

## **BONGA NORTH EPC 1**

JOB CARD NUMBER: A02.L1-TI-0012

WORKPACK NUMBER: A02

JOBCARD INFORMATION							
PREPARED BY: Vitor Pereira DATE OF: 20/06/202		25	REV.: 48		STATUS: checked		
APPROVED BY: None DATE OF:							
SUBSYSTEM: 03-03A_BN		DISCIPLINE: TIE-IN V		WORKING CODE: TDA			
SYSTEM: 03		LOCATION: A02		SEQUENTIAL NUMBER:			
TAG: TP-01		TOTAL MAN-HOURS: 83.00		MATERIAL:			
JOB CARD DESCRIPTION:							
COMMENTS: None							
CTIVITY ID P6: CST-EPC1-6450 HOT-WORK REQUIRED: NO TOTAL WEI		TOTAL WEIGHT (kg): 0		TOTAL DURATION (hs): 10.00			

## DETAILED DESCRIPTION OF WORK TASK NUMBER TASK DESCRIPTION COMPLETED? % Min 12 Perform leak test 40,96% 12 Point week test 50,01%

N-HOUR - DESCRIPTION						
ITEM	TASK NUMBER		DIRECTLABOR			QTY
1	12	Foreman			3,00	1,00
2	12	Welder			5,00	2,00
3	12	Firewatch			4,00	1,00
4	12	Mechanical assembler			5,00	1,00
5	12	Pipe fitter	Pipe fitter			4,00
6	12	Rigger_M			4,00	1,00
7	13	Foreman			5,00	1,00
8	13	Welder			4,00	2,00
9	13	Firewatch			5,00	1,00
10	13	Mechanical assembler			5,00	1,00
11	13	Pipe fitter	Pipe fitter			4,00
12	13	Rigger_M			5,00	1,00
13	13	Scaffolder 5,00 1,			1,00	
TASK NUMBER MAN-H DURATION (hs)						
	1	2	34,00	5,00		
	1	3	49,00	5,00		

ERECTIO	RECTION MATERIALS						
ITEM	DESCRIPTION	PMTO CODE	QTY	COMMENTS			
1	PIPE, CARBON STEEL, DIMENSIONS ACCORDING ASME B36.10, MATERIAL ASTM A333 GR.6 - SEAMLESS, BEVELLED ENDS ASME B16.25, ACCORDING NACE MR0175.	PAPAA.100.00895	1,30	TAM 2026			
2	FLANGE, WN, RF, CL600, ASME B16.5 ASTM A105, NACE MR-01-75 SCH 100	PAAAA.160.00086E	2,00	TAM 2026			
3	FLANGE BLIND, RF, CL600 ASME B16.5 ASTM A 105 NACE MR-01-75 SCH 100	PAAAA.160.00086E	1,00	TAM 2026			
4	FLANGE, WN, RF, CL600, ASME B16.5 ASTM A105, NACE MR-01-75 SCH 100	PAAAA.140.00086	2,00	TAM 2026			
5	FLANGE BLIND, RAISED FACE, CLASS 600 ASME B16.5, CARBON STEEL ASTM A105, NACE MR-01-75/ISO15156 (1) Controlled Hardness per NACE MR-0175; SCH 100.	N/A	2,00	TAM 2026			
6	REDUCING TEE, SMLS, ASTM A420 GR WPL6, BUTT WELD, ASME B16.9, NACE MR-01-75/ISO15156	PAFTF.160.05003	2,00	TAM 2026			
7	300 STUDBOLT WITH NUTS, ASTM A193-B7/A194-2H WITH HOT-DIP GALVANISED	300_BOLT_OPT21'1	20,00	TAM 2026			
8	STUD BOLT WITH 2 HEAVY HEXAGONAL NUTS, BOLT MATERIAL ASTM A193 GrB7, NUTS MATERIAL HEX HEAVY ASTM A194 GrZH, BOLT THREAD TYPE, -1 - ASME B1.1, UNC 24 - 3 ind/in; NUT THREAD TYPE, -1 - ASME B1.1, UNC 24 - 3 ind/in; NUT THREAD TYPE -1 - ASME B1.1, UNC 25; 1? -3 - ASME B1.1, UNC 26 - 3 ind/in; COLT INIG ZIMC PLATED PER ASTM B633 (ASME B16.5), SC2 (0.0003 PLATING THICHNESS), TYPE II (WITH A SUPPLEMENTARY YELLOW CHROMATE TREATMENT).	N/A	40,00	TAM 2026			
9	STUD BOLT WITH 2 HEAVY HEXAGONAL NUTS, BOLT MATERIAL ASTM A193 GrB7, NUTS MATERIAL HEX HEAVY ASTM A194 Gr2H. BOLT THREAD TYPE, -1 - ASME B1.1, UN 2A - 3 Indin; NUT THREAD TYPE, -1 - ASME B1.1, UN 2A - 3 Indin; NUT THREAD TYPE -1 - ASME B1.1, UN 2B, -2 Indin; CATTED PER ASTM B633 (ASME B1.6, SC 2 0.0003 PLATING THICHNESS), TYPE II (WITH A SUPPLEMENTARY YELLOW CHROMATE TREATMENT).	N/A	20,00	TAM 2026			
10	GASKET, SPIRAL WOUND NON-ASBESTOS FLEXITE SUPER FILLER WITH STAINLESS STEEL AISI 304 WINDINGS, FLEXITALLIC STYLE CG OR SDDS APPROVED EQ ASME B16.20, RF CLASS 600, THK 3.2 mm, ASME B16.20 FOR FLANGE ASME B16.5. THE MATERIAL SHALL BE THE REQUIREMENTS OF THE NACE MR-01-75 / ISO 15156 STANDARD.	PZGAY.160.00002	2,00	TAM 2026			
11	KaMOS GASKET RF CL. 600.	K6CS-CL600RF.16	2,00	TAM 2026			
12	PADDLE BLANK AND SPACER; ASTM A516 GR. 70; CARBON STEEL; ASME B16.48 STANDARD; CLASS 600; BETWEEN FLANGES, ASME B16.58, RAISED FACE, FINISHING SPIRAL SERRATED, MINI 125 TO MAX 250 AARH; THE MATERIAL SHALL BE COMPILIANT WITH THE NACE MIR-01-75 / ISO 15150 STANDARD REQUIRE MENTS.	N/A	1,00	TAM 2026			
13	Truniion Pipe supports and base plate Plate 15mm Thk. S355 (0.5m x 0.5m) Pipe 8 Sch.80 ASTM A 106 GR B SMLS (1.5mtr length)	N/A	1,00	TAM 2026			

## EQUIPMENT & SPECIAL TOOLING

ITEM	SPECIAL TOOLING	QTY
1	10 LOCKING PLIERS	1,00
2	8 INSULATED UNIVERSAL PLIERS	1,00
3	12 ADJUSTABLE HACKSAW	1,00
4	WOODEN FILE HANDLE	1,00
5	ALLEN WRENCH 1/16, 3/32, 1/8, 3/16, 1/4	1,00
6	SCREWDRIVER 3/16 x 4, 1/4 x 6, 1/4 x 8, 5/16 x 10	1,00
7	OPEN-END WRENCH 1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 1/4 x 25/32, 1 x 5/16	1,00
8	12 ADJUSTABLE WRENCH	1,00
9	10 HALF-MOON COMPASS	1,00
10	300 mm STAINLESS STEEL RULER	1,00
11	STEEL BRUSH	1,00
12	CARPENTER'S SQUARE	1,00

ITEM	SPECIAL TOOLING	QTY
1	12 FLAT, ROUND, HALF-ROUND, AND SQUARE FILES	1,00
2	HYDRAULIC JACK, 5 TON	1,00
3	BALL-PEEN HAMMER 500 g, 1000 g	1,00
4	IRON LEVEL	1,00
5	300 g CENTER PLUMB	1,00
6	PUNCH	1,00
7	SCRIBER	1,00
8	MANUAL HOIST, 1 TON	1,00
9	CHISEL	1,00
10	TIRFOR, 1.6 TON	1,00
11	BOMBA DE TESTE HIDROST.	1,00
12	LIXADEIRA	1,00
13	TALHA MANUAL, 1 TON	1,00

JobCard N°: A02.L1-TI-0012	QCINSPECTOR	SNEPC <sub>0</sub>	MABU
	SIGNATURE	SIGNATURE	SIGNATURE
	NAME	NAME	NAME
	DATE	DATE	DATE



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SAFETY - CONDITIONS & RECOMMENDATIONS							
PPE E GENERAL	COLD WORK PERMIT	FIRE EXTINGUISHER	□ F	FALL PROTECTION		MARINE SAFETY	
BLIND ISOLATION SYSTEM	HOT WORK PERMIT	FIRE WATCH		SPARK PROTECTION		SEVERE WEATHER PREP	
JOB SAFETY ANALYSIS	BARRICADES	DIVER SAFETY	□ s	SIMULTANEOUSLY DRILL		ENVIRONMENTAL PROTECTION	
GAS LEAK PROTECTION	LIFTING PLAN			VEATHER PROTECTION REQUIRED		PPE SPECIAL	
OTHER/COMMENTS:					•		
OLIVIEW CONTROL AND MODERATION							
QUALITY CONTROL AND INSPECTION							
CQ FORMS:							
ENGINEERING DOCUMENTS							
Discipline	Document		Tag	Rev.		Status	
TIE-IN	BNO-NET CO-300-PX-2365-21014-001		TP-01	02A		None	
TIE-IN	BNO-NETCO-300-PX-2365-21024-001		TP-01	02A		None	
COMPANY COMMENTS							

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	SIGNATURE	SIGNATURE	SIGNATURE
	NAME	NAME	NAME
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