

Annex B

Laboratory Reports

TEST REPORT

Client : ERM Siam CO., LTD.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Surface water
Sampling By : Environmental Monitoring Section/
 STS GREEN COMPANY LIMITED. **Sampling Date** : February 17, 2015
Work Request No. : 063/15 **Sample Received Date** : February 20, 2015
Report No. : 071/15 **Reported Date** : March 11, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
200215/1	MWQ- 1						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	February 20-25, 2015	0.6	mg/L	Clear, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	February 23, 2015	20.8	mg/L	Clear, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	February 24, 2015	<5.0	mg/L	Clear, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	February 25, 2015	0.023	mg/L	Clear, Sediment
		Total Suspended Solids	Dried at 103-105 °C Method (2540 D)	February 23, 2015	7.0	mg/L	Clear, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114-C)	March 10, 2015	0.0010	mg/L	Clear, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	February 24, 2015	0.00008	mg/L	Clear, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	February 24, 2015	0.0010	mg/L	Clear, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	February 23, 2015	<0.03	mg/L	Clear, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	February 23, 2015	0.30	mg/L	Clear, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	February 23, 2015	0.0030	mg/L	Clear, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	February 26, 2015	0.0006	mg/L	Clear, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	February 23, 2015	<0.01	mg/L	Clear, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	February 20-23, 2015	7.8	MPN/ 100 mL	Clear, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remark : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee W.

(Ms. Darunee Wichanphet)

Chemist

March 11, 2015

Kasidit Y.

(Mr. Kasidit Yasongkram)

Laboratory Supervisor

March 11, 2015



Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
3/23 Moo 5, Lat Sawai, Lam Luk Ka, Pathum
Thani Thailand 12150
Attn : Siriwan Hudnaked
Phone : 0-2153-7001 - 6
Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project Name : Myingyan IPP Project
Location : Ayeyarway River,
Mandalay District,
Myanmar
P/O :
Receipt No :

Lot ID: 158807
Date Received : Feb 20, 2015
Date Reported : Mar 13, 2015
Report Number : 536148-1 Rev. No.1

Page 1 of 1

Reference Number 158807-1
Sampling Date Feb 17, 2015
Sample Description Surface Water
Location MWQ-1
Condition of Sample contained in one plastic bottle (client container), refrigerated
Date of Analysis Feb 21, 2015

Analyte	Unit	LOD	LOQ	Result	Method	
Water Testing						
Nitrate	as N	mg/L	0.06	0.2	Not Detected	Based on APHA (2012), 4110 B
Nitrite *	as N	mg/L	0.03	0.1	Not Detected	Based on APHA (2012), 4110 B
Residual Free Chlorine *		mg/L	-	0.01	0.07	Based on APHA (2012), 4500-Cl(B)
Total Kjeldahl Nitrogen	as N	mg/L	0.15	0.5	Not Detected	Based on US EPA, Method 351.2
Total Nitrogen *	as N	mg/L	-	1.0	<1.0	Based on APHA (2012), Calculated

Note:

This Analysis test report is reissued to supersede report No. 536148-1, Date Reported : Feb 25, 2015

Remark :

1. LOD : Limit of Detection
2. "<" : Lower than LOQ (Limit of Quantitation)
3. Analyte(s) marked * is/are not included in scope of Accreditation.

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

Narin Saiseng
Supervisor



Quality Control Report

Client : STS Green Co., Ltd.

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Lot ID : 158807-1

Received Date : February 20, 2015

Analyte	Method Blank		Duplicate (%RPD)		Spike Sample (%Recovery)	
	Result	Criteria	Result	Criteria	Result	Criteria
Water Testing						
Nitrate as N	<0.06	<0.06	n/a	10	92	85-115
Nitrite as N	<0.03	<0.03	n/a	10	89	85-115
TKN	<0.15	<0.15	n/a	10	97	90-110
Residual Free Chlorine	<0.01	<0.01	n/a	10	-	-
Total Nitrogen	<1.0	<1.0	-	-	-	-

Remark

n/a = %RPD is not applicable for results less than Limit of Quantitative (no RPD is reported).

Approved By

Yupaporn Chanpleng
Senior Manager

TEST REPORT

Client : ERM Siam CO., LTD.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Surface water
Sampling By : Environmental Monitoring Section/
 STS GREEN COMPANY LIMITED. **Sampling Date** : February 28, 2015
Work Request No. : 076/15 **Sample Received Date** : March 6, 2015
Report No. : 085/15 **Reported Date** : March 18, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
060315/1	MWQ- 1						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	March 6-11, 2015	0.8	mg/L	Clear, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	March 11, 2015	<5.0	mg/L	Clear, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	March 6, 2015	<5.0	mg/L	Clear, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	March 7, 2015	0.011	mg/L	Clear, Sediment
		Total Suspended Solids	Dried at 103-105 °C Method (2540 D)	March 7, 2015	4.4	mg/L	Clear, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114-C)	March 10, 2015	<0.0002	mg/L	Clear, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	March 7, 2015	<0.00005	mg/L	Clear, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	March 16, 2015	0.0011	mg/L	Clear, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	March 10, 2015	<0.03	mg/L	Clear, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	March 7, 2015	0.31	mg/L	Clear, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	March 11, 2015	0.0118	mg/L	Clear, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	March 15, 2015	<0.0003	mg/L	Clear, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	March 7, 2015	<0.01	mg/L	Clear, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	March 6-9, 2015	4.5	MPN/ 100 mL	Clear, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darnee W.

(Ms. Darnee Wichanphet)

Chemist

March 18, 2015

Kasidit Y.

(Mr. Kasidit Yasongkram)

Laboratory Supervisor

March 18, 2015



Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
3/23 Moo 5, Lat Sawai, Lam Luk Ka, Pathum
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Phone : 0-2153-7001 - 6
Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project Name : Myingyan IPP Project
Location : Ayeyarway River,
Mandalay District,
Myanmar
P/O :
Receipt No :

Lot ID: 1511047
Date Received : Mar 06, 2015
Date Reported : Mar 13, 2015
Report Number : 540389-1 Rev. No.1

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Reference Number 1511047-1
Sampling Date Feb 28, 2015
Sample Description Surface Water
Location MWQ-1
Condition of Sample contained in one plastic bottle (client container)
Date of Analysis Mar 09, 2015

Analyte		Unit	LOD	LOQ	Result	Method
Water Testing						
Nitrate	as N	mg/L	0.06	0.2	Not Detected	Based on APHA (2012), 4110 B
Nitrite *	as N	mg/L	0.03	0.1	Not Detected	Based on APHA (2012), 4110 B
Residual Free Chlorine *		mg/L	-	0.01	<0.01	Based on APHA (2012), 4500-Cl(F)
Total Kjeldahl Nitrogen	as N	mg/L	0.15	0.5	Not Detected	Based on US EPA, Method 351.2
Total Nitrogen *		mg/L	-	-	<1.0	Based on APHA (2012), Calculated

Note:

This Analysis test report is reissued to supersede report No. 540389-1, Date Reported : Mar 11, 2015

Remark :

1. LOD : Limit of Detection
2. "<" : Lower than LOQ (Limit of Quantitation)
3. Analyte(s) marked * is/are not included in scope of Accreditation.

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Approved by

Narin Saiseng
Supervisor



Quality Control Report

Client : STS Green Co., Ltd.
Lot ID : 1511047-1
Received Date : March 6, 2015

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Analyte	Method Blank		Duplicate (%RPD)		Spike Sample (%Recovery)	
	Result	Criteria	Result	Criteria	Result	Criteria
Water Testing						
Nitrate as N	<0.06	<0.06	n/a	10	92	85-115
Nitrite as N	<0.03	<0.03	n/a	10	91	85-115
TKN	<0.15	<0.15	0.0	10	97	90-110
Residual Free Chlorine	<0.01	<0.01	n/a	10	-	-
Total Nitrogen	<1.0	<1.0	-	-	-	-

Remark

n/a = %RPD is not applicable for results less than Limit of Quantitative (no RPD is reported).

Approved By

Yupaporn Chanpleng
Senior Manager

TEST REPORT

Client : ERM Siam Co.,Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Surface water
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : March 14, 2015
Work Request No. : 103/15 **Sample Received Date** : March 18, 2015
Report No. : 103/15 **Reported Date** : March 25, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
180315/1	MWQ- 1						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	March 19-24, 2015	1.2	mg/L	Clear, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	March 22, 2015	9.2	mg/L	Clear, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	March 20, 2015	<5.0	mg/L	Clear, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	March 22, 2015	0.025	mg/L	Clear, Sediment
		Total Suspended Solids	Dried at 103-105 C Method (2540 D)	March 19, 2015	8.6	mg/L	Clear, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114 C)	March 22, 2015	0.0006	mg/L	Clear, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	March 24, 2015	<0.00005	mg/L	Clear, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	March 23, 2015	0.0005	mg/L	Clear, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	March 19, 2015	<0.03	mg/L	Clear, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	March 19, 2015	0.34	mg/L	Clear, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	March 17, 2015	<0.0020	mg/L	Clear, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	March 21, 2015	<0.0003	mg/L	Clear, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	March 20, 2015	<0.01	mg/L	Clear, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	March 18-21, 2015	7.8	MPN/ 100 mL	Clear, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee W.

(Ms. Darunee Wichanphet)

Chemist

March 25, 2015

Kasidit Y.

(Mr. Kasidit Yasongkram)

Laboratory Supervisor

March 25, 2015

**STS GREEN CO., LTD.**

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TEST REPORT

Client : ERM Siam CO., LTD.
 Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
 Project Name : Myingyan IPP Project
 Sample Type : Surface water
 Sampling By : ERM Siam Co., Ltd. Sampling Date : March 28, 2015
 Work Request No. : 188/15 Sample Received Date : April 2, 2015
 Report No. : 110/15 Reported Date : April 20, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
020415/9	MWQ- 1						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	April 3-8, 2015	0.6	mg/L	Clear, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	April 2, 2015	17.5	mg/L	Clear, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	April 3, 2015	<5.0	mg/L	Clear, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	April 3, 2015	0.039	mg/L	Clear, Sediment
		Total Suspended Solids	Dried at 103-105 °C Method (2540 D)	April 2, 2015	5.6	mg/L	Clear, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114-C)	April 17, 2014	0.0010	mg/L	Clear, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	April 9, 2015	<0.00005	mg/L	Clear, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	April 10, 2015	<0.0005	mg/L	Clear, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	April 2, 2015	<0.03	mg/L	Clear, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	April 8, 2015	0.22	mg/L	Clear, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	April 9, 2015	<0.0020	mg/L	Clear, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	April 16, 2015	<0.0003	mg/L	Clear, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	April 5, 2015	<0.01	mg/L	Clear, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	April 10, 2015	<1.8	MPN/100mL	Clear, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee W.

(Ms. Darunee Wichanphet)

Chemist

April 20, 2015

Kasidit Y.

(Mr. Kasidit Yasongkrām)

Laboratory Supervisor

April 20, 2015



Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
3/23 Moo 5, Lat Sawai, Lam Luk Ka, Pathum
Thani Thailand 12150
Attn : Siriwan Hudnaked
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Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project Name : Myingyan IPP Project
Location : Ayeyarway River,
Mandalay District,
Myanmar
P/O :
Receipt No :

Lot ID: 1513368
Date Received : Mar 18, 2015
Date Reported : Mar 27, 2015
Report Number : 545381-1 Rev. No.1

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Reference Number 1513368-1
Sampling Date Mar 14, 2015
Sample Description Surface Water
Location MWQ-1
Condition of Sample contained in one plastic bottle, refrigerated (client container)
Date of Analysis Mar 19, 2015

Analyte	Unit	LOD	LOQ	Result	Method	
Water Testing						
Nitrate	as N	mg/L	0.06	0.2	Not Detected	Based on APHA (2012), 4110 B
Nitrite *	as N	mg/L	0.03	0.1	Not Detected	Based on APHA (2012), 4110 B
Residual Free Chlorine *		mg/L	-	0.01	<0.01	Based on APHA (2012), 4500-Cl(F)
Total Kjeldahl Nitrogen	as N	mg/L	0.15	0.5	Not Detected	Based on US EPA, Method 351.2
Total Nitrogen *		mg/L	-	-	<1.0	Based on APHA (2012), Calculated

Note:

This Analysis test report is reissued to supersede report No. 545381-1, Date Reported : Mar 24, 2015

Remark :

1. LOD : Limit of Detection
2. "<" : Lower than LOQ (Limit of Quantitation)
3. Analyte(s) marked * is/are not included in scope of Accreditation.

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Approved by

Narin Saiseng
Supervisor



Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
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Thani Thailand 12150
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Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project Name : Myingyan IPP Project
Location : Ayeyarway River,
Mandalay District,
Myanmar
P/O :
Receipt No :

Lot ID: 1516311
Date Received : Apr 02, 2015
Date Reported : Apr 10, 2015
Report Number : 550803-1 Rev. No.1


Reference Number 1516311-1
Sampling Date Mar 28, 2015
Sample Description MWQ-1
Condition of Sample contained in one plastic bottle (client container), refrigerated
Date of Analysis Apr 03, 2015

Analyte		Unit	LOD	LOQ	Result	Method
Water Testing						
Nitrate	as N	mg/L	0.06	0.2	Not Detected	Based on APHA (2012), 4110 B
Nitrite *	as N	mg/L	0.03	0.1	Not Detected	Based on APHA (2012), 4110 B
Residual Free Chlorine *		mg/L	-	0.01	0.05	Based on APHA (2012), 4500-Cl(F)
Total Kjeldahl Nitrogen	as N	mg/L	0.15	0.5	Not Detected	Based on US EPA, Method 351.2
Total Nitrogen *	as N	mg/L	-	1.0	<1.0	Based on APHA (2012), Calculated

Note:
This Analysis test report is reissued to supersede report no. 550803-1, Date Reported : Apr 08, 2015

- Remark :
- LOD : Limit of Detection
 - "<" : Lower than LOQ (Limit of Quantitation)
 - Analyte(s) marked * is/are not included in scope of Accreditation.

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Approved by 
Narin Saiseng
Supervisor



Quality Control Report

Client : STS Green Co., Ltd.
Lot ID : 1516311-1
Received Date : April 2, 2015

page 1 of 1

Analyte	Method Blank		Duplicate (%RPD)		Spike Sample (%Recovery)	
	Result	Criteria	Result	Criteria	Result	Criteria
Water Testing						
Nitrate as N	<0.06	<0.06	0.8	10	92	85-115
Nitrite as N	<0.03	<0.03	1.2	10	89	85-115
TKN	<0.15	<0.15	0.0	10	95	90-110
Residual Free Chlorine	<0.01	<0.01	n/a	10	-	-
Total Nitrogen	<1.0	<1.0	-	-	-	-

Remark

n/a = %RPD is not applicable for results less than Limit of Quantitative (no RPD is reported).

Approved By

Yupaporn Chanpleng
Senior Manager

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Surface water
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : April 11, 2015
Work Request No. : 225/15 **Sample Received Date** : April 27, 2015
Report No. : 228/15 **Reported Date** : May 8, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
270415/19	MWQ- 1						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	April 29-May 4, 2015	2.4	mg/L	Clear, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	April 30, 2015	<5.0	mg/L	Clear, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	April 28, 2015	<5.0	mg/L	Clear, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	April 28, 2015	0.016	mg/L	Clear, Sediment
		Total Suspended Solids	Dried at 103-105 °C Method (2540 D)	April 28, 2015	18.8	mg/L	Clear, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114 C)	May 7, 2015	0.0003	mg/L	Clear, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	April 28, 2015	<0.00005	mg/L	Clear, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	April 29, 2015	0.0021	mg/L	Clear, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	April 28, 2015	<0.03	mg/L	Clear, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	April 28, 2015	0.62	mg/L	Clear, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	April 29, 2015	<0.0020	mg/L	Clear, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	May 7, 2015	<0.0003	mg/L	Clear, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	April 28, 2015	<0.01	mg/L	Clear, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	April 27-30, 2015	4.5	MPN/100mL	Clear, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee W.

(Ms. Darunee Wichanphet)

Chemist

May 8, 2015

Kasidit Y.

(Mr. Kasidit Yasongkram)

Laboratory Supervisor

May 8, 2015



Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
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Thani Thailand 12150
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Phone : 0-2153-7001 - 6
Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project Name : Myingyan IPP Project
Location : Ayeyarway River,
Mandalay District,
Myanmar
P/O :
Receipt No :

Lot ID: 1519837
Date Received : Apr 28, 2015
Date Reported : May 04, 2015
Report Number : 558394-1

Reference Number 1519837-1
Sampling Date Apr 14, 2015
Sample Description Surface Water
Location MWQ-1
Condition of Sample contained in one plastic bottle (client container), refrigerated
Date of Analysis Apr 29, 2015

Analyte		Unit	LOD	LOQ	Result	Method
Water Testing						
Nitrate	as N	mg/L	0.06	0.2	Not Detected	Based on APHA (2012), 4110 B
Nitrite *	as N	mg/L	0.03	0.1	Not Detected	Based on APHA (2012), 4110 B
Residual Free Chlorine *		mg/L	-	0.01	0.02	Based on APHA (2012), 4500-Cl(F)
Total Kjeldahl Nitrogen	as N	mg/L	0.15	0.5	Not Detected	Based on US EPA, Method 351.2
Total Nitrogen *		mg/L	-	1.0	<1.0	Based on APHA (2012), Calculated

- Remark :
- LOD : Limit of Detection
 - "<" : Lower than LOQ (Limit of Quantitation)
 - Analyte(s) marked * is/are not included in scope of Accreditation.

Approved by

Nanthawadee Somboon
Scientist (4)

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Quality Control Report

Client : STS Green Co., Ltd.
Lot ID : 1519837-1
Received Date : April 28, 2015

page 1 of 1

Analyte	Method Blank		Duplicate (%RPD)		Spike Sample (%Recovery)	
	Result	Criteria	Result	Criteria	Result	Criteria
Water Testing						
Nitrate as N	<0.06	<0.06	0.0	10	91	85-115
Nitrite as N	<0.03	<0.03	0.0	10	88	85-115
TKN	<0.15	<0.15	0.0	10	95	90-110
Residual Free Chlorine	<0.01	<0.01	n/a	10	-	-
Total Nitrogen	<1.0	<1.0	-	-	-	-

Remark

n/a = %RPD is not applicable for results less than Limit of Quantitative (no RPD is reported).

Approved By

Yupaporn Chanpleng
Senior Manager

TEST REPORT

Client : ERM Siam Co.,Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Surface water
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : April 25, 2015
Work Request No. : 233/15 **Sample Received Date** : April 30, 2015
Report No. : 229/15 **Reported Date** : May 8, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300415/5	MWQ- 1						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	April 30-May 5, 2015	2.4	mg/L	Clear, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	May 6, 2015	8.0	mg/L	Clear, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	May 4, 2015	<5.0	mg/L	Clear, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	April 30, 2015	0.006	mg/L	Clear, Sediment
		Total Suspended Solids	Dried at 103-105 C Method (2540 D)	April 30, 2015	20.6	mg/L	Clear, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114 C)	May 7, 2015	0.0004	mg/L	Clear, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	May 4, 2015	<0.00005	mg/L	Clear, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	May 6, 2015	0.0020	mg/L	Clear, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	May 6, 2015	<0.03	mg/L	Clear, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	May 6, 2015	0.83	mg/L	Clear, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	May 4, 2015	<0.0020	mg/L	Clear, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	May 7, 2015	0.0010	mg/L	Clear, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	May 7, 2015	<0.01	mg/L	Clear, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	April 30-May 3, 2015	110	MPN/ 100 mL	Clear, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee H

(Ms. Darunee Wichanphet)

Chemist

May 8, 2015

Kasidit 7

(Mr. Kasidit Yasongkram)

Laboratory Supervisor

May 8, 2015



Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
3/23 Moo 5, Lat Sawai, Lam Luk Ka, Pathum
Thani Thailand 12150
Attn : Siriwan Hudnaked
Phone : 0-2153-7001 - 6
Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project Name : Myingyan IPP Project
Location : Ayeyarway River,
Mandalay District,
Myanmar
P/O :
Receipt No :

Lot ID: 1520654
Date Received : May 04, 2015
Date Reported : May 14, 2015
Report Number : 559991-1

Reference Number 1520654-1
Sampling Date Apr 25, 2015
Sample Description MWQ-1
Condition of Sample contained in one plastic bottle (client container)
Date of Analysis May 06, 2015

Analyte		Unit	LOD	LOQ	Result	Method
Water Testing						
Nitrate	as N	mg/L	0.06	0.2	Not Detected	Based on APHA (2012), 4110 B
Nitrite *	as N	mg/L	0.03	0.1	Not Detected	Based on APHA (2012), 4110 B
Residual Free Chlorine *		mg/L	-	0.01	0.02	Based on APHA (2012), 4500-Cl(F)
Total Kjeldahl Nitrogen	as N	mg/L	0.15	0.5	Not Detected	Based on US EPA, Method 351.2
Total Nitrogen *		mg/L	-	1.0	<1.0	Based on APHA (2012), Calculated

Remark :

1. LOD : Limit of Detection
2. "<" : Lower than LOQ (Limit of Quantitation)
3. Analyte(s) marked * is/are not included in scope of Accreditation.

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

Narin Saiseng
Supervisor



Quality Control Report

Client : STS Green Co., Ltd.
Lot ID : 1520654-1
Received Date : May 4, 2015

page 1 of 1

Analyte	Method Blank		Duplicate (%RPD)		Spike Sample (%Recovery)	
	Result	Criteria	Result	Criteria	Result	Criteria
Water Testing						
Nitrate as N	<0.06	<0.06	0.0	10	90	85-115
Nitrite as N	<0.03	<0.03	0.0	10	91	85-115
TKN	<0.15	<0.15	0.0	10	92	90-110
Residual Free Chlorine	<0.01	<0.01	n/a	10	-	-
Total Nitrogen	<1.0	<1.0	-	-	-	-

Remark

n/a = %RPD is not applicable for results less than Limit of Quantitative (no RPD is reported).

Approved By

Yupaporn Chanpleng
Senior Manager


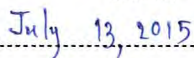
TEST REPORT

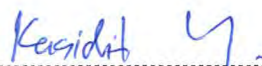
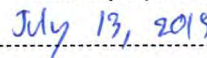
Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Surface water
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 17, 2015
Work Request No. : 381/15 **Sample Received Date** : June 29, 2015
Report No. : 393/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
290615/6	MSW-1						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	June 29 - July 4, 2015	0.6	mg/L	Turbid, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	July 4, 2015	6.4	mg/L	Turbid, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	July 4, 2015	<5.0	mg/L	Turbid, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	June 29, 2015	0.026	mg/L	Turbid, Sediment
		Total Suspended Solids	Dried at 103-105 C Method (2540 D)	June 30, 2015	11.5	mg/L	Turbid, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114-C)	July 7, 2015	<0.0002	mg/L	Turbid, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	July 5, 2015	<0.00005	mg/L	Turbid, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	July 5, 2015	0.0012	mg/L	Turbid, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	July 3, 2015	<0.03	mg/L	Turbid, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	July 21, 2015	2.38	mg/L	Turbid, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	July 5, 2015	<0.0020	mg/L	Turbid, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	July 1, 2015	<0.0003	mg/L	Turbid, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	July 3, 2015	<0.01	mg/L	Turbid, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	July 3-6, 2015	130	MPN/ 100 mL	Turbid, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.


 (Ms. Daranee Wichanphet)
 Chemist



 (Mr. Kasidit Yasongkram)
 Laboratory Supervisor




STS GREEN CO., LTD.

3/23 Moo 5, Lat Sawai, Lam Luk Ka, Pathum Thani 12150, Thailand

Tel: +66 2153 7001-6 Fax: +66 2153 7007

E-mail: green@sts.co.th http://www.sts.co.th

TEST REPORT

Client : ERM Siam Co., Ltd.
 Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
 Project Name : Myingyan IPP Project
 Sample Type : Surface water
 Sampling By : ERM Siam Co., Ltd. Sampling Date : June 17, 2015
 Work Request No. : 381/15 Sample Received Date : June 29, 2015
 Report No. : 393/15 Reported Date : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
290615/7	MSW-2						
		Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification (5210 B)	June 29 - July 4, 2015	0.2	mg/L	Turbid, Sediment
		Chemical Oxygen Demand	Open Reflux Method (5220 B)	July 4, 2015	12.7	mg/L	Turbid, Sediment
		Oil and Grease	Liquid-Liquid, Partition-Gravimetric Method (5520 B)	July 4, 2015	<5.0	mg/L	Turbid, Sediment
		Total Phosphorus	Acid digestion, Ascorbic Acid Method (4500-P B&E)	June 29, 2015	0.032	mg/L	Turbid, Sediment
		Total Suspended Solids	Dried at 103-105 °C Method (2540 D)	June 30, 2015	74.0	mg/L	Turbid, Sediment
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method (3114-C)	July 7, 2015	<0.0002	mg/L	Turbid, Sediment
		Cadmium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	July 5, 2015	<0.00005	mg/L	Turbid, Sediment
		Chromium	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	July 5, 2015	0.0039	mg/L	Turbid, Sediment
		Copper	Direct Air-Acetylene Flame Method (3111 B)	July 3, 2015	<0.03	mg/L	Turbid, Sediment
		Iron	Direct Air-Acetylene Flame Method (3111 B)	July 21, 2015	4.50	mg/L	Turbid, Sediment
		Lead	Electrothermal Atomic Absorption Spectrometric Method (3113 B)	July 5, 2015	0.0033	mg/L	Turbid, Sediment
		Mercury	Cold-Vapor Atomic Absorption Spectrometric Method (3112 B)	July 1, 2015	<0.0003	mg/L	Turbid, Sediment
		Zinc	Direct Air-Acetylene Flame Method (3111 B)	July 3, 2015	<0.01	mg/L	Turbid, Sediment
		Total Coliform Bacteria	Multiple Tube Fermentation Technique (9221 B)	July 3-6, 2015	68	MPN/ 100 mL	Turbid, Sediment

Method : Standard Methods for Examination of Water and Wastewater 22nd Edition 2012 (AWWA, APHA, WEF)

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee W.

 (Ms. Darunee Wichanphet)
 Chemist
July 13, 2015

Kasidit Y.

 (Mr. Kasidit Yasongkram)
 Laboratory Supervisor
July 13, 2015



Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
3/23 Moo 5, Lat Sawai, Lam Luk Ka, Pathum
Thani Thailand 12150
Attn : Siriwan Hudnaked
Phone : 0-2153-7001 - 6
Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project :
Location :
P/O :
Receipt No :

Lot ID: 1531081
Date Received : Jun 30, 2015
Date Reported : Jul 03, 2015
Report Number : 582782-1

Reference Number 1531081-1
Sampling Date Jun 17, 2015
Project Name Myingyan IPP Project
Sample Description Surface Water
Location MSW-1
Condition of Sample contained in one plastic bottle (client container)
Date of Analysis Jul 01, 2015

Analyte	Unit	LOD	LOQ	Result	Method
Water Testing					
Residual Free Chlorine *	mg/L	-	0.01	<0.01	Based on APHA (2012), 4500-Cl(F)
Total Nitrogen *	mg/L	-	1.0	<1.0	Based on APHA (2012), Calculated

Technical Management

Nanthawadee Somboon
Scientist (4)
ทะเบียนเลขที่ ว-204-จ-4716

Approved by

Yupaporn Chanpleng
Senior Manager
ทะเบียนเลขที่ ว-204-ค-4700

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Analysis / Test Report

TESTING
No.0009

Report to : STS Green Co., Ltd.
3/23 Moo 5, Lat Sawai, Lam Luk Ka, Pathum
Thani Thailand 12150
Attn : Siriwan Hudnaked
Phone : 0-2153-7001 - 6
Fax : 0-2153-7007
Email : siriwan.hudnaked@gmail.com
Cc.Email : green@sts.co.th ; siriwan.h@sts.co.th

Project :
Location :
P/O :
Receipt No :

Lot ID: 1531081
Date Received : Jun 30, 2015
Date Reported : Jul 03, 2015
Report Number : 582782-1

Page 2 of 10

Reference Number 1531081-2
Sampling Date Jun 17, 2015
Project Name Myingyan IPP Project
Sample Description Surface Water
Location MSW-2
Condition of Sample contained in one plastic bottle (client container)
Date of Analysis Jul 01, 2015

Analyte	Unit	LOD	LOQ	Result	Method
Water Testing					
Residual Free Chlorine *	mg/L	-	0.01	<0.01	Based on APHA (2012), 4500-Cl(F)
Total Nitrogen *	mg/L	-	1.0	<1.0	Based on APHA (2012), Calculated

Technical Management

Nanthawadee Somboon
Scientist (4)
ทะเบียนเลขที่ ว-204-จ-4716

Approved by

Yupaporn Chanpleng
Senior Manager
ทะเบียนเลขที่ ว-204-ค-4700

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TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 19, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/61	MS-1T (Top soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.52	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	46.19	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	28.22	mg/kg dry-weight	-
		Hexavalent Chromium	Alkaline Digestion, Colorimetric Method	July 4, 2015	<0.10	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	19.00	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	34,363	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	5.32	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	562.14	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	0.13	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	87.89	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee W.

(Ms. Darunee Wichanphet)

Chemist

July 13, 2015

Kasidit Y.

(Ms. Pathama Bunsri)

Laboratory Supervisor

July 13, 2015

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 19, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/62	MS-1B (Bottom soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.53	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	44.21	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	33.55	mg/kg dry-weight	-
		Hexavalent Chromium	Akaline Digestion, Colorimetric Method	July 4, 2015	<0.10	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	22.12	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	36,311	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	5.50	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	744.63	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	0.10	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	78.42	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee H.

(Ms. Darunee Wichanphet)

Chemist

July 13, 2015

Kasodit Y.

(Ms. Pathama Bunsri)

Laboratory Supervisor

July 13, 2015

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 18, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/63	MS-2T (Top soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.47	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	30.03	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	22.68	mg/kg dry-weight	-
		Hexavalent Chromium	Alkaline Digestion, Colorimetric Method	July 4, 2015	0.14	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	12.81	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	22,012	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	<5.00	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	516.65	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	<0.10	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	56.46	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee H.

(Ms. Darunee Wichanphet)

Chemist

July 13, 2015

Keeridat Y.

(Ms. Patthama Bunsri)

Laboratory Supervisor

July 13, 2015

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 19, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/64	MS-2B (Bottom soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.63	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	64.53	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	33.69	mg/kg dry-weight	-
		Hexavalent Chromium	Akaline Digestion, Colorimetric Method	July 4, 2015	<0.10	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	23.40	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	35,831	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	5.62	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	837.21	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	<0.10	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	81.98	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee W.

(Ms. Darunee Wichanphet)

Chemist

July 13, 2015

Kasidit Y.

(Ms. Pathama Bunsri)

Laboratory Supervisor

July 13, 2015

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 18, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/65	MS-3T (Top soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.50	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	39.69	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	26.37	mg/kg dry-weight	-
		Hexavalent Chromium	Alkaline Digestion, Colorimetric Method	July 4, 2015	<0.10	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	15.17	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	27,496	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	<5.00	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	532.60	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	<0.10	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	59.01	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

Remarks : Reported results refer to submitted samples only. This analytical report will not be reproduced in part for such purposes.

Darunee H.

(Ms. Darunee Wichanphet)

Chemist

July 13, 2015

Kasidat Y.

(Ms. Pathama Bunsri)

Laboratory Supervisor

July 13, 2015

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 18, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/66	MS-3B (Bottom soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.56	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	28.71	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	31.00	mg/kg dry-weight	-
		Hexavalent Chromium	Akaline Digestion, Colorimetric Method	July 4, 2015	0.19	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	18.25	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	28,472	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	<5.00	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	687.80	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	<0.10	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	66.22	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

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Darunee W.

(Ms. Darunee Wichanphet)

Chemist

July 13, 2015

Kasidit Y.

(Ms. Pathama Bunsri)

Laboratory Supervisor

July 13, 2015

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 19, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/67	MS-4T (Top soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.71	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	48.68	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	36.88	mg/kg dry-weight	-
		Hexavalent Chromium	Alkaline Digestion, Colorimetric Method	July 4, 2015	<0.10	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	21.15	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	28,962	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	5.35	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	713.52	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	<0.10	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	81.14	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

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Darunee H.

(Ms. Darunee Wichanphet)

Chemist

July 13, 2015

Koridit Y.

(Ms. Patthama Bunsil)

Laboratory Supervisor

July 13, 2015

TEST REPORT

Client : ERM Siam Co., Ltd.
Address : 179 Bangkok City Tower, 24th Floor, South Sathorn Road, Tungmahamek, Sathorn, Bangkok, 10120
Project Name : Myingyan IPP Project
Sample Type : Soil
Sampling By : ERM Siam Co., Ltd. **Sampling Date** : June 19, 2015
Work Request No. : 388/15 **Sample Received Date** : June 30, 2015
Report No. : 390/15 **Reported Date** : July 13, 2015

ID.No.	Sample Name	Parameters	Analytical Methods	Analytical Date	Results	Units	Sample Description
300615/68	MS-4B (Bottom soil)						
		Arsenic	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	0.63	mg/kg dry-weight	-
		Barium	Direct Nitrous Oxide-Acetylene Flame Method	July 5, 2015	36.55	mg/kg dry-weight	-
		Cadmium and compounds	Direct Air-Acetylene Flame Method	July 3, 2015	<1.00	mg/kg dry-weight	-
		Chromium	Direct Air-Acetylene Flame Method	July 3, 2015	26.56	mg/kg dry-weight	-
		Hexavalent Chromium	Alkaline Digestion, Colorimetric Method	July 4, 2015	<0.10	mg/kg dry-weight	-
		Copper	Direct Air-Acetylene Flame Method	July 3, 2015	16.23	mg/kg dry-weight	-
		Iron	Direct Air-Acetylene Flame Method	July 2, 2015	24,282	mg/kg dry-weight	-
		Lead	Direct Air-Acetylene Flame Method	July 4, 2015	<5.00	mg/kg dry-weight	-
		Manganese and compounds	Direct Air-Acetylene Flame Method	July 4, 2015	660.60	mg/kg dry-weight	-
		Mercury and compounds	Cold-Vapor Atomic Absorption Spectrometric Method	July 3, 2015	<0.10	mg/kg dry-weight	-
		Nickel, soluble salts	Direct Air-Acetylene Flame Method	July 2, 2015	<2.00	mg/kg dry-weight	-
		Selenium	Hydride Generation Atomic Absorption Spectrometric Method	July 7, 2015	<0.01	mg/kg dry-weight	-
		Silver	Direct Air-Acetylene Flame Method	July 5, 2015	<1.50	mg/kg dry-weight	-
		Zinc	Direct Air-Acetylene Flame Method	July 3, 2015	67.80	mg/kg dry-weight	-

Method : United State Environmental Protection Agency.

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Daranee W.
 (Ms. Daranee Wichanphet)
 Chemist
 July 13, 2015

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 (Ms. Pathama Bunsri)
 Laboratory Supervisor
 July 13, 2015