

|   |   |   |   |                  |
|---|---|---|---|------------------|
| Welder's name<br>ID Number<br>Date of birth<br>Stamp number<br>Company name<br>Division | R.RABIE<br>7009155186087<br>1970/09/15<br>RR<br>ATLANTIC STEAM<br>WELDING | Test date<br>WPQ record number<br>Standard test number<br>WPS record number<br>Qualification code | 2017/11/13<br>ATLANTIC -2017-2<br>-<br>ATST001SS<br>ASME Section IX | Rev. -<br>Rev. 0 |
|---|---|---|---|------------------|

| BASE METALS |              |                              |       |         |       |      |                   |
|-------------|--------------|------------------------------|-------|---------|-------|------|-------------------|
|             | Product form | Spec. (Type or Grade), UNS # | P no. | Grp-no. | Size  | Sch. | Thick. mm Dia. mm |
| Welded to:  | Pipe         | SA-358 (316), UNS S31600     | 8     | 1       | 38.10 | 40   | 3.68 48.26        |
| Joint type  | Groove       | SA-358 (316), UNS S31600     | 8     | 1       | 38.10 | 40   | 3.68 48.26        |

| VARIABLES          |  | Actual values |  |  | RANGE QUALIFIED                  |  |  |
|--------------------|--|---------------|--|--|----------------------------------|--|--|
| Type of weld joint |  | Pipe - Groove |  |  | Groove and Fillet welds          |  |  |
| Base metal         |  | P8 to P8      |  |  | P-no. 1 thru 15F, 34, 41 thru 49 |  |  |

| BASE METAL THICKNESS |    |        |        |         |          |          |         |
|----------------------|----|--------|--------|---------|----------|----------|---------|
|                      |    | Groove | Fillet | Overlay | Groove   | Fillet   | Overlay |
| Plate thickness      | mm | -      | -      | -       | no limit | no limit | -       |
| Pipe/tube thickness  | mm | 3.68   | -      | -       | no limit | no limit | -       |
| Pipe diameter        | mm | 48.26  | -      | -       | 25.4 min | no limit | -       |

| VARIABLES                              |    | Actual values   |  |  | RANGE QUALIFIED |  |  |
|--|----|-----------------|--|--|-----------------|--|--|
| Welding process                        |    | GTAW            |  |  | GTAW            |  |  |
| Type                                   |    | Manual          |  |  | Manual          |  |  |
| Backing                                |    | No backing used |  |  | With/without    |  |  |
| Filler metal specification             |    | 5.9             |  |  | 5.xx            |  |  |
| Filler metal classification            |    | ER316L          |  |  | Any             |  |  |
| Filler metal F-number                  |    | 6               |  |  | 6               |  |  |
| Filler metal variety (QW-404.23)       |    | Bare            |  |  | Bare            |  |  |
| Consumable insert                      |    | None            |  |  | Without         |  |  |
| Number of layers deposited             |    | 2               |  |  |                 |  |  |
| Weld deposit thickness                 | mm | 3.68            |  |  | 7.36 max        |  |  |
| Weld position (Actual position tested) |    | 6G              |  |  |                 |  |  |
| Groove - Plate & Pipe > 610mm          |    |                 |  |  | All             |  |  |
| Groove - Pipe 73mm to 610mm            |    |                 |  |  | All             |  |  |
| Groove - Pipe < 73mm                   |    |                 |  |  | All             |  |  |
| Fillet - Plate & Pipe > 610mm          |    |                 |  |  | All             |  |  |
| Fillet - Pipe 73mm to 610mm            |    |                 |  |  | All             |  |  |
| Fillet - Pipe < 73mm                   |    |                 |  |  | All             |  |  |
| Progression                            |    | Up              |  |  | Up              |  |  |
| Backing gas                            |    | Without         |  |  | With/without    |  |  |
| Welding current/polarity               |    | DCSP            |  |  | DCSP            |  |  |

| Type of test  | Acceptance criteria | Result                   | Comments   |
|---|---------------------|--------------------------|--|
| RT per QW-191 and QW-302.2<br>Visual examination per QW-302.4 | QW-191.2<br>QW-194  | Acceptable<br>Acceptable | see - see ASME IX - QW-142/3, QW-304<br>see - ASME IX - QW-452.1 (a) |

Notes: SEE RT REPORT : 26996- RT 03

| CERTIFICATION       |                |                        |              |
|---------------------|----------------|------------------------|--------------|
| Tests conducted by  | RITC (Pty) Ltd | Laboratory test number | -            |
| Mechanical tests by | -              | Test file number       | 26996- RT 03 |

We 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 Section IX of the ASME Code.

| INSPECTION AUTHORITY |   | CLIENT         |           |
|----------------------|---|----------------|-----------|
| Name                 | Signature   | Name           | Signature |
| RITC (Pty) Ltd       |  | ATLANTIC STEAM |           |
| Date                 |   | Date           |           |
| 2017/11/23           |   | 2017/11/23     |           |
| Signature 3          |   | Signature 4    |           |
| Name                 | Signature   | Name           | Signature |
|                      |   |                |           |
| Date                 |   | Date           |           |