

	POBOYA 2000 TPD EXPANSION PROJECT	
(CPM Work No.) 11580	Project Doc. No.: E2502-000-PRC-006	Revision No. : B
(Vendor Work No.) E2502	Purchase Order No. : 11580	Page 1 of 11

WELDER LIST & WELDER QUALIFICATION RESULT

CLIENT : PT. CITRA PALU MINERALS (CPM)
PROJECT NAME : POBOYA 2000 TPD EXPANSION PROJECT
LOCATION : PALU, SULAWESI
CONSULTANT : PT. COMO ENGINEERS (PT. CE)
VENDOR : PT. HANAZONO ENGINEERING INDONESIA
DOCUMENT NO. : E2502-000-PRC-006

FOR APPROVAL

☐ AP	APPROVED
☐ AN	APPROVED AS NOTED
☐ RE	NOT APPROVED (Re-Submit)
☐ RV	REVIEWED
☐ RN	REVIEWED WITH NOTES
☐ NR	NOT BE RETURNED
RETURN DATE	
	

						
B	July 13, 2026	Issue For Approval	Benridho	Rusnandi	Murasato	
A	March 02, 2026	Issue For Approval	Benridho	Rusnandi	Murasato	
REV	DATE ISSUED	ISSUE PURPOSE	PREPARE	CHECKED	APPROVED	AUTHORIZED

WELDER'S LIST (Poboyo 2000 TPD Expansion Project)

Issued No. : WI/CPM/26/01

Issued Date : March 02, 2026

Rev No. 0

Effective Period : November 11, 2025 ~ November 10, 2028

No.	Welder I.D No.	Welder Name	Process	Test of T (mm)	Test Position	Position Qualified *1 & *4	Weld TH'K Range		Material P. No	Filler metal F. No.	DIA Range (≤ 24" OD)	Backing	Consumable Inserts	AC/DC (EN or EP)	Mode * 2	Up Down	Gas Backing	Certified	Certificate No	Expired Date	Remark
							Inch	mm													
1	YD-1138	YODI	GTAW+SMAW	8,75	6G	All & Uphill	0.34	8,74	1	6	OD ≥ 1"	With/Without	Without	DCEN	-	Up	Ar.99 / 99%	Disnaker	HEI/WPQR/QC/1138/26/01	November 10, 2028	
						All & Uphill	Unlimited			6 & 4	OD > 1"	With	-	DCEP	-	Up	Weld Metal				
			SMAW	12	3G	F/H/V	0 - 24 mm		1	4	Grove:F.V : OD > 24" F: 2 7/8" < OD < 24" Fillet: F.H.V	With/Without	Without	DCEP	-	Up	Weld Metal		HEI/WPQR/QC/1138/26/04	November 10, 2028	
2	SR-0904	SAHRUL	GTAW+SMAW	8,75	6G	All & Uphill	0.34	8,74	1	6	OD ≥ 1"	With/Without	Without	DCEN	-	Up	Ar.99 / 99%	Disnaker	HEI/WPQR/QC/0904/26/02	November 10, 2028	
						All & Uphill	Unlimited			6 & 4	OD > 1"	With	-	DCEP	-	Up	Weld Metal				
			SMAW	12	3G	F/H/V	0 - 24 mm		1	4	Grove:F.V : OD > 24" F: 2 7/8" < OD < 24" Fillet: F.H.V	With/Without	Without	DCEP	-	Up	Weld Metal		HEI/WPQR/QC/0904/26/05	November 10, 2028	
3	RH-1402	ROHIMI	GTAW+SMAW	8,75	6G	All & Uphill	0.34	8,74	1	6	OD ≥ 1"	With/Without	Without	DCEN	-	Up	Ar.99 / 99%	Disnaker	HEI/WPQR/QC/1402/26/03	November 10, 2028	
						All & Uphill	Unlimited			6 & 4	OD > 1"	With	-	DCEP	-	Up	Weld Metal				
			SMAW	12	3G	F/H/V	0 - 24 mm		1	4	Grove:F.V : OD > 24" F: 2 7/8" < OD < 24" Fillet: F.H.V	With/Without	Without	DCEP	-	Up	Weld Metal		HEI/WPQR/QC/1402/26/06	November 10, 2028	
4	MM-0410	MAHMUDI	GTAW+SMAW	8,75	6G	All & Uphill	0.34	8,74	1	6	OD ≥ 1"	With/Without	Without	DCEN	-	Up	Ar.99 / 99%	Disnaker	HEI/WPQR/QC/0410/26/07	December 24, 2028	
						All & Uphill	Unlimited			6 & 4	OD > 1"	With	-	DCEP	-	Up	Weld Metal				
5	SP-2506	SUPARLAN	SMAW	12	3G	F/H/V	0 - 24 mm		1	4	Grove:F.V : OD > 24" F: 2 7/8" < OD < 24" Fillet: F.H.V	With/Without	Without	DCEP	-	Up	Weld Metal	Disnaker	HEI/WPQR/QC/2506/26/08	December 30, 2028	

REMARKS

* 1. F = Flat, H = Horizontal, V = Vertical, O = Overhead

* 2. S = Spray, G = Globular, P = Pulsating

* 3. Direct visual Control/No Automatic Joint Tracking/

Single pass or Multiple passes

* 4. Plate and Pipe (Over 24" OD)

* 5. Overlay

Prepared by :




Variesty Husein

QC Inspector

Approved by :



Rusnandi

QA/QC Manager

March 02, 2026

Date

March 02, 2026

Date

WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name YODI Identification no. YD-1138 Certificate no. HEI/WPQR/QC/1138/26/01
 Identification of WPS followed 006/HEI/WPS/MIGAS/20 ■ Test coupon □ Production weld Date welded November 11, 2025
 Specification and / grade or UNS Number of base metal(s) SA 106 GR B 8,74 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-automatic) used	Manual Manual	Manual Manual
Backing (with/without)	Without With	With/Without With
□ Plate ■ Pipe (enter diameter if pipe or tube)	Pipe NPS 2" (60.3mm)	OD ≥ 1" OD ≥ 1"
Base metal P-Number to P-Number	1 to 1 1 to 1	1~15F, 34.41~49 1~15F, 34.41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.18 5.1	
Filler metal or electrode classification(s) (info only)	ER 70S-G E 7018-1H4R	
Filler metal F-Number(s)	6 4	6 4,3,2,1 with backing
Consumable insert (GTAW or PAW)	Without -	Without -
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	Solid -	Solid -
Deposit thickness for each process		
Process 1 : GTAW 3 layers minimum □ yes ■ No	2,5 mm	5 mm
Process 2 : SMAW 3 layers minimum ■ yes □ No	6,24 mm	12,48 mm
Position(s)	6 G 6 G	in accordance QW-461.9 (All Position)
Vertical progression (uphill or downhill)	Uphill Uphill	Uphill Uphill
Type of fuel gas (OFW)	Argon 99,99% -	Argon 99,99% -
Use of backing gas (GTAW, PAW, GMAW)	Without -	With/Without -
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	- -	- -
GTAW current type and polarity (AC, DCEP, DCEN)	DCEN -	DCEN -

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory
 □ 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-resistance 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
		Blank			

Alternative Volumetric examination results (QW-191) Accepted RT ■ or UT □ (check one)

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

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

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

Other tests -

□ Film or specimens evaluated by Didid Sugandi (RT Level II) Company PT. TITIAN L.A (Report No. 001/TLA/RT-HEI/XI/2025)

Mechanical tests conducted by - Laboratory test no. -

Welding supervised by Variesy Husein

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.



Organization PT. Hanazono Engineering Indonesia

Prepared By: BEURIDHO Date: March 02, 2026

Inspected By: VARIESY Date: March 02, 2026

Approved By: [Signature] Date: March 03, 2026



WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name SAHRUL Identification no. SR-0904 Certificate no. HEI/WPQR/QC/0904/26/02
Test Description
 Identification of WPS followed 006/HEI/WPS/MIGAS/20 ☒ Test coupon ☐ Production weld Date welded November 11, 2025
 Specification and / grade or UNS Number of base metal(s) SA 106 GR B 8,74 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-automatic) used	Manual	Manual	Manual	Manual
Backing (with/without)	Without	With	With/Without	With
☐ Plate ☒ Pipe (enter diameter if pipe or tube)	Pipe NPS 2" (60.3mm)		OD $\geq$ 1"	OD $\geq$ 1"
Base metal P-Number to P-Number	1 to 1	1 to 1	1~15F, 34, 41~49	1~15F, 34, 41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.18	5.1		
Filler metal or electrode classification(s) (info only)	ER 70S-G	E 7018-1H4R		
Filler metal F-Number(s)	6	4	6	4, 3, 2, 1 with backing
Consumable insert (GTAW or PAW)	Without	-	Without	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	Solid	-	Solid	-
Deposit thickness for each process				
Process 1 : <u>GTAW</u> 3 layers minimum ☐ yes ☒ No	2,5 mm		5 mm	
Process 2 : <u>SMAW</u> 3 layers minimum ☒ yes ☐ No	6,24 mm		12,48 mm	
Position(s)	6 G	6 G	in accordance QW-461.9 (All Position)	
Vertical progression (uphill or downhill)	Uphill	Uphill	Uphill	Uphill
Type of fuel gas (OFW)	Argon 99,99%	-	Argon 99,99%	-
Use of backing gas (GTAW, PAW, GMAW)	Without	-	With/Without	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	DCEN	-	DCEN	-

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory
☐ 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-resistance 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
		Blank			

Alternative Volumetric examination results (QW-191) Accepted RT ☒ or UT ☐ (check one)

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

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

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

Other tests -

Film or specimens evaluated by Didid Sugandi (RT Level II) Company PT. TITIAN L.A (Report No. 001/TLA/RT-HEI/XI/2025)

Mechanical tests conducted by - Laboratory test no. -

Welding supervised by Variesy Husein

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.



Organization PT. Hanazono Engineering Indonesia

Prepared By: BENKIDHO Date: March 02, 2026

Inspected By: VARIESY Date: March 02, 2026

Approved By: Kusnadi Date: March 02, 2026



WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name ROHIMI Identification no. RH-1402 Certificate no. HEI/WPQR/QC/1402/26/03
 Identification of WPS followed 006/HEI/WPS/MIGAS/20 ■ Test coupon □ Production weld Date welded November 11, 2025
 Specification and / grade or UNS Number of base metal(s) SA 106 GR B 8,74 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-automatic) used	Manual	Manual	Manual	Manual
Backing (with/without)	Without	With	With/Without	With
□ Plate ■ Pipe (enter diameter if pipe or tube)	Pipe NPS 2" (60.3mm)		OD ≥ 1"	
Base metal P-Number to P-Number	1 to 1	1 to 1	1~15F,34,41~49	1~15F,34,41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.18	5.1		
Filler metal or electrode classification(s) (info only)	ER 70S-G	E 7018-1H4R		
Filler metal F-Number(s)	6	4	6	4,3,2,1 with backing
Consumable insert (GTAW or PAW)	Without	-	Without	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	Solid	-	Solid	-
Deposit thickness for each process				
Process 1 : GTAW 3 layers minimum □ yes ■ No	2,5 mm		5 mm	
Process 2 : SMAW 3 layers minimum ■ yes □ No	6,24 mm		12,48 mm	
Position(s)	6 G	6 G	in accordance QW-461.9 (All Position)	
Vertical progression (uphill or downhill)	Uphill	Uphill	Uphill	Uphill
Type of fuel gas (OFW)	Argon 99,99%	-	Argon 99,99%	-
Use of backing gas (GTAW, PAW, GMAW)	Without	-	With/Without	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	DCEN	-	DCEN	-

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory
 □ 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-resistance 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
		Blank			

Alternative Volumetric examination results (QW-191) Accepted RT ■ or UT □ (check one)
 Fillet weld - fracture test (QW-181.2) - Length and percent of defects -
 □ Fillet welds in plate [QW-462.4(b)] □ Fillet welds in pipe [QW-462.4(c)]
 Macro examination (QW-184) - Fillet size (in.) - x - Concavity/convexity (in.) -
 Other tests -

Film or specimens evaluated by Didid Sugandi (RT Level II) Company PT. TITIAN I.A (Report No. 001/TLA/RT-HEI/XI/2025)
 Mechanical tests conducted by - Laboratory test no. -
 Welding supervised by VARIESY HUSEIN

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.



Organization PT. Hanazono Engineering Indonesia

Prepared By: BENRIDHO Date: March 02, 2026

Inspected By: VARIESY Date: March 02, 2026

Approved By: [Signature] Date: March 02, 2026



WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name YODI Identification no. YD-1138 Certificate no. HEI/WPQR/QC/1138/26/04

Test Description

Identification of WPS followed 008/HEI/WPS/MIGAS/21 ☒ Test coupon ☐ Production weld Date welded November 11, 2025
Specification and / grade or UNS Number of base metal(s) SA-36 Thickness 12 mm

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process (es)	SMAW	SMAW
Type (i.e.; manual, semi-automatic) used	Manual	Manual
Backing (with/without)	Without	With/without
☒ Plate ☐ Pipe (enter diameter if pipe or tube)	t: 12 mm	t: 24 mm
Base metal P-Number to P-Number	1 to 1	1~15F, 34, 41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.1	
Filler metal or electrode classification(s) (info only)	E 7018-1H4R	
Filler metal F-Number(s)	4	4, 3, 2, 1 with backing
Consumable insert (GTAW or PAW)	-	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	-	-
Deposit thickness for each process		
Process 1 : <u>SMAW</u> 3 layers minimum ☒ yes ☐ No	t: 12 mm	t: 24 mm
Process 2 : <u>-</u> 3 layers minimum ☐ yes ☐ No	-	-
Position(s)	3G / Uphill	Grove: F.V : OD > 24" F: 2 7/8" ≤ OD ≤ 24" Fillet: F.H.V
Vertical progression (uphill or downhill)	-	-
Type of fuel gas (OFW)	-	-
Use of backing gas (GTAW, PAW, GMAW)	-	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	-	-

RESULTS

Visual Examination of Completed Weld (QW-302.4)

Satisfactory

- ☐ 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
		Blank			

Alternative Volumetric examination results (QW-191)

Accepted

RT ☒ or UT ☐ (check one)

Fillet weld - fracture test (QW-181.2) -

Length and percent of defects -

☐ Fillet welds in plate [QW-462.4(b)]

☐ Fillet welds in pipe [QW-462.4(c)]

Macro examination (QW-184) -

Fillet size (in.) -

x -

Concavity/convexity (in.) -

Other tests -

☒ Film or specimens evaluated by Didid Sugandi (RT Level II)

Company PT. TITIAN L.A (Report No. 002/TLA/RT-HEI/XI/2025)

Mechanical tests conducted by -

Laboratory test no. -

Welding supervised by Variesy Husein

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.



Organization PT. Hanazono Engineering Indonesia



Prepared By BENRIDHO

Date: March 02, 2026

Inspected By: Variesy

Date: March 02, 2026

Approved By: [Signature]

Date: March 02, 2026



WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name **SAHRUL** Identification no. **SR-0904** Certificate no. **HEI/WPQR/QC/0904/26/05**

Test Description

Identification of WPS followed **008/HEI/WPS/MIGAS/21** ☒ Test coupon ☐ Production weld Date welded **November 11, 2025**
Specification and / grade or UNS Number of base metal(s) **SA-36** Thickness **12 mm**

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process (es)	SMAW	SMAW
Type (i.e.; manual, semi-automatic) used	Manual	Manual
Backing (with/without)	Without	With/without
☒ Plate ☐ Pipe (enter diameter if pipe or tube)	t: 12 mm	t: 24 mm
Base metal P-Number to P-Number	1 to 1	1~15F, 34, 41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.1	
Filler metal or electrode classification(s) (info only)	E 7018-1H4R	
Filler metal F-Number(s)	4	4, 3, 2, 1 with backing
Consumable insert (GTAW or PAW)	-	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	-	-
Deposit thickness for each process		
Process 1 : SMAW 3 layers minimum ☒ yes ☐ No	t: 12 mm	t: 24 mm
Process 2 : - 3 layers minimum ☐ yes ☐ No	-	-
Position(s)	3G / Uphill	Grove: F.V : OD > 24" F: 2 7/8" ≤ OD ≤ 24" Fillet: F.H.V
Vertical progression (uphill or downhill)	-	-
Type of fuel gas (OFW)	-	-
Use of backing gas (GTAW, PAW, GMAW)	-	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	-	-

RESULTS

Visual Examination of Completed Weld (QW-302.4) **Satisfactory**
☐ 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
		Blank			

Alternative Volumetric examination results (QW-191) **Accepted** RT ☒ or UT ☐ (check one)
 Fillet weld - fracture test (QW-181.2) - Length and percent of defects -
☐ Fillet welds in plate [QW-462.4(b)] ☐ Fillet welds in pipe [QW-462.4(c)]
 Macro examination (QW-184) - Fillet size (in.) - x - Concavity/convexity (in.) -
 Other tests -

☒ Film or specimens evaluated by **Didid Sugandi (RT Level II)** Company **PT. TITIAN L.A (Report No. 002/TLA/RT-HEI/XI/2025)**

Mechanical tests conducted by **-** Laboratory test no. **-**

Welding supervised by **Variesy Husein**

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.



Organization **PT. Hanazono Engineering Indonesia**
 Prepared By **BENRIDHO** Date **March 02, 2026**
 Inspected By **VARIESY** Date **March 02, 2026**
 Approved By **[Signature]** Date **Mar 02 2026**





WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name ROHIMI Identification no. RH-1402 Certificate no. HEI/WPQR/QC/1402/26/06

Test Description

Identification of WPS followed 008/HEI/WPS/MIGAS/21 ☒ Test coupon ☐ Production weld Date welded November 11, 2025
Specification and / grade or UNS Number of base metal(s) SA-36 Thickness 12 mm

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process (es)	SMAW	SMAW
Type (i.e.; manual, semi-automatic) used	Manual	Manual
Backing (with/without)	Without	With/without
☒ Plate ☐ Pipe (enter diameter if pipe or tube)	t: 12 mm	t: 24 mm
Base metal P-Number to P-Number	1 to 1	1~15F, 34, 41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.1	
Filler metal or electrode classification(s) (info only)	E 7018-1H4R	
Filler metal F-Number(s)	4	4, 3, 2, 1 with backing
Consumable insert (GTAW or PAW)	-	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	-	-
Deposit thickness for each process		
Process 1 : <u>SMAW 3 layers minimum</u> ☒ yes ☐ No	t: 12 mm	t: 24 mm
Process 2 : <u>- 3 layers minimum</u> ☐ yes ☐ No	-	-
Position(s)	3G / Uphill	Grove: F.V : OD > 24" F: 2 7/8" ≤ OD ≤ 24" Fillet: F.H.V
Vertical progression (uphill or downhill)	-	-
Type of fuel gas (OFW)	-	-
Use of backing gas (GTAW, PAW, GMAW)	-	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	-	-

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory

- ☐ 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-resistance 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
		Blank			

Alternative Volumetric examination results (QW-191) Accepted RT ☒ or UT ☐ (check one)

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

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

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

Other tests -

Film or specimens evaluated by Didid Sugandi (RT Level II)

Company PT. TITIAN L.A (Report No. 002/TLA/RT-HEI/XI/2025)

Mechanical tests conducted by -

Laboratory test no. -

Welding supervised by Variesy Husein

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.



Organization PT. Hanazono Engineering Indonesia

Prepared By: BENRIDHO

Date: March 02, 2026

Inspected By: VARIESY

Date: March 03, 2026

Approved By: [Signature]

Date: March 03, 2026



WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name MAHMUDI Identification no. MM-0410 Certificate no. HEI/WPQR/QC/0410/26/07
 Identification of WPS followed 006/HEI/WPS/MIGAS/20 ☒ Test coupon ☐ Production weld Date welded December 24, 2025
 Specification and / grade or UNS Number of base metal(s) SA 106 GR B 8,74 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-automatic) used	Manual	Manual	Manual	Manual
Backing (with/without)	Without	With	With/Without	With
☐ Plate ☒ Pipe (enter diameter if pipe or tube)	Pipe NPS 2" (60.3mm)		OD $\geq$ 1"	OD $\geq$ 1"
Base metal P-Number to P-Number	1 to 1	1 to 1	1~15F, 34, 41~49	1~15F, 34, 41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.18	5.1		
Filler metal or electrode classification(s) (info only)	ER 70S-G	E 7018-1H4R		
Filler metal F-Number(s)	6	4	6	4, 3, 2, 1 with backing
Consumable insert (GTAW or PAW)	Without	-	Without	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	Solid	-	Solid	-
Deposit thickness for each process				
Process 1 : GTAW 3 layers minimum ☐ yes ☒ No	2,5 mm		5 mm	
Process 2 : SMAW 3 layers minimum ☒ yes ☐ No	6,24 mm		12,48 mm	
Position(s)	6 G	6 G	in accordance QW-461.9 (All Position)	
Vertical progression (uphill or downhill)	Uphill	Uphill	Uphill	Uphill
Type of fuel gas (OFW)	Argon 99,99%	-	Argon 99,99%	-
Use of backing gas (GTAW, PAW, GMAW)	Without	-	With/Without	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	DCEN	-	DCEN	-

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory
☐ 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-resistance 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
		Blank			

Alternative Volumetric examination results (QW-191) Accepted RT ☒ or UT ☐ (check one)

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

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

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

Other tests -

☒ Film or specimens evaluated by Rahmat Saputra (RT Level II)

Company PT. TITIAN L.A (Report No. 003/TLA/RT-HEI/XI/2025)

Mechanical tests conducted by -

Laboratory test no. -

Welding supervised by Variesy Husein

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.



Organization PT. Hanazono Engineering Indonesia

Prepared By: BENRIDHO Date: March 02, 2026

Inspected By: VARIESY Date: March 02, 2026

Approved By: [Signature] Date: March 02, 2026



WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name YODI Identification no. YD-1138 Certificate no. HEI/WPQR/QC/1138/26/04

Test Description

Identification of WPS followed 008/HEI/WPS/MIGAS/21 ☒ Test coupon ☐ Production weld Date welded November 11, 2025
Specification and / grade or UNS Number of base metal(s) SA-36 Thickness 12 mm

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process (es)	SMAW	SMAW
Type (i.e.; manual, semi-automatic) used	Manual	Manual
Backing (with/without)	Without	With/without
☒ Plate ☐ Pipe (enter diameter if pipe or tube)	t: 12 mm	t: 24 mm
Base metal P-Number to P-Number	1 to 1	1~15F, 34, 41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.1	
Filler metal or electrode classification(s) (info only)	E 7018-1H4R	
Filler metal F-Number(s)	4	4, 3, 2, 1 with backing
Consumable insert (GTAW or PAW)	-	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	-	-
Deposit thickness for each process		
Process 1 : <u>SMAW</u> 3 layers minimum ☒ yes ☐ No	t: 12 mm	t: 24 mm
Process 2 : <u>-</u> 3 layers minimum ☐ yes ☐ No	-	-
Position(s)	3G / Uphill	Grove: F.V : OD > 24" F: 2 7/8" ≤ OD ≤ 24" Fillet: F.H.V
Vertical progression (uphill or downhill)	-	-
Type of fuel gas (OFW)	-	-
Use of backing gas (GTAW, PAW, GMAW)	-	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	-	-

RESULTS

Visual Examination of Completed Weld (QW-302.4) Satisfactory
☐ 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
		Blank			

Alternative Volumetric examination results (QW-191) Accepted RT ☒ or UT ☐ (check one)
 Fillet weld - fracture test (QW-181.2) - Length and percent of defects -
☐ Fillet welds in plate [QW-462.4(b)] ☐ Fillet welds in pipe [QW-462.4(c)]
 Macro examination (QW-184) - Fillet size (in.) - x - Concavity/convexity (in.) -
 Other tests -

Film or specimens evaluated by Didid Sugandi (RT Level II) Company PT. TITIAN L.A (Report No. 002/TLA/RT-HEI/XI/2025)
 Mechanical tests conducted by - Laboratory test no. -

Welding supervised by Variesy Husein

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.

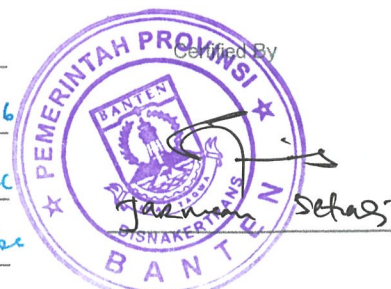


Organization PT. Hanazono Engineering Indonesia

Prepared By: BENRIDHO Date: March 01, 2026

Inspected By: VARIESY Date: March 02, 2026

Approved By: [Signature] Date: Mar 02, 2026



WELDER PERFORMANCE QUALIFICATIONS RECORD

Welder's name SUPARLAN Identification no. SP-2506 Certificate no. HEI/WPQR/QC/2506/26/08

Test Description

Identification of WPS followed 008/HEI/WPS/MIGAS/21 ☒ Test coupon ☐ Production weld Date welded November 11, 2025
Specification and / grade or UNS Number of base metal(s) SA-36 Thickness 12 mm

Testing Conditions and Qualification Limits

Welding Variables (QW-350)	Actual Values	Range Qualified
Welding process (es)	SMAW	SMAW
Type (i.e.; manual, semi-automatic) used	Manual	Manual
Backing (with/without)	Without	With/without
☒ Plate ☐ Pipe (enter diameter if pipe or tube)	t: 12 mm	t: 24 mm
Base metal P-Number to P-Number	1 to 1	1~15F, 34, 41~49
Filler metal or electrode specification(s) (SFA) (info only)	5.1	
Filler metal or electrode classification(s) (info only)	E 7018-1H4R	
Filler metal F-Number(s)	4	4, 3, 2, 1 with backing
Consumable insert (GTAW or PAW)	-	-
Filler Metal Product Form (QW-404.23) (GTAW or PAW)	-	-
Deposit thickness for each process		
Process 1 : <u>SMAW</u> 3 layers minimum ☒ yes ☐ No	t: 12 mm	t: 24 mm
Process 2 : <u>-</u> 3 layers minimum ☐ yes ☐ No	-	-
Position(s)	3G / Uphill	Grove: F.V : OD > 24" F: 2 7/8" ≤ OD ≤ 24" Fillet: F.H.V
Vertical progression (uphill or downhill)	-	-
Type of fuel gas (OFW)	-	-
Use of backing gas (GTAW, PAW, GMAW)	-	-
Transfer mode (spray, globular, or pulse to short circuit-GMAW)	-	-
GTAW current type and polarity (AC, DCEP, DCEN)	-	-

RESULTS

Visual Examination of Completed Weld (QW-302.4)

Satisfactory

- ☐ 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-resistance 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
		Blank			

Alternative Volumetric examination results (QW-191)

Accepted

RT ☒ or UT ☐ (check one)

Fillet weld - fracture test (QW-181.2) -

Length and percent of defects -

☐ Fillet welds in plate [QW-462.4(b)]

☐ Fillet welds in pipe [QW-462.4(c)]

Macro examination (QW-184) -

Fillet size (in.) -

x -

Concavity/convexity (in.) -

Other tests -

☒ Film or specimens evaluated by Eko Sujadmono (RT Level II)

Company PT. TITIAN L.A (Report No. 004/TLA/RT-HEI/XI/2025)

Mechanical tests conducted by -

Laboratory test no. -

Welding supervised by Variesy Husein

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.



Organization PT. Hanazono Engineering Indonesia

Prepared By: BERKIDHO

Date: March 02, 2016

Inspected By: VARIESY

Date: March 02, 2016

Approved By: [Signature]

Date: March 02, 2016

