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| **طرح نگهداشت و افزایش تولید 27 مخزن** | | | | | | | |
| **STRESS ANALYSIS CALCULATIONS REPORT**  **نگهداشت و افزایش تولید میدان نفتی بینک** | | | | | | | |
|  |  |  |  |  |  |  |
| D03 | MAY.2024 | IFI | M.Noori | M.Fakharian | M.Sadeghian |  |
| D02 | MAR.2023 | IFI | M.Noori | M.Fakharian | S.Faramarzpour |  |
| D01 | SEP.2023 | IFI | M.Noori | M.Fakharian | A.M.Mohseni |  |
| D00 | FEB. 2023 | IFI | M.Noori | M.Fakharian | M.Mehrshad |  |
| **Rev.** | **Date** | **Purpose of Issue/Status** | **Prepared by:** | **Checked by:** | **Approved by:** | **CLIENT Approval** |
| **Class:3** | | **CLIENT Doc. Number:** **F0Z-708906** | | | | |
| **Status:** | **IDC: Inter-Discipline Check**  **IFC: Issued For Comment**  **IFA: Issued For Approval**  **AFD: Approved For Design**  **AFC: Approved For Construction**  **AFP: Approved For Purchase**  **AFQ: Approved For Quotation**  **IFI: Issued For Information**  **AB-R: As-Built for CLIENT Review**  **AB-A: As-Built –Approved** | | | | | |

**REVISION RECORD SHEET**

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| **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |  | **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |
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| **3** | X | X | X | X |  | **68** |  |  |  |  |  |
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1. **INTRODUCTION**

Binak oilfield in Bushehr province is a part of the southern oilfields of Iran, is located 20 km northwest of Genaveh city.

With the aim of increasing production of oil from Binak oilfield, an EPC/EPD Project has been defined by NIOC/NISOC and awarded to Petro Iran Development Company (PEDCO). Also PEDCO (as General Contractor) has assigned the EPC-packages of the Project to "Hirgan Energy - Design and Inspection" JV.

As a part of the Project, a New Gas Compressor Station (adjacent to existing Binak GCS) shall be constructed to gather of 15 MMSCFD (approx.) associated gases and compress & transfer them to Siahmakan GIS.

**GENERAL DEFINITION**

The following terms shall be used in this document.

|  |  |
| --- | --- |
| CLIENT: | National Iranian South Oilfields CLIENT (NISOC) |
| PROJECT: | Binak Oilfield Development – Surface Fcilities; New Gas Compressor Station |
| EPD/EPC CONTRACTOR (GC): | Petro Iran Development Company (PEDCO) |
| EPC CONTRACTOR: | Joint Venture of : Hirgan Energy – Design & Inspection (D&I) Companies |
| VENDOR: | The firm or person who will fabricate the equipment or material. |
| EXECUTOR: | Executor is the party which carries out all or part of construction and/or commissioning for the project. |
| THIRD PARTY INSPECTOR (TPI): | The firm appointed by EPD/EPC CONTRACTOR (GC) and approved by CLIENT (in writing) for the inspection of goods. |
| SHALL: | Is used where a provision is mandatory. |
| SHOULD: | Is used where a provision is advisory only. |
| WILL: | Is normally used in connection with the action by CLIENT rather than by an EPC/EPD CONTRACTOR, supplier or VENDOR. |
| MAY: | Is used where a provision is completely discretionary. |

1. **SCOPE**

This document covers piping Stress Analysis Calculations Report for BINAK Compressor Gas Station.

1. **THE PROJECT DOCUMENTS**

|  |  |
| --- | --- |
| * + BK-GCS-PEDCO-120-PI-SP-0001 | Piping Material Specification |
| * + BK-GCS-PEDCO-120-PR-LI-0004 | LINE LIST |
| * + BK-GNRAL-PEDCO-000-PI-SP-0012 | Specification For Flexibility Analysis |

* + BK-GCS-PEDCO-120-PI-LI-0001 Critical Line List

1. **STANDARD AND REFRENCE**
   * IPS-E-PI-200 Engineering standard for Flexibility Analysis
   * IPS-E-PI-240 Engineering standard for plant piping systems
   * API 5L Specification for Line Pipe
   * ASME B31.3 Process Piping (Petroleum Refinery Piping)
   * ASME B16.5 Steel Pipe Flanges, Flanged Valves and Fittings
   * ASME B16.9 Factory Made Wrought Steel Butt Welding Fittings
   * ASME B16.10 Face to Face and End to End Dimension of Valves
   * ASME B16.11 Forged Steel Fittings Socket Welding and Threaded
   * ASME B16.34 Valves Flanged, Threaded , and Welding End
2. **ATTACHEMENT (stress analysis calculation report)**