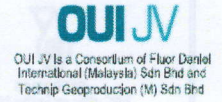




**PETRONAS RAPID PROJECT
PACKAGE 14-UTILITIES, INTERCONNECTING, OFFSITE UNITS**



APPROVAL of CONSTRUCTION MATERIALS	FORM JV 2013 rev0 <small>(Attachment 1 to RAPID-P0014-OUI-CON-PRC-0001-2013)</small>	SH. 1 OF 12
PACKAGE CONTRACTOR: ELECO ICE PETROLEUM SDN. BHD		ACM RAPID-P0014-0025-PIP-ACM-0001-0081 rev0

Civil	<input type="checkbox"/>	Piping	<input checked="" type="checkbox"/>	Stationary	<input type="checkbox"/>	Electrical	<input type="checkbox"/>	Coating	<input checked="" type="checkbox"/>
Building	<input type="checkbox"/>	Supports	<input type="checkbox"/>	Rotating	<input type="checkbox"/>	Instrument	<input type="checkbox"/>	Insulation	<input type="checkbox"/>
Architectural	<input type="checkbox"/>	Welding	<input type="checkbox"/>	Tankage	<input type="checkbox"/>	Safety	<input type="checkbox"/>		<input type="checkbox"/>
Structural	<input type="checkbox"/>	NDE	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

MATERIAL DESCRIPTION							
1. Material	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>description</td><td>PSC BALL – BLAST CLEANING ABRASIVE</td></tr> <tr><td>standard (ASTM ...)</td><td>ISO 11126/11127</td></tr> <tr><td>size, thickness</td><td>30/60 MESH</td></tr> </table>	description	PSC BALL – BLAST CLEANING ABRASIVE	standard (ASTM ...)	ISO 11126/11127	size, thickness	30/60 MESH
description	PSC BALL – BLAST CLEANING ABRASIVE						
standard (ASTM ...)	ISO 11126/11127						
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2. Supplier	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>name</td><td>ROCK GARNET TRADING SDN BHD</td></tr> <tr><td>country</td><td>MALAYSIA</td></tr> <tr><td>stockist</td><td>SELANGOR</td></tr> </table>	name	ROCK GARNET TRADING SDN BHD	country	MALAYSIA	stockist	SELANGOR
name	ROCK GARNET TRADING SDN BHD						
country	MALAYSIA						
stockist	SELANGOR						
3. Purpose	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>explanation</td><td>BLASTING WORKS (MANUAL BLAST)</td></tr> <tr><td>location</td><td>RAPID PROJECT PACKAGE 14 (AREA 801 & 803)</td></tr> <tr><td>installation time...</td><td>NIL</td></tr> </table>	explanation	BLASTING WORKS (MANUAL BLAST)	location	RAPID PROJECT PACKAGE 14 (AREA 801 & 803)	installation time...	NIL
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location	RAPID PROJECT PACKAGE 14 (AREA 801 & 803)						
installation time...	NIL						
4. Project reference	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>specification</td><td>RAPID-P0014-0025-MCI-PRC-0001-0043</td></tr> <tr><td>drawing</td><td>BLASTING AND PAINTING PROCEDURE</td></tr> <tr><td>...</td><td></td></tr> </table>	specification	RAPID-P0014-0025-MCI-PRC-0001-0043	drawing	BLASTING AND PAINTING PROCEDURE	...	
specification	RAPID-P0014-0025-MCI-PRC-0001-0043						
drawing	BLASTING AND PAINTING PROCEDURE						
...							
5. Annexes	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>sample</td><td>NIL</td></tr> <tr><td>brochure</td><td>ATTACHED</td></tr> <tr><td>Test Certificates...</td><td>ATTACHED</td></tr> </table>	sample	NIL	brochure	ATTACHED	Test Certificates...	ATTACHED
sample	NIL						
brochure	ATTACHED						
Test Certificates...	ATTACHED						
PACKAGE CONTRACTOR Notes:							

APPROVAL CYCLE	
1	ISSUED BY PACKAGE CONTRACTOR
Name	Marco Wong
Signature	
Date	19/12/17
2	REVIEWED BY EPCM CONTRACTOR
Name	ru i yan
Signature	
Date	2017.12.21 15:46:16 +08'00'
"A"	<input checked="" type="checkbox"/>
"C"	<input type="checkbox"/>
"R"	<input type="checkbox"/>
3	REVIEWED BY OWNER
Name	
Signature	
Date	
"A"	<input type="checkbox"/>
"C"	<input type="checkbox"/>
"R"	<input type="checkbox"/>
4	FINAL REVIEW BY EPCM CONTRACTOR
Name	lac81204
Signature	
Date	2017.12.21 16:03:46 +08'00'

"A" - ACCEPTED
"C" COMMENTED
"R" REJECTED

EPCM CONTRACTOR Comments:



ROCK GARNET TRADING (SA0079856-X)





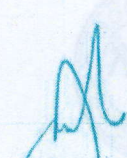

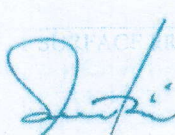
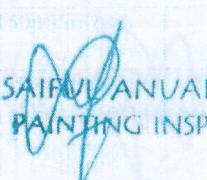

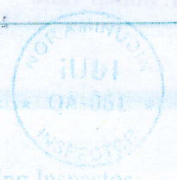
No. 8-1, Jalan Palma Raya, Bandar Botanic, 41200 Klang, Selangor Darul Ehsan
Tel: +603-3325 8984 Fax: +603-3325 8984 Email: kumaran@rockgarnet.com

GARNET TEST REPORT

STANDARD	SA 2.5
METHOD	MANUAL TESTING
SUBSTRATE	CARBON STEEL
PROJECT TITLE	PACKAGE 14-UTILITIES, INTERCONNECTION, OFFSITE UNITS
CLIENT/OWNER	PETRONAS RAPID
SUPPLIER	ROCK GARNET TRADING
TEST LOCATION / YARD	CPP APEX PENDERANG YARD
DATE OF TEST	18 th NOVEMBER 2017
GARNET TYPE	PSC BALL (0.6mm-1.00mm)

TEST RESULTS

INSPECTION CRITERIA	OBSERVATION		REMARKS
	REQUIRED	ACTUAL	
SOLUBLE WATER TEST/ DISCOLORATION	Clean and free from contaminants	Clean and free from contaminants	ACCEPTABLE
RESIDUE/GREASE/OIL	Shall not contain	Does not contain	ACCEPTABLE
CONDUCTIVITY TEST	< 150µS/cm2	89µS/cm2	ACCEPTABLE
SURFACE PROFILE	< 55Micron	83 Micron to 105 Micron	ACCEPTABLE

Conduct by:   Rock Garnet Trading Mr. Kumaran	Witnessed by:   PMC Painting Inspector Mr. Zulkefli Hassim	Witnessed by:   OUIJV, Painting Inspector Mr. Noraminuddin
Witnessed by:  OUIJV Painting Inspector Mr. Sofian Talib	Witnessed by:  SAIFUL ANUAR PAINTING INSP CPP APEX Painting Inspector Mr. Saiful	Witnessed by:   OUIJV Painting Inspector Mr. Noraminuddin



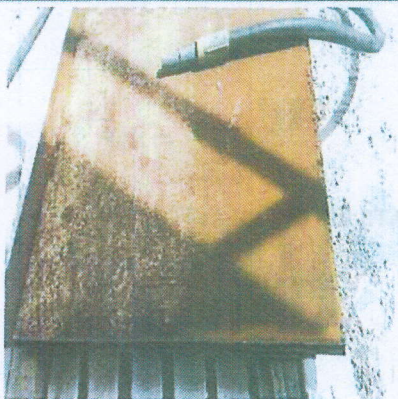
ROCK GARNET TRADING (SA0079856-X)
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PHOTO REPORT



CONDUCTIVITY READING

89 μ S/cm²



SAMPLE PLATE BEFORE BLASTING



BLASTED SURFACE USING PSC BALL



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SURFACE PROFILE READING

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SURFACE PROFILE READING

SURFACE PROFILE RESULTS	
SPOT	DEPTH (MICRON)
SPOT A	83
SPOT B	90
SPOT C	105

SURFACE PROFILE RESULTS

SPOT A. 83 MICRON
 SPOT B. 90 MICRON
 SPOT C. 105 MICRON

SURFACE PROFILE RESULTS