

OIL & GAS DEVELOPMENT COMPANY LIMITED



TENDER ENQUIRY NO. PROC-SERVICES/CB/ML-2092/2017

**HIRING SERVICES OF XRD, XRF, TOC, PYROLYSIS, VITRINITE
REFLECTANCE RO (GROUP A1 & A2) AND GAS SORPTION
ANALYSIS, CORE HANDLING & CORE PRESERVATION (GROUP-
B) FOR SHALE GAS PROJECT**



OIL & GAS DEVELOPMENT COMPANY LIMITED
SUPPLY CHAIN MANAGEMENT DEPARTMENT
SERVICES SECTION

OGDC HOUSE
JINNAH AVENUE,
ISLAMABAD – PAKISTAN

PHONE : +92-51- 92002 3780
EMAIL: ejaz_rizvi@ogdcl.com
POST CODE : 44000

SUBJECT: LETTER FOR INVITATION TO BID FOR HIRING SERVICES OF XRD, XRF, TOC, PYROLYSIS, VITRINITE REFLECTANCE RO (GROUP A1 & A2) AND GAS SORPTION ANALYSIS, CORE HANDLING & CORE PRESERVATION (GROUP-B) FOR SHALE GAS PROJECT

1. INTRODUCTION

Oil and Gas Development Company Ltd (OGDCL) is Pakistan's leading E&P sector company, having operations at about 50 locations and fields in all the four provinces. The Company is listed and traded on Pakistan stock exchange of the country with highest market capitalization. Recently the Company, through GDR process, has also been listed on London Stock Exchange. More details about the Company can be obtained from its website www.ogdcl.com.

2. OBJECTIVE

OGDCL Intends to hire subject Services as per Annexure-A. Interested bidders are required to submit their bids strictly as per Terms of Reference (TOR) / scope of work (Annexure-A) and instructions to bidders given in this tender document.

3. Sealed bids are hereby invited under Competitive Bidding (CB) procedure from eligible bidders from the countries maintaining bilateral trade relations with Pakistan for Services as listed in the Terms of Reference (TOR) "Annexure-A" of the attached Tender Documents. **The prices may be quoted as per details mentioned in TOR "Annexure-A".**

4. PROSPECTIVE BIDDERS SHOULD PARTICULARLY NOTE THAT:

4.1 Bids will be accepted only if the materials / services and supplies being offered are produced and manufactured in the country(s) maintaining bilateral relations with Pakistan. Bidder (s) participating in bidding process for provision of service (s) to OGDCL should invariably be registered with Provincial Revenue Authority at the time of submission of its bid to OGDCL.

4.2 Each bid valid for minimum 180 days from the date of opening of the bids must be accompanied by a Bid Bond in the form of a cash deposit receipt (CDR), a Bank Draft or a Bank Guarantee issued by scheduled Bank of Pakistan or a branch of foreign bank operating in Pakistan, except NIB Bank, for an amount mentioned in clause#31 and valid for 210 days from the date of opening of bids. The Bank Guarantee will be issued by a scheduled Bank, except NIB Bank, in accordance with the format as per Annexure-B of the tender Documents.

4.3 Bid Bond through telex / fax shall not be acceptable.

4.4 On acceptance of the bid by the Purchaser the successful bidder shall be required to furnish Performance Bond / Bank Guarantee for an amount

equivalent to 10 % of the Contract value for the required Services in US Dollars or in currency of Bidder or equivalent in Pakistan Currency as per Annexure-C.

5. The Purchaser does not take any responsibility for collecting the bids from any Agency. Your authorized representative may attend the Tender opening if desired. The request for extension of closing date and time shall not be entertained and tender received after closing time or date shall be returned to Bidder unopened.
6. The Purchaser reserves the right to increase or decrease the quantities / Scope of Work and accept or reject any or all bids or cancel any or all items at anytime without assigning any reasons thereof.
7. The Purchaser reserves the right to have the items inspected by its own representatives or through third party, wherever applicable.
8. It must be indicated in the offer that the quotation fully conforms to Technical Specifications and Terms & Conditions of the Tender Enquiry.
9. **TIME AND PLACE FOR SUBMISSION FO BIDS.**

Bids must be delivered / dropped in the tender box / OGDCL reception at time & date mentioned in Press Tender Notice” at the following address:-

Manager (SCM) Services

Oil & Gas Development Company Limited
Supply Chain Management Department
OGDCL House, Plot No. 3 (New No. 3013) F-6/G-6,
Jinnah Avenue, Islamabad (Pakistan)
Phone No. 92-51-920023780/ 3652
Email: ejaz_rizvi@ogdcl.com

10. **OPENING OF BIDS**

Bids will be opened at the time and date mentioned in Press Tender Notice on the place noted above.

11. Any company registered at places e.g. Vigin, Cayman, Nausa, Jersy and Bohaman Islands shall not be entertained and bids if submitted shall be rejected.

12. **TWO ENVELOPE BIDDINGS**

1. Bids against this tender are invited on **Single Stage Two Envelope Bidding Procedure**; therefore, the bidders shall submit original and copy of their Technical and one original Financial bid.
2. Tender Annexure to be added in both the bids; UN-Priced with technical Bids & Priced with Commercial Bids.
3. Both the bids shall be submitted simultaneously in separate sealed inner and outer envelopes. The envelope containing Technical Bid must be marked clearly **“Technical Bid”** and containing Financial Bid must be marked clearly **“Financial Bid”** along with indication on the envelopes as **“ORIGINAL”** and **“COPY”**.

13. The Technical Bid will be opened at first and evaluated. The Financial Bid of only those bidders will be opened who are declared technically Responsive.
14. The Financial Bid must be complete in all aspects and comparable. Conditional Prices and/or Prices mentioned other than Rate Format/Financial Evaluation Criteria, may not be accepted. In case, the Bidder is not charging any rate and/or the rates are not applicable, Zero (0) must be clearly mentioned, failing which, the bid(s) may be considered as non-responsive.
15. The contract / service order will remain valid till completion of job / period specified in Terms of Reference (TOR) at Annexure "A". Any extension in validity of contract / service order will be subject to written mutual consent of both the parties.
16. The interested bidders must confirm their willingness to submit bid proposals at least ten (10) working days before the last date for bid submission, giving complete mailing address, email etc.
17. No alternation in OGDCL's uploaded tender documents is allowed. Any attempt for alteration/amendment in the tender documents may lead to disqualification of the bidder.
18. The Bank Guarantee, in any form, issued by NIB Bank shall not be accepted.

MANAGER (SCM) SERVICES
OIL & GAS DEVELOPMENT COMPANY LIMITED
PHONE: 0092-51-92002 3780
Email: ejaz_rizvi@ogdcl.com

INSTRUCTIONS TO BIDDER

1. PROSPECTIVE BIDDERS SHOULD PARTICULARLY NOTE THAT:

- 1.1 Bids valid for minimum of 180 days from the date of opening of bids, must be accompanied by Bid Bond (to be attached with **Technical Proposal**) in the form of a Bank Guarantee for an amount of USD/Pak Rupees(*mentioned at Clause-31*) and valid for 210 days from the date of opening of bids. The Bank Guarantee should be issued by a Pakistani Scheduled Bank or branch of a foreign bank operating in Pakistan, except NIB Bank, in accordance with the Format at **Annexure-“B”**.
- 1.2 Bid Bonds through fax shall not be acceptable.
- 1.3 On acceptance of Bid by the purchaser, the successful Bidder shall, within 15 days of the receipt of Letter of Intent (LOI) furnish an acceptable performance Bond/Bank Guarantee for an amount equivalent to 10% of the total contract value in US\$ or equivalent in Pak Rupees, issued by Pakistani Scheduled Bank or Branch of a Foreign Bank operating in Pakistan, except NIB Bank, in accordance with the Format at Annexure-C.
- 1.4 The Terms and Conditions form an integral part of Tender Enquiry and must be taken into consideration before submitting your quotation.
- 1.5 The Purchaser does not take any responsibility for collecting the Bids from any Agency. Your authorized representative may attend the Tender Opening if desired. The requests for extension of closing date and time shall not be entertained and tender received after closing time or date, shall not be accepted and returned to Bidders unopened.
- 1.6 The purchaser reserves the right to increase or decrease the quantities /scope of work to a reasonable percentage and accept or reject any or all bids or may cancel any or all items at any time without assigning any reasons therefore.

2. THE BIDDING DOCUMENTS COMPRISE OF THE FOLLOWING:-

- a) Instructions to Bidders
- b) Terms of Reference / Scope of Work, (Annexure-**A**)
- c) Format of Bid Bond (Annexure-**B**).
- d) Format of Performance Bond/ Bank Guarantee (Annexure-**C**)
- e) Format of Bidding Form(Annexure-**D**)
- f) Format of Integrity and Ethics undertaking (Annexure-**E**)
- g) Affidavit for Not Black Listing (Annexure-**F**)
- h) Date Summary Sheet to be attached with technical bid (Annexure-**G**)
- i) Date Summary Sheet to be attached with financial bid (Annexure-**H**)
- j) Draft Contract /Draft Service Order (Annexure-**I**)

3. TIME AND PLACE FOR SUBMISSION OF BIDS

Sealed Bids as per clause-18 of Instructions to bidders given in this document must be delivered / dropped in the office detailed as per time and date given in Press Tender Notice.

4. OPENING OF BIDS

Bids will be opened at OGDCL House, Islamabad, as per time and date given in Press Tender Notice.

5. **PREPARATION OF PROPOSAL**

Contractors will prepare their bids in two parts i.e. Technical Proposal (Part-I) and Financial Proposal (Part-II). Technical bid shall consist of one original and one copy whereas financial bid shall consist of original only and both the bids should be sealed in separate envelopes.

TECHNICAL PROPOSAL: should demonstrate firm's capability to provide the required Services and its understanding of the requisite tasks set forth in the Tender Document. Availability of the following information / documents in the technical proposal must be ensured for proper evaluation of the bid.

(i). Requested information/ sheets, in full with reference to the instructions given in **Terms of Reference/ Scope of Work** at Annexure-**"A"**.

(ii). Background, organization and experience of bidding firm and of any firm that would be associating with for the purpose of providing the services for this project/contract. A list of past and present major work(s) of similar nature / type i.e carried out, or being carried out, by bidding and associate firm, if any with evidence in shape of work completion certificate or duly signed contract.

(iii). General approach or methodology proposed for carrying out job including all detailed information, as may be deemed relevant.

(iv). Unpriced draft agreement.

(v). Unpriced copy of financial bid.

If the bid is submitted by a joint venture of two or more companies, then the portion(s) of the project work to be carried out by each joint venture partner shall be very clearly identified.

Name, qualification, employment record and detailed professional experience of each expert, to be assigned for providing the proposed services, with particular reference regarding similar assignments undertaken by the bidder should also be provided in the bid. In proposing the personnel for this work, it will be encouraged to associate with domestic contractor(s) who are qualified to provide part of the services required.

Association agreement shall have to be produced by the joint venture partners accepting responsibility for the successful completion of the project separately and jointly.

FINANCIAL PROPOSAL: Financial Proposal should contain:

- (i) This tender document duly signed and stamped by the bidder.
- (ii) Duly filled in "Format For Rates" in accordance with instructions given in **Terms of Reference /Scope of work (TOR)** at (Annexure-"A").

All pages of the bid proposal shall be signed and stamped by duly authorized representatives of the bidder. Proof of authorization shall be furnished in the form of valid written power of attorney, which shall accompany the bid. The person signing the bid shall initial all pages of the bid where entries are made.

BID PRICE:

- a. Bid price shall be inclusive of all taxes (except Provincial Sales Tax/ ICT Tax on services), duties, levies, charges etc.

- b. The prices should be quoted in USD. However payment to all Pakistan based companies 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.
- c. To Foreign based Companies, the payment will be made in US\$ at actual against verified invoices through Irrevocable Letter of Credit(LC)
- d. The prices charged by the successful bidder (contractor) for required services shall not vary from the prices quoted by the service company.

6. COST OF BIDDING.

The bidder shall bear all costs associated with the preparation and submission of his bid and OGDCL will in no case be responsible or liable for those costs, regardless of the outcome of the bidding process.

7. ADDITIONAL SERVICES

Contract price will be subject to adjustment as a result of addition/reduction in scope of work. However, unit price quoted for such work shall be used as base price for computation of final invoice. Contractor should take approval for such changes in writing from OGDCL. Rates and quantum of any additional job, not covered in the scope of work shall be subject to approval of OGDCL.

8. UNSKILLED LABOUR

Unskilled labor for handling tools and equipments will be on account of bidder.

9. LANGUAGE OF BIDDING

The bid must be prepared and submitted in the English language. Supporting documents and printed literature furnished by the bidder with the bid may be in another language as long as they are accompanied by an English translation of the pertinent passages. For the purpose of interpretation of the Bid, the English language shall prevail.

10. BID VALIDITY.

10.1. The Bid shall remain valid and open for acceptance for a period of 180 days from the specified date of tender opening.

10.2. In exceptional circumstances prior to expiry of the original bid validity period, the bidder may be requested in writing for an extension of the period of validity. A bidder agreeing to such request will not be permitted to modify his bid.

11. ALTERNATIVE BIDS.

11.1 In the event that the bidders submit an Alternative bid(s) whether in whole or against any of the items, a group of sub group, in addition to its Main Bid, the bids must be marked as “**Main Bid**” and “**Alternative Bid**”. Alternative Bids which don’t conform to the specifications may be submitted. However, only the Alternative bid of the Bidder whose Main Bid is the lowest evaluated bid will be considered.

11.2 A Bidder, who wishes to have its Alternative bid(s) considered on an equal basis with all other (Main) bids, must submit a **Bid Bond** for each Alternative bid. An Alternative bid must be submitted in a sealed envelope clearly marked “**Alternative Bid**”, separate from the Main bid.

12. BID BOND.

- 12.1 The bidder shall furnish with the **Technical bid proposal**, as part of his bid, a bid bond for an amount of US\$ /Pak Rupees (*mentioned at Clause-31*).
- 12.2 The Bid Bond in the form of a cash deposit receipt (CDR), a Bank Draft, CDR or a Bank Guarantee issued by scheduled Bank of Pakistan or a branch of foreign bank operating in Pakistan, except NIB Bank, for an amount mentioned in Clause#31 and valid for 210 days from the date of opening of bids. The Bank Guarantee will be issued by a scheduled Bank in accordance with the format as per Annexure-B of the tender Documents.
- 12.3 Bid Bond will not be acceptable with the banks whose market price per share is quoted below the par value at the stock Exchange.
- 12.4 Any bid not accompanied by the requisite Bid Bond is likely to be declared non-responsive. The bid bond of unsuccessful bidders will be returned. The bid bond of the successful bidder shall be discharged after he has executed the contract.
- 12.5 The bid bond may be forfeited if a bidder withdraws his bid during the period of bid validity or if the Bidder, having been notified of the acceptance of his bid by the Company during the period of bid validity:
 - 12.5.1 Fails, refuses or delays to execute the Contract in accordance with the instruction to Bidders, or
 - 12.5.2 Fails, refuses or delays to furnish Performance Bond in accordance with the instruction to Bidders.

Note:

“As regards to the requirement of Bid Bond, PPRA rule does not distinguish between any private or public entity, therefore, bidders are required to submit bid bond irrespective of their status as private bidder or public sector bidder”.

Non submission of bid bond of required value by the bidders shall summarily result in disqualification of their bid.

13. AMENDMENT OF BIDDING DOCUMENTS.

13.1 At any time prior to the deadline for submission of Bids, OGDCL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by amendment.

13.2 The amendment shall be part of the Bidding Documents, and will be notified to all the prospective bidders by uploading the same on OGDCL website.

14. CLARIFICATION(s) / QUERIES OF TENDER

The bidders are expected to carefully examine all instructions, forms and specifications in the Bidding Documents. Any bidder in doubt as to the exact meaning or interpretation of any part of the Bidding Documents should immediately seek clarification in writing from;

Manager (SCM) Services
Oil and Gas Development Company Ltd,
Jinnah Avenue, Islamabad, Pakistan
Phone #: 0092-51-920023780/ 3652
Email: ejaz_rizvi@ogdcl.com

For requests of all clarifications in regard to the information contained in Tender Documents made over the telephone shall not be entertained. All inquiries about the tender made to OGDCL and OGDCL's response will be made known to other bidders without disclosing identity of the bidder who made the enquiry.

15. CONTRADICTIONS, OBSCURITIES AND OMISSIONS

The Bidder should likewise notify the above of any contradictions, obscurities and omissions in the Bidding Documents if clarification of these is necessary for the clear understanding of the documents and for preparation of the bid. Such enquiries, clarifications, queries with reference to clause - 14 above must reach the above named not later than two weeks before the bid submission date otherwise the same will not be responded by OGDCL.

16. DEADLINE FOR SUBMISSION OF BIDS.

16.1 The original bid, together with the required copies must be delivered to OGDCL at the address specified in clause-18, not later than the time and date specified in *Press Tender Notice*.

16.2 OGDCL may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause-13, in which case all rights and obligations of OGDCL and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

16.3 Bids will be opened in presence of the bidder's representative who chooses to attend the bid opening at the time and date mentioned in the Tender Notice or on the extended date with reference to clause - 16.2.

16.4 The envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "LATE".

16.5 If the envelopes are not marked as instructed below, OGDCL will assume no responsibility for the misplacement or premature opening of the bid.

16.6 In case due date bids opening falls on holidays, the bid will be opened on next working day.

17. MODIFICATIONS AND WITHDRAWAL OF BIDS.

17.1 Bidder may modify or withdraw his bid after submission, provided that written notice of the modification or withdrawal is received by OGDCL prior to the prescribed deadline for submission of bids.

17.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched as for the bid.

17.3 No bid shall be modified subsequent to the deadline for submission of bids and before the expiry of the period of bid validity.

17.4 No bid shall be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity.

18. SEALING, MARKING AND TRANSMISSION OF THE BID

18.1 Your detailed "**Technical Proposal**" and "**Financial Proposal**" should be submitted in separate envelopes. The envelopes containing Technical and Financial Proposals shall be properly sealed, stamped and marked as follows:

(a) Bid against TENDER ENQUIRY NO. ((As per Press Advertisement)).
Do not open before ((As per Press Advertisement)) Hours (PST) of Bid opening date ((As per Press Advertisement)).

TECHNICAL PROPOSAL

(As per Press Tender Notice)

Manager (SCM) Services

OGDCL House, Jinnah Avenue, Islamabad.

Ph: # 051-920023780/ 3652, email: ejaz_rizvi@ogdcl.com

(b) Bid against TENDER ENQUIRY NO. (As per Press Tender Notice)

Do not open before (As per Press Tender Notice)

Hours (PST) of Bid opening date: (As per Press Tender Notice)

FINANCIAL PROPOSAL

(As per Press Advertisement)

Manager (SCM) Services

OGDCL House, Jinnah Avenue, Islamabad.

Ph: # 051-920023780 / 3652, email: ejaz_rizvi@ogdcl.com

18.2 If the envelope is not marked as instructed above, OGDCL will assume no responsibility for the misplacement or premature opening of the bid.

18.3 In addition you should advise by fax to OGDCL of the dispatch of your proposal.

19. LATE BIDS

Any Bid received after deadline for submission of Bids prescribed by OGDCL pursuant to Clause- 16 above will be rejected and returned unopened to the bidder.

20. BID OPENING

The Bid shall be opened publicly in the Procurement Department of OGDCL by the Tender Opening Committee in the presence of Bidder's representatives who choose to attend the bid opening at the time and date specified in Press Tender Notice or on the extended date with reference to clause- 16.2 above.

21. EVALUATION OF PROPOSALS.

Technical proposal of the bid shall be reviewed first to determine / check its technical responsiveness and conformity with the requirement of bid. The technical evaluation shall be carried out on the basis of information /data spelled out at Annexure "A"/ITB provided with this document. Technically responsive and financially lowest evaluated bidder in line with the bid evaluation criteria given in the scope of work /TOR will be considered for award of job.

22. CRITERIA FOR SUMMARY REJECTION.

Bidder should ensure to submit their bids meeting following summary criteria failing which their bids are likely to be considered non responsive for detailed evaluation.

22.1 The Bid must be prepared in the English Language.

22.2 The Bid must be unconditionally valid for 180 days from the date of Bid Opening.

- 22.3 The Technical bid must be accompanied with the duly signed and stamped "Bidding Form" given at Annexure "D" of the tender documents without any exception/ deviation.
- 22.4 Bids should not be submitted in the form of Telex or Telegram.
- 22.5 Bid must reach before as mentioned in the Tender Notice or as per clause-16.
- 22.6 Technical Bid must be accompanied by a bid bond as specified in Clause - 12.
- 22.7 Direct fax bid shall not be acceptable. However, fax bid in sealed envelope confirming all other formalities as stated above will be acceptable provided original bid is received by OGDCL within 07 days of the Bid Opening Date failing which such bid will be considered non-responsive.
- 22.8 The bid proposal should essentially include C.Vs of the professionals expected to be deployed for the job (if required).
- 22.9 The Purchaser will evaluate and compare only the substantially responsive bids.
- 22.10 Bids determined to be substantially responsive will next be checked for any material error in computation.
- 22.11 Technical bid must be accompanied by Affidavit (Annexure-F) for Not Black Listing. The procedure of Black Listing is available at OGDCL website at following link:
<http://ogdcl.com/uploads/tender/BlackListingProcedure.pdf>

23. CLARIFICATION OF BIDS.

To assist in the examination, evaluation and comparison of Bids OGDCL may at its discretion, ask the Bidder for clarification of his Bid. All responses to request for clarification shall be in writing, and no change in the price or substance of the Bid shall be sought, offered or permitted.

24. ELIGIBILITY AND QUALIFICATION REQUIREMENTS

- 24.1 To be eligible for award of contract, bidders shall have to provide satisfactory evidence to OGDCL of their eligibility, capability and adequacy to carry out the contract effectively up to the end. All bids submitted shall include updates of the information on technical capability and firm's history that includes experience, list of similar projects carried out as per requirement of the Scope of work / TOR.
- 24.2 Proof of requirements mentioned at Sub-clause-24.1 must be submitted by the bidder along with the bid.
- 24.3 Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:
 - 24.3.1 The bids, and in case of a successful bid, a Form of Agreement shall be signed so as to be legal binding on all partners.
 - 24.3.2 One of the partners shall be nominated, as being in charge and it's authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.
 - 24.3.3 The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract including payment shall be done exclusively with the partner in charge.
 - 24.3.4 All partners of the joint venture shall be jointly and severally responsible for the execution and completion of the contract in

accordance with the contract terms and conditions. A relevant statement to this shall be included in the authorization mentioned under clause-24.3.2 as well as in form of bid and the form of Agreement (in case of successful bid). A copy of the agreement entered into the joint venture partners shall be submitted with the bid.

25. COMPANY'S RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS.

OGDCL reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the effected bidder or bidders or any obligation to justify the affected bidder or bidders of the grounds for OGDCL's action.

26. GENERAL TERMS AND CONDITIONS.

- 26.1 After opening the bids, OGDCL will determine whether each bid is substantially responsive to the requirements of the Bidding Documents.
- 26.2 OGDCL will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required experience certificates/ evidence, sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 26.3 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figure, the amount in words shall prevail.
- 26.4 A substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation. A material deviation is one which being inconsistent with the Bidding Documents, affects in any substantial way the scope, instruction to Bidders, quality or prescribed completion schedule or which limits in any substantial way, OGDCL's right or the bidders' obligation under the Contract.
- 26.5 A bid determined to be non-responsive will be rejected by OGDCL and shall not subsequently be made responsive by the Bidder by correction of the non-conformity.
- 26.6 OGDCL may waive any minor deviation non-conformity or irregularity in a bid, which does not constitute a material deviation, provided that the waiver does not prejudice or affect the relative standing order of any Bidder.
- 26.7 To assist in determining a bid's responsiveness the Bidder may be asked for clarification of his bid. The Bidder is not permitted, however, to change bid price or substance of his bid.
- 26.8 The evaluation of the bids will take into account, in addition to the bid price, the following factors:
 - a) Reliability and efficiency of the offered Service.
 - b) Financial standing of the supplier.
- 26.9 The award of the Contract/Service Order shall be made to the Bidder whose bid has been determined to be the lowest evaluated bid, after considering all factors and who meets the requisites of Schedule of Requirement (Scope of Work/Bid Format).
- 26.10 The purchaser shall notify by fax/letter, the successful bidder of its intent to enter into a contract. The contract shall be executed only after all necessary management/Governmental approvals have been obtained.

26.11 The bidders may lodge a written complaint for redressal of their grievances and disputes to Committee for Redressal of Grievances & Settlement Dispute within fifteen (15) days of the placement of the Technical Evaluation Report on the web.

27. PERFORMANCE BOND / BANK GUARANTEE

- 27.1 Within fifteen (15) days of receipt of the notification of contract award, the successful bidder shall furnish to OGDCL, the Bank Guarantee / Performance Bond for an amount equivalent to 10% of contract value as per specimen at “Annexure-“C”.
- 27.2 The bank guarantee / performance bond shall remain valid and in full force and effect during validity of the contract.
- 27.3 The validity of Bank Guarantee / Performance Bond shall be extended by the contractor if the completion of contract is delayed, whether in whole or in part.
- 27.4 The cost incurred for establishing the Bank Guarantee / Performance Bond or any extension thereof shall be to the account of the contractor.
- 27.5 The Bank Guarantee / Performance Bond will be discharged after completion of the contract.
- 27.6 The Bank Guarantee must be as per format attached at Annexure-“C” and must be either from a Pakistan scheduled bank or from a branch of foreign bank operating in Pakistan, except NIB Bank, acceptable to OGDCL.
- 27.7 The proceeds of the Performance Bond shall be payable to the company (OGDCL) as compensation for any loss resulting from the contractor’s failure to complete its performance obligations under the contract.
- 27.8 Performance Guarantee /security will not be acceptable with the banks whose market price per share is quoted below the par value at the Stock Exchange.

28. EMPLOYMENT OF PAKISTANI NATIONALS:

- 28.1 The Contractor will be required to employ Pakistani Qualified & experienced nationals in its operation if available. In order to employ the expatriate professionals if needed, the contractor will ensure that all out efforts have been exhausted to employ Pakistani qualified nationals. Unskilled workers if needed for the operation will be hired from the area where the operation is being performed.
- 28.2 In case of non availability of qualified / experienced Pakistani nationals for the contractual services, the contractor will reasonably make efforts to train Pakistani nationals in such a manner to replace gradually the expatriate professionals.

29. SIGNING OF CONTRACT

Within 15 days after notification to the successful bidder regarding acceptance of his bid, the contract incorporating all agreements between the parties will be signed.

30. SOURCE OF FUNDS.

The Project will be financed out of funds of the Company (OGDCL).

31. AMOUNT OF BID BOND

Amount of bid bond referred to in Clause-12 of Instruction to Bidders, and Annexure-“B” of this tender enquiry shall be:-

For Group A amounting to US\$ 8,000/- (United States Dollar Eight Thousand Only).

For Group B amounting to US\$ 3,000/- (United States Dollar Three Thousand Only).

For Group C amounting to US\$ 3,000/- (United States Dollar Three Thousand Only).

32. DEADLINE/ TIME AND PLACE FOR SUBMISSION OF BIDS (REFER CLAUSE-34 OF INSTRUCTIONS TO BIDDERS):

Sealed bids in duplicate as per Clause-18 of Instructions to bidders of this tender enquiry must be delivered / dropped in the office detailed therein until **(As per Press Tender Notice)** Pakistan Standard Times (“PST”) on **(As per Press Tender Notice)**.

33. OPENING OF BIDS (REFER CLAUSE-34 OF INSTRUCTIONS TO BIDDERS).

Bids will be opened at **(As per Press Advertisement)** (“PST”) on **(As per Press Tender Notice)** at OGDCL House, Islamabad, Pakistan.

34. SEALING, MARKING AND TRANSMISSION OF THE BID (REFER CLAUSE -18 OF INSTRUCTIONS TO BIDDERS).

34.1. Your detailed “Technical Proposal” and “Financial Proposal” should be submitted in one original and one copy of each in separate envelopes. The envelopes containing Technical and Financial Proposals shall be properly sealed, stamped and marked as follows:-

(a) Bid against TENDER ENQUIRY NO. **(As per Press Tender Notice)**

Do not open before **(As per Press Tender Notice)** (PST) of Bid opening date: **(As per Press Tender Notice)**

TECHNICAL PROPOSAL
(As per Press Tender Notice)
Manager (SCM) Services

OGDCL House, Jinnah Avenue, Islamabad.

Ph: 051-92002 3780, / 3652, email: ejaz_rizvi@ogdcl.com

(b) Bid against TENDER ENQUIRY **(As per Press Tender Notice)**

Do not open before **(As per Press Tender Notice)** (PST) of Bid opening date: **(As per Press Tender Notice)**.

FINANCIAL PROPOSAL
(As per Press Tender Notice)
Manager (SCM) Services

OGDCL House, Jinnah Avenue, Islamabad.

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34.2 If the envelope is not marked as instructed above, OGDCL will assume no responsibility for the misplacement or premature opening of the bid.

34.3 In addition you should advise by fax to OGDCL of the dispatch of your proposal.

35. Material Deficiencies which will lead to disqualification

- (i) Failing to get minimum qualifying marks in the technical evaluation
- (ii) Reflect or demand of deviation from TOR of this Tender Enquiry will lead to disqualification.

TERMS OF REFERENCE/SCOPE OF WORK

1.1 Oil & Gas Development Company Limited-Pakistan (OGDCL Pakistan), hereinafter called the "COMPANY" intends to acquire the Wellsite Geosciences Services for advanced cutting analysis (Group "A" Services) at base lab for Shale Gas Characterization, Sample Evaluation on Cuttings and/or Cores of our well(s) (Group "B" Services) at well site and/or advanced Core Analysis (Group "C" Services) at wellsite(s) with two (02) specialists/each covering the daily drilling activity (round the clock, 24hrs/day/12 hrs shift duty each), throughout Pakistan as needed be.

1.2 The desired advanced analysis should be able to provide the following services:

GROUP "A" SERVICES AT BASE LAB

XRD (X-ray Diffraction): Mineralogical composition (Clay typing Quantitative), Mineralogical brittleness index

XRF (X-ray Fluorescence): Rock Chemical (elemental) composition

TOC - Analysis

Analyzer: Total Organic Carbon measurement

Source Rock Pyrolysis:

- S1 (Free Hydrocarbon)
- S2 (Residual Hydrocarbon)
- S3 (Amount of CO₂ to reflect the amount of Oxygen in oxidation)
- GP (Genetic Potential)
- PI (Production Index)
- HI (Hydrogen Index)
- OI (Oxygen Index)
- NOR (Normalized Oil Ratio)
- Tmax (Thermal Maturity)
- Original TOC

Measured Reflectance (Shale Thermal Maturity)

- R₀ (comparison of types of kerogen determined by R₀ and Tmax by SRA or Rock Eval)
- Transported and original kerogen type and abundance of kerogen
- Reflectance Histogram
- Type of Vitrinite
- Photomicrographs, Type and abundance of kerogen whole rock and kerogen

The contractor will collect the sample for analysis from OGDCL G&R Lab (I-9 Islamabad)

GROUP "B" SERVICES At Well Site

XRD (X-ray Diffraction): Mineralogical composition (Clay typing Qualitative), Mineralogical brittleness index

XRF (X-ray Fluorescence): Rock Chemical (elemental) composition

Source Rock Pyrolysis:

- S1 (Free Hydrocarbon)
- S2 (Residual Hydrocarbon)
- S3 (Amount of CO₂ to reflect the amount of Oxygen in oxidation)
- GP (Genetic Potential)
- PI (Production Index)
- HI (Hydrogen Index)
- OI (Oxygen Index)
- NOR (Normalized Oil Ratio)
- Tmax (Thermal Maturity)
- Present day / original TOC

- TOC from Prolyses

GROUP “C” SERVICES (upto 15 sample but not limited)

Gas Sorption Analysis:

- On-Site Pre-Coring Operations (Effective core handling and preservation program)
- Core Handling, Sampling & Preservation (Define depth allocation, maintain core integrity, Preserve core properties, effective core stabilization & preservation methods etc)
- Core Description (Texture, core recovery, core logs, core image, digitized data, Oil fluorescence/cut, etc)
- Core & other data Transportation/Shipping (provide protection against damage Environmental change, mechanical vibration, mishandling, etc)
- Lost gas (estimated to have been released from the sample prior to being sealed in the Canister)
- Gas Content (Canister Gas) Sample Collection
- Measured gas (released into the canister and measured)
- Canister gas analysis at well site for desorption volume measurements and analysis
- Residual gas (estimated to be remaining in the sample when measurements are terminated)
- **Following are evaluated at Base Lab:**
 - Adsorption/Desorption isotherm
 - Gas In Place (GIP)
 - Gas Composition
 - Gas Saturation
 - In Situ Permeability / Porosity
 - Wettability
 - Water Saturation

1.3 The objective of acquiring the advanced analysis on cuttings and/or Cores is the near real time mineralogical/geochemical shale gas characterization of the well target sequence to support operative decision (Coring point selection) and subsequently provide valuable information for the well logging calibration process.

1.4 The CONTRACTOR(s) are invited to submit their bid(s) for Group “A”, Group “B” and/or for “Group C”. Evaluation will be carried out on Group wise basis i.e. Group-A, Group B and Group –C, order will be awarded to the technically qualified and financially lowest bidder on group wise basis. Standby charges of equipment and crew (02 only) are fixed at 40% of the operating day rate and a maximum for a period of three days during the whole validity period of the contract.

1.5 The COMPANY reserves its right to acquire partial or complete services listed in each of the group.

1.6 The COMPANY intends to enter into Rate Running Contract with internationally reputed Wellsite Geosciences Contractors (specialists in above said analysis) to acquire their services purely on “As & When Required Basis within Pakistan”, primarily for a period of 03 years, extendable on mutual agreement.

1.7 The CONTRACTOR shall sign an agreement with the COMPANY to provide fully operative Wellsite Geosciences Laboratory/Unit, Equipment / Tools / Gadget(s) with fully experienced and fully qualified crew, purely on “As & When Required Basis within Pakistan”, during the contract period, in accordance with good industry practice and TOR (Term of Reference)/Scope of Work. The services will be imparted utilizing state of the art technologies in most efficient manner as per TOR. The CONTRACTOR may be offered further jobs, on completion of the assigned work,

subject to his quality of work and performance on this particular assignment.

- 1.8 The CONTRACTOR, after signing the contract agreement with the COMPANY, is legally & morally bound to provide the fully operative Wellsite Geosciences Laboratory/Unit, Equipment / Tools / Gadget(s) with fully qualified, fully trained and fully experienced Crew to perform the services as per "TOR" and requirement of the Company, within 90(ninety) days mobilization notice period for the provision of Laboratory/Unit, Equipment / Tools / Gadget(s) & crew(s) in Pakistan.
- 1.9 The COMPANY shall provide sufficient quantum of work in accordance with its drilling program purely on "As & When Required Basis within Pakistan" without any kind of guarantee for minimum scope of work. The CONTRACTOR should be ready to meet all requirements outsourced by the COMPANY, and therefore, make available adequate resources for this purpose. But the COMPANY is not bound to take any kind of obligation(s) for grant of job(s) or any other business to the CONTRACTOR during the contract period.
- 1.10 If COMPANY is not satisfied with the performance of CONTRACTOR, the CONTRACTOR will be informed to improve the deficiencies. If the CONTRACTOR fails to improve the quality up to the satisfaction of the COMPANY, the rate running contract will be terminated.
- 1.11 During the period of Rate Running Contract, the CONTRACTOR shall be solely responsible for all kind of Permits/licenses, obtaining valid work visa(s) and timely security clearance of its expatriates from concerned agencies/departments.
- 1.12 The CONTRACTOR is responsible for the compliance with the requirements set forth in this TOR and with applicable laws and regulations. Nothing in this specification shall relieve the CONTRACTOR of the responsibility for performing, in addition to the requirements of this specification, such analysis, tests, inspections and other activities that it considers necessary to ensure that the product, and workmanship are satisfactory for the service intended, or as may be required by common usage or good practice. Modification to the requirements of this specification may be proposed by the CONTRACTOR during the bidding phase, provided they are submitted to COMPANY for approval, with the support of proper documentation during the bidding phase.
- 1.13 The cost of all kind of Consumables, Backup Spares, Sample Preparation Kits, Rig up Accessories, all kind of packing material is included in daily operating charges. CONTRACTOR is solely responsible to provide at Base Lab and wellsite, enough backup spares & consumables in separate storage container to cover all kind of Calibrations, Sample Preparations, rig up, Preventive & Corrective maintenance and to face the most common failures.

2. TECHNICAL BID

CONTRACTOR shall supply Onsite / base Laboratory, all equipment, gadgets, tools, accessories, consumables, spare parts, sample preparation kits, qualified & trained personnel, technical assistance, hardware/software, peripherals, etc, etc and documentation necessary to carry out Advanced Cutting Analysis services and/or Core Analysis at wellsite(s) as requested by the "COMPANY".

3. SCOPE OF WORK

- 3.1 This scope of work relates to the provision of Advanced Cuttings Analysis (Group A), (Group B) and/or Advanced Core Analysis (Group C) for OGDCL Shale Gas well activity.
- 3.2 OGDCL Shale gas project has planned to drill Two to Four Wells during 2017-18 &

optional wells during 2018-19, 2019-20. However, the optional wells would be planned upon encouraging results of initial two wells, else otherwise.

- 3.3 COMPANY plans to hire the Wellsite Geosciences Services for Integrated cutting and/or Core analysis XRD (X-ray Diffraction – Mineralogy, Clay typing), XRF(X-ray Fluorescence – Elemental Analysis), Pyrolysis (S1- Free Hydrocarbon, S2-Residual Hydrocarbon, S3- Amount of CO2 to reflect the amount of Oxygen in oxidation, TOC- Total Organic Carbon – Adsorbed Gas, Absorbed Gas, Free Gas, GP- Genetic Potential, PI- Production Index, Hydrogen Index- HI, Oxygen Index-OI, NOR-Normalized Oil Ratio), Tmax (Thermal Maturity – Oil Window to Dry Gas Window), R0- Vitrinite Reflectance, transported and original kerogen, comparison with kerogen determined by Ro and Tmax and/or Gas Sorption analysis by using state of the art Units, Gadgets/Tools/equipment manned with fully experienced & fully qualified crew on Rate Running Contract purely on “As & When Required Basis” for Shale Gas Project Wells. The planned 2 - 4 wells and sample evaluation upto 500 (but not limited), are to be drilled in 2017-18 or 2018-19.
- 3.4 COMPANY intends to get analyze samples at base Lab for Group A Services by using state of the art Lab, Gadgets/Tools/equipment manned with fully experienced & fully qualified crew on Rate Running Contract purely on “As & When Required Basis”.
- 3.5 The Integrated cutting analysis and/or Core analysis will provide the measured results S1, S2, S3, TOC%, Tmax, R0, while calculated results should include Genetic Potential, Hydrogen Index, Oxygen Index, Production Index and Normalized Oil ratio.
- 3.6 As described above the following tests/analysis would be required at rig site during drilling:

Sr. #	Description of Tests/ Analysis	Min of Samples/ Day	Sampling Interval	Total Interval	Remarks
1.	XRD	15 or more	Each meter as dictates	Varies from well to well & Formation to Formation	All sampling intervals and on site analysis may change as per well situation or sweet spots encountered.
2.	XRF	15 or more			
3.	TOC	15 or more			
4.	Pyrolysis	15 or more			
5.	Desorption	15 or more			

- 3.7 The thicknesses of the formations vary from well to well, however, approximate thicknesses are as under:

Sr. #	Name of Formation	Approximate Thickness in Meters
1	Lower Goru Shale Unit *	400-700
2	Upper Shale	250-300
3	Shales of Middle Sand	70-80
4	Lower Shale	150-200
5	Shales of Basal Sand	50-60
6	Talhar	50-70
7	Shales of Massive Sand	80-100
8	Sembar Formation	500-700

* Lower Goru Shale Unit=400-700m, where zonation of Lower Goru regarding Sand/ Shale Sequences not possible, known as Lower Goru Shale Unit

4. **ADVANCED CUTTING ANALYSIS GROUP “A”& GROUP“B AND/OR GAS SORPTION ANALYSIS, CORE HANDLING & CORE PRESERVATION SERVICES (GROUP “C”)**

- 4.1 The services will consist of different technologies at base lab or at wellsite(s), in order to provide OGDCL shale gas characterization by means of analysis on cuttings (Group “A1” & “A2”) and/or Gas Sorption analysis, core handling & core preservation services (Group “B”), the CONTRACTOR shall provide an Operating Service including:

GROUP “A”SERVICES AT BASE LAB

XRD (X-ray Diffraction): Mineralogical composition (Clay typing Quantitative), Mineralogical brittleness index

XRF (X-ray Fluorescence): Rock Chemical (elemental) composition

TOC Analysis: Total Organic Carbon measurement

Source Rock Pyrolysis:

- S1 (Free Hydrocarbon)
- S2 (Residual Hydrocarbon)
- S3 (Amount of CO₂ to reflect the amount of Oxygen in oxidation)
- GP (Genetic Potential)
- PI (Production Index)
- HI (Hydrogen Index)
- OI (Oxygen Index)
- NOR (Normalized Oil Ratio)
- Tmax (Thermal Maturity)
- Original TOC

Measured Reflectance (Shale Thermal Maturity)

- R0 (comparison of types of kerogen determined by R0 and Tmax by SRA or Rock Eval)
- Transported and original kerogen type and abundance of kerogen
- Reflectance Histogram
- Type of Vitrinite
- Photomicrographs, Type and abundance of kerogen whole rock and kerogen

GROUP “B”SERVICES At Well Site

XRD (X-ray Diffraction): Mineralogical composition (Clay typing Qualitative), Mineralogical brittleness index

XRF (X-ray Fluorescence): Rock Chemical (elemental) composition

Source Rock Pyrolysis:

- S1 (Free Hydrocarbon)
- S2 (Residual Hydrocarbon)
- S3 (Amount of CO₂ to reflect the amount of Oxygen in oxidation)
- GP (Genetic Potential)
- PI (Production Index)
- HI (Hydrogen Index)
- OI (Oxygen Index)
- NOR (Normalized Oil Ratio)
- Tmax (Thermal Maturity)
- Present day / original TOC
- TOC from Pyrolysis

GROUP “C” SERVICES

Gas Sorption Analysis:

- On-Site Pre-Coring Operations (Effective core handling and preservation program)
- Core Handling, Sampling & Preservation (Define depth allocation, maintain core integrity, preserve core properties, effective core stabilization & preservation methods etc)
- Core Description (Texture, core recovery, core logs, core image, digitized data, wettability, Oil fluorescence/cut, etc)
- Core & other data Transportation/Shipping (provide protection against

damage environmental change, mechanical vibration, mishandling, etc)

- Lost gas (estimated to have been released from the sample prior to being sealed in the canister)
- Gas Content (Canister Gas) Sample Collection
- Measured gas (released into the canister and measured)
- Canister gas analysis at well site for desorption volume measurements and analysis
- Residual gas (estimated to be remaining in the sample when measurements are terminated)
- **Following are evaluated at Base Lab:**
 - Adsorption isotherm methane or mixture of gases injection
 - Gas In Place (GIP) / Adsorb gas in place.
 - Gas Composition
 - Gas Saturation
 - Total Gas Sampling

4.2 Dedicated software for data interpretation and reporting.

4.3 The above services must be performed by **two specialists/each for Group B and Group C** covering the daily drilling and/or coring activity round the clock, 24hrs/day.

4.4 All kind of Gadgets, spares, consumables, accessories, sample preparation kits, tools needed during the execution of the services (included calibration kit for the equipment) have to be considered included in the Operating Service rate.

4.5 The above analysis will be performed into a dedicated lab/unit.

4.6 CONTRACTOR must provide a documented system to ensure Quality Control verification.

4.7 All equipment must be intrinsically safe and explosion proof, according to the hazardous area classification at RIG LOCATION as per international industry practices.

4.8 The CONTRACTOR equipment shall include the followings:

4.9 The successful bidder must have a mobile unit in Pakistan preferably for Group-B & Group-C. in case a successful bidder has not existing lab or mobile unit in Pakistan, it should made available in Pakistan within 60 days after issuance of Contract.

GROUP “A” & GROUP “B” SERVICES

4.9.1 XRD – X RAY Diffraction for Mineralogy with sample preparation Kit.

4.9.1 (a) CONTRACTOR shall supply XRD instrument, X-Ray Diffractometric Analysis capable to obtain mineralogy analysis directly from cuttings at Base Lab and or Wellsite (Which ever is required). Sample preparation kit shall be included in the service. The mineralogy quantified by wellsite XRD includes:

- Quartz and Opal
- Feldspars-Plagioclase, K-feldspar
- Total Clay + Types of Clay (Kaolinite, Illite, Vermiculite, Smectite,
- Chlorite, Montmorillonite, etc)
- Carbonates – Calcite, Dolomite, Siderite
- Pyrite

- Sulfates – Anhydrite, Gypsum, Barite
- Apatite
- Halite
- Mica (its types) muscovite and biotite
- Glauconite
- The contractor is bound to provide diffractogram of each sample after the completion of XRD analysis.

4.9.1 (b) Due to the innovative aspects of these analysis, the CONTRACTOR will have to provide a complete documentation about the technical characteristics of the instrument proposed and detailed procedure for data processing and data analysis and a comprehensive report may be prepared for the Company.

4.9.2 XRF - X-Rays Fluorescence Instrument for Elemental Composition with sample preparation equipments.

4.9.2 (a) CONTRACTOR shall supply XRF instrument to make elemental analysis at Base Lab and or Wellsite (Which ever is required) and should be capable of measuring the following elements with accuracy and precision. Sample preparation kit shall be included in the service. Elements between Magnesium and Uranium are to be identified including:-

Major Elements – SiO₂, TiO₂, Al₂O₃, MgO, Fe₂O₃, MnO, CaO, Na₂O, K₂O, P₂O₅, SO₃, Cl.

Trace Elements – V, Cr, Co, Ni, Cu, Zn, Ga, As, Rb, Sr, Zr, Nb, Mo, Ba, Hf, Pb, Th, U

4.9.2 (b) Due to the innovative aspects of these analysis, the CONTRACTOR will have to provide a complete documentation about the technical characteristics of the instrument proposed and detailed procedure for data processing and detailed procedure for data processing and data analysis and a comprehensive report may be prepared for the Company.

4.9.3 TOC Analyzer with All Accessories

4.9.3 (a) CONTRACTOR shall supply TOC Field Analyzer instrument at Base Lab and or Wellsite (Whichever is required)to quickly obtain information on Total Organic Carbon by means of a direct measurements on cores or cuttings. The system should be able to perform analysis in a short time, using a low amount of samples and after a dedicated sample preparation. If needed be, Sample preparation kit shall be included in the service .

4.9.3 (b) Considering the innovative aspects of these analysis, the CONTRACTOR will have to provide a complete documentation about the technical characteristics of the tool proposed and detailed procedure for data processing and detailed procedure for data processing and data analysis and a comprehensive report may be prepared for the Company.

4.9.4 Source Rock Pyrolysis and Pyrolysis TOC(calculated) Instrumentation with Sample preparation equipments

Source Rock Pyrolysis:

- S1 (Free Hydrocarbon)
- S2 (Residual Hydrocarbon)
- S3 (Amount of CO₂ to reflect the amount of Oxygen in oxidation)
- GP (Genetic Potential)
- PI (Production Index)
- HI (Hydrogen Index)
- OI (Oxygen Index)

- NOR (Normalized Oil Ratio)
- Tmax (Thermal Maturity)
- Original TOC

4.9.4 (a) CONTRACTOR shall supply Pyrolysis Instrumentation- SRA Source Rock Analyzer at Base Lab and or Wellsite (Whichever is required) to quickly obtain data on Production Index, presence or absence of non-indigenous hydrocarbons, organic matter type and thermal maturity of a rock from core or cuttings. The gadget shall quantitatively determine:

- S1 (Free Hydrocarbon)
- S2, (Residual Hydrocarbon)
- S3 (Amount of CO2 to reflect the amount of Oxygen in oxidation)
- Tmax (Temperature at which maximum rate of generation of Hydrocarbon occurs during Pyrolysis)

Calculated Results

- Pyrolysis TOC,
- GP, Genetic Potential (S1 + S2)
- HI (Hydrogen Index = $100 \cdot S2 / TOC$ %)
- OI (Oxygen Index = $100 \cdot S3 / TOC$ %)
- Normalized Oil Ratio = $100 \cdot S1 / TOC$ %)
- PI (Production Index = $S1 / (S1 + S2)$)
- Original TOC / present day TOC
- Ro

4.9.4 (b) Considering the innovative aspects of these analysis, the CONTRACTOR will have to provide a complete documentation about the technical characteristics of the tool proposed and detailed procedure for sample preparation and analysis.

4.9.5 Measured Reflectance (Shale Thermal Maturity):

4.9.5 (a) CONTRACTOR shall supply “ Shale Thermal Maturity Instrumentation” at base lab to quickly obtain data on Vitrinite Reflectance, Reflectance Histogram, Type of Vitrinite, Photomicrographs to determine thermal maturity shale from core or cuttings. The gadget shall quantitatively determine:

- R0 (comparison of types of kerogen determined by R0 and Tmax by SRA or Rock Eval)
- Transported and original kerogen type and abundance of kerogen
- Reflectance Histogram
- Type of Vitrinite
- Photomicrographs, Type and abundance of kerogen whole rock and kerogen

4.9.5 (b) Considering the innovative aspects of these analysis, the CONTRACTOR will have to provide a complete documentation about the technical characteristics of the tool proposed and detailed procedure for sample preparation and analysis and detailed procedure for data processing and data analysis and a comprehensive report may be prepared for the Company.

GROUP “C”SERVICES

4.10. Gas Sorption Analysis:

- On-Site Pre-Coring Operations (Effective core handling and preservation program)
- Core Handling, Sampling & Preservation (Define depth allocation,

maintain core integrity, preserve core properties, effective core stabilization & preservation methods etc)

- Core Description (Texture, core recovery, core logs, core image, digitized data, wettability, Oil fluorescence/cut, etc)
- Core & other data Transportation/Shipping (provide protection against damage environmental change, mechanical vibration, mishandling, etc)
- Lost gas (estimated to have been released from the sample prior to being sealed in the canister)
- Measured gas (released into the canister and measured)
- Gas Content (Canister Gas) Sample Collection
- Canister gas analysis at well site for desorption volume measurements and analysis
- Residual gas (estimated to be remaining in the sample when measurements are terminated)
- **Following are evaluated at Base Lab:**
 - Adsorption/Desorption isotherm
 - Gas In Place (GIP) / adsorb gas inplace
 - Gas Composition
 - Gas Saturation
 - Canister gas composition.

4.11 REPORTING & DOCUMENTATION FOR GROUP “A”& GROUP“B” AND/OR GROUP “C”

4.11.1 Special emphasis **MUST** be given to the accuracy of all kind of Report(s), logs and Data.

4.11.2 The COMPANY will not accept erroneous Report(s), graphs, logs, data, tables & charts etc in any case.

4.11.3 The CONTRACTOR(s) shall include in Technical Bid the “Specimen” of all kind of proposed reports, logs, Data presentation Formats, Plan of Work for the Project, etc, etc.

4.11.4 The CONTRACTOR shall provide Inception report analysis of the existing data no later than one week after the start of project followed by Daily/Weekly progress reports and Final Report.

4.11.5 Draft copies of the final reports referred to above must be submitted to within two (2) weeks after the end of operations to the designated official of the COMPANY. The reports must be written in English. The designated official of the COMPANY is responsible for approving the reports.

4.11.6 The final report is submitted within 1 month of receiving comments on the draft final report from the designated official of the COMPANY.

4.11.7 During the execution of the service, CONTRACTOR shall provide to the “COMPANY” hard & soft copies (both) of the following reports/logs free of charge.

4.11.8 Group “A” & GROUP “B” SERVICES

- Integrated Cutting Analysis Daily Report.
- Integrated Cutting Analysis Composite Log
- Graphs, tables and cross plots for TOC, S1, S2, S3, Tmax, RO, Chemical and Elemental data.
- Composite logs for measured, calculated and interpreted results (XRD, XRF, TOC, Pyrolysis and RO).
- Colored images
- Reports of evaluated and Interpreted results including

recommendations

4.11.9 Group “C” SERVICES

- Gas Sorption Analysis Reports
- Integrated Core Analysis Daily Reports
- Integrated Core Analysis Composite Logs/Core Logs
- Graphs, tables, cross plots and composite logs for measured, calculated and interpreted results.
- Reports of evaluated and Interpreted results including recommendations.

4.11.10 The Logs shall also include the data received off-line from 3rd party (other Service CONTRACTOR present at WELL SITE).

4.11.11 At the end of the well a Final Report must be provided to the COMPANY either as digital format (both Microsoft Office format and PDF Image File) and paper copies (five copies plus extra copies if requested).

4.11.12 Details about the information and parameters included in the above Log and Reports will be agreed between COMPANY and CONTRACTOR before the start of job/work.

4.11.13 CONTRACTOR shall maintain an extra (digital) copy of all report and digital data acquired for 7 (seven) years. After this period the documentation shall be destroyed by CONTRACTOR after written authorizations by COMPANY.

4.11.14 After submission of the final reports of the results of the analysis of the samples to OGDCL, the contractor shall stand responsible for another 90 days (from the date of final submission) for any correction, editing, revision, formatting or any other change suggested by OGDCL.

4.11.15 The cost of Reports & Documentation is included in Operational Day Rate.

5 OGDCL PARTICIPATION AND SKILL TRANSFER

Relevant OGDCL Professionals will be attached with the CONTRACTOR from time to time for necessary input and complete training at wellsite and/or at HO during the contract period & execution of services as prescribed in Group “A” & “B” and Group “C” without any kind of financial burden on part of the COMPANY. These include methodology how these services will be carried out, including the main methods to be used to collect, analysis, handling instrument, record and report information.

6. INELIGIBILITY

The Contractors/Bidders/Firms/Companies/Vendors and their representatives having conflict of interest with OGDCL would not be entertained.

7 CONTRACTOR’S PERSONNEL REQUIREMENTS FOR GROUP “A”, “B” AND/OR GROUP “C” SERVICES

Following personnel will be required essentially:

- 7.1. Two (02) specialists for advanced cutting analysis (Group- B”) and two (02) specialists for Gas Sorption Analysis, Core handling & Core Preservation (Group “C”), having at least five years post qualification relevant experience in advanced cutting analysis and/or advanced Core Analysis, along with four year university degree in earth sciences preferably in geology or M.Sc. Geology and able to communicate in English fluently (both spoken & written). Each specialist will work 12 hrs shift duty/day and no payment for off days will be made.

- 7.2. The services in Group B and Group C will be covered/manned and monitored with the above crew on 24 hr day basis.
- 7.3. Crew change is based on 28/28 rotation basis or as dictated by operational conditions or as mutually agreed. All kind of crew transportation (cost of Air tickets, pick & drop, etc) to and from the work location, transit time, journey time, hotel stay, etc, etc, will be the sole responsibility of the CONTRACTOR at CONTRACTOR's account. However, on site boarding/ lodging and meals will be provided by the COMPANY as per prevailing industry practices.
- 7.4. In time Security Clearance of Expatriates (Contractor's Personnel) in line with the laid down security procedure of the COMPANY & Government of Pakistan is the sole responsibility of the CONTRACTOR, within stipulated time period. The CONTRACTOR(s) who's office(s) are in Pakistan will be solely responsible for timely security clearance of CONTRACTOR's Crew. Normally it takes a minimum of six (6) weeks from the date of submission of security clearance papers to DGPC (Directorate General of Petroleum Concession, BOI (Board of Investment), and other Government Agencies involved in security clearance. The CONTRACTOR(s) who do not have their office(s) in Pakistan, The Security clearance process of their expatriates will be executed by OGDCL subject to the condition that they submit all relevant documents to OGDCL at least ten (10) weeks prior the Expat Professional is expected to reach at work location. The security clearance for the movement of expatriate from Islamabad/ Karachi to well site is the sole responsibility of OGDCL.
- 7.5. The CONTRACTOR should have an effective liaison with the COMPANY on daily basis to discuss all kind of issues and concerns to resolve them accordingly.
- 7.6. The COMPANY will not compromise on crew competency, attitude, behavior, demonstrated technical skills, communication skills (both spoken & written English), requisite qualification, relevant work experience, equipment's performance, accuracy of data, etc. The CONTRACTOR's personnel are bound to obey the safety regulations & labor laws.
- 7.7. The CONTRACTOR is bound to include Personnel's Resumes along-with their fresh colored photographs and COMPANY reserves the right to lock the resumes for future reference. The CONTRACTOR is also bound to provide the resumes of each crew member on each crew change.
- 7.8. If any incompetent or disobedient or ill-mannered person of CONTRACTOR is found deployed for any of these services, the COMPANY reserves the right to advise the CONTRACTOR to replace him forthwith on CONTRACTOR's expense and deduct on invoice 100% of the established personnel day rate for that specific category (Advanced Cutting Analysis Specialist or Advanced Core Analysis Specialist or Operator) for each day till such time that its suitable replacement, acceptable to the COMPANY, is physically provided at work location, by the CONTRACTOR at contractor's own expenses.
- 7.9. The CONTRACTOR shall at all times be responsible for ensuring that the personnel provided to perform the services are appropriately qualified hold valid certifications, are adequately trained including "training for handling of acid and solvent", and that the validity of such qualifications, certifications and training are maintained throughout the entire Contract Period. In addition, for the personnel working at RIG LOCATION, the following courses are required:
- Basic Fire Fighting
 - Basic First Aid
 - Basic Course H2S
 - Basic monitoring techniques, safety procedures and use of protection equipment as breathing apparatus and escape set.
 - Personnel shall be certified according to Law of Pakistan for the

specific role.

- 7.10. The CONTRACTOR shall supply, on COMPANY request, certificates of good health, qualification and competence for each employee assigned to special works according to local laws and regulations. The personnel shall be fully conversant with the applicable procedures and operating instructions and must be able to speak, read and write in English language.
- 7.11. The CONTRACTOR is solely responsible for all kind of accidental insurance coverage, traveling expenses, health insurance. However, minor first aid will be available to work location.

TABLE (1) PERSONNEL QUALIFICATION – FOR GROUP “A”, “B” AND/OR GROUP “C” SERVICES

	COMPANY REQUEST	BIDDER OFFER
Name:	*	(+) *
Date of Birth:	*	(+)
Languages:	English	(+)
Present Position	*	(+)
Experience as Advanced Cutting Analysis Specialist	Min Four(4) Years	(+)
Experience as Gas Sorption Analyst and Core Handling Specialist	Min Four(4) Years	
Academic Qualification	Preferably M.Sc. Geology	(+)
Trainings	*	(+)
Certificates	*	(+)
Basic Courses	*	(+)
Basic H2S	*	(+)
Basic Fire Fighting	*	(+)
Basic First Aid	*	(+)
Training Certified Course	*	(+)
Advanced Cutting Analysis	*	(+)
Advanced Core Analysis	*	(+)
Professional Experience	*	(+)
On site Trouble Shooting	*	(+)
Preventative Maintenance	*	(+)
Corrective Maintenance	*	(+)
Advanced Analysis on Cuttings	*	(+)
Advanced Analysis on Cores	*	
Onsite Core Analysis	*	(+)
Lithology Description	*	(+)
E & P Companies For which he has worked so far as Advanced Cutting Analysis Specialist	*	
E & P Companies For which he has worked so far as Gas Sorption Analyst and Core Handling Specialist	*	(+)

* To be specified by the BIDDER

TABLE (2) CONTRACTOR'S BASE

	COMPANY REQUEST	BIDDER OFFER
Purpose of Facility	Required	(+) *
Head Office/Administration Technical interface with COMPANY Personnel	*	(+)
Location of Operating Base	*	(+)
HSEQ Documentation	*	
Storage of Equipment & Tools	*	(+)
Maintenance of Equipment	*	
Storage of spares parts/equipment	*	(+)
Calibration of Sensors	*	(+)
Calibration and repairs of all electrical/electronic equipment	*	(+)
Proactive Address to Equipment Malfunction	*	
Crew	*	

* To be specified by the BIDDER

TABLE (3) WELLSITE UNIT / BASE LABORATORY & ADVANCED CUTTING ANALYSIS EQUIPMENT LIST (GROUP "A" & "GROUP -B" Services)

ITEM	EQUIPMENT	COMPANY REQUEST	BIDDER OFFER
1	Wellsite Unit Laboratory for Advanced Cutting Analysis	Required	(+)
	length (meters)	*	(+)
	width (meters)	*	(+)
	height (meters)	*	(+)
	- total Gross Weight (metric ton)	*	(+)
	lifting Eyes (certified)	*	(+)
1.1	AIR CONDITIONING SYSTEM	Required	(+)
	Type	*	(+)
	cooling capacity	*	
1.2	SMOKE & EXPLOSIVE MIXTURE DETECTOR	Required	(+)
	type & description	*	(+)
	audible alarm	*	(+)
	Connected to an automatic shut off	*	(+)
1.3	CLASSIFICATION	Required	
	Type	*	(+)
	Specification of the walls steel	*	(+)
1.4	ELECTRIC POWER SUPPLY	Required	
	Volt	*	(+)
	Ampere	*	(+)
	Frequency	*	(+)
	No of phases	*	(+)
	Emergency/Manual electric shut down	*	(+)
	Type & description	*	(+)
1.5	REQUIRED WATER	Required	
	Flow	*	(+)
	Pressure	*	(+)
1.6	REQUIRED COMPRESSED AIR	Required	(+)
	Flow	*	(+)
	Pressure	*	(+)
2	ADVANCED CUTTING ANALYSIS EQUIPMENT (GROUP A& GROUP B)	Required	(+)
2.1	XRD	*	(+)
	- Manufacturer	*	(+)
	- Type/Model	*	(+)
	Technical Features	*	
	- Measurement Units	%	(+)
	- Analysis time (including sample preparation)	Maximum 1 hr per sample	(+)
	- XRD Resolution	*	(+)
	- XRD Range	*	(+)
	- Accuracy	*	
	- Detection Limits	*	
2.2	XRF	Required	
	- Manufacturer	*	(+)
	- Type/Model	*	(+)
	Technical Features	*	
	- Measurement Units	ppm or %age	(+)
	- Analysis time (including sample	Maximum 10	(+)

	preparation)	mins	
	- Detection Limits	*	
2.3	TOC ANALYSER	Required	(+)
	- Manufacturer	*	(+)
	- Type/Model	*	(+)
	Technical Features	*	(+)
	- Measurement Units	*	
	- Analysis time	Max 5 mins	(+)
	- sample preparation time	40 mins	
	- Accuracy	+/- 5%	
	- Detection Limits	*	
2.4	PYROLYSIS ANALYSER	Required	
	- Manufacturer	*	
	- Type/Model	*	
	Technical Features	*	
	- Measurement Units	mg HC/g of sample	
	- Analysis time (including sample preparation time)	Maximum 1 hr	
	- Accuracy	*	
	- Detection Limits	*	
2.5	Measured Reflectance (Shale Thermal maturity)	Required	
	- Manufacturer	*	
	- Type/Model	*	
	Technical Features	*	
	- Measurement Units/Range	*	
	- Analysis time (including sample preparation time)	Maximum 1 hr	
	- Accuracy	*	
	- Spectral range	*	
	- Resolution	*	
	- Detection Limits	*	

* To be specified by the BIDDER

TABLE (4) GAS SORPTION AND CORE ANALYSIS (GROUP “C” SERVICES)

ITEM	EQUIPMENT	COMPANY REQUEST	BIDDER OFFER
1	Gas Sorption Analysis (Group C)	Required	(+)
1.1	Canister Specification	*	
	length (meters)	*	
	width (meters)	*	
	height (meters)	*	
	Manufacturer	*	
	Type/Model	*	
	Technical Features	*	
	Measurement Units	*	
	- Analysis time for Lost /Measured /Residual Gas (Including sample preparation time)	*	
	Accuracy	*	
1.2	Source(s) of temperature, to keep canister at reservoir temperature	*	
	Technical Features	*	
	Measurement Units	*	
	Temperature limitation of source(s)	*	
1.3	Core Handling and Preservation	*	
	Core Handling and Preservation Equipments	*	
	Shear Plate Information (Size, Specification)	*	
	Core Cutting Assembly	*	
	Wellsite Plugging Tool (Specification)	*	
	Core Boxes (Specification)	*	

* To be specified by the BIDDER

8 **EQUIPMENT PERFORMANCE REQUIREMENTS**

8.1 A loss of any one parameter (as defined in Scope of Work) in any 24 hour period (Midnight to Midnight) shall be applicable for deduction on invoice till such time that particular parameter is fixed/repaired/replaced/calibrated and is made fully functional.

TABLE (5) Daily Equipment Checklist (Mandatory)

	DATE						
EQUIPMENT							
XRD							
Analyzer							
Sample preparation Kit							
Software							
Accessories							
XRF							
Analyzer							
Sample preparation Kit							
Software							
Accessories							
TOC Analyzer							
Analyzer							
Sample preparation Kit							
Software							
Accessories							
Pyrolysis-SRA							
Analyzer							
Sample preparation Kit							
Software							
Accessories							
Vitrinite Reflectance							
Analyzer							
Sample preparation Kit							
Software							
Accessories							
Gas Sorption Analysis							
Canister							
Sample preparation Kit							
Software							
Accessories							
Source of Temperature							

Working

X-Faulty

C-Calibrated

OGDCL REP: _____
(SIG & STAMP)

CONTRACTOR REP: _____
(SIG & STAMP)

TABLE (6) CONTRACTOR'S CONFIRMATION

GROUP "A" & "B" SERVICES		
ITEMS	DESCRIPTION	YES/NO *CONTRACTOR TO SPECIFY
1	<p>Contractor will be solely responsible for providing, correctly calibrated & correctly operative X-Rays Diffraction (XRD) Instrument for Mineralogy with all kind of sample preparation equipments. The XRD instrument should be capable to obtain mineralogy data directly from cuttings at Wellsite and or base lab. The mineralogy quantified by wellsite sample XRD includes:</p> <ul style="list-style-type: none"> • Quartz and Opal • Feldspars-Plagioclase, K-feldspar • Total Clay + Types of Clay (Kaolinite, Illite, Vermiculite, Smectite, Chlorite, Montmorillonite etc) • Carbonates – Calcite, Dolomite, Siderite • Pyrite • Sulfates – Anhydrite, Gypsum, Barite • Apatite • Halite • Mica types of mica (Muscovite and biotite) • Glauconiti. • Diffractogram of each sample. 	
2	<p>Contractor will be solely responsible for providing, correctly calibrated & correctly operative X-Rays Fluorescence (XRF) Instrument for Elemental Composition with all kind of sample preparation equipments. The XRF instrument should be capable to make elemental analysis at wellsite and or base lab and should be capable of measuring the following oxides and elements with accuracy and precision. Elements between Magnesium and Uranium are to be identified including:-</p> <ul style="list-style-type: none"> • Major Elements – SiO₂, TiO₂, Al₂O₃, MgO, Fe₂O₃, MnO, CaO, Na₂O, K₂O, P₂O₅, SO₃, Cl. • Trace Elements – V, Cr, Co, Ni, Cu, Zn, Ga, As, Rb, Sr, , Zr, Nb, Mo, Ba, Be, Hf, Pb, Th, U 	
3	<p>TOC Analyser with All Accessories</p> <p>CONTRACTOR shall supply TOC field Analyser instrument at rig site to quickly obtain information on Total Organic Carbon content by means of a direct measurements on cores or cuttings. The system should be able to perform analysis in a short time. Sample preparation kit should be included in the service.</p> <ul style="list-style-type: none"> • TOC% (Weight % of Organic Carbon) 	
4	<p>Contractor will be solely responsible for providing, correctly Calibrated & correctly Operative portable Pyrolysis instrumentation-SRA (Source rock analyzer) with all kind of sample preparation equipments.</p> <p>Measured Results</p> <ul style="list-style-type: none"> • S1 (Free Hydrocarbon) • S2, (Residual Hydrocarbon) • S3 (Amount of CO₂ to reflect the amount of Oxygen in oxidation) 	

	<ul style="list-style-type: none"> • Tmax (Temperature at which maximum rate of generation of Hydrocarbon occurs during pyrolysis. <p>Calculated Results</p> <ul style="list-style-type: none"> • GP, Genetic Potential = (S1 + S2) • HI (Hydrogen Index = (100*S2/TOC%) • OI (Oxygen Index = (100*S3/TOC%) • Normalized Oil Ratio = (100*S1/TOC%) • PI (Production Index = (S1 / (S1+ S2) • Original TOC • Pyrogram of each sample. 	
5	<p>Measured Reflectance (Shale Thermal Maturity)</p> <ul style="list-style-type: none"> • R₀ (comparison of types of kerogen determined by R₀ and Tmax by SRA or Rock Eval) • Transported and original kerogen type and abundance of kerogen • Reflectance Histogram • Type of Vitrinite • Photomicrographs, Type and abundance of kerogen whole rock and kerogen 	

TABLE (7) CONTRACTOR'S CONFIRMATION

GROUP "C" SERVICES		
ITEMS	DESCRIPTION	YES/NO *CONTRACTOR TO SPECIFY
1	<p>Gas Sorption Analysis</p> <p>The following analysis will be carried out at well site:</p> <ul style="list-style-type: none"> • On-Site Pre-Coring Operations (Effective core handling and preservation program). • Core Handling, Sampling & Preservation (Define depth allocation, maintain core integrity, preserve core properties, effective core stabilization & preservation methods etc). • Core Description (Texture, core recovery, core logs, core image, digitized data, Oil fluorescence/cut, etc) • Core & other data Transportation/Shipping (provide protection against damage environmental change, mechanical vibration, mishandling, etc). • Lost gas (estimated to have been released from the sample prior to being sealed in the canister) • Measured gas (released into the canister and measured). • Gas Content (Canister Gas). • Canister gas analysis at well site for desorption volume measurements and analysis. • Residual gas (estimated to be remaining in the sample when measurements are terminated). • Following are evaluated at Base Lab: <ul style="list-style-type: none"> • Adsorption/Desorption isotherm • Gas In Place (GIP) / Adsorb gas in place • Gas Composition • Gas Saturation • In Situ Permeability / Porosity • Wettability • Water Saturation 	

**TABLE (8) FINANCIAL BID FOR ADVANCED CUTTING ANALYSIS SERVICES
(GROUP "A" SERVICES)**

All Costs in US Dollars

#	DESCRIPTION	COST
	<p>Operational Rates at Base Lab Operating rate per sample per Gadget XRD, XRF, TOC Analyser, Pyrolysis and Measured Reflectance (Shale Thermal maturity) including adequate stock of spare parts, Accessories, As defined in Group A Services.</p> <p>Total for 50 Samples US\$ _____</p>	<p>XRD = US\$_____ / Sample XRF = US\$_____ / Sample TOC = US\$_____ / Sample Measured Reflectance (Shale Thermal Maturity) 1- Adsorption Isotherm (i) Normal temperature=US\$_____</p> <p> (ii) High temperature=US\$_____</p> <p>2- Gas composition C6+=US\$_____</p>
	<p>Total for 50 Samples inclusive of all applicable taxes except PST/ICT</p>	

All expenses inclusive for sample analysis at lab.

**TABLE (9) FINANCIAL BID FOR ADVANCED CUTTING ANALYSIS SERVICES
(GROUP "B" SERVICES)**

All Costs in US Dollars

#	DESCRIPTION	COST
1	Advanced Cuttings Analysis Unit Laboratory and Equipment Mobilization Charges (Lump Sum) One Time Only (Covers all the cost to deliver all equipment from the Contractor point of Origin as mentioned in Bid to the rig location in Pakistan)	US\$ _____
2	Moving between Locations will be arranged by the COMPANY, whereas, rig down of equipment and rig up to the next location will be made by CONTRACTOR,s Personnel (Lump Sum)	US\$ _____
3	Operational Rates of Equipment Equipment Operating rate per Day per Gadget (Applicable when the equipment is in full operation in accordance with Technical specification. Inclusive of Unit Laboratory with XRD, XRF, TOC Analyser, Pyrolysis Including adequate stock of spare parts, Accessories, Sample preparation kits and consumables) (30 Days For Calculation)	XRD = US\$_____ /Day XRF = US\$_____ /Day TOC = US\$_____ /Day Pyrolysis = US\$_____/Day Total for 30 Days US\$ _____
4	Operational Rates of Personnel Personnel Operating Rate per Day per Person Advanced Cutting Analysis Specialists (02 persons) (Applicable from the day Personnel arrive at rig location on Company request, until the day the same is released by Company) (30 days for calculation only)	US\$ _____/Day /Specialist Total for 30 days US\$ _____
5	TOTAL ESTIMATED COST OF US\$ inclusive of all applicable taxes except PST/ICT:	US\$ _____

Note: Demobilization charges of equipment and crew shall be considered as zero (0).

TABLE (10) FINANCIAL BID FOR GAS SORPTION ANALYSIS, CORE HANDLING & PRESERVATION

(GROUP "C" SERVICES)

All Costs in US Dollars

#	DESCRIPTION	COST
1	Gas Sorption Analysis, Core Handling & Preservation Equipment & Accessories Mobilization Charges (Lump Sum) One Time Only (Covers all the cost to deliver all equipment from the Contractor point of Origin as mentioned in Bid to the rig Only location in Pakistan)	US\$ _____
2	Gas Sorption Analysis charges (Equipment Operating rental) per Sample at wellsite or at CONTRATOR,s Base (Applicable when the equipment is in full operation in accordance with Technical specification including adequate stock of spare parts, Temperature Source, Accessories and consumables) (Approx 30 Samples for calculation only)	Gas Sorption Analysis (at Reservoir Temperature) US\$ _____/Sample
3	Core Handling and Preservation Charges (Wrapping & Wax Preservation) per meter (Approx 126m for calculation only)	US\$ _____/meter
4	Personnel Charges per day Gas Sorption Analyst and Core handling & Preservation Specialists (02 persons) (Applicable from the day Personnel arrive at rig location on Company request, until the day the same is released by Company) (30 days for calculation only)	US\$ _____/Day Total for 30 days US\$____
5	Standardized Core Boxes (approx 130 boxes for calculation only)	US\$ _____/ Box
6	Transportation/Shipping - Insulated Shipping Containers with preserved core, as per actual (Approx 01 Container for calculation only)	US\$ _____/Container
7	TOTAL ESTIMATED COST OF US\$ inclusive of all applicable taxes except PST/ICT:	

Note: Demobilization charges of equipment and crew shall be considered as zero (0).

9 Eligibility Criteria for Advance Cutting Analysis (Group “A” Services)

TABLE (11) Information and Eligibility Criteria for Group “A” Services

Cat. No.	Information to be submitted	Minimum Qualifying Criteria	Eligibility Criteria		Max. points	Supplied information
			Qualifying points	Maximum qualification		
1.	Company History & Profile		21		30	
	Company experience	>10 years	3.5	15+	5	
	No. of Established Labs Worldwide	≥10 units/each	7	≥15	10	
	Average annual services Worldwide	≥50 services/each	10.5	150+	15	
2.	Global experience of Advanced Cutting Analysis Services projects		21		30	
	No of Projects in last 5 years	>50 projects	10.5	100+	15	
	NO of services Worldwide	≥300 services	10.5	≥300	15	
3.	Information Equipment in Use		07		10	
	Technical Rating Within last Generation	Within 10 years	3.5	State of the Art	5	
	Condition of Equipment	Not less than 5 years old	3.5	Less than 1 years old	5	
4.	Global Human Resource in this Specific Scope of Work		14		20	
	Total no. of professionals	≥25 professionals	7	≥50	10	
	Advance Cutting Analysis Field Specialists, Field Trouble Shooting Engineers And Technicians	≥15 Specialists, Engineers, Technicians.	3.5	≥30	05	
	Qualification & Experience	Individuals having University degree preferably in Geology alongwith 4+ years post qualification relevant experience & certification in Advance Cutting Analysis	3.5	Individuals having University degree preferably in Geology alongwith 7+ years post qualification relevant experience and certification in Advance Cutting Analysis	05	
5.	Global financial indicators (During last 05 years)		07		10	
	Average Annual Revenues	>US\$50 Millions	3.5	US\$ 150+Millions	05	
	Average Annual R&D Spending	>5%	3.5	10%+	05	
TOTAL			70	--	100	

10. Eligibility Criteria for Advance Cutting Analysis (Group “B” Services)

TABLE (12) Information and Eligibility Criteria for Group “B” Services

Cat. No.	Information to be submitted	Minimum Qualifying Criteria	Eligibility Criteria		Max. points	Supplied information
			Qualifying points	Maximum qualification		
1.	Company History & Profile		21		30	
	Company experience	>10 years	3.5	15+	5	
	No. of Advance Cutting Analysis Units Worldwide	≥15 units/each	7	≥20	10	
	Average annual services Worldwide	≥50 services/each	10.5	150+	15	
2.	Global experience of Advanced Cutting Analysis Services projects		21		30	
	No of Projects in last 5 years	>50 projects	10.5	100+	15	
	NO of services Worldwide	≥300 services	10.5	≥300	15	
3.	Information Equipment in Use		07		10	
	Technical Rating Within last Generation	Within 10 years	3.5	State of the Art	5	
	Condition of Equipment	Not less than 5 years old	3.5	Less than 1 years old	5	
4.	Global Human Resource in this Specific Scope of Work		14		20	
	Total no. of professionals	≥25 professionals	7	≥50	10	
	Advance Cutting Analysis Field Specialists, Field Trouble Shooting Engineers And Technicians	≥15 Specialists, Engineers, Technicians.	3.5	≥30	05	
	Qualification & Experience	Individuals having University degree preferably in Geology alongwith 4+ years post qualification relevant experience & certification in Advance Cutting Analysis	3.5	Individuals having University degree preferably in Geology alongwith 7+ years post qualification relevant experience and certification in Advance Cutting Analysis	05	
5.	Global financial indicators (During last 05 years)		07		10	
	Average Annual Revenues	>US\$50 Millions	3.5	US\$ 150+Millions	05	
	Average Annual R&D Spending	>5%	3.5	10%+	05	
		TOTAL	70	--	100	

11 Eligibility Criteria for Gas Sorption Analysis (Group “C” Services)

TABLE (13) Information and Eligibility Criteria For Group C Services

Cat No.	Information to be submitted	Minimum Qualifying Criteria	Eligibility Qualifying Points	Criteria Maximum Qualification	Maximum Points	Supplied Information
1-	Company History & Profile		21		30	
	No. of years since establishment	>10 years	7	>15 years	10	
	No. of Canister Analysis Units Worldwide	≥15 units/each	7	≥20 units/each	10	
	Average annual services Worldwide	≥100 services/each	7	≥150 services/each	10	
2-	Global experience of Gas Sorption Analysis Services projects		21		30	
	Number of projects in last 5 years	>50 projects	10.5	>100 projects	15	
	Number of Services Worldwide	≥200 services	10.5	≥300 services	15	
3-	Information of Equipment in Use		07		10	
	Technical Rating within last generation	Within 10 years	3.5	State of the Art	5	
	Condition of Equipment	Not >5 years old	3.5	<1 year old	5	
4-	Global Human Resource In this Specific Scope of Work		14		20	
	Total number of professionals	≥25 professionals	7	≥50	10	
	Gas Sorption Analyst/Field Specialists	>15 Specialists, Engineers & Technicians	3.5	≥30	05	
	Qualification Experience &	Individuals having University degree preferably in Geology alongwith 4+ years post qualification relevant experience & certification in Gas Sorption Analysis and Core Analysis	3.5	Individuals having University degree preferably in Geology alongwith 7+ years post qualification relevant experience & certification in Gas Sorption Analysis and Core Analysis	05	
5-	Global Financial Indicators (During Last 05 years)		07		10	
	Average Annual Revenues	>US\$50 Millions	3.5	US\$ 150+Millions	5	
	Average Annual R&D Spending	>5%	3.5	>10%	5	
	TOTAL		70	- -	100	

BID BOND

Oil & Gas Development Company Limited,
OGDCL House, Jinnah Avenue,
Blue Area, Islamabad.

Guarantee No.....
Date of issue.....
Date of expiry
Amount.....

Dear Sir,

In consideration of M/s.....
herein after called "THE BIDDER" having submitted the accompanying Bid with
reference to OGDCL tender enquiry No. **PROC-SERVICES/CB/ML-2092/2017**
and in consideration of value received from (the Bidder above), we hereby agree
to undertake as follows:-

1. To make unconditional, immediate and forthwith payment of the sum of

US\$ 8,000/- (United States Dollar Eight Thousand Only) for Group-A , US\$
3,000/- (US Dollar Three Thousand only) for Group-B and US\$ 3,000/- (US
Dollar Three Thousand only) for Group-C upon your FIRST and SIMPLE
written demand without further recourse, question, query, deferment,
contestation or reference to the bidder, account party or any other person in
the event of the withdrawal of the aforesaid bid by the BIDDER before the
end of the period specified in the Bid after the opening of the same for the
validity thereof or if no such period be specified, within 210 days after the
said opening or if the Bidder, having been notified of the acceptance of his
bid by the Company during the period of bid validity:
 - a. Withdraw their bid during bid validity.
OR
 - b. Fails to provide performance bond/or advance bank guarantees.
OR
 - c. Submit forged document in support of their bid.
OR
 - d. Fails to execute contract as per terms of contract.
OR
 - e. Fails to supply the short/wrong shipped items
2. To accept written demand from you as conclusive, sufficient and final
evidence of the existence of a default of non-compliance, breach or
default as aforesaid on the part of the BIDDER and to make payment
immediately and forthwith upon receipt of your FIRST and SIMPLE
written demand.
3. No grant of time or other indulgence to, or composition or arrangement
with the BIDDER in respect of the aforesaid Bid with or without notice to
us shall affect this Guarantee and our liabilities and commitments
hereunder.
4. This is an independent and direct obligations guarantee and shall be
binding on us and our successor in-interest and shall be irrevocable.
5. The Guarantor Bank warrants and represents that it is fully authorized,
empowered and competent to issue this guarantee.

**Yours faithfully,
(BANKERS)**

PERFORMANCE BOND/BANK GUARANTEE

Oil & Gas Development Company Limited,
OGDCL House, Jinnah Avenue,
Blue Area, Islamabad.

Guarantee No.....
Date of issue
Date of expiry
Amount.....

Dear Sir,

Ref: Our Bank Guarantee No. _____ in the sum of
_____ Account _____ Amount _____ of
Contract/Job _____
In consideration of you having entered into contract No.
_____ Dated _____
with _____ called Contractor and in consideration of value received
from CONTRACTOR, we hereby agree and undertake as follows:

1. To make unconditional, immediate and forthwith payment to you as called upon of an amount (equivalent to 10% of total contract value in Pak Rupees) on your written FIRST and SIMPLE demand without further recourse, question, query, deferment, contestation or reference to CONTRACTOR or any other person, in the event of default, non-performance or non-fulfillment by CONTRACTOR of his obligations liabilities, responsibilities under the said Contract of which you shall be the sole and absolute judge.
2. To accept written demand from you as conclusive, sufficient and final evidence of the existence of a default or breach as aforesaid on the part of CONTRACTOR and to make payment immediately and forthwith upon receipt of your FIRST and SIMPLE written demand.
3. To keep this Guarantee in full force and effect from the date hereof until..... from the date of contract execution / mobilization Notice.
4. That no grant of time or other indulgence to, amendment in the terms of the contract by Agreement between the parties, or imposition of Agreement with contractor in respect of the performance of his obligation under and in pursuance of the said Agreement with or without notice to us, shall in any manner discharge of otherwise however affect this Guarantee and our liabilities and commitments there under.
5. This is an independent and direct obligations guarantee and shall be binding on us and our successor in-interest and shall be irrevocable.
6. This Guarantee shall not be affected by any change in the constitution of the Guarantor Bank or the constitution of the Contractor.
7. The Guarantor Bank warrants and represents that it is fully authorized, empowered and competent to issue this guarantee.

Authorized Sign for Issuing Bank

Seal of the Bank

BIDDING FORM

Date.....
Tender Enquiry No.

To
Oil & Gas Development Company Limited,
OGDCL House, Plot # 3013,
Blue Area, Islamabad

Gentlemen,

Having examined the scope of work and Instructions to bidders of Invitation to Bids, the receipt of which is hereby acknowledged, we the undersigned, offer to supply the services (Nature of Service) to OGDCL in conformity with the scope of work and Instructions to bidders at the rates mentioned in our Bid Proposal or other such sums as may be ascertained in accordance with the said conditions.

2. We confirm that the terms and conditions given in the Tender Enquiry / Tender Documents are acceptable to us and if our Bid is accepted we shall execute a contract with OGDCL accordingly without any exceptions. We further confirm to commence service withindays of the mobilization notice issued by OGDCL

3 We agree to validate bid unconditionally for the period of 180 days from the date of opening the same and it shall remain binding upon us and may be accepted thereof, shall constitute a binding contract between us.

4. We hereby certify that our Firm / Company / Local Agent is or has not been at any time during the past five years, involved in litigation, arbitration or any other unsettled dispute with OGDCL / JV Partners.

5. We further certify that all the contracts / orders placed on us by OGDCL / JV Partners have been executed timely and as per terms & conditions of the Contract / order without any unsettled dispute.

6. Until a formal Agreement is prepared and executed, this bid, together with your acceptance thereof, shall constitute a binding contract between us.

7. We understand that you are not bound to accept the lowest or any tender you may receive.

8. Our bid proposal do not contain any deviation or exceptions from the terms & conditions enunciated in the tender documents.

Dated this.....days of.....2017,

Name & Signature.....in the Capacity of.....

duly authorized to sign tenders for and on behalf of.....
(Name of the firm in block capital Letters)

Address.....

Telex No.....Fax No.....Phone No.....

Witness

1.
(Name) (Signature)

2.
(Name) (Signature)

(On official letter-head of the bidder)
To be signed by the
Chief Executive of the
Bidding company or a representative duly
Authorized by board
Resolution.

INTEGRITY AND ETHICS UNDERTAKING

We hereby commit and undertake to observe the following principles during our participation in the tender process and during the contract execution:

- i. That we will not directly or through any other person of firm, officer promise or give to any of the employees of OGDCL involved in the tender process or execution of the contract any gain, pecuniary benefit of facilitation payment in order to obtain in exchange any advantages of any kind whatsoever during the tender process or during the execution of contracts.
- ii. That we have not and will not enter with other bidders into any undisclosed agreement or undertaking either formal or informal to restrict competitiveness sort to cartelize in the bidding process.
- iii. That we will ensure that the remuneration of agents (if engaged) is appropriate and for legitimate services only.
- iv. That we will not use subcontracts, purchase orders or consulting agreements as means of channeling payments to employees of OGDCL.
- v. That we will not commit any offence under the Pakistan Penal Code, Prevention of Corruption Act or National Accountability Ordinance to achieve any advantage, gain or benefit during the tender process or the execution of the contract.

We further understand and acknowledge that any violation of transgression of the above mentioned principles will attract disqualification from the tender process and may also result in permanent exclusion from future contract award process.

We also accept and undertaking to respect and uphold OGDCL,s absolute right to resort to and impose such disqualification, debarment or execution.

For and on behalf of _____

Tender No. _____

Mandatory for participation in Bidding Process

A F F I D A V I T
(To be attached with Technical bid)

I, _____ S/o _____ aged _____ years _____ working as Proprietor/Managing Partner/Director of M/s _____ having its registered office at _____ do hereby solemnly affirm and declare on oath as under:

2. That I am competent to swear this affidavit being proprietor/one or the partners/ Director of M/s _____
3. That M/s _____ is a proprietorship/partnership firm/company is participating in tender process conducted by OGDCL.
4. That I hereby confirm and declare that none of my/our group/sister concern/associate company is participating/ submitting this tender.
5. That I hereby confirm and declare that my/our firm/company M/s _____ and my/our firm/group/company/ sister concern / associate company have not been black listed/de-listed any Institutional agencies/Govt. Deptt/ Public Sector Undertaking.
6. That there is no change in the Name & Style, Constitution and Status of the firm, after Pre-qualification.
7. That I further undertake that in case any of the facts contained above and in-our application is round other-wise or incorrect or false at any stage, my/our firm/company/ group/sister concerns/ associate companies shall stand debarred from the present and future tenders of the OGDCL.

(Signature of the Proprietor/ Managing Partner/Director with Seal)

DEPONENT

Verified at _____ on _____ that the contents of paras 1 to 6 of this affidavit are true and correct to best of my knowledge and no part of this is false and nothing material has been concealed or falsely stated therein.

(Signature of the Proprietor/ Managing Partner/ Director with Seal)

DEPONENT

(Signature & Seal of Notary)

DATA SUMMARY SHEET
(To be attached with Technical bid)

Following information must be stated categorically:-

COMPLETE NAME, ADDRESS, EMAIL,
PHONE & FAX NUMBER OF BIDDER

NAME, ADDRESS, PHONE, FAX NO &
EMAIL OF LOCAL AGENT IN PAKISTAN (IF
ANY

VALIDITY OF BID:

BID BOND SUBMITTED BY

ADDRESS OF BANKER WITH AC
COUNT NO & SWIFT CODE FOR L/C
OPENING (WHERE APPLICABLE)

IN CASE OF JV PARTNERS (NAME OF
LEAD PARTNER NAME OF ALL OTHER
JV PARTNERS COPY OF JV
AGREEMENT CLEARLY STATING THE
RESPONSIBILITY OF EACH PARTY TO
BE ATTACHED WITH THE TECHNICAL
BID

NTN & GST NUMBER (FOR PAKISTAN
BASE COMPANY ONLY

ANNEXURE -F DULY ATTESTED BY
NOTARY PUBLIC.

PROVINCIAL REGISTRATION NUMBER

DATA SUMMARY SHEET
(To be attached with financial bid)

Following information must be stated categorically:-

COMPLETE NAME ADDRESS EMAIL,
PHONE & FAX NUMBER OF BIDDER

NAME, ADDRESS, PHONE, FAX NO &
EMAIL OF LOCAL AGENT IN PAKISTAN (IF
ANY

VALIDITY OF BID:

COMPLETION PERIOD:

ADDRESS OF BANKER WITH AC
COUNT NO & SWIFT CODE FOR L/C
OPENING (WHERE APPLICABLE)

NTN & GST NUMBER (FOR PAKISTAN
BASE COMPANY ONLY

DRAFT CONTRACT

**CONTRACT NO. PROC-SERVICES/CASE NO. /
NAME OF SERVICES**

THIS **Contract for hiring of (Name of Services) (“Contract”)** is made at Islamabad as of this----- day of -----/year of execution, by and between

Oil & Gas Development Company Limited , a body corporate, having its office at OGDCL House, Jinnah Avenue, Sector F-6, Islamabad (hereinafter referred to as the “Company” which expression shall include its successors and assigns) and

M/s (Name of Contractor or Consultant as the case may be) having its office at address..... (hereinafter referred to as the “Contractor / Consultant” which expression shall include its successors and assigns)

Contractor/ Consultant and Company may hereinafter be collectively referred to as the “Parties” and each individually as a “Party”.

WHEREAS, The Company is desirous of hiring timely, efficient and reliable (Name of Services)services under rate running contract for a period of (period)on as and when required basis.

AND WHEREAS, the Company invited bids for providing Name of Services through Tender Enquiry No. PROC-Services/Case No..... and the Contractor / Consultant through its Bid Proposal No..... dated warrants and represents for providing efficient and reliable Name of Services

WHEREAS, the Contractor / Consultant is engaged in the business of rendering the desired services to various E & P companies and it hereby expresses its ability and willingness to provide the desired services along with necessary equipment, type of Contract.

NOW THEREFORE, in consideration of the promises and mutual undertaking and covenants hereinafter set forth, the Parties hereby agree as follows:

SECTION 1. SCOPE OF WORK

Description of Scope of Work (As described in TOR/Tender enquiry)

SECTION 2. TERM:

The initial term of this Contract shall be -----months/years from the date of signing of contract till completion of the job whichever is later unless earlier terminated under the provisions hereof. Any extension in the term of Contract will be subject to mutual consent of both the parties.

SECTION 3. CONTRACT DOCUMENTS:

The following documents shall be deemed to form and be read and construed as integral part of this Contract:

- (a) This Contract.
- (b) Company’s LOI.
- (c) Company’s Tender documents
- (d) Contractor’s Technical & Financial bid and all correspondence/ clarification made thereafter.

Any inconsistency between the above documents of this Contract shall be resolved by giving precedence in the order in which they are listed above.

SECTION 4. PRICING TERMS:

- 4.1 The Services under this Contract shall be rendered at an estimated Cost of _____ as detailed below:
- 4.2 All prices charged under this Contract shall remain firm during the period of this Contract.
- 4.3 The prices should be quoted in USD. However payment to all Pakistan based companies will be made through cross cheque in 100% equivalent Pak Rupees, at actual, against verified invoices at official exchange rate prevalent on the date of payment.
- 4.4 To Foreign based Companies, the payment will be made in US\$, at actual against verified invoices through Irrevocable Letter of Credit (LC).
- 4.5 However, any payment made after thirty (30) days shall not in any way attract any markup, interest, surcharge or charges, etc.
- 4.6 To avoid delay in payment, it is essential that the invoices shall:
 - (a) be duly signed and stamped and type-written in English.
 - (b) be identified by the Contract number.
 - (c) contain sufficient description of services provided by the Contractor.
 - (d) state the location of the Company where Services have been provided.
 - (e) state the period of Services, duly verified with sign and stamp of Head of Department.
 - (f) be precise and strictly in accordance with the Contract.
 - (g) contain any other information deemed essential either by the Contractor or by the Company.
 - (h) Invoices must be submitted to Manager Accounts for onward submission to concerned Manager for verification.

SECTION 5. TAXES AND DUTIES:

- 1.1 The contract price includes all taxes (except Provincial Sales Tax/ Islamabad Capital Tax on services), duties, fees, levies and any other relevant charges payable/ applicable on the last date of submission of main/supplementary financial bid inside and outside Pakistan, except if OGDCL imports material in its own name it will bear duties/ import taxes/ port charges. The Contractor will be responsible for all the direct taxes (present or future) with respect to income/ payments of total contract amount, under the scope of the contract.
- 1.2 Indirect taxes (Provincial Sales Tax/ Islamabad Capital Territory Sales Tax on services) in Pakistan will be borne by OGDCL at actual where applicable. The contract price will be adjusted for any subsequent changes in the rates of indirect taxes as made applicable thereafter by the relevant authorities in Pakistan.
- 1.3 Any direct taxes, duties, fees, levies and other relevant charges, present or future, assessed or payable inside or outside Pakistan by the Contractor and its sub-contractor and /or by the expatriate personnel deputed by the Contractor and its sub-contractor in connection with its performance under the Contract shall be the sole and exclusive responsibility of the Contractor.
- 5.4 The Contractor shall be responsible and pay all taxes on its income outside and in particular on its income in Pakistan under the Contract and under the laws of Pakistan.

- 5.5 The Company shall have the right, as provided under the laws of Pakistan to meet its obligations and in particular to deduct from the payment due to the Contractor (against entire contract value including supplies and / or services components etc as applicable) , income tax at source at the rates prevailing from time to time, from the invoiced amounts, or such reduced rates fixed by the taxation authorities in Pakistan for the Contractor on production of current and valid documentary evidence by the Contractor from competent tax authorities in Pakistan and pay such amount to appropriate authorities.
- 5.6 The Contractor shall also be responsible for any income taxes levied on the Contractor's and its sub-contractor's expatriate personnel, under the laws of Pakistan and for all social security issuances and other contributions for the Contractor's expatriate personnel regardless of whether such contributions are levied on employer or employee or both in Pakistan or outside Pakistan.
- 5.7 The Contractor shall keep the Company duly informed about the steps taken by the Contractor in order to meet its obligations under the Contract and provide the necessary documents to the Company in this connection.
- 5.8 The Contractor shall indemnify the Company against any claim which might occur due to non compliance by Contractor of any legal obligation regarding the taxes, duties, fees, levies, or other charges, including taxes on income in Pakistan and any other payments to the relevant Government or Governmental agencies or any other applicable authority.
- 5.9 Understanding reflected under the above tax clause would prevail in case of any understanding to the contrary that may be reflected with respect to tax matters, in any other clause of the contract.

SECTION 6. ADJUSTMENT OF CONTRACT PRICE:

The Contract value (price) shall be subject to adjustment as a result of addition / reduction in scope of work. However unit price quoted for such work shall be used as base price for computation of final invoice. Contractor should take approval for such changes in writing from the Company. Rates and quantum of any work, not covered in the scope of work shall be subject to approval of Company.

SECTION 7. CONTRACTOR'S OBLIGATIONS:

- 7.1 The Contractor warrants and represents that all Services along with necessary equipment provided under this Contract shall be in accordance with good industry practice and the Contractor shall use every reasonable means for efficient and timely performance and provision of the Services.
- 7.2 The equipments, tools and materials utilized by the Contractor in performance of this Contract shall be handled and utilized with due care and diligence and proper record of consumables etc shall be maintained and made available to the Company upon request.
- 7.3 The Contractor shall secure and maintain during the performance of this Contract, all licenses, permits, authorization and certification required under the laws of Pakistan and applicable to Contractor. Company has the right to inspect such licenses, permits, authorization and certificates and the Contractor shall forthwith comply with such request.
- 7.4 Contractor shall employ and depute for the execution of Services, persons who are careful, skilled and experienced in their profession. The Company' shall have the right to ask the Contractor to replace any person employed by the Contractor for execution of Services who, in the sole opinion of Company, misbehaves, is incompetent or negligent in the performance of his duties or fails to conform with any particular provisions with regard to safety which may be set out in the Contract, or any conduct which is prejudicial to safety or health,

and such person shall not be employed again for the Services without the permission of the Company.

- 7.5 Contractor and its personnel shall, when using Company's premises, adopt and observe all safety, security, fire and health measures and comply with all reasonable directions relating to health and safety rules and emergency evacuation plans as notified or as directed by the Company.

SECTION 8. DECLARATION:

- 8.1 The Contractor hereby declares that it has not obtained or induced the procurement of any Contract, right, interest, privilege or other obligation or benefit from Company through any corrupt business practices.
- 8.2 Without limiting the generality of the foregoing, the Contractor represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, Contractor, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from the Company, except that which has been expressly declared pursuant hereto.
- 8.3 The Contractor certifies that it has made and shall make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with the Company and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.
- 8.4 The Contractor accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any Contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to the Company under any law, Contract or other instrument, be voidable at the option of the Company.
- 8.5 Notwithstanding any rights and remedies exercised by Company in this regard, the Contractor agrees to indemnify Company for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to Company in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback paid by the Contractor as aforesaid for the purpose of obtaining or inducing the procurement of any Contract, right, interest, privilege or other obligation or benefit in whatsoever form from Company.

SECTION 9. PERFORMANCE BOND/SECURITY DEPOSIT:

The Contractor shall provide to the Company, within fifteen (15) days of the award of the Contract, a Performance Bond in the form of an irrevocable, independent, unconditional, direct obligation of the bank and first and simple demand guarantee of a Pakistani Scheduled Bank or branch of a foreign bank operating in Pakistan, except NIB Bank, in the amount equivalent to 10% (Ten percent) of the total contract value in Pak Rupees/US\$ strictly in accordance with the format given at LOI to cover and secure the Contractor's faithful performance and execution of this Contract. The charges and expenses payable in connection with the issuance, extension, renewal

and maintenance of the Performance Bond shall be borne and paid by the Contractor. The Performance Bond shall be valid and shall be maintained in full force effect until - -----/ extendable six (06) months beyond the validity of the Contract. The Company has sole and absolute right to encash the Performance Bond without any prior notice to the Contractor in the event of any breach, failure, non-compliance or delay in the performance of the Contract.

SECTION 10. LIABILITIES:

- 10.1 Each party shall defend, indemnify and hold the other party harmless from and against any claim INCLUDING THIRD (3rd) PARTIES arising out of (i) loss or damage to its own property, and / or (ii) death of or injury to its own personnel.
- 10.2 Each party shall be liable for, and shall defend, indemnify and hold the other Party and its members/affiliates, co-ventures (if any), contractors or subcontractors, and it's and their respective employees, directors, officers, agents and invitees harmless from and against. all claims, demands, causes of action, judgments, awards, damages, losses, costs, expenses, expenses and liabilities of any kind and character arising out of third party property damage (including death) caused by the indemnifying Party's negligence during the performance of the Contract.
- 10.3 Notwithstanding any other provision of this Contract, Company shall defend, indemnify and hold harmless the Contractor from and against all liabilities, claims, damages, losses and costs relating to or resulting from (a) through (e) below, including any and all personal injury, death and loss of or damage to the drilling rig, vessel or platform and all other property arising there from (except if caused by Contractor's Gross Negligence or willful misconduct):
 - (a) damage to or loss of or impairment to any well (including the casing) or well bore;
 - (b) killing of or the bringing under control of any well;
 - (c) damage to or loss or any reservoir or productive formation, or subsurface minerals or structure or the loss of oil or gas therefore in;
 - (d) blowout, fire, explosion, catering , or any uncontrolled well condition;
 - (e) pollution, as well as containing, controlling and cleaning up any pollution, contamination or debris.

Gross Negligence or Willful Misconduct means any act or failure to act (whether sole, joint or concurrent) by a person that was intended to cause or was in reckless disregard of, or wanton indifference to, the harmful consequences to the safety or property of another person which the person acting or failing to act knew, or should have known, would result from such act of omission, provided that Gross Negligence or Willful Misconduct does not include any act or failure to act insofar as it: (i) constituted mere ordinary omission or oversight; or (ii) was done or omitted in accordance with the express instructions or approval of all parties."

The liability clause will be applicable to both parties i.e. OGDCL and the contractor and therefore its ambit and scope will be interpreted accordingly.

SECTION 11. INDEMNITIES:

- 11.1 Neither Party shall be liable to the other for any punitive, indirect or consequential damages sustained by the other including without limitation business interruptions, loss of profits, loss of use of assets, loss of data and loss of contracts, and each Party shall hold the other Party harmless in respect thereof.

- 11.2 The Contractor shall indemnify the Company against all motions, proceedings, claims, liens and demands whatsoever which may be made against the Company by the third parties for or in respect of or out of any failure by the Contractor in performance of its obligation or wrongful performance under this Contract or any act or omission in connection therewith. Should Company have to pay any moneys in respect of any such claims or demands, the amounts to be paid and the costs incurred by the Company connection therewith, shall be charged in to and paid by the Contractor in full.

SECTION 12. LIQUIDATED DAMAGES:

- 12.1 If the contractor fails to deliver any or all of the goods/services within the time periods(s) specified in the Contract, the purchaser shall, without prejudice to other remedies under the Contract, deduct from the Contract Price/Bank Guarantee as liquidated damages, a sum not more than 0.5% of the contract price per week or part thereof for first four weeks, 1.00% per week for next four weeks and 1.5% per week exceeding four weeks upto maximum extent of 10% of the contract value.
- 12.2 In case the purchaser is satisfied that the delayed/defective services/shipment was due to some mistake or circumstances beyond the control of the contractor and the contractor has not intentionally or negligently contributed in the delay, the purchaser may impose Liquidated Damages for not more than a sum equivalent to 0.5% of the delayed of defective shipment per week or part thereof for first two weeks, 1.00 per week for next three weeks and 1.5% per week exceeding five weeks but not exceeding 10% of the contract value of the delayed/defective shipment provided that the Contractor takes immediate remedial measures for the replacement of defective shipment and takes prompt steps to mitigate the delayed. The Purchaser may however, impose Liquidated Damages as per clause 12.1 above if the delayed or defective shipment/ services has affected the project completion schedule or has resulted in Production losses.
- 12.3 Even after imposition of LDs, if the supplier fails to materialize the delivery (material and or services); the Purchaser reserves the right to cancel Purchase Order/Contract/LC and forfeit the Guarantee (if applicable) after intimating the supplier for such cancellation/forfeiture.

SECTION 13. PATENT RIGHTS:

The Contractor shall protect, indemnify and hold the Company harmless from and against all claims, proceedings, demands, damages, costs, charges and expenses whatsoever for or on account of infringement of any patent rights, design, trade-mark, industrial design or name or other protected rights in respect of any design, method, machine work, material etc. used for or in connection with the Services.

SECTION 14. DIRECTIONS:

The Contractor and its personnel must, when using Company's premises, adopt and observe all safety, security, fire and health measures and comply with all reasonable directions relating to health and safety rules and emergency evacuation plans as notified or as directed by the Company or its representative.

SECTION 15. CONFIDENTIALITY:

- 15.1 Any data provided by the Company or which the Contractor or its employees have access to, or which they acquire directly or indirectly under this Contract or during the performance of this Contract, shall be deemed Confidential Information. Duplication or disclosure of such Confidential Information by Contractor or any one claiming through it without the prior written consent of

the Company is strictly prohibited. All Confidential Information shall be the sole property of the Company. The Contractor hereby agrees not to disclose said data, information, any interpretations thereof, or data derivative there from or any information relating to Company's facilities, installations and operations etc to unauthorized parties or person. This Section also applies to any sub-consultant, assignee or consultants used by the Contractor. The obligations under these provisions shall survive the termination or expiry of this Contract.

- 15.2 Neither the Contractor nor any of its employees shall, except with the prior written consent of the Company, take ground or aerial photographs of the site, rig, installation or existing facilities of the Company.
- 15.3 The Contractor further undertakes that it shall not, except with the prior written consent of the Company:
- i) make any reference publicly, whether to the press or in books, brochures, internal publications, publicity material, magazines and periodicals or by advertisement through radio, television or films or by any other medium relating to:
 - a) the Contract or its terms and conditions,
 - b) the nature or extent of Services carried out by the Contractor,
 - c) the method, materials, or equipment used and personnel employed, or
 - d) any other Company information in the possession of the Contractor.
 - ii) disclose or convey any of the matters or information referred to in (i) above to any employees of the Contractor not directly concerned with the Contract.

SECTION 16. DEFAULT:

- 16.1 If the Contractor is unable or unwilling to perform its Services in accordance with terms of the Contract, the Company may obtain conforming Services from other sources, in which case, the Contractor shall be liable to the Company for the increased cost, if any, incurred by the Company for procuring such Services from other sources.
- 16.2 The Contractor shall also be in default under the Contract if the Contractor (a) fails to fully and timely perform any of its material obligations under the Contract (b) becomes insolvent or seeks relief under the bankruptcy laws.

SECTION 17. ARBITRATION:

- 17.1 If any technical question, difference or dispute arises under this Contract, the Parties shall use their best efforts to promptly resolve such dispute, controversy or disagreement. However, if the dispute continues, either Party may give written notice to the other for appointment of an expert to resolve the dispute. The expert shall be preferably a Pakistani national and shall have at least ten years of experience in the relevant technical field.
- 17.2 If any question, difference or dispute arises regarding the rights, obligations or performance by the Parties under this Contract, the Parties shall use their best efforts to promptly resolve such dispute, controversy or disagreement. This includes without limitation the question of whether one or the other is in default and what action if any shall be taken to remedy such default. If the Parties are unable to resolve such question, difference, dispute and controversy, the matter may be referred to arbitration. Either Party may notify the other in writing specifying the nature of the dispute and designate one arbitrator to whom such dispute shall be referred requesting that the other party give notice in writing within fifteen (15) days after receipt of the notice of designation of the second arbitrator. The two arbitrators shall within fifteen (15) days after the receipt of notice of the second arbitrator, appoint an umpire whose decision with respect to the dispute shall govern in the event that the arbitrators shall

fail to agree. In the event that second arbitrator is not designated within the time specified, the first arbitrator shall have full and complete power to determine the dispute.

- 17.3 Arbitration shall be precedent in any action of law and that the provisions of the Arbitration Act, 1940 and rules framed thereunder shall apply. The venue of the arbitration shall be in Islamabad, Pakistan.
- 17.4 The expenses of arbitration shall be charged equally to the Parties unless the award of the arbitrator(s) or the umpire, as the case may be, otherwise provide.

SECTION 18. TERMINATION:

- 18.1 In the event of default by the Contractor, the Company shall have the right to terminate the Contract for cause, by giving written notice effective ten (10) days after the date of such notice, unless otherwise specified therein. If the Contractor cures such default within the ten (10) days period, or provides evidence to satisfy the Company that such default does not exist. In addition to any other remedy available under law or in equity, the Company shall be entitled to recover all actual damages, costs and losses incurred by the Company as a result of default by the Contractor.
- 18.2 The Company shall have the right to terminate the Contract, in whole or in part, without any cause at any time upon thirty (30) days' prior written notice. Upon receipt of such notice of termination, the Contractor shall promptly cease all further Services under the Contract with such exceptions, if any, specified in the notice of termination. The Company shall pay the Contractor for all Services performed and obligations incurred prior to the date of termination in accordance with the terms of the Contract.

SECTION 19. FORCE MAJEURE:

- 19.1 "Force Majeure" shall mean an unforeseeable event that impairs the ability of the Party affected by it to wholly or partially perform its obligations under this Contract. In the event of either party hereto being rendered unable, wholly or in part, by Force Majeure circumstances to carry out its obligations under this Contract, then such party by giving notice with satisfactory evidence of such Force Majeure circumstance(s) relied upon, the obligations of the party giving such notice so far as they are affected by such Force Majeure shall be suspended for the period during which the party, is rendered unable as aforesaid, but for no longer period. However, such notice must be given within fourteen (14) days of occurrence of Force Majeure event. The terms Force Majeure as employed herein, shall include but not be limited to acts of God or war, war whether declared or undeclared; acts of terrorism or sabotage, or public enemy; riots and insurrection; civil commotion; revolution; embargo, blockade, invasion or act of foreign enemies; epidemic; landslide, lightning, earthquake, loss of well, reservoir failure, change of law or policy; or any other cause beyond the control of the affected Party which materially and adversely affects the performance by such Party of its obligations under or pursuant to this Contract, other than to make payments due hereunder, acts of enemies, civil insurrection, fires, floods, earthquakes or other physical disasters, order or request of Government, blockade or embargo. It is however, clarified that strikes, lockouts, shortage or non availability of raw materials, rains disturbances, other labour disputes or non availability of transport shall not be included in the term "Force Majeure". During the established period of Force Majeure as contained hereinabove, the Contractor shall not be entitled to payment for Services and the Company shall not impose penalty.

- 19.2 In case the Force Majeure contingencies last continuously for more than one month, both parties will agree on the necessary arrangement for the further implementation of the contract. In case further implementation is unforeseeable and impossible, both parties shall arrange for the termination of the Contract, but without prejudice to their right and obligations prior to such termination it being understood that each party shall fulfill its contractual obligations so far as they have fallen due before the operation of Force Majeure.

SECTION 20. LICENSE, PERMITS, AUTHORIZATION AND CERTIFICATION:

The Contractor / Consultant hereby warrants and undertakes that all kinds of licenses, permits, authorizations and certifications required under the laws of Pakistan and applicable to the Contractor / Consultant are intact, valid and possessed by the Contractor / Consultant and shall be maintained during the performance of this Contract. The Company has the right to inspect, or demand for such licenses, permits, authorization and certificates and the Contractor/ Consultant shall forthwith comply with such inspection on demand.

SECTION 21. PHOTOGRAPHY AND ADVERTISING:

- 21.1 The Contractor undertakes that neither the Contractor nor any of its employees shall, except with the prior written consent of the Company shall take, any ground or aerial photographs of the site, rig, installation or existing facilities at or around the work site.
- 21.2 The Contractor further undertakes that neither the Contractor nor any of the Contractor's personnel shall, except with the prior written consent of the Company:
- i. make any reference publicly, whether to the press or in books, brochures, internal publications, publicity material, magazines and periodicals or by advertisement through radio, television or films or by any other medium relating to:
 - the Contract or its terms and conditions,
 - the type or extent of the works, services, jobs required to be carried out by the Contractor,
 - the method, materials, or equipment used and personnel employed,
 - any information in the possession of the Contractor as to the operations of the Company.
 - ii. Disclose or convey any of the matters or information referred to in (a) above to any employees of the Contractor not directly concerned with the Contract.

SECTION 22. SECURITY:

- 22.1 If otherwise mentioned in TOR, Company shall provide appropriate site security including, as from time to time may be necessary, security personnel and security services at the work site or during transportation of personnel and equipment to and from the work site.
- 22.2 If otherwise mentioned in TOR, it is the express intent of the Parties that any delay in the performance of Services or provision of equipment, or part thereof related directly or indirectly to security issues shall under no circumstances be deemed a breach of Contractor's obligation under the Contract.

SECTION 23. INSURANCE DEMURRAGE:

23.1 The Contractor shall within seven (07) days of the date hereof take out and shall maintain until maturity of the Contract, standard insurance policies, which shall include Contractor's waiver of subrogation as follows:

- (a) Worker's compensation insurance covering all employees, engaged directly or indirectly in the performance of the Services in accordance with the applicable statutory requirements of the state or nation having jurisdiction over such employees.
- (b) All risk insurance cover for the Services and Equipment including without limitation Equipment and machinery and other materials, if any supplied hereunder by the Contractor.
- (c) The foregoing insurance shall be maintained with insurers that are satisfactory to the Company, and the terms of coverage for the foregoing insurance shall also be satisfactory to the Company and shall be evidenced by certificate to be furnished to Company. Such certificates shall provide that ten (10) days written notice shall be given to Company prior to cancellation of any policy. In the event the Contractor fails to effect or keep in force the insurances then the Company without prejudice to any other rights, shall effect and keep in force such insurance's at the Contractor's cost and risk.
- (d) It shall be the duty of the Contractor to notify the insurers of any insurance referred to above or of any matter or event, which by the terms of such insurance are required to be so notified.

23.2 The Contractor shall indemnify the Company against all suits, proceedings, claims, liens and demands whatsoever which may be made against the Company by the third parties for or in respect of out of any failure by the Contractor in performance of its obligation or wrongful performance under this Contract or any act or omission in connection therewith. Should Company have to pay any moneys in respect of any such claims or demands, the amounts to be paid and the costs incurred by the Company in connection therewith, shall be charged to and paid by the Contractor in full.

SECTION 24. EMPLOYMENT OF PAKISTANI NATIONALS

The Contractor shall employ qualified Pakistani nationals for its Services, if available. If necessary, Contractor may employ expatriate professionals only after making all out efforts to employ Pakistani nationals. The Contractor shall make reasonable efforts to train Pakistani nationals in order to gradually replace its expatriate staff. Unskilled workers if needed for the Services shall be hired from the area where the Services are being performed.

SECTION 25. ASSIGNMENT:

The Contractor shall not sub-contractor or assign either whole or part of its obligations under this Contract without the prior written consent of the Company and such consent if given shall not relieve the Contractor from any liability or obligation under this Contract. The Contractor shall be responsible for the acts, defaults and negligence of any sub Contractor, its personnel or agents as fully as it they were the acts, defaults or negligence of the Contractor, or its personnel.

SECTION 26. ENTIRE CONTRACT:

The documents mentioned in Section-3 of this Contract constitute the entire understanding between the Company and the Contractor on the subject matter and supersede all prior discussions, communications and agreements regarding the subject matter, whether written or oral.

SECTION 27. AMENDMENTS:

No variation in or modification of the terms of this Contract shall be made except by written amendment signed by the duly authorized representative of the Company and the Contractor.

SECTION 28. GOVERNING LAW:

This Contract shall be construed, interpreted and governed by the laws of the Islamic Republic of Pakistan.

SECTION 29. ERADICATION OF CORRUPTION:

All vendors, Suppliers, Contractors, Consultants and alike are encouraged to inform the Managing Director and Heads of Departments in case where any Company's employee asks for any type of favour whether monetary or in kind. You can contact the M.D. and Heads of Departments on the following addresses, phone numbers, faxes or e-mail:

- i MD & CEO
Oil & Gas Development Company Limited
OGDCL House, Blue Area, Islamabad.
Tel No. 051-9209701
Fax No. 051-9209708
E-mail: md@ogdcl.com
- ii GM (SCM)
Tel No. 051-920023540
Fax No. 051-9209859

SECTION 30. NOTICES:

Any notice, request demand, statement, call, question, intimation, reference, or other Communication required for execution of this Contract shall be made in writing and shall be directed by courier service or facsimile to the address of the Parties as follows:

To the Company: Manager (_____)
Oil & Gas Development Company limited
OGDCL House, Jinnah Avenue, Sector F-6
Blue Area, Islamabad, Pakistan
Telephone: 0092 - 51-92002_____
Facsimile: 0092 - 51-

To the Contractor: Mr. _____.
M/s _____.
Address:- _____
Telephone: 0092 -
Facsimile: 0092 -

Notices shall be deemed served when received by the addressee.

IN WITNESS WHEREOF, the Parties hereto have executed this Contract as of the date first above written.

COMPANY

CONTRACTOR

Signature_____

Signature_____

Name_____

Name_____

Position_____

Position _____

Witness _____

Witness_____

Witness_____

Witness_____