

# ภาคผนวก ง

หนังสือรับรองผลการตรวจวิเคราะห์คุณภาพสิ่งแวดล้อม



## ภาคผนวก ง-1

หนังสือรับรองผลการตรวจวิเคราะห์คุณภาพอากาศในบรรยากาศ



## ANALYSIS REPORT

**PROJECT NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)  
**CUSTOMER NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED  
**ADDRESS** : 99,219,301 MOO 9,5,5, MITRAPARB ROAD TABKWANG KAENGKOI SARABURI 18260  
**CONTACT INFORMATION** : TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM  
**SAMPLING SOURCE** : บ้านวงศ์เพชร (ทิศตะวันออก)  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*, \*\*, \*\*\*  
**SAMPLING TIME** : \*, \*\*, \*\*\*  
**SAMPLING BY** : MR WORRAPONG NONTHAJAN  
**ANALYZED BY** : MISS JETJARIN TUMSA-AT  
**RECEIVED DATE** : OCTOBER 26, 2022  
**ANALYTICAL DATE** : OCTOBER 26-31, 2022  
**REPORT NO.** : 2022-U085616  
**WORK NO.** : 2021-001118  
**ANALYSIS NO.** : T22AV296-0001 - T22AV296-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านวงศ์เพชร (ทิศตะวันออก)		
			* T22AV296-0001	** T22AV296-0002	*** T22AV296-0003
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.094	0.060	0.052
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.066	0.047	0.035
<b>SAMPLE CONDITION</b>			COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX B.  
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.  
\* : SAMPLING FROM 10:00 HOUR ON OCTOBER 20, 2022 TO 10:00 HOUR ON OCTOBER 21, 2022.  
\*\* : SAMPLING FROM 10:00 HOUR ON OCTOBER 21, 2022 TO 10:00 HOUR ON OCTOBER 22, 2022.  
\*\*\* : SAMPLING FROM 10:00 HOUR ON OCTOBER 22, 2022 TO 10:00 HOUR ON OCTOBER 23, 2022.

*Budsakorn* ✓

(MISS BUDSAKORN LERDPANUMAS)  
LABORATORY SUPERVISOR

NOVEMBER 2, 2022



## ANALYSIS REPORT

<b>PROJECT NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)	<b>RECEIVED DATE</b>	: OCTOBER 20-23, 2022
<b>CUSTOMER NAME</b>	: INSEE ECOCYCLE COMPANY LIMITED	<b>ANALYTICAL DATE</b>	: OCTOBER 20-23, 2022
<b>ADDRESS</b>	: COLUMN TOWER, 3RD, 10TH, 12TH FL., 199 KHLONG TOEI KHLONG TOEI BANGKOK 10110	<b>REPORT NO.</b>	: 2022-U085183
<b>CONTACT INFORMATION</b>	: TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM	<b>WORK NO.</b>	: 2021-001118
<b>MEASURING PLACE</b>	: บ้านวงศ์เพชร (ทิศตะวันออก)	<b>ANALYSIS NO.</b>	: T22AV296-0001 - T22AV296-0003
<b>MEASURING TYPE</b>	: AMBIENT (AIR)		
<b>MEASURING DATE</b>	: OCTOBER 20-23, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: WIND SPEED & WIND DIRECTION EQUIPMENT		
<b>MEASURED BY</b>	: MR WORRAPONG NONTHAJAN		

TIME *	RESULT (m/s)					
	บ้านวงศ์เพชร (ทิศตะวันออก)					
	OCTOBER 20 - 21, 2022 T22AV296-0001		OCTOBER 21 - 22, 2022 T22AV296-0002		OCTOBER 22 - 23, 2022 T22AV296-0003	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
07:00-08:00 HOUR	0.8	E	1.4	E	0.9	ENE
08:00-09:00 HOUR	0.9	E	2.1	ESE	0.8	E
09:00-10:00 HOUR	1.0	ESE	1.7	E	0.9	E
10:00-11:00 HOUR	1.1	ESE	1.6	ESE	1.0	ESE
11:00-12:00 HOUR	1.2	SSE	2.2	SSE	1.2	SE
12:00-13:00 HOUR	1.3	ESE	2.0	ESE	1.1	SSE
13:00-14:00 HOUR	1.0	SSE	1.6	SE	0.9	NNE
14:00-15:00 HOUR	1.2	SSE	2.3	SE	1.0	NE
15:00-16:00 HOUR	1.1	SE	1.9	ESE	1.2	NE
16:00-17:00 HOUR	0.8	ESE	1.7	ESE	1.1	NE
17:00-18:00 HOUR	1.3	ENE	2.4	ESE	1.3	NE
18:00-19:00 HOUR	1.0	ENE	2.0	ESE	1.2	NE
19:00-20:00 HOUR	1.2	ENE	1.8	E	1.8	NE
20:00-21:00 HOUR	0.8	ENE	2.2	E	1.9	NNE
21:00-22:00 HOUR	1.1	E	1.4	ESE	2.2	NNE
22:00-23:00 HOUR	1.0	E	1.2	ENE	1.8	NE
23:00-00:00 HOUR	0.9	E	0.9	NE	2.3	NNE
00:00-01:00 HOUR	1.3	E	1.1	ENE	1.7	NNE
01:00-02:00 HOUR	1.4	E	1.0	NE	2.3	NNE
02:00-03:00 HOUR	1.6	ESE	0.9	ENE	2.1	NNE
03:00-04:00 HOUR	1.9	E	1.0	ENE	1.6	NE
04:00-05:00 HOUR	2.1	E	1.1	NE	1.8	E
05:00-06:00 HOUR	2.3	E	1.3	ENE	1.5	E
06:00-07:00 HOUR	2.0	E	1.2	ENE	1.7	SE



(MR SILA BANJONGJAIRUK)  
LABORATORY SUPERVISOR

OCTOBER 31, 2022





## ANALYSIS REPORT

**PROJECT NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)  
**CUSTOMER NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED  
**ADDRESS** : 99,219,301 MOO 9,5,5, MITRAPARB ROAD TABKWANG KAENGKOI SARABURI 18260  
**CONTACT INFORMATION** : TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM  
**SAMPLING SOURCE** : บ้านวงศ์เพชร (ทิศใต้)  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*, \*\*, \*\*\*  
**SAMPLING TIME** : \*, \*\*, \*\*\*  
**SAMPLING BY** : MR WORRAPONG NONTHAJAN  
**ANALYZED BY** : MISS JETJARIN TUMSA-AT  
**RECEIVED DATE** : OCTOBER 26, 2022  
**ANALYTICAL DATE** : OCTOBER 26-31, 2022  
**REPORT NO.** : 2022-U085617  
**WORK NO.** : 2021-001118  
**ANALYSIS NO.** : T22AV296-0004 - T22AV296-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านวงศ์เพชร (ทิศใต้)		
			* T22AV296-0004	** T22AV296-0005	*** T22AV296-0006
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.065	0.038	0.035
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.050	0.020	0.016
<b>SAMPLE CONDITION</b>			COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX B.  
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.  
\* : SAMPLING FROM 10:30 HOUR ON OCTOBER 20, 2022 TO 10:30 HOUR ON OCTOBER 21, 2022.  
\*\* : SAMPLING FROM 10:30 HOUR ON OCTOBER 21, 2022 TO 10:30 HOUR ON OCTOBER 22, 2022.  
\*\*\* : SAMPLING FROM 10:30 HOUR ON OCTOBER 22, 2022 TO 10:30 HOUR ON OCTOBER 23, 2022.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)  
LABORATORY SUPERVISOR

NOVEMBER 2, 2022



## ANALYSIS REPORT

**PROJECT NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)  
**CUSTOMER NAME** : INSEE ECOCYCLE COMPANY LIMITED  
**ADDRESS** : COLUMN TOWER, 3RD, 10TH, 12TH FL., 199 KHLONG TOEI KHLONG TOEI BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM  
**MEASURING PLACE** : บ้านวงศ์เพชร (ทิศใต้)  
**MEASURING TYPE** : AMBIENT (AIR) **RECEIVED DATE** : OCTOBER 20-23, 2022  
**MEASURING DATE** : OCTOBER 20-23, 2022 **ANALYTICAL DATE** : OCTOBER 20-23, 2022  
**MEASURING TIME** : \* **REPORT NO.** : 2022-U085184  
**MEASURING METHOD** : WIND SPEED & WIND DIRECTION EQUIPMENT **WORK NO.** : 2021-001118  
**MEASURED BY** : MR WORRAPONG NONTHAJAN **ANALYSIS NO.** : T22AV296-0004 - T22AV296-0006

TIME *	RESULT (m/s)					
	บ้านวงศ์เพชร (ทิศใต้)					
	OCTOBER 20 - 21, 2022 T22AV296-0004		OCTOBER 21 - 22, 2022 T22AV296-0005		OCTOBER 22 - 23, 2022 T22AV296-0006	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
07:00-08:00 HOUR	1.0	SE	0.8	E	1.6	SSE
08:00-09:00 HOUR	0.9	ESE	1.0	E	2.1	SSE
09:00-10:00 HOUR	1.1	E	1.1	E	2.3	SSE
10:00-11:00 HOUR	1.2	ESE	1.3	SE	2.0	SE
11:00-12:00 HOUR	0.9	ESE	1.4	SE	1.8	SE
12:00-13:00 HOUR	1.3	SE	1.5	SSE	1.6	ESE
13:00-14:00 HOUR	1.1	ESE	1.8	SSE	1.5	E
14:00-15:00 HOUR	1.2	SSE	1.7	SSE	1.8	ESE
15:00-16:00 HOUR	1.0	SE	1.9	SE	1.6	ESE
16:00-17:00 HOUR	1.1	SE	2.3	SE	1.4	ESE
17:00-18:00 HOUR	1.3	SE	2.0	ESE	1.5	SE
18:00-19:00 HOUR	1.1	S	1.8	ESE	1.3	SE
19:00-20:00 HOUR	1.2	SE	2.2	ESE	1.1	SSE
20:00-21:00 HOUR	1.0	SSE	1.6	E	1.2	SE
21:00-22:00 HOUR	1.1	ESE	2.2	E	0.9	SE
22:00-23:00 HOUR	1.3	SE	1.5	E	1.0	SE
23:00-00:00 HOUR	1.5	E	1.8	ENE	1.2	SE
00:00-01:00 HOUR	1.0	E	1.7	ENE	1.1	SSE
01:00-02:00 HOUR	1.1	E	1.5	E	1.3	SSE
02:00-03:00 HOUR	0.8	E	2.0	ESE	0.9	SE
03:00-04:00 HOUR	1.0	ENE	1.9	SSE	1.2	ESE
04:00-05:00 HOUR	1.1	ENE	2.1	SE	0.8	SE
05:00-06:00 HOUR	0.8	ENE	2.4	SSE	1.0	E
06:00-07:00 HOUR	0.9	E	2.0	SSE	1.1	ENE

*Sila Banjongjairuk*

(MR SILA BANJONGJAIKUK)  
LABORATORY SUPERVISOR

OCTOBER 31, 2022



## ANALYSIS REPORT

**PROJECT NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)  
**CUSTOMER NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED  
**ADDRESS** : 99,219,301 MOO 9,5,5, MITRAPARB ROAD TABKWANG KAENGKOI SARABURI 18260  
**CONTACT INFORMATION** : TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM  
**SAMPLING SOURCE** : วัดถ้ำสิมปัญญา  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*, \*\*, \*\*\*  
**SAMPLING TIME** : \*, \*\*, \*\*\*  
**SAMPLING BY** : MR WORRAPONG NONTHAJAN  
**ANALYZED BY** : MISS JETJARIN TUMSA-AT  
**RECEIVED DATE** : OCTOBER 26, 2022  
**ANALYTICAL DATE** : OCTOBER 26-31, 2022  
**REPORT NO.** : 2022-U085618  
**WORK NO.** : 2021-001118  
**ANALYSIS NO.** : T22AV296-0007 - T22AV296-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			วัดถ้ำสิมปัญญา		
			* T22AV296-0007	** T22AV296-0008	*** T22AV296-0009
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.068	0.035	0.043
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.033	0.025	0.024
<b>SAMPLE CONDITION</b>			COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX B.  
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.  
\* : SAMPLING FROM 11:00 HOUR ON OCTOBER 20, 2022 TO 11:00 HOUR ON OCTOBER 21, 2022.  
\*\* : SAMPLING FROM 11:00 HOUR ON OCTOBER 21, 2022 TO 11:00 HOUR ON OCTOBER 22, 2022.  
\*\*\* : SAMPLING FROM 11:00 HOUR ON OCTOBER 22, 2022 TO 11:00 HOUR ON OCTOBER 23, 2022.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)  
LABORATORY SUPERVISOR

NOVEMBER 2, 2022





## ANALYSIS REPORT

**PROJECT NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)  
**CUSTOMER NAME** : INSEE ECOCYCLE COMPANY LIMITED  
**ADDRESS** : COLUMN TOWER, 3RD, 10TH, 12TH FL., 199 KHLONG TOEI KHLONG TOEI BANGKOK 10110  
**CONTACT INFORMATION** : TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM  
**MEASURING PLACE** : วัดถ้ำลิ้นปี่ญา  
**MEASURING TYPE** : AMBIENT (AIR) **RECEIVED DATE** : OCTOBER 20-23, 2022  
**MEASURING DATE** : OCTOBER 20-23, 2022 **ANALYTICAL DATE** : OCTOBER 20-23, 2022  
**MEASURING TIME** : \* **REPORT NO.** : 2022-U085185  
**MEASURING METHOD** : WIND SPEED & WIND DIRECTION EQUIPMENT **WORK NO.** : 2021-001118  
**MEASURED BY** : MR WORRAPONG NONTHAJAN **ANALYSIS NO.** : T22AV296-0007 - T22AV296-0009

TIME *	RESULT (m/s)					
	วัดถ้ำลิ้นปี่ญา					
	OCTOBER 20 - 21, 2022 T22AV296-0007		OCTOBER 21 - 22, 2022 T22AV296-0008		OCTOBER 22 - 23, 2022 T22AV296-0009	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
07:00-08:00 HOUR	1.9	SE	2.1	ENE	2.4	NE
08:00-09:00 HOUR	2.0	SE	1.9	ENE	2.1	NE
09:00-10:00 HOUR	1.4	SE	2.0	ENE	1.6	NE
10:00-11:00 HOUR	0.9	SE	1.8	NE	1.9	NNE
11:00-12:00 HOUR	0.7	ESE	1.6	ENE	1.4	NE
12:00-13:00 HOUR	0.8	SE	1.8	NE	1.3	NNE
13:00-14:00 HOUR	1.0	ESE	1.6	ENE	0.8	ESE
14:00-15:00 HOUR	1.4	ESE	1.9	E	1.1	SSE
15:00-16:00 HOUR	1.6	ESE	1.8	ENE	1.2	ESE
16:00-17:00 HOUR	2.3	ESE	1.6	E	1.0	SE
17:00-18:00 HOUR	2.1	E	1.5	E	0.9	SE
18:00-19:00 HOUR	1.6	E	1.2	E	1.1	SE
19:00-20:00 HOUR	1.7	E	1.0	E	1.2	SE
20:00-21:00 HOUR	1.5	ESE	0.8	E	1.3	ESE
21:00-22:00 HOUR	1.6	ESE	0.7	SE	1.3	ESE
22:00-23:00 HOUR	2.0	ESE	1.1	ESE	2.0	E
23:00-00:00 HOUR	1.4	E	0.8	SE	1.5	E
00:00-01:00 HOUR	2.2	E	1.3	ESE	1.7	E
01:00-02:00 HOUR	2.1	E	1.5	ESE	2.0	E
02:00-03:00 HOUR	1.8	ENE	2.0	E	1.5	E
03:00-04:00 HOUR	1.6	ENE	2.2	E	1.4	ENE
04:00-05:00 HOUR	1.5	ENE	1.7	E	1.0	E
05:00-06:00 HOUR	1.8	ENE	2.3	NE	0.9	ENE
06:00-07:00 HOUR	2.0	ENE	2.2	NE	1.1	NE



(MR SILA BANJONGJAIKUK)  
LABORATORY SUPERVISOR

OCTOBER 31, 2022



## ภาคผนวก ง-2

หนังสือรับรองผลการตรวจวิเคราะห์ระดับเสียง





## ANALYSIS REPORT

<b>PROJECT NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)	<b>RECEIVED DATE</b>	: OCTOBER 20-23, 2022
<b>CUSTOMER NAME</b>	: INSEE ECOCYCLE COMPANY LIMITED	<b>ANALYTICAL DATE</b>	: OCTOBER 20-23, 2022
<b>ADDRESS</b>	: COLUMN TOWER, 3RD, 10TH, 12TH FL., 199 KHLONG TOEI KHLONG TOEI BANGKOK 10110	<b>REPORT NO.</b>	: 2022-U085186
<b>CONTACT INFORMATION</b>	: TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM	<b>WORK NO.</b>	: 2021-001118
<b>MEASURING SOURCE</b>	: บ้านวงศ์เกษตร (ทิศตะวันออก)	<b>ANALYSIS NO.</b>	: T22AV297-0001 - T22AV297-0003
<b>MEASURING TYPE</b>	: AMBIENT (NOISE)		
<b>MEASURING DATE</b>	: OCTOBER 20-23, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: INTEGRATED SOUND LEVEL METER		
<b>MEASURED BY</b>	: MR WORRAPONG NONTHAJAN		

TIME*	RESULT dB(A)		
	บ้านวงศ์เกษตร (ทิศตะวันออก)		
	OCTOBER 20 - 21, 2022		
	T22AV297-0001		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	52.6	84.7	41.2
08:00-09:00 HOUR	54.6	79.7	42.9
09:00-10:00 HOUR	59.6	81.0	42.8
10:00-11:00 HOUR	60.5	80.8	44.9
11:00-12:00 HOUR	67.1	90.7	46.8
12:00-13:00 HOUR	61.7	86.7	57.4
13:00-14:00 HOUR	59.5	82.3	46.2
14:00-15:00 HOUR	62.7	89.8	44.7
15:00-16:00 HOUR	51.3	72.3	43.0
16:00-17:00 HOUR	54.1	84.6	43.0
17:00-18:00 HOUR	60.2	92.9	43.7
18:00-19:00 HOUR	55.7	83.9	42.7
19:00-20:00 HOUR	55.4	81.3	42.3
20:00-21:00 HOUR	51.9	76.3	42.8
21:00-22:00 HOUR	49.1	78.8	42.1
22:00-23:00 HOUR	45.3	72.9	41.3
23:00-00:00 HOUR	50.2	75.5	41.2
00:00-01:00 HOUR	43.4	62.8	41.8
01:00-02:00 HOUR	50.5	80.7	41.7
02:00-03:00 HOUR	44.5	61.8	41.5
03:00-04:00 HOUR	43.4	67.1	41.3
04:00-05:00 HOUR	45.6	67.5	41.1
05:00-06:00 HOUR	44.2	65.0	41.0
06:00-07:00 HOUR	47.6	70.9	41.3
<b>L<sub>Aeq</sub> 24 hours</b>		57.9	



TIME*	RESULT dB(A)		
	บ้านวงศ์เพชร (ทิศตะวันออก)		
	OCTOBER 21 - 22, 2022		
	T22AV297-0002		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	53.4	84.2	43.7
08:00-09:00 HOUR	53.8	80.5	44.6
09:00-10:00 HOUR	58.8	85.3	44.9
10:00-11:00 HOUR	54.5	75.0	44.9
11:00-12:00 HOUR	53.2	80.7	44.3
12:00-13:00 HOUR	61.1	95.3	46.5
13:00-14:00 HOUR	59.3	90.3	45.1
14:00-15:00 HOUR	62.6	86.0	50.7
15:00-16:00 HOUR	56.8	87.8	43.3
16:00-17:00 HOUR	51.8	75.9	41.5
17:00-18:00 HOUR	52.1	72.2	41.9
18:00-19:00 HOUR	56.0	85.8	41.2
19:00-20:00 HOUR	52.9	78.4	41.3
20:00-21:00 HOUR	52.7	80.0	41.5
21:00-22:00 HOUR	48.4	72.7	41.6
22:00-23:00 HOUR	45.8	73.5	41.2
23:00-00:00 HOUR	50.2	80.0	40.8
00:00-01:00 HOUR	43.0	64.8	41.0
01:00-02:00 HOUR	45.9	75.5	41.0
02:00-03:00 HOUR	46.3	78.8	40.8
03:00-04:00 HOUR	43.6	71.5	40.9
04:00-05:00 HOUR	45.4	75.9	40.8
05:00-06:00 HOUR	45.5	69.3	41.2
06:00-07:00 HOUR	48.3	69.2	41.5
L <sub>Aeq</sub> 24 hours		55.1	

TIME*	RESULT dB(A)		
	บ้านวงศ์เพชร (ทิศตะวันออก)		
	OCTOBER 22 - 23, 2022		
	T22AV297-0003		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	54.9	84.2	43.4
08:00-09:00 HOUR	64.5	100.7	44.3
09:00-10:00 HOUR	56.9	79.5	44.6
10:00-11:00 HOUR	58.3	86.7	44.5
11:00-12:00 HOUR	57.3	87.2	44.8
12:00-13:00 HOUR	55.6	81.8	43.5
13:00-14:00 HOUR	58.5	79.0	43.7
14:00-15:00 HOUR	62.4	77.7	43.5
15:00-16:00 HOUR	58.7	84.3	40.1
16:00-17:00 HOUR	56.4	79.6	40.3
17:00-18:00 HOUR	53.5	73.7	40.6
18:00-19:00 HOUR	53.2	74.0	39.3
19:00-20:00 HOUR	58.8	84.6	38.6
20:00-21:00 HOUR	55.0	83.3	39.5
21:00-22:00 HOUR	52.2	81.4	39.9
22:00-23:00 HOUR	50.7	80.0	37.5
23:00-00:00 HOUR	45.1	72.8	34.7
00:00-01:00 HOUR	48.4	79.8	34.4
01:00-02:00 HOUR	41.2	64.7	34.4
02:00-03:00 HOUR	44.1	73.7	33.3
03:00-04:00 HOUR	38.8	63.0	33.1
04:00-05:00 HOUR	47.3	76.3	32.8
05:00-06:00 HOUR	58.1	84.4	35.5
06:00-07:00 HOUR	44.8	67.4	37.8
L <sub>Aeq</sub> 24 hours		56.8	

*Sila*

(MR SILA BANJONGJAIKUK)  
LABORATORY SUPERVISOR

OCTOBER 31, 2022



## ANALYSIS REPORT

<b>PROJECT NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)	<b>RECEIVED DATE</b>	: OCTOBER 20-23, 2022
<b>CUSTOMER NAME</b>	: INSEE ECOCYCLE COMPANY LIMITED	<b>ANALYTICAL DATE</b>	: OCTOBER 20-23, 2022
<b>ADDRESS</b>	: COLUMN TOWER, 3RD, 10TH, 12TH FL., 199 KHLONG TOEI KHLONG TOEI BANGKOK 10110	<b>REPORT NO.</b>	: 2022-U085187
<b>CONTACT INFORMATION</b>	: TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM	<b>WORK NO.</b>	: 2021-001118
<b>MEASURING SOURCE</b>	: บ้านวงศ์เพชร (ทิศใต้)	<b>ANALYSIS NO.</b>	: T22AV297-0004 - T22AV297-0006
<b>MEASURING TYPE</b>	: AMBIENT (NOISE)		
<b>MEASURING DATE</b>	: OCTOBER 20-23, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: INTEGRATED SOUND LEVEL METER		
<b>MEASURED BY</b>	: MR WORRAPONG NONTHAJAN		

TIME*	RESULT dB(A)		
	บ้านวงศ์เพชร (ทิศใต้)		
	OCTOBER 20 - 21, 2022		
	T22AV297-0004		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	54.5	82.2	40.6
08:00-09:00 HOUR	51.2	70.7	39.5
09:00-10:00 HOUR	47.5	68.4	37.9
10:00-11:00 HOUR	52.8	76.5	40.4
11:00-12:00 HOUR	61.7	101.3	42.0
12:00-13:00 HOUR	50.6	77.7	45.2
13:00-14:00 HOUR	48.7	70.4	44.7
14:00-15:00 HOUR	48.8	69.3	44.2
15:00-16:00 HOUR	48.0	64.5	44.6
16:00-17:00 HOUR	47.6	67.3	44.2
17:00-18:00 HOUR	48.6	71.5	44.6
18:00-19:00 HOUR	48.5	68.8	45.5
19:00-20:00 HOUR	49.0	62.7	46.2
20:00-21:00 HOUR	46.7	66.8	44.5
21:00-22:00 HOUR	45.9	61.9	44.2
22:00-23:00 HOUR	45.2	60.6	44.0
23:00-00:00 HOUR	47.2	72.1	43.9
00:00-01:00 HOUR	51.4	80.3	44.0
01:00-02:00 HOUR	45.7	53.1	44.4
02:00-03:00 HOUR	47.0	76.9	44.2
03:00-04:00 HOUR	46.0	57.7	44.3
04:00-05:00 HOUR	46.7	54.3	44.3
05:00-06:00 HOUR	51.0	73.6	46.0
06:00-07:00 HOUR	57.4	77.4	46.4
<b>L<sub>Aeq</sub> 24 hours</b>		52.1	



TIME*	RESULT dB(A)		
	บ้านวงศ์เพชร (ทิศใต้)		
	OCTOBER 21 - 22, 2022		
	T22AV297-0005		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	53.8	75.9	44.8
08:00-09:00 HOUR	56.0	78.8	44.5
09:00-10:00 HOUR	54.3	80.2	44.3
10:00-11:00 HOUR	49.9	76.6	44.1
11:00-12:00 HOUR	50.0	67.3	44.2
12:00-13:00 HOUR	48.9	73.2	42.8
13:00-14:00 HOUR	49.7	71.7	43.4
14:00-15:00 HOUR	51.8	75.2	43.8
15:00-16:00 HOUR	49.2	71.5	43.2
16:00-17:00 HOUR	46.4	68.7	43.2
17:00-18:00 HOUR	48.5	64.2	43.9
18:00-19:00 HOUR	50.4	75.7	44.3
19:00-20:00 HOUR	57.9	77.2	45.5
20:00-21:00 HOUR	54.4	75.1	45.2
21:00-22:00 HOUR	46.8	70.2	44.4
22:00-23:00 HOUR	45.2	58.1	44.2
23:00-00:00 HOUR	44.9	55.8	43.9
00:00-01:00 HOUR	44.9	59.0	43.9
01:00-02:00 HOUR	45.0	64.0	43.6
02:00-03:00 HOUR	67.7	90.3	43.8
03:00-04:00 HOUR	66.1	89.5	43.6
04:00-05:00 HOUR	48.9	72.7	43.5
05:00-06:00 HOUR	53.4	75.5	44.3
06:00-07:00 HOUR	58.5	78.3	49.5
L <sub>Aeq</sub> 24 hours		57.6	



TIME*	RESULT dB(A)		
	บ้านวงศ์เพชร (ทิศใต้)		
	OCTOBER 22 - 23, 2022		
	T22AV297-0006		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	54.0	74.0	45.2
08:00-09:00 HOUR	50.5	69.9	43.4
09:00-10:00 HOUR	50.3	73.7	43.4
10:00-11:00 HOUR	47.9	73.8	43.0
11:00-12:00 HOUR	51.6	74.7	43.9
12:00-13:00 HOUR	50.9	72.9	42.7
13:00-14:00 HOUR	46.6	65.8	39.4
14:00-15:00 HOUR	45.5	71.8	36.0
15:00-16:00 HOUR	48.7	73.7	36.5
16:00-17:00 HOUR	45.7	63.2	37.5
17:00-18:00 HOUR	47.2	74.2	37.6
18:00-19:00 HOUR	51.8	77.0	39.4
19:00-20:00 HOUR	48.9	75.4	43.5
20:00-21:00 HOUR	45.3	65.2	39.8
21:00-22:00 HOUR	48.4	86.6	39.7
22:00-23:00 HOUR	43.4	63.4	38.3
23:00-00:00 HOUR	42.0	67.5	37.9
00:00-01:00 HOUR	41.5	63.2	37.6
01:00-02:00 HOUR	40.2	52.5	36.5
02:00-03:00 HOUR	38.7	62.7	35.2
03:00-04:00 HOUR	40.0	54.3	34.8
04:00-05:00 HOUR	44.2	68.5	36.2
05:00-06:00 HOUR	55.3	76.6	42.4
06:00-07:00 HOUR	58.1	79.0	46.2
L <sub>Aeq</sub> 24 hours		50.1	

*Sila Banjongjairuk*

(MR SILA BANJONGJAIKUK)  
LABORATORY SUPERVISOR

OCTOBER 31, 2022

## ANALYSIS REPORT

<b>PROJECT NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)	<b>RECEIVED DATE</b>	: OCTOBER 20-23, 2022
<b>CUSTOMER NAME</b>	: INSEE ECOCYCLE COMPANY LIMITED	<b>ANALYTICAL DATE</b>	: OCTOBER 20-23, 2022
<b>ADDRESS</b>	: COLUMN TOWER, 3RD, 10TH, 12TH FL., 199 KHLONG TOEI KHLONG TOEI BANGKOK 10110	<b>REPORT NO.</b>	: 2022-U085188
<b>CONTACT INFORMATION</b>	: TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM	<b>WORK NO.</b>	: 2021-001118
<b>MEASURING SOURCE</b>	: วัดถ้ำลิ้นปี่	<b>ANALYSIS NO.</b>	: T22AV297-0007 - T22AV297-0009
<b>MEASURING TYPE</b>	: AMBIENT (NOISE)		
<b>MEASURING DATE</b>	: OCTOBER 20-23, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: INTEGRATED SOUND LEVEL METER		
<b>MEASURED BY</b>	: MR WORRAPONG NONTAJAN		

TIME*	RESULT dB(A)		
	วัดถ้ำลิ้นปี่		
	OCTOBER 20 - 21, 2022		
	T22AV297-0007		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	50.6	76.3	44.1
08:00-09:00 HOUR	51.8	74.0	42.6
09:00-10:00 HOUR	54.4	78.6	42.4
10:00-11:00 HOUR	54.7	81.2	42.3
11:00-12:00 HOUR	54.9	77.1	51.6
12:00-13:00 HOUR	49.3	71.5	41.1
13:00-14:00 HOUR	47.1	72.6	41.2
14:00-15:00 HOUR	47.6	78.6	40.6
15:00-16:00 HOUR	51.2	77.3	40.7
16:00-17:00 HOUR	47.1	68.9	40.8
17:00-18:00 HOUR	52.9	79.1	43.2
18:00-19:00 HOUR	50.9	80.8	45.5
19:00-20:00 HOUR	47.6	61.9	43.8
20:00-21:00 HOUR	44.9	67.5	42.8
21:00-22:00 HOUR	44.0	61.4	42.3
22:00-23:00 HOUR	51.8	84.2	42.5
23:00-00:00 HOUR	44.9	67.8	42.3
00:00-01:00 HOUR	43.5	58.8	41.9
01:00-02:00 HOUR	43.6	63.5	41.6
02:00-03:00 HOUR	42.6	59.8	41.5
03:00-04:00 HOUR	42.8	62.1	41.3
04:00-05:00 HOUR	51.7	82.8	41.3
05:00-06:00 HOUR	47.7	68.0	43.3
06:00-07:00 HOUR	50.5	78.4	43.0
L <sub>Aeq</sub> 24 hours		50.2	



TIME*	RESULT dB(A)		
	วัดค่าเสียงจาก		
	OCTOBER 21 - 22, 2022		
	T22AV297-0008		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	49.4	72.1	42.3
08:00-09:00 HOUR	57.8	83.8	42.7
09:00-10:00 HOUR	58.6	81.8	42.0
10:00-11:00 HOUR	54.8	76.0	43.7
11:00-12:00 HOUR	52.0	75.3	42.4
12:00-13:00 HOUR	51.1	75.7	37.5
13:00-14:00 HOUR	54.0	80.0	37.3
14:00-15:00 HOUR	41.9	65.5	35.6
15:00-16:00 HOUR	50.6	77.6	36.3
16:00-17:00 HOUR	52.9	78.7	38.0
17:00-18:00 HOUR	51.6	77.0	39.7
18:00-19:00 HOUR	52.1	75.8	43.2
19:00-20:00 HOUR	49.6	67.5	42.1
20:00-21:00 HOUR	42.8	53.3	40.7
21:00-22:00 HOUR	45.8	64.7	40.9
22:00-23:00 HOUR	52.6	86.3	40.2
23:00-00:00 HOUR	40.5	59.5	39.0
00:00-01:00 HOUR	40.4	61.2	37.5
01:00-02:00 HOUR	41.9	61.8	37.5
02:00-03:00 HOUR	44.5	61.2	39.0
03:00-04:00 HOUR	40.2	65.5	37.8
04:00-05:00 HOUR	48.9	80.5	38.9
05:00-06:00 HOUR	49.0	65.8	43.5
06:00-07:00 HOUR	50.7	74.3	45.2
L <sub>Aeq</sub> 24 hours		51.7	



TIME*	RESULT dB(A)		
	วัดค่าเสียงจาก		
	OCTOBER 22 - 23, 2022		
	T22AV297-0009		
	L <sub>Aeq</sub> 1 hour	L <sub>Amax</sub> 1 hour	L <sub>A90</sub> 1 hour
07:00-08:00 HOUR	54.2	75.9	42.8
08:00-09:00 HOUR	50.9	73.5	42.1
09:00-10:00 HOUR	50.9	80.6	42.6
10:00-11:00 HOUR	51.9	68.0	40.6
11:00-12:00 HOUR	47.5	70.3	38.8
12:00-13:00 HOUR	46.3	68.3	37.0
13:00-14:00 HOUR	44.9	64.2	36.8
14:00-15:00 HOUR	48.0	77.6	37.4
15:00-16:00 HOUR	44.8	72.0	38.1
16:00-17:00 HOUR	50.9	77.4	38.5
17:00-18:00 HOUR	50.0	73.8	39.4
18:00-19:00 HOUR	52.3	78.0	41.5
19:00-20:00 HOUR	51.5	78.3	44.4
20:00-21:00 HOUR	48.6	64.7	43.0
21:00-22:00 HOUR	43.8	60.4	41.8
22:00-23:00 HOUR	44.9	63.1	41.6
23:00-00:00 HOUR	52.2	85.3	41.4
00:00-01:00 HOUR	42.7	63.6	40.7
01:00-02:00 HOUR	42.0	60.0	39.7
02:00-03:00 HOUR	42.8	62.7	39.6
03:00-04:00 HOUR	43.5	60.5	40.3
04:00-05:00 HOUR	41.5	63.8	39.6
05:00-06:00 HOUR	50.3	81.7	40.1
06:00-07:00 HOUR	48.3	66.9	43.4
L <sub>Aeq</sub> 24 hours		49.2	

*Sila Banjongjairuk*

(MR SILA BANJONGJAIKUK)  
LABORATORY SUPERVISOR

OCTOBER 31, 2022

## ภาคผนวก ง-3

หนังสือรับรองผลการตรวจวิเคราะห์คุณภาพน้ำ





## ANALYSIS REPORT

**PROJECT NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)  
**CUSTOMER NAME** : SIAM CITY CEMENT PUBLIC COMPANY LIMITED  
**ADDRESS** : 99,219,301 MOO 9,5,5, MITRAPARB ROAD TABKWANG KAENGKOI SARABURI 18260  
**CONTACT INFORMATION** : TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM  
**SAMPLING SOURCE** : -  
**SAMPLE TYPE** : GROUNDWATER  
**SAMPLING DATE** : NOVEMBER 16, 2022  
**SAMPLING TIME** : 15:50 HOUR  
**SAMPLING METHOD °** : GRAB  
**SAMPLING BY °** : MR ANUSART SUAYDEE  
**ANALYZED BY** : MISS ARIYA THARAROM

**RECEIVED DATE** : NOVEMBER 17, 2022  
**ANALYTICAL DATE** : NOVEMBER 17 - DECEMBER 19, 2022  
**REPORT NO.** : 2022-U100249  
**WORK NO.** : 2021-001118  
**ANALYSIS NO.** : T22AW931-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บ้านวงศ์เกษม T22AW931-0001	
pH °	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H+ B)	7.9 (27°C)	-
WATER LEVEL °	m	WATER LEVEL METER	25.3	-
TURBIDITY °	NTU	NEPHELOMETRIC METHOD (SM: 2130 B)	0.8	0.1
TOTAL DISSOLVED SOLIDS °	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	498	25
TOTAL SUSPENDED SOLIDS °	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
TOTAL HARDNESS °	mg/L as CaCO <sub>3</sub>	EDTA TITRIMETRIC METHOD (SM: 2340 C)	432	4.0
SULPHATE °	mg/L SO <sub>4</sub> <sup>2-</sup>	TURBIDIMETRIC METHOD (SM: 4500-SO <sub>4</sub> <sup>2-</sup> E)	5.1	0.3
METALS				
ARSENIC °	mg/L As	HYDRIDE GENERATION AAS METHOD (SM: 3114 C)	0.0005	0.0003
CADMIUM °	mg/L Cd	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.002
IRON °	mg/L Fe	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	0.097	0.005



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บ้านวงศ์เกษม T22AW931-0001	
LEAD <sup>c</sup>	mg/L Pb	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.003
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR BROWN	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Bhuchonk p.*

(MR BHUCHONK PANICHLERTUMPI)  
LABORATORY SUPERVISOR

DECEMBER 20, 2022

## ANALYSIS REPORT

<b>PROJECT NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)	<b>RECEIVED DATE</b>	: NOVEMBER 17, 2022
<b>CUSTOMER NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED	<b>ANALYTICAL DATE</b>	: NOVEMBER 17 - DECEMBER 19, 2022
<b>ADDRESS</b>	: 99,219,301 MOO 9,5,5, MITRAPARB ROAD TABKWANG KAENGKOI SARABURI 18260	<b>REPORT NO.</b>	: 2022-U100250
<b>CONTACT INFORMATION</b>	: TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM	<b>WORK NO.</b>	: 2021-001118
<b>SAMPLING SOURCE</b>	: -	<b>ANALYSIS NO.</b>	: T22AW931-0002
<b>SAMPLE TYPE</b>	: GROUNDWATER		
<b>SAMPLING DATE</b>	: NOVEMBER 16, 2022		
<b>SAMPLING TIME</b>	: 15:10 HOUR		
<b>SAMPLING METHOD <sup>c</sup></b>	: GRAB		
<b>SAMPLING BY <sup>c</sup></b>	: MR ANUSART SUAYDEE		
<b>ANALYZED BY</b>	: MISS ARIYA THARAROM		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บ้านหนองน้ำแดง T22AW931-0002	
pH <sup>c</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H <sup>+</sup> B)	7.8 (28°C)	-
WATER LEVEL <sup>c</sup>	m	WATER LEVEL METER	24.2	-
TURBIDITY <sup>c</sup>	NTU	NEPHELOMETRIC METHOD (SM: 2130 B)	0.4	0.1
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	504	25
TOTAL SUSPENDED SOLIDS <sup>c</sup>	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
TOTAL HARDNESS <sup>a</sup>	mg/L as CaCO <sub>3</sub>	EDTA TITRIMETRIC METHOD (SM: 2340 C)	396	4.0
SULPHATE <sup>c</sup>	mg/L SO <sub>4</sub> <sup>2-</sup>	TURBIDIMETRIC METHOD (SM: 4500-SO <sub>4</sub> <sup>2-</sup> E)	28.0	0.3
<b>METALS</b>				
ARSENIC <sup>c</sup>	mg/L As	HYDRIDE GENERATION AAS METHOD (SM: 3114 C)	ND	0.0003
CADMIUM <sup>c</sup>	mg/L Cd	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.002
IRON <sup>c</sup>	mg/L Fe	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.005



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บ้านหนองน้ำแดง T22AW931-0002	
LEAD <sup>c</sup>	mg/L Pb	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.003
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Bhuchonk*

(MR BHUCHONK PANICHLERTUMPI)  
LABORATORY SUPERVISOR

DECEMBER 20, 2022



## ANALYSIS REPORT

<b>PROJECT NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED (QUARRY-KDD)	<b>RECEIVED DATE</b>	: NOVEMBER 17, 2022
<b>CUSTOMER NAME</b>	: SIAM CITY CEMENT PUBLIC COMPANY LIMITED	<b>ANALYTICAL DATE</b>	: NOVEMBER 17 - DECEMBER 19, 2022
<b>ADDRESS</b>	: 99,219,301 MOO 9,5,5, MITRAPARB ROAD TABKWANG KAENGKOI SARABURI 18260	<b>REPORT NO.</b>	: 2022-U100251
<b>CONTACT INFORMATION</b>	: TEL : 08 1929 1310 e-mail : PIYAWAT.PHOTIMONGKONKUL@SIAMCITYCEMENT.COM	<b>WORK NO.</b>	: 2021-001118
<b>SAMPLING SOURCE</b>	: -	<b>ANALYSIS NO.</b>	: T22AW931-0003
<b>SAMPLE TYPE</b>	: GROUNDWATER		
<b>SAMPLING DATE</b>	: NOVEMBER 16, 2022		
<b>SAMPLING TIME</b>	: 16:20 HOUR		
<b>SAMPLING METHOD <sup>c</sup></b>	: GRAB		
<b>SAMPLING BY <sup>c</sup></b>	: MR ANUSART SUAYDEE		
<b>ANALYZED BY</b>	: MISS ARIYA THARAROM		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บ้านชลประทาน T22AW931-0003	
pH <sup>c</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H <sup>+</sup> B)	7.9 (27°C)	-
WATER LEVEL <sup>c</sup>	m	WATER LEVEL METER	26.4	-
TURBIDITY <sup>c</sup>	NTU	NEPHELOMETRIC METHOD (SM: 2130 B)	1.0	0.1
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	476	25
TOTAL SUSPENDED SOLIDS <sup>c</sup>	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
TOTAL HARDNESS <sup>a</sup>	mg/L as CaCO <sub>3</sub>	EDTA TITRIMETRIC METHOD (SM: 2340 C)	420	4.0
SULPHATE <sup>c</sup>	mg/L SO <sub>4</sub> <sup>2-</sup>	TURBIDIMETRIC METHOD (SM: 4500-SO <sub>4</sub> <sup>2-</sup> E)	3.5	0.3
<b>METALS</b>				
ARSENIC <sup>c</sup>	mg/L As	HYDRIDE GENERATION AAS METHOD (SM: 3114 C)	0.0003	0.0003
CADMIUM <sup>c</sup>	mg/L Cd	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.002
IRON <sup>c</sup>	mg/L Fe	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.005





PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บ้านชลประทาน T22AW931-0003	
LEAD <sup>c</sup>	mg/L Pb	IN-HOUSE METHOD: UAE.TP.GW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	ND	0.003
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

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ND : NON-DETECTABLE.

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DECEMBER 20, 2022