



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

شماره پیمان:

 $\cdot \Delta \tau = \cdot V \tau - 91 \lambda \tau$

| MIO FOR PAGA | | | | | | | |
|--------------|-----------|------------|---------|------|----------|-------|------|
| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |
| BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 |

شماره صفحه: ۱ از ۸

طرح نگهداشت و افزایش تولید ۲۷ مخزن

MTO FOR PAGA

نگهداشت و افزایش تولید میدان نفتی بینک

| Rev. | Date | Purpose of Issue/Status | Prepared by: | Checked by: | Approved by: | Client Approval |
|------|-----------|-------------------------|--------------|-------------|----------------|-----------------|
| D00 | May. 2022 | IFI | H.Shakiba | M.Fakharian | M.Mehrshad | |
| D01 | Sep. 2022 | IFI | H.Shakiba | M.Fakharian | M.Mehrshad | |
| D02 | Feb. 2023 | FI | H.Shakiba | M.Fakharian | M.Mehrshad | |
| D03 | May. 2024 | FI | H.Shakiba | M.Fakharian | S.Faramarzpour | |
| | | | | | | |

Class: 3 Client Doc. Number: F8Z-709096

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





شماره صفحه: ۲ از ۸

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

| شماره پیمان: | | | M | TO FOR I | PAGA | | | |
|-------------------------------------------|-------|-----------|------------|----------|------|----------|--------|------|
| ۹۱۸۴ – ۲۷۰ – ۱۸۴ | پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سر يال | نسخه |
| ·ωι – · · · · · · · · · · · · · · · · · · | BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 |

REVISION RECORD SHEET

| | | | | ŀ | REVISION |
|------|-----|-----|-----|-----|----------|
| PAGE | D00 | D01 | D02 | D03 | D04 |
| 1 | X | Χ | Χ | X | |
| 2 | Х | Χ | Χ | Х | |
| 3 | Х | | | | |
| 4 | Х | | | | |
| 5 | Х | | | | |
| 6 | Х | Х | | | |
| 7 | Х | Х | | | |
| 8 | | Χ | | Χ | |
| 9 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | 1 | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | | | | | |
| 32 | | | | | |
| 33 | | | | | |
| 34 | | | | | |
| 35 | | | | | |
| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |
| 39 | | | | | |
| 40 | | | | | |
| 41 | | | | | |
| 42 | | | | | |
| 43 | | | | | |
| 44 | | | | | |
| 45 | | | | | |
| 46 | | | | | |
| 47 | | | | | |
| 48 | | | | | |
| 49 | | | | | |
| 50 | | | | | |

| DAGE | T 500 | | | D 00 | - DO4 |
|------|-------|-----|-----|-------------|-------|
| PAGE | D00 | D01 | D02 | D03 | D04 |
| 51 | | | | | |
| 52 | | | | | |
| 53 | | | | | |
| 54 | | | | | |
| 55 | | | | | |
| 56 | | | | | |
| 57 | | | | | |
| 58 | | | | | |
| 59 | | | | | |
| 60 | | | | | |
| 61 | | | | | |
| 62 | | | | | |
| 63 | | | | | |
| 64 | | | | | |
| 65 | | | | | |
| 66 | | | | | |
| 67 | | | | | |
| 68 | ļ | | | | |
| 69 | | | | | |
| 70 | | | | | |
| 71 | | | | | |
| 72 | | | | | |
| 73 | | | | | |
| 74 | | | | | |
| 75 | | | | | |
| 76 | | | | | |
| 77 | | | | | |
| 78 | | | | | |
| 79 | | | | | |
| 80 | | | | | |
| 81 | | | | | |
| 82 | | | | | |
| 83 | | | | | |
| 84 | | | | | |
| 85 | | | | | |
| 86 | | | | | |
| 87 | | | | | |
| 88 | | | | | |
| 89 | | | | | |
| 90 | | | | | |
| 91 | | | | | |
| 92 | | | | | |
| 93 | | | | | |
| 94 | | | | | |
| 95 | | | | | |
| 96 | | | | | |
| 97 | | | | | |
| 98 | | | | | |
| 99 | | | | | |
| 100 | | | | | |





احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

| | | پیمان: | شماره |
|--------|-------|--------|-------|
| ۰ ۵۳ – | ٠٧٣ – | ۹۱۸۱ | ۴ |

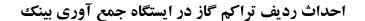
| | | M | IO FOR I | PAGA | | | |
|-------|-----------|------------|----------|------|----------|-------|------|
| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |
| BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 |

شماره صفحه: ۳ از ۸

CONTENTS

| 1.0 | INTRODUCTION | . 4 |
|-----|-----------------------|-----|
| 2.0 | GENERAL | .5 |
| 3.0 | BILL OF MATERIAL LIST | .6 |







| نماره پیمان: |
|--------------|
| -0 |

· ۵۳ - · ۷۳ - 9 1 1 4

| MIO FOR PAGA | | | | | | | |
|--------------|-----------|------------|---------|------|----------|-------|------|
| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |
| BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 |

شماره صفحه: ۴ از ۸

1.0 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

CLIENT:

The following terms shall be used in this document.

| _ | | () |
|---|----------------------------|------------------------|
| | Rinak Oilfield Davelenment | Surface Edilities: New |

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.

National Iranian South Oilfields CLIENT (NISOC)

The firm appointed by EPD/EPC CONTRACTOR (GC)

THIRD PARTY INSPECTOR (TPI): 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.

Is normally used in connection with the action by

CLIENT rather than by an EPC/EPD CONTRACTOR,

supplier or VENDOR.

Is used where a provision is completely discretionary.

MAY:

WILL:



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



| پیمان: | شماره |
|--------|-------|
|--------|-------|

· 24 - · 74 - 9114

| | | IVI | IO FOR I | PAGA | | | |
|-------|-----------|------------|----------|------|----------|-------|------|
| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |
| BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 |

شماره صفحه: ۵ از ۸

2.0 GENERAL

- This document presents the item material requisitions for Contractor's use as appropriate.
- This material requisition covers the requirements for the design, manufacturing, testing and supply of **PAGA SYSTEM** as listed below.

The supplier shall supply Telephone System. The supplier shall include in the supply, all other equipment/devices/items not listed in the following, but necessary for a good design and a safe operation, taking into account process data and installation conditions such as area classification and climatic conditions.

The grade of shop assembly of the equipment/devices/items supplied shall be at maximum extent to facilitate site erection and pre-commissioning activities.



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

· 24 - · 74 - 9 1 1 4

| | | M | IO FOR I | PAGA | | | |
|-------|-----------|------------|----------|------|----------|-------|------|
| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |
| BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 |

شماره صفحه: ۶ از ۸

3.0 BILL OF MATERIAL LIST

| Item | Description | Design | Unit | Remark |
|------|-----------------------------------------------------------------------------|--------|------|--------|
| | IP-Based PAGA Unit: | | | |
| | Centralized Communication System for Intercom, PA and General Alarm | | | |
| | Data Transmission through a Standard IP Ethernet-Network according to | | | |
| | DIN EN 60849/VDE 0828 installed in 19" rack swing standalone | | | |
| | WxHxD:800x2000x800 mm/ 40 HU, With 100mm Base, RAL 7035 | | | |
| | Equipped with: | | | |
| | - Controller | | | |
| | - Power Module | 1 | Set | |
| | - 4x Amplifier Class D 19" 250W/100V (Total 1000 W in operation with | | | |
| 1 | considering N+1 Configuration) | | | |
| • | - Tone Generator Module | | | |
| | - Zone selection module | | | |
| | - 230VAC | | | |
| | - 1x SIP link to PABX | | | |
| | - Relay Contact with F&G | | | |
| | - 1x AM/FM radio / CD / mp3 player 2HU/19" | | | |
| | - Customized Software programmed & ready to site connection | | | |
| | - SIP Interface to radio System | | | |
| | - Service Laptop including software | | | |
| | - MDF Terminal | | | |
| 2 | Master Call Station: | 1 | Set | |
| | IP21, Desktop mounted including keyboard and Neck swan MIC | | | |
| 3 | 28 Unit Rack 19" with full accessories and earth bar (Light, fan, power | 1 | Sot | |
| 3 | socket) | 1 | Set | |
| 4 | LAN Switch Layer 2, 24x 10/100/1000 Base T +2 SFP Module | 1 | Set | |
| | Ceiling Loudspeaker: Flush Mounted | | | |
| F | Ceiling Loud speaker 5 watt at 100 V, with matching transformer 1.5, 3, 6W, | _ | 0 | 005 |
| 5 | Frequency Range 70 Hz to 20 kHz , SPL 90 dB (1watt/1m) and SPL 96 dB | 7 | Set | CCR |
| | (6w/1m)+local JB | | | |



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

· 24 - · 74 - 9114

| | | M | TO FOR I | PAGA | | | | |
|-------|-----------|------------|----------|------|----------|-------|------|--|
| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه | |
| BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 | |

شماره صفحه: ۷ از ۸

| Item | Description | Design | Unit | Remark |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|------------------------|
| 6 | Indoor Horn Loudspeaker: Weather proof pressure chamber Loud speaker 15/25 watt at 100 V, Adjustable Sound level, Frequency Range, Frequency Range 300Hz to 6 kHz, with matching transformer 3,6,12W, SPL 108 dB (1watt/1m) and SPL 118 dB (12w/1m), Pole mounting with U-shaped, non-rusting stainless steel Bracket, IP54 | 0 | Set | |
| 7 | Weather Proof 30 watts: Weather proof pressure Loud speaker 30 watt at 100 V, Adjustable Sound level, Frequency Range 300Hz to 6 kHz, with matching transformer 6,12,25W, SPL 108 dB (1watt/1m) so it can be used in low power case too ,and SPL 121 dB (30w/1m),AL/ABS/fiber glass reinforced plastic enclosure, Pole mounting with U-shaped, non-rusting stainless steel Bracket, IP65 | 16 | Set | Outdoor CGS Area |
| 8 | Weather Proof Flash Beacon , Yellow Color,5 Joule | 12 | Set | For noisy area |
| 9 | Explosion proof Call Station: IP 65 Digital Explosion proof Call station with Hood Break Glass housing for the unit party line /speech key master/ conference cancellation keys, volume control functions, with speech memory Equipped with 2m H.D.G pole | 2 | Set | |
| 10 | Explosion Proof Flash Beacon , Yellow Color,5 Joule | 2 | Set | |
| 11 | HDG Pole seamless industrial Hot dipped Galvanized & base plate including adaptor for 4 speakers Note; The right height for Horn Loud Speakers pole is around 4 m High. More than this height the loss sound power will be high amount. | 4 | Set | |
| 12 | Outdoor Metal box for Intercom Station, Explosion proof, IP65 ,with all required explosion proof cable glands For 4Px0.8 mm cable And required terminal , 2X M20 Gland and Terminal mounting accessories and blind plug | 2 | Set | |
| 13 | Outdoor Metal Type WP PJB for Loud speakers, with all required cable glands, mounting accessories and blind plug | 4 | Set | |





احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

شماره پیمان: ۹۱۸۴ – ۲۷۳ – ۵۳۰

| | | M | IO FOR I | PAGA | | | | |
|-------|-----------|------------|----------|------|----------|-------|------|--|
| پروژه | بسته کاری | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه | |
| BK | GCS | PEDCO | 120 | TE | MT | 0004 | D03 | |

شماره صفحه: ۸ از ۸

| Item | Description | Design | Unit | Remark |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|-----------------|
| | 10 xM20 Gland and Terminal | | | |
| 14 | Indoor AL material PJB for Paging, IP42, with all required cable glands .Capable to install inside the building Minimum 2x M25 Gland Bottom and 5 No.M20 Gland in Top and Terminal | 1 | Set | |
| 15 | Indoor Loud Speaker Cable , CU/PVC/ XLPE ,3X1.5 mm 2, LSZH Fire Resistance | 100 | m | D03 |
| 16 | Outdoor Loud Speaker Cable, 3x4mm2, TWISTED, PAIR, FLAME RETARDANT, Fire Resistance, CU/PVC/XLPE,SWA | 1000 | m | |
| 17 | Outdoor Loud Speaker Cable, 3x2.5 mm2, TWISTED, PAIR, FLAME RETARDANT, Fire Resistance, CU/PVC/XLPE, | 200 | m | |
| 18 | Outdoor Intercom cable ,A2Y(St)2Y, 4x2x0.8mm | 1000 | m | |
| 19 | Outdoor LV Power cable ,3x2.5 mm2 , CU/XLPE/SWA | 1000 | m | For Flashers |