RESUME

MR. SUTTHIKIAT CHUANGNGOEN

8 M. 11 T. KUDCHUMSAENG A. NONGBUADAENG CHAIYABHUM PROVINCE



NAME	:	MR. SUTTHIKIAT CHUANGNGOEN
ID CARD NO.	:	1-3699-00122-57-2
TELEPHONE NO.	:	089-041-4187
ID LINE	:	sut09876
DATE OF BIRTH	:	FEBRUARY 18, 1988
HEIGHT	:	161 CMS.
WEIGHT	:	80 KGS.
SEX	:	MALE
NATIONALITY	:	THAI
HEALTH	:	EXCELLENT
RELIGION	:	BUDDHISM
PASSPORT NO.	:	AC 8172970 DATE OF ISSUE 11 DEC 2025 DATE OF EXPIRY 10 DEC 2035
SIZE SHIRT	:	2XL
SIZE SHOES	:	43 / 9 US

SUMMARY EXPERIENCE

PERIOD	:	SEPTEMBER 20, 2025
COMPANY	:	SRIRACHA CONSTRUCTION PUBLIC COMPANY LIMITED
POSITION	:	WELDER 6G ALL
PROJECT	:	CLEAN FUEL PROJECT
PROCESS	:	GTAW
PERIOD	:	SEPTEMBER 20, 2025
COMPANY	:	SRIRACHA CONSTRUCTION PUBLIC COMPANY LIMITED
POSITION	:	WELDER 6G ALL
PROJECT	:	CLEAN FUEL PROJECT
PROCESS	:	GTAW + SMAW
PERIOD	:	AUGUST 27, 2025
COMPANY	:	THAI NIPPON STEEL ENGINEERING & CONSTRUCTION CORPORATION LTD
POSITION	:	WELDER 6G ALL
PROJECT	:	BUNDLED PHASES 3 WELLHEAD PLATFORMS ASSOCIATED PIPELINES PROJECT

PROCESS	:	**GTAW + SMAW**
PERIOD	:	**AUGUST 27, 2025**
COMPANY	:	**THAI NIPPON STEEL ENGINEERING & CONSTRUCTION CORPORATION LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**BUNDLED PHASES 3 WELLHEAD PLATFORMS ASSOCIATED PIPELINES PROJECT**
PROCESS	:	**GTAW**
PERIOD	:	**JUNE 22, 2024 -APRIL 2025**
COMPANY	:	**CHEMO-AHARON. LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**HMC PP-4 PROJECT**
PROCESS	:	**GTAW + SMAW**
PERIOD	:	**JUNE 22, 2023**
COMPANY	:	**CHEMO-AHARON. LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**HMC PP-4 PROJECT**
PROCESS	:	**GTAW + SMAW**
PERIOD	:	**JUNE 22, 2023**
COMPANY	:	**CHEMO-AHARON. LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**HMC PP-4 PROJECT**
PROCESS	:	**SMAW**
PERIOD	:	**APRIL 26, 2021**
COMPANY	:	**HMC POLYMER / SUNGDO THAI ENGINEERING & CONSTRUCTION CO., LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**HMC PP-4 PROJECT**
PROCESS	:	**GTAW/ GTAW**
PERIOD	:	**SEPTEMBER 26, 2020**
COMPANY	:	**HMC POLYMER / SUNGDO THAI ENGINEERING & CONSTRUCTION CO., LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**HMC PP-4 PROJECT**
PROCESS	:	**GTAW+SMAW**
PERIOD	:	**NOVEMBER 09, 2011 – JUNE 3, 2021**
COMPANY	:	**CAZ (THAILAND) CO., LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**OLEFINES RECONFIGURATION PROJECT**

PROCESS	:	**GTAW / GTAW+SMAW**
PERIOD	:	**OCTOBER 10, 2018 – JANUARY 31, 2019**
COMPANY	:	**CAZ (THAILAND) CO., LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**IN PLANT POWER GENERATION PLANT PROJECT**
PROCESS	:	**GTAW / GTAW+SMAW**
PERIOD	:	**DECEMBER 18, 2017 – JUNE 15, 2018**
COMPANY	:	**CAZ (THAILAND) CO., LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**COAL WATER GENERATION PLANT PROJECT**
PROCESS	:	**GTAW / GTAW+SMAW**
PERIOD	:	**DECEMBER 02, 2016 – DECEMBER 12, 2017**
COMPANY	:	**IRPC PUBLIC COMPANY LIMITED**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**CAP PROJECT**
PROCESS	:	**GTAW / GTAW+SMAW**
PERIOD	:	**JUNE 18, 2015**
COMPANY	:	**STP & I PUBLIC COMPANY LIMITED**
POSITION	:	**WELDER 6G ALL (CARBON STEEL & LOW-TEMP)**
PROJECT	:	**ICHTHYS PROJECT**
PROCESS	:	**GTAW+SMAW**
PERIOD	:	**OCTOBER 13, 2013 – APRIL 28, 2015**
COMPANY	:	**THAI NIPPON STEEL & SUMIKIN ENGINEERING**
POSITION	:	**WELDER 2G, 5G, 6G**
PROJECT	:	**BONGKOT WELLHEAD BOOSTER COMPRESSOR PHASE 4**
	:	**BONGKOT LONG TERM CONTRACT 1 FOR THE EPCI TO WELLHEAD PLATFORM**
	:	**NONGYAO FIELD DEVELOPMENT PROJECT**
PROCESS	:	**GTAW+SMAW**
PERIOD	:	**DECEMBER 15, 2010 – AUGUST 29, 2013**
COMPANY	:	**CUEL CO., LTD**
POSITION	:	**WELDER 6G ALL**
PROJECT	:	**ALL PROJECT**
PROCESS	:	**SMAW**

PERIOD	**:**	**JUNE 08, 2008 – OCTOBER 26, 2010**
COMPANY	**:**	**SINO THAI CO., LTD**
POSITION	**:**	**WELDER 6G ALL UPHILL**
PROJECT	**:**	**PLUTO LNG PROJECT**
PROCESS	**:**	**GTAW+SMAW**

Passport No.
AC8172970

OFFICIAL OBSERVATIONS

The holder of this passport has previously travelled on Passport No. AD0557661 issued by the Ministry of Foreign Affairs in Bangkok on 03 JAN 2023

Passport Division, Bangkok.

PASSPORT
หนังสือเดินทาง

KINGDOM OF THAILAND
ราชอาณาจักรไทย

Type / ชนิด: PP
Country Code / รหัสประเทศ: THA
Passport No. / หนังสือเดินทางเลขที่: AC8172970

Surname / นามสกุล: CHUANGERN
Title / Name / คำนำหน้าชื่อ / ชื่อ: MR. SUTTHIKIAT
Name in Thai / ชื่อภาษาไทย: นาย สุทธิเกียรติ์ ชวงเงิน



Nationality / สัญชาติ: THAI
Date of Birth / วันเกิด: 18 FEB 1988
Identification No. / เลขประจำตัวประชาชน: 1369900122572
Sex / เพศ: M
Place of Birth / สถานที่เกิด: CHAIYAPHUM
Height / ส่วนสูง: 1.81M
Date of Issue / วันที่ออก: 11 DEC 2025
Date of Expiry / วันที่หมดอายุ: 10 DEC 2035



Issuing Authority / เจ้าพนักงาน: MINISTRY OF FOREIGN AFFAIRS
Holder's Signature / ลายมือชื่อผู้ถือหนังสือเดินทาง

PPTHACHUANGERN<<SUTTHIKIAT<<<<<<<<<<<<<<<<<<<<
AC81729708THA8802185M3512104136990012257 2<72

SCC

QUALIFIED WELDER CARD

(ASME Sec IX)

wood.

PROJECT NAME : Clean Fuel Project

COMPANY NAME : Sriracha Construction Public Company Limited

WELDER NAME : MR.SUTTHIKIAT CHUANGERN

WELDER No. : SCC-W-6315

ISSUED DATE : 20-Sep-2025

EXPIRE DATE : 22-Mar-2026



Welding Process	Pipe Stainless -Performance Qualification				
	Base Metal			Filler Metal F No.	Position
	Gr.No.	Pipe Size Range	Thickness of weld metal qualified (t) mm. Max		
GTAW	P-1 to P-15F, P-34, and P-41 to P-49	1"OD&Over	11.08 mm.	6	All

Approved by: SCC	Approved by: WOOD	Approved by: TOP
Date: 20-Sep-2025	Date: 25 SEP 2025	Date:

SCC

QUALIFIED WELDER CARD

(ASME Sec IX)

wood.

PROJECT NAME : Clean Fuel Project

COMPANY NAME : Sriracha Construction Public Company Limited

WELDER NAME : MR.SUTTHIKIAT CHUANGERN

WELDER No. : SCC-W-6315

ISSUED DATE : 20-Sep-2025

EXPIRE DATE : 22-Mar-2026



Welding Process	Pipe Alloy -Performance Qualification				
	Base Metal			Filler Metal F No.	Position
	Gr.No.	Pipe Size Range	Thickness of weld metal qualified (t) mm. Max		
GTAW	P-1 to P-15F, P-34, and P-41 to P-49	1"OD&Over	11.08 mm.	6	All
GTAW+SMAW		2-7/8" OD & Over	8.69 mm.(GTAW) 12.94 mm.(SMAW)	6 & 4, 3, 2, 1	

Approved by: SCC	Approved by: WOOD	Approved by: TOP
Date: 20-Sep-2025	Date: 25 SEP 2025	Date:

SCC

QUALIFIED WELDER CARD

(ASME Sec IX)

wood.

PROJECT NAME : Clean Fuel Project

COMPANY NAME : Sriracha Construction Public Company Limited

WELDER NAME : MR.SUTTHIKIAT CHUANGERN

WELDER No. : SCC-W-6315

ISSUED DATE : 20-Sep-2025

EXPIRE DATE : 22-Mar-2026



Welding Process	Pipe Carbon -Performance Qualification				
	Base Metal			Filler Metal F No.	Position
	Gr.No.	Pipe Size Range	Thickness of weld metal qualified (t) mm. Max		
GTAW	P-1 to P-15F, P-34, and P-41 to P-49	1"OD&Over	11.08 mm.	6	All
GTAW+SMAW		2-7/8" OD & Over	8.69 mm.(GTAW) 12.94 mm.(SMAW)	6 & 4, 3, 2, 1	

Approved by: SCC	Approved by: WOOD	Approved by: TOP
Date: 20-Sep-2025	Date: 25 SEP 2025	Date:

THAI NIPPON STEEL ENGINEERING & CONSTRUCTION CORPORATION LTD.

Project: Bundled Phases 3 Wellhead Platforms, Associated Piplines



Welder Name	MR.SUTTHIKEIAT CHUANGERN
Code / Spec.	ASME IX 2019 / PEGS-12060-FAB-002 Rev.0-0
Process	GTAW(Root,Hot) / SMAW(Fill,Cap)
Position	6G (Uphill When Vertical)
Material	Any metals assigned P-No.1
F No.	GTAW-6 / SMAW-4
Diameter Range	O.D. 73.0 mm to Unlimited
Thickness Range	GTAW 8.00 mm / SMAW 20.04 mm (Max)
Qualified	27 มิถุนายน 2566
Expire	26 กุมภาพันธ์ 2568

Welder ID: GS-C-1294

NPC / BPN

W/QC-003-5 R1

NDE No.	Expire
NDE No.	Expire
NDE No.	Expire

CSWIP ☐3.0 ☐3.1

Prapas Phengprakhon

DNV

INSPECTION

Inspector no.: 27-334

Date: 04 SEP 2025

Signature:

Prepared / Approved by TNS

Approved by / Company

W/QC-003-5 R1

THAI NIPPON STEEL ENGINEERING & CONSTRUCTION CORPORATION LTD.

Project: Bundled Phases 3 Wellhead Platforms, Associated Piplines



Welder Name	MR.SUTTHIKEIAT CHUANGERN
Code / Spec.	ASME IX 2019 / PEGS-12060-FAB-002 Rev.0-0
Process	GTAW
Position	6G (Uphill When Vertical)
Material	Any metals assigned P-No.1
F No.	6
Diameter Range	O.D. 25 mm to Unlimited
Thickness Range	17.48 mm (Max.)
Qualified	27 มิถุนายน 2566
Expire	26 กุมภาพันธ์ 2568

Welder ID: GT-C-1294

NPC / BPN

W/QC-003-5 R1

NDE No.	Expire
NDE No.	Expire
NDE No.	Expire

CSWIP ☐3.0 ☐3.1

Prapas Phengprakhon

DNV

INSPECTION

Inspector no.: 27-334

Date: 04 SEP 2025

Signature:

Prepared / Approved by TNS

Approved by / Company

W/QC-003-5 R1

THAI NIPPON STEEL ENGINEERING & CONSTRUCTION CORPORATION LTD.

Project: Bundled Phases 3 Wellhead Platforms, Associated Piplines



Welder Name	MR.SUTTHIKEIAT CHUANGERN
Code / Spec.	ASME IX 2019 / PEGS-12060-FAB-002 Rev.0-0
Process	GTAW
Position	6G (Uphill When Vertical)
Material	Any metals assigned P-No.1(H)
F No.	6
Diameter Range	O.D. 25 mm to Unlimited
Thickness Range	17.48 mm (Max)
Qualified	26 มิถุนายน 2566
Expire	25 กุมภาพันธ์ 2568

Welder ID: GT-D-1294

NPC / BPN

W/QC-003-5 R1

NDE No.	Expire
NDE No.	Expire
NDE No.	Expire

CSWIP ☐3.0 ☐3.1

Prapas Phengprakhon

DNV

INSPECTION

Inspector no.: 27-334

Date: 04 SEP 2025

Signature:

Prepared / Approved by TNS

Approved by / Company

W/QC-003-5 R1

THAI NIPPON STEEL ENGINEERING & CONSTRUCTION CORPORATION LTD.

Project: Bundled Phases 3 Wellhead Platforms, Associated Piplines



Welder Name	MR.SUTTHIKEIAT CHUANGERN
Code / Spec.	ASME IX 2019 / PEGS-12060-FAB-002 Rev.0-0
Process	GTAW
Position	6G (Uphill When Vertical)
Material	Any metals assigned P No. 8
F No.	6
Diameter Range	O.D. 25 mm to Unlimited
Thickness Range	7.82 mm (Max)
Qualified	26 มิถุนายน 2566
Expire	25 กุมภาพันธ์ 2568

Welder ID: GT-S-1294

NPC / BPN

NDE No.	Expire
NDE No.	Expire
NDE No.	Expire

CSWIP ☐3.0 ☐3.1

Prapas Phengprakhon

DNV

INSPECTION

Inspector no.: 27-334

Date: 04 SEP 2025

Signature:

Prepared / Approved by TNS

Approved by / Company

CHEMO AHARON

TO WHOM IT MAY CONCERN

THIS IS TO CERTIFY THAT THE EMPLOYEE NAMED BELOW HAD BEEN EMPLOYED BY OUR COMPANY FOR THE FOLLOWING PROJECT AND PERFORMED HIS ASSIGNED DUTIES IN CHEMO AHARON LTD.

NAME OF EMPLOYEE	:	SUTTHIKIAT CHUANGERN
PASSPORT NO.	:	AD0557661
EMPLOYMENT PERIOD	:	11 JUNE 2023 - 16 JUNE 2025
AS FOLLOWS		
PROJECT	:	INTEL SPARROW PROJECT (ISRAEL)
PERIOD	:	11 JUNE 2023 - 15 MARCH 2025
POSITION	:	WELDER
PROJECT	:	DALIA POWER STATION
PERIOD	:	16 MARCH 2025 - 16 JUNE 2025
POSITION	:	SCAFFOLDER

SINCERELY YOURS,

TANACHART AGANISTHAGORN

PROJECT MANAGER

CHEMO AHARON LTD.

CHEMO AHARON
ENERGY INFRASTRUCTURES

Refrence	ASME IX 2021
STANDATD	
Report No.	22-CHM-INT-65

Welder Qualification test

Welder Name	Welder No	Welder Passport	
SUTTHIKIAT CHUANGERN	1185	AB0557661	

	WPS330AS				Range of approval	
Date of Test	22/06/2023					
Welding process(es)	GTAW+SMAW				GTAW	SMAW
Type (i.e.; manual, semi-automatic) used	Manual				Manual	
Backing (with/without)	NO				without with	
Plate or Pipe (enter diameter if pipe or tube)	6				2.375" and up 1" and up	
nominal w th[mm]	7.2				14.2	
Base metal P-Number to P-Number	1 TO 1				1 TO 15F	
Filler metal or electrode specification(s) (SFA) (info. only)	A5.18	A5.5			----	
Filler metal or electrode classification(s) (info. only)	ER70S-6	E7018			----	
Filler metal F-Number(s)	6	4			ALL F.NO 6	1,2,3,4 with Backing
Consumable insert (GTAW or PAW)	NA				NA	
Filler Metal Product Form (solid/metal or flux cored/powder)	SOLID	N/A			SOLID	BASIC
Deposit thickness for each process(mm)	6	4			GROOVE GTAW <=6mm	
					GROOVE SMAW<=8mm	
					Fillet welds all sizes (QW-451.4)	
Position qualified (2G, 6G, 3F, etc.)	6G				All position	
Vertical progression (uphill or downhill)	Uphill				Uphill	
Type of fuel gas (OFW)	NA				NA	
Inert gas backing (GTAW, PAW, GMAW)	NO				WITH/WITHOUT	
Transfer mode (spray/globular or pulse to short circuit-GMAW)	NA				NA	
GTAW/SMAW current type/polarity (AC, DCEP, DCEN)	DCEN/DCEP				DCEN DCEP	

Visual testing	Acc
Radiographic test	57031

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Code.

Prepared and approved by:	yosi asulin: ICWI	Approved by:	Mufeed Hamdan: IWE/CWI		
Yosi Asulin ICWI 10074 RT Level II		IWE Mufeed Hamdan IIW/DVS			

CHEMO AHARON
ENERGY INFRASTRUCTURES

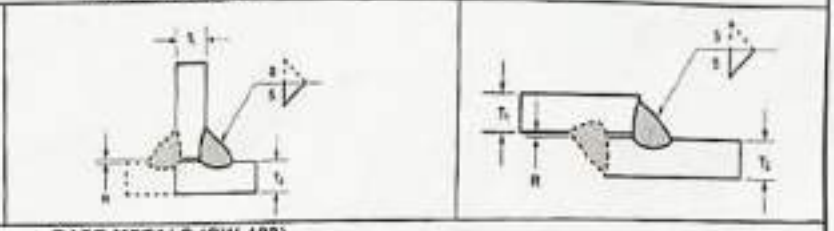
WELDING PROCEDURE SPECIFICATION
WPS 330AS-FW

ASME BOILER & PIPING VESSEL CODE – SECTION IX QW 482

Company name:	Chemo-Aharon Ltd	By: Mufeed Hamdan		Page 1 of 1	
Procedure Doc ID:	CHM-WLD-WPS-330AS-FW	Rev.	0	Rev Date	27.6.2019
Supporting PQR:	CHM-WLD-PQR-330AS	Rev.	A	Rev Date.	27.6.19
Welding Process(es):	SMAW	Type(s):		MANUAL	

JOINTS (QW-402)

Joint Design:	FW
Groove Angle	NA
Root Opening	0
Root Face	NA
Backgouging	IF WELDED BOTH SIDES
Method	GRINDER/AIR CARBON



BASE METALS (QW-403)

	Test Specimen	Range of Fillet
Base Metal	P-No. 1 to P-No. 1	P-No. 1
Diameter	18"	All
Wall Thickness	12.75mm	All

FILLER METALS (QW-404)

Layer	Process	Spec. No. (SFA)	AWS No. (Class)	F-No.	A-No.	Size[mm]	Weld metal Max	filler coat
Resi	SMAW	E 7018	A5.1	4	1	2.5/3.2/4	19.5	BASIC

Each base metal-filler metal combination should be recorded individually.

POSITIONS (QW-405)	PREHEAT (QW-406)	POSTWELD HEAT TREATMENT (QW-407) NA
Position(s) of Groove: ALL	Preheat Temp.:ambient min 10 C°	heating rate: [C°]
Welding Progression: Uphill	Interpass Temp.: Max 350° C	soaking temp [C°]
Position(s) of Fillet: All	Preheat Maintenance*:	soaking time:
Other: NA	Yes,(by melt sticks ,Tempature gun),preheat shall be done to 30 C̊ using prpane burner.	cooling rate: [C°]

Hydrogen release stage(optional)	GAS (QW-408)			
heating rate:NA		Gases	Mixture	FLOW L/MIN
soaking temp:NA	Shielding			
soaking time:NA	Trailing			
cooling rate:NA	Backing*	NO		

ELECTRICAL CHARACTERISTICS (QW-409)

Current: DC Polarity: SMAW: EP

Tungsten Electrode Size and type: NA

Mode of Metal Transfer for GMAW: NA

Electrode Wire feed speed range: NA

Method of Back Gouging: NA

Oscillation NA

Contact Tube to Work Distance NA

Multiple or Single Pass (per side): Multiple

Multiple or Single Electrodes: Single

Peening, retainer & removable inserts: None

TECHNIQUE (QW-410)

String or Weave Bead: SMAW: Weave/String

Initial and Inter-pass Cleaning :

Hand Grinding & Brushing as needed, Using Power Tools (Grinder, Power Brush) and Hand Tools (Wire Brush)

Orifice or Gas Cup Size: NA

Weld Layers	Process	Filler Metal		Current		Volts Range [v]		Travel speed cm/min		Heat Input KJ/mm	
		Class	Dia.mm	Amps Range(A)							
Remain(opt.1)	SMAW	E7018	2.5	75	100	21	25	7	10	1.35	1.56
Remain(opt.2)	SMAW	E7018	3.2	100	140	22	26	7.5	10	1.76	2.18
Remain(opt.3)	SMAW	E7018	4	135	160	22	27	10	13	1.78	1.99

A - Low hydrogen electrodes. Vacuum packs can be used immediately for 4 hrs.(non vacuum packs shall be baked for 2 hrs @300-350C the electrode shall be kept in 100 C during welding.

B-range of A.V.Ta may be exceeded as long as the heat input stays within permitted range.

Prepared by:Mufeed hamdan CWI/IWE	Approved by	Approved by
IWE Mufeed Hamdan IIW/IDVS		

CHEMO AHARON
ENERGY INFRASTRUCTURES

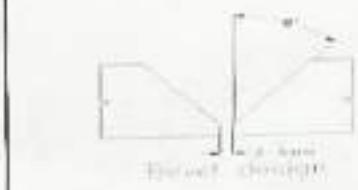
WELDING PROCEDURE SPECIFICATION
WPS 360

ASME BOILER & PIPING VESSEL CODE – SECTION IX QW 482

Company name:	Chemo-Aharon Ltd	By: Mufeed Hamdan		Page 1 of 1	
Procedure Doc ID:	CHM-WLD-WPS-360	Rev.	B	Rev Date:	27.2.2019
Supporting PQR:	CHM-WLD-PQR-360	Rev.	A	Rev Date:	26.2.2012
Welding Process(es):	GTAW	Type(s):		MANUAL	

JOINTS (QW-402)

Joint Design: Single V Groove
Backing: NA
Backing Material (Type): NA
Procedure Doc ID:
Bevel angle (30°-37.5°)
Bevel tolerance (all groove)
Root face & gap per dwg
Root face & gap tolerance ±1mm



Pass sequence



BASE METALS (QW-403)

	Specimen	Range of Groove	Range of Fillet
Base Metal	P-No. 1 to P-No. 1	P-No. 1	P-No. 1
Diameter	60.3	All	All
Wall Thickness	5.5mm	1.5 to 11mm	All

FILLER METALS (QW-404)

Layer	Process	Spec. No. (SFA)	AWS No. (Class)	F-No.	A-No.	Size[mm]	Weld metal Max	filler coat
ALL	GTAW	ER70S-6	A5.18	6	1	2.4	11	solid

Each base metal-filler metal combination should be recorded individually.

POSITIONS (QW-405)

Position(s) of Groove: ALL
Welding Progression: Uphill
Position(s) of Fillet: All
Other: NA

PREHEAT (QW-406)

Preheat Temp.:ambient min 10 C°
Interpass Temp.: Max. 350° C
Preheat Maintenance*:

Yes.(by melt sticks, Tempature gun),preheat shall be done to 30 C using propane burner

POSTWELD HEAT TREATMENT (QW-407) NA

heating rate: [C°]
soaking temp [C°]
soaking time:
cooling rate: [C°]

Hydrogen release stage(optional)

heating rate:NA
soaking temp:NA
soaking time:NA
cooling rate:NA

GAS (QW-408)

	Gases	Mixture	FLOW L/MN
Shielding	Ar 99.99%		10-20
Trailing			
Backing*	NO		

ELECTRICAL CHARACTERISTICS (QW-409)

Current: DC Polarity: GTAW: EN SMAW: NA
Tungsten Electrode Size and type: 2.4mm. Tungsten electrode Thorated 2%, EW TH2
Mode of Metal Transfer for GMAW: NA
Electrode Wire feed speed range: NA
Method of Back Gouging: NA
Oscillation NA
Contact Tube to Work Distance:NA
Multiple or Single Pass (per side): Multiple
Multiple or Single Electrodes: Single
Peening, retainer & consumable inserts:None

TECHNIQUE (QW-410)

String or Weave Bead:GTAW: Weave;string
Initial and Inter-pass Cleaning :
Hand Grinding & Brushing as needed, Using Power Tools (Grinder, Power Brush) and Hand Tools (Wire Brush)
Orifice or Gas Cup Size: GTAW: 5-7 mm

Weld Layers	Process	Filler Metal Class	Filler Metal Dia.	Current Amps Range[A]		Volts Range [V]		Travel speed cm/min		Heat Input KJ/mm	
ALL	GTAW	ER70S-6	2.4	110	150	9	15	6	9	0.66	2.25

A - range of A.V.Ts may be exceeded as long as the heat input stays within permitted range

Prepared by:Mufeed hamdan CWI/IWE	Approved by	Approved by
IWE Mufeed Hamdan IIW/IDVS		

CHEMO AHARON
ENERGY INFRASTRUCTURES

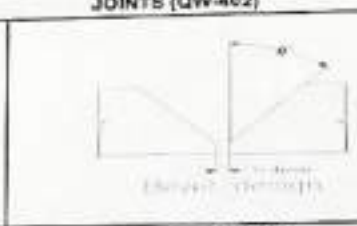
WELDING PROCEDURE SPECIFICATION
WPS 330AS

ASME BOILER & PIPING VESSEL CODE – SECTION IX QW 482

Company name:	Chemo-Aharon Ltd	By: Mufeed Hamdan		Page 1 of 1	
Procedure Doc ID:	CHM-WLD-WPS-330AS	Rev	B	Rev Date:	27.2.2019
Supporting PQR:	CHM-WLD-PQR-330AS	Rev.	A	Rev Date	27.6.11
Welding Process(es):	GTAW+SMAW	Type(s) :		MANUAL	

JOINTS (QW-402)

Joint Design: Single V Groove
Backing: NA
Backing Material (Type): NA
Procedure Doc ID:
Bevel angle (30°-37.5°)
Bevel tolerance (all groove)
Root face & gap per dwg.
Root face & gap tolerance ±1mm





BASE METALS (QW-403)

	Specimen	Range of Groove	Range of Fillet
Base Metal	P-No. 1 to P-No. 1	P-No. 1	P-No. 1
Diameter	18"	All	All
Wall Thickness	12.75mm	5 to 25.5mm	All

FILLER METALS (QW-404)

Layer	Process	Spec. No. (SFA)	AWS No. (Class)	F-No.	A-No.	Size[mm]	Weld metal Max	filler coat
ROOT/R+H	GTAW	ER70S-6	A5.18	6	1	2.4	6	solid
Rest	SMAW	E 7018	A5.1	4	1	2.5/3.2/4	19.5	BASIC

Each base metal-filler metal combination should be recorded individually.

POSITIONS (QW-405)

Position(s) of Groove: ALL
Welding Progression: Uphill
Position(s) of Fillet: All
Other: NA

PREHEAT (QW-406)

Preheat Temp.:ambient min 10 C°
Interpass Temp.: Max. 350° C
Preheat Maintenance*:
Yes,(by melt stecks ,Tempature gun),preheat shall be done to 30 C̊ using propane burner.

POSTWELD HEAT TREATMENT (QW-407) NA

heating rate: [C°]
soaking temp [C°]
soaking time:
cooling rate: [C°]

Hydrogen release stage(optional)

heating rate:NA
soaking temp:NA
soaking time:NA
cooling rate:NA

GAS (QW-408)

	Gases	Mixture	FLOW L/MIN
Shielding	Ar 99.99%		10-20
Trailing			
Backing*	NO		

ELECTRICAL CHARACTERISTICS (QW-409)

Current: DC Polarity: GTAW: EN SMAW: NA
Tungsten Electrode Size and type: 2.4mm, Tungsten electrode Thoriated 2%, EW TH2
Mode of Metal Transfer for GMAW: NA
Electrode Wire feed speed range: NA
Method of Back Gouging: NA
Oscillation:NA
Contact Tube to Work Distance:NA
Multiple or Single Pass (per side): Multiple
Multiple or Single Electrodes:Single
Peening, retainer & consumable inserts:None

TECHNIQUE (QW-410)

String or Weave Bead:SMAW+GTAW: Weave/String
Initial and Inter-pass Cleaning :
Hand Grinding & Brushing as needed, Using Power Tools (Grinder, Power Brush) and Hand Tools (Wire Brush)
Orifice or Gas Cup Size: GTAW: 5-7 mm

Weld Layers	Process	Filler Metal Class	Filler Metal Dia.mm	Current Amps Range[A]		Volts Range [v]		Travel speed cm/min		Heat Input KJ/mm	
ROOT	GTAW	ER70S-6	2.4	110	150	9	15	6	9	0.99	1.50
Remain(opt.1)	SMAW	E7018	2.5	75	100	21	26	7	10	1.35	1.56
Remain(opt.2)	SMAW	E7018	3.2	100	140	22	26	7.5	10	1.76	2.18
Remain(opt.3)	SMAW	E7018	4	135	160	22	27	10	13	1.78	1.99

A - Low hydrogen electrodes. Vacuum packs can be used immediately for 4 hrs,from vacumm packs shall be baked for 2 hrs @300-350C,the electrode shall be kept in 100 C during welding.
Ranges of A,V,Ts may be exceeded as long as the heat input stays within permitted range.

Prepared by:Mufeed hamdan CWI/IWE	Approved by	Approved by
IWE Mufeed Hamdan IIW ID V.B		

Thai Nippon Steel & Sumikin Engineering & Construction Corp.,Ltd.



Project	Nong Yao Field Development Project
Welder Name	MR.SUTTHIKEIAT CHUANGERN
Code / Spec.	ASME IX/2015 / WPS-GS-GT-S-C-P-LP-SMS-101
Process	GTAW
Position	6G (Uphill When Vertical)
Material	Any metals assigned that P-No.8 and 1
F No.	6
Diameter Range	1" and Over
Thickness Range	11.08 mm. (Max.)
Qualified Date	20-May-14

Welder I.D.GT-D- 1294
GT-S- 1294

Thai Nippon Steel & Sumikin Engineering & Construction Corp.,Ltd.

Nong Yao Field Development Project

Approved by Contractor	Approved by Certifying Authority	Approved by Company
	N/A	28 MAY 2014

Thai Nippon Steel & Sumikin Engineering & Construction Corp.,Ltd.

Project Bundled Phases 2 (Arthit and Bongkot Field Development Project)



Welder Name	MR.SUTTHIKEIAT CHUANGERN
Code / Spec.	ASME IX/2015 / PWPS-FP-101 Rev.0
Process	GTAW
Position	6G (Uphill When Vertical)
Material	Any metals assigned that P-No.1
F No.	6
Diameter Range	O.D. 25 mm to Unlimited
Thickness Range	11.08 mm (Max.)
Qualified	12-Oct-16 Expire Mar-17

Welder I.D. GT-C-1294

Thai Nippon Steel & Sumikin Engineering & Construction Corp.,Ltd.

Bundled Phases 2 (Arthit and Bongkot Field Development Project)

NDE No.		Expire:
NDE No.		Expire:
NDE No.		Expire:
Approved by Contractor	Approved by Certifying Authority	Approved by Company
	N/A	21 OCT 2016



PROJECT NAME :	ROGD Onbodsmoothing Project
COMPANY NAME :	SKC
WELDER NAME :	Mr.Sutthikeiat Chuangern
WELDER NO :	SKC-050
ISSUED DATE :	6-Oct-16
ISSUED BY :	Mr.Sorawis Sopanakorn
ISSUED BY :	
APPROVE BY :	

WELDING PROCESS	GTAW	GTAW+SMAW
POSITION	ALL	ALL
MATERIAL	ASME IX [illegible]	ASME IX [illegible]
P-NO.	[illegible]	[illegible]
DIAMETER	NPS 3/4" and Over	NPS 1-1/2"and Over
FILLER METAL	SR-70S-6	[illegible]
THICKNESS	7.14mm	22.24 mm
P-NO.	5	5+8
EXPIRED DATE	6 Oct 17	28 Sep 17

WELDER'S IDENTIFICATION CARD

(WELDER OPERATOR)

VIPCO

☑ ASME IX
☐ AWS



NAME : MR. SUTTHIKEIAT CH.
ID No. VW : 1326
ISSUE : 30/5/2017
EXPIRE : 30/11/2017

This qualification certificate is to certify that this welder & welding operator has passed qualification test carried out by VIPCO

(His/Her resignation from VIPCO. This card is expired)

Signature :

Surveyor : VISAVAKIT PATANA CORP., LTD.

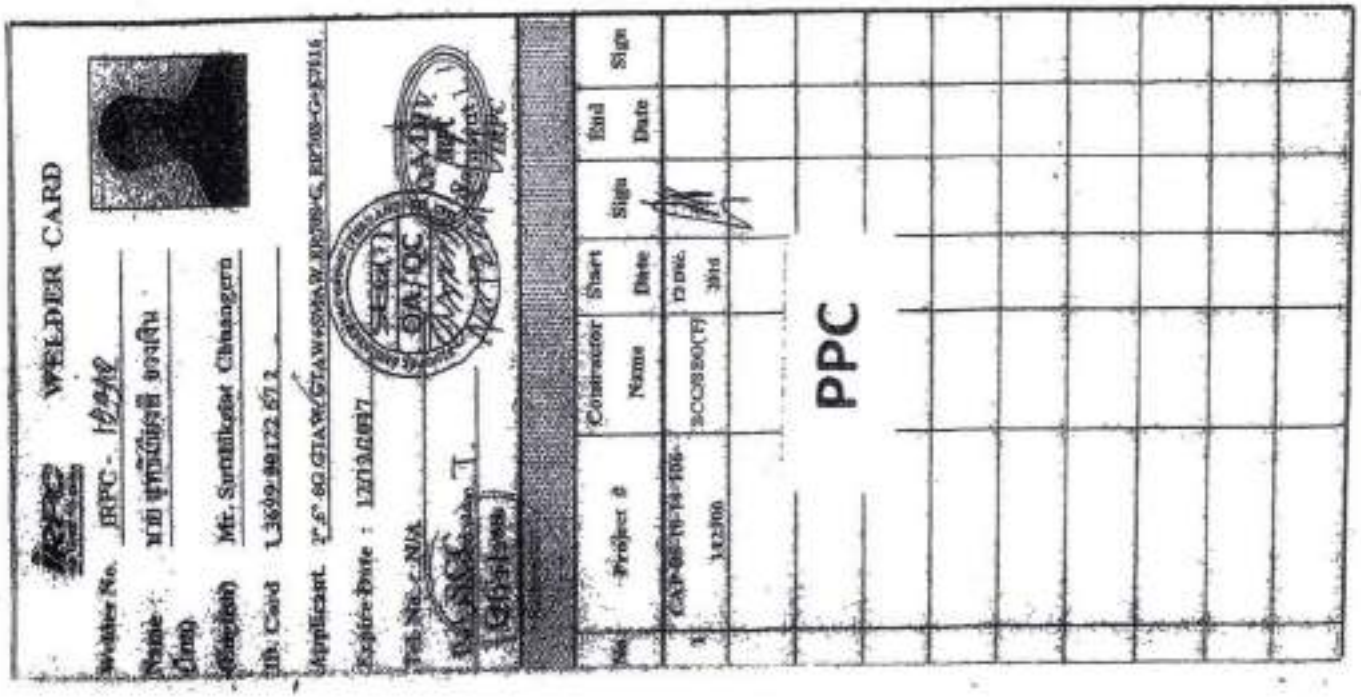
QUALIFICATION CERTIFICATE VW - 1326

WPS No.	PROCESS	POSITION	BACKING	PIPE/STOCK	MATERIAL (P.No.)
P-152	GTAW	All	Without Backing	2½" To above	P1-GP or 34 or 43-49
				11.08 mm.	

(His/Her resignation from VIPCO. This card is expired)

Test procedure no. / WPS no. : 281-50-T1-001 , 281-50-TA1-001

Manual or Similautomatic Variales For Each Process (QW - 350)	Actual Values	Ranges Qualified
Backing (metal,weld metal,welded from both side,flux,etc.) (QW - 402)	With out	With out / With
ASME P-No P1 to P1 To ASME P-No. (QW - 403)	P1 to P1	P1 to P15F,P34, & P81 to P45
( ) Plate (/) Pipe (enter diameter (NPS), if pipe)	2"SCH 80 , 6" SCH 80	OD 4" to Unlimited
Filler metal specification (SFA) A5.18 , A5.18 + A5.1 Classification (QW - 404)	ER70S-G , ER70S-G + E7016	Variable under F-No. Qualified
Filler metal F-No. 6 / 6 +4	6 / 6 +4	6 / 6+4, 1,2,3
Consumable insert for GTAW or PAW	N/A	N/A
	GTAW / GTAW+SMAW	GTAW / GTAW+SMAW
Weld deposit thickness for each welding process	5.54 mm., 16.97 mm.	(11.08 mm., 21.94 mm.)(Fillet: All) (Groove) (Unlimited)
Welding position (1G,5G,ect) (QW - 405)	6G	All position
Progression (uphill/downhill)	Uphill	Uphill
Backing gas for GTAW,PAW or GMAW : fuel gas for OGW (QW - 408)	No.	N/A
GMAW tanfer mode (QW - 409)	N/A	N/A
Welding current type/Polarity	DCEN / DCEP	DCEN / DCEP , AC



Thai Nippon Steel Engineering and Construction Corp.,Ltd.

Welder and Welding Operator Qualification Test Record (ASME IX)



Welder's Name	MR.SUTTHI KEIAT CHUA NGERN	I.D. No.	GT-D-1294
WPS No.	P5 Rev.No. 1		GT-S-1294
		Test Date	18-Jul-12

Variable	Actual Values used in Qualification	Qualification Ranges
Process	GTAW	GTAW
Process Type	MANUAL	MANUAL
Backing	WITHOUT BACKING	WITH OR WITHOUT BACKING
Material Specification	ASTM A790 UNS S31803 to Itself (P NO. 10H)	Any metals assigned P No. 8 and 10H
Thickness		
Groove (Base Metal)	5.54 mm.	11.08 mm.(Max.)
Groove (Weld Metal)	5.54 mm.	11.08 mm.(Max.)
Fillet	N/A	UNLIMITED
Diameter		
Groove	60.3mm OD, NPS 2"	26mm OD. to unlimited
Fillet	N/A	UNLIMITED
Filler Metal Spec. No.	SFA 5.9	SFA 5.9
Class	ER2594 & ER2209	ER2594 & ER2209
F-No.	6	6
Position	6G	All
Weld Progression	Uphill	Uphill
Backing Gas	Argon 99.995%	Argon 99.995%
Electrical Characteristics		
Current/Polarity	DC-EN	DC-EN

VISUAL INSPECTION

Report No.	Results	Remark
BB-WQT-P-072	Accepted	-

RADIOGRAPHIC TEST RESULTS

Report No.	Results	Remark
BB-WQT-P-RT-309	Accepted	-

BEND TEST RESULTS

Report No.	Results	Remark
-	-	-

BREAK TEST RESULTS

Report No.	Results	Remark
-	-	-

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded and tested in accordance with the requirements of Article III of ASME section IX'2010 and company specification PWGS-PIP-101 Rev.0

THAI NIPPON STEEL QC

18/July/2012

Prepared / Approved by
TNS

N/A
Certified By
Certifying Authority

1-8-12

Approved by
Company

Thai Nippon Steel Engineering and Construction Corp.,Ltd.

Welder and Welding Operator Qualification Test Record (ASME IX)



Welder's Name	MR.SUTTHI KEIAT CHUA NGERN	I.D. No.	GS-C-1294
WPS No.	P2 Rev.No. 1	Test Date	04-Oct-12

	Actual Values used in Qualification	Qualification Ranges
Variable		
Process	GTAW (Root,Hot) / SMAW (Fill,Cap)	GTAW (Root,Hot) / SMAW (Fill,Cap)
Process Type	MANUAL	MANUAL
Backing	WITHOUT BACKING	WITH OR WITHOUT BACKING
Material Specification	ASTM A106 Gr.B to Itself (P NO. 1)	P NO. 1
Thickness		
Groove (Base Metal)	10.97 mm.	21.94 MM. (Max.)
Groove (Weld Metal)	GTAW 2.97 mm./ SMAW 8.0 mm.	GTAW 5.94 mm./ SMAW 16.0 mm.(Max)
Fillet	N/A	UNLIMITED
Diameter		
Groove	150 mm.NPS	O.D. 73.0 mm. And Over
Fillet	N/A	UNLIMITED
Filler Metal Spec. No.	SFA 5.18 (GTAW) / SFA 5.1 (SMAW)	SFA 5.18 (GTAW) / SFA 5.1 (SMAW)
Class	ER 70S-G (GTAW) / E 7016 (SMAW)	ER 70S-G (GTAW) / E 7016 (SMAW)
F-No.	6 (GTAW) / 4 (SMAW)	6 (GTAW) / 4 (SMAW)
Position	6G	All
Weld Progression	Uphill	Uphill
Gas Type	Argon 99.99%	Argon 99.99%
Electrical Characteristics		
Current/Polarity	DC-EN (GTAW) / AC (SMAW)	DC-EN (GTAW) / AC or DC-EP (SMAW)

VISUAL INSPECTION

Report No.	Results	Remark
BB-WQT-P-086	Accepted	-

RADIOGRAPHIC TEST RESULTS

Report No.	Results	Remark
BB-WQT-P-RT-365	Accepted	-

BEND TEST RESULTS

Report No.	Results	Remark
-	-	-

BREAK TEST RESULTS

Report No.	Results	Remark
-	-	-

We, the undersigned, certify that the statements in this record are correct and that the test welds were prepared, welded and tested in accordance with the requirements of Article III of ASME section IX'2010 and company specification PWGS-PIP-101 Rev.0

10/Octhon	N/A	10-10-12
Prepared / Approved by	Certified By	Approved by
TNS	Certifying Authority	Company

Thai Non-Destructive PCL. 19 Soi Suanson 8, Ramkhamhaeng Road, Hamrak, Bangkapi, Bangkok 10240, Thailand. Tel 662-735-0881-3, Fax 662-735-1941, Email: tnfo@tndt.co.th

INSPECTION REPORT
RADIOGRAPHIC EXAMINATION

REPORT NO.:	WQT-RT-PC-0229
PAGE NO.:	1 OF 1

CLIENT:	SRIRACHA CONSTRUCTION PUBLIC COMPANY LIMITED	LOCATION:	SCC SHOP
PROJECT :	POLYPROPYLENE COMPOUND AND SPECIALTIES PROJECT.	JOB NO :	281
PROCEDURE NO.(REV):	SCC-PPC/RT-PIPING-1606 ,(Rev.0)	DATE OF TEST:	December 09,2016
REF. CODE/STD:	ASME Sec V / ASME Sec. IX:2015.	REQUEST NO:	PPC-WQT-PI-012
WORK INSTRUCTION :	WI-RT		

EQUIPMENT, MATERIALS & OPERATION PARAMETERS...

RADIATION SOURCE...		EXPOSURE & TECHNIQUE ...		FILM...	
X-RAY EQUP:	N/A	TIME:	1:01 MIN.	BRAND:	CARESTREAM
TUBE VOLTAGE:	N/A	TECHNIQUE:	DWSI	TYPE:	MX-125
TUBE CURRENT:	N/A	SOD/OFD:	165/13.97 MM.	SIZE:	89 x 216 MM.
GAMMA RAY SOURCE:	Ir-192	IQI TYPE/SIZE:	ASTM 1B	INTENSIFYING SCREEN...	
SOURCE ACTIVITY:	P.38/32.83 Ci.	NO OF FILM/ FOLDER:	1	FRONT:	0.125 MM.
SOURCE SIZE:	3.0 x 2.5 MM.	% OF EXAM:	100	BACK:	0.125 MM.
		NO OF RADIOGRAPHS (Exp):	-		

FILM PROCESSING: ☐ AUTO ■ MANUAL

PART IDENTIFICATION & INFORMATION...

WPS NO.:	281-50-TA1-001	WQT NO.:	-
TEST POSITION :	6G	PART SIZE:	6"
MATERIAL:	A106-B	MATERIAL THICKNESS:	10.97 MM.
WELD THICKNESS:	13.97 MM.	REINFORCEMENT:	3 MM.
WELD/JOINT TYPE:	BUTT WELD	WELDING PROCESS:	GTAW+SMAW

SYSTEM PERFORMANCE...

SENSITIVITY REQUIRED:	ESSENTIAL WIRE NO.7	DENSITY REQUIRED (RANGE) :	2.0-4.0
SENSITIVITY ACHIEVED:	VISIBLE WIRE NO.7	DENSITY ACHIEVED :	2.2-2.7

RADIOGRAPHIC EVALUATION... *ACCEPTANCE CRITERIA: ASME Sec. IX, QW191.1.2 :2015.*

WELD/JOINT/RADIOGRAPH IDENTIFICATION...			DISCONTINUITY		RESULT		REMARK
Joint/ Weld/ Film NO	*Welder No*	*Film Ind-No*	*TYPE*	*MEASURED SIZE*	*ACC*	*REJ*	
Mr.Sutthikeist Ch.	-	A - B	NO	-	ACC	-	
		B - C	NO	-	ACC	-	
		C - D	NO	-	ACC	-	
		D - A	NO	-	ACC	-	

NOTE :

ABBREVIATION:

C : CRACK
IP : INCOMPLETE PENETRATION
SF : SURFACE FLAW
NO : NO RELEVANT INDICATION
SOD: SOURCE TO OBJECT DISTANCE
CV : CONCAVITY
LF : LACK OF FUSION
SL : SLAG INCLUSIONS
TI : TUNGSTEN INCLUSION
OFD: OBJECT TO FILM DISTANCE
EP : EXCESS PENETRATION
P : GAS CAVITIES
UC : UNDERCUT
E & V: EXPOSURE & VIEWING

AUTHORIZATION...	INTERPRETED/EVALUATED:	REVIEWED/APPROVED BY :	REVIEWED/APPROVED BY :	REVIEWED/APPROVED BY :
COMPANY:	THAI NDT PUBLIC CO., LTD.			
SIGNED:				
NAME:	Nikorn Th.			
METHOD (LEVEL):	RT LEVEL II			
DATE OF ISSUE:	December 10,2016	10 DEC 2016	14.12.2016	15/12/16

F-OP-002 Rev.005

May 25, 2016

STP&I PUBLIC COMPANY LIMITED



WELDER PERFORMANCE QUALIFICATIONS (WPQ) FOR PIPING

Project name: Ichthys Onshore LNG Facilities Project

Welder's name: Mr. Suthikiat Chuangam — Identification No: -NA-850L

Test Description

Identification of WPS followed: WPS-P-1-1-18 — ☒ Test coupon — Production Weld

Specification of base metal(s): A106 Gr B-A106 Gr B — Thickness: 18.26 mm

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values		Range Qualified	
Welding process(es)	GTAW	SMAW	GTAW	SMAW
Type (ie: manual, semi-auto) used	Manual		Manual	
Backing (metal, weld metal, double-welded, etc.)	Without Backing	With Backing	With or Without Backing	With Backing or Back Gouging
Plate ☐ Pipe ☒	(6") OD 168.3 mm.		(2 7/8") OD 73 mm to Unlimited	
Base metal P-Number to P-Number	P1 to P1		P1 to P15F and P41 to P49	
Filler metal or electrode specification(s) (SFA-(min. Only)	SFA-5.18	SFA-5.1		
Filler metal or electrode classification(s) (min. Only)	ER70S-6	E7018		
Filler metal F-Number(s)	6	4	6	4
Consumable insert (GTAW or PAW)	NONE	N/A	Without	N/A
Filler type (solid/metal or flux cored/powder) (GTAW or PAW)	SOLID	N/A	SOLID	N/A
Deposit thickness for each process				
Process 1: GTAW — 3 layers minimum — Yes ☒ No ☐	3 mm.		6 mm. (Max)	
Process 2: SMAW — 3 layers minimum — Yes ☒ No ☐	18.26 mm		Unlimited	
Position qualified	6G		All	
			All for Fillet Weld Plate and Pipe	
Vertical progression (uphill or downhill)	Uphill		Uphill	
Type of fuel gas (OFW)	N/A		N/A	
Inert gas backing (GTAW, PAW, GMAW)	NONE		With & Without	N/A
Transfer mode (spray/globular or pulse to short circuit-GMAW)	N/A		N/A	
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEP	DCEN	All

RESULTS

Visual Examination of Completed Weld (QW-302.4): Accepted

Transverse face and root bends (QW-462.3(a)) — Longitudinal bends (QW-462.3(b)) — Side bends (QW-462.2)

Pipe bend specimen, corrosion-resistant weld metal overlay — Plate bend specimen, corrosion-resistant weld metal overlay

Pipe specimen, macro test for fusion (QW-462.5(b)) — Plate specimen, macro test for fusion (QW-462.5(e))

Type	Result	Type	Result	Type	Result
-	-	-	-	-	-
-	-	-	-	-	-

Alternative radiographic examination results (QW-191): Report RT No: WQT-LCP-4255

Fillet weld - fracture test (QW-180): N/A — Length and percent of defects: N/A

Macro examination (QW-184): N/A — Fillet size: N/A — Concavity/convexity (mm): N/A

Film or specimens evaluated by: Mr.Prarinthorn S — Company: STP&I PUBLIC COMPANY LIMITED

Mechanical tests conducted by: N/A — Laboratory test no: N/A

Welding supervised by: Mr Pudit M — Test Number: WQT-LCP-4255

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code

Approved By — Name — Test Date: 29-May-15

Authorized By — Name: Alan Kirchhof

WELDER PERFORMANCE QUALIFICATIONS (WPQ)

Project Title : Polypropylene Compound and Specialtise Project (PPC)

Subcontractor : Sriracha Construction Public Co.,Ltd.

Location : IRPC, RAYONG PROVINCE, THAILAND



Welder 's Name : Mr. Sutthikelat Chuangern ID No.: 1 3699 00122 57 2 Test Date : 09/12/2016

Test Description

Identification of WPS followed : 281-60-TA1-001 ☐ Test coupon ☐ Production weld

Specification and type/grade or UNS Number of base metal(s) : A106-B Size 6" NPS Sch 80 Thick : 10.97 mm.

Welder No: IRPC - 12312

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process (es)	GTAW + SMAW	GTAW + SMAW
Type (i.e. manual , semi-auto) Used	Manual	Manual
Backing (Metal,weld metal,Weld from both)	With out	With out / With
☐ Plate ☑ Pipe (Enter diameter ,if pipe or tube)	6" NPS	2-7/8" OD and over
Base metal P-or S-Number to P-or S-Number	P1 to P1	P1 to P15F,P34, & P41 to P49
Filler metal or electrode specification (s) (SFA) (info.only)	5.18 + 5.1	Variable under F-No. Qualified
Filler metal or electrode classification (s) (info.only)	ER70S-G + E7016	Variable under F-No. Qualified
Filler metal F-Number(s)	6 + 4	6 + 4, 3, 2, 1
Consumable insert for (GTAW or PAW)	N/A	N/A
Filler type(solid/metal or flux cored/powder)(GTAWorSMAW)	Both	Both
Deposit thickness for each process		
Process 1 GTAW 2 layers minimum ☑ Yes ☐ No	1 mm.	6 mm. (max), Fillet : All
Process 2 SMAW 3 layers minimum ☑ Yes ☐ No	7.97 mm.	15.94 mm. (max), Fillet : All
Position qualified (2G ,6G,3F,etc .)	5G	All position
Vertical progression (uphill / downhill)	Uphill	Uphill
Type of Fuel gas (OFW)	N/A	N/A
Inert gas backing (GTAW,PAW, GMAW)	No	No / Argon
Transfer mode(sprey/globular or pulse to short circuit-GMAW)	N/A	N/A
Welding Current type /polarity (AC,DCEP,DCEN)	DCEN+DCEP	DCEN+DCEP / AC

Results

Visual Examination of Completed Weld (QW-302.4) Acceptable

☐ Transverse face and root bends [QW-462.3(a)] ☐ Longitudinal bends [QW-462.3(b)] ☐ Side bends (QW-462.2)

☐ Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5(c)]

☐ Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]

☐ Pipe specimen, macro test for fusion [QW-462.5(b)] ☐ Plate specimen, macro test for fusion [QW-462.5(e)]

Type	Result	Type	Result
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Alternative Volumetric Examination Results(QW-191): WQT-RT-PC-0229 RT ☑ or UT ☐ (check one)

Fillet weld — fracture test (QW-181.2) Length and percent of defects -

Macro examination (QW-184) - Fillet size (in) - X - Concavity/Concavity(in) -

☐ Fillet welds in plate [QW-462.4(b)] ☐ Fillet welds in pipe [QW-462.4(c)]

Other test -

Film or specimens evaluated by Mr.Nikom Thammahone Company TNDT

Mechanical test conducted by N/A Laboratory test no. N/A

Welding supervised by

We certify that the statements in this record are correct and that the test coupons were prepared,welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Completed by	Prepared by	Certified by Third Paty	Reviewed by	Approved by
Company	SCC SCC	TNDT	SEGD QAQC	
Signature	Rutchaneewan T.			
Name	Rutchaneewan Thianthang	Chanin [illegible]ghan		
Date	12/12/2016	12/12/2016		

SEG

Thai Non-Destructive PCL. 19 Sui Suwan 3, Ramkhamhaeng Road, Hoamak, Bangkapi, Bangkok 10240, Thailand. Tel. 662-733-0801-3, Fax 662-735-1941, Email: info@pcl.co.th

INSPECTION REPORT
RADIOGRAPHIC EXAMINATION

REPORT NO.:	WQT-RT-PC-0246
PAGE NO.:	1 OF 1

CLIENT:	SRIRACHA CONSTRUCTION PUBLIC COMPANY LIMITED	LOCATION:	SCC SHOP
PROJECT :	POLYPROPYLENE COMPOUND AND SPECIALTIES PROJECT.	JOB NO :	281
PROCEDURE NO.(REV):	SCC-PPC/RT-PIPING-1606 ,(Rev.0)	DATE OF TEST:	December 09,2016
REF. CODE/STD:	ASME Sec V / ASME Sec. IX:2015.	REQUEST NO:	PPC-WQT-PI-012
WORK INSTRUCTION :	WI-RT		

EQUIPMENT, MATERIALS & OPERATION PARAMETERS...

RADIATION SOURCE...		EXPOSURE & TECHNIQUE ...		FILM...	
X-RAY EQUP:	N/A	TIME:	3:05 MIN.	BRAND:	CARESTREAM
TUBE VOLTAGE:	N/A	TECHNIQUE:	DWDI	TYPE:	MX-125
TUBE CURRENT:	N/A	SOD/OFD:	355/7.04 MM.	SIZE:	89 x 216 MM.
GAMMA RAY SOURCE:	Ir-192	IQI TYPE/SIZE:	ASTM 1A	INTENSIFYING SCREEN...	
SOURCE ACTIVITY:	P.38/32.83 Ci.	NO OF FILM/ FOLDER:	1	FRONT:	0.125 MM.
SOURCE SIZE:	3.0 x 2.5 MM.	% OF EXAM:	100	BACK:	0.125 MM.
		NO OF RADIOGRAPHS (Exp):	-		

FILM PROCESSING: ☐ AUTO ■ MANUAL

PART IDENTIFICATION & INFORMATION...

WPS NO.:	281-50-T1-001	WQT NO.:	-
TEST POSITION :	6G	PART SIZE:	2"
MATERIAL:	A106-B	MATERIAL THICKNESS:	5.54 MM.
WELD THICKNESS:	7.04 MM.	REINFORCEMENT:	1.5 MM.
WELD/JOINT TYPE:	BUTT WELD	WELDING PROCESS:	GTAW

SYSTEM PERFORMANCE...

SENSITIVITY REQUIRED:	ESSENTIAL WIRE NO.5	DENSITY REQUIRED (RANGE) :	2.0-4.0
SENSITIVITY ACHIEVED:	VISIBLE WIRE NO.5	DENSITY ACHIEVED :	2.8-3.0

RADIOGRAPHIC EVALUATION... *ACCEPTANCE CRITERIA: ASME Sec. IX, QW191.1.2 :2015.*

WELD/JOINT/RADIOGRAPH IDENTIFICATION...			DISCONTINUITY		RESULT		REMARK
Joint/ Weld/ Film NO	*Welder No*	*Film Level-No*	*TYPE*	*MEASURED SIZE*	*ACC*	*REJ*	
Mr.Sutthikeiat Ch.	-	A	NO	-	ACC	-	
		B	NO	-	ACC	-	

NOTE :

ABBREVIATION:

- C : CRACK
- IP : INCOMPLETE PENETRATION
- SF : SURFACE FLAW
- NO : NO RELEVANT INDICATION
- SCD: SOURCE TO OBJECT DISTANCE
- CV : CONCAVITY
- LF : LACK OF FUSION
- SL : SLAG INCLUSIONS
- TI : TUNGSTEN INCLUSION
- OFD: OBJECT TO FILM DISTANCE
- EP : EXCESS PENETRATION
- P : GAS CAVITIES
- UC : UNDERCUT
- E & V: EXPOSURE & VIEWING

AUTHORIZATION...	INTERPRETED/EVALUATED:	REVIEWED/APPROVED BY :	REVIEWED/APPROVED BY :	REVIEWED/APPROVED BY :
COMPANY:	THAI NDT PUBLIC CO., LTD.			
SIGNED:				
NAME:	Nikorn Th.			
METHOD (LEVEL):	RT LEVEL II			
DATE OF ISSUE:	December 10,2016	10 DEC 2016	13/12/16	13/12/16

WELDER PERFORMANCE QUALIFICATIONS (WPQ)

Project Title :Polypropylene Compound and Specialtise Project (PPC)

Subcontractor : Sriracha Construction Public Co.,Ltd.

Location : IRPC, RAYONG PROVINCE, THAILAND



Welder 's Name : Mr. Sutthikeiat Chuangern ID No.: 1 3699 00122 57 2 Test Date : 09/12/2016

Welder No: IRPC-12012

Test Description

Identification of WPS followed : 281-50-T1-001 ☑ Test coupon ☐ Production weld

Specification and type/grade or UNS Number of base metal(s) : A106-B Size 2" NPS Sch 80 Thick : 5.54 mm.

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process (es)	GTAW	GTAW
Type (i.e. manual , semi-auto) Used	Manual	Manual
Backing (Metal,weld metal,Weld from both)	With out	With out / With
☐ Plate ☑ Pipe (Enter diameter ,If pipe or tube)	2" NPS	1" OD and over
Base metal P-or S-Number to P-or S-Number	P1 to P1	P1 to P15F,P34, & P41 to P49
Filler metal or electrode specification (s) (SFA) (info.only)	5.18	Variable under F-No. Qualified
Filler metal or electrode classification (s) (info.only)	ER70S-G	Variable under F-No. Qualified
Filler metal F-Number(s)	6	6
Consumable insert for (GTAW or PAW)	N/A	N/A
Filler type(solid/metal or flux cored/powder)(GTAWorSMAW)	solid/metal , GTAW	solid/metal , GTAW
Deposit thickness for each process		
Process 1 GTAW 3 layers minimum ☑ Yes ☐ No	5.54 mm.	11.08 mm. (max.), Fillet : All
Process 2 N/A 3 layers minimum ☐ Yes ☐ No	N/A	N/A
Position qualified (2G ,6G,3F,etc)	6G	All position
Vertical progression (uphill / downhill)	Uphill	Uphill
Type of Fuel gas (OFW)	N/A	N/A
Inert gas backing (GTAW,PAW, GMAW)	No	No / Argon
Transfer mode(sprey/globular or pulse to short circuit-GMAW)	N/A	N/A
GTAW Current type /polarity (AC,DCEP,DCEN)	DCEN	DCEN

Results

Visual Examination of Completed Weld (QW-302.4) Acceptable

☐ Transverse face and root bends [QW-462.3(a)] ☐ Longitudinal bends [QW-462.3(b)] ☐ Side bends (QW-462.2)

☐ Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5(c)]

☐ Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]

☐ Pipe specimen, macro test for fusion [QW-462.5(b)] ☐ Plate specimen, macro test for fusion [QW-462.5(e)]

Type	Result	Type	Result
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Alternative Volumetric Examination Results(QW-191): WQT-RT-PC-0246 RT ☑ or UT ☐ (check one)

Fillet weld — fracture test (QW-181.2) - Length and percent of defects -

Macro examination (QW-184) - Fillet size (in) - X - Concavity/Concavity(in) -

☐ Fillet welds in plate [QW-462.4(b)] ☐ Fillet welds in pipe [QW-462.4(c)]

Other test -

Film or specimens evaluated by Mr.Nikorn Thammahone Company TNDT

Mechanical test conducted by N/A Laboratory test no. N/A

Welding supervised by N/A

We certify that the statements in this record are correct and that the test coupons were prepared,welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Completed by	Prepared by	Certified by Third Paty	Reviewed by	Approved by
Company	SCC		SEG QA/QC	
Signature	Rutchaneewan T.			
Name	Rutchaneewan Thianthang	Chanin Thanakhanthan		
Date	12/12/2016	12/12/2016	12/12/2016	

SEG SINOPEC ENGINEERING GROUP (THAILAND) CO., LTD.

SUNGDO THAI ENGINEERING & CONSTRUCTION CO., LTD.

98/22 Takuan-Hat Sai Thong Road, Maptaphut Sup-district, Mueang Rayong District,

Rayong Province 21150 Tel : 038-020-220

วันที่ 7 May 2022

เรื่อง แจ้งเลิกจ้างพนักงาน

ถึง นายสุทธิเกียรติ จวงเงิน (Mr. Sutthikelat Chuangern) รหัสพนักงาน HMC-20492

เนื่องจาก นายสุทธิเกียรติ จวงเงิน เป็นพนักงานของบริษัท ซังโด-ไทยฯ เริ่มงานตั้งแต่ 13 December 2020 ในตำแหน่ง Welder Tig (PIPE) แผนก Piping เป็นพนักงานรายวัน ค่าจ้างวันละ 1,000.00 บาท (หนึ่งพันบาทถ้วน) โดยในระยะเวลาการทำงานกับทางบริษัทฯ ได้ผ่านระยะเวลาการทดลองงานเมื่อวันที่ 13 April 2021 ตามปกติ ณ ปัดนี้งานในส่วนที่ท่านรับผิดชอบได้สำเร็จไปแล้วบางส่วน ทางบริษัทฯ จึงพิจารณาปรับโครงสร้าง โดยการปรับลดพนักงานโดยให้ท่านพ้นสภาพจากการเป็นพนักงานของบริษัทฯ ทั้งนี้ตั้งแต่วันที่ 7 May 2022 เป็นต้นไป โดยทางบริษัทจะจ่ายค่าบอกกล่าวล่วงหน้า 15 วัน พร้อมเงินค่าจ้างงวดสุดท้าย ส่วนเงินชดเชยกรณีเลิกจ้างเป็นระยะเวลา 90 วันตามกฎหมายภายในวันที่ 30 July 2022

ทั้งนี้พนักงานจะต้องปฏิบัติงานจนถึงวันที่ 7 May 2022 และคืนอุปกรณ์ที่เบิกไว้จากการทำงานที่แผนก Store ให้ครบตามจำนวนด้วย

พนักงานจะต้องคืนอุปกรณ์ทั้งหมดที่เบิกไปจากการทำงานให้ที่ Store

☑ ได้คืนเครื่องมือและอุปกรณ์อื่นๆเรียบร้อยแล้ว

☐ ยังไม่คืนของที่เบิกจากสโตร์คือ.....(ยินยอมให้หักค่าเครื่องมือที่คืนไม่ครบ)

ข้าพเจ้าได้อ่านข้อความข้างต้นและเข้าใจเรียบร้อย

ลงชื่อ สุทธิเกียรติ จวงเงิน

ทั้งนี้ข้าพเจ้ามีความประสงค์จะไม่เรียกร้องใดๆกับทางบริษัทอีก

(นายสุทธิเกียรติ จวงเงิน)

วันที่ 7 / 5 / 65

ลงชื่อ.....

(Mr.Seongsik Chang)

Site Manager

SUNDA LAND SUPPLY CO.,LTD.
123/760 M.3 TAMBOL BANG - PLA AMPHUR BANG - PLEE SAMUTPRAKARN THAILAND 10540
TEL & FAX. 02-7035818

Certificate no.SDL/BPK175
Date of Issued : 30 May 2015

Certificate of services

To whom it may concern

This is to certify that ***Mr.Sutthikat Chuang-ngern*** has been employed by Sunda Land Supply Co.,Ltd. He was assigned as a " Welder GTAW CS SMAW CS DSS 2" " and carried out the piping field development fabrication works period from 1 December 2011 until 30 May 2015 at Thai Nippon Steel Engineering and Construction Corp., Ltd. For PTTEP Wellhead Platform project Bongkot in Bangpakong, Thailand.

During the above period, he performed his duties and responsibilities with satisfactory competence workmanship.

We wish him successful in his future professional work.

Very truly yours,
On behalf of Sunda Land Supply Co., Ltd.



SUNDA

Warut Peerasombut

Project Manager

CAZ (THAILAND) CO., LTD.

ptt

WELDER PERFORMANCE QUALIFICATION (WPQ)



Welder's name: MR. SUTTHIKEINT C. Identification No.: WD-PP-025

Test Description

Identification of WPS followed: CAZ-G-001 ☑ Test coupon ☐ Production weld

Specification and type/ grade or UNS Number of base metal (s): SA106 Gr.B Thickness: 5.54 mm.

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process(es)	GTAW	GTAW
Type (i.e; manual, semi-auto) used	Manual	Manual
Backing (with/ without)	Without Backing	With / Without Backing
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD. 60.3 mm.	Pipe OD. 25 mm. and Over
Base metal P- or S- Number to P- or S- Number	P-No.1 to P-No.1	P-No.1 through P-No.15F
Filler metal or electrode specification(s) (SFA) (info. Only)	5.18	
Filler metal or electrode classification(s) (info. Only)	ER70S-6	
Filler metal F-Number(s)	F-No.6	All F-No.6
Consumable insert (GTAW or PAW)	None	None
Filler Metal Product Form (solid/metal or flux cored/powder) (GTAW or PAW)	Solid Wire	Solid Wire
Deposit thickness for each process		
Process 1: GTAW 3 layers minimun ☑ Yes ☐ No	5.54 mm.	11.08 mm. (Max)
Process 2: - 3 layers minimun ☐ Yes ☐ No	N/A	N/A
Position qualified (2G, 6G, 3F, etc.)	6G	ALL
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	N/A	N/A
Inert gas backing (GTAW, PAW, GMAW)	Without Backing	With / Without Backing
Transfer mode (spray/globular or pulse to short circuit-GMAW)	N/A	N/A
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

RESULTS

Visual examination of completed weld (QW-302.4): Acceptable / NDE Request No. NDE-LNG-062

☐ Transverse face and root bends [QW-462.3(a)] ☐ Longitudinal bends [QW-462.3(b)] ☐ Side bends[QW-462.2]

☐ Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5 (c)] ☐ Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]

☐ Pipe specimen, macro test for fusion [QW-462.5(b)] ☐ Plate specimen, macro test for fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
-	-	-	-	-	-
-	-	-	-	-	-

Alternative radiographic examination results (QW-191): Accepted as Report No. REC-RT-062 From REC Rajchapleuk Engineering Co., Ltd.

Fillet weld - fracture test (QW-181.2): N/A Length and percent of defects: N/A

☐ Fillet welds in plate [QW-462.4(b)] ☐ Fillet welds in pipe [QW-462.4(c)]

Macro examination (QW-184): N/A Fillet size (in.): - x - Concavity/convexity (in.): -

Other tests:

Film or specimens evaluated by: Mr. Sutin T. Company: REC Rajchapleuk Engineering Co., Ltd.

Mechanical tests conducted by: N/A Laboratory test no.: N/A

Welding supervised by: Mr. Surathin T.

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOLIER AND PRESSURE VESSEL CODE.

	Prepared by Welding Engineer	Certified by QA/QC Manager	Witnessed/Reviewed/Approved By
Sign	Mr. Teerapat [signature]	Chaloempol Vandeeyong [signature]	[signature]
Date	01-12-2017	2 Nov 2017	

CAZ (THAILAND) CO., LTD.



WELDER PERFORMANCE QUALIFICATION (WPQ)

Welder's name: MR. SUTTHIKEINT C. Identification No.: WD-PP-025

Test Description

Identification of WPS followed: CAZ-GS-003 ☑ Test coupon ☐ Production weld

Specification and type/ grade or UNS Number of base metal (s): SA106 Gr.B Thickness: 10.97 mm.

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process(es)	GTAW / SMAW	GTAW / SMAW
Type (i.e; manual, semi-auto) used	Manual	Manual
Backing (with/ without)	Without / With Backing	With + Without / With Backing
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD. 168.3 mm.	Pipe OD. 73 mm. and Over
Base metal P- or S- Number to P- or S- Number	P-No.1 to P-No.1	P-No.1 through P-No.15F
Filler metal or electrode specification(s) (SFA) (info. Only)	5.18 / 5.1	
Filler metal or electrode classification(s) (info. Only)	ER70S-6 / E7016	
Filler metal F-Number(s)	F-No.6 / F-No.4	All F-No.6 / F-No. 4,3,2,1
Consumable insert (GTAW or PAW)	N/A	N/A
Filler Metal Product Form (solid/metal or flux cored/powder) (GTAW or PAW)	Solid Wire	Solid Wire
Deposit thickness for each process		
Process 1: GTAW 3 layers minimun ☐ Yes ☑ No	3.0 mm.	6.0 mm. (Max)
Process 2: SMAW 3 layers minimun ☑ Yes ☐ No	7.97 mm.	15.94 mm. (Max)
Position qualified (2G, 6G, 3F, etc.)	6G	ALL
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	N/A	N/A
Inert gas backing (GTAW, PAW, GMAW)	Without Backing	With / Without Backing
Transfer mode (spray/globular or pulse to short circuit-GMAW)	N/A	N/A
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

RESULTS

Visual examination of completed weld (QW-302.4): Acceptable / NDE Request No. NDE-LNG-802

☐ Transverse face and root bends [QW-462.3(a)] ☐ Longitudinal bends [QW-462.3(b)] ☐ Side bends[QW-462.2]

☐ Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5 (c)] ☐ Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]

☐ Pipe specimen, macro test for fusion [QW-462.5(b)] ☐ Plate specimen, macro test for fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
-	-	-	-	-	-
-	-	-	-	-	-

Alternative radiographic examination results (QW-191): Accepted as Report No. REC-RT-077 From REC Rajchapleuk Engineering Co., Ltd.

Fillet weld - fracture test (QW-181.2): N/A Length and percent of defects: N/A

☐ Fillet welds in plate [QW-462.4(b)] ☐ Fillet welds in pipe [QW-462.4(c)]

Macro examination (QW-184): N/A Fillet size (in.): - x - Concavity/convexity (in.): -

Other tests:

Film or specimens evaluated by: Mr. Sutin T. Company: REC Rajchapleuk Engineering Co., Ltd.

Mechanical tests conducted by: N/A Laboratory test no.: N/A

Welding supervised by: Mr. Surathin T.

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOLIER AND PRESSURE VESSEL CODE.

	Prepared by Welding Engineer	Certified by QA/QC Manager	Witnessed/Reviewed/Approved By
Sign	[signature]	Chaloempol Vandeevong [signature]	[signature]
Date	06-11-2017	8 Nov 2017	

QW-484 MANUFACTURER'S RECORD OF WELDER OR WELDING OPERATOR QUALIFICATION TEST (WQT)



Welder Certificate No. CAZ-DRP-073-1 Welder No. CAZ-P-073

Welder's name	MR.SUTTHIKEIAT CHUANGERN	Identification No.	1-3699-00122-57-2
Welding process(es) used	GTAW	Type (i.e., Manual, Semi-automatic)	Manual
Identification of WPS followed by welder during welding of test coupon	CAZ-G-001		
Base material(s) welded	SA106 GR.B	Thickness	5.54 mm.

Manual or Semiautomatic Variables for Each Process (QW-350)	Actual Values	Range Qualified
Welding Process	GTAW	GTAW
Backing (metal, weld metal, weld from both sides, flux, etc.) (QW-402)	Without	With / Without
ASME P-No. 1 to ASME P-No. 1 (QW-403)	P-No.1 to P-No.1	P-No.1 through P-No.15F
( ) Plate (√) Pipe (enter diameter, if pipe or tube) Groove	NPS 2" Sch 80	OD. 1" to Unlimited
Fillet	N/A	All thickness
Filler metal or electrode specification (SFA)	5.18	
Filler metal or electrode Classifications (AWS etc.) (QW-404)	ER70S-6	
Filler metal F-No.	F-No.6	F-No.6
Consumable insert for GTAW or PAW	None	None
Filler metal product form (solid/metal or flux cored/powder) (GTAW or PAW)	Solid Wire	Solid Wire
Weld deposit thickness for each welding process		
Process1 GTAW 3 layers minimum (√) Yes ( ) No	5.54 mm.	11.08 mm. (Max)
Process2 - 3 layers minimum ( ) Yes ( ) No	N/A	N/A
Welding position (1G, 6G, 1F, 2F etc.) (QW-405)	6G	ALL
Progression (uphill/downhill)	Uphill	Uphill
Backing gas for GTAW, PAW, or GMAW.; fuel gas for OFW (QW-408)	None	With/Without
GMAW transfer mode (spray/globular or pulse to short circuit) (QW-409)	N/A	N/A
GTAW welding current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

Machine Welding Variables for the Process Used (QW-360)	Actual Values	Range Qualified
Direct/Remote visual control	N/A	N/A
Automatic voltage control (GTAW)	N/A	N/A
Automatic joint tracking	N/A	N/A
Welding position (1G, 6G, etc.)	N/A	N/A
Consumable insert	N/A	N/A
Backing (metal, weld metal, welded from both sides, flux, etc.)	N/A	N/A

Guide Bend Test Results

Guided Bend Tests Type ( )QW-462.2 (Side) Results ( )QW-462.3(a) (Trans. R & F) Type ( )QW-462.3(b) (Long. R & F) Results

N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Visual examination of completed weld results (QW-302.4) Acceptable

Alternative volumetric examination (QW-191) (√) RT or ( ) UT

RT/UT results (QW-304 and QW-305) Accepted Report No. REC-6190498-RT-0224

(For alternative qualification of groove welds by volumetric examination)

Fillet Weld – Fracture test (QW-182) N/A Length and percent of defects N/A in.

Macro test fusion(QW-183) N/A Fillet leg size N/A in. × N/A in. Concavity/convexity N/A in.

Other tests

Film or specimens evaluated by Mr. Sutin T. Company REC Rajchaphruk Engineering Co., Ltd.

Mechanical test conducted by N/A Laboratory test no. N/A

Welding test conducted by Mr. Komsan K. Test date 19-Jan-2019

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirement of Section IX of the ASME Code.

Organization

Date 19-Jan-2019 by

CAZ (THAILAND) LTD. QA / QC DEPT.

This form (F0008) may be obtained from the Order Dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

QW-484 MANUFACTURER'S RECORD OF WELDER OR WELDING OPERATOR QUALIFICATION TEST (WQT)



Welder Certificate No. CAZ-ORP-073-1 Welder No. CAZ-P-073

Welder's name	MR.SUTTHIKEIAT CHUANGERN	Identification No.	1-3699-00122-57-2
Welding process(es) used	GTAW	Type (i.e., Manual, Semi-automatic)	Manual
Identification of WPS followed by welder during welding of test coupon	CAZ-G-001		
Base material(s) welded	SA106 GR.B	Thickness	5.54 mm.

Manual or Semiautomatic Variables for Each Process (QW-350)	Actual Values	Range Qualified
Welding Process	GTAW	GTAW
Backing (metal, weld metal, weld from both sides, flux, etc.) (QW-402)	Without	With / Without
ASME P-No. 1 to ASME P-No. 1 (QW-403)	P-No.1 to P-No.1	P-No.1 through P-No.15F
( ) Plate (√) Pipe (enter diameter, if pipe or tube) Groove	NPS 2" Sch 80	OD. 1" to Unlimited
Fillet	N/A	All thickness
Filler metal or electrode specification (SFA)	5.18	
Filler metal or electrode Classifications (AWS etc.) (QW-404)	ER70S-6	
Filler metal F-No.	F-No.6	F-No.6
Consumable insert for GTAW or PAW	None	None
Filler metal product form (solid/metal or flux cored/powder) (GTAW or PAW)	Solid Wire	Solid Wire
Weld deposit thickness for each welding process		
Process1 GTAW 3 layers minimum (√)Yes ( )No	5.54 mm.	11.08 mm. (Max)
Process2 - 3 layers minimum ( )Yes ( )No	N/A	N/A
Welding position (1G, 6G, 1F, 2F etc.) (QW-405)	6G	ALL
Progression (uphill/downhill)	Uphill	Uphill
Backing gas for GTAW, PAW, or GMAW; fuel gas for OFW (QW-408)	None	With/Without
GMAW transfer mode (spray/globular or pulse to short circuit) (QW-409)	N/A	N/A
GTAW welding current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

Machine Welding Variables for the Process Used (QW-360)	Actual Values	Range Qualified
Direct/Remote visual control	N/A	N/A
Automatic voltage control (GTAW)	N/A	N/A
Automatic joint tracking	N/A	N/A
Welding position (1G, 6G, etc.)	N/A	N/A
Consumable insert	N/A	N/A
Backing (metal, weld metal, welded from both sides, flux, etc.)	N/A	N/A

Guide Bend Test Results

Guided Bend Tests Type ( )QW-462.2 (Side) Results ( )QW-462.3(a) (Trans. R & F) Type ( )QW-462.3(b) (Long. R & F) Results

N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Visual examination of completed weld results (QW-302.4) Acceptable

Alternative volumetric examination (QW-191) (√) RT or ( ) UT

RT/UT results (QW-304 and QW-305) Accepted Report No. REC-6100498-RT-0224

(For alternative qualification of groove welds by volumetric examination)

Fillet Weld -- Fracture test (QW-182) N/A Length and percent of defects N/A in.

Macro test fusion(QW-183) N/A Fillet leg size N/A in. × N/A in. Concavity/convexity N/A in.

Other tests

Film or specimens evaluated by Mr. Sutin T. Company REC Rajchapleek Engineering Co., Ltd.

Mechanical test conducted by N/A Laboratory test no. N/A

Welding test conducted by Mr. Komsan K. Test date 19-Jan-2019

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirement of Section IX of the ASME Code.

Organization

Date 19-Jan-2019 by

CAZ (THAILAND) LTD. QA / QC DEPT.

This form (E0008) may be obtained from the Order Dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

QW-484 MANUFACTURER'S RECORD OF WELDER OR WELDING OPERATOR QUALIFICATION TEST (WQT)



Welder Certificate No. CAZ-ORP-073-3 Welder No. CAZ-P-073

Welder's name	MR.SUTTHIKEIAT CHUANGERN	Identification No.	1-3699-00122-57-2
Welding process(es) used	GTAW+SMAW	Type (i.e., Manual, Semi-automatic)	Manual
Identification of WPS followed by welder during welding of test coupon	CAZ-GS-011		
Base material(s) welded	SA106 GR.B	Thickness	21.95 mm.

Manual or Semiautomatic Variables for Each Process (QW-350)	Actual Values		Range Qualified	
Welding Process	GTAW	SMAW	GTAW	SMAW
Backing (metal, weld metal, weld from both sides, flux, etc.) (QW-402)	Without	With	With/Without	With
ASME P-No. 1 to ASME P-No. 1 (QW-403)	P-No.1 to P-No.1		P-No.1 through P-No.15F	
( ) Plate (√) Pipe (enter diameter, if pipe or tube) Groove	NPS 6" Sch XXS		2-7/8"(73 mm.)O.D. and Over	
Fillet	N/A		All thickness	
Filler metal or electrode specification (SFA)	5.28	5.5		
Filler metal or electrode Classifications (AWS etc.) (QW-404)	ER80S-B2	E8018-B2 H4		
Filler metal F-No.	F-No.6	F-No.4	F-No.6	F-No.1-4
Consumable insert for GTAW or PAW	None		None	
Filler metal product form (solid/metal or flux cored/powder) (GTAW or PAW)	Solid	N/A	Solid	N/A
Weld deposit thickness for each welding process				
Process1 GTAW 3 layers minimum ( )Yes (√)No	3.0 mm	N/A	6.0 mm.Max.	N/A
Process2 SMAW 3 layers minimum (√)Yes ( )No	N/A	18.95 mm	N/A	Max. to be Welded
Welding position (1G, 6G, 1F, 2F etc.) (QW-405)	6G		ALL	
Progression (uphill/downhill)	Uphill		Uphill	
Backing gas for GTAW, PAW, or GMAW; fuel gas for OFW (QW-408)	None		With/Without	
GMAW transfer mode (spray/globular or pulse to short circuit) (QW-409)	N/A		N/A	
GTAW welding current type/polarity (AC, DCEP, DCEN)	DCEN	DCEP	DCEN	DCEP

Machine Welding Variables for the Process Used (QW-360)	Actual Values	Range Qualified
Direct/Remote visual control	N/A	N/A
Automatic voltage control (GTAW)	N/A	N/A
Automatic joint tracking	N/A	N/A
Welding position (1G, 6G, etc.)	N/A	N/A
Consumable insert	N/A	N/A
Backing (metal, weld metal, welded from both sides, flux, etc.)	N/A	N/A

Guide Bend Test Results

Guided Bend Tests Type ( )QW-462.2 (Side) Results ( )QW-462.3(a) (Trans. R & F) Type ( )QW-462.3(b) (Long. R & F) Results

N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Visual examination of completed weld results (QW-302.4) Acceptable

Alternative volumetric examination (QW-191) (√) RT or ( ) UT

RT/UT results (QW-304 and QW-305) Accepted Report No. REC-6200198-RT-0569

(For alternative qualification of groove welds by volumetric examination)

Fillet Weld – Fracture test (QW-182) N/A Length and percent of defects N/A in.

Macro test fusion(QW-183) N/A Fillet leg size N/A in. × N/A in. Concavity/convexity N/A in.

Other tests

Film or specimens evaluated by Mr. Sutin T. Company REC Rajchapleuk Engineering Co., Ltd.

Mechanical test conducted by N/A Laboratory test no. N/A

Welding test conducted by Mr. Komsan K. Test date 11-May-2019

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirement of Section IX of the ASME Code.

Organization CAZ (THAILAND) CO., LTD. QA / QC DEPT.

Date 11-May-2019 by

This form (E0008) may be obtained from the Order Dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

CAZ (THAILAND) CO., LTD.

WELDER PERFORMANCE QUALIFICATION (WPQ)



Welder's name: MR. SUTTHIKEINT C. Identification No.: WD-PP-025

Test Description

Identification of WPS followed: CAZ-GS-003 ☑ Test coupon ☐ Production weld

Specification and type/ grade or UNS Number of base metal (s): SA106 Gr.B Thickness: 21.95 mm.

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process(es)	GTAW / SMAW	GTAW / SMAW
Type (i.e; manual, semi-auto) used	Manual	Manual
Backing (with/ without)	Without / With Backing	With + Without / With Backing
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	OD. 168.3 mm.	Pipe OD. 73 mm. and Over
Base metal P- or S- Number to P- or S- Number	P-No.1 to P-No.1	P-No.1 through P-No.1F
Filler metal or electrode specification(s) (SFA) (info. Only)	5.12 / 5.1	
Filler metal or electrode classification(s) (Info. Only)	ER70S-6 / E7016	
Filler metal F-Number(s)	F-No.6 / F-No.4	All F-No.6 / F-No. 4,3,2,1
Consumable insert (GTAW or PAW)	N/A	N/A
Filler Metal Product Form (solid/metal or flux cored/powder) (GTAW or PAW)	Solid Wire	Solid Wire
Deposit thickness for each process		
Process 1: GTAW 3 layers minimun ☐ Yes ☑ No	3.0 mm.	6.0 mm. (Max)
Process 2: SMAW 3 layers minimun ☑ Yes ☐ No	18.95 mm.	Maximum to be Welded
Position qualified (2G, 6G, 3F, etc.)	6G	ALL
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	N/A	N/A
Inert gas backing (GTAW, PAW, GMAW)	Without Backing	With / Without Backing
Transfer mode (spray/globular or pulse to short circuit-GMAW)	N/A	N/A
GTAW current type/polarity (AC, DCEP, DCEN)	DCEN	DCEN

RESULTS

Visual examination of completed weld (QW-302.4): Acceptable / NDE Request No. NDE-LNG-010

☐ Transverse face and root bends [QW-462.3(a)] ☐ Longitudinal bends [QW-462.3(b)] ☐ Side bends[QW-462.3]

☐ Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5(c)] ☐ Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]

☐ Pipe specimen, macro test for fusion [QW-462.5(b)] ☐ Plate specimen, macro test for fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result
-	-	-	-	-	-
-	-	-	-	-	-

Alternative radiographic examination results (QW-191): Accepted as Report No. REC-RT-171 From REC Rajchapleuk Engineering Co., Ltd.

Fillet weld - fracture test (QW-181.2): N/A Length and percent of defects: N/A

☐ Fillet welds in plate [QW-462.4(b)] ☐ Fillet welds in pipe [QW-462.4(c)]

Macro examination (QW-184): N/A Fillet size (in.): - x - Concavity/convexity (in.): -

Other tests:

Film or specimens evaluated by: Mr. Sutin T. Company: REC Rajchapleuk Engineering Co., Ltd.

Mechanical tests conducted by: N/A Laboratory test no.: N/A

Welding supervised by: Mr. Surathin T.

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE.

Chaloempol Vandeevong

	Prepared by Welding Engineer	Certified by QA/QC Manager	Witnessed/Reviewed/Approved By
Sign	Mr. Surathin T.		
Date	28/12/2017	29 DEC 2017	

Mr.Danuwat Sumrungwong
Mechanical & Piping Inspectn

☐ Review ☐ Approval

FO-QC-19 (Rev. 0)

SAMSUNG ENGINEERING THAILAND CO., LTD.

QW-484 MANUFACTURER'S RECORD OF WELDER OR WELDING OPERATOR QUALIFICATION TEST (WQT)



Welder Certificate No. CAZ-ORP-073-2 Welder No. CAZ-P-073

Welder's name	MR.SUTTHIKEIAT CHUANGERN	Identification No.	1-3699-00122-57-2
Welding process(es) used	GTAW+SMAW	Type (i.e., Manual, Semi-automatic)	Manual
Identification of WPS followed by welder during welding of test coupon	CAZ-GS-002		
Base material(s) welded	SA106 GR.B	Thickness	12.70 mm.

Manual or Semiautomatic Variables for Each Process (QW-350)	Actual Values		Range Qualified	
Welding Process	GTAW	SMAW	GTAW	SMAW
Backing (metal, weld metal, weld from both sides, flux, etc.) (QW-402)	Without	With	With/Without	With
ASME P-No. 1 to ASME P-No. 1 (QW-403)	P-No. 1 to P-No. 1		P-No. 1 through P-No. 15F	
( ) Plate (√) Pipe (enter diameter, if pipe or tube) Groove	NPS 8" Sch 80		2-7/8"(73 mm) O.D. and Over	
Fillet	N/A		All thickness	
Filler metal or electrode specification (SFA)	5.18	5.1		
Filler metal or electrode Classifications (AWS etc.) (QW-404)	ER70S-6	E7016		
Filler metal F-No.	F-No.6	F-No.4	F-No.6	F-No.1-4
Consumable insert for GTAW or PAW	None		None	
Filler metal product form (solid/metal or flux cored/powder) (GTAW or PAW)	Solid	N/A	Solid	N/A
Weld deposit thickness for each welding process				
Process1 GTAW 3 layers minimum ( )Yes (√)No	3.0 mm.	N/A	6.0 mm Max.	N/A
Process2 SMAW 3 layers minimum (√)Yes ( )No	N/A	9.70 mm.	N/A	19.40 mm Max.
Welding position (1G, 6G, 1F, 2F etc.) (QW-405)	6G		ALL	
Progression (uphill/downhill)	Uphill		Uphill	
Backing gas for GTAW, PAW, or GMAW; fuel gas for OFW (QW-408)	None		With/Without	
GMAW transfer mode (spray/globular or pulse to short circuit) (QW-409)	N/A		N/A	
GTAW welding current type/polarity (AC, DCEP, DCEN)	DCEN	DCEP	DCEN	DCEP

Machine Welding Variables for the Process Used (QW-360)	Actual Values	Range Qualified
Direct/Remote visual control	N/A	N/A
Automatic voltage control (GTAW)	N/A	N/A
Automatic joint tracking	N/A	N/A
Welding position (1G, 6G, etc.)	N/A	N/A
Consumable insert	N/A	N/A
Backing (metal, weld metal, welded from both sides, flux, etc.)	N/A	N/A

Guide Bend Test Results

Guided Bend Tests Type ( )QW-462.2 (Side) Results ( )QW-462.3(a) (Trans. R & F) Type ( )QW-462.3(b) (Long. R & F) Results

N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Visual examination of completed weld results (QW-302.4) Acceptable

Alternative volumetric examination (QW-191) (√) RT or ( ) UT

RT/UT results (QW-304 and QW-305) Accepted Report No. REC-6100498-RT-0225

(For alternative qualification of groove welds by volumetric examination)

Fillet Weld – Fracture test (QW-182) N/A Length and percent of defects N/A in.

Macro test fusion(QW-183) N/A Fillet leg size N/A in. × N/A in. Concavity/convexity N/A in.

Other tests

Film or specimens evaluated by Mr. Sutin T. Company REC Rajchaplesk Engineering Co., Ltd.

Mechanical test conducted by N/A Laboratory test no. N/A

Welding test conducted by Mr. Komsan K. Test date 19-Jan-2019

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirement of Section IX of the ASME Code.

Organization

Date 19-Jan-2019 by

CAZ (THAILAND) LTD. QA / QC DEPT.

pasv

This form (E0008) may be obtained from the Order Dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

PAE TECHNICAL SERVICE

PAE TECHNICAL SERVICE PUBLIC COMPANY LIMITED

WELDER CERTIFICATE

Record of Welder or Welding Operator Qualification Test



Company Name : **Sungdo Thai Engineering & Construction Co., Ltd.** **Cert. No.** **P-20-11-016**

WELDER PERFORMANCE QUALIFICATIONS (WPQ) CERTIFICATE

Welder's name **Mr.Sutthikeiat Chuangern** I/C no. **1 3699 00122 57 2** Stamp no. **SUD-039**

Test Description

Identification of WPS followed No. PP4-QA-WPS-P1P1-GTAW-0001 ☑ Test coupon ☐ Production weld

Specification of base metal(s) SA106 Gr.B Thickness 5.54 mm Tested Date : 21 Nov 20

Testing Condition and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process(es)	GTAW	GTAW
Type (ie: manual, semi-auto) used	Manual	Manual
Backing (metal, weld metal, double-welded, etc.)	Without backing	With & Without backing
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	Pipe O.D.NPS 2"	Pipe O.D. 1" to Unlimited
Base metal P or S-number to P- or S-number	P-No.1 + P-No.1	P-No.1 throughe P-No.15F,P-No.34, and P-No.41 through P-No.49
Filler metal or electrode specification(s) (SFA) (info only)	SFA 5.18	SFA 5.18
Filler metal or electrode classification(s) (info only)	ER70S-6	ER70S-6
Filler metal F-Number(s)	F-No.6	F-No.6
Consumable insert (GTAW or PAW)	N/A	N/A
Filler type (solid/metal or flux cored/powder) (GTAW or PAW)	Solid Wire	Solid Wire
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	5.54 mm	11.08 mm
Process 2: - 3 layers minimum ☐ Yes ☐ No	-	-
Position qualified (2G, 6G, 3F, etc.)	6G	All Position
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	-	-
Inert gas backing (GTAW, PAW, GMAW)	Without gas backing	With/Without gas backing
Transfer mode (spray/globular or pulse to short circuit-GMAW)	N/A	N/A
GTAW current type/porarity (AC, DCEP, DCEN)	DCEN	DCEN

RESULTS

Visual Examination of Completed Weld (QW-302.4) Accepted Report No. WQT-S-0010

☐ Bend test; ☐ Transverse root and face [QW-462.3(a)] - Report No. -

☐ Longitudinal bends [QW-462.3(b)] ☐ Side bends (QW-462.2)

☐ Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5(c)]

☐ Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]

☐ Pipe specimen, Macro test for fusion [QW-462.5(b)] ☐ Plate specimen,Macro test for fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result	Type	Result
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Alternative radiographic examination results (QW-191) Accepted RT ☑ UT ☐ Report No. HMC-RT-SDP-WQT-0022

Filler Weld - Facture test (QW-180) - Length and percent of defects -

Macro examination (QW-184) - Fillet size (in.) - x - Concavity/convexity (in.) -

Other tests - Report No.: -

Film or specimens evaluated by Mr.Santi T. Company PAE Technical Service PCL

Mechanical tests Conducted by N/A Laboratory test no. N/A

Welding supervised by Mr.Anusorn M. (PAE Technical Service Public Company Limited)

We certify that the statements in this record are correct and that the test coupons were prepared, welded and tested in accordance with the requirements of Section of the ASME BOILER AND PRESSURE VESSEL CODE.

Inspected by	Witnessed / Reviewed by	Approved by
Mr.Chaleemlaet B.		Watchawadeh S
Date: 22 Nov 20	Date: 1-Dec-2020	Date: 1/12/2020

PAE TECHNICAL SERVICE PUBLIC COMPANY LIMITED
WELDER CERTIFICATE

Record of Welder or Welding Operator Qualification Test



Company Name : Sungdo Thai Engineering & Construction Co., Ltd. Cert. No. P-20-11-017

WELDER PERFORMANCE QUALIFICATIONS (WPQ) CERTIFICATE

Welder's nam: Mr.Sutthikelat Chuangern I/C no. 1 3699 00122 57 2 Stamp no. SUD-039

Test Description

Identification of WPS followed No. PP4-QA-WPS-P1P1-GTSM-0002 ☑ Test coupon ☐ Production weld

Specification of base metal(s) SA106 Gr.B Thickness 10.97 mm Tested Date : 21 Nov 20

Testing Condition and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process(es)	GTAW/SMAW	GTAW/SMAW
Type (ie: manual, semi-auto) used	Manual	Manual
Backing (metal, weld metal, double-welded, etc.)	Without (GTAW)+With (SMAW)	With/Without (GTAW)+With (SMAW)
☐ Plate ☑ Pipe (enter diameter if pipe or tube)	Pipe O.D. NPS 6"	2 7/8" (NPS) - Unlimited
Base metal P or S-number to P- or S-number	P-No.1 + P-No.1	P-No.1 through P-No.15F,P-No.34, and P-No.41 through P-No.49
Filler metal or electrode specification(s) (SFA) (info only)	SFA 5.18 + 5.1	SFA 5.18 + 5.1
Filler metal or electrode classification(s) (info only)	ER70S-6 + E7016	ER70S-6 + E7016
Filler metal F-Number(s)	F-No.6 + F-No.4	F-No.6 + F-No.4
Consumable insert (GTAW or PAW)	N/A	N/A
Filler type (solid/metal or flux cored/powder) (GTAW or PAW)	Solid for GTAW	Solid for GTAW
Deposit thickness for each process		
Process 1: GTAW 3 layers minimum ☑ Yes ☐ No	3.50 mm	7.00 mm
Process 2: SMAW 3 layers minimum ☑ Yes ☐ No	7.47 mm	14.94 mm
Position qualified (2G, 6G, 3F, etc.)	6 G	All Position
Vertical progression (uphill or downhill)	Uphill	Uphill
Type of fuel gas (OFW)	-	-
Inert gas backing (GTAW, PAW, GMAW)	Without gas backing	With/Without gas backing
Transfer mode (spray/globular or pulse to short circuit-GMAW)	N/A	N/A
GTAW current type/porarity (AC, DCEP, DCEN)	DCEN + DCEP	DCEN + DCEP or AC

RESULTS

Visual Examination of Completed Weld (QW-302.4) Accepted Report No. WQT-S-0011

☐ Bend test; ☐ Transverse root and face [QW-462.3(a)] - Report No. -

☐ Longitudinal bends [QW-462.3(b)] ☐ Side bends (QW-462.2)

☐ Pipe bend specimen, corrosion-resistant weld metal overlay [QW-462.5(c)]

☐ Plate bend specimen, corrosion-resistant weld metal overlay [QW-462.5(d)]

☐ Pipe specimen, Macro test for fusion [QW-462.5(b)] ☐ Plate specimen,Macro test for fusion [QW-462.5(e)]

Type	Result	Type	Result	Type	Result	Type	Result
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Alternative radiographic examination results (QW-191) Accepted RT ☑ UT ☐ Report No. HMC-RT-SDP-WQT-0024

Filler Weld - Facture test (QW-180) - Length and percent of defects -

Macro examination (QW-184) - Fillet size (in.) - x - Concavity/convexity (in.) -

Other tests: - Report No.: Hardness Testing Report No. -

Film or specimens evaluated by Mr.Santi T. Company PAE Technical Service PCL.

Mechanical tests Conducted by N/A Laboratory test no. N/A

Welding supervised by Mr.Anusorn M. (PAE Technical Service Public Company Limited)

We certify that the statements in this record are correct and that the test coupons were prepared, welded and tested in accordance with the requirements of Section of the ASME BOILER AND PRESSURE VESSEL CODE.

Inspected by	Witnessed / Reviewed by	Approved by
PAE TECHNICAL SERVICE		Watchavalan S
Mr.Chaiyaporn B.		
Date: 22 NOV 20	Date: 1-Dec-2020	Date: 1/12/2020

WELDER AND WELDING OPERATOR QUALIFICATION TEST CERTIFICATE

Designation(s)	EN ISO 9606/ EN 287	141 BW FM5 ss gb ml
Welder's Name	SUTTHIKIAT CHUANGNGOEN	
Date of birth	1988-02-18	
Welder's No	8409230009	
Employer	SHI	
Code/testing standard	EN ISO 9606-1 : 2013	
Test of Date	2015-12-30	
WPS No	W-DS-GT-G-ALL-WQ-P005	



Variables	Tested value	Qualified Range
Welding process(es)	141(GTAW)	141, 142, 143, 145
Welding position	H-L045	PA, PC, PE, PF
Type of weld	BW	BW
Backing	ss gb	ss gb ss mb bs
Product type(plate: P or pipe: T)	T	P,T (See Notes)
Parent material group(s)/subgroups	10.1 / A790 S31803	
Material thickness(mm)	13.49	-
Deposited thickness(mm) for each process		
Process 1 GTAW 3layers min ■Yes □No	13.49	3 to Unlimited
Process 2 3layers min □Yes □No	-	-
Outside pipe diameter(mm)	114.3	57.15 to Unlimited
Type of current and polarity	DCEN	-
Filler material group(s)	FM5	FM5
Filler material(Designation)	A5.9 ER329N	-
Transfer mode	N/A	-
Shielding gas	Ar 99.9%	-
Backing gas	Ar 99.9%	-
Multi-layer/single layer	ml	sl,ml

1)FW/BW Combination test (according to ISO 9606-1 para 5.4 b) and Annex C) : □YES ■NO

2)Supplementary fillet weld test(completed in conjunction with a butt weld qualification): □YES ■NO

Details for Mechanized Welding	Tested value	Qualified Range	Details for Automatic welding	Tested value	Qualified Range
Direct/Remote visual control	N/A	N/A	Joint sensor	N/A	N/A
Automatic arc length control	N/A	N/A	Arc sensor control	N/A	N/A
Automatic joint tracking	N/A	N/A	Single or Multiple run technique	N/A	N/A
Consumable insert	N/A	N/A	Type of welding Unit	N/A	N/A
Single or Multiple run	N/A	N/A			

Notes	1. Test piece welds with outside pipe diameter D>25 mm cover welds in plates

Type of test	Result	Report No.	Type of test	Result	Report No.
Visual testing	A	7115-VT-20153230-005	Ultrasonic testing		
Radiographic testing	A	SN7115TRTQRE1N00307	Notch tensile test		
Fracture test			Macroscopic examination		
Bend test	A	M160100007	PMI		

TEST CONDUCTED BY D. H. LEE

WE, THE UNDERSIGNED, CERTIFY THAT THE STATEMENTS IN THE RECORD ARE CORRECT AND THE WELDS WERE PREPARED AND TESTED ACCORDING TO THE REQUIREMENTS OF EN ISO 9606-1

Issued by SHI	Approved by SHI	Approved by Client/Class	Approved by Client/Class
D. H. LEE	J. H. ROH	DNV GL	
2016.01.11	2016.01.11	2016-01-18	2016.07.11

S43989-02

WELDER & WELDING OPERATOR PERFORMANCE QUALIFICATION TEST RECORD



NAME OF WELDER :	SUTTHIKIAT CHUANGNGOEN	WELDER No. :	8409230009
DATE OF BIRTH :	1988.02.24	DATE OF TEST :	2017.12.14

APPLIED WPS No. : W-CN-GT-V-ALL-1400

VARIABLES		TESTED VALUE	QUALIFIED RANGE	VARIABLES		TESTED VALUE	QUALIFIED RANGE
WELDING	PROCESS	GTAW	GTAW	POLARITY		EN	EN
	TYPE	MANUAL	MANUAL	POSITION		PIPE 6G	ALL
BACKING		WITHOUT	BOTH	FILLER METAL	SFA/A No.	A5.7	A5.7
MATERIAL SPEC		B466 C70600	P No. 1~15F,34,41~49		VARIETY	SOLID	SOLID
WELD METAL THICK (mm)		8.74	Max. 17.48		CLASS	ERCUNI	ERCUNI
THICK (mm)	GROOVE	8.74	Max. 17.48		F No.	34	34
	FILLET	N/A	Unlimited	PROGRESSION		UPHILL	UPHILL
DIA (inch)	GROOVE	2	1" to Unlimited	TRANSFER MODE		N/A	N/A
	FILLET	N/A	Unlimited	SHIELD GAS TYPE		Ar(99.9%)	N/A
CURRENT		DC	DC	BACKING GAS		Ar(99.9%)	Ar(99.9%)
MACHINE WELDING VARIABLES FOR THE PROCESS USED			DIRECT/REMOTE VISUAL CONTROL			N/A	N/A
			CONSUMABLE INSERT			N/A	N/A
			MULTIPLE OR SINGLE ELECTRODE			N/A	N/A
			AUTOMATIC JOINT TRACKING			N/A	N/A

NOTES

RESULT OF TEST

TEST	RESULT	REPORT No.	TEST	RESULT	REPORT No.	TEST	RESULT	REPORT No.
VISUAL	ACCEPT	N/A	RT	ACCEPT	SN2126RTWT030026	BREAK		
MACRO			BEND			IMPACT		
MICRO			HARDNESS			UT		
MT			PT			CORROSION		

TEST CONDUCTED BY S.K.LEE

WE, THE UNDERSIGNED, CERTIFY THAT THE STATEMENTS IN THE RECORD ARE CORRECT AND THE WELDS WERE PREPARED AND TESTED ACCORDING TO THE REQUIREMENTS OF ASME SEC IX

ISSUED BY SHI	APPROVED BY SHI	APPROVED BY CLIENT/CLASS	APPROVED BY CLIENT/CLASS
S.K.LEE	E.B.KIM		
2017.12.14	2017.12.28		

04031413140100

S43989-10

WELDER AND WELDING OPERATOR QUALIFICATION TEST CERTIFICATE

Designation(s)	EN ISO 9606/ EN 287	141 BW FMS sl
Welder's Name	SUTTHIKIAT CHUANGNGOEN	
Date of birth	1988-02-18	
Welder's No	8409230009	
Employer	SHI	
Code/testing standard	EN ISO 9606-1 : 2013	
Test of Date	2016-02-24	
WPS No	W-SS-GT-F-ALL-WQ-P015	



Variables	Tested value	Qualified Range
Welding process(es)	141(GTAW)	141(GTAW) 142, 143, 145
Welding position	PD(F)	PA, PB, PC, PD, PE
Type of weld	FW	FW
Backing	-	-
Product type(plate, P or pipe, T)	P	P,T (See Notes)
Parent material group(s)/subgroups	B.1 / A240 TYPE 316L	
Material thickness(mm)	12	3 to Unlimited
Deposited thickness(mm) for each process		
Process 1. 3layers min ☐Yes ☐No	-	-
Process 2. 3layers min ☐Yes ☐No	-	-
Outside pipe diameter(mm)	-	-
Type of current and polarity	DCEP	-
Filler material group(s)	FM5	FM5
Filler material(Designation)	AS 9 ST-316L	-
Transfer mode	N/A	-
Shielding gas	Ar 99.9%	-
Backing gas	N/A	-
Multi-layer/single layer	sl	sl

1)FW/BW Combination test (according to ISO 9606-1 para. 5.4 b) and Annex C) : ☐YES ■NO
2)Supplementary fillet weld test(completed in conjunction with a butt weld qualifiction): N/A

Details for Mechanized Welding	Tested value	Qualified Range	Details for Automatic welding	Tested value	Qualified Range
Direct/Remote visual control	N/A	N/A	Joint sensor	N/A	N/A
Automatic arc length control	N/A	N/A	Arc sensor control	N/A	N/A
Automatic joint tracking	N/A	N/A	Single or Multiple run technique	N/A	N/A
Consumable insert	N/A	N/A	Type of welding Unit	N/A	N/A
Single or Multiple run	N/A	N/A			

Notes	1. Fixed pipe of outside pipe diameter D≥500mm 2. Rotating pipes of outside pipe diameter D≥75mm for welding position PA,PB, PC, PD

Type of test	Result	Report No.	Type of test	Result	Report No.
Visual testing	A	7115-VT-20160224-001	Ultrasonic testing		
Radiographic testing			Notch tensile test		
Fracture test	A	7115-FT-20160224-001	Macroscopic examination		
Bend test			PMI		

TEST CONDUCTED BY D. H. LEE
WE THE UNDERSIGNED, CERTIFY THAT THE STATEMENTS IN THE RECORD ARE CORRECT AND THE WELDS WERE PREPARED AND TESTED ACCORDING TO THE REQUIREMENTS OF EN ISO 9606-1

Issued by SHI	Approved by SHI	Approved by Client/Class	Approved by Client/Class
D. H. LEE	J. H. ROH		
2016.02.26	2016.02.26		2016.02.26

S43989-03



Name:
SUTTHIKIAT CHUAN
W/N: 8409230009
Dep't :

Project No	Position			Material
SN2190 JOHAN SVERDRUP RISE	H-L045			6Mo
SN2190 JOHAN SVERDRUP RISE	H-L045	PCPH		DSS
SN2190 JOHAN SVERDRUP RISE	H-L045			SDSS
SN2190 JOHAN SVERDRUP RISE	PD(F)	PF(F)		SS
SN2191 JOHAN SVERDRUP PROC	H-L045			6Mo
SN2191 JOHAN SVERDRUP PROC	H-L045	PCPH		DSS
SN2191 JOHAN SVERDRUP PROC	H-L045			SDSS
SN7115 MARTIN LINGE TOPSID	H-L045	PCPH		DSS
SN7115 MARTIN LINGE TOPSID	PD(F)	PF(F)		SS

Welder Certification Card

Project Name : COLD WATER GENRATION PLANT PROJECT



Welder No. : WD-PP-025

Welder Name : MR. SUTTHIKEINT C.

Certified by : MR. TEERASAK S.

Date 28-Dec-2017

Approved by :

Date

PIPING-CS

FO-QC-17-00

WPS No.	CAZ-G-001	CAZ-GS-003	CAZ-GS-003	
Applicable Code	ASME IX:2015	ASME IX:2015	ASME IX:2015	
Material	CS	CS	CS	
(P. No.)	P-No.1 thr. P-No.15F	P-No.1 thr. P-No.15F	P-No.1 thr. P-No.15F	
Process	GTAW	GTAW+SMAW	GTAW+SMAW	
Position	ALL	ALL	ALL	
Thickness Range	11.08 mm. (Max)	6.0 mm. (Max) 15.94 mm. (Max)	6.0 mm. (Max) Max. to be Welded	
Filler Metal	ALL F-No.6	ALL F-No.6 F-No.4,3,2,1	ALL F-No.6 F-No.4,3,2,1	
Diameter Range	Pipe OD. 25 mm. and Over	Pipe OD. 73 mm. and Over	Pipe OD. 73 mm. and Over	

FO-QC-17-00

WELDER IDENTIFICATION CARD

SAMSUNG ENGINEERING



Company CAZ (THAILAND) CO., LTD.

ID No. WD-PP-015

Name MR.SUTTHIKEIAT C.

Date Qlfd. 10-Oct-18

This is to certify that the above person is qualified in accordance with the applicable Codes & Standards.

In-Plant Power Generation Project

P No. P-No.1 thr. P-No.15F

Quality Control Manager

[redacted]

SAMSUNG ENGINEERING (THAILAND) CO.,LTD.

Qualification Details

Name : MR.SUTTHIKEIAT C.

Process	Mat'l	Electrodes	Range Thk.	Range Dia	Position	Date Qualified
GTAW	P-No.1 thr. P-No.15F	ER70S-6	11.08 MM. (Max.)	Pipe OD. 1 in. & Over	ALL	28-Aug-18
GTAW + SMAW	P-No.1 thr. P-No.15F	ER70S-6 / E7016	6.0 MM. (Max.) 6.20 MM. (Max.)	Pipe OD. 2.7/8 in. & Over	ALL	28-Aug-18
GTAW	P-No.1 thr. P-No.15F	ER70S-6	25.36 MM. (Max.)	Pipe OD. 4.1/8 in. & Over	ALL	9-Sep-18
GTAW	P-No.1 thr. P-No.15F	ER70S-6	9.66 MM. (Max.)	Pipe OD. 1/2 in. & Over	ALL	10-Oct-18

[redacted]

"Thickness in mm" & "Dia in inches"

GC

SAMSUNG ENGINEERING THAILAND CO., LTD.

PROJECT NAME : OLEFINS RECONFIGURATION PROJECT

COMPANY NAME : CAZ (THAILAND) PCL

WELDER NAME : MR.SUTTHIKEIAT CH.

WELDER NO. CAZ-P-362

ID. NO. : 1-3699-00122-57-2

ISSUED DATE : 24-Feb-2020



Komsan Katasila
CWI 13123681
QC1 EXP. 12/1/2022

ISSUED BY :

[redacted]

Juluzzong Sukhatiw
CWI 17122271
QC1 EXP. 12/1/2020

APPROVED BY :

RANGE QUALIFIED		
WELDING PROCESS	GTAW	GTAW+SMAW
POSITION	ALL	ALL
[redacted]		
P-NO.	P-No.1	P-No.1
DIAMETER	Pipe OD. 25 mm. and Over	Pipe OD. 73 mm. and Over
WELD THICKNESS (MAX.)	11.08 mm. (Max)	GTAW : 6.0 mm. (Max) SMAW : 15.94 mm. (Max)
AWS CLASSIFICATION	ER70S-6	GTAW : ER70S-6 SMAW : E7016
F-NO.	ALL F-No.6	ALL F-No.6 & F-No.4,3,2,1
VALID DATE	24-Feb-2020	24-Feb-2020

RAYONG ENGINEERING & PLANT SERVICE CO., LTD.

SCG

WELDER CERTIFICATION CARD



Project Name : Turnaround 2020

Welder No. : **UTOC-173**

Welder Name : **Mr. Sutthikeiat Ch.**

Issue Date : **08 Oct 2020**

QA/QC

Welder | Contractor | Owner

WPS No.	**P1-001,P1-002,P8-010**
Process	**GTAW, GTAW+SMAW,GTAW**
Position	**All**
Material (P No.)	**P1 to P1 /P8 to P8**
Thickness	**7.82 /14.22 /7.82 mm**
Filler Metal	**F-No.6, F-No.4, F-No.6**

WELDER No : UTOC-173

PC-ME-0016-000

HMC Polymers

HMC PP-4 Project

Welder Identification Card

GS



ID No.	1 3699 00122 57 2 (SUD-039)
Name	Mr. Sutthikeiat Chuangern
Date Qualified	26 Apr 21

This is to certify the above person is qualified in accordance with ASME BOILER AND PRESSURE VESSEL CODE

Subcontractor | Contractor | Owner

Sungdo Thai Engineering & Construction Co.,Ltd.

Qualification Details

Name: Mr. Sutthikeiat Chuangern | ID No. : 1 3699 00122 57 2

Process	Material	Electrodes	Range Thk.	Range Dia.	Position	Date Qualified
GTAW	P-8 through P-8	SFA-5.9	6.10 mm (max)	0.0 3/8" to Unlimited	All	26 Apr 21

Valid Up to :

"Thickness in mm" & "Diameter in Inches".

HMC Polymers

HMC PP-4 Project

Welder Identification Card

GS



ID No.	1 3699 00122 57 2 SUD-039
Name	Mr.Sutthikeiat Chuangern
Date Qualified	21/11/2020

This is to certify the above person is qualified in accordance with ASME BOILER AND PRESSURE VESSEL CODE

Subcontractor | Contractor | Owner

Sungdo Thai Engineering & Construction Co., Ltd

Qualification Details

Name: Mr.Sutthikeiat Chuangern | ID No. : 1 3699 00122 57 2

Process	Material	Electrodes	Range Thk.	Range Dia.	Position	Date Qualified
GTAW	P-1 through P-15F,P-34, and P-41 through P-49	SFA-5.18	11.88 mm (max)	1" OD to Unlimited	All	21/11/2020
GTAW+SMAW	P-1 through P-15F,P-34, and P-41 through P-49	SFA-5.18+5.1	21.64 mm (max)	2 7/8"OD to Unlimited	All	21/11/2020

Valid Up to :

"Thickness in mm" & "Diameter in Inches".

VATANA PHAISAL ENGINEERING CO.,LTD.

WELDER QUALIFICATION CARD



W6-923

ชื่อ นายสุทธิเกียรติ จวงเงิน

NAME **Mr.Sutthikeiat Ch.**

ISSUED BY :

APPROVED BY :

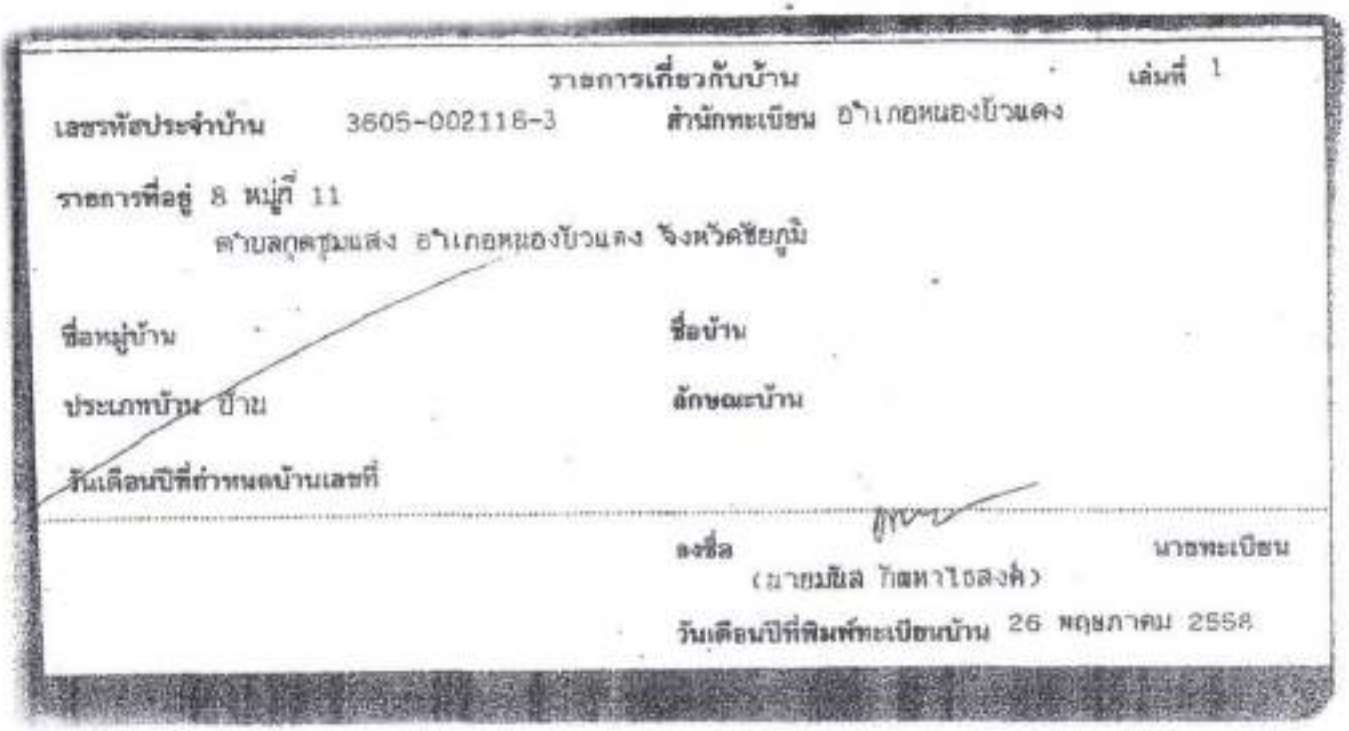
ISSUED DATE : 15-Aug-20

EXPIRED DATE : 14-Feb-21

QUALIFIED WELDING DATA

CODE/ SPEC.	WELDING PROCESS	THICKNESS OF WELD METAL	OUTSIDE DIAMETER	MATERIAL GROUP	F NO.	WELDING POSITION	REF. RCN No.
ASME IX	GTAW	11.88 mm (GTAW)	1" AND OVER	P1	6	ALL	[illegible]
ASME IX	GTAW+SMAW	[illegible]	1 3/8" AND OVER	P1	6.4	ALL	[illegible]


บัตรประจำตัวประชาชน Thai National ID Card
เลขประจำตัวประชาชน 1 3699 00122 57 2
Identification Number
ชื่อตัวและชื่อสกุล นาย สุทธิเกียรติ จวงเงิน
Name Mr. Sutthikiat
Last name Chuangern
วันเกิด 18 ก.พ. 2531
Date of Birth 18 Feb. 1988
ศาสนา พุทธ
ที่อยู่ 8 หมู่ที่ 11 ต.กุดสุมแสง อ.พนมไพรแดง
จ.ร้อยเอ็ด
19 ก.พ. 2563
Date of Issue
17 ก.พ. 2572
Date of Expiry
1032-11-0219345



รายการเกี่ยวกับบ้าน เล่มที่ 1

เลขรหัสประจำบ้าน 3605-002116-3 สำนักทะเบียน อำเภอหนองบัวแดง

รายการที่อยู่ 8 หมู่ที่ 11

ตำบลกุดชุมแสง อำเภอหนองบัวแดง จังหวัดชัยภูมิ

ชื่อหมู่บ้าน ชื่อบ้าน

ประเภทบ้าน บ้าน ลักษณะบ้าน

วันเดือนปีที่กำหนดบ้านเลขที่

ลงชื่อ นายทะเบียน

(นายมนัส ทิพหาไธสง)

วันเดือนปีที่พิมพ์ทะเบียนบ้าน 26 พฤษภาคม 2558



เล่มที่ 1 รายการบุคคลในบ้านของเลขรหัสประจำบ้าน 3605-002116-3 ลำดับที่ 7

ชื่อ นายสุทธิเกียรติ จวงเงิน สัญชาติ ไทย เพศ ชาย

เลขประจำตัวประชาชน 1-3699-00122-57-2 สถานภาพ ยังโสด เกิดเมื่อ 18 ก.พ. 2531

บิดาชื่อ สมยศ สัญชาติ ไทย

มารดาชื่อ นิพนธ์ สัญชาติ ไทย

หลักฐาน ทะเบียนการเกิด

ย้ายมาอยู่ในบ้านนี้เมื่อ 26 ส.ค. 2558 (นายมนัส ทิพหาไธสง)

หมายเหตุ ไม่มี นายทะเบียน

ส ■ ว 156576

(แบบ สค.๔๓)

ฉบับที่ 76 เลขที่หมายเรียก [illegible]/51

ใบรับรองผล

การตรวจเลือกทหารกองเกินเข้ารับราชการทหารกองประจำการ พ.ศ. ๒๕๔๒

๑. หลักฐานเกี่ยวกับประวัติบุคคล.

๑.๑ ชื่อ [illegible] ชื่อสกุล [illegible]

๑.๒ ภูมิลำเนาทหารตำบล [illegible]

อำเภอ [illegible] จังหวัด [illegible]

๑.๓ บัตรประจำตัวประชาชนหมายเลข

เลขประจำตัวประชาชน 1 3699 [illegible] 572

๒. ผลการตรวจเลือก

๒.๑ กรรมการซึ่งเป็นผู้ประกอบโรคศิลปะแผนปัจจุบัน ผู้ตรวจร่างกายเห็นว่า

[illegible]

ควรเป็นคนจำพวกที่ [illegible]

(ลายมือชื่อผู้ตรวจร่างกาย) [illegible]

๒.๒ ขนาดสูง [illegible] ซม. ขนาดรอบตัว [illegible] ซม.

(ลายมือชื่อกรรมการนายทหารสัญญาบัตร) [illegible]

๒.๓ คณะกรรมการตรวจเลือกกำหนดเป็นคนจำพวกที่ [illegible]

(ลายมือชื่อกรรมการสัสดีจังหวัด) [illegible]

๒.๔ ผลการจับสลาก

(ลายมือชื่อกรรมการสัสดีจังหวัด)

(ลายมือทหารกองเกิน) หรือ (ลายพิมพ์นิ้วมือ)

๓. บันทึกอื่น ๆ ปล่อยเพราะสงคน

ขนาดสูงกว่าพล [illegible]

ขอรับรองว่าถูกต้อง

[illegible] ประธานกรรมการ

[illegible] กรรมการ

[illegible] กรรมการ

[illegible] กรรมการ

[illegible] กรรมการ

กรรมการ

กรรมการ

(ท่อนที่ ๓ สำหรับทหารกองเกิน)

ระเบียนแสดงผลการเรียนตามหลักสูตรประกาศนียบัตรวิชาชีพชั้นสูง (ปวส.) พุทธศักราช 2546

รหัสสถานศึกษา 12300x101 | ชื่อสถานศึกษา วิทยาลัยเทคนิคอันดูนี | อำเภอ อันดูนี | 210 1 0218 46 0301 0656 13 3103315

ชื่อ - ชื่อสกุล นายสุรชัยศักดิ์ ขานอัน | เลขประจำตัว 5631030012 | วันที่ประจำตัวประชาชน 1 3609 00122 97 2 | หมายเหตุพิเศษ -

ประเภทวิชา อุตสาหกรรม | วัน-เดือน-ปีเกิด 18 กุมภาพันธ์ 2531 | สถานที่เกิด โรงพยาบาลอันดูนี | หมายเหตุปีโอน 95

สาขาวิชา เทคนิคโยธา | ชื่อบิดา ไชย ศักดิ์ศรี ไชย สกุล บุญธ | อำเภอ อันดูนี | หมายเหตุปี 95

สาขางาน เทคนิคการก่อสร้างอุตสาหกรรม | ชื่อมารดา นางนิพนธ์ ขานอัน | ที่อยู่ของผู้ปกครอง บ้าน 3 | ระดับคะแนนเฉลี่ยสะสม 2.61

เข้าศึกษาเมื่อ 14 พฤษภาคม 2550 | ชื่อผู้ปกครอง นายสุนทร ขานอัน | จบการศึกษา 112 สาขาวิชาเอก 2 ตค | สำเร็จการศึกษาเมื่อ 16 มีนาคม 2552



รหัสวิชา	ชื่อวิชา	หน่วยกิต (ท)	ผลการเรียน (ป)	ท x ป (ผ)	รหัสวิชา	ชื่อวิชา	หน่วยกิต (ท)	ผลการเรียน (ป)	ท x ป (ผ)	รหัสวิชา	ชื่อวิชา	หน่วยกิต (ท)	ผลการเรียน (ป)	ท x ป (ผ)	รหัสวิชา	ชื่อวิชา	หน่วยกิต (ท)	ผลการเรียน (ป)	ท x ป (ผ)
	ปีการศึกษา 2550 ภาคเรียนที่ 1					ปีการศึกษา 2550 ภาคเรียนที่ 2					ปีการศึกษา 2551 ภาคเรียนที่ 1					ปีการศึกษา 2551 ภาคเรียนที่ 2			
3000-0101	การติดต่อสื่อสารและพัฒนาบุคลิกภาพ	3	4	12.0	3000-1226	ภาษาอังกฤษสำหรับสถานประกอบการ	3	2.5	7.5	3000-0206	การออกแบบโครงสร้างและพื้นคอนกรีต	3	2	6.0	3000-1205	งานฝึกฝีมือช่างก่อ	1	3.5	3.5
	แลออ			*	3000-7001	การฝึกงาน	4	4	16.0		งานสหกิจ				3000-1206	การฝึกงานก่อสร้างอาคารโยธา	2	1.5	3.0
3000-1101	คณิตศาสตร์โยธาเบื้องต้น	3	1	3.0	3303-2102	การชั่งวัดที่ดิน	2	4	8.0	3000-1202	คณิตศาสตร์สำหรับงานก่อสร้างอุตสาห	2	2	4.0	3000-1004	กีฬาเพื่อสุขภาพ	2	1.5	3.0
3000-1201	คณิตศาสตร์เพื่อการก่อสร้างอาคารอุตสา	5	2.5	5.0	3303-2103	การฝึกงานสำรวจ	2	4	8.0	3000-1420	วัสดุก่อสร้าง	3	1.5	4.5	3000-0001	ลูกเสือวิสามัญ 1	1	1.5	1.5
3000-1301	ฟิสิกส์และวัสดุงานโยธา	3	2.5	7.5	3303-2106	การออกแบบเครื่องจักรกล	2	4	8.0	3000-1525	เขียนแบบ 3	3	2	6.0	3000-0107	ความพร้อมทางร่างกาย	1	1.5	1.5
3000-1521	เคมีศาสตร์ 2	3	2	6.0	3000-2002	ปัญหาและข้อแก้ไขการก่อสร้าง		0		3000-1601	ทั่วไปสำหรับวิศวกรรมศาสตร์	3	1.5	4.5	3105-2003	งานคอนกรีตเสริม	2	2.5	5.0
3000-0106	นิเวศสัมพันธ์ไทยกับโลก	3	2	6.0						3105-0103	การสำรวจทางวิศวกรรม	3	1.5	4.5	3303-2004	การออกแบบงานก่อสร้าง	2	3	6.0
3000-0117	ภาษาไทยเพื่อการสื่อสาร	2	3.5	7.0						3105-2001	การออกแบบสถาปัตยกรรมเบื้องต้น	2	4	8.0	3305-2008	โครงสร้างงานเหล็ก	3	2.5	7.5
3000-0121	ความปลอดภัยและอาชีวอนามัยเบื้องต้น	2	2	4.0						3303-2007	โครงสร้างไม้และโครงสร้างพิเศษ	3	2	6.0	3303-2303	งานเหล็ก	3	3	9.0
3105-2101	งานก่ออิฐและคอนกรีตเบื้องต้น	2	3.5	7.0						3105-2008	การออกแบบโครงสร้างเหล็ก	3	2	6.0	3105-2206	งานก่ออิฐและคอนกรีตเสริมเหล็ก 2	3	3.5	10.5
3105-2002	เขียนแบบและเขียนไดเรคะ	2	3.5	7.0						3303-2201	ทักษะงานเครื่องมือสำรวจและงานสนาม	2	4	8.0	3303-4001	โครงงาน	4	4	16.0
3105-2005	วัสดุและงานก่อสร้าง	2	3	6.0						3000-2007	จิตวิทยาสังคมศาสตร์ในงานวิศวกรรม		0		3125-2207	การอนุรักษ์พลังงานและสิ่งแวดล้อม	3	3.5	10.5
3105-2009	การสำรวจและงานเครื่องมือ	3	2.5	7.5											3000-2304	จิตวิทยาและคำวิเคราะห์ 1		0	
3100-2003	จิตวิทยาและคำวิเคราะห์ 3		0																

สรุปผลการเรียน	ภาคเรียน								
	1/2550	2/2550	3/2551	4/2551					
หน่วยกิตที่ได้ในภาค	20	11	23	31					
หน่วยกิตสะสม	20	31	54	85					
ระดับคะแนนเฉลี่ยในภาค	2.60	2.86	2.39	2.64					
ระดับคะแนนเฉลี่ยสะสม	2.60	2.96	2.82	2.83					

หมายเหตุ 1. ชั่วโมงที่ใช้ในการฝึกงานเท่ากับ

2. ฝึกงานภาคฤดูร้อน

3. ระดับคะแนนเฉลี่ยสะสมไม่ต่ำกว่า 2.00

สำเนาผลการเรียนนี้ถือว่าเป็นสำเนาที่ถูกต้องเมื่อมีลายมือชื่อและตราประจำตำแหน่งของผู้มีอำนาจลงนามเท่านั้น

บันทึก * หมายถึง โอนผลการเรียน

** หมายถึง ทดสอบวัดผลการเรียนระดับชาติ

*** หมายถึง หลักสูตรความรู้และประสบการณ์

**** หมายถึง ปีการศึกษา

(นายไชยา โยธาพลเดิน)

ตำแหน่ง รองผู้อำนวยการฝ่ายวิชาการ

วันที่ 16 เดือน มีนาคม พ.ศ. 2552

ออกให้ตลอดการศึกษานี้ 16 มีนาคม 2552

ในหลักฐาน สำเนาหลักสูตร ปวส.

(นายไชโรจน์ ศิริมณีย์)

ผู้อำนวยการวิทยาลัยเทคนิคอันดูนี

วันที่ 16 เดือน มีนาคม พ.ศ. 2552

ท.ร. ๑ ตอน ๑

สำนักทะเบียน [illegible]

สูติบัตร

เลขประจำตัวประชาชน 1-3699-00120-57-2

๑ เด็ก	๑.๑ ชื่อตัว: [illegible]	ชื่อสกุล: [illegible]	๑.๒ เพศ: ชาย ✓ หญิง	๑.๓ สัญชาติ: ไทย
	๑.๔ เกิดเมื่อวันที่: 18 เดือน [illegible] พ.ศ. [illegible]	เวลา: [illegible]	[illegible]	เดือน: 3 ปี: [illegible]
	๑.๕ สถานที่เกิด: [illegible]	บ้านเลขที่ หมู่ที่ ตรอก ซอย ถนน ตำบล/แขวง อำเภอ/เขต จังหวัด: [illegible]		
	๑.๖ เป็นบุตร: ลำดับที่ 2	๑.๗ ผู้ทำคลอด: ○ [illegible] ○ [illegible] ○ อื่น ๆ [illegible] ✓ [illegible] ○ [illegible] ○ [illegible]		๑.๘ น้ำหนักแรกเกิด: [illegible] กรัม
	๑.๙ เพิ่มชื่อเข้าทะเบียนบ้านเลขที่ หมู่ที่ ตรอก ซอย ถนน ตำบล/แขวง อำเภอ/เขต จังหวัด: [illegible]			
	๑.๑๐ เลขรหัสประจำบ้านที่เพิ่มชื่อเข้า: 3699-00125-1			
๒ มารดา	๒.๑ ชื่อตัว: [illegible]	ชื่อสกุลก่อนสมรส: [illegible]	๒.๒ เลขประจำตัวประชาชน:	
	๒.๓ อายุ: 22 ปี	๒.๔ สัญชาติ: ✓ ไทย ○ อื่น ๆ	๒.๕ เกิดที่จังหวัด: [illegible]	ประเทศ: ไทย
	๒.๖ ที่อยู่ บ้านเลขที่ หมู่ที่ ตรอก ซอย ถนน ตำบล/แขวง อำเภอ/เขต จังหวัด ประเทศ: [illegible]			
๓ บิดา	๓.๑ ชื่อตัว: [illegible]	ชื่อสกุล: [illegible]	๓.๒ เลขประจำตัวประชาชน:	
	๓.๓ อายุ: 29 ปี	๓.๔ สัญชาติ: ✓ ไทย ○ อื่น ๆ	๓.๕ เกิดที่จังหวัด: [illegible]	ประเทศ: ไทย
	๓.๖ ที่อยู่ บ้านเลขที่ หมู่ที่ ตรอก ซอย ถนน ตำบล/แขวง อำเภอ/เขต จังหวัด ประเทศ: ○ [illegible] ✓ [illegible] [illegible]			
๔ ผู้แจ้งการเกิด	๔.๑ ชื่อตัว: [illegible]	ชื่อสกุล: [illegible]	๔.๒ เลขประจำตัวประชาชน: 3-3699-00165-36-7	๔.๓ อายุ: 22 ปี
	๔.๔ ที่อยู่ บ้านเลขที่ หมู่ที่ ตรอก ซอย ถนน ตำบล/แขวง อำเภอ/เขต จังหวัด: [illegible]			
	๔.๕ ความเกี่ยวข้องกับเด็ก: ○ เจ้าบ้าน ○ บิดา ○ ผู้ทำคลอด ○ ผู้อื่น ○ ญาติ ○ [illegible] ✓ [illegible]			
	๔.๖ หนังสือรับรองการเกิด: ✓ มี ○ ไม่มี	๔.๗ ไม่รับรองการเกิด: ○ มี ○ ไม่มี	๔.๘ ลงชื่อผู้แจ้งการเกิด: [illegible]	

ลงชื่อนายทะเบียนผู้รับแจ้งการเกิด

[illegible]

([illegible])

นายทะเบียน

วันที่ 23 เดือน [illegible] พ.ศ. 2531 ที่รับแจ้ง

ใบสำคัญการสมรส

แสดงว่า

นายสุทธิเกียรติ จวงเงิน

กับ

น.ส.จันทร์จิรา ทองหล้า

ได้จดทะเบียนสมรส

ณ สำนักทะเบียน อำเภอเมืองสมุทรปราการ

จังหวัด สมุทรปราการ

เลขทะเบียนที่ ๑๐๑/๑๒๑๓๖๗

เมื่อวันที่ ๑๒ เดือน มกราคม พ.ศ. ๒๕๕๘

(น.ส.ทัศนันทน์ ภมรพล)

ปลัดอำเภอ(เจ้าพนักงานปกครองชำนาญการ)รักษาราชการแทน

นายทะเบียน

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Mr.SUTTHIKIAT CHUANGERN

Has attended and successfully completed a Training Course in

The Duties of Mobile Crane Operator (Hiab Truck), Signal Person and Rigger

Training Date: 17 – 18 February 2023 Expiry Date: 18 February 2025

2 Days Duration

Certificate No. Crane2023 2 126

Mr. Adirek Thammawong	Ms. Poonsap Sriarunjanrean	Mr. Nasit Klaharn	Mr.Somchat Nakbunjong
Instructor	Instructor	Managing Director/THAp	Managing Director/KTC


חשמל אחד
דליה
עובד קבלן זמני
SUTTHIKIAT CHUANGERN
ת.ז. - AD0557661
חברה - RMS- חמו אהרון
מס' רכב - ללא
תוקף - 01/01/2028
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