**Annexure-A** 

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

## FOR

# HIRING OF DST AND FLEX TEST SERVICES FOR 15K DOWNHOLE /10K SURFACE PRESSURE CONDITIONS WITH DOWNHOLE TEMPERATURE CONDITIONS OF 392°F



# TENDER ENQUIRY # PROC-SERVICES/CB/PROD-4814/2020

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## HIRING OF DST SERVICES TERMS OF REFERENCE / SCOPE OF WORK

## 1. OPERATIONAL CONDITIONS:

Hiring of DST services with following operational conditions

- 1. Downhole Pressure Conditions: Upto 15,000 Psi
- 2. Surface Pressure conditions: Upto 10,000 Psi
- 3. Down Hole Temperature Conditions: Up to 392 °F/200 °C
- 4. Well Depth: <u>+</u> 5,500 M

### 2. SCOPE OF WORK:

Estimated 30 wells located anywhere in Pakistan during a period of three (03) years.

## 3. GENERAL TERMS AND CONDITIONS:

- 3.1 The bidder must have all required equipment (with backup) and crew capable of performing jobs on 04 wells simultaneously.
- 3.2 All the required equipment and crew to be available with the bidder anywhere around the globe with the commitment to shift the same to Pakistan within 45 Days after signing of contract with OGDCL.
- 3.3 All certificates, documents, proof of work etc. should be in English language; if not then they shall be accompanied with certified translation to English language to be considered for evaluation.
- 3.4 All HSEQ responsibility shall rest with the contractor for any third party equipment and personnel supplied by the contractor.
- 3.5 All equipment should be in good working condition for the performance of the services, provide calibration certification and third party inspection certificates.
- 3.6 Contractor will provide Check List of Equipment, Tools and other accessories before mobilizing to wellsite.
- 3.7 Bidder to arrange all safety equipment/services at their own for their personnel's whichever is required by them for working in extreme H<sub>2</sub>S environment with no additional cost to OGDCL.
- 3.8 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 insurance of deployed crew will be the responsibility of the bidder.
- 3.9 Adequate back-up services / equipment should be available on well site. However, OGDCL will not pay for backup equipment.
- 3.10 All technical details for items specified in Section "Technical Evaluation Criteria" must be covered in the Technical Bid.
- 3.11 The equipment and crew have to work round the clock as per operational requirement.
- 3.12 Bidders to attach unpriced financial bids in their technical bids.
- 3.13 Bidder to submit their technical bids in hard as well as in soft form.
- 3.14 All equipment must be  $H_2S/CO_2$  compliant.
- 3.15 Maximum notice period for each call-out is 5 6 days and transit time from company base to OGDCL location is 3 4 days.

- 3.16 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 his mobilization. In case company fails to provide the necessary documentation, OGDCL reserves the right to cancel the personnel operation and stand by charges for that particular job.
- 3.17 The bidder to provide complete list of personnel to be deployed for the jobs along with detailed CV's highlighting the details of the completed jobs, level of competence of key personnel that will be involved in design, supervision and implementation, and provide necessary support during the job.
- 3.18 The type and number of jobs performed by personnel must be clearly mentioned on CV.
- 3.19 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.
- 3.20 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.
- 3.21 Invoice for unsuccessful jobs will not be paid.
- 3.22 Bidder must quote the cost of every item of financial bid format otherwise incomplete bid will not be entertained. Bidder must strictly follow and quote prices as per financial bid format. No clause with "if & but" having financial impacts will be entertained and in such case bid will be treated as nonresponsive.
- 3.23 A price list of additional / relevant equipment / services must be provided with the bid document which will be used as reference for obtaining approvals.
- 3.24 Mob/De-Mob charges for equipment & crew will only be applicable if transport is not provided by OGDCL and will be calculated as per OGDCL distance chart for the locations covered in the OGDCL location distance chart and as per actual for the locations which are not covered in OGDCL location distance chart.
- 3.25 No Mob/Demob charges for equipment and crew shall be applicable for well to well movement within the same field.
- 3.26 DST equipment and Flex test equipment will be mobilized together.
- 3.27 Daily operating charges for each DST (Crew & Equipment) will commence when the DST packer is picked up to Rig floor, lowered into well bore, gauges started and will cease when the same is pulled out of the hole.
- 3.28 Days and millage mentioned are for evaluation purposes only. Payment will be made as per actual.
- 3.29 There will be three (03) free standby days for flex test equipment before start of flex test job.
- 3.30 OGDCL will pay standby charges if applicable for flex test equipment and crew before start of DST. No standby charges for DST equipment and crew are admissible till completion of flex test.
- 3.31 There will be no standby charges for flex test equipment and crew after completion of flex test.
- 3.32 There will be 03 free DST equipment standby days, each before the start of first DST after completion of flex test as well as after the completion of last DST while 05 equipment standby days will be free of cost between successive DST jobs.
- 3.33 OGDCL will pay operating charges for only DST equipment and crew for the day where flex test and DST both are in operation.

- 3.34 DST may be carried out in extreme  $H_2S$  and  $CO_2$  environment.
- 3.35 Coil tubing jobs (Nitrogen Kick off & acid stimulation), Acid & Hydraulic Fracturing and other such jobs may be performed during DST operation.
- 3.36 Partial availability of crew or equipment at location 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 transport is not provided by OGDCL).
- 3.37 Fuel, oil and lubricants/transport 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.
- 3.38 Daily Operating and standby charges of equipment and crew, if applicable must remain uniform/fixed for all days wherever these charges are applicable.
- 3.39 OGDCL may use only DST control head along with crew during various operations at rig site. Payment to the service company against use of DST Control head with crew to be made as per following criteria.
  - > DST control head Operating charges = 25% of Operating charges of DST equipment
  - Control head crew Operating charges = 25% of Operating charges of DST crew.
  - > These charges will not be applicable during DST operations.
- 3.40 If, after mobilization / reporting at site, job is cancelled then only mobilization / demobilization charges for crew / equipment will be paid. No job cancellation charges are admissible.
- 3.41 The standby rates of equipment and personnel must not exceed 50% of operating charges for all equipment / crew.
- 3.42 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.
- 3.43 The lost in hole (LIH) will be paid by OGDCL as per following criteria subject to the condition that there is no malfunctioning of service company equipment and loss 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.
- 3.44 Bidder to confirm compliance to OGDCL's HSEQ policy.
- 3.45 Bidder to provide hard copies as well as the soft copies of detailed DST interpretation report to OGDCL free of cost.
- 3.46 Bidder to provide data of minimum Two (02) down hole memory Gauges for a DST job to ensure the integrity of data. DST invoice will not be paid in case bidder fails to provide the data of two (02) downhole memory gauges for a DST job.
- 3.47 Bidder must give "Clean acceptance certificate" of OGDCL terms and conditions and if exceptions are found, the bidder will withdraw all exceptions.
- 3.48 The bidder to clearly read and understand the OGDCL TOR and tentative scope of work, no correspondence and queries regarding change/splitting of estimated scope of work, bid bond and performance bank guarantee will be accepted.
- 3.49 The scope of work is tentative. OGDCL may increase or decrease the scope of work without any change in rates and terms & conditions.
- 3.50 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).

## 4. DURATION OF CONTRACT:

The duration of the contract is for a period of three (03) years therefore, the Bid proposal/rates should remain valid unconditionally during the period of contract. The Rate Running Contract (as and when required basis) will remain intact till the completion of jobs on wells where service company was mobilized for the job during the contract period, however, any extension in term of contract will be subject to mutual consent of both parties in writing.

### 5. PAYMENT TERMS:

- 5.1 The payments to the service company will be made through cross cheque in 100% Pak Rupees, at actual, against verified invoices at official exchange rate prevalent on the date of payment.
- 5.2 The prices quoted by bidder in financial bid are to be in US\$ and should be fixed/firm and are inclusive of all applicable taxes, duties and Levies etc. except Provincial Sales Tax/ICT Tax on Services.

### 6. BID BOND:

Bid Bond/Bid Security amounting to US\$ 42,450/- (US Dollar forty-two thousand four hundred and Fifty Only) is to be attached/provided with financial bid. Please see Master Set of Tender Document for further details.

### 7. MODE OF PROCUREMENT:

Bids against this tender are invited on "**Single Stage Two Envelope Bidding Procedure**" through press tendering, therefore, the bidders shall submit one original Technical bid along with its soft copy and one original Financial bid.

<u>Note:</u> 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.

## **TECHNICAL EVALUATION**

### DOCUMENTATION FOR TECHNICAL EVALUATION

Bidders are required to provide the following details along with the bid documents:

- Complete list of personnel to be deployed for the jobs as mentioned in technical evaluation criteria along with detailed CV's highlighting the number of completed jobs, level of competence of key personnel that will be involved in design, supervision and implementation, and provide necessary support during the jobs (both primary and backup crews). Note that the defined crew members shall not be changed without the prior consent of the Company.
- 2. Detailed list of necessary equipment to perform the DST jobs in safe and efficient manner along with their pressure and temperature ratings.
- 3. Complete list and details of available backup and support services.
- 4. Third party certification of all the equipment etc. along with dates of last testing/inspection.
- 5. Provide references for clients for whom these jobs (as mentioned in technical evaluation criteria) have been performed with contact person's name, designation & details.

## **TECHNICAL EVALUATION CRITERIA**

- 1. Only technically qualified bidder(s) will be considered for commercial evaluation.
- 2. OGDCL reserves the right to visit bidder's operational base and check inventory and verify the information provided in the bid at any stage during the evaluation of the bids.
- 3. Bidder to provide documentary evidence for each criterion where proof is demanded. Provide documents, photographs for inventory claims.
- 4. All the bidders must fulfill the requirements below to technically qualify. Even single "no" in below mentioned tables will result in technical disqualification. All the bidders are required to submit the below tables as per the given pattern.

## 1. EQUIPMENT

DST and Flex Test Tools for 7" & 9-5/8" Casing
Pressure Conditions = upto 15 K Down Hole and upto 10 K surface
Down Hole Temperature Conditions = Up to 392 <sup>0</sup> F/200 <sup>0</sup> C
Note:

- 1. All the equipment must be in line with above mentioned conditions, except defined otherwise.
- Minimum DST Equipment requirement for 7" casing size is for 04 simultaneous wells with adequate backup along with 02 Nos. 9-5/8" DST Packers for carrying out DST in 9-5/8" casing. Bidder to confirm the availability of below mentioned DST package accordingly.

Sr.	Tools Description	Availability
1	Mule Shoe/Wireline Re Entry Guide	Yes/No
2	9-5/8" DST Packer (10K Psi downhole differential pressure)	Yes/No
3	7" DST Packer	Yes/No
4	Safety Joint	Yes/No
5	Hydraulic Jar	Yes/No
6	RTTS Circulating Valve	Yes/No
7	In stream Gauge carrier	Yes/No
8	Down hole Electronic Memory Gauges	Yes/No
9	Annulus Response Tester Valve	Yes/No
10	RD Annulus Pressure Operated Reversing Valve	Yes/No

11	Slip Joint	Yes/No
12	Control Head	Yes/No
13	Complete Surface Piping set	Yes/No
14	All Necessary Cross Overs	Yes/No
15	Choke manifold	Yes/No
16	Flex Test Tools(complete set)	Yes/No

#### Slim Hole DST and Flex Test Tools

Pressure Conditions = upto 15 K Down Hole and upto 10 K surface

## Down Hole Temperature Conditions = upto 392 <sup>o</sup>F/200 <sup>o</sup>C

Note:

Minimum DST Equipment requirement for 5" casing is for 01 well along with adequate backup. Bidder to confirm the availability of below mentioned DST package accordingly.

Sr.	Tools Description	Availability
1	Mule Shoe/Wireline Re Entry Guide	Yes/No
2	5" DST Packer	Yes/No
3	Safety Joint	Yes/No
4	Hydraulic Jar	Yes/No
5	RTTS Circulating Valve	Yes/No
6	In stream Gauge carrier	Yes/No
7	Down hole Electronic Memory Gauges	Yes/No
8	Annulus Response Tester Valve	Yes/No
9	RD Annulus Pressure Operated Reversing Valve	Yes/No
10	Slip Joint	Yes/No
11	Control Head	Yes/No
12	Complete Surface Piping set	Yes/No
13	All Necessary Cross Overs	Yes/No
14	Choke manifold	Yes/No
15	Flex Test Tools	Yes/No

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

Sr.	Qualification/Experience of crew members	Availability
1	DST Engineers (at least 1 Engineer per job)	Yes/No
	Graduate Engineer with minimum five (5) years of exclusive experience	
	of planning, designing and executing DST operations along with relevant	
	training(s) and certified courses etc.	
	Must have Designed and Performed 20 DST jobs during his career.	
	(Attach CV and Training/Certificates)	
2	DST Operators (at least 1 Operator per job)	Yes/No
	DAE (03 Years) with minimum five (5) years of exclusive experience of	
	executing DST operations along with relevant training(s) and certified	
	courses etc.	
	Must have Performed 50 DST jobs during his career.	
	(Attach CV and Training/Certificates)	
3	EMR Gauge Specialist (at least 1 Specialist per job)	Yes/No
	DAE (03 Years) with minimum five (5) years of exclusive experience	
	executing DST operations along with relevant training(s) and certified	
	courses etc.	
	Must have Performed 50 DST jobs during his career.	
	(Attach CV and Training/Certificates)	

4	Well Head Operators (at least 1 Operator per job)	Yes/No
	10 Years of Education with minimum five (5) years of exclusive	
	experience of executing DST operations along with relevant training(s)	
	and certified courses etc.	
	Must have Performed 50 DST jobs during his career.	
	(Attach CV and Training/Certificates)	

## 3. <u>Company Profile</u>

Sr.	Description	Availability
1	Bidder's History (attach proof)	
1.1	Company registered in Pakistan or elsewhere with minimum registration period of 03 Years.	Yes/No
1.2	03 Years' experience of providing DST services to E & P Companies around the globe. Provide Job Tickets/contracts to confirm the same.	Yes/No
1.3	Company has provided DST services to E & P companies on at least 50 wells around the globe. Provide proof.	Yes/No
2	Bidder's Capabilities	
2.1	Capability in terms of equipment and crew to perform job on Deep wells $(+5500 \text{ meters})$ with $H_2S/CO_2$ environment simultaneously on 04 OGDCL wells.	Yes/No
3	Bidder's Financial Status	
	Bidder to provide the audited financial statement of last three years	Yes/No

## 4. <u>HSEQ</u>

Sr.	Description	Availability		
1	Written and approved HSE and Quality Policy	Yes/No		
2	HSEQ Management System in line with International Standards available to	Yes/No		
	cater HSE risks. Or			
	Management System not available however, procedures are available to fulfill			
	minimum HSEQ requirements (i.e. Risk Assessment, Environmental risks,			
	Emergency Response Procedures waste management etc.)			
	Note: Copies of HSEQ Management System procedures to be attached.			
3	HSEQ Responsibilities (CV's to be attached)	Yes/No		
3.1	Dedicated HSEQ person available to handle HSEQ matters. Please provide Job	Yes/No		
	Responsibilities and Quality Inspection Plan.			
4	Hazard Identification & Risk Assessment	Yes/No		
4.1	Hazard Identification & Risk Assessment / Job Hazard Analysis are conducted	Yes/No		
	before start of project and appropriate preventive measures taken to address			
	hazards. Copies of previously conducted similar assessments to be attached			
5	Equipment & Tools	Yes/No		
5.1	Maintenance records of all equipment / tools available	Yes/No		
5.2	Third party validity certificates of equipment / tools available	Yes/No		
6	Emergency Response Procedure	Yes/No		
6.1	Approved Emergency Response Plan available with responsibilities shall be shared with OGDCL	Yes/No		
7	HSE Legal / Regulatory Compliance.	Yes/No		
7.1	Contractor shall comply with Health & Safety Regulations Mines Act 1923, The	Yes/No		
	Oil & Gas (Safety In Drilling & Production Regulations 1974)			
7.2	Contractor shall comply with Environmental Protection ACT 1997 and National	Yes/No		
	Environmental Quality Standards			
8	HSEQ Trainings	Yes/No		
8.1	All staff is trained is in basic HSEQ trainings i.e. Fire Fighting, First aid, H <sub>2</sub> S.	Yes/No		
	Please provide details / records of the crew.			
8.2	Staff receives specialized HSEQ trainings with respect to their jobs	Yes/No		

9	Personal Protective Equipment	Yes/No
9.1	All required personal protective equipment available to all its staff and	Yes/No
	subcontractors.	
10	Permit to work	Yes/No
10.1	PTW system available and strictly followed	Yes/No

## **FINANCIAL EVALUATION CRITERIA/RATE FORMAT**

Sr	Description	• •	UOM (U)	Unit Cost (P)	Total Cost =P x Q
		(0)	(0)	US\$/UOM	US\$
1	DST Equipment - Operating	15	Day		
2	DST Equipment - Standby	1	Day		
3	DST Personnel- Operating	15	Day		
4	DST Personnel - Standby	6	Day		
5	Total for One DST	1	Test		=Sum(R1:R4)
6	Total for 03 DSTs/well	3	Test		=3 * R5
7	Flex Test Equipment - Operating	4	Days		
8	Flex Test Equipment - Standby	1	Day		
9	Flex Test Personnel - Operating	4	Day		
10	Flex Test Personnel - Standby	3	Day		
11	DST+Flex Test Equipment Mob/De-mob	1,600	Km		
12	DST+Flex Test Personnel Mob/De-mob	1,600	Km		
13	Total cost for Flex Test and Mob/De-mob	1	No.		=Sum(R7:R12)
14	Cost/Well	1	Well		= R6+R13
15	Total cost for 30 wells	30	Well		=R14*30

### Note:

- The bidder scoring lowest in the above table as **Total Cost of 30 Wells (Sr. 15)** shall be the financially lowest.
- Zero (0) value shall depict "free of cost" service.
- Number of wells, DSTs/Days, millage mentioned are for evaluation purposes only however, payment to be made as per actual.