

## ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

# ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148673**

Date Received : Jan 24, 2022

Date Reported : Feb 01, 2022

Report Number: 2183030-1

Page 1 of 1

<b>Sample Description</b>	Air Quality				
<b>Location</b>	วัดคลองเข่ง (A1) (GPS 47P 0701612, 1593740)				
<b>Date Analysis Commenced</b>	Jan 26, 2022				
<b>Condition of Sample</b>	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
21148673-1	Jan 14 - Jan 15, 2022	0.166	0.075	759	33
21148673-2	Jan 15 - Jan 16, 2022	0.177	0.077	759	33
21148673-3	Jan 16 - Jan 17, 2022	0.162	0.087	759	34
21148673-4	Jan 17 - Jan 18, 2022	0.189	0.092	759	34
21148673-5	Jan 18 - Jan 19, 2022	0.152	0.063	759	34
21148673-6	Jan 19 - Jan 20, 2022	0.199	0.073	759	34
21148673-7	Jan 20 - Jan 21, 2022	0.132	0.059	759	33
<b>Guideline</b>		0.33	0.12	-	-

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

**Sampled By :** Winyou Boontana

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148673**

Date Received : Jan 24, 2022

Date Reported : Feb 01, 2022

Report Number: 2220-PPf1

Page 1 of 1

<b>Sample Description</b>	Air Quality				
<b>Location</b>	บ้านบัวลอย 276 QS 4PQ 05-8952, 19-42417				
<b>Date Analysis Commenced</b>	Jan 25, 2022				
<b>Condition of Sample</b>	Drawn into one glass (filter paper 6x10 inch) placed in plastic bag and one quartz (filter paper 6x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (µg/m <sup>3</sup> )	Particulate Matter (PM <sub>10</sub> ) (µg/m <sup>3</sup> )	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
211485P3f8	Jan 14 - Jan 19, 2022	0.124	0.05P	P9-	33
211485P3f-	Jan 19 - Jan 15, 2022	0.115	0.053	P9-	33
211485P3f10	Jan 15 - Jan 1P, 2022	0.133	0.080	P9-	34
211485P3f11	Jan 1P - Jan 18, 2022	0.153	0.102	P9-	34
211485P3f12	Jan 18 - Jan 1-, 2022	0.11-	0.05P	P9-	34
211485P3f13	Jan 1- - Jan 20, 2022	0.124	0.051	P9-	34
211485P3f14	Jan 20 - Jan 21, 2022	0.0-1	0.054	P9-	33
<b>Guideline</b>		0.33	0.12	f	f

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 90 Appendix B

Particulate Matter (PM<sub>10</sub>) : US EPA 40 CFR Part 90 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 B.E.294P7 dated September 22, 2004

**Sampled By :** Winyou Boontana

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist #7

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21148673**

Date Received : Jan 24, 2022

Date Reported : Feb 01, 2022

Report Number: 2220-P8f1

Page 1 of 1

<b>Sample Description</b>	Air ) uality				
<b>Location</b>	วัดท่าช้าง GA37 QS 4PQ 0P01331, 15- 55- 47				
<b>Date Analysis Commenced</b>	Jan 29, 2022				
<b>Condition of Sample</b>	Drawn into one glass (ilter paper 6x10 inch7 placed in plastic bag and one quartz (ilter paper 6x10 inch7 placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate Gng/m37	Particulate Matter Gmf107 Gng/m37	Barometric Pressure Gng Hg7	Atmospheric Temperature GC7
211489P3f15	Jan 14 f Jan 15, 2022	0.14-	0.0P5	P5-	33
211489P3f19	Jan 15 f Jan 19, 2022	0.15-	0.088	P5-	33
211489P3f1P	Jan 19 f Jan 1P, 2022	0.188	0.0- 4	P5-	34
211489P3f18	Jan 1P f Jan 18, 2022	0.18P	0.0- 4	P5-	34
211489P3f1-	Jan 18 f Jan 1-, 2022	0.155	0.05-	P5-	34
211489P3f20	Jan 1- f Jan 20, 2022	0.143	0.095	P5-	34
211489P3f21	Jan 20 f Jan 21, 2022	0.159	0.0P-	P5-	33
<b>Guideline</b>		0.33	0.12	f	f

### Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter Gmf107 : US EPA 40 CFR Part 50 Appendix J

**Guideline :** Notification of the National Environmental Board. No.24, 2004 B.E.254P7 dated September 22, 2004

**Sampled By :** Winyou Boontana

Approved by

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Saranya Chalermthamrong  
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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21148670**

Date Received : Jan 24, 2022

Date Reported : Jan 28, 2022

Report Number: 2183027-1

Page 1 of 1

**Sample Description** Air Quality  
**Location** วัดร่องแซง (A1) (GPS 47P 0701612, 1593740)  
**Parameter** Nitrogen dioxide (ppm)  
**Measurement Date** Jan 14, 2022 - Jan 21, 2022  
**Measurement by** Winyou Boontana

	21148670-1 Jan 14, 2022	21148670-2 Jan 15, 2022	21148670-3 Jan 16, 2022	21148670-4 Jan 17, 2022	21148670-5 Jan 18, 2022	21148670-6 Jan 19, 2022	21148670-7 Jan 20, 2022
Time							
12:00 PM - 01:00 PM	0.038	0.008	0.007	0.032	0.012	0.012	0.011
01:00 PM - 02:00 PM	0.036	0.008	0.006	0.023	0.012	0.010	0.010
02:00 PM - 03:00 PM	0.010	0.009	0.007	0.016	0.010	0.008	0.008
03:00 PM - 04:00 PM	0.012	0.008	0.006	0.012	0.010	0.011	0.011
04:00 PM - 05:00 PM	0.016	0.011	0.010	0.011	0.011	0.016	0.012
05:00 PM - 06:00 PM	0.024	0.016	0.014	0.026	0.016	0.017	0.016
06:00 PM - 07:00 PM	0.027	0.029	0.019	0.027	0.030	0.029	0.026
07:00 PM - 08:00 PM	0.050	0.060	0.029	0.042	0.050	0.040	0.038
08:00 PM - 09:00 PM	0.043	0.042	0.043	0.041	0.060	0.041	0.041
09:00 PM - 10:00 PM	0.035	0.045	0.038	0.055	0.029	0.040	0.040
10:00 PM - 11:00 PM	0.042	0.042	0.034	0.056	0.024	0.036	0.035
11:00 PM - 12:00 AM	0.043	0.037	0.039	0.053	0.019	0.037	0.031
12:00 AM - 01:00 AM	0.032	0.028	0.039	0.046	0.018	0.034	0.026
01:00 AM - 02:00 AM	0.020	0.029	0.034	0.043	0.024	0.029	0.024
02:00 AM - 03:00 AM	0.020	0.021	0.029	0.040	0.027	0.025	0.022
03:00 AM - 04:00 AM	0.026	0.018	0.028	0.033	0.020	0.024	0.016
04:00 AM - 05:00 AM	0.026	0.024	0.025	0.027	0.013	0.026	0.018
05:00 AM - 06:00 AM	0.018	0.031	0.030	0.028	0.012	0.023	0.020
06:00 AM - 07:00 AM	0.021	0.028	0.032	0.031	0.015	0.021	0.017
07:00 AM - 08:00 AM	0.021	0.021	0.024	0.031	0.021	0.015	0.023
08:00 AM - 09:00 AM	0.022	0.022	0.022	0.034	0.028	0.022	0.023
09:00 AM - 10:00 AM	0.034	0.034	0.038	0.038	0.026	0.029	0.018
10:00 AM - 11:00 AM	0.030	0.013	0.031	0.030	0.021	0.029	0.017
11:00 AM - 12:00 PM	0.009	0.008	0.016	0.013	0.016	0.013	0.013
Average	0.027	0.025	0.025	0.033	0.022	0.025	0.021
1hr - Maximum	0.050	0.060	0.043	0.056	0.060	0.041	0.041
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21148670**

Date Received : Jan 24, 2022

Date Reported : Jan 28, 2022

Report Number: 2218780-1

Page 1 of 1

<b>Sample Description</b>	Air Quality						
<b>Location</b>	บ้านบัวลอย (A2) (GPS 46P 0578952, 1974241)						
<b>Parameter</b>	Nitrogen dioxide (ppm)						
<b>Measurement Date</b>	Jan 14, 2022 - Jan 21, 2022						
<b>Measurement by</b>	Winyou Boontana						
	21148560-8	21148560-7	21148560-10	21148560-11	21148560-12	21148560-13	21148560-14
Time	Jan 14, 2022	Jan 19, 2022	Jan 15, 2022	Jan 16, 2022	Jan 18, 2022	Jan 17, 2022	Jan 20, 2022
10:00 AM - 11:00 AM	0.015	0.017	0.017	0.029	0.024	0.020	0.023
11:00 AM - 12:00 PM	0.015	0.014	0.020	0.024	0.024	0.020	0.020
12:00 PM - 01:00 PM	0.015	0.012	0.021	0.024	0.023	0.017	0.016
01:00 PM - 02:00 PM	0.023	0.013	0.017	0.023	0.024	0.020	0.015
02:00 PM - 03:00 PM	0.029	0.014	0.016	0.023	0.025	0.029	0.019
03:00 PM - 04:00 PM	0.025	0.013	0.016	0.023	0.020	0.028	0.016
04:00 PM - 09:00 PM	0.025	0.013	0.018	0.023	0.020	0.029	0.015
09:00 PM - 05:00 PM	0.025	0.019	0.018	0.023	0.020	0.024	0.018
05:00 PM - 06:00 PM	0.024	0.018	0.020	0.026	0.029	0.025	0.022
06:00 PM - 08:00 PM	0.025	0.023	0.021	0.032	0.033	0.029	0.022
08:00 PM - 07:00 PM	0.020	0.021	0.022	0.028	0.030	0.022	0.022
07:00 PM - 10:00 PM	0.016	0.017	0.018	0.024	0.024	0.022	0.022
10:00 PM - 11:00 PM	0.015	0.018	0.019	0.024	0.020	0.017	0.029
11:00 PM - 12:00 AM	0.020	0.023	0.020	0.023	0.018	0.016	0.022
12:00 AM - 01:00 AM	0.017	0.020	0.021	0.029	0.017	0.018	0.022
01:00 AM - 02:00 AM	0.019	0.020	0.016	0.024	0.021	0.017	0.021
02:00 AM - 03:00 AM	0.013	0.018	0.015	0.021	0.020	0.015	0.018
03:00 AM - 04:00 AM	0.013	0.014	0.019	0.018	0.016	0.019	0.016
04:00 AM - 09:00 AM	0.012	0.015	0.014	0.017	0.019	0.019	0.015
09:00 AM - 05:00 AM	0.011	0.021	0.014	0.020	0.019	0.014	0.019
05:00 AM - 06:00 AM	0.011	0.024	0.015	0.018	0.016	0.013	0.019
06:00 AM - 08:00 AM	0.014	0.022	0.013	0.020	0.017	0.010	0.014
08:00 AM - 07:00 AM	0.014	0.024	0.012	0.017	0.020	0.013	0.014
07:00 AM - 10:00 AM	0.016	0.019	0.019	0.022	0.020	0.016	0.015
Average	0.018	0.018	0.016	0.023	0.021	0.017	0.017
1hr - Maximum	0.025	0.024	0.022	0.032	0.033	0.028	0.029
Standard 1hr - Average	0.160	0.160	0.160	0.160	0.160	0.160	0.160

Standard : Notification of the National Environment Board No. 33, 2007 (B.E. 2992).

Reference Method : US EPA Method Part 90 App. F (Chemiluminescence)

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148670**

Date Received : Jan 24, 2022

Date Reported : Jan 28, 2022

Report Number: 2218982-1

Page 1 of 1

<b>Sample Description</b>	Air Quality						
<b>Location</b>	วัดท่าช้าง (A3) (GPS 47P 0701331, 1595594)						
<b>Parameter</b>	Nitrogen dioxide (ppm)						
<b>Measurement Date</b>	Jan 14, 2022 - Jan 21, 2022						
<b>Measurement by</b>	Winyou Boontana						
	21148670-15	21148670-16	21148670-17	21148670-18	21148670-19	21148670-20	21148670-21
Time	Jan 14, 2022	Jan 15, 2022	Jan 16, 2022	Jan 17, 2022	Jan 18, 2022	Jan 19, 2022	Jan 20, 2022
11:00 AM - 12:00 PM	0.004	0.003	0.003	0.003	<0.001	0.002	0.005
12:00 PM - 01:00 PM	0.006	0.003	0.003	<0.001	0.002	0.004	0.003
01:00 PM - 02:00 PM	0.005	0.003	0.002	0.001	0.001	0.004	0.002
02:00 PM - 03:00 PM	0.007	0.003	0.002	0.001	0.002	0.004	0.002
03:00 PM - 04:00 PM	0.009	0.003	0.002	<0.001	0.001	0.003	0.002
04:00 PM - 05:00 PM	0.009	0.003	0.003	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.005	0.004	0.003	0.002	0.003	0.003	0.002
06:00 PM - 07:00 PM	0.007	0.005	0.003	0.002	0.002	0.004	0.004
07:00 PM - 08:00 PM	0.008	0.005	0.004	0.003	0.002	0.007	0.007
08:00 PM - 09:00 PM	0.008	0.006	0.005	0.004	0.004	0.007	0.012
09:00 PM - 10:00 PM	0.007	0.007	0.004	0.004	0.006	0.009	0.014
10:00 PM - 11:00 PM	0.006	0.007	0.004	0.004	0.006	0.013	0.011
11:00 PM - 12:00 AM	0.005	0.006	0.004	0.004	0.003	0.012	0.009
12:00 AM - 01:00 AM	0.004	0.005	0.004	0.003	0.002	0.012	0.007
01:00 AM - 02:00 AM	0.003	0.004	0.005	0.003	0.002	0.011	0.007
02:00 AM - 03:00 AM	0.003	0.004	0.006	0.002	0.003	0.010	0.006
03:00 AM - 04:00 AM	0.003	0.004	0.005	0.001	0.001	0.010	0.006
04:00 AM - 05:00 AM	0.002	0.004	0.004	0.001	0.001	0.010	0.005
05:00 AM - 06:00 AM	0.002	0.005	0.004	0.001	<0.001	0.009	0.005
06:00 AM - 07:00 AM	0.002	0.004	0.005	<0.001	<0.001	0.008	0.004
07:00 AM - 08:00 AM	0.002	0.004	0.006	<0.001	<0.001	0.007	0.005
08:00 AM - 09:00 AM	0.002	0.005	0.005	<0.001	<0.001	0.007	0.008
09:00 AM - 10:00 AM	0.003	0.004	0.004	0.002	0.001	0.011	0.008
10:00 AM - 11:00 AM	0.003	0.004	0.003	<0.001	0.002	0.011	0.006
Average	0.005	0.004	0.004	0.002	0.002	0.007	0.006
1hr - Maximum	0.009	0.007	0.006	0.004	0.006	0.013	0.014
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

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## Analysis / Test Report

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

P/O :

Project Name : Environmental Testing

Project Location :

Lot ID : 21148674

Date Received : Jan 24, 2022

Date Reported : Jan 26, 2022

Report Number : 2183031-1

Page 1 of 2

Sample Number 21148674-1 to 7  
Parameter Wind Speed / Wind Direction  
Location วัดร่องแซง (A1) (GPS 47P 0701612, 1593740)  
Sampling Date Jan 14 - Jan 21, 2022  
Sampling by Winyou Boontana

Time	Jan 14 - Jan 15, 2022			Jan 15 - Jan 16, 2022			Jan 16 - Jan 17, 2022			Jan 17 - Jan 18, 2022			Jan 18 - Jan 19, 2022			Jan 19 - Jan 20, 2022			Jan 20 - Jan 21, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	0.2	-	-	1.8	213.0	SSW	2.8	229.0	SW	0.5	236.0	SW	1.2	324.0	NW	0.6	344.0	NNW	1.1	206.0	SSW
01:00 PM - 02:00 PM	0.4	165.0	SSE	0.9	97.0	E	0.9	103.0	ESE	2.2	280.0	W	0.2	-	-	0.7	148.0	SSE	0.7	137.0	SE
02:00 PM - 03:00 PM	0.7	189.0	S	1.1	150.0	SSE	0.5	182.0	S	1.1	225.0	SW	0.8	198.0	SSW	0.0	-	-	1.0	18.0	NNE
03:00 PM - 04:00 PM	0.3	114.0	ESE	2.7	223.0	SW	0.1	-	-	0.5	0.0	N	0.7	221.0	SW	0.0	-	-	2.1	241.0	WSW
04:00 PM - 05:00 PM	0.6	264.0	W	0.4	122.0	ESE	0.4	142.0	SE	1.4	213.0	SSW	0.0	-	-	2.5	218.0	SW	0.4	167.0	SSE
05:00 PM - 06:00 PM	0.0	-	-	1.5	221.0	SW	0.8	229.0	SW	0.0	-	-	0.9	229.0	SW	0.2	-	-	0.0	-	-
06:00 PM - 07:00 PM	0.5	214.0	SW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	1.4	233.0	SW	0.0	-	-
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.8	218.0	SW
08:00 PM - 09:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.3	238.0	WSW	0.3	295.0	WNW	0.0	-	-	0.3	224.0	SW
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-
10:00 PM - 11:00 PM	0.0	-	-	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-
11:00 PM - 12:00 AM	0.3	139.0	SE	0.3	151.0	SSE	0.0	-	-	0.1	-	-	0.0	-	-	0.0	-	-	0.1	-	-
12:00 AM - 01:00 AM	0.1	-	-	0.3	105.0	ESE	0.5	226.0	SW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.4	3.0	N	0.0	-	-	0.1	-	-
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.3	17.0	NNE	0.0	-	-	0.2	-	-
03:00 AM - 04:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.5	123.0	ESE	0.0	-	-	0.4	106.0	ESE
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.5	353.0	N	0.1	-	-	0.0	-	-	1.1	66.0	ENE
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.4	359.0	N	0.0	-	-	0.2	-	-	0.0	-	-	0.4	359.0	N
07:00 AM - 08:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.1	-	-
08:00 AM - 09:00 AM	0.2	-	-	0.1	-	-	0.0	-	-	0.3	124.0	SE	0.5	9.0	N	0.0	-	-	0.0	-	-
09:00 AM - 10:00 AM	2.0	91.0	E	1.0	185.0	S	0.3	359.0	N	0.0	-	-	0.2	-	-	0.4	85.0	E	0.5	42.0	NE
10:00 AM - 11:00 AM	0.5	22.0	NNE	1.6	224.0	SW	0.5	4.0	N	0.3	315.0	NW	2.1	46.0	NE	0.3	97.0	E	0.3	25.0	NNE
11:00 AM - 12:00 PM	0.2	-	-	0.9	109.0	ESE	0.5	326.0	NW	1.5	35.0	NE	0.7	26.0	NNE	0.5	87.0	E	0.2	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

P/O :

Project Name : Environmental Testing

Project Location :

Lot ID : 21148674

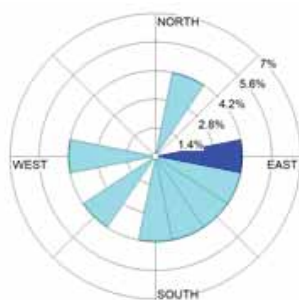
Date Received : Jan 24, 2022

Date Reported : Jan 26, 2022

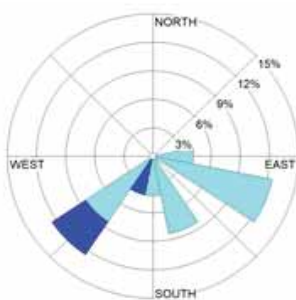
Report Number : 2183031-1

Page 2 of 2

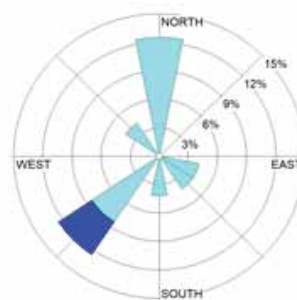
### Wind Rose



Date : Jan 14-15, 2022



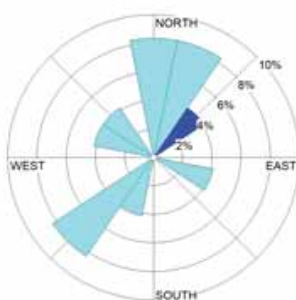
Date : Jan 15-16, 2022



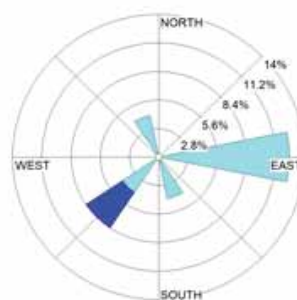
Date : Jan 16-17, 2022



Date : Jan 17-18, 2022



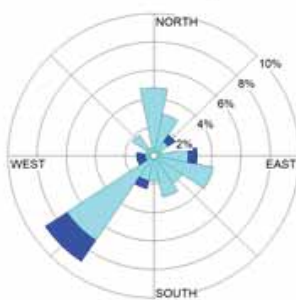
Date : Jan 18-19, 2022



Date : Jan 19-20, 2022



Date : Jan 20-21, 2022



Date : Jan 14-21, 2022

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	4.76
0.3-1.7	36.31
Calms	58.93

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Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

P/O :

Project Name : Environmental Tesing

Project Location :

Lot ID : 21148674

Date Received : Jan 24, 2022

Date Reported : Jan 26, 2022

Report Number : 2183031-1

Page 1 of 2

Sample Number 21148674-8 to 14  
Parameter Wind Speed / Wind Direction  
Location บ้านบัวลอย (A2) (GPS 47P 0698562, 1594241)  
Sampling Date Jan 14 - Jan 21, 2022  
Sampling by Winyou Boontana

Time	Jan 14 - Jan 15, 2022			Jan 15 - Jan 16, 2022			Jan 16 - Jan 17, 2022			Jan 17 - Jan 18, 2022			Jan 18 - Jan 19, 2022			Jan 19 - Jan 20, 2022			Jan 20 - Jan 21, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	1.1	334.0	NNW	0.4	150.0	SSE	1.7	168.0	SSE	0.6	11.0	N	0.0	-	-	2.7	10.0	N	2.3	208.0	SSW
11:00 AM - 12:00 PM	3.1	121.0	ESE	2.8	163.0	SSE	2.4	201.0	SSW	0.2	-	-	0.0	-	-	0.5	84.0	E	1.1	130.0	SE
12:00 PM - 01:00 PM	2.5	171.0	S	2.1	167.0	SSE	1.4	124.0	SE	1.9	359.0	N	0.0	-	-	0.0	-	-	3.4	205.0	SSW
01:00 PM - 02:00 PM	1.8	152.0	SSE	0.1	-	-	1.4	191.0	S	0.3	180.0	S	0.0	-	-	0.6	121.0	ESE	1.1	163.0	SSE
02:00 PM - 03:00 PM	1.6	186.0	S	1.7	148.0	SSE	0.5	195.0	SSW	1.1	170.0	S	0.4	170.0	S	0.0	-	-	2.3	160.0	SSE
03:00 PM - 04:00 PM	3.2	165.0	SSE	2.0	159.0	SSE	0.3	0.0	N	0.4	113.0	ESE	2.5	209.0	SSW	0.7	143.0	SE	1.2	182.0	S
04:00 PM - 05:00 PM	1.3	165.0	SSE	1.5	190.0	S	0.4	213.0	SSW	1.0	197.0	SSW	1.3	173.0	S	1.1	198.0	SSW	1.2	137.0	SE
05:00 PM - 06:00 PM	1.1	196.0	SSW	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.8	171.0	S
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
07:00 PM - 08:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
08:00 PM - 09:00 PM	0.3	359.0	N	0.1	-	-	0.4	5.0	N	0.0	-	-	0.8	21.0	NNE	0.0	-	-	0.5	167.0	SSE
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.3	2.0	N	1.2	9.0	N	0.0	-	-	0.5	136.0	SE
10:00 PM - 11:00 PM	0.0	-	-	0.3	29.0	NNE	0.0	-	-	0.0	-	-	0.9	16.0	NNE	0.0	-	-	0.4	126.0	SE
11:00 PM - 12:00 AM	0.3	135.0	SE	0.9	127.0	SE	0.9	2.0	N	0.0	-	-	2.0	6.0	N	0.0	-	-	1.2	119.0	ESE
12:00 AM - 01:00 AM	0.2	-	-	0.7	104.0	ESE	0.2	-	-	0.0	-	-	0.6	8.0	N	0.5	359.0	N	0.9	145.0	SE
01:00 AM - 02:00 AM	0.1	-	-	0.0	-	-	0.9	124.0	SE	0.0	-	-	0.7	359.0	N	0.0	-	-	0.7	154.0	SSE
02:00 AM - 03:00 AM	0.3	154.0	SSE	0.0	-	-	0.6	167.0	SSE	0.0	-	-	2.0	359.0	N	0.7	0.0	N	0.7	121.0	ESE
03:00 AM - 04:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.4	359.0	N	0.0	-	-	0.4	133.0	SE	0.0	-	-
04:00 AM - 05:00 AM	0.3	359.0	N	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.6	136.0	SE
05:00 AM - 06:00 AM	0.2	-	-	0.0	-	-	0.0	-	-	0.6	359.0	N	1.2	3.0	N	0.0	-	-	1.4	124.0	SE
06:00 AM - 07:00 AM	0.8	357.0	N	0.0	-	-	0.0	-	-	0.0	-	-	1.9	16.0	NNE	0.0	-	-	1.9	1.0	N
07:00 AM - 08:00 AM	0.0	-	-	0.7	8.0	N	0.0	-	-	0.0	-	-	0.7	21.0	NNE	0.2	-	-	0.0	-	-
08:00 AM - 09:00 AM	0.7	7.0	N	0.4	354.0	N	0.2	-	-	0.0	-	-	2.3	359.0	N	0.6	172.0	S	0.3	359.0	N
09:00 AM - 10:00 AM	1.3	178.0	S	0.4	1.0	N	0.3	346.0	NNW	0.0	-	-	2.3	35.0	NE	1.2	0.0	N	0.2	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittrantont  
Assistant General Manager



## Analysis / Test Report

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

P/O :

Project Name : Environmental Tesing

Project Location :

Lot ID : 21148674

Date Received : Jan 24, 2022

Date Reported : Jan 26, 2022

Report Number : 2183031-1

Page 2 of 2

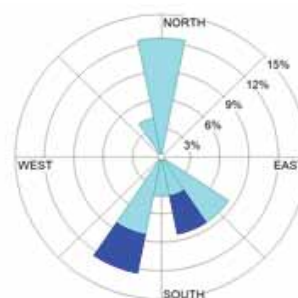
### Wind Rose



Date : Jan 14-15, 2022



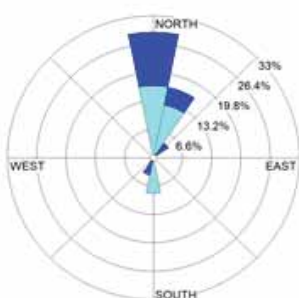
Date : Jan 15-16, 2022



Date : Jan 16-17, 2022



Date : Jan 17-18, 2022



Date : Jan 18-19, 2022



Date : Jan 19-20, 2022



Date : Jan 20-21, 2022



Date : Jan 14-21, 2022

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	12.50
0.3-1.7	41.66
Calms	45.24

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Approved by

Sarayuth Jitranont  
Assistant General Manager



## Analysis / Test Report

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

P/O :

Project Name : Environmental Tesing

Project Location :

Lot ID : 21148674

Date Received : Jan 24, 2022

Date Reported : Jan 26, 2022

Report Number : 2183031-1

Page 1 of 2

Sample Number 21148674-15 to 21  
Parameter Wind Speed / Wind Direction  
Location วัดท่าช้าง (A3) (GPS 47P 0701331, 1595594)  
Sampling Date Jan 14 - Jan 21, 2022  
Sampling by Winyou Boontana

Time	Jan 14 - Jan 15, 2022			Jan 15 - Jan 16, 2022			Jan 16 - Jan 17, 2022			Jan 17 - Jan 18, 2022			Jan 18 - Jan 19, 2022			Jan 19 - Jan 20, 2022			Jan 20 - Jan 21, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	0.1	-	-	0.0	-	-	1.3	242.0	WSW	1.8	38.0	NE	1.0	59.0	ENE	0.6	26.0	NNE	0.3	178.0	S
12:00 PM - 01:00 PM	1.4	232.0	SW	0.6	263.0	W	0.0	-	-	0.9	64.0	ENE	0.7	288.0	WNW	1.0	20.0	NNE	1.8	190.0	S
01:00 PM - 02:00 PM	2.0	200.0	SSW	0.5	205.0	SSW	0.0	-	-	0.4	67.0	ENE	1.5	287.0	WNW	0.0	-	-	0.6	200.0	SSW
02:00 PM - 03:00 PM	1.0	207.0	SSW	0.2	-	-	0.6	60.0	ENE	0.0	-	-	1.2	297.0	WNW	0.1	-	-	1.0	198.0	SSW
03:00 PM - 04:00 PM	0.0	-	-	0.4	217.0	SW	1.2	267.0	W	0.6	285.0	WNW	0.9	288.0	WNW	1.5	167.0	SSE	1.3	180.0	S
04:00 PM - 05:00 PM	0.5	185.0	S	0.1	-	-	1.0	246.0	WSW	0.3	190.0	S	1.5	180.0	S	0.4	164.0	SSE	2.0	168.0	SSE
05:00 PM - 06:00 PM	0.9	195.0	SSW	0.0	-	-	0.5	238.0	WSW	0.5	242.0	WSW	0.4	232.0	SW	0.8	169.0	S	0.2	-	-
06:00 PM - 07:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
07:00 PM - 08:00 PM	0.0	-	-	0.1	-	-	0.0	-	-	0.1	-	-	0.1	-	-	0.0	-	-	0.0	-	-
08:00 PM - 09:00 PM	0.0	-	-	0.2	-	-	0.0	-	-	0.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-
09:00 PM - 10:00 PM	0.0	-	-	0.0	-	-	0.0	-	-	0.6	310.0	NW	0.5	46.0	NE	0.1	-	-	1.6	171.0	S
10:00 PM - 11:00 PM	0.2	-	-	0.2	-	-	0.0	-	-	0.2	-	-	0.2	-	-	0.1	-	-	0.0	-	-
11:00 PM - 12:00 AM	0.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-	0.0	-	-	0.0	-	-
12:00 AM - 01:00 AM	0.3	175.0	S	0.1	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.3	145.0	SE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
02:00 AM - 03:00 AM	0.1	-	-	0.1	-	-	1.0	146.0	SE	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
03:00 AM - 04:00 AM	0.0	-	-	0.0	-	-	0.2	-	-	0.2	-	-	0.3	169.0	S	0.0	-	-	0.0	-	-
04:00 AM - 05:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.1	-	-	0.1	-	-	0.1	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.1	-	-	0.3	125.0	SE	0.1	-	-	0.0	-	-	0.1	-	-	0.1	-	-	0.0	-	-
06:00 AM - 07:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.1	-	-	0.0	-	-	0.1	-	-
07:00 AM - 08:00 AM	0.0	-	-	0.0	-	-	0.5	307.0	NW	0.0	-	-	0.3	36.0	NE	0.0	-	-	0.2	-	-
08:00 AM - 09:00 AM	0.1	-	-	0.0	-	-	0.2	-	-	0.1	-	-	1.7	30.0	NNE	0.0	-	-	0.0	-	-
09:00 AM - 10:00 AM	0.0	-	-	1.6	164.0	SSE	0.2	-	-	0.5	150.0	SSE	2.2	45.0	NE	0.3	183.0	S	0.0	-	-
10:00 AM - 11:00 AM	1.4	171.0	S	0.9	224.0	SW	0.7	165.0	SSE	0.2	-	-	1.6	28.0	NNE	1.4	60.0	ENE	0.1	-	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittrantont  
Assistant General Manager





## Analysis / Test Report

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

P/O :

Project Name : Environmental Testing

Project Location :

Lot ID : 21148674

Date Received : Jan 24, 2022

Date Reported : Jan 26, 2022

Report Number : 2183031-1

Page 2 of 2

### Wind Rose



Date : Jan 14-15, 2022



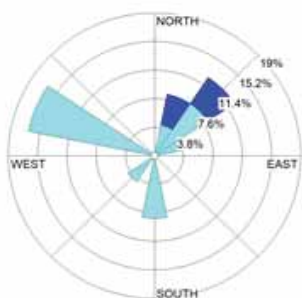
Date : Jan 15-16, 2022



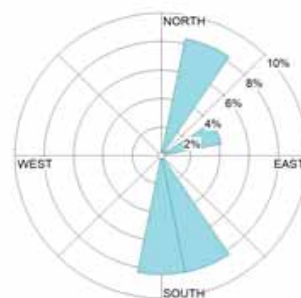
Date : Jan 16-17, 2022



Date : Jan 17-18, 2022



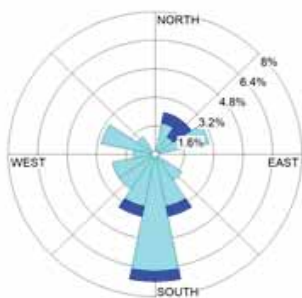
Date : Jan 18-19, 2022



Date : Jan 19-20, 2022



Date : Jan 20-21, 2022



Date : Jan 14-21, 2022

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	3.57
0.3-1.7	30.36
Calms	66.07

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Sarayuth Jitranont  
Assistant General Manager

# ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบาย



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148783**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183073-1

Page 1 of 1

**Sample Number** 21148783-1  
**Sampled Date** Jan 20, 2022  
**Sample Description** Emission from Stationary Source  
**Location** Bag House 1 (1BH-1) : MCL1  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	760	mmHg	Diameter	1.50	m	Oxygen	20.9	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	%
Type of Process	Process		Stack Temperature	44.9	°C	Gas Velocity	11.5	m/s
Type of Fuel	-		Moisture	2.14	%	Flow Rate (Actual O2)	66876	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	09:10 AM - 09:58 AM	mg/m3	-	0.5	1.4	40	120	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2554)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4717

**Approved by**

*Kanok Korn Anek*  
Kanok Korn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148785**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183078-1

Page 1 of 1

**Sample Number** 2114878H-1  
**Sampled Date** Jan 20, 2022  
**Sample Description** Emission from Stationary Source  
**Location** Bag (ouse 2 )1B(-26: MCL1  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	700	mm( g	Diameter	1.H0	m	%xygen	20.0	9
Ambient Temperature	32.0	FC	Shape	Circle		Carbon Dioxide	0.0	9
Type of Process	Process		Stack Temperature	43.2	FC	Gas Velocity	4.3	m/s
Type of Fuel	-		Moisture	2.02	9	Slow Rate )Actual %26	2H22	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	10:20 AM - 11:08 AM	mg/m3	-	0.H	U0.H	40	120	I S EPA, Method H	Bangkok

**Guideline :** Guideline )16: Environmental Impact Assessment Report of Magotteaux Co., Ltd. )B.E.2H46  
Guideline )26: Notification of the Ministry of Science, Tecnology and Environmetal )B.E.2H46: New Source

**Sampled By :** Apisit Singha

Remark :

- L%D : Limit of Detection
- <L% : Lower than L% )Limit of " uantitation6/ L%R )Limit of Reporting6
- Analyte)s6 marked \* is/are not included in scope of Accreditation )B.E.2H46

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist )46  
ทะเบียนเลขที่ ว-204-จ-4717

**Approved by**

*Kanok Korn Anek*  
Kanok Korn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-0111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148786**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218308471

- age 1 oP1

**Sample Number** 21148f 8H71  
**Sampled Date** Jan 18, 2022  
**Sample Description** Emission From Stationary Source  
**Location** Bag ( ouse H )1B( 736: MCL1  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one Rlter paper placed in plastic petri dish

### Stack Description

Ambient - ressure	f HD	mm( g	Diameter	0.50	m	Oxygen	20.5	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	%
Type oP- rocess	- rocess		Stack Temperature	94.H	°C	Gas Velocity	12.H	m/s
Type oPFuel	7		Moisture	1.55	%	Flow Rate )Actual O26	29f 34	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended - articulate	02:90 - M 703:38 - M	mg/m3	7	0.9	1.3	40	120	US E- A, Method 9	Bangkok

**Guideline :** Guideline )16: Environmental Impact Assessment Report oPMagotteaux Co., Ltd. )B.E.29946  
Guideline )26: NotiRcation oPthe Ministry oPScience, Tecnology and Environmetal )B.E.29446: New Source

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit oPDetection
- "<" : Lower than LOQ )Limit oPQuantitation6 / LOR )Limit oPReporting6
- Analyte)s6 marked \* is/are not included in scope oPAccreditation ISO/IEC 1f 029.

**Technical Management**

Saranya Chalerthamrong  
Scientist )46  
ทะเบียนเลขที่ 7204774f 1f

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7204774f 111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148804**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183172-1

Page 1 of 1

<b>Sample Number</b>	21148804-1
<b>Sampled Date</b>	Jan 18, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่องระบายไอร่อน HT2 Stack1 (2SN-1)
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Extracted into two 2-L collection flasks, one 10-L air sampling bag and one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	670	mmHg	Diameter	0.90	m	Fxygen	16.6	O
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.8	O
Type of Process	Combustion (F pen System)		Stack Temperature	183	°C	Gas Velocity	7.8	m/s
Type of Fuel	LP9		Moisture	6.27	O	Flow Rate (Actual F2)	2V08	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide Q	12:00 PM - 12:10 PM	ppm	-	1.0	U1.0	-	7V0 (3)	I S EPA, Method 10	Bangkok
Fluxides of Nitrogen Q	11:40 AM - 12:00 PM	ppm	-	1.07	7.34	70	180	I S EPA, Method 6	Bangkok
Total Suspended Particulate	11:40 AM - 12:26 PM	mg/m3	-	0.0%	U0.0%	70	120	I S EPA, Method %	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2544)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source  
Guideline (3) : Notification of the Ministry of Industry 2007 (B.E. 254V) Published in the Royal Government Gazette, Vol.123 Special Part 12% D, dated December 4, 2007 (B.E. 254V)

**Sampled By :** Apisit Singha

Remark :

- LFD : Limit of Detection
- LUK : Lower than LFD\* (Limit of Quantitation) / LFR (Limit of Reporting)
- Analyte(s) marked Q is/are not included in scope of Accreditation "SF/EC 1602"

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4616

**Approved by**

*Kanok Korn Anek*  
zanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-7111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148806**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183173-1

Page 1 of 1

<b>Sample Number</b>	21148807-1
<b>Sampled Date</b>	Jan 18, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่องระบายไอร่อน HT2 Stack2 (2SN-2)
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Extracted into two 2-L collection flasks, one 10-L air sampling bag and one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	670	mmHg	Diameter	0.7%	m	Fxygen	18.0%	O
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.2	O
Type of Process	Combustion (F pen System)		Stack Temperature	140	°C	Gas Velocity	6.7	m/s
Type of Fuel	LP9		Moisture	7.0%	O	Flow Rate (Actual F2)	7.08	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide Q	10:00 AM - 11:00 AM	ppm	-	1.0	U1.0	-	7.0 (3)	I S EPA, Method 10	Bangkok
Fluxes of Nitrogen Q	10:40 AM - 10:00 AM	ppm	-	1.07	6.01	70	180	I S EPA, Method 6	Bangkok
Total Suspended Particulate	10:10 AM - 11:03 AM	mg/m3	-	0.0	U0.0	70	120	I S EPA, Method V	Bangkok

**Guideline (1) :** Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2544)

**Guideline (2) :** Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source

**Guideline (3) :** Notification of the Ministry of Industry 2007 (B.E. 2547) Published in the Royal Government Gazette, Vol.123 Special Part 12V D, dated December 4, 2007 (B.E. 2547)

**Sampled By :** Apisit Singha

**Remark :**

- LFD : Limit of Detection
- LUK : Lower than LFD\* (Limit of Quantitation) / LFR (Limit of Reporting)
- Analyte(s) marked Q is/are not included in scope of Accreditation "ISO/IEC 17025".

**Technical Management**

Saranya Chalerthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4616

**Approved by**

zanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-7111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148809**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218317- P1

Page 1 of 1

**Sample Number** 2114880- P1  
**Sampled Date** Jan 18, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ( il circulate 2 )2( CP26 : ° T2  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one 10FL air sampling bag and one filter paper placed in plastic petri dish

### Stack Description

Ambient pressure	F70	mmHg	Diameter	0.90	m	( oxygen	20.-	O
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	O
Type of process	process		Stack Temperature	F2.°	°C	Gas Velocity	13.8	m/s
Type of fuel	P		Moisture	2.28	O	Flow Rate Actual ( 26	8240	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended particulate	01:20 PM - 02:00 PM	mg/m3	P	0.0%	1.3	40	120	US EPA, Method 5	Bangkok

**Guideline :** Guideline 16: Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2546)  
Guideline 26: Notification of the Ministry of Science, Technology and Environment (B.E.2546: New Source)

**Sampled By :** Apisit Singha

**Remark :**

- L ( D ) : Limit of Detection
- " < " : Lower than L ( Q ) Limit of Quantitation / L ( R ) Limit of Reporting
- Analytes marked \* is/are not included in scope of Accreditation ISO/IEC 17025

**Technical Management**

Saranya Chalerthamrong  
Scientist 46  
ทะเบียนเลขที่ วป204ปพ41F

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ วป204ปพ7111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148809**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183169-2

Page 1 of 1

<b>Sample Number</b>	21148809-1
<b>Sampled Date</b>	Jan 18, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	Oil circulate 2 (2OC-2) : HT2
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Extracted into one 10-L air sampling bag and one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	760	mmHg	Diameter	0.50	m	Oxygen	20.9	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	%
Type of Process	Process		Stack Temperature	72.5	°C	Gas Velocity	13.8	m/s
Type of Fuel	-		Moisture	2.28	%	Flow Rate (Actual O2)	8240	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
<b>Air Testing</b>							
Total Hydrocarbon as Methane	01:40 PM - 01:50 PM	ppm	-	1.0	53.3	Total Hydrocarbon Analyzer, Based on US EPA Method 25A	Bangkok
Total VOCs as Propane	01:40 PM - 01:50 PM	ppm	-	1.0	2.2	US EPA, Method 25A	Bangkok

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148810**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218317- P1

Page 1 of 1

**Sample Number** 21148810P1  
**Sampled Date** Jan 17, 2022  
**Sample Description** Emission from Stationary Source  
**Location** Bag ( house 3 )3B( P16: MCL2  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient pressure	700	mmHg	Diameter	1.29	m	Oxygen	20.0	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	%
Type of process	process		Stack Temperature	43.0	°C	Gas Velocity	1.4	m/s
Type of fuel	P		Moisture	2.1	%	Slow Rate Actual O2	7-22	%

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended particulate	03:20 PM P04:08 PM	mg/m3	P	0.9	0.0	40	120	US EPA, Method 9	Bangkok

**Guideline :** Guideline 16: Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.29946)  
Guideline 26: Notification of the Ministry of Science, Technology and Environment (B.E.29446: New Source)

**Sampled By :** Apisit Singha

**Remark :**

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analytes marked \* is/are not included in scope of Accreditation ISO/IEC 17029.

**Technical Management**

Saranya Chalerthamrong  
Scientist 46  
ทะเบียนเลขที่ วป204ป4717

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ วป204ป111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148813**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218318171

- age 1 of 1

**Sample Number** 2114881371  
**Sampled Date** Jan 1f, 2022  
**Sample Description** Emission From Stationary Source  
**Location** Bag House 4 (3BH72) : MCL2  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient - pressure	60	mmHg	Diameter	1.25	m	%Oxygen	20.0	9
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	9
Type of Process	Process		Stack Temperature	45.5	°C	Gas Velocity	21.6	m/s
Type of Fuel	7		Moisture	2.10	9	Flow Rate (Actual %2)	8 f f 38	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended - particulate	02:15 - M 703:03 - M	mg/m3	7	0.5	12.4	40	120	US E- A, Method 5	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2554)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source

**Sampled By :** Apisit Singha

Remark :

- L<sub>MD</sub> : Limit of Detection
- "<" : Lower than L<sub>MQ</sub> (Limit of Quantitation) / L<sub>MR</sub> (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

Saranya Chalerthamrong  
Scientist (4)  
ทะเบียนเลขที่ 72047741f

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7204776111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148814**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218318371

- age 1 of 1

**Sample Number** 2114881471  
**Sampled Date** Jan 1f, 2022  
**Sample Description** Emission From Stationary Source  
**Location** Bag House ( )3BH736: MCL2  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient - pressure	ft	mmHg	Diameter	1.2	m	%Oxygen	20.0	9
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	9
Type of Process	- Process		Stack Temperature	( 3.0	°C	Gas Velocity	24.1	m/s
Type of Fuel	7		Moisture	2.21	%	Slow Rate Actual %	26	18 Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
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### Air Testing

Total Suspended - particulate	12:00 - 13:00	mg/m3	7	0.1	2.0	40	120	US EPA Method 4	Bangkok
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**Guideline :** Guideline 16: Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2546)  
Guideline 26: Notification of the Ministry of Science, Technology and Environment (B.E.2546): New Source

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOD (Limit of Quantitation / LOR) Limit of Reporting
- Analytes marked \* is/are not included in scope of Accreditation ISO/IEC 17025

**Technical Management**

Saranya Chalerthamrong  
Scientist 46  
ทะเบียนเลขที่ 7204741f

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ 720474111

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S:\Reports\\_Air Stack\_2GL.rpt ( 6:15PM)



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2261327**

Date Received : Jul 04, 2022

Date Reported : Jul 12, 2022

Report Number: 2318930-1

Page 1 of 1

<b>Sample Number</b>	2261327-1
<b>Sampled Date</b>	Jul 04, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่อยระบายไอร่อน HT3 Stack 1 (3SN-1) : Condition 1
<b>Date Analysis Commenced</b>	Jul 05, 2022
<b>Condition of Sample</b>	Extracted into two 2-L collection flasks, one 10-L air sampling bag and one filter paper placed in plastic cassette

### Stack Description

Ambient Pressure	754	mmHg	Diameter	0.7	m	Oxygen	11.8	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	6.1	%
Type of Process	Combustion (Open System)		Stack Temperature	314	°C	Gas Velocity	3.3	m/s
Type of Fuel	LPG		Moisture	7.27	%	Flow Rate (Actual O2)	2143	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Oxides of Nitrogen *	10:30 AM - 10:38 AM	ppm	-	1.06	24.3	60	180	US EPA, Method 7	Bangkok
Total Suspended Particulate	10:30 AM - 11:18 AM	mg/m3	-	0.5	<0.5	60	120	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2554)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source  
Guideline (3) : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

ทะเบียนเลขที่ ว-204-จ-4719

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2261327**

Date Received : Jul 04, 2022

Date Reported : Jul 12, 2022

Report Number: 2318930-2

Page 1 of 1

<b>Sample Number</b>	2261327-1
<b>Sampled Date</b>	Jul 04, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่อยระบายไอระเหย HT3 Stack 1 (3SN-1) : Condition 1
<b>Date Analysis Commenced</b>	Jul 05, 2022
<b>Condition of Sample</b>	Extracted into two 2-L collection flasks, one 10-L air sampling bag and one filter paper placed in plastic cassette

### Stack Description

Ambient Pressure	754	mmHg	Diameter	0.7	m	Oxygen	11.8	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	6.1	%
Type of Process	Combustion (Open System)		Stack Temperature	314	°C	Gas Velocity	3.3	m/s
Type of Fuel	LPG		Moisture	7.27	%	Flow Rate (Actual O2)	2143	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	10:40 AM - 10:50 AM	ppm	-	1.0	1.2	-	690 (3)	US EPA, Method 10	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2554)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source  
Guideline (3) : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

ทะเบียนเลขที่ ว-204-จ-4719

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148817**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183170-1

Page 1 of 1

<b>Sample Number</b>	2114881H1
<b>Sampled Date</b>	Jan 14, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่อยระบายไอร้อน ( T3 Stack 2 )3SN-26
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Extracted into two 2-L collection flasks, one 10-L air sampling bag and one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	HP0	mm( g	Diameter	0.40	m	5xygen	13.1	G
Ambient Temperature	32.0	FC	Shape	Circle		Carbon Dioxide	0.2	G
Type of Process	Combustion )5 pen System6		Stack Temperature	3°°	FC	%as Velocity	11.°	m/s
Type of Fuel	LP%		Moisture	°°H2	G	Flow Rate )Actual 5 26	2872	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide I	11:00 AM - 11:10 AM	ppm	-	1.0	12.°	-	°70 )36	US EPA, Method 10	Bangkok
5xides of Nitrogen I	11:10 AM - 11:20 AM	ppm	-	1.0°	8.00	°0	180	US EPA, Method H	Bangkok
Total Suspended Particulate	11:00 AM - 11:48 AM	mg/m3	-	0.0	0.8	°0	120	US EPA, Method O	Bangkok

**Guideline :** %uideline )16: Environmental Onpact Assessment Report of Magotteaux Co., Ltd. )B.E.20046  
%uideline )26: Notification of the Ministry of Science, Technology and Environmental )B.E.20446 : New Source  
%uideline )36: Notification of the Ministry of Industry 200° )B.E. 20476 Published in the Royal %overnment %a"ette, Vol.123 Special Part 120 D, dated December 4, 200° )B.E. 20476

**Sampled By :** Apisit Singha

Remark :

- L5 D : Limit of Detection
- \*K\* : Lower than L5 < )Limit of <uantitation6 / L5 R )Limit of Reporting6
- Analyte)s6 marked I is/are not included in scope of Accreditation Q5 /EC 1H020.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist )46  
ทะเบียนเลขที่ ว-204-จ-4H1H

**Approved by**

*Kanok Korn Anek*  
zanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-°111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2261332**

Date Received : Jun 01, 2022

Date Reported : Jun 10, 2022

Report Number: 2318742-1

Page 1 of 1

**Sample Number** 22H1332-1  
**Sampled Date** Jun 01, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ( il Circulate 3 )3( C-16 : ° T3 : Condition 1  
**Date Analysis Commenced** Jun 01, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one 10-L air sampling bag

### Stack Description

Ambient Pressure	F57	mm <sup>9</sup> g	Diameter	0.70	m	(xygen	20.F	O
Ambient Temperature	33.0	9C	Shape	Circle		Carbon Dioxide	0.2	O
Type of Process	Process		Stack Temperature	40.0	9C	Gas Velocity	F.1	m/s
Type of %el	-		Moisture	2.51	O	%ow Rate )Actual ( 26	15004	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	10:00 AM - 10:48 AM	mg/m3	-	0.5	U0.5	40	120	I S EPA, Method 5	Bangkok

**Guideline :** Guideline )16 : Environmental Impact Assessment Report of Magotteaux Co., Ltd. )B.E.25546  
Guideline )26 : Notification of the Ministry of Science, Technology and Environment )B.E.25446 : New Source  
Guideline )36 : Notification of the Ministry of Industry 200H )B.E. 25476 Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 200H )B.E. 25476

**Sampled By :** Anuvat Moungpai

Remark :

- L( D : Limit of Detection
- \*U\* : Lower than L( < )Limit of quantitation / L( R )Limit of Reporting
- Analyte)s6 marked K is/are not included in scope of Accreditation (S( /CEC 1F025.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist )46  
ทะเบียนเลขที่ ว-204-จ-4F1F

**Approved by**

*Kanokorn Anek*  
zanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-H111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2261332**

Date Received : Jun 01, 2022

Date Reported : Jun 10, 2022

Report Number: 231864292

- age 1 oP1

**Sample Number** 22f 133291  
**Sampled Date** Jun 01, 2022  
**Sample Description** Emission From Stationary Source  
**Location** Oil Circulate 3 (3OC91) : HT3 : Condition 1  
**Date Analysis Commenced** Jun 02, 2022  
**Condition of Sample** Extracted into one 8liter paper placed in plastic petri dish and one 109L air sampling bag

### Stack Description

Ambient - ressure	7°6	mmHg	Diameter	0.60	m	Oxygen	20.7	%
Ambient Temperature	33.0	FC	Shape	Circle		Carbon Dioxide	0.2	%
Type oP- rocess	- rocess		Stack Temperature	40.0	FC	Gas Velocity	7.1	m/s
Type oP5uel	9		Moisture	2.°1	%	Slow Rate (Actual O2)	1°004	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
<b>Air Testing</b>							
Total Hydrocarbon as Methane	10:1° AM 9 10:2° AM	ppm	9	1.0	81.2	Total Hydrocarbon Analyzer, Based on US E- A Method 2°A	Bangkok
Total VOCs as - ropane	10:1° AM 9 10:2° AM	ppm	9	1.0	3.3	US E- A, Method 2°A	Bangkok

**Sampled By :** Anuvat Moungpai

Remark :

- LOD : Limit oPDetection
- "<" : Lower than LOQ (Limit oPQuantitation) / LOR (Limit oPReporting)

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2261336**

Date Received : May 23, 2022

Date Reported : May 31, 2022

Report Number: 2318948-1

Page 1 of 1

<b>Sample Number</b>	2261336-1
<b>Sampled Date</b>	May 23, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่องระบายไอร่อน HT4 Stack 1 (3SN-3) : Condition 1
<b>Date Analysis Commenced</b>	May 24, 2022
<b>Condition of Sample</b>	Extracted into one 10-L air sampling bag, two 2-L collection flasks, one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	753	mmHg	Diameter	0.7	m	Oxygen	8.7	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	8.7	%
Type of Process	Combustion (Open System)		Stack Temperature	258	°C	Gas Velocity	2.9	m/s
Type of Fuel	LPG		Moisture	8.72	%	Flow Rate (Actual O2)	2051	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide *	12:33 PM - 12:43 PM	ppm	-	1.0	13.9	-	690 (3)	US EPA, Method 10	Bangkok
Oxides of Nitrogen *	12:25 PM - 12:31 PM	ppm	-	1.06	19.6	60	180	US EPA, Method 7	Bangkok
Total Suspended Particulate	12:20 PM - 01:08 PM	mg/m3	-	0.5	24.4	60	120	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2554)

Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source

Guideline (3) : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4717

**Approved by**

*Kanok Korn Anek*  
Kanok Korn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148820**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183177-1

Page 1 of 1

<b>Sample Number</b>	21148820-1
<b>Sampled Date</b>	Jan 14, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่องระบายไอร่อน ( T4 Stack 2 )3SN-46
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Extracted into one 2-L collection flask, one filter paper placed in plastic petri dish and one 10-L air sampling bag

### Stack Description

Ambient Pressure	H <sub>2</sub> O	mm( g	Diameter	0.40	m	5xygen	1°0	G
Ambient Temperature	32.0	FC	Shape	Circle		Carbon Dioxide	3.3	G
Type of Process	Combustion )5 pen System6		Stack Temperature	182	FC	%as Velocity	8.°	m/s
Type of Fuel	LP%		Moisture	Q.08	G	Flow Rate )Actual 5 26	30°8	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide I	12:00 PM - 12:10 PM	ppm	-	1.0	12.1	-	°70 )36	US EPA, Method 10	Bangkok
5xides of Nitrogen I	12:10 PM - 12:20 PM	ppm	-	1.0°	H.38	°0	180	US EPA, Method H	Bangkok
Total Suspended Particulate	12:00 PM - 12:48 PM	mg/m3	-	0.0	1.1	°0	120	US EPA, Method O	Bangkok

**Guideline :** %uideline )16: Environmental Onpact Assessment Report of Magotteaux Co., Ltd. )B.E.20046  
%uideline )26: Notification of the Ministry of Science, Technology and Environmental )B.E.20446 : New Source  
%uideline )36: Notification of the Ministry of Industry 200° )B.E. 20476 Published in the Royal %overnment %a"ette, Vol.123 Special Part 120 D, dated December 4, 200° )B.E. 20476

**Sampled By :** Apisit Singha

Remark :

- L5 D : Limit of Detection
- \*K\* : Lower than L5 < )Limit of <uantitation6 / L5 R )Limit of Reporting6
- Analyte)s6 marked I is/are not included in scope of Accreditation Q5 /EC 1H020.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist )46  
ทะเบียนเลขที่ ว-204-จ-4H1H

**Approved by**

*Kanok Korn Anek*  
zanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-°111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148827**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2183207-1

Page 1 of 1

**Sample Number** 2114882H-1  
**Sampled Date** Jan 14, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ( il Circulate 4 )3( C-26 : ° T4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one 10-L air sampling bag

### Stack Description

Ambient Pressure	H70	mm° g	Diameter	0.90	m	(xygen	20.9	%
Ambient Temperature	32.0	FC	Shape	Circle		Carbon Dioxide	0.0	%
Type of Process	Process		Stack Temperature	31.0	FC	Oas Gelocity	9.7	m/s
Type of Fuel	-		Moisture	2.42	%	Slow Rate )Actual ( 26	21029	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	11:30 AM - 12:27 PM	mg/m3	-	0.U	V0.U	40	120	I S EPA, Method U	Bangkok

**Guideline :** Guideline )16 : Environmental Impact Assessment Report of Magotteaux Co., Ltd. )B.E.2546  
Guideline )26 : Notification of the Ministry of Science, Technology and Environment )B.E.2546 : New Source  
Guideline )36 : Notification of the Ministry of Industry 2007 )B.E. 25496 Published in the Royal Government Gazette, Vol.123 Special Part 12U D, dated December 4, 2007 )B.E. 25496

**Sampled By :** Apisit Singha

Remark :

- L( D : Limit of Detection
- \*V\* : Lower than L( < )Limit of quantitation / L( R )Limit of Reporting
- Analyte(s) marked K is/are not included in scope of Accreditation (S) / (EC 1H02U.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist )46  
ทะเบียนเลขที่ ๖-204-๖-4H1H

**Approved by**

*Kanokorn Anek*  
zanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ๖-204-๖-7111

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S:\Reports\\_Air Stack\\_2GL.rpt ( 6:24PM)



## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21148827**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218320692

- age 1 of 1

<b>Sample Number</b>	2114882791
<b>Sampled Date</b>	Jan 11, 2022
<b>Sample Description</b>	Emission From Stationary Source
<b>Location</b>	Oil Circulate 4 (30C92) : HT4
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Extracted into one 100ml paper placed in plastic petri dish and one 100L air sampling bag

### Stack Description

Ambient - pressure	160	mmHg	Diameter	0.60	m	Oxygen	20.1	5
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	5
Type of Process	- process		Stack Temperature	31.0	°C	Gas Velocity	1.6	m/s
Type of Fuel	9		Moisture	2.42	5	Flow Rate (Actual O2)	2102F	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
<b>Air Testing</b>							
Total Hydrocarbon as Methane	11:4V AM 9 11:V AM	ppm	9	1.0	12.2	Total Hydrocarbon Analyzer, Based on US E- A Method 2VA	Bangkok
Total GOCs as - ropene	11:4V AM 9 11:V AM	ppm	9	1.0	Q1.0	US E- A, Method 2VA	Bangkok

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- Q < : Lower than LO (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

*Saranya C.*

Saranya Chalermthamrong  
Scientist (4)

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149378**

Date Received : Jan 21, 2022

Date Reported : Feb 02, 2022

Report Number: 2184122-1

Page 1 of 1

**Sample Number** 2114HB( 8-1  
**Sampled Date** Jan 14, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง Bag House of Melting (4B) -1° : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	( F0	mm) g	Diameter	1.90	m	Oxygen	20.H	%
Ambient Temperature	32.0	5C	Shape	Circle		Carbon Dioxide	0.0	%
Type of Process	Process		Stack Temperature	3H.H	5C	Gas Velocity	4.(	m/s
Type of Fuel	-		Moisture	2.08	%	Flow Rate Actual O2°	280H0	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	04:93 PM - 09:41 PM	mg/m3	-	0.9	U0.9	40	120	I S EPA, Method 9	Bangkok

**Guideline :** Guideline 61° : Environmental Impact Assessment Report of Magotteaux Co., Ltd. B.E.2994°  
Guideline 62° : Notification of the Ministry of Science, Technology and Environment B.E.2944° : New Source

**Sampled By :** Apisit Singha

**Remark :**

- LOD : Limit of Detection
- <LO : Lower than LO" Limit of Quantitation° / LOR Limit of Reporting°
- Analytes marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist 64°  
ทะเบียนเลขที่ ว-204-จ-4(1)

**Approved by**

*Kanok Korn Anek*  
Kanok Korn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-F111

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S:\Reports\\_Air Stack\_2GL.rpt ( 1:09PM)



## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149378**

Date Received : Jan 21, 2022  
Date Reported : Feb 02, 2022  
Report Number: 218412292

- page 1 of 1

**Sample Number** 2114f30891  
**Sampled Date** Jan 1f, 2022  
**Sample Description** Emission from Stationary Source  
**Location** 14 Moo 3 Bag ( House of Melting ) 4B ( 91H: MCL4  
**Date Analysis Commenced** Jan 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient - Pressure	070	mm( g	Diameter	1.F0	m	%Oxygen	20.f	5
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.0	5
Type of Process	- process		Stack Temperature	3f .f	°C	Gas Velocity	4.0	m/s
Type of Fuel	9		Moisture	2.08	5	Flow Rate (Actual %RH	280f 0	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
---------	--------------	------	-----	-----------	--------	--------	------------------

### Metals Testing

Chromium	04:F3 - M 90F:41 - M	mg/m3	9	0.10	z 0.10	US E- A, Method 2f	Bangkok
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**Sampled By :** Apisit Singha

Remark :

- L%D : Limit of Detection
- "z" : Lower than L%Q (Limit of Quantitation) / L%R (Limit of Reporting)

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21146978**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218414471

- age 1 oP1

**Sample Number** 2114f H( 871  
**Sampled Date** Jan 20, 2022  
**Sample Description** Emission From Stationary Source  
**Location** ปล่อง Bag ) ouse oPSand plant 64B) 72° : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one Filter paper placed in plastic petri dish

### Stack Description

Ambient - pressure	( f 0	mm) g	Diameter	0.f 0	m	%xygen	20.H	9
Ambient Temperature	32.0	FC	Shape	Circle		Carbon Dioxide	0.0	9
Type oP- rocess	- rocess		Stack Temperature	40.0	FC	Oas Gelocity	( .0	m/s
Type oP5uel	7		Moisture	2.10	9	Slow Rate 6Actual %2°	ff ( 4	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended - articulate	10:38 AM 711:2f AM	mg/m3	7	0.U	1.(	40	120	VS E- A, Method U	Bangkok

**Guideline :** Guideline 61° : Environmental Impact Assessment Report oPMagotteaux Co., Ltd. 6B.E.2UU4°  
Guideline 62° : Notification oPthe Ministry oPScience, Tecnology and Environmetal 6B.E.2UU4° : New Source

**Sampled By :** Apisit Singha

Remark :

- L%D : Limit oPDetection
- "<" : Lower than L%Q 6Limit oPQuantitation° / L%R 6Limit oPReporting°
- Analyte6° marked \* is/are not included in scope oPAccreditation IS%IEC 1( 02U.

**Technical Management**

Saranya Chalerthamrong  
Scientist 64°  
ทะเบียนเลขที่ 7204774( 1(

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ 7204774( 111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149395**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218414871

- age 1 oP1

**Sample Number** 2114f 3f H71  
**Sampled Date** Jan 20, 2022  
**Sample Description** Emission From Stationary Source  
**Location** ปล่อง Bag (ouse oPShake7) ut 64B( 73° : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one Rlter paper placed in plastic petri dish

### Stack Description

Ambient - ressure	F50	mm( g	Diameter	1.38	m	) xygen	20.f	O
Ambient Temperature	32.0	9C	Shape	Circle		Carbon Dioxide	0.0	O
Type oP- rocess	- rocess		Stack Temperature	34.F	9C	Gas Velocity	F.2	m/s
Type oP%uel	7		Moisture	2.0F	O	%ow Rate 6Actual ) 2°	35588	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended - articulate	0f :22 AM 710:10 AM	mg/m3	7	0.H	0.F	40	120	US E- A, Method H	Bangkok

**Guideline :** Guideline 61° : Environmental Impact Assessment Report oPMagotteaux Co., Ltd. 6B.E.2H4°  
Guideline 62° : NotiRcation oPthe Ministry oPScience, Tecnology and Environmetal 6B.E.2H4° : New Source

**Sampled By :** Apisit Singha

Remark :

- L) D : Limit oPDetection
- "<" : Lower than L) Q 6Limit oPQuantitation° / L) R 6Limit oPReporting°
- Analyte6° marked \* is/are not included in scope oPAccreditation IS) /IEC 1F02H.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
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ทะเบียนเลขที่ 72047จ74F1F

**Approved by**

*Kanok Korn Anek*  
Kanok Korn Anek  
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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149396**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2184147-1

Page 1 of 1

**Sample Number** 2114737H1  
**Sampled Date** Jan 17, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง Bag filter of shotblasting (4B) -46 : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish

### Stack Description

Ambient Pressure	°H <sub>2</sub> O	mm) g	Diameter	0.8	m	Oxygen	20.7	%
Ambient Temperature	32.0	FC	Shape	Circle		Carbon Dioxide	0.0	%
Type of Process	Process		Stack Temperature	40.9	FC	Gas Velocity	3.4	m/s
Type of Fuel	-		Moisture	2.11	%	Slow Rate (Actual O <sub>2</sub> )	9912	Nm <sup>3</sup> /hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	03:20 PM - 04:00 PM	mg/m <sup>3</sup>	-	0.9	1.3	40	120	US EPA, Method 9	Bangkok

**Guideline :** Guideline (16: Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.29946  
Guideline (26: Notification of the Ministry of Science, Technology and Environment (B.E.29446: New Source

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (46)  
ทะเบียนเลขที่ ว-204-จ-401

**Approved by**

*Kanok Korn Anek*  
Kanok Korn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149400**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2184151-1

Page 1 of 1

**Sample Number** 21149400-1  
**Sampled Date** Jan 21, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง Heat Treatment Batch furnace 1 (4HT-1) : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into two 2-L collection flasks, one 10-L air sampling bag

### Stack Description

Ambient Pressure	760	mmHg	Diameter	0.45	m	Oxygen	19.1	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.0	%
Type of Process	Combustion (Open System)		Stack Temperature	113	°C	Gas Velocity	5.1	m/s
Type of Fuel	LPG		Moisture	3.42	%	Flow Rate (Actual O2)	2183	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	09:15 AM - 09:25 AM	ppm	-	1.0	7.0	-	690 (3)	US EPA, Method 10	Bangkok
Oxides of Nitrogen	09:03 AM - 09:13 AM	ppm	-	1.06	13.8	60	180	US EPA, Method 7	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2554)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source  
Guideline (3) : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4717

**Approved by**

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149401**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2184153-1

Page 1 of 1

<b>Sample Number</b>	21149401-1
<b>Sampled Date</b>	Jan 20, 2022
<b>Sample Description</b>	Emission from Stationary Source
<b>Location</b>	ปล่อง Heat Treatment Batch furnace 2 (4HT-2) : MCL4
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Extracted into two 2-L collection flasks, one 10-L air sampling bag

### Stack Description

Ambient Pressure	760	mmHg	Diameter	0.45	m	Oxygen	19.8	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.7	%
Type of Process	Combustion (Open System)		Stack Temperature	126	°C	Gas Velocity	4.9	m/s
Type of Fuel	LPG		Moisture	2.63	%	Flow Rate (Actual O2)	2033	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	02:10 PM - 02:20 PM	ppm	-	1.0	U1.0	-	690 (3)	I S EPA, Method 10	Bangkok
Oxides of Nitrogen	02:05 PM - 02:15 PM	ppm	-	1.06	14.9	60	180	I S EPA, Method 7	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2554)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source  
Guideline (3) : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- <LO : Lower than LO" (Limit of Quantitation) / LOR (Limit of Reporting)

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4717

**Approved by**

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149402**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2184150-1

Page 1 of 1

**Sample Number** 21149402-1  
**Sampled Date** Jan 21, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง Heat Treatment Batch furnace 3 (4HT-3) : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into two 2-L collection flasks, one 10-L air sampling bag

### Stack Description

Ambient Pressure	570	mmHg	Diameter	0.4G	m	°xygen	18.9	%
Ambient Temperature	32.0	6C	Shape	Circle		Carbon Dioxide	1.2	%
Type of Process	Combustion (°pen System)		Stack Temperature	90.G	6C	Fas Velocity	4.8	m/s
Type of Quel	LPF		Moisture	3.14	%	Qow Rate (Actual ° 2)	2188	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	09:00 AM - 10:00 AM	ppm	-	1.0	28.4	-	790 (3)	US EPA, Method 10	Bangkok
°xides of Nitrogen	09:40 AM - 09:00 AM	ppm	-	1.07	8.7G	70	180	US EPA, Method 5	Bangkok

**Guideline :** Fuideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2GG4)  
Fuideline (2) : Notification of the Ministry of Science, Tecnology and Envrionmetal (B.E.2G44) : New Source  
Fuideline (3) : Notification of the Ministry of Industry 2007 (B.E. 2G49) Published in the Royal Foverment Fazette, Vol.123 Special Part 12G D, dated December 4, 2007 (B.E. 2G49)

**Sampled By :** Apisit Singha

Remark :

- L°D : Limit of Detection
- "<" : Lower than L°Q (Limit of Quantitation) / L°R (Limit of Reporting)

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4515

**Approved by**

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-7111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149403**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2184152-1

Page 1 of 1

**Sample Number** 21149403-1  
**Sampled Date** Jan 20, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง Heat Treatment Batch furnace 4 (4HT-4) : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into two 2-L collection flasks, one 10-L air sampling bag

### Stack Description

Ambient Pressure	570	mmHg	Diameter	0.4G	m	°xygen	19.3	%
Ambient Temperature	32.0	6C	Shape	Circle		Carbon Dioxide	0.9	%
Type of Process	Combustion (° pen System)		Stack Temperature	14G	6C	Fas Velocity	7.2	m/s
Type of Quel	LPF		Moisture	3.43	%	Qow Rate (Actual ° 2)	2441	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	02:4G PM - 02:GG PM	ppm	-	1.0	23.0	-	790 (3)	US EPA, Method 10	Bangkok
°xides of Nitrogen	02:40 PM - 02:G0 PM	ppm	-	1.07	4.10	70	180	US EPA, Method 5	Bangkok

**Guideline :** Fuideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2GG4)  
Fuideline (2) : Notification of the Ministry of Science, Tecnology and Envrionmetal (B.E.2G44) : New Source  
Fuideline (3) : Notification of the Ministry of Industry 2007 (B.E. 2G49) Published in the Royal Foverment Fazette, Vol.123 Special Part 12G D, dated December 4, 2007 (B.E. 2G49)

**Sampled By :** Apisit Singha

Remark :

- L°D : Limit of Detection
- "<" : Lower than L°Q (Limit of Quantitation) / L°R (Limit of Reporting)

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4515

**Approved by**

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-7111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149404**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2184151-1

Page 1 of 1

**Sample Number** 21145404-1  
**Sampled Date** Jan 21, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง 9 eat Treatment Batch furnace H (49T-H) : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into two 2-L collection flasks, one 10-L air sampling bag

### Stack Description

Ambient Pressure	760	mmHg	Diameter	0.4H	m	Oxygen	15.1	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.1	%
Type of Process	Combustion (Open System)		Stack Temperature	110	°C	Gas Velocity	H4	m/s
Type of Fuel	LPG		Moisture	3.6H	%	Flow Rate (Actual O2)	2312	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	10:2H AM - 10:3H AM	ppm	-	1.0	1.5	-	650 (3)	US EPA, Method 10	Bangkok
Oxides of Nitrogen	10:1H AM - 10:2H AM	ppm	-	1.06	8.44	60	180	US EPA, Method 7	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2544)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source  
Guideline (3) : Notification of the Ministry of Industry 2006 (B.E. 2545) Published in the Royal Government Gazette, Vol.123 Special Part 12H D, dated December 4, 2006 (B.E. 2545)

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4717

**Approved by**

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149405**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 2184154-1

Page 1 of 1

**Sample Number** 21145409-1  
**Sampled Date** Jan 20, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง Heat Treatment Batch furnace ( )4HT-(7: MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into two 2-L collection flasks, one 10-L air sampling bag

### Stack Description

Ambient Pressure	6(0	mmHg	Diameter	0.49	m	Oxygen	16.(	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.5	%
Type of Process	Combustion )Open System7		Stack Temperature	120	°C	Gas Velocity	9.4	m/s
Type of Fuel	LPG		Moisture	3.26	%	Flow Rate )Actual Q27	228(	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	03:19 PM - 03:29 PM	ppm	-	1.0	U1.0	-	( 50 )37	I S EPA, Method 10	Bangkok
Oxides of Nitrogen	03:20 PM - 03:30 PM	ppm	-	1.0(	23.9	( 0	180	I S EPA, Method 6	Bangkok

**Guideline :** Guideline )17: Environmental Impact Assessment Report of Magotteaux Co., Ltd. )B.E.29947  
Guideline )27: Notification of the Ministry of Science, Technology and Environment )B.E.29447: New Source  
Guideline )37: Notification of the Ministry of Industry 200( )B.E. 29457 Published in the Royal Government Gazette, Vol.123 Special Part 129 D, dated December 4, 200( )B.E. 29457

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- <LO : Lower than "LO" )Limit of "Quantitation" / LOR )Limit of Reporting

**Technical Management**

*Saranya C.*  
Saranya Chalermthamrong  
Scientist )47  
ทะเบียนเลขที่ ว-204-จ-4616

**Approved by**

*Kanokkorn Anek*  
Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-( 111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149406**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218415- P1

Page 1 of 91

**Sample Number** 2114540- P1  
**Sampled Date** Jan 21, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง Heat Treatment Batch Furnace ( ) 4HTR 7: MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into two 2FL collection flasks, one 10FL air sampling bag

### Stack Description

Ambient Pressure	( - 0	mmHg	Diameter	0.4G	m	Oxygen	15.1	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	1.1	%
Type of Process	Combustion	Open System	Stack Temperature	118	°C	Flow Velocity	4.6	m/s
Type of Fuel	Lf F		Moisture	2.85	%	Flow Rate (Actual)	150G	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	10:00 AM P11:00 AM	ppm	P	1.0	3.4	P	- 50 )37	US EPA, Method 10	Bangkok
Oxides of Nitrogen	10:00 AM P11:00 AM	ppm	P	1.0	13.1	- 0	180	US EPA, Method (	Bangkok

**Guideline :** Guideline 17: Environmental Impact Assessment Report of Magotteaux Co., Ltd. )B.E.2547  
Guideline 27: Notification of the Ministry of Science, Technology and Environment )B.E.2547: New Source  
Guideline 37: Notification of the Ministry of Industry 200- )B.E. 2547 published in the Royal Government Gazette, Vol.123 Special Part 12G D, dated December 4, 200- )B.E. 2547

**Sampled By :** Apisit Singha

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOD Limit of Quantitation / LOD Limit of Reporting

**Technical Management**

Saranya Chalerthamrong  
Scientist 47  
ทะเบียนเลขที่ วป204ป4 (1)

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ วป204ป4 111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149407**

Date Received : Jan 21, 2022

Date Reported : Jan 28, 2022

Report Number: 218415- P1

Page 1 of 91

**Sample Number** 2114540- P1  
**Sampled Date** Jan 20, 2022  
**Sample Description** Emission from Stationary Source  
**Location** โรง Heat Treatment Batch Furnace 8 (4HTP8) : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Extracted into two 2FL collection flasks, one 10FL air sampling bag

### Stack Description

Ambient Pressure	- 70	mmHg	Diameter	0.4G	m	Oxygen	15.7	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	0.8	%
Type of Process	Combustion (Open System)		Stack Temperature	133	°C	Gas Velocity	6.7	m/s
Type of Fuel	Lf F		Moisture	3.42	%	Flow Rate (Actual ° 2)	22G2	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Carbon Monoxide	04:10 f M P04:20 f M	ppm	P	1.0	2.1	P	750 (3)	US EPA, Method 10	Bangkok
Oxides of Nitrogen	04:00 f M P04:10 f M	ppm	P	1.07	1G.-	70	180	US EPA, Method -	Bangkok

**Guideline :** Guideline (1) : Environmental Impact Assessment Report of Magotteaux Co., Ltd. (B.E.2544)  
Guideline (2) : Notification of the Ministry of Science, Technology and Environment (B.E.2544) : New Source  
Guideline (3) : Notification of the Ministry of Industry 2007 (B.E. 2545) published in the Royal Government Gazette, Vol.123 Special Part 12G D, dated December 4, 2007 (B.E. 2545)

**Sampled By :** Apisit Singha

Remark :

- L<sup>o</sup> D : Limit of Detection
- "<" : Lower than L<sup>o</sup> Q (Limit of Quantitation) / L<sup>o</sup> R (Limit of Reporting)

**Technical Management**

Saranya Chalerthamrong  
Scientist (4)  
ทะเบียนเลขที่ วป204ป4- 1-

**Approved by**

Kanokkorn Anek  
Senior Manager  
ทะเบียนเลขที่ วป204ป7111

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# ภาคผนวก ค-3

คุณภาพน้ำ



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21145994**

Date Received : Jan 11, 2022

Date Reported : Jan 18, 2022

Report Number : 2208558-1

Page 1 of 1

<b>Sample Number</b>	21145994-1
<b>Sampled Date</b>	Jan 11, 2022 10:00 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	คูน้ำรอบพื้นที่โครงการ (MCL1+2)
<b>Date Analysis Commenced</b>	Jan 12, 2022
<b>Condition of Sample</b>	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
<b>Water Testing</b>						
BOD (5 days at 20 degree C)	mg/L	-	2	2	Based on APHA (2017), 5210 B	Bangkok
COD	mg/L	1.5	5	27	Based on APHA (2017), 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	7.5	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	30.7	Based on APHA (2017), 2550 B	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Based on APHA (2017), 2540 D	Bangkok

**Sampled By :** Jiranat Khowlaor

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

Siriluk P.

Siriluk Puengpang

Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

**Approved by**

Kanokkorn Anek

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21146006**

Date Received : Jan 11, 2022

Date Reported : Jan 18, 2022

Report Number : 2208583-1

Page 1 of 1

<b>Sample Number</b>	21146006-1
<b>Sampled Date</b>	Jan 11, 2022 9:57 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	คูน้ำรอบพื้นที่โครงการ (MCL4)
<b>Date Analysis Commenced</b>	Jan 12, 2022
<b>Condition of Sample</b>	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
<b>Water Testing</b>						
BOD (5 days at 20 degree C)	mg/L	-	2	2	Based on APHA (2017), 5210 B	Bangkok
COD	mg/L	1.5	5	23	Based on APHA (2017), 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	7.6	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	30.3	Based on APHA (2017), 2550 B	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	10	Based on APHA (2017), 2540 D	Bangkok

**Sampled By :** Jiranat Khowlaor

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

Siriluk P.

Siriluk Puengpang

Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

**Approved by**

Kanokkorn Anek

Kanokkorn Anek

Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**TESTING**  
**No.0009**

**Lot ID: 21145994**

Date Received : Jan 11, 2022

Date Reported : Jan 18, 2022

Report Number : 2208559-1

Page 1 of 1

<b>Sample Number</b>	21145994-2
<b>Sampled Date</b>	Jan 11, 2022 8:50 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	บ่อพักน้ำทิ้ง (MCL1+2)
<b>Date Analysis Commenced</b>	Jan 12, 2022
<b>Condition of Sample</b>	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 degree C)	mg/L	-	2	5	≤20	Based on APHA (2017), 5210 B	Bangkok
COD	mg/L	1.5	5	65	≤120	Based on APHA (2017), 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	7.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	29.9	≤40	Based on APHA (2017), 2550 B	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	12	≤50	Based on APHA (2017), 2540 D	Bangkok

**Guideline :** Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

**Sampled By :** Jiranat Khowlaor

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

*Siriluk P.*

Siriluk Puengpang  
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

**Approved by**

*Kanok Korn Anek*

Kanok Korn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**TESTING**  
**No.0009**

**Lot ID: 21146006**

Date Received : Jan 11, 2022

Date Reported : Jan 18, 2022

Report Number : 2208584-1

Page 1 of 1

<b>Sample Number</b>	21146006-2
<b>Sampled Date</b>	Jan 11, 2022 9:40 AM
<b>Sample Description</b>	Wastewater
<b>Location</b>	บ่อพักน้ำทิ้ง (MCL4)
<b>Date Analysis Commenced</b>	Jan 12, 2022
<b>Condition of Sample</b>	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
<b>Water Testing</b>							
BOD (5 days at 20 degree C)	mg/L	-	2	2	≤20	Based on APHA (2017), 5210 B	Bangkok
COD	mg/L	1.5	5	18	≤120	Based on APHA (2017), 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	≤5	Based on APHA (2017), 5520 B	Bangkok
pH at 25 degree C		-	-	6.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Bangkok
Temperature *	Degree C	-	-	29.8	≤40	Based on APHA (2017), 2550 B	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	≤50	Based on APHA (2017), 2540 D	Bangkok

**Guideline :** Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

**Sampled By :** Jiranat Khowlaor

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

*Siriluk P.*

Siriluk Puengpang  
Supervisor

ทะเบียนเลขที่ ว-204-จ-4720

**Approved by**

*Kanok Korn Anek*

Kanok Korn Anek  
Senior Manager

ทะเบียนเลขที่ ว-204-ค-6111

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# ภาคผนวก ค-4

ระดับเสียงโดยทั่วไป



## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250402**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314212-1

Page 1 of 1

**Sample Number** 2250402-1  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันตกโครงการ MCI 1-2 (GPS 47P 0700052, 1593539)  
**Measurement Date** May 03 - May 04, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 572563

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.5	77.3	58.5
11:00 AM - 12:00 PM	60.7	77.9	58.6
12:00 PM - 01:00 PM	61.9	86.0	58.9
01:00 PM - 02:00 PM	60.9	76.9	58.8
02:00 PM - 03:00 PM	61.0	74.0	58.9
03:00 PM - 04:00 PM	60.5	71.0	58.7
04:00 PM - 05:00 PM	60.1	78.0	58.4
05:00 PM - 06:00 PM	61.1	75.7	58.9
06:00 PM - 07:00 PM	59.6	70.5	58.3
07:00 PM - 08:00 PM	58.2	73.4	56.4
08:00 PM - 09:00 PM	59.1	82.2	56.6
09:00 PM - 10:00 PM	57.9	74.8	56.5
10:00 PM - 11:00 PM	58.3	76.2	56.9
11:00 PM - 12:00 AM	58.2	74.7	56.6
12:00 AM - 01:00 AM	58.7	74.8	57.2
01:00 AM - 02:00 AM	59.7	78.2	57.8
02:00 AM - 03:00 AM	59.5	75.5	57.6
03:00 AM - 04:00 AM	60.7	78.4	57.9
04:00 AM - 05:00 AM	61.7	78.3	58.0
05:00 AM - 06:00 AM	61.1	80.6	58.0
06:00 AM - 07:00 AM	61.4	86.9	57.9
07:00 AM - 08:00 AM	59.9	73.5	58.6
08:00 AM - 09:00 AM	59.0	74.2	57.7
09:00 AM - 10:00 AM	59.0	74.5	57.7

Leq Average 24 hrs. (dB(A)) 60.1  
Lmax (dB(A)) 86.9  
L90 (dB(A)) 57.9  
Ldn (dB(A)) 66.5  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250402**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314213-1

Page 1 of 1

**Sample Number** 2250402-2  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันตกโครงการ MCI 1-2 (GPS 47P 0700052, 1593539)  
**Measurement Date** May 04 - May 05, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 572563

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.9	74.1	57.5
11:00 AM - 12:00 PM	58.5	74.0	57.1
12:00 PM - 01:00 PM	58.5	73.9	56.9
01:00 PM - 02:00 PM	58.2	72.9	56.8
02:00 PM - 03:00 PM	58.9	74.8	57.1
03:00 PM - 04:00 PM	59.7	76.4	57.0
04:00 PM - 05:00 PM	59.4	80.5	57.1
05:00 PM - 06:00 PM	58.0	70.8	56.9
06:00 PM - 07:00 PM	58.3	73.8	56.7
07:00 PM - 08:00 PM	58.1	73.5	57.0
08:00 PM - 09:00 PM	57.9	72.3	56.9
09:00 PM - 10:00 PM	58.3	72.1	57.0
10:00 PM - 11:00 PM	58.7	73.3	57.3
11:00 PM - 12:00 AM	57.6	70.0	56.3
12:00 AM - 01:00 AM	58.1	72.4	56.8
01:00 AM - 02:00 AM	58.1	73.1	56.6
02:00 AM - 03:00 AM	60.1	76.5	57.6
03:00 AM - 04:00 AM	63.2	83.7	58.4
04:00 AM - 05:00 AM	59.2	72.1	57.3
05:00 AM - 06:00 AM	59.6	77.8	57.4
06:00 AM - 07:00 AM	61.4	82.6	57.8
07:00 AM - 08:00 AM	63.0	85.9	58.4
08:00 AM - 09:00 AM	62.3	87.5	58.3
09:00 AM - 10:00 AM	60.3	77.9	58.0

Leq Average 24 hrs. (dB(A)) 59.7  
Lmax (dB(A)) 87.5  
L90 (dB(A)) 57.1  
Ldn (dB(A)) 66.3  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

**Technical Management**

  
Sararat Mongkonjirawut  
Supervisor

**Approved by**

  
Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250402**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314214-1

Page 1 of 1

**Sample Number** 2250402-3  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันตกโครงการ MCI 1-2 (GPS 47P 0700052, 1593539)  
**Measurement Date** May 05 - May 06, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 572563

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	61.4	82.9	58.1
11:00 AM - 12:00 PM	60.3	77.2	57.7
12:00 PM - 01:00 PM	59.9	81.1	57.7
01:00 PM - 02:00 PM	60.3	79.2	57.7
02:00 PM - 03:00 PM	59.7	79.4	56.7
03:00 PM - 04:00 PM	59.5	83.4	56.4
04:00 PM - 05:00 PM	60.2	76.7	57.2
05:00 PM - 06:00 PM	61.2	93.0	57.8
06:00 PM - 07:00 PM	60.8	89.8	57.8
07:00 PM - 08:00 PM	59.8	77.0	57.4
08:00 PM - 09:00 PM	59.9	73.5	57.9
09:00 PM - 10:00 PM	59.2	72.3	57.6
10:00 PM - 11:00 PM	60.0	71.0	58.7
11:00 PM - 12:00 AM	60.5	73.7	59.6
12:00 AM - 01:00 AM	60.3	72.4	59.3
01:00 AM - 02:00 AM	59.8	69.2	58.4
02:00 AM - 03:00 AM	59.3	78.1	57.5
03:00 AM - 04:00 AM	58.5	73.6	57.2
04:00 AM - 05:00 AM	58.8	77.0	57.6
05:00 AM - 06:00 AM	58.8	70.0	57.8
06:00 AM - 07:00 AM	59.1	69.8	57.8
07:00 AM - 08:00 AM	58.9	74.3	57.6
08:00 AM - 09:00 AM	60.8	76.0	57.9
09:00 AM - 10:00 AM	60.2	79.1	57.7

Leq Average 24 hrs. (dB(A)) 59.9  
Lmax (dB(A)) 93.0  
L90 (dB(A)) 57.7  
Ldn (dB(A)) 66.0  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

**Technical Management**

  
Sararat Mongkonjirawut  
Supervisor

**Approved by**

  
Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250402**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 231421-PI

f age 1 o51

**Sample Number** 22- 0402P4  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันออกเฉียงใต้โครงการ MCL 1P2 (Gf S 47f 0700382, 1- 93268)  
**Measurement Date** May 03 P May 04, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 672737

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM P 11:00 AM	67.7	92.2	60.8
11:00 AM P 12:00 f M	66.8	97.2	61.1
12:00 f M P 01:00 f M	62.7	8-.3	61.0
01:00 f M P 02:00 f M	62.1	71.-	60.9
02:00 f M P 03:00 f M	62.8	81.6	61.4
03:00 f M P 04:00 f M	62.6	79.4	61.-
04:00 f M P 0- :00 f M	6-.6	84.8	61.3
0- :00 f M P 06:00 f M	61.8	79.0	60.4
06:00 f M P 07:00 f M	61.6	72.8	-9.3
07:00 f M P 08:00 f M	63.1	96.3	61.1
08:00 f M P 09:00 f M	61.4	69.-	60.-
09:00 f M P 10:00 f M	61.-	7-.1	60.-
10:00 f M P 11:00 f M	61.0	68.1	60.1
11:00 f M P 12:00 AM	61.1	72.2	60.0
12:00 AM P 01:00 AM	60.9	71.-	-9.9
01:00 AM P 02:00 AM	60.8	76.8	-8.-
02:00 AM P 03:00 AM	61.0	73.1	60.0
03:00 AM P 04:00 AM	60.7	73.1	-9.4
04:00 AM P 0- :00 AM	60.4	71.-	-9.6
0- :00 AM P 06:00 AM	60.-	71.1	-9.-
06:00 AM P 07:00 AM	61.7	73.6	-9.7
07:00 AM P 08:00 AM	61.7	91.-	-9.6
08:00 AM P 09:00 AM	61.1	73.9	-9.9
09:00 AM P 10:00 AM	62.-	84.4	61.0

Leq Average 24 hrs. (dB(A)) 62.7  
Lmax (dB(A)) 97.2  
L90 (dB(A)) 60.1  
Ldn (dB(A)) 67.8  
Standard (dB(A)) 70 11-

ReSeRence Method : ISO1996P1 and 1996P2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 1- (พ.ศ. 2-40) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2-48

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250402**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314216-1

Page 1 of 1

**Sample Number** 2250402-5  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันออกเฉียงใต้โครงการ MCL 1-2 (GPS 47P 0700382, 1593268)  
**Measurement Date** May 04 - May 05, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 672737

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	69.4	92.3	61.6
11:00 AM - 12:00 PM	69.0	94.3	63.2
12:00 PM - 01:00 PM	63.3	77.5	55.7
01:00 PM - 02:00 PM	63.0	82.1	61.3
02:00 PM - 03:00 PM	65.2	84.3	61.2
03:00 PM - 04:00 PM	68.8	92.4	60.8
04:00 PM - 05:00 PM	62.4	77.1	59.0
05:00 PM - 06:00 PM	62.7	82.0	61.1
06:00 PM - 07:00 PM	61.2	81.7	54.9
07:00 PM - 08:00 PM	63.2	74.5	61.9
08:00 PM - 09:00 PM	61.8	79.0	60.7
09:00 PM - 10:00 PM	61.8	73.1	60.8
10:00 PM - 11:00 PM	62.0	73.8	61.3
11:00 PM - 12:00 AM	62.0	67.2	61.4
12:00 AM - 01:00 AM	61.6	72.5	61.0
01:00 AM - 02:00 AM	60.5	72.3	55.7
02:00 AM - 03:00 AM	60.9	73.0	60.3
03:00 AM - 04:00 AM	61.1	71.5	60.1
04:00 AM - 05:00 AM	60.8	66.4	59.8
05:00 AM - 06:00 AM	61.7	87.2	59.8
06:00 AM - 07:00 AM	64.2	79.8	57.6
07:00 AM - 08:00 AM	60.5	94.8	54.0
08:00 AM - 09:00 AM	58.1	90.0	51.2
09:00 AM - 10:00 AM	64.8	74.4	57.8

Leq Average 24 hrs. (dB(A)) 64.0  
Lmax (dB(A)) 94.8  
L90 (dB(A)) 60.3  
Ldn (dB(A)) 68.8  
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2548

**Technical Management**

  
Sararat Mongkonjirawut  
Supervisor

**Approved by**

  
Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250402**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 231421-PI

Page 1 of 51

**Sample Number** 22( 0402P6  
**Parameter** Noise d.e) 24 hrs.G  
**Location** ริมรั้วด้านทิศตะวันออกเฉียงใต้โครงการ MCL 1P2 q7f S 4-f 0-00382, 1(93268G  
**Measurement Date** May 0( PMay 06, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 6-2-3-

Time	Le) d(BqAG	Lmax d(BqAG	L90 d(BqAG
10:00 AM P 11:00 AM	66.9	80.8	(6.-
11:00 AM P 12:00 f M	64.2	91.1	(-.1
12:00 f M P 01:00 f M	64.0	86.1	((.9
01:00 f M P 02:00 f M	(9.3	-9.(	(0.4
02:00 f M P 03:00 f M	(8.-	-(.0	((.6
03:00 f M P 04:00 f M	(9.1	-(.1	(4.6
04:00 f M P 0( :00 f M	(6.9	-2.8	(3.9
0( :00 f M P 06:00 f M	(6.6	-2.0	(4.1
06:00 f M P 0- :00 f M	((.4	69.4	(1.3
0- :00 f M P 08:00 f M	(8.4	-2.0	((.3
08:00 f M P 09:00 f M	(8.0	69.2	(3.(
09:00 f M P 10:00 f M	(6.6	-(.-	(3.0
10:00 f M P 11:00 f M	(8.9	81.(	(-.0
11:00 f M P 12:00 AM	60.3	-0.-	(-.0
12:00 AM P 01:00 AM	61.6	-0.(	(8.2
01:00 AM P 02:00 AM	60.9	-4.4	(4.2
02:00 AM P 03:00 AM	62.1	69.8	(8.8
03:00 AM P 04:00 AM	62.-	-4.4	62.1
04:00 AM P 0( :00 AM	62.1	6-.9	61.(
0( :00 AM P 06:00 AM	62.6	-2.3	62.1
06:00 AM P 0- :00 AM	63.3	-1.6	(9.6
0- :00 AM P 08:00 AM	63.-	93.-	(8.1
08:00 AM P 09:00 AM	(9.8	93.8	(1.6
09:00 AM P 10:00 AM	60.4	93.8	(1.4

Le) Average 24 hrs. d(BqAG 61.4  
Lmax d(BqAG 93.8  
L90 d(BqAG ((.6  
Ldn d(BqAG 68.1

Standard d(BqAG -0 11(

Reference Method : ISO1996P1 and 1996P2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 1( พ.ศ. 2( 40Gเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2( 48

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250444**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314220-1

Page 1 of 1

**Sample Number** 2250444-1  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันตกโครงการ VRM : MCL4 (GPS 47P 0699917, 1593242)  
**Measurement Date** May 03 - May 04, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.0	71.5	54.9
11:00 AM - 12:00 PM	60.4	71.3	52.7
12:00 PM - 01:00 PM	58.4	70.2	51.6
01:00 PM - 02:00 PM	58.3	80.1	50.9
02:00 PM - 03:00 PM	58.9	69.9	56.0
03:00 PM - 04:00 PM	57.3	74.1	54.0
04:00 PM - 05:00 PM	57.8	86.1	53.8
05:00 PM - 06:00 PM	57.1	81.4	53.6
06:00 PM - 07:00 PM	57.3	72.6	53.4
07:00 PM - 08:00 PM	59.2	74.2	54.8
08:00 PM - 09:00 PM	62.4	68.8	56.6
09:00 PM - 10:00 PM	64.9	72.0	61.3
10:00 PM - 11:00 PM	60.5	67.3	58.1
11:00 PM - 12:00 AM	58.6	65.2	56.0
12:00 AM - 01:00 AM	58.1	64.5	56.3
01:00 AM - 02:00 AM	59.5	64.7	57.6
02:00 AM - 03:00 AM	59.2	70.2	57.4
03:00 AM - 04:00 AM	58.0	75.6	56.2
04:00 AM - 05:00 AM	58.4	64.9	56.4
05:00 AM - 06:00 AM	60.9	71.5	55.6
06:00 AM - 07:00 AM	64.1	73.5	56.1
07:00 AM - 08:00 AM	57.5	71.4	53.9
08:00 AM - 09:00 AM	66.2	72.8	53.9
09:00 AM - 10:00 AM	65.9	72.7	55.6

Leq Average 24 hrs. (dB(A)) 60.9  
Lmax (dB(A)) 86.1  
L90 (dB(A)) 55.6  
Ldn (dB(A)) 66.8  
Standard (dB(A)) 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. มาตรฐาน สปรรมปาลิ่งอวดหุ้มอตงชาณี บี 5 (พ.ศ. 2540) เรืองปาดนดมาจรรฐานรลลล เลมมโดยทัวไล  
2. มาตรฐานสปรทรวงกลลลาดปรรม เรืองปาดนดคาร์ลลล เลมมปารรี ปาน อหลลลลล เลมมทพ็ดจาปารลลลลล กิจปาร  
โรงงาน" .ศ. 2548

**Technical Management**

  
Sararat Mongkonjirawut  
Supervisor

**Approved by**

  
Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250444**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314221-1

Page 1 of 1

**Sample Number** 2250444-2  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันตกโครงการ VRM : MCL4 (GPS 47P 0699917, 1593242)  
**Measurement Date** May 04 - May 05, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.8	80.6	53.3
11:00 AM - 12:00 PM	67.9	77.6	55.9
12:00 PM - 01:00 PM	66.0	76.9	54.3
01:00 PM - 02:00 PM	55.3	69.4	52.6
02:00 PM - 03:00 PM	57.5	68.5	54.0
03:00 PM - 04:00 PM	67.4	71.6	64.8
04:00 PM - 05:00 PM	56.0	65.7	50.2
05:00 PM - 06:00 PM	65.4	71.6	55.9
06:00 PM - 07:00 PM	64.3	71.6	55.5
07:00 PM - 08:00 PM	64.0	72.3	55.5
08:00 PM - 09:00 PM	57.7	82.5	55.2
09:00 PM - 10:00 PM	61.1	68.9	53.4
10:00 PM - 11:00 PM	61.7	71.2	56.0
11:00 PM - 12:00 AM	56.0	67.6	53.1
12:00 AM - 01:00 AM	57.4	64.1	55.0
01:00 AM - 02:00 AM	57.2	68.4	55.0
02:00 AM - 03:00 AM	57.4	69.9	55.0
03:00 AM - 04:00 AM	70.4	77.7	56.2
04:00 AM - 05:00 AM	72.4	79.1	58.4
05:00 AM - 06:00 AM	60.2	65.9	58.8
06:00 AM - 07:00 AM	60.1	64.0	58.8
07:00 AM - 08:00 AM	59.7	73.2	57.8
08:00 AM - 09:00 AM	59.3	66.4	57.3
09:00 AM - 10:00 AM	59.7	63.7	58.2

Leq Average 24 hrs. (dB(A)) 64.3  
Lmax (dB(A)) 82.5  
L90 (dB(A)) 55.5  
Ldn (dB(A)) 71.9  
Standard (dB(A)) 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. มาตรฐาน สปรบมปลั่งอวดหุ้มอตงขานี้ มี 5 ( .ศ. 2540 ) เรืองปาดนดมาจรรฐานรลลี้ เลมมโดยทัวไณ  
2. มาตรฐานสปรบมปลั่งอวดหุ้มอตงขานี้ มี 5 ( .ศ. 2548 ) เรืองปาดนดมาจรรฐานรลลี้ เลมมโดยทัวไณ

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250444**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314222-1

Page 1 of 1

**Sample Number** 2250444-3  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันตกโครงการ VRM : MCL4 (GPS 47P 0699917, 1593242)  
**Measurement Date** May 05 - May 06, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 572457

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.8	64.4	57.6
11:00 AM - 12:00 PM	57.8	63.8	55.6
12:00 PM - 01:00 PM	57.3	67.3	55.4
01:00 PM - 02:00 PM	57.5	70.0	55.4
02:00 PM - 03:00 PM	58.0	67.3	56.3
03:00 PM - 04:00 PM	57.8	64.2	56.2
04:00 PM - 05:00 PM	58.2	74.1	55.7
05:00 PM - 06:00 PM	57.3	68.4	55.6
06:00 PM - 07:00 PM	57.5	63.0	55.7
07:00 PM - 08:00 PM	60.0	70.9	57.1
08:00 PM - 09:00 PM	57.4	62.7	56.6
09:00 PM - 10:00 PM	58.2	67.4	57.2
10:00 PM - 11:00 PM	58.0	68.7	55.8
11:00 PM - 12:00 AM	57.4	64.5	55.8
12:00 AM - 01:00 AM	56.7	67.6	55.2
01:00 AM - 02:00 AM	56.1	63.3	54.7
02:00 AM - 03:00 AM	70.6	75.0	55.1
03:00 AM - 04:00 AM	58.0	79.0	55.0
04:00 AM - 05:00 AM	56.1	74.1	54.9
05:00 AM - 06:00 AM	55.7	76.7	54.2
06:00 AM - 07:00 AM	53.5	70.4	52.0
07:00 AM - 08:00 AM	53.9	72.7	52.2
08:00 AM - 09:00 AM	63.8	74.1	53.3
09:00 AM - 10:00 AM	71.6	76.7	56.9

Leq Average 24 hrs. (dB(A)) 62.2  
Lmax (dB(A)) 79.0  
L90 (dB(A)) 55.6  
Ldn (dB(A)) 68.7  
Standard (dB(A)) 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. มาตรฐาน สปรบมปารสิ่งแวดล้อมต่งชาติ ปี ๒๕๕๕ (พ.ศ. 2540) เรืองปาดนตมมาตรฐานรลล เลนงโดยทัวไล  
2. มาตรฐานสปรบมปารสิ่งแวดล้อมต่งชาติ เรืองปาดนตมรลล เลนงปาร ปาน อหสลล เลนงทพดจาปารลลปลก บัจปาร  
โรงงาน" .ศ. 2548

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250444**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314223-1

Page 1 of 1

**Sample Number** 2250444-4  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันออก รร VRM : MCL4 (GPS 47P 0699843, 1593041)  
**Measurement Date** May 03 - May 04, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	61.2	76.3	59.5
11:00 AM - 12:00 PM	61.0	82.6	59.8
12:00 PM - 01:00 PM	60.3	71.7	59.4
01:00 PM - 02:00 PM	60.5	69.6	59.3
02:00 PM - 03:00 PM	61.7	68.7	59.8
03:00 PM - 04:00 PM	61.5	76.5	59.7
04:00 PM - 05:00 PM	61.7	75.2	59.9
05:00 PM - 06:00 PM	61.8	71.4	61.0
06:00 PM - 07:00 PM	62.6	81.5	61.5
07:00 PM - 08:00 PM	62.0	70.1	61.5
08:00 PM - 09:00 PM	62.3	75.8	61.7
09:00 PM - 10:00 PM	62.5	80.3	61.6
10:00 PM - 11:00 PM	62.2	77.8	61.4
11:00 PM - 12:00 AM	62.1	67.8	61.3
12:00 AM - 01:00 AM	62.2	68.2	61.4
01:00 AM - 02:00 AM	62.8	78.3	61.8
02:00 AM - 03:00 AM	62.3	69.6	61.6
03:00 AM - 04:00 AM	62.6	68.1	61.3
04:00 AM - 05:00 AM	61.4	71.4	60.9
05:00 AM - 06:00 AM	61.6	71.2	61.0
06:00 AM - 07:00 AM	62.9	74.0	61.1
07:00 AM - 08:00 AM	62.2	72.5	61.6
08:00 AM - 09:00 AM	61.4	74.1	60.3
09:00 AM - 10:00 AM	61.5	73.6	59.9

Leq Average 24 hrs. (dB(A)) 61.9  
Lmax (dB(A)) 82.6  
L90 (dB(A)) 61.0  
Ldn (dB(A)) 68.6  
Standard (dB(A)) 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ยรจ าศกใจ รมร ารจควดปกคณคณลาคี หั ทป5 (บ.ศ. 2540) เรตคีนาสนดมาะร านรงค ไลจลคดฐทัวโย  
2. ยรจ าศี รงทรวลค าสี รมเรตคีนาสนดครงค ไลจลค ารร วน คปงรงค ไลจลค ารยจ ไลจลค าร  
อรจณ บ.ศ. 2548

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250444**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 2314224-1

Page 1 of 1

**Sample Number** 2250444-5  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันออก รร VRM : MCL4 (GPS 47P 0699843, 1593041)  
**Measurement Date** May 04 - May 05, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. 584983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	66.1	78.1	61.1
11:00 AM - 12:00 PM	66.2	73.6	61.2
12:00 PM - 01:00 PM	61.8	70.3	60.7
01:00 PM - 02:00 PM	64.6	72.7	61.1
02:00 PM - 03:00 PM	64.7	75.8	61.9
03:00 PM - 04:00 PM	62.5	72.7	61.2
04:00 PM - 05:00 PM	61.8	75.8	60.8
05:00 PM - 06:00 PM	62.0	77.8	61.1
06:00 PM - 07:00 PM	62.2	78.5	61.3
07:00 PM - 08:00 PM	66.7	79.1	61.5
08:00 PM - 09:00 PM	61.7	69.8	61.3
09:00 PM - 10:00 PM	62.5	69.2	61.9
10:00 PM - 11:00 PM	62.4	69.4	61.8
11:00 PM - 12:00 AM	62.5	71.5	61.8
12:00 AM - 01:00 AM	62.9	68.6	62.1
01:00 AM - 02:00 AM	62.1	70.9	61.3
02:00 AM - 03:00 AM	62.5	69.4	61.5
03:00 AM - 04:00 AM	62.6	69.9	62.1
04:00 AM - 05:00 AM	62.8	71.2	62.2
05:00 AM - 06:00 AM	62.4	70.9	61.8
06:00 AM - 07:00 AM	68.2	77.1	62.0
07:00 AM - 08:00 AM	63.1	84.0	61.9
08:00 AM - 09:00 AM	62.4	75.3	61.6
09:00 AM - 10:00 AM	70.2	77.3	62.5

Leq Average 24 hrs. (dB(A)) 64.3  
Lmax (dB(A)) 84.0  
L90 (dB(A)) 61.5  
Ldn (dB(A)) 70.2  
Standard (dB(A)) 70

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ยิง าศกใจ รมิ ารใจคอดปกคณคณลาคี หั ทป5 (บ.ศ. 2540) เรตคี่ าสนดมาะร านรงคี่ ไล้จลคดรูทัวโย  
2. ยิง าศี รงทรวจก าสี รมิ เรตคี่ าสนดคพรงคี่ ไล้จล ารร วน คปงรงคี่ ไล้จล ารยจ ไล้จล าร  
อรจณ บ.ศ. 2548

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250444**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 231422-P1

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**Sample Number** 22- 0444P6  
**Parameter** Noise (Leq 24 hrs.)  
**Location** ริมรั้วด้านทิศตะวันออก รร VRM : MCL4 (Gf S 47f 0699843, 1-93041)  
**Measurement Date** May 0- P May 06, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. -84983

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM P 11:00 AM	62.7	81.6	61.6
11:00 AM P 12:00 f M	72.3	78.7	63.2
12:00 f M P 01:00 f M	63.1	76.3	62.1
01:00 f M P 02:00 f M	69.-	78.-	61.7
02:00 f M P 03:00 f M	66.7	7-.8	61.6
03:00 f M P 04:00 f M	66.-	77.3	62.0
04:00 f M P 0- :00 f M	62.4	78.7	61.4
0- :00 f M P 06:00 f M	6-.7	77.8	61.6
06:00 f M P 07:00 f M	66.8	71.9	6-.0
07:00 f M P 08:00 f M	71.8	78.-	66.6
08:00 f M P 09:00 f M	67.6	8-.7	66.2
09:00 f M P 10:00 f M	6-.0	74.8	61.8
10:00 f M P 11:00 f M	66.7	71.7	62.0
11:00 f M P 12:00 AM	63.0	76.8	62.1
12:00 AM P 01:00 AM	62.8	70.9	62.2
01:00 AM P 02:00 AM	62.9	73.1	62.2
02:00 AM P 03:00 AM	62.7	76.3	62.0
03:00 AM P 04:00 AM	62.6	73.4	62.1
04:00 AM P 0- :00 AM	62.7	72.0	62.1
0- :00 AM P 06:00 AM	62.4	72.4	61.9
06:00 AM P 07:00 AM	73.8	81.1	62.2
07:00 AM P 08:00 AM	62.8	70.-	62.2
08:00 AM P 09:00 AM	62.1	70.7	61.4
09:00 AM P 10:00 AM	68.6	78.9	60.3

Leq Average 24 hrs. (dB(A)) 67.2  
Lmax (dB(A)) 8-.7  
L90 (dB(A)) 62.0  
Ldn (dB(A)) 73.2  
Standard (dB(A)) 70 11-

Reference Method : ISO1996P1 and 1996P2

Standard : 1. ยิง าศก ใ จี รมมี าร ใจควดปณคณลาคี หั ทัช- (บ.ศ. 2-40) เรตคี่ าสนดมาะร านรงค้ ใ ฐนค้ าวใ ใ  
2. ยิง าศี รงทรวจณ าสี รม เรตคี่ าสนดค้ าวใ ใ ารร วน ค้ าวใ ใ ารยง ใ ใ าร  
อรณน บ.ศ. 2-48

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2250419**

Date Received : May 06, 2022

Date Reported : May 14, 2022

Report Number: 22- 6062P1

Page 1 of 51

**Sample Number** 22( 041- P1  
**Parameter** Noise d.e) 24 hrs.G  
**Location** ชุมชนที่อยู่ใกล้โครงการ ด้านทิศตะวันตกกq7f S 49f 06-- 36, 1(- 3( 31G  
**Measurement Date** May 04 PMay 0(, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level meter** Serial No. ( 92( 64

Time	Le) qdBqAG	Lmax qdBqAG	L-0 qdBqAG
0- :00 AM P10:00 AM	((.9	82.1	(2.2
10:00 AM P11:00 AM	((.3	90.9	(2.-
11:00 AM P12:00 f M	(3.-	6-.9	(1.9
12:00 f M P01:00 f M	(4.0	68.3	(1.1
01:00 f M P02:00 f M	(3.8	96.-	(0.9
02:00 f M P03:00 f M	((.4	94.9	(2.(
03:00 f M P04:00 f M	62.1	83.(	(3.3
04:00 f M P0( :00 f M	(9.6	82.2	(2.8
0( :00 f M P06:00 f M	(9.2	9-.2	(3.0
06:00 f M P09:00 f M	(8.0	96.6	(3.4
09:00 f M P08:00 f M	(9.4	91.(	(3.3
08:00 f M P0- :00 f M	(4.-	64.4	(3.2
0- :00 f M P10:00 f M	((.3	6(.2	(3.8
10:00 f M P11:00 f M	(4.4	64.3	(2.-
11:00 f M P12:00 AM	(4.8	6(.1	(3.2
12:00 AM P01:00 AM	(4.2	6(.8	(2.8
01:00 AM P02:00 AM	(4.(	6(.9	(3.1
02:00 AM P03:00 AM	(4.(	91.8	(2.(
03:00 AM P04:00 AM	(4.6	64.0	(3.1
04:00 AM P0( :00 AM	(4.0	63.0	(2.9
0( :00 AM P06:00 AM	((.2	6(.6	(3.-
06:00 AM P09:00 AM	(8.3	82.3	(4.(
09:00 AM P08:00 AM	((.4	92.1	(3.0
08:00 AM P0- :00 AM	(8.9	91.0	((.6

Le) Average 24 hrs. qdBqAG ( 6.4  
Lmax qdBqAG 83.(  
L-0 qdBqAG (3.0  
Ldn qdBqAG 61.-

Standard qdBqAG

90

11(

ReSference Method : ISO1-- 6P1 and 1-- 6P2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 1( พ.ศ. 2( 40Gเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป  
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ  
โรงงาน พ.ศ. 2( 48

**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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# Analysis / Test Report

TESTING

No.0009

**Client** : Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**Lot ID:** 2250413  
**Date Received** : May 06, 2022  
**Date Reported** : May 11, 2022  
**Report Number** : 2296046-1

**P/O** :  
**Project Name** : Environmental Testing  
**Project Location** :

Page 1 of 3

**Sample No.** 2250413-1  
**Parameter** เสียงรบกวน  
**Location** ชุมชนที่อยู่ใกล้โครงการ (ด้านทิศตะวันตก) (GPS 47P 0699936, 1593531)  
**Measurement Date** May 04 - 05, 2022  
**Measurement by** Autit Aoonsim  
**Sound Level Meter** 00572564

## ระดับเสียง (dB(A))

เวลา	เสียงจาก แหล่งกำเนิด (A)	เสียงขณะ ไม่มีการรบกวน (B)	ผลต่าง ระดับเสียง (A-B)	ตัวปรับค่า (C)	ปรับค่าเสียงจากแหล่งกำเนิด (D)		เสียงพื้นฐาน (E)	ค่าระดับ การรบกวน (D-E)
					กลางวัน (A-C)	กลางคืน (A-C)+3		
09:00 AM - 10:00 AM	55.7	53.6	2.1	4.5	51.2	-	51.7	-0.5
10:00 AM - 11:00 AM	55.3	54.9	0.4	7.0	48.3	-	52.5	-4.2
11:00 AM - 12:00 PM	53.9	53.4	0.5	7.0	46.9	-	51.3	-4.4
12:00 PM - 01:00 PM	54.0	52.8	1.2	7.0	47.0	-	50.5	-3.5
01:00 PM - 02:00 PM	53.8	53.2	0.6	7.0	46.8	-	50.4	-3.6
02:00 PM - 03:00 PM	55.4	56.2	-0.8	7.0	48.4	-	52.1	-3.7
03:00 PM - 04:00 PM	62.1	61.9	0.2	7.0	55.1	-	52.8	2.3
04:00 PM - 05:00 PM	57.6	58.1	-0.5	7.0	50.6	-	52.7	-2.1
05:00 PM - 06:00 PM	57.2	55.8	1.4	7.0	50.2	-	52.7	-2.5
06:00 PM - 07:00 PM	58.0	55.8	2.2	4.5	53.5	-	53.0	0.5
07:00 PM - 08:00 PM	57.4	56.6	0.8	7.0	50.4	-	53.2	-2.8
08:00 PM - 09:00 PM	54.9	59.4	-4.5	7.0	47.9	-	58.0	-10.1
09:00 PM - 10:00 PM	55.3	55.1	0.2	7.0	48.3	-	53.6	-5.3
10:00 PM - 10:05 PM	54.4	53.9	0.5	7.0	-	50.4	52.5	-2.1
10:05 PM - 10:10 PM	54.2	54.4	-0.2	7.0	-	50.2	52.8	-2.6
10:10 PM - 10:15 PM	54.2	54.0	0.2	7.0	-	50.2	52.7	-2.5
10:15 PM - 10:20 PM	54.2	60.6	-6.4	7.0	-	50.2	53.0	-2.8
10:20 PM - 10:25 PM	54.9	64.0	-9.1	7.0	-	50.9	63.7	-12.8
10:25 PM - 10:30 PM	54.8	58.5	-3.7	7.0	-	50.8	53.7	-2.9
10:30 PM - 10:35 PM	54.9	54.9	0.0	7.0	-	50.9	53.2	-2.3
10:35 PM - 10:40 PM	54.2	54.6	-0.4	7.0	-	50.2	53.4	-3.2
10:40 PM - 10:45 PM	53.9	54.3	-0.4	7.0	-	49.9	52.9	-3.0
10:45 PM - 10:50 PM	54.5	54.6	-0.1	7.0	-	50.5	53.1	-2.6
10:50 PM - 10:55 PM	54.2	54.7	-0.5	7.0	-	50.2	53.4	-3.2
10:55 PM - 11:00 PM	54.2	54.2	0.0	7.0	-	50.2	52.9	-2.7
11:00 PM - 11:05 PM	54.4	54.6	-0.2	7.0	-	50.4	53.1	-2.7
11:05 PM - 11:10 PM	54.4	54.6	-0.2	7.0	-	50.4	53.1	-2.7
11:10 PM - 11:15 PM	54.6	54.6	0.0	7.0	-	50.6	53.3	-2.7
11:15 PM - 11:20 PM	54.5	54.5	0.0	7.0	-	50.5	53.2	-2.7
11:20 PM - 11:25 PM	54.6	55.1	-0.5	7.0	-	50.6	53.7	-3.1
11:25 PM - 11:30 PM	55.0	55.0	0.0	7.0	-	51.0	53.9	-2.9
11:30 PM - 11:35 PM	54.7	54.8	-0.1	7.0	-	50.7	53.5	-2.8
11:35 PM - 11:40 PM	54.9	55.1	-0.2	7.0	-	50.9	53.6	-2.7
11:40 PM - 11:45 PM	55.0	55.1	-0.1	7.0	-	51.0	53.7	-2.7
11:45 PM - 11:50 PM	55.0	54.9	0.1	7.0	-	51.0	53.6	-2.6
11:50 PM - 11:55 PM	54.9	55.4	-0.5	7.0	-	50.9	53.8	-2.9
11:55 PM - 12:00 AM	55.1	55.2	-0.1	7.0	-	51.1	54.1	-3.0
12:00 AM - 12:05 AM	54.9	55.2	-0.3	7.0	-	50.9	53.9	-3.0
12:05 AM - 12:10 AM	55.1	55.0	0.1	7.0	-	51.1	53.5	-2.4
12:10 AM - 12:15 AM	54.1	54.5	-0.4	7.0	-	50.1	53.2	-3.1

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Approved by

*Kanok Korn Anek*

Kanok Korn Anek  
Senior Manager



## Analysis / Test Report

TESTING

No.0009

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

Lot ID: 2250413

Date Received : May 06, 2022

Date Reported : May 11, 2022

Report Number : 2296046-1

P/O :

Project Name : Environmental Testing

Project Location :

Page 2 of 3

Sample No. 2250413-1  
Parameter เสียงรบกวน  
Location ชุมชนที่อยู่ใกล้โครงการ (ด้านทิศตะวันตก) (GPS 47P 0699936, 1593531)  
Measurement Date May 04 - 05, 2022  
Measurement by Autit Aoonsim  
Sound Level Meter 00572564

### ระดับเสียง (dB(A))

เวลา	เสียงจาก แหล่งกำเนิด <sup>(A)</sup>	เสียงขณะ ไม่มีการรบกวน <sup>(B)</sup>	ผลต่าง ระดับเสียง <sup>(A-B)</sup>	ตัวปรับค่า <sup>(C)</sup>	ปรับค่าเสียงจากแหล่งกำเนิด <sup>(B)</sup>		เสียงพื้นฐาน <sup>(E)</sup>	ค่าระดับ การรบกวน <sup>(B-E)</sup>
					กลางวัน <sup>(A-C)</sup>	กลางคืน <sup>(A-C)+3</sup>		
12:15 AM - 12:20 AM	54.2	54.2	0.0	7.0	-	50.2	52.9	-2.7
12:20 AM - 12:25 AM	54.1	54.2	-0.1	7.0	-	50.1	52.9	-2.8
12:25 AM - 12:30 AM	53.8	54.3	-0.5	7.0	-	49.8	53.0	-3.2
12:30 AM - 12:35 AM	54.1	53.9	0.2	7.0	-	50.1	52.4	-2.3
12:35 AM - 12:40 AM	53.8	54.0	-0.2	7.0	-	49.8	52.5	-2.7
12:40 AM - 12:45 AM	54.5	54.7	-0.2	7.0	-	50.5	53.0	-2.5
12:45 AM - 12:50 AM	54.1	54.1	0.0	7.0	-	50.1	52.8	-2.7
12:50 AM - 12:55 AM	54.2	54.2	0.0	7.0	-	50.2	52.8	-2.6
12:55 AM - 01:00 AM	53.8	54.5	-0.7	7.0	-	49.8	53.1	-3.3
01:00 AM - 01:05 AM	54.3	54.1	0.2	7.0	-	50.3	52.9	-2.6
01:05 AM - 01:10 AM	54.2	54.3	-0.1	7.0	-	50.2	52.8	-2.6
01:10 AM - 01:15 AM	53.7	54.6	-0.9	7.0	-	49.7	53.2	-3.5
01:15 AM - 01:20 AM	54.3	54.3	0.0	7.0	-	50.3	53.1	-2.8
01:20 AM - 01:25 AM	53.9	54.4	-0.5	7.0	-	49.9	52.9	-3.0
01:25 AM - 01:30 AM	54.6	54.6	0.0	7.0	-	50.6	53.2	-2.6
01:30 AM - 01:35 AM	54.3	54.4	-0.1	7.0	-	50.3	53.3	-3.0
01:35 AM - 01:40 AM	54.5	54.7	-0.2	7.0	-	50.5	53.5	-3.0
01:40 AM - 01:45 AM	54.8	54.9	-0.1	7.0	-	50.8	53.5	-2.7
01:45 AM - 01:50 AM	55.0	55.4	-0.4	7.0	-	51.0	54.0	-3.0
01:50 AM - 01:55 AM	55.5	54.9	0.6	7.0	-	51.5	53.4	-1.9
01:55 AM - 02:00 AM	54.5	54.8	-0.3	7.0	-	50.5	53.4	-2.9
02:00 AM - 02:05 AM	54.4	54.5	-0.1	7.0	-	50.4	52.9	-2.5
02:05 AM - 02:10 AM	54.1	54.3	-0.2	7.0	-	50.1	52.9	-2.8
02:10 AM - 02:15 AM	53.7	53.9	-0.2	7.0	-	49.7	52.4	-2.7
02:15 AM - 02:20 AM	53.8	54.7	-0.9	7.0	-	49.8	53.2	-3.4
02:20 AM - 02:25 AM	54.4	54.3	0.1	7.0	-	50.4	53.0	-2.6
02:25 AM - 02:30 AM	54.3	54.4	-0.1	7.0	-	50.3	53.0	-2.7
02:30 AM - 02:35 AM	54.3	54.4	-0.1	7.0	-	50.3	53.0	-2.7
02:35 AM - 02:40 AM	54.0	54.0	0.0	7.0	-	50.0	52.8	-2.8
02:40 AM - 02:45 AM	54.4	54.9	-0.5	7.0	-	50.4	52.7	-2.3
02:45 AM - 02:50 AM	56.2	55.7	0.5	7.0	-	52.2	53.1	-0.9
02:50 AM - 02:55 AM	54.2	54.2	0.0	7.0	-	50.2	52.9	-2.7
02:55 AM - 03:00 AM	55.8	55.8	0.0	7.0	-	51.8	51.3	0.5
03:00 AM - 03:05 AM	55.9	55.8	0.1	7.0	-	51.9	54.4	-2.5
03:05 AM - 03:10 AM	55.8	55.5	0.3	7.0	-	51.8	54.0	-2.2
03:10 AM - 03:15 AM	54.9	54.0	0.9	7.0	-	50.9	52.2	-1.3
03:15 AM - 03:20 AM	54.3	54.7	-0.4	7.0	-	50.3	53.5	-3.2
03:20 AM - 03:25 AM	54.5	54.4	0.1	7.0	-	50.5	53.3	-2.8
03:25 AM - 03:30 AM	54.1	54.2	-0.1	7.0	-	50.1	52.9	-2.8
03:30 AM - 03:35 AM	54.1	54.6	-0.5	7.0	-	50.1	53.3	-3.2

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Approved by

*Kanok Korn Anek*

Kanok Korn Anek  
Senior Manager





## Analysis / Test Report

TESTING

No.0009

Client : Magotteaux Co., Ltd.

14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

Lot ID: 2250413

Date Received : May 06, 2022

Date Reported : May 11, 2022

Report Number : 2296046-1

P/O :

Project Name : Environmental Teting

Project Location :

Page 3 of 3

Sample No. 2250413-1  
Parameter เสียงรบกวน  
Location ชุมชนที่อยู่ใกล้โครงการ (ด้านทิศตะวันตก) (GPS 47P 0699936, 1593531)  
Measurement Date May 04 - 05, 2022  
Measurement by Autit Aoonsim  
Sound Level Meter 00572564

### ระดับเสียง (dB(A))

เวลา	(A) เสียงจากแหล่งกำเนิด	(B) เสียงขณะไม่มีการรบกวน	(A-B) ผลต่างระดับเสียง	(C) ตัวปรับค่า	(D) ปรับค่าเสียงจากแหล่งกำเนิด		(E) เสียงพื้นฐาน	(D-E) ค่าระดับการรบกวน
					(A-C) กลางวัน	(A-C)+3 กลางคืน		
03:35 AM - 03:40 AM	54.3	54.4	-0.1	7.0	-	50.3	53.3	-3.0
03:40 AM - 03:45 AM	54.3	54.4	-0.1	7.0	-	50.3	53.0	-2.7
03:45 AM - 03:50 AM	53.9	54.2	-0.3	7.0	-	49.9	52.9	-3.0
03:50 AM - 03:55 AM	53.7	54.2	-0.5	7.0	-	49.7	52.8	-3.1
03:55 AM - 04:00 AM	54.5	54.6	-0.1	7.0	-	50.5	53.0	-2.5
04:00 AM - 04:05 AM	54.3	54.2	0.1	7.0	-	50.3	52.6	-2.3
04:05 AM - 04:10 AM	53.8	53.8	0.0	7.0	-	49.8	52.4	-2.6
04:10 AM - 04:15 AM	53.4	53.6	-0.2	7.0	-	49.4	52.3	-2.9
04:15 AM - 04:20 AM	53.9	54.2	-0.3	7.0	-	49.9	52.8	-2.9
04:20 AM - 04:25 AM	53.6	54.1	-0.5	7.0	-	49.6	52.8	-3.2
04:25 AM - 04:30 AM	54.0	54.3	-0.3	7.0	-	50.0	53.0	-3.0
04:30 AM - 04:35 AM	54.1	54.3	-0.2	7.0	-	50.1	52.7	-2.6
04:35 AM - 04:40 AM	53.9	54.4	-0.5	7.0	-	49.9	53.1	-3.2
04:40 AM - 04:45 AM	53.9	54.2	-0.3	7.0	-	49.9	52.9	-3.0
04:45 AM - 04:50 AM	54.5	54.7	-0.2	7.0	-	50.5	53.3	-2.8
04:50 AM - 04:55 AM	54.2	54.9	-0.7	7.0	-	50.2	53.5	-3.3
04:55 AM - 05:00 AM	54.4	54.4	0.0	7.0	-	50.4	53.2	-2.8
05:00 AM - 05:05 AM	54.6	54.8	-0.2	7.0	-	50.6	53.4	-2.8
05:05 AM - 05:10 AM	55.0	55.5	-0.5	7.0	-	51.0	53.9	-2.9
05:10 AM - 05:15 AM	55.0	54.8	0.2	7.0	-	51.0	53.5	-2.5
05:15 AM - 05:20 AM	54.7	54.8	-0.1	7.0	-	50.7	53.5	-2.8
05:20 AM - 05:25 AM	54.3	54.8	-0.5	7.0	-	50.3	53.3	-3.0
05:25 AM - 05:30 AM	54.6	54.9	-0.3	7.0	-	50.6	53.6	-3.0
05:30 AM - 05:35 AM	54.8	55.1	-0.3	7.0	-	50.8	53.8	-3.0
05:35 AM - 05:40 AM	54.9	55.4	-0.5	7.0	-	50.9	54.1	-3.2
05:40 AM - 05:45 AM	55.0	55.3	-0.3	7.0	-	51.0	53.8	-2.8
05:45 AM - 05:50 AM	55.5	55.8	-0.3	7.0	-	51.5	54.5	-3.0
05:50 AM - 05:55 AM	55.6	57.5	-1.9	7.0	-	51.6	55.0	-3.4
05:55 AM - 06:00 AM	57.2	59.4	-2.2	7.0	-	53.2	56.9	-3.7
06:00 AM - 07:00 AM	58.3	57.8	0.5	7.0	51.3	-	54.6	-3.3
07:00 AM - 08:00 AM	55.4	54.8	0.6	7.0	48.4	-	52.7	-4.3
08:00 AM - 09:00 AM	58.7	56.0	2.7	3.0	55.7	-	53.7	2.0
ค่ามาตรฐาน	≤ 10							

Reference Method : Based on ISO 1996-1 and ISO 1996-2

มาตรฐาน

- ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ เรื่อง ค่าระดับเสียงรบกวน ฉบับที่ 29 พ.ศ. 2550
- ประกาศคณะกรรมการควบคุมมลพิษ เรื่อง วิธีการตรวจวัดระดับเสียงพื้นฐาน ระดับเสียงขณะไม่มีการรบกวน การตรวจวัดและคำนวณระดับเสียงขณะมีการรบกวน การคำนวณค่าระดับการรบกวน และแบบบันทึกการตรวจวัดเสียงรบกวน พ.ศ. 2550 และประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2553
- ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานมลพิษทางเสียงอันเกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561  
ระดับเสียงจากแหล่งกำเนิด ทำการตรวจวัด วันที่ 04-05 พฤษภาคม 2565  
ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2250417-1 วันที่ตรวจวัด 04-05 พฤษภาคม 2565)

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Approved by

*Kanok Korn Anek*

Kanok Korn Anek  
Senior Manager



## Analysis / Test Report

TESTING  
No.0009

Client : Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

Lot ID: 2250417  
Date Received : May 06, 2022  
Date Reported : May 11, 2022  
Report No. : 2296048-1

P/O :  
Project Name : Environmental Testing  
Project Location :

Page 1 of 3

Sample No. 2250417-1  
Parameter Noise  
Location หมู่ชนที่อยู่ใกล้โครงการ (จุดอ้างอิง) (GPS 47P 0699899, 1593565) (Shut down)  
Measurement Date May 04 - 05, 2022  
Measurement by Autit Aoonsim  
Sound Level Meter 00572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	53.6	66.3	51.7
10:00 AM - 11:00 AM	54.9	66.7	52.5
11:00 AM - 12:00 PM	53.4	65.4	51.3
12:00 PM - 01:00 PM	52.8	65.2	50.5
01:00 PM - 02:00 PM	53.2	73.2	50.4
02:00 PM - 03:00 PM	56.2	79.0	52.1
03:00 PM - 04:00 PM	61.9	83.7	52.8
04:00 PM - 05:00 PM	58.1	86.0	52.7
05:00 PM - 06:00 PM	55.8	74.2	52.7
06:00 PM - 07:00 PM	55.8	70.3	53.0
07:00 PM - 08:00 PM	56.6	68.8	53.2
08:00 PM - 09:00 PM	59.4	66.9	58.0
09:00 PM - 10:00 PM	55.1	64.9	53.6
10:00 PM - 10:05 PM	53.9	58.9	52.5
10:05 PM - 10:10 PM	54.4	62.1	52.8
10:10 PM - 10:15 PM	54.0	59.8	52.7
10:15 PM - 10:20 PM	60.6	64.5	53.0
10:20 PM - 10:25 PM	64.0	65.0	63.7
10:25 PM - 10:30 PM	58.5	64.5	53.7
10:30 PM - 10:35 PM	54.9	61.5	53.2
10:35 PM - 10:40 PM	54.6	59.6	53.4
10:40 PM - 10:45 PM	54.3	60.8	52.9
10:45 PM - 10:50 PM	54.6	63.7	53.1
10:50 PM - 10:55 PM	54.7	61.1	53.4
10:55 PM - 11:00 PM	54.2	60.1	52.9
11:00 PM - 11:05 PM	54.6	65.4	53.1
11:05 PM - 11:10 PM	54.6	63.2	53.1
11:10 PM - 11:15 PM	54.6	62.3	53.3
11:15 PM - 11:20 PM	54.5	59.2	53.2
11:20 PM - 11:25 PM	55.1	62.4	53.7
11:25 PM - 11:30 PM	55.0	62.6	53.9
11:30 PM - 11:35 PM	54.8	61.8	53.5
11:35 PM - 11:40 PM	55.1	61.7	53.6
11:40 PM - 11:45 PM	55.1	59.4	53.7
11:45 PM - 11:50 PM	54.9	59.2	53.6
11:50 PM - 11:55 PM	55.4	64.5	53.8
11:55 PM - 12:00 AM	55.2	59.6	54.1
12:00 AM - 12:05 AM	55.2	62.6	53.9
12:05 AM - 12:10 AM	55.0	64.3	53.5
12:10 AM - 12:15 AM	54.5	59.2	53.2

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Approved by

*Kanok Korn Anek*

Kanokkorn Anek  
Senior Manager



## Analysis / Test Report

TESTING  
No.0009

Client : Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

Lot ID: 2250417  
Date Received : May 06, 2022  
Date Reported : May 11, 2022  
Report No. : 2296048-1

P/O :  
Project Name : Environmental Testing  
Project Location :

Page 2 of 3

Sample No. 2250417-1  
Parameter Noise  
Location หมู่ชนที่อยู่ใกล้โครงการ (จุดอ้างอิง) (GPS 47P 0699899, 1593565) (Shut down)  
Measurement Date May 04 - 05, 2022  
Measurement by Autit Aoonsim  
Sound Level Meter 00572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:15 AM - 12:20 AM	54.2	59.0	52.9
12:20 AM - 12:25 AM	54.2	60.7	52.9
12:25 AM - 12:30 AM	54.3	59.4	53.0
12:30 AM - 12:35 AM	53.9	58.5	52.4
12:35 AM - 12:40 AM	54.0	60.8	52.5
12:40 AM - 12:45 AM	54.7	65.3	53.0
12:45 AM - 12:50 AM	54.1	58.9	52.8
12:50 AM - 12:55 AM	54.2	59.1	52.8
12:55 AM - 01:00 AM	54.5	61.4	53.1
01:00 AM - 01:05 AM	54.1	59.5	52.9
01:05 AM - 01:10 AM	54.3	61.4	52.8
01:10 AM - 01:15 AM	54.6	61.2	53.2
01:15 AM - 01:20 AM	54.3	59.4	53.1
01:20 AM - 01:25 AM	54.4	62.5	52.9
01:25 AM - 01:30 AM	54.6	60.2	53.2
01:30 AM - 01:35 AM	54.4	60.0	53.3
01:35 AM - 01:40 AM	54.7	59.1	53.5
01:40 AM - 01:45 AM	54.9	60.3	53.5
01:45 AM - 01:50 AM	55.4	62.6	54.0
01:50 AM - 01:55 AM	54.9	62.8	53.4
01:55 AM - 02:00 AM	54.8	63.2	53.4
02:00 AM - 02:05 AM	54.5	64.0	52.9
02:05 AM - 02:10 AM	54.3	61.2	52.9
02:10 AM - 02:15 AM	53.9	60.8	52.4
02:15 AM - 02:20 AM	54.7	62.0	53.2
02:20 AM - 02:25 AM	54.3	59.7	53.0
02:25 AM - 02:30 AM	54.4	59.0	53.0
02:30 AM - 02:35 AM	54.4	60.1	53.0
02:35 AM - 02:40 AM	54.0	58.6	52.8
02:40 AM - 02:45 AM	54.9	69.3	52.7
02:45 AM - 02:50 AM	55.7	70.7	53.1
02:50 AM - 02:55 AM	54.2	58.9	52.9
02:55 AM - 03:00 AM	55.8	67.7	51.3
03:00 AM - 03:05 AM	55.8	60.5	54.4
03:05 AM - 03:10 AM	55.5	62.3	54.0
03:10 AM - 03:15 AM	54.0	59.2	52.2
03:15 AM - 03:20 AM	54.7	59.7	53.5
03:20 AM - 03:25 AM	54.4	59.5	53.3
03:25 AM - 03:30 AM	54.2	58.6	52.9
03:30 AM - 03:35 AM	54.6	59.5	53.3

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Approved by

*Kanok Korn Anek*

Kanokkorn Anek  
Senior Manager



## Analysis / Test Report

TESTING  
No.0009

Client : Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

Lot ID: 2250417  
Date Received : May 06, 2022  
Date Reported : May 11, 2022  
Report No. : 2296048-1

P/O :  
Project Name : Environmental Testing  
Project Location :

Page 3 of 3

Sample No. 2250417-1  
Parameter Noise  
Location ชุมชนที่อยู่ใกล้โครงการ (จุดอ้างอิง) (GPS 47P 0699899, 1593565) (Shut down)  
Measurement Date May 04 - 05, 2022  
Measurement by Autit Aoonsim  
Sound Level Meter 00572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:35 AM - 03:40 AM	54.4	60.9	53.3
03:40 AM - 03:45 AM	54.4	58.9	53.0
03:45 AM - 03:50 AM	54.2	61.0	52.9
03:50 AM - 03:55 AM	54.2	62.7	52.8
03:55 AM - 04:00 AM	54.6	60.2	53.0
04:00 AM - 04:05 AM	54.2	60.0	52.6
04:05 AM - 04:10 AM	53.8	59.0	52.4
04:10 AM - 04:15 AM	53.6	59.9	52.3
04:15 AM - 04:20 AM	54.2	61.9	52.8
04:20 AM - 04:25 AM	54.1	59.3	52.8
04:25 AM - 04:30 AM	54.3	60.7	53.0
04:30 AM - 04:35 AM	54.3	62.7	52.7
04:35 AM - 04:40 AM	54.4	60.2	53.1
04:40 AM - 04:45 AM	54.2	60.6	52.9
04:45 AM - 04:50 AM	54.7	61.5	53.3
04:50 AM - 04:55 AM	54.9	60.2	53.5
04:55 AM - 05:00 AM	54.4	59.1	53.2
05:00 AM - 05:05 AM	54.8	61.9	53.4
05:05 AM - 05:10 AM	55.5	61.8	53.9
05:10 AM - 05:15 AM	54.8	60.3	53.5
05:15 AM - 05:20 AM	54.8	59.9	53.5
05:20 AM - 05:25 AM	54.8	60.9	53.3
05:25 AM - 05:30 AM	54.9	62.5	53.6
05:30 AM - 05:35 AM	55.1	61.5	53.8
05:35 AM - 05:40 AM	55.4	61.3	54.1
05:40 AM - 05:45 AM	55.3	59.2	53.8
05:45 AM - 05:50 AM	55.8	68.9	54.5
05:50 AM - 05:55 AM	57.5	63.4	55.0
05:55 AM - 06:00 AM	59.4	69.0	56.9
06:00 AM - 07:00 AM	57.8	78.0	54.6
07:00 AM - 08:00 AM	54.8	68.7	52.7
08:00 AM - 09:00 AM	56.0	67.5	53.7

Reference Method : Based on ISO 1996-1 and ISO 1996-2

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Approved by

Kanokkorn Anek  
Senior Manager

# ภาคผนวก ค-5

ระดับเสียงในบริเวณการทำงาน



## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149418**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214831-1

Page 1 of 1

**Sample Number** 21149418-1  
**Parameter** Noise (Leq 8 hrs.)  
**Location** เดชาหลอม MCL4  
**Measurement Date** Jan 19, 2022  
**Measurement by** Aphiwat Tumnoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
05:02 PM - 06:02 PM	81.3	92.6	78.3
06:02 PM - 07:02 PM	80.3	98.0	77.1
07:02 PM - 08:02 PM	79.1	85.9	76.5
08:02 PM - 09:02 PM	83.2	96.9	77.4
09:02 PM - 10:02 PM	83.9	89.4	81.6
10:02 PM - 11:02 PM	81.1	87.3	77.7
11:02 PM - 12:02 AM	79.9	91.5	77.2
12:02 AM - 01:02 AM	84.1	97.1	81.3

Leq Average 8 hrs. (dB(A))

82.0

Lmax (dB(A))

98.0

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Technical Management**

Sararat Mongkonjirawut  
Scientist (4)

**Approved by**

Supot Salamteh  
Section Head

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Date Received : Jan 21, 2022  
Date Reported : Jan 25, 2022  
Report Number: 2214832-1



## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149418**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214833-1

Page 1 of 1

**Sample Number** 21149418-3  
**Parameter** Noise (Leq 8 hrs.)  
**Location** เตาอบชุมชนงาน MCL4  
**Measurement Date** Jan 19, 2022  
**Measurement by** Aphiwat Tumnoo

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:44 AM - 10:44 AM	89.5	92.2	88.4
10:44 AM - 11:44 AM	89.6	92.6	88.4
11:44 AM - 12:44 PM	90.2	93.3	89.0
12:44 PM - 01:44 PM	90.3	93.5	89.1
01:44 PM - 02:44 PM	90.0	92.7	89.0
02:44 PM - 03:44 PM	89.6	92.7	88.6
03:44 PM - 04:44 PM	88.9	91.3	88.1
04:44 PM - 05:44 PM	89.8	92.8	88.7

Leq Average 8 hrs. (dB(A))

89.8

Lmax (dB(A))

93.5

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Technical Management**

Sararat Mongkonjirawut  
Scientist (4)

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238930**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 2285457-1

Page 1 of 1

**Sample Number** 2238930-1  
**Parameter** Noise (Leq 8 hrs.)  
**Location** เดทหลอม : MCL1  
**Measurement Date** Apr 06, 2022  
**Measurement by** NarupolThongnuch

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:20 AM - 01:20 AM	81.1	100.9	76.2
01:20 AM - 02:20 AM	86.0	107.5	79.1
02:20 AM - 03:20 AM	84.7	103.7	77.5
03:20 AM - 04:20 AM	83.2	99.5	73.6
04:20 AM - 05:20 AM	84.1	104.0	77.1
05:20 AM - 06:20 AM	86.2	107.6	78.4
06:20 AM - 07:20 AM	85.2	96.6	78.6
07:20 AM - 08:20 AM	84.8	100.7	78.1

Leq Average 8 hrs. (dB(A))

84.7

Lmax (dB(A))

107.6

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Technical Management**

Sararat Mongkonjirawut  
Scientist (4)

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149335**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214-82P1

Page 1 of 1

**Sample Number** 2114( 335P1  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เดอหลอม : MCL1  
**Measurement Date** Jan 18, 2022  
**Measurement by** Aphiwat Tumnoo

Time	Le) dBA66	Lmax dBA66	L(0 dBA66
08:51 AM P0( :51 AM	83.7	( (.3	-8.8
0( :51 AM P10:51 AM	87.4	112.5	- (.7
10:51 AM P11:51 AM	83.3	(3.-	-(.2
11:51 AM P12:51 f M	81.(	(-.3	-4.1
12:51 f M P01:51 f M	80.-	102.5	-3.7
01:51 f M P02:51 f M	84.4	101.(	-7.(
02:51 f M P03:51 f M	84.4	102.-	-(.3
03:51 f M P04:51 f M	82.2	(8.(	-8.5

Le) Average 8 hrs. dBA66

83.-

Lmax dBA66

112.5

Standard dBA66

(0

140

Reference Method : Based on ISO1((7P1 and 1((7P2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Technical Management**

Sararat Mongkonjirawut  
Scientist q46

**Approved by**

Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149335**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214-83P1

f age 1 o91

**Sample Number** 2114( 335P2  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เดทหลอม : MCL2  
**Measurement Date** Jan 1- , 2022  
**Measurement by** Aphiwat Tumnoo

Time	Le) d(BqA66	Lmax d(BqA66	L(0 d(BqA66
0(:4- AM P10:4- AM	85.3	(3.8	81.5
10:4- AM P11:4- AM	85.0	102.8	80.(
11:4- AM P12:4- fM	84.8	101.(	80.3
12:4- fM P01:4- fM	85.0	((.0	80.-
01:4- fM P02:4- fM	83.-	(3.4	-(.8
02:4- fM P03:4- fM	84.7	(8.7	-(.1
03:4- fM P04:4- fM	84.2	102.5	-(.8
04:4- fM P05:4- fM	84.(	(1.2	80.5

Le) Average 8 hrs. d(BqA66

84.-

Lmax d(BqA66

102.8

Standard d(BqA66

(0

140

Reference Method : Based on ISO1((7P1 and 1((7P2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Technical Management**

Sararat Mongkonjirawut  
Scientist q46

**Approved by**

Supot Salamteh  
Section Head

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**P/O :**  
**Project Name :** Environmental Tesing  
**Project Location :**

Date Received : Jan 21, 2022  
Date Reported : Jan 25, 2022  
Report Number: 2214- 84P1

page 1 of 91

Sample Number	2114/ (335P3
Parameter	Noise d.e) 8 hrs.6
Location	ตามปกติทางวิ่ง : MCL1
Measurement Date	Jan 18, 2022
Measurement by	Aphiwat Tumnoo

Time	Le) qdBqA66	Lmax qdBqA66	L(0 qdBqA66
10:50 AM P 11:50 AM	-2.0	8-.-	77.2
11:50 AM P 12:50 f M	-1.4	(4.3	74.5
12:50 f M P 01:50 f M	-0.4	84.-	75.1
01:50 f M P 02:50 f M	7(.5	82.-	77.1
02:50 f M P 03:50 f M	-0.3	84.8	77.-
03:50 f M P 04:50 f M	-2.(	83.-	7- .7
04:50 f M P 05:50 f M	-1.0	82.2	7- .4
05:50 f M P 07:50 f M	-0.8	84.7	7- .4

Le) Average 8 hrs.  $\alpha$ BqA66

Lmax qdBqA66

Standard qdBqA66

Reference Method : Based on ISO11791 and 11792

Standard : ปา สวี สุ ทำ มัคคตวรสาวิ ามัน วั สวาทอดาอมต วั ปไอนนง

<sup>๕</sup> ะสวาปา สอศสขิ สว้า นามะ สต สตตบว ก นใ้ ะสวาทวมะ พี. ๒๕๔๖

## Technical Management

*Sept*

Sararat Mongkonjirawut  
Scientist α6

**Approved by**

Snapt S.

Supot Salamteh  
Section Head

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**Lot ID: 21149335**  
Date Received : Jan 21, 2022  
Date Reported : Jan 25, 2022  
Report Number: 2214-85P1

f age 1 o91

Le) Average 8 hrs.  $\sigma_{BQA66}$  -7.1  
 $L_{max}$   $\sigma_{BQA66}$   
Standard  $\sigma_{BQA66}$  (0  
Reference Method : Based on ISO1((7P1 and 1((7P2  
Standard : ป่า สรี สภา ทำ มัคคตรวจสำ ักม วั าสวดีตามมด วั ปโนนบ  
ะสวปา สอศสววิ ามมะ สด สดบว ัก นไฟ ะสวทามมะ พ. ๒๕๔๔



## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149335**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214-8Pf1

Page 1 of 1

**Sample Number** 2114q335f5  
**Parameter** Noise )Le6 8 hrs.7  
**Location** เครื่องคัดแยกขนาดชิ้นงาน : MCL1  
**Measurement Date** Jan 18, 2022  
**Measurement by** Aphiwat Tumnoo

Time	Le6 )dB)A77	Lmax )dB)A77	Lq0 )dB)A77
08:50 AM f 09:50 AM	8-.-	q8.5	81.0
09:50 AM f 10:50 AM	88.3	100.4	8P.q
10:50 AM f 11:50 AM	88.4	q5.2	8-.-
11:50 AM f 12:50 PM	88.4	qq.8	8- .P
12:50 PM f 01:50 PM	8- .q	q8.8	8P.P
01:50 PM f 02:50 PM	88.0	100.P	8- .1
02:50 PM f 03:50 PM	8- .4	qq.0	8P.P
03:50 PM f 04:50 PM	88.-	q8.P	84.5

Le6 Average 8 hrs. )dB)A77

88.1

Lmax )dB)A77

100.P

Standard )dB)A77

q0

140

Reference Method : Based on ISO1qPf1 and 1qPf2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Sararat Mongkonjirawut  
Scientist )47

**Approved by**

Supot Salamteh  
Section Head

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149335**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214-8-P1

Page 1 of 1

**Sample Number** 2114( 335Pq  
**Parameter** Noise )Le6 8 hrs.7  
**Location** เครื่องคัดแยกขนาดชิ้นงาน : MCL2  
**Measurement Date** Jan 1- , 2022  
**Measurement by** Aphiwat Tumnoo

Time	Le6 )dB)A77	Lmax )dB)A77	L( 0 )dB)A77
0( :38 AM P 10:38 AM	8( .5	( q.-	88.5
10:38 AM P 11:38 AM	8( .-	( 8.8	88.5
11:38 AM P 12:38 f M	8( .4	( q.2	88.4
12:38 f M P 01:38 f M	8( .4	( 5.(	88.4
01:38 f M P 02:38 f M	8( .3	( 5.4	88.0
02:38 f M P 03:38 f M	8( .4	( q.1	88.3
03:38 f M P 04:38 f M	8( .(	100.q	8( .0
04:38 f M P 05:38 f M	( 0.(	( 4.4	8( .0

Le6 Average 8 hrs. )dB)A77

8( .-

Lmax )dB)A77

100.q

Standard )dB)A77

( 0

140

Reference Method : Based on ISO1(( qP1 and 1(( qP2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149335**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214-8Pf1

Page 1 of 1

**Sample Number** 2114P335f8  
**Parameter** Noise (Le) 8 hrs.6  
**Location** เตาอบชุมชนงาน : 7 T2  
**Measurement Date** Jan 18, 2022  
**Measurement by** Aphiwat Tumnoo

Time	Le) dB(A)	Lmax dB(A)	LPO dB(A)
08:48 AM f 09:48 AM	81.1	P5.0	18.1
09:48 AM f 10:48 AM	85.1	102.8	82.5
10:48 AM f 11:48 AM	85.-	102.1	82.5
11:48 AM f 12:48 PM	84.4	102.-	82.5
12:48 PM f 01:48 PM	85.8	102.1	81.0
01:48 PM f 02:48 PM	81.8	101.1	80.4
02:48 PM f 03:48 PM	84.5	101.5	81.2
03:48 PM f 04:48 PM	82.8	P2.-	82.4

Le) Average 8 hrs. dB(A)

84.2

Lmax dB(A)

102.8

Standard dB(A)

P0

140

Reference Method : Based on SH1PPIf1 and 1PPIf2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149335**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214-P0f1

Page 1 of 1

**Sample Number** 2114P335fP  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เตาอบชุมชนงาน : 7 T3  
**Measurement Date** Jan 1P, 2022  
**Measurement by** Aphiwat Tumnoo

Time	Le) dBA66	Lmax dBA66	LPO dBA66
08:2P AM f 0P:2P AM	88.8	101.1	85.0
0P:2P AM f 10:2P AM	8P.0	102.2	84.8
10:2P AM f 11:2P AM	88.-	101.8	84.3
11:2P AM f 12:2P 9M	88.8	102.3	84.-
12:2P 9M f 01:2P 9M	88.8	102.4	84.P
01:2P 9M f 02:2P 9M	88.8	102.3	85.1
02:2P 9M f 03:2P 9M	88.P	102.3	84.5
03:2P 9M f 04:2P 9M	8P.1	103.I	84.-

Le) Average 8 hrs. dBA66

88.P

Lmax dBA66

103.I

Standard dBA66

P0

140

Re(ference Method : Based on CSH1PPIf1 and 1PPIf2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149335**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2214-P1f1

Page 1 of 1

**Sample Number** 2114P335f10  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เตาอบชุมชน : 7T4  
**Measurement Date** Jan 1-, 2022  
**Measurement by** Aphiwat Tumnoo

Time	Le) dBA66	Lmax dBA66	LPO dBA66
0P:52 AM f 10:52 AM	8-.0	PP.2	82.P
10:52 AM f 11:52 AM	85.-	PP.8	82.2
11:52 AM f 12:52 9M	85.2	102.1	82.0
12:52 9M f 01:52 9M	8-.1	101.4	82.8
01:52 9M f 02:52 9M	8-.3	PP.3	82.P
02:52 9M f 03:52 9M	8-.2	P8.-	83.2
03:52 9M f 04:52 9M	8-.5	100.2	83.4
04:52 9M f 05:52 9M	88.1	PP.1	84.1

Le) Average 8 hrs. dBA66

8-.1

Lmax dBA66

102.1

Standard dBA66

P0

140

Reference Method : Based on CSH1PPIf1 and 1PPIf2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238930**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 2285458-1

Page 1 of 1

**Sample Number** 2238930-2  
**Parameter** Noise (Leq 8 hrs.)  
**Location** เดอหลอม : MCL2  
**Measurement Date** Apr 06, 2022  
**Measurement by** NarupolThongnuch

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:05 AM - 01:05 AM	82.3	93.2	76.7
01:05 AM - 02:05 AM	83.8	98.1	78.5
02:05 AM - 03:05 AM	84.9	100.6	78.7
03:05 AM - 04:05 AM	84.6	104.8	79.4
04:05 AM - 05:05 AM	85.1	105.5	78.4
05:05 AM - 06:05 AM	84.3	98.4	79.6
06:05 AM - 07:05 AM	85.4	103.9	79.7
07:05 AM - 08:05 AM	84.9	104.8	79.6

Leq Average 8 hrs. (dB(A))

84.5

Lmax (dB(A))

105.5

Standard (dB(A))

90

140

Reference Method : Based on ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238930**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 228545- P1

f age 1 o91

**Sample Number** 2238- 30P3  
**Parameter** Noise (Leq 8 hrs.)  
**Location** ตามประกาศทาง : MCL1  
**Measurement Date** Apr 06, 2022  
**Measurement by** NarupolThongnuch

Time	Leq (dB(A))	Lmax (dB(A))	L-0 (dB(A))
12:1- AM P01:1- AM	71.3	85.-	66.0
01:1- AM P02:1- AM	71.4	85.5	66.3
02:1- AM P03:1- AM	71.-	88.1	64.6
03:1- AM P04:1- AM	72.3	87.2	63.8
04:1- AM P05:1- AM	71.5	86.-	66.2
05:1- AM P06:1- AM	71.6	86.7	66.4
06:1- AM P07:1- AM	72.6	88.1	66.7
07:1- AM P08:1- AM	74.0	8-.-	66.7

Leq Average 8 hrs. (dB(A))

72.2

Lmax (dB(A))

8-.-

Standard (dB(A))

-0

140

Reference Method : Based on ISO1--6P1 and 1--6P2

Standard : ปฎิบัติ สร ทำ มัคคตวสั ำ ำ สวตัดตามต ำ ปไอนบง

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238930**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 22854- 0P1

Page 1 of 1

**Sample Number** 2238( 30P4  
**Parameter** Noise d.e) 8 hrs.6  
**Location** ตามประกาศทาง : MCL2  
**Measurement Date** Apr 0-, 2022  
**Measurement by** NarupolThongnuch

Time	Le) dB(A)	Lmax dB(A)	L(0 dB(A)
12:05 AM P01:05 AM	75.-	85.0	71.3
01:05 AM P02:05 AM	75.3	85.-	73.3
02:05 AM P03:05 AM	75.4	85.8	71.0
03:05 AM P04:05 AM	75.3	84.1	73.1
04:05 AM P05:05 AM	74.8	85.2	72.-
05:05 AM P0- :05 AM	75.0	85.1	73.1
0- :05 AM P07:05 AM	75.3	82.7	73.0
07:05 AM P08:05 AM	75.4	85.3	73.2

Le) Average 8 hrs. dB(A)

75.3

Lmax dB(A)

85.0

Standard dB(A)

70

140

Reference Method : Based on ISO1(-P1 and 1(-P2

Standard : ปุ สรี สุ ทำ มัคคตวสั ำ ำ สวตัดตามด วั ปไอนนง

ะสวาปว สอศสววิ นมมะ สด สดตบว, ก นใสิ ะสวาท่มมะ พ. .๒๕๕๖

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**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238930**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 22854- 1P1

f age 1 o91

**Sample Number** 2238( 30P5  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เครื่องคัดแยกขนาดชิ้นงาน : MCL1  
**Measurement Date** Apr 0- , 2022  
**Measurement by** NarupolThongnuch

Time	Le) dBA66	Lmax dBA66	L(0 dBA66
12:15 AM P01:15 AM	8- .4	100.5	84.-
01:15 AM P02:15 AM	87.3	101.4	8- .2
02:15 AM P03:15 AM	87.2	101.-	8- .3
03:15 AM P04:15 AM	87.2	102.0	8- .3
04:15 AM P05:15 AM	87.0	100.7	8- .3
05:15 AM P0- :15 AM	87.5	100.(	8- .5
0- :15 AM P07:15 AM	87.7	103.0	8- .7
07:15 AM P08:15 AM	88.3	105.4	8- .7

Le) Average 8 hrs. dBA66

87.4

Lmax dBA66

105.4

Standard dBA66

(0

140

Reference Method : Based on ISO1((- P1 and 1((- P2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238930**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 22854- 2P1

f age 1 o91

**Sample Number** 2238( 30P-  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เครื่องคัดแยกขนาดชิ้นงาน : MCL2  
**Measurement Date** Apr 0-, 2022  
**Measurement by** NarupolThongnuch

Time	Le) qdBqA66	Lmax qdBqA66	L(0 qdBqA66
12:02 AM P01:02 AM	8-.1	(-.1	80.8
01:02 AM P02:02 AM	85.0	(3.3	81.0
02:02 AM P03:02 AM	85.5	(3.(	81.4
03:02 AM P04:02 AM	8(.5	(-.(	88.1
04:02 AM P05:02 AM	(0.4	((.8	8(.2
05:02 AM P0- :02 AM	(3.1	(8.(	8(.0
0- :02 AM P07:02 AM	(0.0	((.8	88.-
07:02 AM P08:02 AM	8(.7	101.1	88.2

Le) Average 8 hrs. qdBqA66

8(.4

Lmax qdBqA66

101.1

Standard qdBqA66

(0

140

Reference Method : Based on ISO1((- P1 and 1((- P2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238930**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 22854- 4P1

Page 1 of 1

**Sample Number** 2238( 30P8  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เตาอบชุมชน : I T2  
**Measurement Date** Apr 05, 2022  
**Measurement by** NarupolThongnuch

Time	Le) dB(A)	Lmax dB(A)	L(0 dB(A)
10:02 AM P 11:02 AM	80.2	(3.4	77.(
11:02 AM P 12:02 f M	83.1	(0.5	81.-
12:02 f M P 01:02 f M	83.5	(1.1	81.5
01:02 f M P 02:02 f M	83.3	(0.7	81.5
02:02 f M P 03:02 f M	82.(	(0.3	81.5
03:02 f M P 04:02 f M	83.1	(0.4	81.5
04:02 f M P 05:02 f M	82.(	(0.8	81.5
05:02 f M P 0- :02 f M	82.8	(0.0	81.5

Le) Average 8 hrs. dB(A)

82.8

Lmax dB(A)

(3.4

Standard dB(A)

(0

140

Reference Method : Based on CSH1(- P1 and 1(- P2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Technical Management**

Sararat Mongkonjirawut  
Scientist 46

**Approved by**

Supot Salamteh  
Section I lead

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238940**

Date Received : Apr 06, 2022

Date Reported : Apr 11, 2022

Report Number: 228--3Pf1

Page 1 of 1

**Sample Number** 2238q40f1  
**Parameter** Noise )LeG 8 hrs.7  
**Location** เตาหลอม MCL4  
**Measurement Date** Apr 0-, 2022  
**Measurement by** NarupolThongnuch

Time	LeG )dB)A77	Lmax )dB)A77	Lq0 )dB)A77
10:36 5M f 11:36 5M	68.2	8P.8	61.6
11:36 5M f 12:36 AM	6q.q	q0.6	63.2
12:36 AM f 01:36 AM	80.2	q8.1	62.q
01:36 AM f 02:36 AM	66.P	88.1	P6.0
02:36 AM f 03:36 AM	81.0	q2.6	6-.2
03:36 AM f 04:36 AM	63.0	q2.2	P-.-
04:36 AM f 0-:36 AM	83.-	q4.0	68.1
0-:36 AM f 0P:36 AM	6q.-	q0.1	60.6

LeG Average 8 hrs. )dB)A77

6q.q

Lmax )dB)A77

q8.1

Standard )dB)A77

q0

140

Reference Method : Based on 951 1qqPf1 and 1qqPf2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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**Technical Management**

Sararat Mongkonhrawut  
Scientist )47

**Approved by**

Supot Salamteh  
Section Oead

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238940**

Date Received : Apr 06, 2022

Date Reported : Apr 11, 2022

Report Number: 228--36P1

Page 1 of 51

**Sample Number** 2238( 40P2  
**Parameter** Noise d.e) 8 hrs.G  
**Location** ตามประกาศทาง MCL4  
**Measurement Date** Apr 04, 2022  
**Measurement by** NarupolThongnuch

Time	Le) dBA	Lmax dBA	L(0 dBA
07:16 AM P10:16 AM	83.2	(2.0	7(.
10:16 AM P11:16 AM	80.4	(-.0	7(.-
11:16 AM P12:16 fM	62.8	88.6	76.1
12:16 fM P01:16 fM	76.-	68.7	77.8
01:16 fM P02:16 fM	80.-	(2.6	78.2
02:16 fM P03:16 fM	83.0	112.2	78.8
03:16 fM P04:16 fM	60.(	86.7	77.6
04:16 fM P0-:16 fM	82.0	(2.8	61.0

Le) Average 8 hrs. dBA

80.1

Lmax dBA

112.2

Standard dBA

(0

140

Reference Method : Based on SSI 1(7P1 and 1(7P2

Standard : ปุ สรี สุ ทำ มัคคตวสั ำ ำ สวัดตามด วั ปไอนนง

ะสวาป สออสสิ สว ำ นมมะ สด สดตบว ัก นสิ ะสวาท่มมะ พ. ๒๕๕๖

**Technical Management**

Sararat Mongkonhrawut  
Scientist dG

**Approved by**

Supot Salamteh  
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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2250394**

Date Received : May 03, 2022

Date Reported : May 03, 2022

Report Number: 225-5c5P1

Page 1 of 1

**Sample Number** 22-0354P1  
**Parameter** Noise (Leq 8 hrs.)  
**Location** เตาอบชุมชน : 6 T4  
**Measurement Date** May 03, 2022  
**Measurement by** Samart Roongan

Time	Leq (dB(A))	Lmax (dB(A))	L50 (dB(A))
08:-8 AM P05:-8 AM	8-.8	55.-	81.-
05:-8 AM P10:-8 AM	8c.0	58.1	82.1
10:-8 AM P11:-8 AM	8-.8	58.2	82.1
11:-8 AM P12:-8 f M	8-.5	51.3	82.1
12:-8 f M P01:-8 f M	84.8	54.2	81.2
01:-8 f M P02:-8 f M	84.1	5c.c	81.3
02:-8 f M P03:-8 f M	83.4	52.1	81.2
03:-8 f M P04:-8 f M	84.1	52.-	81.3

Leq Average 8 hrs. (dB(A))

8-.2

Lmax (dB(A))

55.-

Standard (dB(A))

50

140

Reference Method : Based on GB1555P1 and 1555P2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2250438**

Date Received : May 03, 2022

Date Reported : May 03, 2022

Report Number: 225c0c8-1

Page 1 of 1

**Sample Number** 2290438-1  
**Parameter** Noise (Leq 8 hrs.)  
**Location** เตาอบชุมชน : MCL4  
**Measurement Date** May 03, 2022  
**Measurement by** Samart Roongan

Time	Leq (dB(A))	Lmax (dB(A))	L50 (dB(A))
05:22 AM - 10:22 AM	89.6	58.9	83.4
10:22 AM - 11:22 AM	89.0	50.6	83.0
11:22 AM - 12:22 PM	84.4	50.2	82.6
12:22 PM - 01:22 PM	84.4	50.4	82.4
01:22 PM - 02:22 PM	89.8	50.3	84.2
02:22 PM - 03:22 PM	89.0	85.5	84.0
03:22 PM - 04:22 PM	89.1	88.3	83.5
04:22 PM - 09:22 PM	89.2	85.3	83.8

Leq Average 8 hrs. (dB(A))

89.2

Lmax (dB(A))

58.9

Standard (dB(A))

50

140

Reference Method : Based on ISO155c-1 and 155c-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Sararat Mongkonjirawut  
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**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2250955**

Date Received : May 03, 2022

Date Reported : May 03, 2022

Report Number: 2305-3cP1

Page 1 of 1

**Sample Number** 2250( 55P2  
**Parameter** Noise d.e) 8 hrs.6  
**Location** เตาอบชุมชน : I T3  
**Measurement Date** May 03, 2022  
**Measurement by** Samart Roongan

Time	Le) dB(A)	Lmax dB(A)	L(0 dB(A)
01:01 AM P10:01 AM	88.4	100.2	84.5
10:01 AM P11:01 AM	8(.4	((.2	85.2
11:01 AM P12:01 f M	8(.3	((.5	85.c
12:01 f M P01:01 f M	8(.5	(8.1	85.c
01:01 f M P02:01 f M	88.2	(c.4	84.2
02:01 f M P03:01 f M	8-.2	(5.2	83.(
03:01 f M P04:01 f M	8c.8	(5.c	83.(
04:01 f M P05:01 f M	8-.-	(c.0	84.1

Le) Average 8 hrs. dB(A) 88.4  
Lmax dB(A) 100.2  
Standard dB(A) 140

Reference Method : Based on GB11181 and 11182

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย  
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**Technical Management**

Sararat Mongkonjirawut  
Supervisor

**Approved by**

Supot Salamteh  
Section Head

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# ภาคผนวก ค-6

ระดับความร้อนในบริเวณการทำงาน



## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149419**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2184217-1

Page 1 of 2

**Sample Number** 21149419-1  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Jan 19, 2022  
**Measurement by** Aphiwat Tumnoo  
**Location** ปฏิบัติงาน 2 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณศักดิ์ดา ทองดั่ง แผนก : เตาอบขนม )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เตาอบขนมชิ้นงาน : MCL4	30	27.9	25.1	34.5	34.0
Office : HT	90	18.4	16.7	22.3	22.2
Average (WBGT)		20.8			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
Wichan Choonharat  
Assistant Manager

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149419**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2184217-1

Page 2 of 2

**Sample Number** 21149419-2  
**Parameter** Heat Stress (Sampling Time : 05.00 PM - 07.00 PM)  
**Measurement Date** Jan 19, 2022  
**Measurement by** Aphiwat Tumnoo  
**Location** ปฏิบัติงาน 2 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณเชิรวิทย์ จวง แผนก : เตาหลอม)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
หน้าเตาหลอม : MCL4	40	27.0	24.7	32.2	32.0
ห้องควบคุมเตาหลอม	80	19.4	17.8	23.0	22.8
Average (WBGT)		21.9			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

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## Analysis / Test Report

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238933**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 2271968-1

Page 1 of 4

**Sample Number** 2238933-1  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Apr 06, 2022  
**Measurement by** Phongsiri Somkaew  
**Location** ปฏิบัติงาน 2 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณอนุรักษ พรหมมา แผนก : เตาหลอม MCL1 )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
หน้าเตาหลอม MCL1	20	28.3	25.1	35.7	35.5
ห้องควบคุมเตาหลอม MCL1	100	15.5	13.6	19.8	19.7
Average (WBGT)		17.6			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

**Technical Management**

Supot Salamteh  
Section Head

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Assistant Manager

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238933**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 2271968-1

Page 2 of 4

**Sample Number** 2238933-2  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Apr 06, 2022  
**Measurement by** Phongsiri Somkaew  
**Location** ปฏิบัติงาน 2 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณเจตกรชัย คำคม แผนก : เตาหลอม MCL2 )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
หน้าเตาหลอม MCL2	20	28.7	25.4	36.5	36.2
ห้องควบคุมเตาหลอม MCL2	100	22.1	19.6	27.8	27.4
Average (WBGT)		23.2			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

**Technical Management**

Supot Salamteh  
Section Head

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Assistant Manager

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238933**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 2271968-1

Page 3 of 4

**Sample Number** 2238933-3  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Apr 05, 2022  
**Measurement by** Phongsiri Somkaew  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณสุรินทร์ แก้วตา แผนก : เตาอบขนมปังงาน )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เตาอบขนมปังงาน : HT2	120	26.6	22.8	35.4	34.9
Average (WBGT)		26.6			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
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**Technical Management**

  
Supot Salamteh  
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## Analysis / Test Report

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**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238933**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 2271968-1

Page 4 of 4

**Sample Number** 2238933-4  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Apr 05, 2022  
**Measurement by** Phongsiri Somkaew  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณประวิทย์ คงสถิตย์ แผนก : เตาอบขนมชิ้นงาน )

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เตาอบขนมชิ้นงาน : HT4	120	27.8	24.4	35.8	35.8
Average (WBGT)		27.8			
Guideline WBGT (°C)		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

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Section Head

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**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238943**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 227197961

- age 1 of 2

**Sample Number** 223894361  
**Parameter** Heat Stress Sampling Time : 11.00 - 16.00 AM  
**Measurement Date** Apr 07, 2022  
**Measurement by** - hongsiri Somkaew  
**Location** ปฏิบัติงาน พื้นที่ ห้องนิยามสกุล ผู้ปฏิบัติงาน : คุณธนวิชัย นภาทอง แผนก : เตาหลอม MCL4 (

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
หน้าเตาหลอม : MCL4	20	25.3	23.7	32.3	32.1
ห้องควบคุมเตาหลอม MCL4	100	20.0	18.1	24.3	24.1
Average WBGT		21.0			
Guideline WBGT		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

- Notification of Department Labour - Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform H.E. 2) 51
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2529

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238943**

Date Received : Apr 07, 2022

Date Reported : Apr 11, 2022

Report Number: 227197961

- age 2 of 2

**Sample Number** 223894362  
**Parameter** Heat Stress Measurement  
**Measurement Date** Apr 04, 2022  
**Measurement by** - hongsi Somkaew  
**Location** ปฏิบัติงาน 2 พื้นที่ ที่ห้องนามสกุล ผู้ปฏิบัติงาน : คุณเสภาพร โรงเลี้ยงช่างทอง แผนก : เตาหลอมชิ้นงาน (

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
บริเวณเตาอบชิ้นงาน MCL4	40	24.)	21.)	31.4	31.4
บริเวณห้องพ่นงานเตาอบชิ้นงาน MCL4	80	19.)	17.8	23.4	23.2
Average WBGT		21.1			
Guideline WBGT		34.0			

**Reference Method :** Wet Bulb Globe Temperature

**Guideline:**

- Notification of Department Labour - Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform H.E. 2) 51
- Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2529

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149343**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2184078-1

Page 1 of 5

**Sample Number** 21149343-1  
**Parameter** Heat Stress (Sampling Time : 01.50 PM - 03.50 PM)  
**Measurement Date** Jan 18, 2022  
**Measurement by** Aphiwat Tumnoo  
**Location** ปฏิบัติงาน 2 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณฐาปกรณ์ ทำเจริญรักษ์ แผนก : เตาหลอม)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
หน้าเตาหลอม : MCL1	20	27.9	24.4	36.1	35.7
ห้องควบคุมเตาหลอม	100	16.8	14.7	21.7	21.1
Average (O BWT)		18.7			
Wuideline O BWT (GC)		34.0			

**Reference Method :** O et Bulb Wobe Temperature

**Guideline:**

1. Notification of Department Labour Protection and O elfare on the Criteria and Procedures for Measurement and Analysis of O rking Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of ° ccupational Safety, Health and Environmentin relation to Heat,Light and Noise, B.E.2559

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

O ichan Choonharat  
Assistant Manager

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**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149343**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2184078-1

Page 2 of 5

**Sample Number** 21149343-3  
**Parameter** Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)  
**Measurement Date** Jan 18, 2022  
**Measurement by** Aphiwat Tumnoo  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณอนุชิต ท้าวประสิทธิ์ แผนก : เตาอบขนม)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เตาอบขนมชิ้นงาน : HT2	120	31.2	28.9	36.4	36.2
Average (O BWT)		31.2			
Wuideline O BWT (GC)		34.0			

**Reference Method :** O et Bulb Wobe Temperature

**Guideline:**

1. Notification of Department Labour Protection and O elfare on the Criteria and Procedures for Measurement and Analysis of O rking Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of ° ccupational Safety, Health and Environmentin relation to Heat,Light and Noise, B.E.2559

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
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Assistant Manager

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149343**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2184078-1

Page 3 of 5

**Sample Number** 21149343-4  
**Parameter** Heat Stress (Sampling Time : 01.15 PM - 03.15 PM)  
**Measurement Date** Jan 17, 2022  
**Measurement by** Aphiwat Tumnoo  
**Location** ปฏิบัติงาน 2 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณเสกฤษฎ์ สมขาว แผนก : เตาหลอม)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
หน้าเตาหลอม : MCL2	20	27.6	24.1	35.8	35.7
ห้องควบคุมเตาหลอม	100	19.1	16.6	24.9	24.7
Average (O BWT)		20.5			
Wuideline O BWT (GC)		34.0			

**Reference Method :** O et Bulb Wobe Temperature

**Guideline:**

1. Notification of Department Labour Protection and O elfare on the Criteria and Procedures for Measurement and Analysis of O rking Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of ° ccupational Safety, Health and Environmentin relation to Heat,Light and Noise, B.E.2559

**Technical Management**

  
Supot Salamteh  
Section Head

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149343**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2184078-1

Page 4 of 5

**Sample Number** 21149343-5  
**Parameter** Heat Stress (Sampling Time : 01.30 PM - 03.30 PM)  
**Measurement Date** Jan 17, 2022  
**Measurement by** Aphiwat Tumnoo  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณเอกชัย บันความสุข แผนก : เคาอมขุบ)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เคาอมขุบขันงาน : HT3	120	28.8	26.4	34.5	34.2
Average (O BWT)		28.8			
Wuideline O BWT (GC)		34.0			

**Reference Method :** O et Bulb Wobe Temperature

**Guideline:**

1. Notification of Department Labour Protection and O elfare on the Criteria and Procedures for Measurement and Analysis of O rking Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of ° ccupational Safety, Health and Environmentin relation to Heat,Light and Noise, B.E.2559

**Technical Management**

  
Supot Salamteh  
Section Head

**Approved by**

  
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Assistant Manager

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## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149343**

Date Received : Jan 21, 2022

Date Reported : Jan 25, 2022

Report Number: 2184078-1

Page 5 of 5

**Sample Number** 21149343-6  
**Parameter** Heat Stress (Sampling Time : 01.20 PM - 03.20 PM)  
**Measurement Date** Jan 17, 2022  
**Measurement by** Aphiwat Tumnoo  
**Location** ปฏิบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : คุณศักดิ์สยาม ยอดดสร้าง แผนก : เตาอบขนม)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
เตาอบขนมชิ้นงาน : HT4	120	27.8	24.1	36.3	36.0
Average (O BWT)		27.8			
Wuideline O BWT (GC)		34.0			

**Reference Method :** O et Bulb Wobe Temperature

**Guideline:**

1. Notification of Department Labour Protection and O elfare on the Criteria and Procedures for Measurement and Analysis of O rking Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of ° ccupational Safety, Health and Environment in relation to Heat,Light and Noise, B.E.2559

**Technical Management**

Supot Salamteh  
Section Head

**Approved by**

Wichan Choonharat  
Assistant Manager

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# ภาคผนวก ค-7

คุณภาพอากาศในสถานประกอบการ



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

Page 1 of 17

**Sample Number** 21149350-1  
**Sampled Date** Jan 18, 2022  
**Sample Description** Air Quality  
**Location** หน้าเตาหลอม : MCL1  
**Personal Sampling** คุณฐาปนกรณ์ ท่าเรือรักษ  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	10:00 AM - 12:00 PM	mg/m3	-	0.15	0.27	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	10:00 AM - 01:00 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	10:00 AM - 12:00 PM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

**Remark :**

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022

Date Reported : Feb 04, 2022

Report Number : 2184088-1

Page 2 of 17

**Sample Number** 21149350-2  
**Sampled Date** Jan 17, 2022  
**Sample Description** Air Quality  
**Location** หน้าเตาหลอม : MCL2  
**Personal Sampling** คุณสุกฤษฎี สมขาว  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	10:00 AM - 12:00 PM	mg/m3	-	0.15	0.34	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	10:00 AM - 01:00 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	10:00 AM - 12:00 PM	mg/m3	-	0.002	0.005	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

**Remark :**

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

Page 3 of 17

**Sample Number** 21149350-3  
**Sampled Date** Jan 18, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL1  
**Personal Sampling** คุณวีรภัทร ปรีชาพจน์  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	09:55 AM - 11:55 AM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	09:55 AM - 12:55 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	09:55 AM - 11:55 AM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

**Remark :**

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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*Sawitree N.*

Sawitree Noisangiam  
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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
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**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

Page 4 of 17

**Sample Number** 21149350-4  
**Sampled Date** Jan 17, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL2  
**Personal Sampling** คุณนพดล ไชยมทิพย์  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	09:55 AM - 11:55 AM	mg/m3	-	0.15	1.97	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	09:55 AM - 12:55 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	09:55 AM - 11:55 AM	mg/m3	-	0.002	0.003	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

**Remark :**

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

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Sawitree Noisangiam  
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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
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**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

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**Sample Number** 21149350-5  
**Sampled Date** Jan 18, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาด : MCL1  
**Personal Sampling** คุณบุญเรศ ชัยอ่อน  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	09:50 AM - 11:50 AM	mg/m3	-	0.15	0.20	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	09:50 AM - 12:50 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	09:50 AM - 11:50 AM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

**Remark :**

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

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**Sample Number** 21149350-6  
**Sampled Date** Jan 17, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาด : MCL2  
**Personal Sampling** คุณกาญจนา นุญคำ  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	09:50 AM - 11:50 AM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	09:50 AM - 12:50 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	09:50 AM - 11:50 AM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

### Remark :

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Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

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**Sample Number** 21149350-7  
**Sampled Date** Jan 18, 2022  
**Sample Description** Air Quality  
**Location** เดราหลอม : MCL1  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	10:00 AM - 01:00 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	10:00 AM - 12:00 PM	mg/m <sup>3</sup>	-	0.15	0.47	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	10:00 AM - 12:00 PM	mg/m <sup>3</sup>	-	0.002	0.003	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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Sawitree Noisangiam  
Assistant Manager



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

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**Sample Number** 21149350-8  
**Sampled Date** Jan 17, 2022  
**Sample Description** Air Quality  
**Location** เดราหลอม : MCL2  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	10:00 AM - 01:00 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	10:00 AM - 12:00 PM	mg/m <sup>3</sup>	-	0.15	3.22	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	10:00 AM - 12:00 PM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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**Sampled By :** Aphiwat Tumnoo

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*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Tesing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

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**Sample Number** 21149350-9  
**Sampled Date** Jan 18, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL1  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	09:55 AM - 12:55 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	09:55 AM - 11:55 AM	mg/m <sup>3</sup>	-	0.15	1.36	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	09:55 AM - 11:55 AM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Tesing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

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**Sample Number** 21149350-10  
**Sampled Date** Jan 17, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL2  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	09:55 AM - 12:55 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	09:55 AM - 11:55 AM	mg/m <sup>3</sup>	-	0.15	1.27	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	09:55 AM - 11:55 AM	mg/m <sup>3</sup>	-	0.002	0.004	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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Assistant Manager



## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022  
Date Reported : Feb 04, 2022  
Report Number : 2184088-1

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**Sample Number** 21149350-11  
**Sampled Date** Jan 18, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาดชั้นงาน : MCL1  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	09:50 AM - 12:50 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	09:50 AM - 11:50 AM	mg/m <sup>3</sup>	-	0.15	1.95	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	09:50 AM - 11:50 AM	mg/m <sup>3</sup>	-	0.002	0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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Sawitree Noisangiam  
Assistant Manager





## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149350**

Date Received : Jan 21, 2022

Date Reported : Feb 04, 2022

Report Number : 2184088-1

Page 12 of 17

**Sample Number** 21149350-12  
**Sampled Date** Jan 17, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาดชั้นงาน : MCL2  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	09:50 AM - 12:50 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	09:50 AM - 11:50 AM	mg/m <sup>3</sup>	-	0.15	1.65	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	09:50 AM - 11:50 AM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager





## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149427**

Date Received : Jan 21, 2022

Date Reported : Feb 17, 2022

Report Number : 2184283-1

Page 1 of 22

<b>Sample Number</b>	21149427-1
<b>Sampled Date</b>	Jan 19, 2022
<b>Sample Description</b>	Air Quality
<b>Location</b>	หน้าเตาหลอม : MCL4
<b>Personal Sampling</b>	คุณธีรวัฒน์ จวง
<b>Date Analysis Commenced</b>	Jan 24, 2022
<b>Condition of Sample</b>	Drawn into three filter papers placed in each cassette
<b>Barometric Pressure</b>	758 mmHg
<b>Atmospheric Temperature</b>	32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	05:00 PM - 07:00 PM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	05:00 PM - 08:00 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	05:00 PM - 07:00 PM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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*Sawitree N.*

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Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 21149427**

Date Received : Jan 21, 2022

Date Reported : Feb 17, 2022

Report Number : 2184283-1

Page 2 of 22

**Sample Number** 21149427-2  
**Sampled Date** Jan 19, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL4  
**Personal Sampling** คุณบุญโฮม กิ่งมาลา  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	02:20 PM - 04:20 PM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	02:20 PM - 05:20 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	02:20 PM - 04:20 PM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 21149427**

Date Received : Jan 21, 2022

Date Reported : Feb 17, 2022

Report Number : 2184283-1

Page 3 of 22

**Sample Number** 21149427-3  
**Sampled Date** Jan 19, 2022  
**Sample Description** Air Quality  
**Location** หน้าเตาหลอม : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	05:00 PM - 08:00 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	05:00 PM - 07:00 PM	mg/m <sup>3</sup>	-	0.15	0.42	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	05:00 PM - 07:00 PM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 21149427**

Date Received : Jan 21, 2022  
Date Reported : Feb 17, 2022  
Report Number : 2184283-1

Page 4 of 22

**Sample Number** 21149427-4  
**Sampled Date** Jan 19, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL4  
**Date Analysis Commenced** Jan 24, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 758 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	02:20 PM - 05:20 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	02:40 PM - 04:20 PM	mg/m <sup>3</sup>	-	0.15	0.85	15	Based on NIOSH (1994), 0500	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	02:40 PM - 04:20 PM	mg/m <sup>3</sup>	-	0.002	0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Aphiwat Tumnoo

### Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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<b>Sample Number</b>	2238935-1
<b>Sampled Date</b>	Apr 06, 2022
<b>Sample Description</b>	Air Quality
<b>Location</b>	หน้าเตาหลอม : MCL1
<b>Personal Sampling</b>	คุณอนุรักษ์ พรหมมา
<b>Date Analysis Commenced</b>	Apr 08, 2022
<b>Condition of Sample</b>	Drawn into three filter papers placed in each cassette
<b>Barometric Pressure</b>	760 mmHg
<b>Atmospheric Temperature</b>	32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	08:45 AM - 10:45 AM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	08:45 AM - 11:45 AM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	08:45 AM - 10:45 AM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

Remark :

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Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022  
Date Reported : May 06, 2022  
Report Number : 2271970-1

Page 2 of 16

**Sample Number** 2238935-2  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** หน้าเตาหลอม : MCL2  
**Personal Sampling** คุณจิตกรชัย คำคม  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	01:00 PM - 03:00 PM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	01:00 PM - 04:00 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	01:00 PM - 03:00 PM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

### Remark :

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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**Sample Number** 2238935-3  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL1  
**Personal Sampling** คุณณัฐพล ชัยเลิศ  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	08:50 AM - 10:50 AM	mg/m3	-	0.15	0.24	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	08:50 AM - 11:50 AM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	08:50 AM - 10:50 AM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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TESTING  
No.0009

## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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**Sample Number** 2238935-4  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL2  
**Personal Sampling** คุณชลวิทย์ บุญเหลือ  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	01:05 PM - 03:05 PM	mg/m3	-	0.15	0.45	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	01:05 PM - 04:05 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	01:05 PM - 03:05 PM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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## Analysis / Test Report

TESTING  
No.0009

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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**Sample Number** 2238935-5  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาด : MCL1  
**Personal Sampling** คุณณฐเลิศ ภัยอ่อน  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	08:56 AM - 10:56 AM	mg/m3	-	0.15	0.52	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	08:56 AM - 11:56 AM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	08:56 AM - 10:56 AM	mg/m3	-	0.002	0.004	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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## Analysis / Test Report

TESTING  
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**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Tesing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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**Sample Number** 2238935-6  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาด : MCL2  
**Personal Sampling** คุณกาญจนา บุญคำ  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	01:13 PM - 03:13 PM	mg/m3	-	0.15	0.48	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	01:13 PM - 04:13 PM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	01:13 PM - 03:13 PM	mg/m3	-	0.002	0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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TESTING  
No.0009

## Analysis / Test Report

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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**Sample Number** 2238935-7  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เดราหลอม : MCL1  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	08:45 AM - 11:45 AM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	08:45 AM - 10:45 AM	mg/m <sup>3</sup>	-	0.15	0.32	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	08:45 AM - 10:45 AM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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*Sawitree N.*

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TESTING  
No.0009

## Analysis / Test Report

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14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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**Sample Number** 2238935-8  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เดราหลอม : MCL2  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	01:00 PM - 04:00 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	01:00 PM - 03:00 PM	mg/m <sup>3</sup>	-	0.15	0.59	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	01:00 PM - 03:00 PM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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TESTING  
No.0009

## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022  
Date Reported : May 06, 2022  
Report Number : 2271970-1

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**Sample Number** 2238935-9  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL1  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	08:50 AM - 11:50 AM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	08:50 AM - 10:50 AM	mg/m <sup>3</sup>	-	0.15	0.50	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	08:50 AM - 10:50 AM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

### Guideline :

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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TESTING  
No.0009

## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022  
Date Reported : May 06, 2022  
Report Number : 2271970-1

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**Sample Number** 2238935-10  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL2  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	01:05 PM - 04:05 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	01:05 PM - 03:05 PM	mg/m <sup>3</sup>	-	0.15	0.86	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	01:05 PM - 03:05 PM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

### Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

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**Sample Number** 2238935-11  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาดชั้นงาน : MCL1  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	08:56 AM - 11:56 AM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	08:56 AM - 10:56 AM	mg/m <sup>3</sup>	-	0.15	2.31	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	08:56 AM - 10:56 AM	mg/m <sup>3</sup>	-	0.002	0.01	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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*Sawitree N.*

Sawitree Noisangiam  
Assistant Manager

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238935**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271970-1

Page 12 of 16

**Sample Number** 2238935-12  
**Sampled Date** Apr 06, 2022  
**Sample Description** Air Quality  
**Location** เครื่องคัดแยกขนาดชั้นงาน : MCL2  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	01:13 PM - 04:13 PM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	01:13 PM - 03:13 PM	mg/m <sup>3</sup>	-	0.15	2.18	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	01:13 PM - 03:13 PM	mg/m <sup>3</sup>	-	0.002	0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 2238944**

Date Received : Apr 07, 2022  
Date Reported : May 06, 2022  
Report Number : 2271980-1

Page 1 of 21

**Sample Number** 2238944-1  
**Sampled Date** Apr 05, 2022  
**Sample Description** Air Quality  
**Location** หน้าเตาหลอม : MCL4  
**Personal Sampling** คุณธนัชกรชัย นภาพอง  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	10:30 PM - 00:30 AM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	10:30 PM - 01:30 AM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	10:30 PM - 00:30 AM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 2238944**

Date Received : Apr 07, 2022  
Date Reported : May 06, 2022  
Report Number : 2271980-1

Page 2 of 21

**Sample Number** 2238944-2  
**Sampled Date** Apr 05, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL4  
**Personal Sampling** คุณคมสัน อินทร์ชมชื่น  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Respirable Dust	08:45 AM - 10:45 AM	mg/m3	-	0.15	<0.15	5	Based on NIOSH (1998), 0600	OSHA	Bangkok
Silica (SiO <sub>2</sub> ) *	08:45 AM - 11:45 AM	mg/m3	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
<b>Metals Testing</b>									
Chromium *	08:45 AM - 10:45 AM	mg/m3	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

**Guideline :**

ACGIH : The American Conference of Governmental Industrial Hygiene, The 6th edition of the Documentation of the Threshold Limit Values and Biological Exposure Indices (2020).

MOL : Announcement of the Department of Labour Protection and Welfare on Threshold Limit Values of Hazardous Chemical Substances Dated August 3, B.E. 2560 (2017)

OSHA : Occupational Safety and Health Administration

**Sampled By :** Phongsiri Somkaew

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**

**Project Name :** Environmental Testing

**Project Location :**

**Lot ID: 2238944**

Date Received : Apr 07, 2022

Date Reported : May 06, 2022

Report Number : 2271980-1

Page 3 of 21

**Sample Number** 2238944-3  
**Sampled Date** Apr 05, 2022  
**Sample Description** Air Quality  
**Location** หน้าเตาหลอม : MCL4  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	10:30 PM - 01:30 AM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	10:30 PM - 00:30 AM	mg/m <sup>3</sup>	-	0.15	0.54	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	10:30 PM - 00:30 AM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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TESTING  
No.0009

## Analysis / Test Report

**Client :** Magotteaux Co., Ltd.  
14 Moo 3, Suwannasorn Rd., Bualoy, Nongkhae, Saraburi Thailand 18230

**P/O :**  
**Project Name :** Environmental Testing  
**Project Location :**

**Lot ID: 2238944**

Date Received : Apr 07, 2022  
Date Reported : May 06, 2022  
Report Number : 2271980-1

Page 4 of 21

**Sample Number** 2238944-4  
**Sampled Date** Apr 05, 2022  
**Sample Description** Air Quality  
**Location** เครื่องปั้นแบบทราย : MCL4  
**Date Analysis Commenced** Apr 08, 2022  
**Condition of Sample** Drawn into three filter papers placed in each cassette  
**Barometric Pressure** 760 mmHg  
**Atmospheric Temperature** 31.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
<b>Air Testing</b>									
Silica (SiO <sub>2</sub> ) *	08:45 AM - 11:45 AM	mg/m <sup>3</sup>	-	0.020	<0.020	0.025 (R)	NIOSH (1994), 7601	MOL	Bangkok
Total dust	08:45 AM - 10:45 AM	mg/m <sup>3</sup>	-	0.15	0.59	15	Based on NIOSH (1994), 0501	OSHA	Bangkok
<b>Metals Testing</b>									
Chromium *	08:45 AM - 10:45 AM	mg/m <sup>3</sup>	-	0.002	<0.002	0.5	NIOSH (2003), 7301	ACGIH	Bangkok

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**Sampled By :** Phongsiri Somkaew

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