|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **INSPECTION & TEST PLAN (ITP)**  **For Gasket** | | | | | | |
| **Rev.** | **Date** | **Document Status** | **Prepared by:** | **Checked by:** | **Approved by:** | **Client Approval** |
| 00 | 08-12-2024 | Issue for Comment | H.B | H.B | H.B | - |
| 01 | 14-01-2025 | Issue for Approval | H.B | H.B | H.B | - |
| 02 | 16-02-2025 | Issue for Approval | H.B | H.B | H.B | - |
| 02 | 15-03-2025 | Final Issue | H.B | H.B | H.B | - |
| **Class: A** | |  | | | | |
| **Status:** | **IFC: Issued For Comment**  **IFI:** **Issue for Information**  **IFA:** **Issue for Approval**  **AB-R: As-Built for COMPANY Review**  **FI:** **Final Issue**  **AB-A: As-Built –Approved** | | | | | |

**Tabulation of Revised Pages**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SHEET** | **REVISIONS** | | | | | | | | | **SHEET** | **REVISIONS** | | | | | | | | | |
| **00** | **01** | **02** | **03** |  |  |  |  |  | **00** |  |  |  |  |  |  |  |  |
| 1 | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table of Contents

[1. INTRODUCTION 4](#_Toc104039078)

[2. SCOPE 4](#_Toc104039079)

[3. DEFINITIONS 4](#_Toc104039080)

[4. CODES AND STANDARDS 5](#_Toc104039081)

[5. REFERENCE DOCUMENTS 5](#_Toc104039082)

[6. ITB TABLE 2](#_Toc104039083)

# INTRODUCTION

National Iranian South Oil Company (NISOC) plans to conduct an integrated project includes several sub-projects to preserve and increase production of Gachsaran oil fields located in south of Iran Khuzestan and Bushehr provinces as follow:

1. Revamping of Production and Desalting Units of Bibi Hakimeh 1&2
2. Fabrication & Installation a Preheater, Stripping Column and Related Equipment for Nargesi Production Unit

The purposes of first sub-project are equipping and extension of Bibihakime-2 desalting unit to achieve 110,000 SBPD desalted crude oil, and necessary modifications in Bibihakime-2 desalting & production units and Bibihakime-1 production unit so that the new plants will be able to process crude oil with 22% water cut and transfer waste water from Bibihakime-1 production unit to waste water treatment facilities in Bibihakime-1 desalting unit via installation of a none-metal pipe. Therefore, National Iranian South Oil Company (NISOC) has announced this project.

The purpose of second sub-project is crude oil sweetening in Nargesi plant by new design and necessary modifications in existing facilities. National Iranian South Oil Company (NISOC), on behalf of the National Iranian Oil Company (NIOC) is responsible to exploit oil and gas from onshore fields in the south district of Iran. According to management of planning & international affairs of National Iranian Oil Company (NIOC) pronouncement, H2S content and RVP specification of exported oil shall be in the specified allowable range; Accordingly, NISOC has decided to fulfil a project, investigating and probing required equipment and operational conditions to meet the desired crude oil specifications of sulphur content and RVP for Nargesi production units.

# SCOPE

**Revamping of Production and Desalting Units of Bibi Hakimeh 1&2** and **Fabrication & Installation a Preheater, Stripping Column and Related Equipment for Nargesi Production Unit** sub-projects.

# DEFINITIONS

Within the context of this document, the following definitions are applicable

|  |  |
| --- | --- |
| Owner/Client | : National Iranian south oil company (NISOC) |
| Title | : Development Plan of 28 Reservoirs/ BIBI HAKIMEH Oilfield (EPC) |
| Contractor  Consultant | : Mashin Sazi Arak/ Sealand Engineering and Well Services JV  : Tehran Raymand Consulting Engineers |
| Will: | Is normally used in connection with the action by the “Company” rather than by a contractor, supplier or vendor. |
| May:  Should:  Shall: | Is used where a provision is completely discretionary  Is used where a provision is advisory only.  Is used where a provision is mandatory. |

# CODES AND STANDARDS

|  |  |
| --- | --- |
| ASME B16.20 | Metallic Gaskets for pipe flanges |
| ASME B16.21 | Non Metallic Flat Gaskets for pipe flanges |

# REFERENCE DOCUMENTS

|  |  |
| --- | --- |
| BH-17-SM-000-PI-MR-1103-D02 | Material Requisition for Gasket for Bibi Hakimeh for Production Unit.1& Desalting Unit 1 |
| BH-17-SM-000-PI-MR-1972-D02 | Material Requisition for Gasket for Bibi Hakimeh for Production Unit.2 |
| BH-17-SM-000-PI-MR-2170-D02 | Material Requisition for Gasket for Bibi Hakimeh for Desalting Unit.2 |
| BH-18-SM-000-PI-MR-0434-D02 | Material Requisition for Gasket for Nargesi |

1. **ITP TABLE**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Item** | **Inspection Activities** | **Applicable Documents** | **Acceptance**  **Criteria** | **Verifying**  **Document** | **Action By** | | | | **Remark** |
| **Vendor** | **Purchaser** | **EPC Contractor/TPA** | **Daryapala Consulting Engineers** |
| **1** | Pre Inspection Meeting  (PIM) | **-** | **-** | **-** | H | H | H | H |  |
| **2** | Material Certificate  (Including chemical & mechanical properties) | ASME B16.20 & MTO | ASME B16.20 & MTO | MTC  EN 10204-3.1 | H | RA | RA/W | RA/W |  |
| **3** | Visual & Dimensional Inspection | ASME B16.20 & MTO | ASME B16.20 & MTO | TPI Report | H | W | W | W |  |
| **4** | Spiral Wound Gasket Compression Test | ASME B16.20 | ASME B16.20 | Test Report | H | W | W | W | Only 4” #600 as sample |
| **5** | Spiral Wound Gasket Performance Test | ASME B16.20 | ASME B16.20 | Test Report | H | W | W | W | One random gaskets shall be tested by TPI selection |
| **6** | Ring Joint Gasket Hardness & Roughness Test | ASME B16.20 | ASME B16.20 | Test Report | H | W | W | W | One random gaskets shall be tested by TPI selection |
| 7 | Marking & Color Coding check  (Visual Coating Check) | ASME B16.20 & MTO | ASME B16.20 & MTO | TPI Report | H | W | W | W |  |
| 8 | Final Inspection | ASME B16.20 & MTO | MTO & PO | TPI Report | H | W | W | W |  |
| 9 | Packing & Marking Inspection | Project Spec.  & Approved  Procedure | PO & Packing List | Packing List | H | R | W | W |  |
| 10 | Release Note Issuance | PO & Packing List | PO & Packing List | IRN | R | W | H | R |  |
| 11 | Final Data Book | Contract | Vendor data book index | Final Data  Book | H | RA | RA | RA |  |