03.2021	17.21			
		6.03.2021	6.34			
		7.03.2021	20.29			
		8.03.2021	27.90			
		9.03.2021	15.94			
		10.03.2021	7.07			
		11.03.2021	17.21			
		12.03.2021	20.29			
		13.03.2021	34.42			
		14.03.2021	37.14			
		15.03.2021	9.60			
		16.03.2021	5.07			
		17.03.2021	13.04			
		18.03.2021	17.57			
		19.03.2021	16.49			
		20.03.2021	4.53			
		21.03.2021	13.77			
		22.03.2021	5.98			
		23.03.2021	5.25			
		24.03.2021	6.88			
		25.03.2021	19.20			
		26.03.2021	17.93			
		27.03.2021	20.11			
		28.03.2021	15.22			
		29.03.2021	16.67			
		30.03.2021	15.94			
31.03.2021	12.68					
01.04.2021	19.20					
02.04.2021	15.94					
	Average	16.36	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 31 Results of The PM_{2.5} Measurement at Location 7

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
7 th Point	PM _{2.5}	3.03.2021	15.04	-	50	40
		4.03.2021	17.21			
		5.03.2021	7.61			
		6.03.2021	4.17			
		7.03.2021	14.31			
		8.03.2021	12.14			
		9.03.2021	9.60			
		10.03.2021	5.43			
		11.03.2021	11.23			
		12.03.2021	15.76			
		13.03.2021	21.56			
		14.03.2021	18.12			
		15.03.2021	6.16			
		16.03.2021	<3.80			
		17.03.2021	6.34			
		18.03.2021	5.98			
		19.03.2021	6.34			
		20.03.2021	<3.80			
		21.03.2021	5.80			
		22.03.2021	<3.80			
		23.03.2021	<3.80			
		24.03.2021	5.07			
		25.03.2021	6.88			
		26.03.2021	13.22			
		27.03.2021	11.96			
		28.03.2021	8.51			
		29.03.2021	9.60			
		30.03.2021	9.96			
31.03.2021	7.61					
01.04.2021	13.77					
02.04.2021	11.41					
	Average	10.40	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 32 Results of The PM_{2.5} Measurement at Location 8

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
8 th Point	PM _{2.5}	3.04.2021	8.51	-	50	40
		4.04.2021	9.24			
		5.04.2021	22.28			
		6.04.2021	16.12			
		7.04.2021	<3.80			
		8.04.2021	7.79			
		9.04.2021	6.70			
		10.04.2021	7.07			
		11.04.2021	13.95			
		12.04.2021	14.49			
		13.04.2021	17.03			
		14.04.2021	5.80			
		15.04.2021	7.79			
		16.04.2021	9.24			
		17.04.2021	5.25			
		18.04.2021	8.88			
		19.04.2021	7.97			
		20.04.2021	12.14			
		21.04.2021	17.39			
		22.04.2021	13.41			
		23.04.2021	10.33			
		24.04.2021	5.07			
		25.04.2021	8.70			
		26.04.2021	21.38			
		27.04.2021	14.13			
		28.04.2021	10.14			
		29.04.2021	25.00			
		30.04.2021	35.51			
1.05.2021	18.30					
2.05.2021	14.49					
	Average	12.90	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 33 Results of The PM_{2.5} Measurement at Location 9

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
9 th Point	PM _{2.5}	3.04.2021	10.33	-	50	40
		4.04.2021	13.22			
		5.04.2021	47.46			
		6.04.2021	23.91			
		7.04.2021	4.35			
		8.04.2021	11.59			
		9.04.2021	11.59			
		10.04.2021	10.87			
		11.04.2021	16.30			
		12.04.2021	32.79			
		13.04.2021	20.11			
		14.04.2021	14.67			
		15.04.2021	12.14			
		16.04.2021	10.87			
		17.04.2021	12.32			
		18.04.2021	9.96			
		19.04.2021	12.68			
		20.04.2021	20.47			
		21.04.2021	26.81			
		22.04.2021	35.33			
		23.04.2021	25.00			
		24.04.2021	8.15			
		25.04.2021	18.30			
		26.04.2021	42.57			
		27.04.2021	26.45			
		28.04.2021	22.28			
		29.04.2021	36.59			
		30.04.2021	38.22			
1.05.2021	34.78					
2.05.2021	28.62					
	Average	21.29	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 34 Results of The PM_{2.5} Measurement at Location 10

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
10 th Point	PM _{2.5}	3.04.2021	10.87	-	50	40
		4.04.2021	14.86			
		5.04.2021	53.80			
		6.04.2021	31.34			
		7.04.2021	4.89			
		8.04.2021	8.51			
		9.04.2021	13.04			
		10.04.2021	15.22			
		11.04.2021	27.72			
		12.04.2021	40.22			
		13.04.2021	20.65			
		14.04.2021	14.86			
		15.04.2021	15.04			
		16.04.2021	14.31			
		17.04.2021	11.05			
		18.04.2021	17.75			
		19.04.2021	19.02			
		20.04.2021	21.20			
		21.04.2021	23.55			
		22.04.2021	25.72			
		23.04.2021	23.19			
		24.04.2021	10.14			
		25.04.2021	12.68			
		26.04.2021	28.62			
		27.04.2021	30.07			
		28.04.2021	25.36			
		29.04.2021	26.99			
		30.04.2021	44.93			
1.05.2021	43.12					
2.05.2021	33.33					
	Average	22.74	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 35 Results of The PM_{2.5} Measurement at Location 11

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
11 th Point	PM _{2.5}	3.04.2021	5.98	-	50	40
		4.04.2021	8.88			
		5.04.2021	29.17			
		6.04.2021	11.59			
		7.04.2021	<3.80			
		8.04.2021	8.15			
		9.04.2021	7.25			
		10.04.2021	5.62			
		11.04.2021	13.22			
		12.04.2021	25.72			
		13.04.2021	11.78			
		14.04.2021	5.62			
		15.04.2021	9.42			
		16.04.2021	5.98			
		17.04.2021	5.80			
		18.04.2021	9.60			
		19.04.2021	11.78			
		20.04.2021	13.22			
		21.04.2021	16.49			
		22.04.2021	15.76			
		23.04.2021	13.41			
		24.04.2021	4.89			
		25.04.2021	7.25			
		26.04.2021	17.93			
		27.04.2021	14.13			
		28.04.2021	9.06			
		29.04.2021	24.28			
		30.04.2021	32.25			
1.05.2021	19.38					
2.05.2021	14.49					
	Average	13.04	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 36 Results of The PM_{2.5} Measurement at Location 12

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
12 th Point	PM _{2.5}	03.05.2021	13.22	-	50	40
		04.05.2021	19.2			
		05.05.2021	23.19			
		06.05.2021	27.72			
		07.05.2021	19.75			
		08.05.2021	11.05			
		09.05.2021	10.51			
		10.05.2021	12.5			
		11.05.2021	7.61			
		12.05.2021	15.04			
		13.05.2021	10.87			
		14.05.2021	19.2			
		15.05.2021	11.59			
		16.05.2021	19.75			
		17.05.2021	15.58			
		18.05.2021	17.03			
		19.05.2021	29.35			
		20.05.2021	6.88			
		21.05.2021	7.79			
		22.05.2021	16.12			
		23.05.2021	28.8			
		24.05.2021	13.04			
		25.05.2021	12.5			
		26.05.2021	14.49			
		27.05.2021	16.85			
		28.05.2021	6.7			
		29.05.2021	23.91			
		30.05.2021	33.7			
31.05.2021	15.22					
01.06.2021	10.33					
02.06.2021	15.22					
	Average	16.28	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 37 Results of The PM_{2.5} Measurement at Location 13

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
13 th Point	PM _{2.5}	3.05.2021	8.88	-	50	40
		4.05.2021	12.68			
		5.05.2021	14.31			
		6.05.2021	27.36			
		7.05.2021	17.39			
		8.05.2021	5.43			
		9.05.2021	5.98			
		10.05.2021	9.60			
		11.05.2021	7.25			
		12.05.2021	6.34			
		13.05.2021	7.25			
		14.05.2021	9.24			
		15.05.2021	8.88			
		16.05.2021	14.31			
		17.05.2021	12.86			
		18.05.2021	10.14			
		19.05.2021	25.72			
		20.05.2021	4.17			
		21.05.2021	5.98			
		22.05.2021	12.14			
		23.05.2021	22.28			
		24.05.2021	12.32			
		25.05.2021	12.14			
		26.05.2021	7.61			
		27.05.2021	9.42			
		28.05.2021	7.25			
		29.05.2021	10.69			
		30.05.2021	22.64			
		31.05.2021	13.77			
		1.06.2021	12.50			
02.06.2021	9.78					
	Average	11.82	-	25	10	

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

Table 38 Results of The PM_{2.5} Measurement at Location 14

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
14 th Point	PM _{2.5}	3.05.2021	14.13	-	50	40
		4.05.2021	16.30			
		5.05.2021	21.74			
		6.05.2021	31.88			
		7.05.2021	12.14			
		8.05.2021	6.88			
		9.05.2021	8.70			
		10.05.2021	8.70			
		11.05.2021	4.71			
		12.05.2021	7.61			
		13.05.2021	8.33			
		14.05.2021	10.33			
		15.05.2021	7.97			
		16.05.2021	14.86			
		17.05.2021	12.14			
		18.05.2021	11.96			
		19.05.2021	24.46			
		20.05.2021	5.25			
		21.05.2021	5.80			
		22.05.2021	16.12			
		23.05.2021	21.01			
		24.05.2021	9.96			
		25.05.2021	11.78			
		26.05.2021	6.70			
		27.05.2021	10.87			
		28.05.2021	4.53			
		29.05.2021	17.03			
		30.05.2021	17.93			
		31.05.2021	9.96			
		1.06.2021	11.05			
02.06.2021	9.24					
	Average	12.26	-	25	10	

¹Limit Values Stipulated in the “EU Council Directive “2008/50/EC”

²Limit Values Stipulated in the “WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide”

Table 39 Results of The PM_{2.5} Measurement at Location 15

Location	Parameter	Sampling Date	Results ($\mu\text{g}/\text{m}^3$)	Limit Values		
				RCAPO	EU ¹	WHO ²
15 th Point	PM _{2.5}	3.05.2021	7.61	-	50	40
		4.05.2021	10.33			
		5.05.2021	17.21			
		6.05.2021	20.65			
		7.05.2021	14.31			
		8.05.2021	5.98			
		9.05.2021	6.34			
		10.05.2021	8.15			
		11.05.2021	6.34			
		12.05.2021	7.61			
		13.05.2021	10.87			
		14.05.2021	10.51			
		15.05.2021	6.70			
		16.05.2021	8.70			
		17.05.2021	11.23			
		18.05.2021	9.24			
		19.05.2021	19.02			
		20.05.2021	6.34			
		21.05.2021	4.35			
		22.05.2021	14.31			
		23.05.2021	13.22			
		24.05.2021	8.70			
		25.05.2021	11.59			
		26.05.2021	7.25			
		27.05.2021	8.33			
		28.05.2021	5.25			
		29.05.2021	8.33			
		30.05.2021	23.01			
		31.05.2021	12.86			
		1.06.2021	6.34			
02.06.2021	7.25					
	Average		10.26	-	25	10

¹Limit Values Stipulated in the "EU Council Directive "2008/50/EC"

²Limit Values Stipulated in the "WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide"

4. ACCREDITATION CERTIFICATE

	TÜRK AKREDİTASYON KURUMU
<h2>AKREDİTASYON SERTİFİKASI</h2>	
Deney Laboratuvarı olarak faaliyet gösteren,	
SİGMA ÇEVRE LABORATUVARI ÖLÇÜM VE ANALİZ HİZMETLERİ TİCARET LTD. ŞTİ.	
BARBAROS MAH. ELMAÇIÇEĞİ SOK. NO:14/A BAŞISKELE 41090 KOCAELİ / TÜRKİYE	
TÜRKAK tarafından yapılan denetim sonucunda TS EN ISO/IEC 17025:2017 Standardına göre Ek'te yer alan kapsamlarda akredite edilmiştir.	
Akreditasyon No	: AB-1361-T
Akreditasyon Tarihi	: 17 Temmuz 2018
Revizyon Tarihi / No	: 19 Nisan 2021 / 02
Bu Sertifika, yukarıda açık adı ve adresi yazılı Kuruluşun TS EN ISO/IEC 17025:2017 Standardına, ilgili Yönetmelik ve Tebliğlere uygunluğunu sürdürmesi halinde, 16 Temmuz 2022 tarihine kadar geçerlidir.	
	 G. Banu MÜDERRİSOĞLU Genel Sekreter
Türk Akreditasyon Kurumu (TÜRKAK) ISO/IEC 17025 alanında Avrupa Akreditasyon Birliği (EA) ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile çok taraflı anlaşma (MLA/MRA) imzalamıştır.	