



BONGA NORTH EPC 1

JOB CARD NUMBER: A02.L1-TI-0012  
WORKPACK NUMBER: A02

JOB CARD INFORMATION

|                            |                        |                            |                 |
|----------------------------|------------------------|----------------------------|-----------------|
| PREPARED BY: Vitor Pereira | DATE OF: 20/06/2025    | REV.: 3                    | STATUS: checked |
| APPROVED BY: None          | DATE OF:               |                            |                 |
| SUBSYSTEM: 03-03A_BN       | DISCIPLINE: TIE-IN     | WORKING CODE: TDA          |                 |
| SYSTEM: 03                 | LOCATION: A02          | SEQUENTIAL NUMBER: 0012    |                 |
| TAG: TP-01                 | TOTAL MAN-HOURS: 83.00 | TOTAL DURATION (hs): 10.00 |                 |

JOB CARD DESCRIPTION: TIE-IN - DISASSEMBLY AND ASSEMBLY OF TP-01

COMMENTS: None

|                               |                       |                      |          |
|-------------------------------|-----------------------|----------------------|----------|
| ACTIVITY ID P6: CST-EPC1-6450 | HOT-WORK REQUIRED: NO | TOTAL WEIGHT (kg): 0 | UNIT: kg |
|-------------------------------|-----------------------|----------------------|----------|

DETAILED DESCRIPTION OF WORK

| TASK NUMBER | TASK DESCRIPTION  | COMPLETED? | % M/h  |
|-------------|-------------------|------------|--------|
| 12          | Perform leak test |            | 40,96% |
| 13          | Paint touch up    |            | 59,04% |

| TASK NUMBER | DURATION (hs) | MAN-H | ITEM | TASK NUMBER | SPECIALIST           | MAN-H | QTY  |
|-------------|---------------|-------|------|-------------|----------------------|-------|------|
| 12          | 5,00          | 34,00 | 1    | 12          | Foreman              | 3,00  | 1,00 |
| 13          | 5,00          | 49,00 | 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          | 2,00  | 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          | 4,00  | 4,00 |
|             |               |       | 12   | 13          | Rigger_M             | 5,00  | 1,00 |
|             |               |       | 13   | 13          | Scaffolder           | 5,00  | 1,00 |

ERECTION 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_OPT211  | 20,00 | TAM 2026 |
| 8    | STUD BOLT WITH 2 HEAVY HEXAGONAL NUTS, BOLT MATERIAL ASTM A193 Gr B7, NUTS MATERIAL HEX HEAVY ASTM A194 GR 2H; BOLT THREAD TYPE, - 1 - ASME B1.1, UNC 2A; 1 7 - 3 - ASME B1.1, UN 2A - 8 thd/in; NUT THREAD TYPE - 1 - ASME B1.1, UNC 2B; 1 7 - 3 - ASME B1.1, UN 2B - 8 thd/in; COATING ZINC PLATED PER ASTM B633 (ASME B16.5), SC2 (0.0003 PLATING THICKNESS), 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 Gr B7, NUTS MATERIAL HEX HEAVY ASTM A194 GR 2H; BOLT THREAD TYPE, - 1 - ASME B1.1, UNC 2A; 1 7 - 3 - ASME B1.1, UN 2A - 8 thd/in; NUT THREAD TYPE - 1 - ASME B1.1, UNC 2B; 1 7 - 3 - ASME B1.1, UN 2B - 8 thd/in; COATING ZINC PLATED PER ASTM B633 (ASME B16.5), SC2 (0.0003 PLATING THICKNESS), 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 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 B16.5, RAISED FACE, FINISHING SPIRAL SERRATED, MINI 125 TO MAX 250 AARH; THE MATERIAL SHALL BE COMPLIANT WITH THE NACE MR-01-75 / ISO 15156 STANDARD REQUIREMENTS.   | N/A              | 1,00  | TAM 2026 |
| 13   | Trunion 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 |

| 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   | CARPENTERS 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 |

SAFETY - CONDITIONS & RECOMMENDATIONS

|   |   |   |  |   |
|---|---|---|--|---|
| <input type="checkbox"/> PPE E GENERAL          | <input type="checkbox"/> COLD WORK PERMIT | <input type="checkbox"/> FIRE EXTINGUISHER  | <input type="checkbox"/> FALL PROTECTION             | <input type="checkbox"/> MARINE SAFETY            |
| <input type="checkbox"/> BLIND ISOLATION SYSTEM | <input type="checkbox"/> HOT WORK PERMIT  | <input type="checkbox"/> FIRE WATCH         | <input type="checkbox"/> SPARK PROTECTION            | <input type="checkbox"/> SEVERE WEATHER PREP      |
| <input type="checkbox"/> JOB SAFETY ANALYSIS    | <input type="checkbox"/> BARRICADES       | <input type="checkbox"/> DIVER SAFETY       | <input type="checkbox"/> SIMULTANEOUSLY DRILL        | <input type="checkbox"/> ENVIRONMENTAL PROTECTION |
| <input type="checkbox"/> GAS LEAK PROTECTION    | <input type="checkbox"/> LIFTING PLAN     | <input type="checkbox"/> HAZARDOUS MATERIAL | <input type="checkbox"/> WEATHER PROTECTION REQUIRED | <input type="checkbox"/> PPE SPECIAL              |

OTHER/COMMENTS:

|                            |              |           |           |
|----------------------------|--------------|-----------|-----------|
| JobCard N°: A02.L1-TI-0012 | QC INSPECTOR | SNEPCo    | MABU      |
|                            | SIGNATURE    | SIGNATURE | SIGNATURE |
|                            | NAME         | NAME      | NAME      |
|                            | DATE         | DATE      | DATE      |



BONGA NORTH EPC 1

JOB CARD NUMBER: **A02.L1-TI-0012**  
WORKPACK NUMBER: A02

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-NET CO-300-PX-2365-21024-001 | TP-01 | 02A   | None   |

COMPANY COMMENTS

JobCard N°: A02.L1-TI-0012



QC INSPECTOR

SNEPCo

MABU

SIGNATURE

SIGNATURE

SIGNATURE

NAME

NAME

NAME

DATE

DATE

DATE