

# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



شماره پیمان:

053 - 073 - 9184

|       | PMF       | R For FIELD | INSTRUM | ENTAT | IONS-W046 | S     |      |  |
|-------|-----------|-------------|---------|-------|-----------|-------|------|--|
| پروژه | بسته کاری | صادر كننده  | تسهيلات | رشته  | نوع مدرك  | سريال | نسخه |  |
| BK    | W046S     | PEDCO       | 110     | IN    | MR        | 0002  | D01  |  |

شماره صفحه: 1 از 18

## طرح نگهداشت و افزایش تولید 27 مخزن

### PMR FOR FIELD INSTRUMENTATIONS-W046S

نگهداشت و افزایش تولید میدان نفتی بینک

| Rev. | Date      | Purpose of Issue/Status | Prepared by:  | Checked by: | Approved by: | CLIENT Approval |
|------|-----------|-------------------------|---------------|-------------|--------------|-----------------|
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| D00  | DEC. 2021 | IFI                     | P.Hajisadeghi | M.Fakharian | M.Mehrshad   |                 |
| D01  | JUL. 2022 | IFI                     | P.Hajisadeghi | M.Fakharian | M.Mehrshad   |                 |
|      |           |                         |               |             |              |                 |
|      |           |                         |               |             |              |                 |
|      |           |                         |               |             |              |                 |

Class:3 CLIENT Doc. Number: F0Z-707696

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



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| BK    | W046S     | PEDCO       | 110     | IN    | MR        | 0002  | D01  |  |

شماره صفحه: 2 از 18

## REVISION RECORD SHEET

| PAGE          | D00 | D01 | D02 | D03 | D04 |
|---------------|-----|-----|-----|-----|-----|
| 1             | X   | Χ   |     |     |     |
| 2             | X   | X   |     |     |     |
| 3             | X   |     |     |     |     |
| <u>4</u><br>5 | X   |     |     |     |     |
| 6             | X   | Χ   |     |     |     |
| 7             | X   | X   |     |     |     |
| 8             | Х   |     |     |     |     |
| 9             | X   |     |     |     |     |
| 10            | X   | X   |     |     |     |
| 11<br>12      | X   | X   |     |     |     |
| 13            | X   | X   |     |     |     |
| 14            | X   |     |     |     |     |
| 15            | Х   |     |     |     |     |
| 16            | X   |     |     |     |     |
| 17            | X   |     |     |     |     |
| 18            | X   |     |     |     |     |
| 19<br>20      | X   |     |     |     |     |
| 21            | 1   |     |     |     |     |
| 22            |     |     |     |     |     |
| 23            |     |     |     |     |     |
| 24            |     |     |     |     |     |
| 25            |     |     |     |     |     |
| 26            |     |     |     |     |     |
| 27<br>28      |     |     |     |     |     |
| 29            |     |     |     |     |     |
| 30            |     |     |     |     |     |
| 31            |     |     |     |     |     |
| 32            |     |     |     |     |     |
| 33            |     |     |     |     |     |
| 34            |     |     |     |     |     |
| 35            |     |     |     |     |     |
| 36<br>37      |     |     |     |     |     |
| 38            |     |     |     |     |     |
| 39            |     |     |     |     |     |
| 40            |     |     |     |     |     |
| 41            |     |     |     |     |     |
| 42            | 1   |     |     | 1   |     |
| 43<br>44      |     |     |     |     |     |
| 45            |     |     |     |     |     |
| 46            |     |     |     |     |     |
| 47            |     |     |     |     |     |
| 48            |     |     |     |     |     |
| 49            | -   |     |     |     |     |
| 50            | +   |     |     |     |     |
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| 53            |     |     |     |     |     |
| 54            |     |     |     |     |     |
| 55            |     |     |     |     |     |
| 56            |     |     |     |     |     |
| 57            | -   |     |     |     |     |
| 58            | 1   |     |     | 1   |     |
| 59<br>60      | +   |     |     |     |     |
| 60<br>61      |     |     |     |     |     |
| 62            | L   |     |     |     |     |
| 63            |     |     |     |     |     |
| 64            |     |     |     |     |     |
| 65            | 1   |     |     |     |     |

| PAGE       | D00 | D01 | D02 | D03 | D04 |
|------------|-----|-----|-----|-----|-----|
| 66         |     |     |     |     |     |
| 67         |     |     |     |     |     |
| 68         |     |     |     |     |     |
| 69         |     |     |     |     |     |
| 70<br>71   |     |     |     |     |     |
| 72         |     |     |     |     |     |
| 73         |     |     |     |     |     |
| 74         |     |     |     |     |     |
| 75         |     |     |     |     |     |
| 76         |     |     |     |     |     |
| 77         |     |     |     |     |     |
| 78         |     |     |     |     |     |
| 79         |     |     |     |     |     |
| 80         |     |     |     |     |     |
| 81         |     |     |     |     |     |
| 82         |     |     |     |     |     |
| 83<br>84   |     |     |     |     |     |
| 85<br>85   |     |     |     |     |     |
| 86         |     |     |     |     |     |
| 87         |     |     |     |     |     |
| 88         |     |     |     |     |     |
| 89         |     |     |     |     |     |
| 90         |     |     |     |     |     |
| 91         |     |     |     |     |     |
| 92         |     |     |     |     |     |
| 93         |     |     |     |     |     |
| 94         |     |     |     |     |     |
| 95         |     |     |     |     |     |
| 96         |     |     |     |     |     |
| 97         |     |     |     |     |     |
| 98<br>99   |     |     |     |     |     |
| 100        |     |     |     |     |     |
| 101        |     |     |     |     |     |
| 102        |     |     |     |     |     |
| 103        |     |     |     |     |     |
| 104        |     |     |     |     |     |
| 105        |     |     |     |     |     |
| 106        |     |     |     |     |     |
| 107        |     |     |     |     |     |
| 108        |     |     |     |     |     |
| 109        |     |     |     |     |     |
| 110        |     |     |     |     |     |
| 111        |     |     |     |     |     |
| 112<br>113 |     |     |     |     |     |
| 113        |     |     |     |     |     |
| 115        |     |     |     |     |     |
| 116        |     |     |     |     |     |
| 117        |     |     |     |     |     |
| 118        |     |     |     |     |     |
| 119        |     |     |     |     |     |
| 120        |     |     |     |     |     |
| 121        |     |     |     |     |     |
| 122        |     |     |     |     |     |
| 123        |     |     |     |     |     |
| 124        |     |     |     |     |     |
| 125        |     |     |     |     |     |
| 126        |     |     |     |     |     |
| 127        |     |     |     |     |     |
| 128<br>129 |     |     |     |     |     |
| 130        |     |     |     |     |     |
| 130        |     | ı   |     |     | i   |



# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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|       | PIVIE     | For FIELD  | INSTRUM | ENIAI | IONS-W0463 | >     |      |
|-------|-----------|------------|---------|-------|------------|-------|------|
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| BK    | W046S     | PEDCO      | 110     | IN    | MR         | 0002  | D01  |

شماره صفحه: 3 از 18

## **CONTENTS**

|   | 4   |
|---|---|
| SCOPE   | 5   |
| NORMATIVE REFERENCES  | 5   |
| Environmental Data  |   |
| SUBJECT OF THE SUPPLY   | 5   |
| LIMITS OF SUPPLY  | 6   |
| Scope of Supply  .1 Main Description  Spare parts Other Items  Exclusions | 6<br>7<br>7   |
|   |   |
|   |   |
|   |   |
|   |   |
|   |   |
| PRICE BREAKDOWN   |   |
| ATTACHMENT 1  | 11  |
| LIST OF REFRENCE / APPLICABLE DOCUMENTS                                   | 11  |
| ATTACHMENT 2  | 12  |
| VENDOR DOCUMENTS MIN. REQUIREMENT   | 12  |
| ATTACHMENT 3  | 17  |
| DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION                              | 17  |
| ATTACHMENT 4  | 18  |
| ALTERNATIVES TO JOB SPECIFICATION   | 18  |
|   | ENVIRONMENTAL DATA ONDER OF PRECEDENCE  SUBJECT OF THE SUPPLY  LIMITS OF SUPPLY  SCOPE OF SUPPLY  1 Main Description  SPARE PARTS OTHER ITEMS EXCUSIONS BATTERY LIMITS  INSPECTION AND TESTS VENDOR DOCUMENTATION REQUIREMENTS & SCHEDULE  VENDOR RESPONSIBILITY  GUARANTEE AND WARRANTY  DEVIATION  PRICE BREAKDOWN  ATTACHMENT 1  LIST OF REFRENCE / APPLICABLE DOCUMENTS.  ATTACHMENT 2  VENDOR DOCUMENTS MIN. REQUIREMENT  ATTACHMENT 3  DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION.  ATTACHMENT 4. |



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



شماره پیمان:

053 - 073 - 9184

|       | PMR For FIELD INSTRUMENTATIONS-W046S |            |         |      |          |       |      |
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| BK    | W046S                                | PEDCO      | 110     | IN   | MR       | 0002  | D01  |

شماره صفحه: 4 از 18

#### 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, construction of well location, access road, wellhead facilities (with electric power supply) for W046S shall be done. In addition, construction of new flowline from aforementioned well location to Binak B/C unit is in the Project scope of work.

#### **GENERAL DEFINITION**

The following terms shall be used in this document.

CLIENT: National Iranian South Oilfields Company (NISOC)

PROJECT: Binak Oilfield Development - Construction of Well

Location, Wellhead Facilities, Electrification Facilities,

& Flowlines for W046S

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.



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



شماره پیمان:

053 - 073 - 9184

|       | PMF       | R For FIELD | INSTRUM | ENTAT | IONS-W046 | 5     |      | l |
|-------|-----------|-------------|---------|-------|-----------|-------|------|---|
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| BK    | W046S     | PEDCO       | 110     | IN    | MR        | 0002  | D01  | l |

شماره صفحه: 5 از 18

#### 2.0 SCOPE

This material requisition covers the requirements for the design, manufacturing, testing and supply of field instruments of wellhead area no. W046S (PGs, TGs and related accessories) as per section 4 and attached data sheets.

All equipment/devices/items shall conform to this requisition and all specifications which have been mentioned in attachment 1 of this material requisition.

#### 3.0 NORMATIVE REFERENCES

Specified documents in attachment 1 shall be considered as a part of this material Requisition.

All codes and standards which have been referenced in above mentioned documents shall be considered.

#### 3.1 ENVIRONMENTAL DATA

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

#### 3.2 ORDER OF PRECEDENCE

In case of any conflict between the contents of this document or any discrepancy between this document and other project documents or reference standards, this issue must be reported to the CLIENT. The final decision in this situation will be made by CLIENT.

#### 4.0 SUBJECT OF THE SUPPLY

The vendor shall supply field instrument. The scope of supply is detailed at para. 5. The vendor 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.

The vendor's supply shall include:



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



شماره پیمان:

053 - 073 - 9184

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|-------|-----------|-------------|---------|-------|-----------|-------|------|--|
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| BK    | W046S     | PEDCO       | 110     | IN    | MR        | 0002  | D01  |  |

شماره صفحه: 6 از 18

| No. | Equipment<br>Tag No. | Description          | QTY   | Unit  | Remarks  |
|-----|----------------------|----------------------|-------|---|--|
| 1.  | PG-1301              | Pressure Gauge       | 1     | No.   | 2 valve manifold for PGs and thermowell for TG to be considered by vendor. The other requirements as per attached  |
| 2.  | PG-1302              | Pressure Gauge       | 1 No. | documents, Data Sheet for pressure gauge - Wellheads, BK-SSGRL-PEDCO-110-IN-DT- |  |
| 3.  | TG/TW-1301           | Temperature<br>Gauge | 1     | No.   | 0002, Data Sheet for temperature gauge -<br>Wellheads, BK-SSGRL-PEDCO-110-IN-DT-<br>0003, Specification for Instrumentation, BK-<br>GNRAL-PEDCO-000-IN-SP-0001 |

#### 5.0 LIMITS OF SUPPLY

### 5.1 SCOPE OF SUPPLY

#### 5.1.1 MAIN DESCRIPTION

The scope of supply includes 1 Nos.Temperature Gauge and 2 Nos. Pressure Gauges Main feature are as below:

Temperature Gauge with flanged Thermowell



- · Pressure Gauge with 2 valve Manifold
- Pressure Valve Protector (when required)
- Painting and coating (if required)

The vendor shall assume overall responsibility for the design, manufacture, assembly, test and performance of all equipment/devices/items supplied as indicated in this requisition. This shall include, but not be limited to:

- Resolve engineering issues relating to equipment/devices/items within the scope of supply.
- Provide detailed design and documentation of all equipment/devices/items and components within the scope of supply in accordance with attachment 2 of this document.
- Provide all necessary information documents in order to allow the contractor to erect, install and verify the proposed equipment/devices/items.
- · Implement a quality assurance plan
- The quality plan applied to the scope of supply shall include:
  - QA/QC Organization Chart and procedures that shall be submitted for approval.
  - Plan for HOLD points in the production process proposed to CLIENT/EPC CONTRACTOR for witness or approval particular activities.



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



053 - 073 - 9184

|       | PMF       | R For FIELD | INSTRUM | ENTAT | IONS-W046 | 3     |      |
|-------|-----------|-------------|---------|-------|-----------|-------|------|
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| BK    | W046S     | PEDCO       | 110     | IN    | MR        | 0002  | D01  |

شماره صفحه: 7 از 18

- Production schedule indicating main quality manufacturing processes, inspection and tests.
- Qualification of all personnel performing tests to be reviewed by the inspector
- Vendor shall also provide the description of the following quality activities:
  - Sub vendors' products quality
  - Quality check and identification of the materials and equipment entering in their manufacturing shop.
- Calibration of test instruments and equipment
- Provide detailed specifications and data sheets.

#### 5.2 SPARE PARTS



- The Vendor shall provide certain quantities of consumable for the installation, precommissioning, commissioning, start-up and up to the end of the guarantee period.
- The quantities shall be estimated by Vendor and shall be based upon the Vendor's experience. The following two periods shall be taken into account:
  - Pre-commissioning and commissioning period where the consumption of consumable is greater
  - Normal use of the System
- The VENDOR shall provide lists of recommended spare parts, which shall include the
  original part numbers with prices for commissioning, start-up and two years operation. All
  spare parts shall be identified individually.
- Spare parts for commissioning and start-up; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&C-QC-SP-1).
- Spare parts for two years operation; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&C-QC-SP-1).
- The VENDOR shall be able to provide spares back up and support for the plant life of at least 20 years.
- SPIR form shall be approved by CLIENT prior to procurement.

#### 5.3 OTHER ITEMS

Name plate

#### 5.4 EXCLUSIONS

No exclusion is applicable.

#### 5.5 BATTERY LIMITS

No battery limit is applicable.





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|--------------|
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053 - 073 - 9184

|       | PMR For FIELD INSTRUMENTATIONS-W046S                        |       |     |    |    |      |     |  |  |
|-------|---|-------|-----|----|----|------|-----|--|--|
| پروژه | نسخه سریال نوع مدرک رشته تسهیلات صادر کننده بسته کاری پروژه |       |     |    |    |      |     |  |  |
| BK    | W046S   | PEDCO | 110 | IN | MR | 0002 | D01 |  |  |

شماره صفحه: 8 از 18

#### 6.0 INSPECTION AND TESTS

The equipment shall be inspected and tested in accordance with the quality control plan issued by the vendor and approved by the CLIENT/EPC CONTRACTOR before the award of the order. The QC plan shall at least be according to the Commodity Procurement and Manufacturing Inspection Instruction (Doc.s No.s E&C-QC-INSP-1, ICE-EID-MI-SP01) and data sheets (if any).

The vendor shall in any case conduct all the tests required by contractual documents, specifications, codes and standards, manufacturer standard quality system and keep the relevant documentation.

#### 7.0 VENDOR DOCUMENTATION REQUIREMENTS & SCHEDULE

- Vendor document shall be according to attachment 2 of this document.
- All documents, preliminary or final, are to be stamped and signed by the vendor.
- Failure in dispatch of the required documents shall cause the supply to be considered as unfulfilled.
- CLIENT/EPC CONTRACTOR's approval does not relieve vendor, in any way, from his
  obligation to fulfill the requirements of the purchase order documents.
- All vendor drawings and documents shall be in English language.
- All drawings and documents are to be identified as follows:

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EPD/EPC CONTRACTOR (GC): Petro Iran Development Company (PEDCO)

EPC CONTRACTOR: Joint Venture of : Hirgan Energy - Design &

Inspection(D&I) Companies

#### 8.0 VENDOR RESPONSIBILITY

VENDOR shall be responsible for the design, engineering, co-ordination, supply, delivery, and testing, final check-out, training and satisfactory operation of the equipment/devices/items. The engineering coordination also includes responsibility for handing and expediting drawings.

Also VENDOR shall be responsible for ensuring that all relevant information and documentation is passed on the sub-vendors.



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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|--------------------------------------|--|-------|-----|----|----|------|-----|---|--|
| پروژه                                | نسخه سریال نوع مدر ک رشته تسهیلات صادر کننده بسته کاری پروژه |       |     |    |    |      |     |   |  |
| BK                                   | W046S  | PEDCO | 110 | IN | MR | 0002 | D01 | ı |  |

شماره صفحه: 9 از 18

#### 9.0 GUARANTEE AND WARRANTY

All material and Equipment/Devices/Items in VENDOR's scope of work/supply shall be guaranteed by VENDOR.

VENDOR shall guarantee the performance of supplied items (if any).

VENDOR shall supply the Equipment/Devices/Items with all the components necessary to provide the owner/operator of the facility with a finished, fully functional product; such product is in accordance with the contract documents, and operate within the performance guidelines set out in this document and the other relevant documents.

VENDOR shall guarantee that the Equipment/Device/Item is suitable for the operating conditions herein specified, and that all materials and components are free from any defects; verifications of all calculations are in VENDOR's responsibility.

VENDOR shall unconditionally guarantee the materials and workmanship of all material and/or services. If, within the guarantee period (which is noted in REFERENCE/ATTACHED DOCUMENTS, any defects occur which are due to faulty material and/or services included in his scope (design, manufacturing, inspection, testing, supply & etc.), VENDOR shall, at his own expense, repair or adjust the condition, or replace the material and/or services to the complete satisfaction of CLIENT's representative. These repairs, replacement or adjustments shall be made only at such time as will be least detrimental to the operation of the CLIENT's business.

VENDOR warrants promptly repairing or replacing the defective parts in the warranty period.

Vendor shall ensure a correct and safe operation of the unit, providing all safety protection Devices.

Vendor shall be responsible for the safe, reliable, continuous functioning of the Equipment/Devices/Items.

VENDOR is fully responsible for the design of package for correct and safe operation based on project requirement during package life time; therefore, VENDOR shall specify any documents/specifications which may be required for design, manufacture and finalizing of Equipment/Devices/Items to avoid any problems during the package operation at site before P.O; otherwise, VENDOR shall be hold responsible for any corresponding deviation from expectations from the Equipment/Devices/Items.

The guarantee period shall be eighteen (18) months from the date of delivery or twelve (12) months from the installation date of each equipment/packages at site

Vendor shall guarantee that, spare parts are available for 20 years from shipping date.



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



شماره پیمان:

053 - 073 - 9184

| PMR For FIELD INSTRUMENTATIONS-W046S |  |       |     |    |    |      |     |   |  |
|--------------------------------------|--|-------|-----|----|----|------|-----|---|--|
| پروژه                                | نسخه سریال نوع مدر ک رشته تسهیلات صادر کننده بسته کاری پروژه |       |     |    |    |      |     |   |  |
| BK                                   | W046S  | PEDCO | 110 | IN | MR | 0002 | D01 | ı |  |

شماره صفحه: 10 از 18

#### 10.0 DEVIATION

VENDOR's proposal shall be prepared in strict compliance with the requirements set forth in the relevant specifications of tender documents.

VENDOR shall include in his proposal the statement of compliance with the tender documents should VENDOR wish to submit exception to the requirements of tender documents. They shall be submitted for CLIENT/EPC CONTRACTOR's approval.

#### 11.0 PRICE BREAKDOWN

Breakdown price of following items shall be included in the proposal, as well as total price.

- 1) Material and Fabrication for each Section Separately
- 2) Pre-commissioning & commissioning spare parts (E&C-QC-SP-1)
- 3) 2 years' operational spare parts (SP-1)
- 4) Packing & transportation
- 5) Other fee (if any)





# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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| پروژه | بسته کاری                            | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |  |
| BK    | W046S                                | PEDCO      | 110     | IN   | MR       | 0002  | D01  |  |

شماره صفحه: 11 از 18

### 12.0 ATTACHMENT 1

### 12.1 LIST OF REFRENCE / APPLICABLE DOCUMENTS

| No. | Document No.                      | Document Title D01                                      | REV. | Status |
|-----|-----------------------------------|---|------|--------|
|     |                                   | Instrument  |      |        |
| 1   | BK-GNRAL-PEDCO-000-<br>IN-SP-0001 | Specification For Instrumentation                       | D04  | IFA    |
| 2   | BK-SSGRL-PEDCO-110-<br>IN-DT-0002 | Data Sheets For Pressure Gauge - Wellheads              | D02  | IFC    |
| 3   | BK-SSGRL-PEDCO-110-<br>IN-DT-0003 | Data Sheets For Temperature Gauge - Wellheads           | D02  | IFC    |
| 4   | BK-SSGRL-PEDCO-110-<br>IN-DG-0001 | Instrument Hook-up Diagram - Wellheads                  | D03  | IFC    |
| 5   | BK-SSGRL-PEDCO-110-<br>IN-DC-0002 | Instrument & Control System Design Criteria             | D01  | IFA    |
|     | Piping                            |   |      |        |
| 6   | BK-SSGRL-PEDCO-110-<br>PL-SP-0001 | Piping Material Specification                           | D02  | IFA    |
|     |                                   | Process   |      |        |
| 7   | BK-W046S-PEDCO-110-<br>PR-PI-0001 | P&ID - W046S  | D03  | IFA    |
|     |                                   | General   |      |        |
| 8   | ICE-EID-MI-SP01-Rev01             | دستورالعمل بازرسی خرید و ساخت کالا                      | -    | -      |
| 9   | ICE-EID-MI-SP02-Rev01             | سطح بازرسي كالا و تجهيزات                               | ı    | -      |
| 10  | E&C-QC-SP-1                       | دستورالعمل تامین قطعات یدکی راه اندازی و راهبردی دوساله | 1    | -      |
| 11  | BK-GNRAL-PEDCO-000-<br>QC-PR-0022 | Specification For Final Data Book (FDB) Requirements    | D00  |        |
| 12  | BK-GNRAL-PEDCO-000-<br>QC-PR-0045 | Packing, Marking, Transportation Procedure              |      |        |

\*\*NOTE: List of Documents will be Finalized in VDLS.



# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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053 - 073 - 9184

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| پروژه | بسته کاری                            | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |  |  |
| BK    | W046S                                | PEDCO      | 110     | IN   | MR       | 0002  | D01  |  |  |

شماره صفحه: 12 از 18

### 13.0 ATTACHMENT 2

### 13.1 VENDOR DOCUMENTS MIN. REQUIREMENT

|     |   | WITH<br>BID    |                    | AFTER OR             | DERING             |                | AT THE                     |
|-----|---|----------------|--------------------|----------------------|--------------------|----------------|----------------------------|
| NO. | DESCRIPTION   | Q./TYPE<br>(1) | Q./TY<br>PE<br>(1) | DELIVERY<br>DATE (2) | PURPO<br>SE<br>(3) | FINAL<br>ISSUE | FINAL<br>INSPECTION<br>(4) |
|     | MA  | NAGEMEN        | Т                  |                      |                    |                |                            |
| 1   | Vendor Document Index and Schedule (See attachment 2)   | 4N             | (5)                | 2W                   | А                  | (5)            | X                          |
| 2   | Organization Brief  | 3N             | (5)                | 2W                   | I                  | (5)            |                            |
| 3   | Schedule Level 1, 2, 3 & 4 showing Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan. | 4N             | (5)                | 3W                   | А                  | (5)            | Х                          |
| 4   | Physically Progress Report (Every 2 Weeks))   |                | (5)                | 2W                   | 1                  | (5)            |                            |
| 5   | Project Organization Chart  | 3N             | (5)                | 2W                   | I                  | (5)            | Х                          |
| 6   | Reference List  | 3N             | (5)                | 2W                   | I                  | (5)            |                            |
| 7   | Vendor Catalogue  | 3N             | (5)                | 2W                   | I                  | (5)            | Х                          |
|     |   | HSE            |                    |                      |                    |                |                            |
| 8   | HSE Procedure   |                | (5)                | 4W                   | А                  | (5)            | Х                          |
|     | EN  | GINEERIN       | G                  |                      |                    |                |                            |
| 9   | Specifications/Data Sheets (Completed)  |                | (5)                | 4W                   | А                  | (5)            | Х                          |
| 10  | Dimensional Outlines  | 3N             | (5)                | 4W                   | А                  | (5)            | Х                          |
| 11  | Mounting Details  |                | (5)                | 4W                   | А                  | (5)            | Х                          |
| 12  | Wake Frequency Calculations   | 3N             | (5)                | 4W                   | А                  | (5)            | Х                          |
| 13  | General Arrangement   | 3N             | (5)                | 4W                   | А                  | (5)            | Х                          |
| 14  | Detailed Dimensions of Cut- Outs  |                | (5)                | 4W                   | А                  | (5)            | Х                          |
| 15  | Parts/Material List   | 3N             | (5)                | 4W                   | А                  | (5)            | Х                          |
| 16  | Technical Description and Relevant Catalogues   | 3N             | (5)                | 4W                   | А                  | (5)            | Х                          |



# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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053 - 073 - 9184

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|-------|--------------------------------------|------------|---------|------|----------|-------|------|--|
| پروژه | بسته کاری                            | صادر کننده | تسهيلات | رشته | نوع مدرك | سريال | نسخه |  |
| BK    | W046S                                | PEDCO      | 110     | IN   | MR       | 0002  | D01  |  |

شماره صفحه: 13 از 18

|     |   | WITH<br>BID    |                    | AFTER OR             | DERING             |                | AT THE                     |
|-----|---|----------------|--------------------|----------------------|--------------------|----------------|----------------------------|
| NO. | DESCRIPTION   | Q./TYPE<br>(1) | Q./TY<br>PE<br>(1) | DELIVERY<br>DATE (2) | PURPO<br>SE<br>(3) | FINAL<br>ISSUE | FINAL<br>INSPECTION<br>(4) |
| 17  | List of Deviations from the Specification and Data Sheets   | 3N             | (5)                | 4W                   | А                  | (5)            |                            |
|     | PRO   | CUREMEN        | <b>I</b> T         |                      |                    |                |                            |
| 18  | List of Sub-Vendors ( table giving: part of equipment, tag no., sub-vendor reference)(5.1.3) (if any) | 4N             | (5)                | 4W                   | А                  | (5)            |                            |
| 19  | Unpriced copy of sub-orders   | 4N             | (5)                | 4W                   | I                  | -              |                            |
| 20  | Packing Spec. / Shipping Schedule   | 4N             | (5)                | 4W                   | I                  | -              |                            |
| 21  | Weight List/ Shipping List  | 4N             | (5)                | 4W                   | I                  | (5)            |                            |
| 22  | Mechanical & Performance Guarantees   | 4N             | (5)                | 4W                   | ı                  | -              |                            |
|     | QUALITY, MAN  | UFACTUR        | ING, TE            | STING Z              | 01                 |                |                            |
| 23  | Quality Assurance Manual /Quality Management System Certificate (according to latest rev. of ISO)     |                | (5)                | 3W                   | А                  | (5)            |                            |
| 24  | Preliminary Project Schedule  |                | (5)                | 4W                   | I                  | -              |                            |
| 25  | Weld and NDT Map (if any)   |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 26  | Surface Preparation and Painting Procedures   |                | (5)                | 4W                   | 1                  | (5)            | Х                          |
| 27  | Welding Procedure Specification (including repair procedures). (if any)                               |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 28  | Welder Qualification Procedure (if any)   |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 29  | Fabrication Degree  |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 30  | Manufacturing, Test & Inspection Procedures   | 3N             | (5)                | 4W                   | Α                  | (5)            | Х                          |
| 31  | Performance & Functional Test Procedure   |                | (5)                | 4W                   | Α                  | (5)            | Х                          |
| 32  | Non-Destructive Testing/Examination Procedures  |                | (5)                | 4W                   | А                  | (5)            | Х                          |
| 33  | Factory Acceptance Test (FAT) Procedure   |                | (5)                | 4W                   | Α                  | (5)            | Х                          |
|     | RECORDS, REP  | ORTS & C       | ERTIFIC            | CATES                |                    |                |                            |
| 34  | Material Conformity Certificate   |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 35  | Testing Authority Approval Certificate (if any)   |                | (5)                | 4W                   | 1                  | (5)            | Х                          |
| 36  | Hazardous Area Certificates.  |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 37  | Ingress Protection Certificate  |                | (5)                | 4W                   | I                  | (5)            | X                          |



# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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|--------------------------------------|--|--|--|--|--|--|--|---|
| پروژه                                | نسخه سریال نوع مدر ک رشته تسهیلات صادر کننده بسته کاری پروژه |  |  |  |  |  |  |   |
| BK W046S PEDCO 110 IN MR 0002 D01    |  |  |  |  |  |  |  | l |

شماره صفحه: 14 از 18

|     |   | WITH<br>BID    |                    | AFTER OR             | DERING             |                | AT THE                     |
|-----|---|----------------|--------------------|----------------------|--------------------|----------------|----------------------------|
| NO. | DESCRIPTION   | Q./TYPE<br>(1) | Q./TY<br>PE<br>(1) | DELIVERY<br>DATE (2) | PURPO<br>SE<br>(3) | FINAL<br>ISSUE | FINAL<br>INSPECTION<br>(4) |
| 38  | Conformity Certificates (subvendor/equipment)   |                | (5)                | 4W                   | I                  | (5)            | X                          |
| 39  | Material Certificates Identification Diagram. (cross-reference material location; certificates for critical components) |                | (5)                | 4W                   | I                  | (5)            | X                          |
| 40  | Welding Procedure Qualification Record. (if any)  |                | (5)                | 4W                   | I                  | (5)            |                            |
| 41  | Welder Qualification Records. (if any)  |                | (5)                | 4W                   | I                  | (5)            |                            |
| 42  | NDT Operator Qualifications   |                | (5)                | 4W                   | I                  | (5)            | X                          |
| 43  | Detailed NDT Reports  |                | (5)                | 4W                   | Α                  | (5)            |                            |
| 44  | Weld/ NDT Identification Diagram. (Cross-<br>reference weld locations, WPS, welders, NDT<br>reports). (if any)          |                | (5)                | 4W                   | А                  | (5)            | Х                          |
| 45  | Dimensional Control Reports   |                | (5)                | 4W                   | Α                  | (5)            |                            |
| 46  | Hardness Test Reports   |                | (5)                | 4W                   | Α                  | (5)            | Х                          |
| 47  | PWHT Charts & Reports, including calibration records of recorders (for each heat treatment)                             |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 48  | Pressure Test Reports / Certificates  |                | (5)                | 4W                   | A                  | (5)            | Х                          |
| 49  | FAT Test Report / Certificates  |                | (5)                | 4W                   | А                  | (5)            |                            |
| 50  | Performance Test Report / Certificates  |                | (5)                | 4W                   | Α                  | (5)            | Х                          |
| 51  | Material Test Certificates  |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 52  | Calibration Curves of Control Equipment   |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 53  | Calibration Test Certificates   |                | (5)                | 4W                   | 1                  | (5)            | X                          |
| 54  | Surface Preparation & Coating Reports   |                | (5)                | 4W                   | Α                  | (5)            |                            |
| 55  | Hydrostatic / Pneumatic Testing Certificates  |                | (5)                | 4W                   | 1                  | (5)            | Х                          |
| 56  | Welding Consumable Certificate(if any)  |                | (5)                | 4W                   | I                  | (5)            | Х                          |
| 57  | Test & Inspection Reports   |                | (5)                | 4W                   | А                  | (5)            |                            |
| 58  | Rust Prevention Report  |                | (5)                | 4W                   | Α                  | (5)            |                            |
| 59  | Non-Conformities Report   |                | (5)                | 4W                   | Α                  | (5)            |                            |
| 60  | Letter of Conformity  |                | (5)                | 4W                   | А                  | (5)            |                            |



# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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|-------|--|--|--|--|--|--|--|--|--|
| پروژه | نسخه سریال نوع مدرک رشته تسهیلات صادرکننده بسته کاری پروژه |  |  |  |  |  |  |  |  |
| BK    | BK W046S PEDCO 110 IN MR 0002 D01                          |  |  |  |  |  |  |  |  |

شماره صفحه: 15 از 18

|     |  | WITH<br>BID    |                    | AFTER OR             | DERING             |                | AT THE<br>FINAL   |  |  |  |  |
|-----|--|----------------|--------------------|----------------------|--------------------|----------------|-------------------|--|--|--|--|
| NO. | DESCRIPTION  | Q./TYPE<br>(1) | Q./TY<br>PE<br>(1) | DELIVERY<br>DATE (2) | PURPO<br>SE<br>(3) | FINAL<br>ISSUE | INSPECTION<br>(4) |  |  |  |  |
|     | INSTALLATION   |                |                    |                      |                    |                |                   |  |  |  |  |
| 61  | Sub-Assembly Documentation                                     |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 62  | Sub-Assembly Drawings  |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 63  | Erection/Installation Manual (if required)                     |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 64  | Name Plate Documents   | 4N             | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 65  | Handling, Transportation & Storage Instructions                | 4N             | (5)                | 4W                   | А                  | (5)            |                   |  |  |  |  |
| 66  | Unpacking & Inspection Instructions                            |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 67  | Preliminary Packing List                                       |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 68  | Packing List   |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
|     | OPERATION & MAINTENANCE  |                |                    |                      |                    |                |                   |  |  |  |  |
| 69  | Operating Instructions   |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 70  | Maintenance Instructions                                       |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 71  | Commissioning & Start-up Manual                                |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 72  | List of Spare Parts Commissioning & Start-up                   | 4N             | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 73  | List of Spare Parts 2 Years Operation                          | 4N             | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 74  | List of Special Tools  | 4N             | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 75  | Lube Oil Schedule  |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 76  | Software Manual (incl. Troubleshooting)                        |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 77  | Consumables List   |                | (5)                | 4W                   | Α                  | (5)            |                   |  |  |  |  |
| 78  | Function Test Procedure  |                | (5)                | 4W                   | Α                  | (5)            | Х                 |  |  |  |  |
|     |  | OTHERS         |                    |                      |                    | ,              |                   |  |  |  |  |
| 79  | All others documents (if required) will be listed in the order |                |                    |                      |                    |                |                   |  |  |  |  |
|     |  |                |                    |                      |                    |                |                   |  |  |  |  |
|     |  |                |                    |                      |                    |                |                   |  |  |  |  |



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



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| PMR For FIELD INSTRUMENTATIONS-W046S |  |  |  |  |  |  |  |  |  |
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| پروژه                                | نسخه سریال نوع مدر ک رشته تسهیلات صادر کننده بسته کاری پروژه |  |  |  |  |  |  |  |  |
| BK W046S PEDCO 110 IN MR 0002 D01    |  |  |  |  |  |  |  |  |  |

شماره صفحه: 16 از 18

|     |             | WITH<br>BID    |                    | AFTER OR             | DERING             |                | AT THE<br>FINAL<br>INSPECTION<br>(4) |
|-----|-------------|----------------|--------------------|----------------------|--------------------|----------------|--------------------------------------|
| NO. | DESCRIPTION | Q./TYPE<br>(1) | Q./TY<br>PE<br>(1) | DELIVERY<br>DATE (2) | PURPO<br>SE<br>(3) | FINAL<br>ISSUE | INSPECTION                           |
|     |             |                | _ ( /              |                      | (*)                |                |                                      |

### NOTES:

- \*\*\* The electronic file (Native/PDF) and Hardcopy version shall be provided in all stages by vendor.
- (1) Q : QUANTITY ; TYPE : C = COPY, R = REPRODUCIBLE, P = POLYESTER, M = MICROFILM, E = ELECTRONIC, N=NUMBER OF DOCUMENT
- (2) W = CONSECUTIVE CALENDAR WEEK, M = CONSECUTIVE CALENDAR MONTH
- (3) A = FOR APPROVAL I = FOR INFORMATION
- (4) X = DOCUMENTS TO BE SUBMITTED AT THE FINAL INSPECTION
- (5) "6 C+E" COPY OF DOCUMENT.
- (6) MECHANICAL CATALOGUE INCLUDING FINAL DRAWINGS/DOCUMENTS, UNPRICED PURCHASE ORDER & SUB- PURCHASE ORDER, MAINTENANCE DOSSIER ETC.
- (7) ALL DOCUMENTS AND/OR DRAWINGS FOR THIS PROJECT SHALL ALSO BE SUBMITTED IN THE ELECTRONIC FILES BY

USING THE FOLLOWING SOFTWARE.

MS OFFICE WORD 2013 OR UPPER VERSION (ENGLISH) FOR WORD PROCESSING MS OFFICE EXCEL 2013 OR UPPER VERSION (ENGLISH) FOR SPREAD SHEET AUTO CAD 2005 (ENGLISH) FOR DRAWING

(8) IN ORDER TO DESIGN AND MANUFACTURE THE INSTRUMENTS, VENDOR SHALL CONSIDER THE SEISMIC FACTOR.

SUITABLE FOR SEISMIC UBC 97 zone 4, AND THE RESULTS SHALL BE PROVIDED BY VENDOR.



## ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



شماره پیمان:

053 - 073 - 9184

| PMR FOR FIELD INSTRUMENTATIONS-W046S |   |       |     |    |    |      |     |  |  |
|--------------------------------------|---|-------|-----|----|----|------|-----|--|--|
| پروژه                                | نسخه سریال نوع مدرک رشته تسهیلات صادر کننده بسته کاری پروژه |       |     |    |    |      |     |  |  |
| BK                                   | W046S   | PEDCO | 110 | IN | MR | 0002 | D01 |  |  |

شماره صفحه: 17 از 18

### 14.0 ATTACHMENT 3

### 14.1 DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION

| Requisition No.: |  |  |
|------------------|--|--|

Description:

Equipment No.:

| Item<br>No. | Description of Proposed Exception | Recommended<br>Revision to JOB<br>SPECIFICATION | Reason for<br>Proposed<br>Exception | Effect on Base PROPOSAL if CONTRACTOR Rejects Exception |
|-------------|-----------------------------------|---|-------------------------------------|---|
|             |                                   |   |                                     |   |
|             |                                   |   |                                     |   |
|             |                                   |   |                                     |   |
|             |                                   |   |                                     |   |
|             |                                   |   |                                     |   |
|             |                                   |   |                                     |   |
|             |                                   |   |                                     |   |



# ساخت موقعیت چاه، تاسیسات سرچاهی، خطوط جریانی، و تسهیلات برق رسانی مربوط به موقعیت W046S



شماره پیمان:

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| PMR For FIELD INSTRUMENTATIONS-W046S                       |       |       |     |    |    |      |     |  |
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| BK   | W046S | PEDCO | 110 | IN | MR | 0002 | D01 |  |

شماره صفحه: 18 از 18

### 15.0 ATTACHMENT 4

### 15.1 ALTERNATIVES TO JOB SPECIFICATION

Description:

Equipment No.:

| Item<br>No. | Job Specification No. & Paragraph No. | Requirements of Job<br>Specification | Description of<br>Proposed<br>Alternative | Reason for Proposed<br>Alternative |
|-------------|---------------------------------------|--------------------------------------|---|------------------------------------|
|             |                                       |                                      |   |                                    |
|             |                                       |                                      |   |                                    |
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|             |                                       |                                      |   |                                    |