# OIL INDIA LIMITED KG BASIN PROJECT KAKINADA

GLOBAL EXPRESSION OF INTEREST (EOI) NO. OIL/KGB/EOI-46 FOR HIRING OF HPHT WELL ACTIVATION SERVICES COMPRISING OF COILED TUBING UNIT, NITROGEN PUMPING UNIT, NITROGEN STORAGE TANKS, SUPPLY OF LIQUID NITROGEN AND OPERATING CREW FOR TESTING OF EXPLORATORY HPHT WELLS IN NELP-VI BLOCK: KG-ONN-2004/1 IN EAST GODAVARI DISTRICT OF ANDHRA PRADESH & YANAM DISTRICT OF PUDUCHERRY, INDIA.

## 1. Introduction

OIL India Limited (OIL) invites Global Expression of Interest (EOI) from interested and reputable contractors with relevant experience for its Exploratory & Appraisal Well Drilling Campaign in the block- KG-ONN-2004/1 for provision of various services as mentioned below.

# 2. Brief description, work scope and services required

As a part of the Exploratory campaign NELP-VI block: KG-ONN-2004/1, 3 (three) exploratory HPHT wells are planned to be drilled on onshore field. Of this two (02) HPHT exploratory wells is already completed and 3<sup>rd</sup> HPHT well is about to be spudded in Mid October'2017.

OIL seek to hire the Well Activation Service package purely on call out basis comprising of Coil Tubing Unit (CTU) and Nitrogen Pumping Unit (NPU) along with operating crew and accessories to be utilized as and when required during testing of the first exploratory HPHT well, TLK-1. If required the well activation service for rest of the 2- HPHT well will be decided nearer the time.

The testing of the wells will be carried out by lowering 3-1/2" DST- TCP string rated to 15,000 psi and activation of the well is planned by lowering Coil Tubing to the target depth and charging Nitrogen in CT to displace the fluid column inside tubing. The wells will be tested either in 7" Bowen - Flow head from Schlumberger or in 3-1/16"x 15K Christmas Mass tree or 4-1/16"x 15 K Christmas tree.

OIL intend to hire the **Well Activation Service Package** comprising below mentioned services from competent and experienced Service Provider having experience in HPHT operations.

## A. Nitrogen Pumping Unit (NPU) Package-15,000 psi rated

- 1. **Nitrogen Pumping Unit:** 15,000 psi WP rated Nitrogen Pumping Unit (Non-Fired type with Integral spill traps.) with a suitable cold-end & vaporizer to achieve max. pumping & vaporizing rate of 90,000 SCF/HR at 15,000 psi.
- 2. Nitrogen Storage/Pumping Tank: Skid Mounted Nitrogen Storage/Pumping Tank -3 nos with 2000 US Gallon Capacity each with full protective shipping frame including spill traps with a maximum working pressure of 6 Bar. Tank must be fitted with standard safety relief systems as per applicable ASME code. For example: Tank Relief valve, Block line relief valve, Rupture disk, Annular space relief valve, etc. Tank must be provided with suitable pressure building coil to pressurize vessel for withdrawal of liquid.
- 3. <u>Treating Iron/Hoses:</u> The contractor shall provide suitable cryogenic hoses for Nitrogen pumping operations & adequate high pressure iron with sufficient valves, chiksans, NRV etc.

# 4. Supply of Liquid Nitrogen on Call out basis

5. **Operating Crew:** The contractor shall provide technically qualified, competent & experienced personnel to carry out all activities related to Nitrogen Pumping operations in professional manner following internationally recognized safe practices.

# B) Coiled Tubing Unit (CTU) Package

- **1. Coiled Tubing Unit:** 15,000 psi rated Coiled Tubing(CT) Unit of size 1.5"/1.75" OD CT suitable for working in 420 deg F bottom hole temperature for maximum well depth of 5200 metre along with following equipment / accessories should meet the following minimum requirement:
- a) **Coiled Tubing Power Pack:** The Contractor shall offer suitable diesel engine Hydraulic power unit for providing adequate hydraulic power to all Coiled Tubing components for the operation with adequate accumulator & backup hydraulic systems for contingency operation.
- b) **Coiled Tubing Control Cabin:** The Contractor shall offer suitable Control Cabin with dedicated controls in the control console for various

- functions of the Coiled Tubing unit. (Telescoping-Hydraulic raised or Stacked on Top of Power Pack.)
- c) <u>Coiled Tubing String:</u> The Contractor shall offer 15,000 psi rated 1.5" / 1.75" OD continuous coiled tubing string with suitable length for performing CT intervention till 5200m of QT900/HS90/GT90 or equivalent grade as a minimum.
- d) **Tubing Reel:** The above tubing string is to be placed in a suitably sized skid mounted tubing reel assembly suited for holding 5200 m working string of 1.5"/1.75" coiled tubing with 15,000 psi working pressure.
- e) **Tubing Injector:** The tubing injector should be suitable for 1.5" / 1.75" OD Coiled tubing and be driven by hydraulic motor with minimum 80,000 lbs pull capacity with suitable Gooseneck.
- f) **Stuffing Box/Stripper:** The Contractor shall offer Two (02) Nos. of Stripper of 15,000 psi WP with a minimum bore of 3 1/16" able to operate independently from each other, installed below the Injector head.
- g) **Blow Out Preventor (BOP):** The Contractor shall offer Two (02) Nos. of Quad/Dual Combi type BOPs of 15,000 psi WP with a minimum Bore size of 3 1/16" with dedicated hydraulic system & remote control actuation from the Control Cabin.
- h) **Gate Valve Assembly:** The Contractor shall offer Four (04). Nos. of suitable sized gate valves 15,000 psi rated to be installed (02 Each) on Kill port of each BOP.
- i) **Riser / CTU Lubricator:** The Contractor shall arrange for at least 3 sections X 10 feet (Each) risers / Lubricators of appropriate sizes & pressure rating for carrying out different CT operation.
- j) **Wellhead Crossovers & Treating Iron:** The package shall be inclusive of high pressure 15K psi rated surface piping along with suitable x-overs..
- k) **Coiled Tubing BHA:** The Contractor shall offer Coiled Tubing BHA consisting of CT Connector, Double Flapper Check Valves 15,000 psi rated, Hydraulic Disconnect, Circulating Sub, and Jetting Nozzles etc.
- l) <u>Data Acquisition System & CT Real-time Monitoring Software:</u> The contractor shall offer Data Acquisition System & CT Real-time Monitoring Software with sensors, transducers, other hardware & laptop computer to monitor, record, display, and print the following parameters: Tubing Depth, Speed, Weight, Circulating Pressure, Wellhead Pressure, Liquid /

- N2 Pump rate, Total Volume Pumped, Coil Tension, Coil Ovality, Coil Stress Envelope etc.
- m) <u>Crane Assembly</u>: The contractor shall provide a crane assembly with adequate lifting tools, shackles, slings etc suitable for lifting, spotting and rigging up & carrying out above mentioned Coil Tubing Operations along with necessary accessories.
- **2.** <u>Coil Tubing Unit Operation Crew:</u> The contractor shall provide technically qualified, competent & experienced personnel to carry out all activities related to Coil Tubing Unit operations in professional manner following internationally recognized safe practices.

Below are the formation data and well details which may be may be taken into consideration while proposing for service.

## HPHT well TLK-1

- a) Completion: 7" Liner completion (35.0 ppf, Grade-SM 125TT) in combination of casing string of 9-5/8" (53.5 ppf) x 9-7/8" (65.3ppf).
- b) Tubing: 3-1/2" Tubing (Grade T-95) 15.8 ppf with TSH-533 Integral connection.
- c) Target Depth: 5203 metre.
- d) Porosity: 6 to 12%
- e) Permeability: 0.053 mD (Average); 0.159 mD (Maximum)
- f) Pressure: 12,500-13,000 psi (Max); Temperature: 420 deg F at TD=5203m
- g) CO2 = 2-7%
- h) Fracture gradient = 0.64 psi/ft

## 3. Documents to be submitted:

To qualify for consideration, contractors are required to supply one (1) set of the following documentation, with the specific chapters, separated by dividers, in the same order as set out here below (a) to (l):

- a) A separate section summarizing the contents chapter by chapter of the prequalification document.
- b) Contractor's general structure and organization, including the branch / subdivision dedicated to such activities.

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- c) Details of company's Health, Safety and Environmental Policy and Programme together with HSE Management System.
- d) Safety record summaries for accidents, injuries, damages, near-misses & LTI over the past two (2) years.
- e) Quality Assurance System certified ISO 9001 or equivalent.
- f) Details of relevant verifiable experience of similar services that has been undertaken as main contractor in the last 5 (Five) years, inside or outside India.
- g) Reference (including emails and telephone numbers) of three major customers that can be contacted for information / reference.
- h) Description and brief specifications of services offered for this project.
- i) Resume of key personnel to be involved in the services with experience in their respective position.
- j) Qualifier's audited accounts for the past three (3) years.
- k) All relevant information concerning contacts, telephone, fax, e-mail of the contractor's representative.
- 1) Indicate tentative mobilization schedule.

In addition, applicants must provide two clearly labeled (2) electronic copies (CD ROM) of the prequalification documents.

Failure to provide any of the listed documents or information shall negatively affect the qualification to participate in the tendering process. Notwithstanding the submission of this documentation, OIL is neither committed nor obliged to include any contractor on the tender list or award any form of contract to any contractor and/or associated companies.

Please note that this is not an invitation to tender. Full tendering procedure will be provided only to contractors who have been successfully pre-qualified through this EOI and this may consist of safety / technical audit of facilities/equipment to determine those suitable to provide this service.

# 4. Vendor Pre-qualifying Criteria:

The contractor/Service provider must fulfill the following minimum criteria:

- (a) Minimum **5 years** of corporate experience in providing **Well Activation Services** in-house to E&P operators at the time of publication of this EOI.
- (b) Must have experience of providing **Well Activation Services with CTU** and **NPU** to at **least 5 nos. of wells** of which **minimum 1(one) well** should be a **HPHT well** in the last 7 years prior to publication of this EOI. Documentary evidence (viz. well details, pressure & temperature of the wells, well location, clients name with contact details, completion certificates etc. from client) showing details of scope of work for the services provided to these wells are to be provided.
- (c) The key operating personnel for offered services should have experience in Well **Activation Services** in **minimum 1(one) HPHT well**. The competent key operating personnel should have minimum 5 years of overall experience in Well Activation Service with CTU and NPU. Bidder should submit bio-data of the proposed personnel(s).

### NOTE:

- A) **Definition of HPHT** for the above case: Well having static reservoir pressure above 10,000 psi and static reservoir temperature above 300 deg F.
- (d) Must provide services for full scope of work i.e. to provide the following services as a package for the entire period of the contract:
  - (i) Nitrogen Pumping Unit package.
  - (ii) Nitrogen Storage Tanks-3 nos of 2000 bbl each
  - (iii) Supply of Liquid Nitrogen on call out basis
  - (iv) Operating crew for NPU package
  - (v) Coiled Tubing Unit package
  - (vi) Operating crew for CTU package
- (e) The contractor/service provider must be in a position to mobilize the entire package as mentioned in 4(d) above within 28 days of issuing call out notice for mobilization. The service provider should provide an undertaking for mobilisation of the service within the said timeline.

- (f) The Service Provider must have established Health, safety, security and environment management system with sound track record.
- (i) The average annual turnover of the Company in last three accounting years should be USD 0.5 Million or INR 3.25 Crore.

The Production testing of the HPHT well is scheduled from mid November'2017 and the requirement of the service is likely to come up in the last week of November'2017.

Interested Parties having relevant experience and expertise as above are invited to submit their EOI at our e-mail id: oilkgbprojecteoi@gmail.com within 31.10.2017, followed by hard copies and two(2) clearly labelled electronic copies (CD ROM) of the same through courier/post super-scribing "Expression of Interest No. OIL/KGB/EOI-46 for "FOR HIRING OF HPHT WELL ACTIVATION SERVICES COMPRISING OF COILED TUBING UNIT, NITROGEN PUMPING UNIT, NITROGEN STORAGE TANKS, SUPPLY OF LIQUID NITROGEN AND OPERATING CREW FOR TESTING OF EXPLORATORY HPHT WELLS IN NELP-VI BLOCK: KG-ONN-2004/1 IN EAST GODAVARI DISTRICT OF ANDHRA PRADESH & YANAM DISTRICT OF PUDUCHERRY, INDIA." at the following address:

Executive Director (KGB&BEP)
OIL INDIA LIMITED,
D.No.11-4-7, 3rd Floor,
Nookalamma Temple Street, Ramaraopeta,
KAKINADA- 533004, Andhra Pradesh.
Contact No: 0884-2302179.

The offer(s) may also be uploaded in Parties' FTP server/File sharing website (portal) and the link(s) may be provided to us at our e-mail within above specified period.

The offer(s) should have clear indication whether the same meet the requisite experiences as mentioned in Pre-qualifying criteria.

OIL reserves the right to (a) accept or reject any/all EOIs submitted by parties (b)cancel the process at any time without any liability and assigning any reason thereof.