|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **طرح نگهداشت و افزایش تولید 27 مخزن** | | | | | | |
| **RELIEF LOAD SUMMERY**  **نگهداشت و افزایش تولید میدان نفتی بینک** | | | | | | |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| D02 | SEP.2023 | IFA | M.Aryafar | M.Fakharian | S.Faramarzpour |  |
| D01 | JAN.2023 | IFA | M.Aryafar | M.Fakharian | M.Mehrshad |  |
| D00 | APR. 2022 | IFC | M.Aryafar | M.Fakharian | M.Mehrshad |  |
| **Rev.** | **Date** | **Purpose of Issue/Status** | **Prepared by:** | **Checked by:** | **Approved by:** | **CLIENT Approval** |
| **Class:1** | | **CLIENT Doc. Number:F0Z-708537** | | | | |
| **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**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |  | **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |
| **1** | X | X | X |  |  | **66** |  |  |  |  |  |
| **2** | X | X | X |  |  | **67** |  |  |  |  |  |
| **3** | X |  |  |  |  | **68** |  |  |  |  |  |
| **4** | X |  |  |  |  | **69** |  |  |  |  |  |
| **5** | X |  |  |  |  | **70** |  |  |  |  |  |
| **6** | X | X | X |  |  | **71** |  |  |  |  |  |
| **7** |  |  | X |  |  | **72** |  |  |  |  |  |
| **8** |  |  |  |  |  | **73** |  |  |  |  |  |
| **9** |  |  |  |  |  | **74** |  |  |  |  |  |
| **10** |  |  |  |  |  | **75** |  |  |  |  |  |
| **11** |  |  |  |  |  | **76** |  |  |  |  |  |
| **12** |  |  |  |  |  | **77** |  |  |  |  |  |
| **13** |  |  |  |  |  | **78** |  |  |  |  |  |
| **14** |  |  |  |  |  | **79** |  |  |  |  |  |
| **15** |  |  |  |  |  | **80** |  |  |  |  |  |
| **16** |  |  |  |  |  | **81** |  |  |  |  |  |
| **17** |  |  |  |  |  | **82** |  |  |  |  |  |
| **18** |  |  |  |  |  | **83** |  |  |  |  |  |
| **19** |  |  |  |  |  | **84** |  |  |  |  |  |
| **20** |  |  |  |  |  | **85** |  |  |  |  |  |
| **21** |  |  |  |  |  | **86** |  |  |  |  |  |
| **22** |  |  |  |  |  | **87** |  |  |  |  |  |
| **23** |  |  |  |  |  | **88** |  |  |  |  |  |
| **24** |  |  |  |  |  | **89** |  |  |  |  |  |
| **25** |  |  |  |  |  | **90** |  |  |  |  |  |
| **26** |  |  |  |  |  | **91** |  |  |  |  |  |
| **27** |  |  |  |  |  | **92** |  |  |  |  |  |
| **28** |  |  |  |  |  | **93** |  |  |  |  |  |
| **29** |  |  |  |  |  | **94** |  |  |  |  |  |
| **30** |  |  |  |  |  | **95** |  |  |  |  |  |
| **31** |  |  |  |  |  | **96** |  |  |  |  |  |
| **32** |  |  |  |  |  | **97** |  |  |  |  |  |
| **33** |  |  |  |  |  | **98** |  |  |  |  |  |
| **34** |  |  |  |  |  | **99** |  |  |  |  |  |
| **35** |  |  |  |  |  | **100** |  |  |  |  |  |
| **36** |  |  |  |  |  | **101** |  |  |  |  |  |
| **37** |  |  |  |  |  | **102** |  |  |  |  |  |
| **38** |  |  |  |  |  | **103** |  |  |  |  |  |
| **39** |  |  |  |  |  | **104** |  |  |  |  |  |
| **40** |  |  |  |  |  | **105** |  |  |  |  |  |
| **41** |  |  |  |  |  | **106** |  |  |  |  |  |
| **42** |  |  |  |  |  | **107** |  |  |  |  |  |
| **43** |  |  |  |  |  | **108** |  |  |  |  |  |
| **44** |  |  |  |  |  | **109** |  |  |  |  |  |
| **45** |  |  |  |  |  | **110** |  |  |  |  |  |
| **46** |  |  |  |  |  | **111** |  |  |  |  |  |
| **47** |  |  |  |  |  | **112** |  |  |  |  |  |
| **48** |  |  |  |  |  | **113** |  |  |  |  |  |
| **49** |  |  |  |  |  | **114** |  |  |  |  |  |
| **50** |  |  |  |  |  | **115** |  |  |  |  |  |
| **51** |  |  |  |  |  | **116** |  |  |  |  |  |
| **52** |  |  |  |  |  | **117** |  |  |  |  |  |
| **53** |  |  |  |  |  | **118** |  |  |  |  |  |
| **54** |  |  |  |  |  | **119** |  |  |  |  |  |
| **55** |  |  |  |  |  | **120** |  |  |  |  |  |
| **56** |  |  |  |  |  | **121** |  |  |  |  |  |
| **57** |  |  |  |  |  | **122** |  |  |  |  |  |
| **58** |  |  |  |  |  | **123** |  |  |  |  |  |
| **59** |  |  |  |  |  | **124** |  |  |  |  |  |
| **60** |  |  |  |  |  | **125** |  |  |  |  |  |
| **61** |  |  |  |  |  | **126** |  |  |  |  |  |
| **62** |  |  |  |  |  | **127** |  |  |  |  |  |
| **63** |  |  |  |  |  | **128** |  |  |  |  |  |
| **64** |  |  |  |  |  | **129** |  |  |  |  |  |
| **65** |  |  |  |  |  | **130** |  |  |  |  |  |

**CONTENTS**

[1.0 INTRODUCTION 4](#_Toc100489407)

[2.0 Scope 4](#_Toc100489408)

[3.0 NORMATIVE REFERENCES 5](#_Toc100489409)

[3.1 Local Codes and Standards 5](#_Toc100489410)

[3.2 International Codes and Standards 5](#_Toc100489411)

[3.3 The Project Documents 5](#_Toc100489412)

[3.4 ENVIRONMENTAL DATA 5](#_Toc100489413)

[4.0 RELIEF LOAD SUMMARY TABLE 5](#_Toc100489414)

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, New Gas/Condensate Pipelines (from Binak New GCS to Siahmakan GIS/Binak PU) shall be constructed.

**GENERAL DEFINITION**

The following terms shall be used in this document.

|  |  |
| --- | --- |
| CLIENT: | National Iranian South Oilfields Company (NISOC) |
| PROJECT: | Binak Oilfield Development – Surface Facilities; Gas & Gas-Condensate Pipelines |
| 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**

The scope of this document is to present summary of flare loads in BINAK new Pipelines.

1. **NORMATIVE REFERENCES**

## Local Codes and Standards

|  |  |
| --- | --- |
| * IPS-E-PR-450 | Process design of pressure relieving Systems inclusive safety relief valves |

## International Codes and Standards

|  |  |
| --- | --- |
| * API-STD-520 | Sizing, Selection and Installation of Pressure Relieving Devices in Refineries, Part 1-Sizing and Selection |
| * API-STD-521 | Pressure Relieving and Depressuring Systems |

## The Project Documents

|  |  |
| --- | --- |
| * BK-GNRAL-PEDCO-000-PR-DC-0001 | Process Design Criteria |
| * BK-PPL-PEDCO-320-PR-PF-0001 | Process Flow Diagram For pipelines |
| * BK-PPL-PEDCO-320-PR-PI-0001 * BK-PPL-PEDCO-320-PR-PI-0002 | P&ID - Gas Pipeline (to Siahmakan G.I. Station)  P&ID - Condensate Pipeline (to Binak PU) |

## ENVIRONMENTAL DATA

Refer to "Process Basis of Design; Doc. No. BK-GNRAL-PEDCO-000-PR-DB-0001 ".

1. **RELIEF LOAD SUMMARY TABLE**

D02

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Tag** | **Location** | **Fluid** | **Set pressure(barg)** | **Case** | **Required mass flow(Kg/h)** | **CP/CV** | **Z**  **Factor** | **Molecular Weight** | **Temp (ºC)** | **P&ID Number** |
| PSV-3201 | PL-3201 | GAS | 62 | Fire Case | 1799.99 | 1.448 | 0.829 | 24.58 | 212 | BK-PPL-PEDCO-320-PR-PI-0001(1/3) |
| PSV-3202 | PR-3201 | GAS | 62 | Fire Case | 4300.75 | 1.437 | 0.827 | 24.58 | 289 | BK-PPL-PEDCO-320-PR-PI-0001(3/3) |

D02

**ATTACHMENT: SOFTWARE REPORT**