Annexure-A

TERMS OF REFERENCE (TOR)

FOR

HIRING OF COMPOSITE WORKOVER SERVICES FOR WELL JAND # 01



TENDER ENQUIRY # PROC-SERVICES/CB/PROD-4917/2020

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SCOPE OF WORK AND TERMS OF REFERENCE (TOR)

1. INTRODUCTION:

Oil and Gas Development Company Limited (OGDCL) intends to execute a contract for the provision of composite workover services for one of its high pressure problematic well located in province of Punjab, Pakistan. The rate running contract will be effective from date of mobilization to the well for a period of one (01) year **OR** till the completion of job on the well whichever is later.

Bids are invited to provide Hydraulic Workover Unit (Snubbing Unit), expertise, general/specialized composite services with materials, all necessary equipment/machinery, workover plan and accordingly safe execution of workover services (Well killing, well control, retrieval of parted completion strings, retrieval of 7" completion packer with tail assembly and placement of three cement plugs) on the well.

2. TECHNICAL DATA:

Brief information and well history is as under:

- 2.1 PBTD: 5523 M, 5" Liner Top: 5,252 M, Selective Perfs interval: 5515 5376 = 112 M
- 2.2 7" Casing = 35 PPF, Shoe at 5319 M, 5" Liner = 18 PPF, Shoe @ 5962 M, 3-1/2" tubing = 12.95 PPF, L-80, PH-6
- 2.3 Predominantly a gas well with minor quantity of condensate.
- 2.4 Well was completed through workover in November 2018 with 3-1/2", 12.95 PPF, L-80 tubing, TRSSV and Permanent Packer in 7" casing.
- 2.5 Well produced for almost three months from 06-01-2019 to 29-03-2019.
- 2.6 Well production parameters at choke size = 28/64", WHFP = 2100 Psi, BHSIP=10096 Psi BHT=300°F, WHSIP=7,800 Psi
- 2.7 The property and density of annular fluid: 1.39 SG CaCl₂ brine.
- 2.8 Gas stream contains **8** % **H**₂**S** and **3** % **CO**₂.
- 2.9 Well was shut in for ATA since 29-03-2019.WHSIP dropped from 7800 Psi to 1400 Psi on 16-04-2019 indicating that something went wrong downhole.
- 2.10 Failed to open TRSSV for operational purpose on 19-04-2019
- 2.11 After necessary diagnostics, concluded that completion string is parted at 74 M depth. Tagged lower parted portion of completion string at 113 M.
- 2.12 As per available data and caliper log confirmations, fish head is most likely TRSSV at 113 M.
- 2.13 At present, well has the tendency to build pressure @ 20-25 Psi/day due to leakage somewhere from lower part of parted completion string. Pressure build-up is periodically bleed-off from 500 600 Psi to zero for safety reasons.
- 2.14 Additional well data whichever is available will be provided on request.

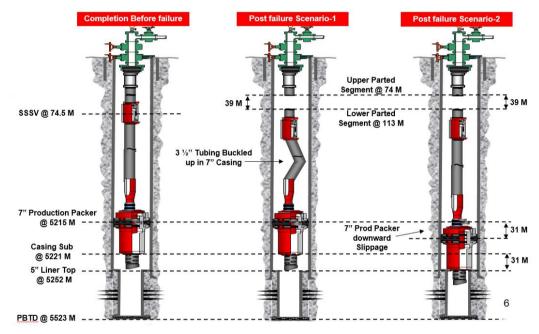
3. WORK PLAN:

- 3.1 Mobilization of Hydraulic Workover Unit and other required services to well site by the contractor.
- 3.2 POOH upper portion of 3-1/2" tubing.
- 3.3 Fishing activity for the retrieval of parted completion along with LSA.
- 3.4 Retrieval of 7" production packer with tail assembly.
- 3.5 Cement squeeze / placement of cement plugs (bottom plug against perfs, placement of middle plug to secure 5" liner top followed by top cement plug) to temporarily plug and abandon the well.

4. SCOPE OF WORK FOR BIDDERS:

- 4.1 Scope of work is for only one (01) specific well located in Potohar region of Pakistan.
- 4.2 Review of pertinent well data provided by the OGDCL.
- 4.3 Provision of technical bid along with proposed unpriced financial bid format and financial TORs.

- 4.4 Provision of detailed workover program.
- 4.5 Provision of Integrated Project Management of operations
- 4.6 Provision of Hydraulic Workover Unit (Snubbing unit) for workover operation
- 4.7 Provision of plan regarding all other required allied services (Slickline, Wireline, CTU, etc.)
- 4.8 Provision of all other required allied services (Slickline, Wireline, CTU, etc.)
- 4.9 Provision of all applicable safety systems pertinent to these operations
- 4.10 Provision of well killing and well control services.
- 4.11 Provision of any additional well head equipment necessary for safe operations.
- 4.12 Provision of mud services and mud chemicals if required.
- 4.13 Provision of mud logging services if required.
- 4.14 Provision of comprehensive fishing services.
- 4.15 Provision of cementation services and cement slurries for cement plugs jobs (1st/Bottom plug = 220 M, 2nd /Middle plug = 100 M and 3rd/Top plug = 100 M)
- 4.16 Provision of detailed post job report.
- 4.17 Below schematics have been provided as reference only and provide the most likely downhole scenarios based on observations/assumptions.



5. TERMS AND CONDITIONS:

- 5.1 Scope of work is for only one (01) specific well located in Potohar region of Pakistan.
- 5.2 The bidder(s) to confirm compliance with OGDCL's QHSE Policy. However, given the nature of the intervention work Bidder is required to submit its HSE plan and relevant procedures for this particular work.
- 5.3 All certificates, documents, proof of relevant jobs etc. should be in English language; if not so then they shall be accompanied with certified translation to English language.
- 5.4 Free of cost visits to wellsite (prior to start any operation) need to be made by the bidder to provide feedback for any additional civil work required to be managed by OGDCL. Bidder to submit foot print drawing of the hydraulic work over unit as part of bid submission
- 5.5 Arrangement of Hydraulic Workover Unit (Snubbing unit), equipment, materials, chemicals, fishing and all allied services whichever required for the workover operation shall be the sole responsibility of the contractor.
- 5.6 The bidder to mobilize all equipment and crew to well site within 90 days after signing of contract with OGDCL.
- 5.7 Adequate back-up for services/equipment should be available on site free of cost to avoid delay in operations.

- 5.8 All equipment/machinery/tools quoted by the bidder must be in good working condition with valid inspection and calibration certificate(s) for the performance of job(s). OGDCL reserves the right to inspect quoted equipment and tools as part of technical evaluation.
- 5.9 Contractor must consider high pressure and high temperature sour environment and deploy suitable/compatible operational equipment to meet the requirements.
- 5.10 Bidder(s) to arrange all safety equipment/services at his own for bidder as well as OGDCL deployed personnel whichever is required by them for working in extreme H₂S environment with no additional cost to OGDCL.
- 5.11 All responsibility for any third-party equipment and personnel supplied/deployed by the contractor shall rest with the contractor.
- 5.12 All third-party deployed equipment must be accompanied with applicable quality and safety standards and/or pressure control manuals.
- 5.13 Key personnel for all services must have experience to efficiently and swiftly carry out the similar well intervention tasks. CVs of key personnel to be submitted for verification.
- 5.14 OGDCL shall not be accountable for any injury of contractor personnel during Mob/De-mob, loading, offloading and during the main course of operations at well site. Health insurance of deployed crew will be the responsibility of the bidder(s).
- 5.15 Availability of safe and swift system regarding ignition of gas at flare pit is to be ensured by the bidder.
- 5.16 Bidders to provide technical bid along with detailed workover program, proposed unpriced financial bid format and financial TORs.
- 5.17 **Financial bid format and financial TORs will be finalized** in consultation with technically qualified bidders.
- 5.18 **Technically qualified bidders will have to submit financial proposals** as per finalized financial bid format and agreed financial TORs.
- 5.19 Service Company to arrange necessary NOCs for its personnel to work in the lease area.
- 5.20 OGDCL reserves the right to ask bidder for the replacement of any of their personnel who is / are unacceptable to OGDCL for his / their incompetence or misbehavior at contract holder's expense.
- 5.21 An expert on hydraulic work over unit to be available during the work execution in Islamabad. His role will be to plan the job, establish associated risks and supervise work execution. He will also address the points raised by our coordination team as such person will work as a consultant from the service company and will have experience of supervising similar well intervention activity.
- 5.22 Bidder to establish possible scenarios that it could face based on the information that will be provided by OGDCL.
- 5.23 A full work plan to be provided by the bidder highlighting the scope of work that will be carried out through slick line e.g. setting plugs on top of the fish, a comprehensive scope of work that will be carried out through the hydraulic work over unit including its set up and subsequent operational steps.
- 5.24 The bidder to submit the post job report within one month after execution of job.
- 5.25 OGDCL reserves the right to accept or reject any/all bid (s) or annul the entire bidding process at any time prior to award of Contract without taking any responsibility of the affected bidder(s) and is not bound to justify the reasons to the affected bidder(s).
- 5.26 Bidder to establish possible scenarios based on information provided by OGDCL.

6. DURATION OF CONTRACT:

- 6.1 The contract will be on rate running basis. The duration of the contract will be one (1) year starting from the date of mobilization to the well, or till completion of job on the well whichever comes later.
- 6.2 The bid proposal/rates should remain valid unconditionally during the period of contract.

7. PAYMENT TERMS:

- 7.1 The payments to the Service Company will be made in line with agreed financial TORs.
- 7.2 The prices quoted by the bidders in financial bid should be in US\$. The quoted prices should be fixed/firm and are inclusive of all applicable taxes, duties and levies etc. except Provincial Sales Tax/ICT Tax on Services.

8. BID BOND:

Bid Bond/Bid Security amounting to **US\$:10,000/-** (**US Dollars Ten Thousand Only**) is to be attached/provided with technical bid. Please see Master Set of Tender Document for further details.

9. MODE OF PROCUREMENT:

Bids against this tender are invited on **"Two Stage Bidding Procedure"** through press tendering. Therefore, the bidders shall submit original technical bid along with soft copy.

Note: The Master Set of Tender Documents for services uploaded on OGDCL's website (<u>www.ogdcl.com</u>) is the integral part of this TOR.

10. TECHNICAL EVALUATION:

All the bidders are required to provide a compliance certificate to the following minimum requirements. The bidder must fulfill the below mentioned minimum requirements for preliminary technical qualification. Confirmation to all the mentioned services and terms and conditions is required from the bidder.

The bidder will deliver detailed presentation on workover program, equipment/material specifications /requirement and crew requirement for the job to OGDCL technical team. Convincing technical presentation(s) of work program in addition to confirmation to the below mentioned tables will lead to technical qualification of the bidder(s).

EQUIPMENT/ TOOLS (ALL EQUIPMENT MUST BE H₂S COMPLAINT)

Sr.	Description	Availability
1	 Hydraulic Workover Unit (Snubbing Unit) Bidder to provide suitable Hydraulic Workover Unit (Snubbing unit) with minimum following specifications. Hydraulic Jack Workbasket and associated accessories (OHSA approved height for railings) Operator and BOP Consoles Telescopic Caged Ladder Gin Pole 2 set Travelling slips (1 set heavy, 1 set light) 2 set Stationary slips (1 set heavy, 1 set light) Hydraulic Rotary Necessary milling Clamp Hydraulic Power pack and associated accessories Tool container complete with tools and spares for the job Snubbing Guides Associated Pressure Control equipment 	Yes/No
	It will be the responsibility of service provider to provide complete set of equipment as required to operate the unit. Unit pulling and snubbing capacity to be in line with the workover requirement of the well. Unit must be equipped with slip interlock system.	
	Unit should be in compliance with API RP 2A. The structural steel design calculations are required to be performed in accordance with the API 8C 5th Edition. It is required that environmental loading calculations as per API 4F have been successfully performed on this unit.	

2	Mud engineering services and chemicals. Bidder to provide mud engineering services and mud chemicals during workover operations.	Yes/No
3	Allied services Bidder to provide all other required allied services (Slickline, Wireline, CTU, etc.)	Yes/No
4	Fishing Operation Bidder to provide all fishing tools / services required during workover operations.	Yes/No
5	Cementing services and chemicals Bidder to provide cementing services and cement slurries during workover operations.	Yes/No
6	Mud logging services if required Bidder to provide mud logging services during workover operations.	Yes/No
8	Tubing RIH/POOH capabilities The bidder should have all required equipment and crew for RIH/POOH completion string.	Yes/No

11. COMPANY PROFILE

Sr.	Description	Availability
1	Registered company inside or outside Pakistan with minimum registration period	Yes/No
	of 10 or more years. Provide documents for registration.	
2	Bidder's History (attach proof)	Yes/No
	Providing the Hydraulic Workover Unit (Snubbing unit) and workover services for	
	10 or more years in Pakistan or elsewhere around the globe.	
3	Bidder to provide standard operating procedure (SOPs) for each service along with technical specifications of Pressure Control Equipment (PCE) and Inspection Certifications.	Yes/No
4	Equipment for all services should be in good condition and of latest model as per industry standards. Equipment for all services should be accompanied with operating manuals and valid maintenance and inspection certificates (attach with bid). Equipment shall be liable to inspection and final approval by OGDCL.	Yes/No
5	Bidder must have carried out at least three (03) complex well intervention jobs.	Yes/No
	Case histories to be provided along with the bid	