

**Certificate No : 2011-00433**

**BANGKOK : 25/08/2011**

**CERTIFICATE OF INSPECTION**



**SGS**  
**ORIGINAL**

**CLIENT :** Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540

**ITEM INSPECTED :** 600V CU/XLPE/AWA/FRPVC (ST2) 1X400 SQ.MM.

**PLACE OF INSPECTION :** - Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540  
- Phelps Dodge International (Thailand) Ltd.  
9/9 Moo 4, Tambol Nikompattana,  
Amphur Nikompattana, Rayong 21180

**SCOPE OF INSPECTION :** Witness Electrical Type Test & Non Electrical Type Test

**PERSON CONTACT :** Mr. Warapong Atthirawong

**DATE OF INSPECTION :** - July 13, 21 & 29, 2011  
- August 1, 8, 11 & 18, 2011

**SGS INSPECTOR :** - Mr. Nirun Sadjuntuke  
- Mr. Pornchai Lertwattanakit

This is to certify that at the request of Phelps Dodge International (Thailand) Ltd., SGS attended the premises of Phelps Dodge International (Thailand) Ltd. Bangplee, Samutprakarn for the purpose of witness type test we report as follows:-

**MATERIAL DATA**

**Description of the test object**

**Shipping Reel No.** : 1

**Type** : 600V CU/XLPE/AWA/FRPVC (ST2) 1X400 SQ.MM.

**Year of Manufacture** : 2011

**Quantity submitted** : 50 m

**Rated voltage, Uo/U (Um)** : 0.6/1 (1.2) kV

**Conductor material** : Copper

**Nominal cross-section area** : 400 sq.mm.

**No. of core** : 1 Core

**Insulation** : XLPE

**Separation sheath** : FRPVC (ST2)

**Armouring** : Aluminum wire

**Outer sheath** : FRPVC (ST2)

**Marking on the cable** : 0.6/1KV XLPE/AWA/FRPVC 1X400 SQ.MM.  
IEC 60502-1, PHELPS DODGE 2011

**Specification** : AS per IEC 60502-1/PDPTL

**SGS (Thailand) Limited.**

Industrial Services and Technical Staff Services  
100 Nanglinchee Road, Chongnonsee Yannawa, Bangkok 10120. Thailand  
TEL : 66 2 678 18 13 FAX : 66 2 678 15 04  
E-Mail : industry.thailand@sgs.com

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**Certificate No : 2011-00433-1**

**BANGKOK : 25/08/2011**

**CERTIFICATE OF INSPECTION**

**CLIENT** : Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540

**ITEM INSPECTED** : 600V CU/XLPE/SWA/FRPVC (ST2) 2X2.5+2.5 SQ.MM.

**PLACE OF INSPECTION** : - Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540  
- Phelps Dodge International (Thailand) Ltd.  
9/9 Moo 4, Tambol Nikompattana,  
Amphur Nikompattana, Rayong 21180

**SCOPE OF INSPECTION** : Witness Electrical Type Test & Non Electrical Type Test

**PERSON CONTACT** : Mr. Warapong Atthirawong

**DATE OF INSPECTION** : - July 13, 21 & 29, 2011  
- August 1, 8, 11 & 18, 2011

**SGS INSPECTOR** : - Mr. Nirun Sadjuntuke  
- Mr. Pornchai Lertwattanakit

This is to certify that at the request of Phelps Dodge International (Thailand) Ltd., SGS attended the premises of Phelps Dodge International (Thailand) Ltd. Bangplee, Samutprakarn for the purpose of witness type test we report as follows:-

**MATERIAL DATA**

**Description of the test object**

**Shipping Reel No.** : 1

**Type** : 600V CU/XLPE/SWA/FRPVC (ST2) 2X2.5+2.5 SQ.MM.

**Year of Manufacture** : 2011

**Quantity submitted** : 50 m

**Rated voltage, Uo/U (Um)** : 0.6/1 (1.2) kV

**Conductor material** : Copper

**Nominal cross-section area** : 2.5 sq.mm. for phase core and ground core

**No. of core** : 2 Phase cores and 1 ground core

**Insulation** : XLPE

**Separation sheath** : FRPVC (ST2)

**Armouring** : Galvanized steel wire

**Outer sheath** : FRPVC (ST2)

**Marking on the cable** : 0.6/1KV XLPE/SWA/FRPVC 2X2.5+2.5 SQ.MM.  
IEC 60502-1, PHELPS DODGE 2011

**Specification** : AS per IEC 60502-1/PD TL

**SGS (Thailand) Limited.**

Industrial Services and Technical Staff Services  
100 Nanglinchee Road, Chongnonsee Yannawa, Bangkok 10120. Thailand  
TEL : 66 2 678 18 13 FAX : 66 2 678 15 04  
E-Mail : industry.thailand@sgs.com

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**Certificate No : 2011-00433-2**

**BANGKOK : 25/08/2011**

**CERTIFICATE OF INSPECTION**

**CLIENT :** Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540

**ITEM INSPECTED :** 600V CU/XLPE/AWA/FRPVC (ST2) 1X95 SQ.MM.

**PLACE OF INSPECTION :** - Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540  
- Phelps Dodge International (Thailand) Ltd.  
9/9 Moo 4, Tambol Nikompattana,  
Amphur Nikompattana, Rayong 21180

**SCOPE OF INSPECTION :** Witness Electrical Type Test & Non Electrical Type Test

**PERSON CONTACT :** Mr. Warapong Atthirawong

**DATE OF INSPECTION :** - July 13, 21 & 29, 2011  
- August 1, 8, 11 & 18, 2011

**SGS INSPECTOR :** - Mr. Nirun Sadjuntuke  
- Mr. Pornchai Lertwattanakiti

This is to certify that at the request of Phelps Dodge International (Thailand) Ltd., SGS attended the premises of Phelps Dodge International (Thailand) Ltd. Bangplee, Samutprakarn for the purpose of witness type test we report as follows:-

**MATERIAL DATA**

**Description of the test object**

**Shipping Reel No.** 1

**Type :** 600V CU/XLPE/AWA/FRPVC (ST2) 1X95 SQ.MM.

**Year of Manufacture :** 2011

**Quantity submitted :** 50 m

**Rated voltage, Uo/U (Um) :** 0.6/1 (1.2) kV

**Conductor material :** Copper

**Nominal cross-section area :** 95 sq.mm.

**No. of core** 1 Core

**Insulation** XLPE

**Separation sheath** FRPVC (ST2)

**Armouring :** Aluminum wire

**Outer sheath :** FRPVC (ST2)

**Marking on the cable :** 0.6/1 KV XLPE/AWA/FRPVC 1X95 SQ.MM.  
IEC 60502-1, PHELPS DODGE 2011

**Specification :** AS per IEC 60502-1/PD TL

**SGS (Thailand) Limited.**

Industrial Services and Technical Staff Services  
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**Certificate No : 2011-00433-3**

**BANGKOK : 25/08/2011**

**CERTIFICATE OF INSPECTION**

**CLIENT :** Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540

**ITEM INSPECTED :** 600V CU/XLPE/CTS/SWA/FRPVC (ST2) 2X2.5+2.5 SQ.MM.

**PLACE OF INSPECTION :** - Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540  
- Phelps Dodge International (Thailand) Ltd.  
9/9 Moo 4, Tambol Nikompattana,  
Amphur Nikompattana, Rayong 21180

**SCOPE OF INSPECTION :** Witness Electrical Type Test & Non Electrical Type Test

**PERSON CONTACT :** Mr. Warapong Atthirawong

**DATE OF INSPECTION :** - July 13, 21 & 29, 2011  
- August 1, 8, 11 & 18, 2011

**SGS INSPECTOR :** - Mr. Nirun Sadjuntuke  
- Mr. Pornchai Lertwattanakit

This is to certify that at the request of Phelps Dodge International (Thailand) Ltd., SGS attended the premises of Phelps Dodge International (Thailand) Ltd. Bangplee, Samutprakarn for the purpose of witness type test we report as follows:-

**MATERIAL DATA**

**Description of the test object**

**Shipping Reel No.** : 1

**Type** : 600V CU/XLPE/CTS/SWA/FRPVC (ST2) 2X2.5+2.5 SQ.MM.

**Year of Manufacture** : 2011

**Quantity submitted** : 50 m

**Rated voltage, Uo/U (Um)** : 0.6/1 (1.2) kV

**Conductor material** : Copper

**Nominal cross-section area** : 2.5 sq.mm. for phase core and ground core

**No. of core** : 2 Phase cores and 1 ground core

**Insulation** : XLPE

**Separation sheath** : FRPVC (ST2)

**Shielding** : Copper tape

**Armouring** : Galvanized steel wire

**Outer sheath** : FRPVC (ST2)

**Marking on the cable** : 0.6/1KV XLPE/CTS/SWA/FRPVC 2X2.5+2.5 SQ.MM.  
IEC 60502-1, PHELPS DODGE 2011

**Specification** : AS per IEC 60502-1/PD TL

**SGS (Thailand) Limited.**

Industrial Services and Technical Staff Services  
100 Nanglinchee Road, Chongnonsee Yannawa, Bangkok 10120. Thailand  
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**Certificate No : 2011-00433-4**

**BANGKOK : 25/08/2011**

**CERTIFICATE OF INSPECTION**

**CLIENT :** Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540

**ITEM INSPECTED :** 600V CU/XLPE/SWA/FRPVC (ST2) 4X150+95 SQ.MM.

**PLACE OF INSPECTION :** - Phelps Dodge International (Thailand) Ltd.  
159 Moo 10 Soi Watratburana Teparak Road,  
Bangpla, Bangplee, Samutprakarn 10540  
- Phelps Dodge International (Thailand) Ltd.  
9/9 Moo 4, Tambol Nikompattana,  
Amphur Nikompattana, Rayong 21180

**SCOPE OF INSPECTION** Witness Electrical Type Test & Non Electrical Type Test

**PERSON CONTACT** Mr. Warapong Atthirawong

**DATE OF INSPECTION** - July 13, 21 & 29, 2011  
- August 1, 8, 11 & 18, 2011

**SGS INSPECTOR** - Mr. Nirun Sadjuntuke  
- Mr. Pornchai Lertwattanakit

This is to certify that at the request of Phelps Dodge International (Thailand) Ltd., SGS attended the premises of Phelps Dodge International (Thailand) Ltd. Bangplee, Samutprakarn for the purpose of witness type test we report as follows:-

**MATERIAL DATA**

**Description of the test object**

**Shipping Reel No.** 1

**Type :** 600V CU/XLPE/SWA/FRPVC (ST2) 4X150+95 SQ.MM.

**Year of Manufacture :** 2011

**Quantity submitted :** 50 m

**Rated voltage, Uo/U (Um) :** 0.6/1 (1.2) kV

**Conductor material :** Copper

**Nominal cross-section area :** 150 sq.mm. for phase core and 95 sq.mm. for ground core

**No. of core** 4 Phase cores and 1 ground core

**Insulation** XLPE

**Separation sheath** FRPVC (ST2)

**Armouring :** Galvanized steel wire

**Outer sheath :** FRPVC (ST2)

**Marking on the cable :** 0.6/1KV XLPE/SWA/FRPVC 4X150+95 SQ.MM.  
IEC 60502-1, PHELPS DODGE 2011

**Specification :** AS per IEC 60502-1/PD TL

**SGS (Thailand) Limited.**

Industrial Services and Technical Staff Services  
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