#### **Annexure-A**

## **TERMS OF REFERENCE (TOR)**

#### **FOR**

## HIRING OF SMART COIL SERVICES



# TENDER ENQUIRY # PROC-SERVICES/CB/PROD-640000001/2022

#### TERMS OF REFERENCE / SCOPE OF WORK

#### 1. SCOPE OF WORK:

Hiring of Smart coil and Inflatable bridge plug services (Retrievable/Permanent) for wells located anywhere in Pakistan on rate running and call out basis over a period of three (03) years for estimated 15 jobs.

#### **TERMS AND CONDITIONS:**

- 2.1 All certificates, documents, proof of work etc. should be in English language; if not then same shall be accompanied with certified translation in English language.
- 2.2 Coil tubing should have effective workable life well enough for the contract period and suitable for smart coil operation.
- 2.3 All HSEQ responsibility for any third party equipment and personnel supplied by the contractor shall rest with the contractor.
- 2.4 All the equipment should be in good working condition, valid calibration and third party inspection certificates should be available with field service crew for verification by field engineer prior to start of job.
- 2.5 OGDCL shall not be liable to pay any mobilization/demobilization of tools/equipment for bringing it to Pakistan that may be located elsewhere.
- 2.6 Contractor to provide the list of equipment, tools and other accessories wherever required by OGDCL before mobilizing to wellsite.
- 2.7 HSE / safety related equipment in working condition should be available during all jobs.
- 2.8 Bidder to arrange all safety equipment/services at their own for their personnel for working in extreme H<sub>2</sub>S environment with no additional cost to OGDCL.
- 2.9 OGDCL shall not be accountable for any personnel injury during Mob/De-mob, loading, offloading and during the course of operations at well site. Health/accidental insurance cover of deployed crew will be the responsibility of the bidder.
- 2.10 Adequate back-up services / equipment should be available at well site. However, OGDCL will not pay for backup equipment.
- 2.11 All technical details for items/equipment specified in Section "Technical Evaluation Criteria" must be covered in the technical bid.
- 2.12 Contractor may provide standard price list for additional material, equipment and tools required for the job. The same will be used as reference for obtaining Management approvals when required.
- 2.13 The equipment and crew have to work round the clock as per operational activities.
- 2.14 Bidders to attach unpriced financial bids in their technical bids.
- 2.15 All equipment must be H<sub>2</sub>S/CO<sub>2</sub> compliant.
- 2.16 Maximum notice period for each call-out is 3 days and transit time from company base to OGDCL location is 3 days.
- 2.17 Successful bidder will provide the same personnel mentioned in their bid to carryout jobs. In case the service company engages the personnel other than those mentioned in their bid, the educational and experience certificate must be provided before mobilization.
- 2.18 The bidder will provide complete list of personnel to be deployed for the jobs along with CVs.
- 2.19 OGDCL reserves the right to ask bidder for the replacement of any of their personnel due to incompetence or misbehavior at contractor's expense.
- 2.20 If during job, it is ascertained that the service company is unable to perform / accomplish the job satisfactorily, OGDCL reserves the right to demobilize the service company.
- 2.21 Invoice for unsuccessful job i.e. due to mechanical failure of contractor's equipment or inefficiency of well site crew will not be paid.

- 2.22 All available services with smart coil tubing will be utilized as per operational requirement. The bidder to cover cost of all services of smart coil in different available payment heads in financial evaluation model. No additional payment shall be made for any service which can be performed with smart coil and utilized by OGDCL. Addition of new cost head in financial model is not allowed.
- 2.23 BHA used for different smart coil operation is essential part of coil tubing operation. No separate payment for any BHA shall be made.
- 2.24 Pressure test and pull test before start of job is to be carried out by Service Company following standard procedure using their own equipment and crew. No charges will be applicable for equipment and crew used for pressure test and pull test before start of job.
- 2.25 OGDCL has the sole discretion to utilize the services as whole or partial and the service company will have to provide complete or partial services accordingly.
- 2.26 Quantities used in evaluation tables are for evaluation purpose only, payment to be made as per actual.
- 2.27 The number of jobs may increase or decrease as per actual operation. The approved amount against the contract will be collectively used for any number of jobs/wells.
- 2.28 Fuel, oil and lubricants that may be required by service company for operational purpose will be charged to service company as per actual and the cost will be deducted from the invoice.
- 2.29 There will be no standby charges on the reporting day at location and the day the contractor is demobilized for both equipment and crew.
- 2.30 The standby rates of equipment and personnel must not exceed 50% of operational charges for all equipment / personnel. Any standby charges quoted above 50% shall be considered 50% for evaluation and payment purpose.
- 2.31 Lighting arrangement if required at well site is to be arranged by the bidder.
- 2.32 Rig up/Rig down and associated preparation period before start of job will be paid as standby for both equipment and crew.
- 2.33 Daily operating charges for coil tubing equipment and crew will commence from the day/date coil tubing is lowered into the well bore and would cease when coil tubing is out of hole.
- 2.34 The coil tubing cumulative depth is defined as the accumulated downward movement of the coil tubing.
- 2.35 Partial availability of crew or equipment will not attract any charges. During traveling (mobilization/de-mobilization) phase, no operating/stand-by/rental charges will be admissible and only Mob/De-mob will be payable (if not mobilized by OGDCL).
- 2.36 If, after mobilization / reporting at site, job is cancelled then mobilization / demobilization charges for crew / equipment along with standby charges to be paid from reporting day to demobilization day. Job cancellation charges are not admissible.
- 2.37 Well to well movement of both equipment and crew within the same field is the responsibility of the bidder without any charge to OGDCL.
- 2.38 Mob/De-mob charges for equipment & crew will be calculated as per OGDCL distance chart for the locations covered in the chart and as per actual for the locations not covered in OGDCL location distance chart.
- 2.39 During coil tubing operation, environment would be treated as corrosive if respective recorded values of CO<sub>2</sub> exceeds 5 % or H<sub>2</sub>S exceeds 10 PPM by volume. Extra charges for corrosive environment to be incorporated including adjusted additional dosage of chemicals e.g. corrosion inhibitor, inhibitor aid, H<sub>2</sub>S scavenger, H<sub>2</sub>S-CO<sub>2</sub> Inhibitor etc. Extra charges for chemicals to combat corrosive environment will not be paid by OGDCL.
- 2.40 Stimulation, pumping services and/or Nitrogen kick off services etc. provided by OGDCL either own or through third party contract will be utilized with smart coil where required.

- 2.41 The lost in hole (LIH)/DBR charges for bottom hole tools (BHA) and actual damaged/LIH coil tubing length will be paid by OGDCL as per following criteria subject to the conditions that there is no malfunctioning of service company equipment and loss/DBR is due to abnormal well conditions.
  - ➤ 40 % of landed cost of equipment/tools which are less than three years old.
  - > 30% of landed cost of equipment/tools which are equal to or more than three years old.
- 2.42 If required third party inspection/evaluation for LIH/DBR will be carried as per predefined scope with mutual consent. Cost for third party inspection/evaluation will be on bidders account.
- 2.43 Bidder must give "Clean acceptance certificate" of OGDCL terms and conditions and if exceptions are found, the bidder will withdraw all exceptions.
- 2.44 The scope of work is tentative. OGDCL may increase or decrease the scope of work without any change in rates and terms & conditions.
- 2.45 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).
- 2.46 Boarding / lodging and laundry services would be provided free of cost by OGDCL to the service company crew while working in the field/Rig site.
- 2.47 Bidder to comply with OGDCL's HSEQ policy.

#### 3. DURATION OF CONTRACT:

- 3.1 The duration of the contract will be three (03) years starting from date of signing of contract.
- 3.2 The bid proposal/rates should remain valid unconditionally during the term of contract.
- 3.3 The **Rate Running Contract** (as and when required basis) will remain intact till the completion of jobs on wells where contractor is mobilized for the job during the contract period. Extension in term of contract will be subject to mutual consent of both the parties in writing.

#### 4. PAYMENT TERMS:

- 4.1 The prices quoted by bidder in financial bid should be in US\$. The quoted price should be fixed/firm and are inclusive of all applicable taxes, duties and levies etc. except Provincial Sales Tax/ICT Tax on services. Rate format of RFQ shall be considered.
- 4.2 The payment will be made in 100% Pak rupees against verified invoices at official exchange rate prevalent on the date of payment.

(This clause will prevail instead of Master Tender document "ITB" clause # 07 'PAYMENT').

#### 5. BID BOND:

Bid bond/Bid security amounting to US\$ 10,000.00 (US Dollar Ten Thousand Only) is to be attached/provided with financial bid. Please see master set of tender document for further details.

#### 6. BIDDING METHOD:

- 6.1 Bids against this tender are invited on "Single Stage Two Envelope Bidding Procedure" through press tendering.
- 6.2 The bidders shall submit one original technical and one original financial bid along with soft copies of technical bids sealed in their respective envelopes.

Note: The Master set of tender documents for services uploaded on OGDCL website (www.ogdcl.com) is the integral part of this TOR.

#### **TECHNICAL EVALUATION**

- 1. Only technically qualified bidder(s) will be considered for financial evaluation.
- 2. OGDCL reserves the right to visit bidder's operational base, check inventory and verify the information provided in the bid at any stage during evaluation of bid and the contract period.
- 3. All the bidders must fulfill the below mentioned technical requirements for technical qualification. Even single "No" in below mentioned tables for technical evaluation will lead to disqualification.

#### 1. EQUIPMENT

Sr.	DESCRIPTION	AVAILABILITY				
COIL	COIL TUBING SERVICES					
1	SMART COIL TUBING UNIT/ REEL/INJECTOR HEAD					
i	Availability of at least one (01) complete smart coil tubing unit with capacity for coil sizes 1.5"(5,500 M), 1.75"(4,300 M) and 2" (4,000 M) complete with all valid certificates available anywhere around the globe at the time of bidding.	Yes/No				
ii	Commitment to arrange smart coil services in Pakistan within 45 days after signing of contract.	Yes/No				
iii	The coil tubing unit must be equipped with latest real time monitoring software (fatigue computation and data acquisition), with self-aligning sliding Goose neck, separate power pack drive mechanism and injector heads.	Yes/No				

#### **APPLICATIONS OF SMART COIL**

OGDCL require following jobs to be performed through Smart coil, therefore, contractor to provide necessary connection including but not limited to logging head to perform jobs along with OGDCL/third party services. Bidder to confirm that Smart coil provided to OGDCL is capable of performing below mentioned jobs in true letter and spirit. No additional payment other than those mentioned in Financial Evaluation model to be made to the contractor.

i	Wireline logging e.g CBL/CCL, Gamma Ray/Neutron logs, caliper etc.	Yes/No
ii	Temperature log	Yes/No
iii	Perforations	Yes/No
iv	Casing/tubing cutting	Yes/No
V	Packer/bridge plug setting	Yes/No
vi	Cement retainer setting	Yes/No
vii	Convey any tool through coil tubing and operate via wire line	Yes/No
viii	Fishing	Yes/No
ix	Plugs setting and retrieval	Yes/No
Х	Well logging (Real time & memory)	Yes/No
xi	Production logging both qualitative & quantitate	Yes/No
xii	Leak identification	Yes/No
xiii	Flow path identification	Yes/No
xiv	Real time bottom hole parameters	Yes/No
χV	Bottom hole pressure and temperature survey during kick off	Yes/No
xvi	Setting and retrieving tubing patch	Yes/No

	ADDITIONAL ORTIONAL FEATURES OF SMART COUL				
2	ADDITIONAL OPTIONAL FEATURES OF SMART COIL				
OGD	OGDCL may utilize the following additional optional features of smart coil if available with				
prov	ided smart coil of the bidder without any financial impact to OGDCL.				
i	Capability of delivering live downhole data (differential pressures across CT,				
	Temperature, Depth Correlation) during Nitrogen Kick-off and Stimulation including				
	temperature profiling.				
ii	Ability to pump HCl up to 15% to conduct matrix stimulation, acid was	sh and cleanout			
	services and provide real time stimulation/diversion analysis and effect	iveness.			
iii	Ability to pump aromatic solvents to conduct cleanout services and pr	ovide real time			
	analysis				
3	PRESSURE CONTROL EQUIPMENT				
i	WCE Remote control panel (To be operated from control cabin)	Yes/No			
ii	10K Psi rating WCE (CAT-I), compatible to H₂S environment	Yes/No			
iii	10K Psi rating WCE (CAT-II), compatible to H <sub>2</sub> S environment	Yes/No			
iv	15K Psi rating WCE (CAT-III), compatible to H <sub>2</sub> S environment	Yes/No			
4	Adapters/X-overs for coil tubing rig-up as per standard tree top/drill	Yes/No			
	pipe connections without any financial impact				
5	Provision of inflatable retrievable/permanent Bridge plugs.	Yes/No			
	(Commitment to Provide within 15 Days of mobilization notice at well site)				
6	Data acquisition system	Yes/No			
7	Coil tubing unit and pump unit are Zone-II certified.	Yes/No			

## 2. <u>CREW</u>

Sr.	QUALIFICATION/EXPERIENCE OF CREW MEMBERS	AVAILABILITY
1	CTU ENGINEERS / SPECIALIST (AT LEAST 1 ENGINEER)	Yes/No
	Petroleum or Mechanical Engineer with minimum five (5) years of	
	exclusive experience of planning, designing and executing Coil Tubing	
	operations along with relevant training(s) and certified courses etc.  Must have designed and performed 100 coil tubing jobs.	
2	SMART COIL OPERATOR (AT LEAST 02)	Yes/No
	Technical diploma holder with minimum of five (05) years' experience	
	of Smart coil operations.	
	Must have performed 10 jobs with smart coil.	
3	OPERATOR (AT LEAST 02 OPERATORS)	Yes/No
	Technical diploma holder/ matric with at least five (05) years relevant	
	experience of executing coil tubing jobs along with relevant certification	
	and training courses etc.	
	<ul> <li>Must have Performed 100 jobs with CTU.</li> </ul>	

## 3. **COMPANY PROFILE**

Sr.	DESCRIPTION	AVAILABILITY
1	BIDDER'S HISTORY (ATTACH PROOF)	
i	Company registered in Pakistan or elsewhere for providing coil tubing	Yes/No
	and stimulation services. Minimum registration period = 05 Years.	

2	BIDDER'S CAPABILITIES	
i	Bidder have performed at least 20 jobs with smart coil around the globe.	Yes/No
ii	Pumping units with necessary hook up piping having minimum 350 hp - 500 hp must be available with the bidder.	Yes/No
iii	Bidder, to provide standard operating procedure (SOPs) for coil tubing, Smart coil jobs along with Technical manual of pressure control equipment (PCE).	Yes/No
iv	Bidder, to provide published pressure control manual for standard coil tubing operations.	Yes/No
V	Bidder, to provide free of cost minimum 06 days basic and advanced coil tubing and stimulation training to two (02) OGDCL Engineers every year. Share a structured training program.	Yes/No
3	BASE SET UP	
Equ afte Equ test	Yes/No	

## FINANCIAL EVALUATION MODEL GROUP "C" (ALL OVER PAKISTAN)

Sr.					
51.	Services	Qty. (Q)	UOM (U)	Unit Cost (P)	Total Cost =P x Q
				US\$/UOM	US\$
1.5"	/1.75"/2" Smart Coil Services (for all Categories F	PCE)			
1	Smart coil tubing unit with necessary BHA upto category 3 PCE- Operating charges.	60	Day		
2	Smart coil tubing unit with necessary BHA upto category 3 PCE - Standby charges.	30	Day		
3	Smart coil Cumulative Depth Charges for Non-corrosive Environment.	60,000	Meter		
4	Smart coil Cumulative Depth Charges for corrosive Environment CO2 $\geq$ 5 % or H2S $\geq$ 10 PPM.	15,000	Meter		
5	Crew Operating.	60	Day		
6	Crew Standby.	30	Day		
7	Equipment Mob/De-mob.	20,000	KM		
8	Crew Mob/De-mob.	20,000	KM		
Crai	ne Services Inclusive of Operator				
9	40-50 ton Hydraulic Crane Operating Charges.	60	Days		
10	40-50 ton Hydraulic Crane Standby Charges.	30	Days		
11	Crane with operator Mob/De-mob.	20,000	KM		
			Т	otal (US\$)	

C	Baraniakian	04	иом	Unit/Total Cost (US\$)		
Sr.	Description	Qty.		Retrieved	Left in hole	
1	Inflatable bridge plugs (2-7/8" tubing to 5"-7" Liner/casing) on location charges.	1	Nos.			
2	Inflatable Bridge plugs (3-1/2" tubing to 5"-7" Liner/casing) on location charges.	1	Nos.			
3	Inflatable Bridge plugs (4-1/2" tubing to 5"-7" Liner/casing) on location charges.	1	Nos.			
4	Inflatable Bridge plugs (5" tubing to 7" - 9-5/8" Liner/casing).	1	Nos.			
		otal (	Cost(US\$)			

(C)	(C) Inflatable Bridge Plug Services (Permanent/Retrievable):				
Sr.	Description	Qty. UOM (P) (Q) (U) US\$/UOM			Total Cost =P x Q
			US\$		
1	Inflatable Bridge plugs crew with setting	28	Day		
	kit-Operating Charges.				
2	Inflatable Bridge plugs crew with setting	14	Day		
	kit-Standby Charges.				
3	Inflatable Bridge plugs crew including	7,000	KM		
	setting kit-Mob/De-mob.				
	Total(US\$)				

Table To	Table Totalizer				
Table	Description	Value (US\$)			
Table A	Smart coil services.				
Table B	Inflatable Bridge Plugs (Permanent/Retrievable),				
	(Left In Hole Cost to be used).				
Table C	Inflatable Permanent/Retrievable Bridge Plug services.				
	Grand Total(US\$)				

#### Note:

- Bidder scoring lowest "Grand Total (US\$)" in table totalizer shall be declared financially lowest evaluated bidder and the contract shall be awarded to the financially lowest evaluated bidder.
- Any additional items not covered in the table may be utilized as per published price book with 50% discount, if required, subject to approval of OGDCL Management.