

JobCard N°: A02.L1-TI-0012

## BONGA NORTH EPC 1

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

| JOBCARD INFORMATION PREPARED BY: Vitor Pereira |   |   |  |  |   |  |                    |                             |  |         |  |               |               |        |       |
|--|---|---|--|--|---|--|--------------------|-----------------------------|--|---------|--|---------------|---------------|--------|-------|
|  |   |   |  |  |   |  |                    | REV.: 1 STATUS: checked     |  |         |  |               |               |        |       |
| APPROVED                                       | BY: None  |   | DATE OF:   |  |   |  |                    |                             |  |         |  |               |               |        |       |
| SUBSYSTEM: 03-03A_BN                           |   |   |  |  | LINE: TIE-IN                            | 1  |                    | WORKING CODE: TDA           |  |         |  |               |               |        |       |
| SYSTEM: 03 TAG: TP-01                          |   |   |  |  | ION: A02<br>MAN-HOURS                   | S · 83 NN  |                    |                             | SEQUENTIAL NUMBER: 0012 TOTAL DURATION (hs): 10.00                       |         |  |               |               |        |       |
|  | DE S CRIPTIO  | N. TIE IN DICASSEMBLY   | AND ASSEMBLY OF TP-01  | 10176  |   | 0.00.00  |                    |                             |  |         | TOTAL BOTATTION (IIB): 10:00               |               |               |        |       |
| COMMENTS                                       |   | N: I IE-IN - DISASSEMBLY  | AND ASSEMBLY OF IP-01  |  |   |  |                    |                             |  |         |  |               |               |        |       |
| ACTIVITY IE                                    |   | °C1-6450  |  | н  | OT-WORK R                               | EQUIRED: NO                                      |                    |                             |  | 1       | TOTAL WEIGHT (kg): 0                       |               | UNIT          | : kg   |       |
| DETAILED D                                     | ESCRIPTION  | I OF WORK   |  |  |   |  |                    |                             |  | •       |  |               |               |        |       |
| ORE  |   |   |  |  |   | TASK DESCRIPTI                                   | ON                 |                             |  |         |  | COMPL         | ETED?         |        | % M/h |
| 1.   | 2   | Perform leak test   |  |  |   |  |                    |                             |  |         |  |               |               | 4      | 0,96% |
| 1  | 3   | Paint touch up  |  |  |   |  |                    |                             |  |         |  |               |               | 5      | 9,04% |
| TASK NUM                                       | MBER  | DURATION (hs  | MAN-   | ITEM   | TASK NI                                 | UMBER  |                    |                             | SPECI  | ALIST   |  | MAN-          | Н             |        | QTY   |
| 12   |   | 5,00  | 34,00  | 1  | 12                                      |  |                    |                             |  |         |  | 3,00          |               |        | 1,00  |
| 13   |   | 5,00  | 49,00  | 3  | 12                                      |  | h                  |                             |  |         |  | 5,00          |               |        | 1.00  |
|  |   |   |  | 4  | 12                                      |  |                    | embler                      |  |         |  | 5,00          |               |        | 1,00  |
|  |   |   |  | 5  | 12                                      | 2 Pipe fitte                                     | r                  |                             |  |         |  | 2,00          | 1             |        | 4,00  |
|  |   |   |  | 6  | 12                                      |  | Л                  |                             |  |         |  | 4,00          |               |        | 1,00  |
|  |   |   |  | 7  | 13                                      |  |                    |                             |  |         |  |               |               | 1,00   |       |
|  |   |   |  | 8  | 13                                      |  | h                  |                             |  |         |  | 4,00<br>5,00  |               |        | 1,00  |
|  |   |   |  | 10   | 13                                      | -  |                    | embler                      |  |         |  | 5,00          |               |        | 1,00  |
|  |   |   |  | 11   | 13                                      | 3 Pipe fitte                                     | r                  |                             |  |         |  | 4,00          | 1             |        | 4,00  |
|  |   |   |  | 12   | 13                                      |  | Л                  |                             |  |         |  | 5,00          | 1             |        | 1,00  |
|  |   |   |  | 13   | 13                                      | 3 Scaffold                                       | er                 |                             |  |         |  | 5,00          | )             |        | 1,00  |
| ERECTION N                                     | MATERIALS   |   |  |  |   |  |                    |                             |  |         |  |               |               |        |       |
| ITEM   |   |   | DESCRIPTIO   | N  |   |  |                    | F                           | MTO CODE   |         | QTY  |               | COMMENT       | 8      |       |
| 1  | PIPE, CARE<br>BEVELLED  | BON STEEL, DIMENSIONS<br>ENDS ASME B16.25, AC                                 | S ACCORDING ASME B36.10<br>CORDING NACE MR0175.  | , MATERIAL AST                                       | M A333 GR.6                             | -SEAMLESS,                                       |                    | PAF                         | PAA.100.00895  |         | 1,30                                       | TAM 2026      |               |        |       |
| 2  | FLANGE,W  | N,RF,CL600,ASME B16.5   | ASTM A105, NACE MR-01-75   | SCH 100  |   |  |                    | PAA                         | AA.160.00086E  |         | 2,00                                       | TAM 2026      |               |        |       |
| 3  | FLANGE BL   | IND, RF, CL600 ASME B1  | 6.5 ASTM A 105 NACE MR-0   | 1-75 SCH 100   |   |  |                    | PAA                         | AA.160.00086E  |         | 1,00                                       | TAM 2026      |               |        |       |
| 4  | FLANGE, WN, RF, CL600, ASME B16.5 AST M A105, NACE MR-01-75 SCH 100   |   |  |  |   |  | PAA                | N/A                         |  | 2,00    | TAM 2026<br>TAM 2026                       |               |               |        |       |
| 5  | 5 FLANGE BLIND, RAISED FACE, CLASS 600 ASME B16.5, CARBON STEEL ASTM A105, NACE MR-01-75/ISO15156 (1)<br>Controlled Hardness per NACE MR-0175; SCH 100. |   |  |  |   |  | (1)                | N/A 2,00 TAM 2026           |  |         |  |               |               |        |       |
| 6  |   |   | GR WPL6, BUTT WELD, AS   |  |   | 015156   |                    |                             | FTF.160.05003  |         | 2,00                                       | TAM 2026      |               |        |       |
| 7 8  |   |   | A193-B7/A194-2H WITH HOT<br>ONAL NUTS, BOLT MATERI   |  |   | MATERIAL HEV HE                                  | WV                 | 300_                        | BOLT_OPT21'1<br>N/A  |         | 20,00                                      | TAM 2026      |               |        |       |
| 0  | ASTM A194<br>TYPE - 1 - A<br>B16.5), SC2<br>TREATMEN  | FGr 2H; BOLT THREAD T<br>ASME B1.1, UNC 2B; 1 ? -<br>2 (0.0003 PLATING THICH  | ONAL NOTS, BOLT WATER<br>YPE, -1 - ASME B1.1, UNC 2<br>3 - ASME B1.1, UN 2B - 8 tho<br>NESS), TYPE II (WITH A SU   | A; 1 ? - 3 - ASME<br>/in; COATING ZIN<br>PPLEMENTARY | 31.1, UN 2A<br>C PLATED P<br>FELLOW CHE | -8 thd/in; NUT THE<br>PER ASTM B633 (A<br>ROMATE | EAD<br>SME         |                             | N/A  |         | 40,00                                      | 1 AM 2026     |               |        |       |
| 9  | ASTM A194<br>TYPE - 1 - A<br>B16.5), SC2  | I Gr 2H; BOLT THREAD T<br>ASME B1.1, UNC 2B; 1 ? -<br>2 (0.0003 PLATING THICH | ONAL NUTS, BOLT MATERI<br>YPE, - 1 - ASME B1.1, UNC 2<br>3 - ASME B1.1, UN 2B - 8 tho<br>NESS), TYPE II (WITH A SU | A; 1 ? - 3 - ASME<br>/in: COATING ZIN                | 31.1, UN 2A -<br>C PLATED P             | -8 thd/in; NUT THE<br>PER ASTM B633 (A           | AVY<br>READ<br>SME |                             | N/A  |         | 20,00                                      | TAM 2026      |               |        |       |
| 10   | FLEXITALL<br>FLANGE AS  | PIRAL WOUND NON-ASE<br>IC STYLE CG OR SDDS A                                  | ESTOS FLEXITE SUPER FI<br>APPROVED EQ ASME B16.2I<br>AL SHALL BE THE REQUIRE                                       | ), RF CLASS 600,                                     | THK 3.2 mm                              | , ASME B16.20 FOR                                | NGS,               | PZG                         | GAY.160.00002  |         | 2,00                                       | T A M 2026    |               |        |       |
| 11   | STANDARE<br>KaMOS GAS   | SKET RF CL. 600.  |  |  |   |  |                    | K6C                         | S-CL600RF.16   |         | 2,00                                       | TAM 2026      |               |        |       |
| 12   | BETWEEN   | FLANGES, ASME B16.5,  | M A516 GR. 70; CARBON ST<br>RAISED FACE, FINISHING S<br>VITH THE NACE MR-01-75 / I                                 | PIRAL SERRATE  | D, MINI 125 T                           | O MAX 250 AARH;                                  | THE                |                             | N/A  |         | 1,00                                       | TAM 2026      |               |        |       |
| 13   | Truniion Pip<br>(1.5mtr leng  |   | Plate 15mm Thk. \$355 (0.5)  | n x 0.5m) Pipe 8 S                                   | ch.80 ASTM                              | A 106 GR B SMLS                                  |                    |                             | N/A  |         | 1,00                                       | TAM 2026      |               |        |       |
| EQUIPMENT                                      |   |   |  |  |   |  |                    | EQUIPMEN                    | IT & SPECIAL TO  | OLING   |  |               |               |        |       |
| ITEM   |   |   | L TOOLING  | DII  | RECTLABOR                               | QTY  |                    | ITEM                        |  |         | SPECIAL TOOLING                            |               | DIRECTLABO    | ₹ .    | QTY   |
| 1  | 300 g CENT  | ER PLUMB  |  |  | QTY<br>1,00                             | 1,00   |                    | 1                           | WOODEN FILE  | HANDIF  |  |               | QTY<br>1,00   |        | 1,00  |
| 2  | PUNCH   |   |  |  | 1,00                                    | 1,00   | 1                  | 2                           | +  |         | 3/32, 1/8, 3/16, 1/4                       |               | 1,00          | $\top$ | 1,00  |
| 3  | SCRIBER   |   |  |  | 1,00                                    | 1,00   |                    | 3                           |  |         | 4, 1/4 x 6, 1/4 x 8, 5/16 x 10             |               | 1,00          |        | 1,00  |
| 4  | MANUAL HO   | DIST, 1 TON   |  |  | 1,00                                    | 1,00   | _                  | 4                           |  |         | 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          | +      | 1,00  |
| 5  | TIRFOR, 1.6 TON   |   |  | +  | 1,00 1,00<br>1,00 1,00                  |  | $\dashv$           | 5<br>6                      | 12 ADJUSTABLE WRENCH 10 HALF-MOON COMPASS                                |         |  |               | 1,00          | +      | 1,00  |
| 7  | BOMBA DE TESTE HIDROST.   |   |  |  | 1,00 1,00<br>4,00 1,00                  |  |                    | 7                           |  |         |  |               | 1,00          | $\top$ | 1,00  |
| 8  | LIXADEIRA   |   |  |  | 4,00                                    |  |                    | 8 STEEL BRUSH               |  | +       |  |               | 1,00          |        | 1,00  |
| 9  | TALHA MANUAL, 1 TON   |   |  |  | 4,00 1,00                               |  | _                  | 9                           | CARPENTER'S SQUARE   |         |  |               | 1,00          | ot     | 1,00  |
| -  | 10 10 LOCKING PLIERS  |   |  |  | 1,00 1,00                               |  | _                  |                             | 10 12 FLAT, ROUND, HALF-ROUND, AND SQUARE FILES 11 HYDRAULIC JACK, 5 TON |         |  |               | 1,00          | -      | 1,00  |
| 11   |   | ABLE HACKSAW  |  | +  | 1,00                                    | 1,00   | $\dashv$           | 11                          | BALL-PEEN HA   |         |  |               | 1,00          | +      | 1,00  |
| .2   | .27.53031   |   |  | 1  | .,                                      | 1,00   |                    | 13                          | IRON LEVEL   |         | g, .000 g                                  |               | 1,00          | +      | 1,00  |
| SAFETY -                                       | CONDITIONS  | & RECOMMENDATIONS   |  |  |   |  |                    | -                           | •  |         |  |               | •             | _      |       |
| PPE E C  |   |   | COLD WORK PERMIT   |  | □ F                                     | IRE EXTINGUISHE                                  | R                  |                             | ☐ FALI   | L PROTE | CTION                                      | MARINE S      | AFETY         |        |       |
|  | SOLATION S  | YSTEM   | HOT WORK PERMIT  |  |   | TRE WATCH  |                    |                             |  | RK PROT |  |               | WEATHER PREP  |        |       |
|  |   |   | BARRICADES   | ADES DIVER SAFE                                      |   |  |                    | SIMULTANEOUSLY DRILL        |  |         | OUSLY DRILL                                | ENVIRON       | MENTAL PROTEC | TION   |       |
|  |   |   | LIFTING PLAN   | LAN HAZARDOUS MATERIAL                               |   |  | RIAL               | WEATHER PROTECTION REQUIRED |  |         | PPE SPE                                    | PPE SPECIAL   |               |        |       |
| OTHER/CO                                       | MMENTS:   |   |  |  |   |  |                    |                             |  |         |  |               |               |        |       |
|  |   |   |  |  |   |  | _                  |                             |  |         |  |               |               | _      |       |

QCINSPECTOR

SIGNATURE

NAME

DATE

SNEPC0

SIGNATURE

NAME

DATE

MABU

SIGNATURE

NAME

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-NETCO-300-PX-2365-21014-001 | TP-01 | 02A  | None   |  |  |  |  |
| TIE-IN                | BNO-NETCO-300-PX-2365-21024-001 | TP-01 | 02A  | None   |  |  |  |  |
| COMPANY COMMENTS      |                                 |       |      |        |  |  |  |  |

| JobCard N°: A02.L1-TI-0012 | QC INSPECTOR | SNEPC0    | MABU      |
|----------------------------|--------------|-----------|-----------|
|                            | SIGNATURE    | SIGNATURE | SIGNATURE |
|                            | NAME         | NAME      | NAME      |
|                            | DATE         | DATE      | DATE      |