

OIL & GAS DEVELOPMENT COMPANY LIMITED



TENDER ENQUIRY NO. PROC-SERVICES/CB/EXPL-3153/2017

2D SEISMIC DATA ACQUISITION KALCHAS E.L



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 2D SEISMIC DATA
ACQUISITION OF KALCHAS E.L

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 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. Bid Bond will not be acceptable with the banks whose market price per share is quoted below the par value at the stock Exchange

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 OF 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, 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.
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 in Pakistan), 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 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.
- 12.4 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:
- 12.4.1 Fails, refuses or delays to execute the Contract in accordance with the instruction to Bidders, or
- 12.4.2 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 #. 0092-51-92002 3780/ 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

(Description, 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

(Description, ***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.
- 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 **USD 170,000/-** (United States Dollar One Hundred Seventy 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.
Ph: 051-92002 3780, / 3652, email: ejaz_rizvi@ogdcl.com

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 (TOR)
FOR
2D SEISMIC DATA ACQUISITION
KALCHAS 2D**



Oil & Gas Development Company Ltd.

INVITATION TO BID FOR 2D SEISMIC REFLECTION SURVEY OF KALCHASE.L.(2969-7) PUNJAB & BALOCHISTAN PROVINCE - PAKISTAN

GUIDELINES FOR THE BIDDERS

Oil and Gas Development Company Limited (Hereinafter referred to as “the Company”) intends to carry out seismic reflection survey in Exploration Lease Area under petroleum concession agreement over onshore in **KALCHAS E.L. (2969-7)** Punjab & Baluchistan Province and invites contractors to submit their firm proposals for conducting 2D Seismic Reflection Survey as per **Schedules of TOR** on turnkey basis using Dynamite/Vibroseis as source of energy.

2. *Data acquisition will be for a work program as defined in Schedule – A. The bidder must have experience in acquiring seismic data in such area and must provide detail of projects conducted.*

The bidder is required to conduct a detailed reconnaissance of the area prior to submission of bid. Area information including environmental characteristics is important to understand before recording data. The bidder is required to submit the reconnaissance report with the technical bid proposal.

The bidder is required to conduct a detailed reconnaissance of the area and submit reconnaissance report with the technical bid proposal without which the bid will be declared as non responsive and will be rejected.

3. The program shall be carried out in proper manner as per international Oil and Gas industry environmental and safety standards and in accordance with good geophysical practices and safety standards. The parameters mentioned in Schedule – B for guidelines only and final parameters will be decided after experimentation in the field.

4. For the purpose of carrying out the seismic survey, the contractor shall provide and maintain a basic operating unit consisting of personnel, equipment supplies and services adequate to carry out the survey on continuous basis.

5. The basic operating unit shall be required to be mobilized immediately after award of job and to commence survey work forthwith failing which OGDCL reserves the right to terminate the contract and confiscate PBG.

6. The basic operating unit shall be required to carry out the work on a continuous basis till accomplishment of the program.

7. The contractor shall be required to comply with and conduct all operations in accordance with all applicable laws and Governmental orders, rules and regulations of Pakistan and of the Political Sub-Division, in which work is to be performed including, but, not limited to income tax laws and regulations, workmen’s compensation laws, employer’s liability laws, insurance laws, wage and working hours laws, safety rules and any regulations pertaining to the conduct of seismic operations in Pakistan.

8. Contractor shall arrange for/provide and bear full costs of the following:

- 8.1 Mobilization and demobilization.
- 8.2 Basic operating unit, personnel’s salaries/wages, bonuses, allowances, other benefits prescribed by law, entities, facilities, accommodation, messing, social insurance, medical services, leaves, traveling and transportation, etc.
- 8.3 All necessary land entry permits and fees and any other permits required by local authorities.
- 8.4 All import licenses, custom duties, sales tax and surcharges, if any/ bonds for the entry and exit of all contractor’s equipment and supplies, port dues, octroi, handling expenses and agency fees, contract registration fees and all other levies fees, taxes or charges assessed against contractor.

- 8.5 All income taxes levied in connection with the contract on contractor's income and on the income of contractor's basic operating unit personnel whether in contractor's home country or in Pakistan.
 - 8.6 Arrange / manage maintenance and repair of all the equipment that is part of basic operating unit.
 - 8.7 All the necessary fuel and lubricants requirements of the crew.
 - 8.8 Magnetic tapes used by field recorders, monitor paper, chemicals, films and photographic paper, survey supplies such as beacons, cement and flagging including materials for survey pegs.
 - 8.9 Office/Warehouse rent, utilities, services and supplies, etc.
 - 8.10 Technical and logistic support and supervision.
 - 8.11 Furnishing of boarding and lodging in the field for max of four company representatives.
 - 8.12 Transportation facilities (two A/C fitted 4x4 vehicles) should be permanently reserved for company representative deputed in the field and should be provided by the contractor. The same should be planned and included in the bid.
 - 8.13 Delivery of all recorded data on 3592/LTO2/LTO3/LTO4 cartridges with three copies (on SEG-D) to OGDCL Head Office, Islamabad.
 - 8.14 All replacement costs of basic operating unit, personnel deemed unqualified by OGDCL and of any unserviceable equipment which is part of basic operating unit.
 - 8.15 Settlement of all claims for land damages resulting from survey, which are caused by negligence on the part of contractor's basic operating unit personnel, or, by source/explosives.
 - 8.16 Primary survey control and material for permanent markers as required by OGDCL.
 - 8.17 Explosives, detonating cord, detonators and firing line including their transport to the area of operations, handling and storage including licenses for explosives, radios, transport and equipment, work permits, residence, visas and fees.
 - 8.18 Telephone/ Tele fax contact from field to OGDCL Head Office and as well as mobile telephone facility to OGDCL representative in the field for the communication with OGDCL Head Office. The same will be provided by the contractor.
 - 8.19 Health, Safety & Environment: - The OGDCL expects that these issues will be handled with adequate care and the OGDCL has to be thoroughly satisfied prior to award of the contract.
 - 8.20 Carry out and document an Environmental Health and Safety audit of facilities, and operational procedures to OGP standards.
 - 8.21 Carry out and document a Technical audit of all recording equipment and systems including ground equipment and recording instruments.
 - 8.22 Include on site camp medical facilities including a qualified on site paramedic and or nationally certified Medical doctor.
 - 8.23 Implement and document a Emergency Response Plan to have arrangements in place to initiate a medical evacuation of an injured or person requiring medical treatment beyond the scope of the onsite paramedics and seismic base camp facilities.
9. All disputes arising out of or concerning the contract between contractor and OGDCL or its validity, interpretation, performance or breach shall be governed by the laws of Pakistan and decided by application of the Arbitration Act, 1940. The venue of arbitration proceeding shall be in Pakistan.

10. Your Technical and Financial Quote should be for Seismic Data Acquisition using Dynamite/Vibroiseis as source of energy and should also include up hole / refraction survey for static correction control including line clearance, security, Land permitting / Crop Compensation, geodetic computations and on-site seismic data processing etc.

10.1 List of personnel (Expatriate and local staff/ labor proposed to be included in basic operating unit along with their qualification/experience).

10.2 Detailed list of equipment including recorder, ground electronics, vibrators, drilling units, survey, communication, bulldozers, workshop, camp and office etc. Also specify number of vehicles and their types to be employed for the operation and give details.

10.3 Likely date of mobilization and commencement of work.

10.4 Complete schedule of work Programme in tabulated form.

10.5 Work experience in Pakistan as well as in the area of operations.

10.6 The contractor is advised at its own expense and security arrangements to conduct reconnaissance of the area for knowing the actual topographic and other field conditions of the area and submit reconnaissance report along with bid proposals.

11. Standard insurance coverage to be taken out and kept in full force and effect for the full duration of the contract to cover all of contractor's liabilities under the contract. Such insurance should be with insurance carriers and up to limits prescribed by law and satisfaction to the Company.

12. Bidders may seek clarification from OGDCL before the Tender documents are submitted. However, once the tender document is received changes / modifications in the proposal will not be entertained by OGDCL unless they are by way of amplification of the bid and of no substantive nature and in any event do not involve a change in the commercial offer. Similarly OGDCL reserves the right to have discussions with any bidders in order to seek clarification and implication of the bid.

13. Quotes received by closing date will be evaluated expeditiously and after approval, the successful bidder will be invited to finalize a draft contract in line with the broad basis outlines in this tender document and the quote of the successful bidder.

14. Your quote should be allowed for acceptance for a minimum period of 180 days from the date of bid submission and should remain firm and fixed during the period of the proposed work.

15. OGDCL Reserves the right to accept or reject any offer without describing any reasons whatsoever.

16. The completion time of the project is 06 months after signing of the contract.

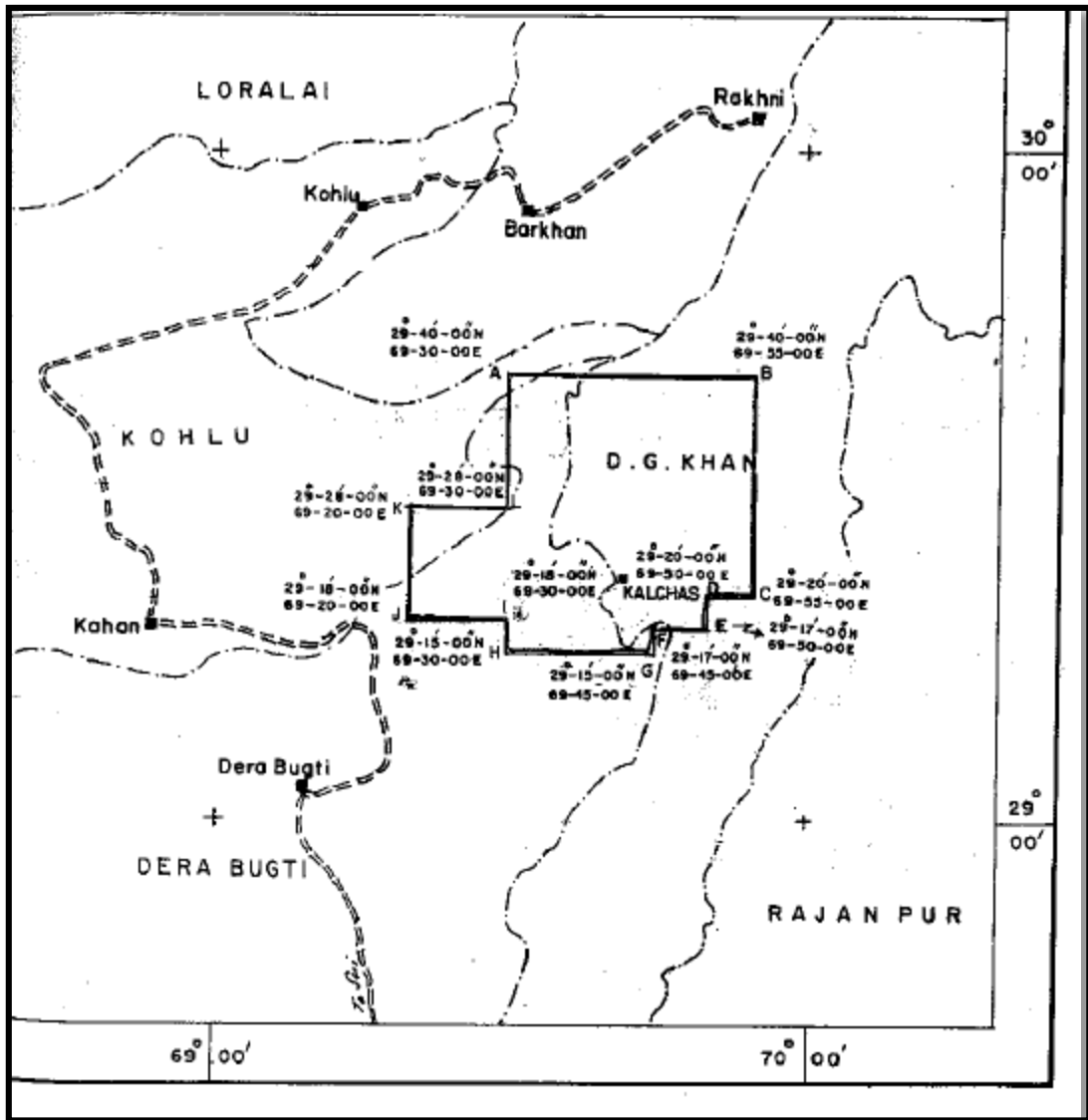
LIST OF SCHEDULES

Schedule – A	INTRODUCTION AND SCOPE OF WORK
Schedule – B	TECHNICAL SPECIFICATION AND PARAMETERS
Schedule – C	PERSONNEL AND EQUIPMENT
Schedule – D	TEST AND QUALITY CONTROL STANDARDS
Schedule – E	COMPENSATION / FEES
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Annexure-I	CHECK LIST
Annexure –II	TECHNICAL PROFORMA TO BE FILLED BY BIDDER
Annexure-III	TECHNICAL EVALUATION

INTRODUCTION AND SCOPE OF WORK

1- SCOPE OF WORK

Kalchas E. L comprising an area of 2068.32 Sq. Kms, falls in Rajanpur (trible) district of the Punjab Province, Kohlu&Dera Bugti agencies of Baluchistan Province, Pakistan. Oil & Gas Development Company Limited (OGDCL) is the Operator of the block while Tullow Pakistan Development Ltd. (TPDL) Mari Petroleum Company Limited (MPCL) are the joint venture partners with working interests of 30% and 20% respectively. The area is bounded by latitudes and longitudes as shown below.



TAKING:

<u>QINT A:-</u>	Latitude 29°-40'-00" N	Longitude 69°-30'-00" E
<u>QINT B:-</u>	Latitude 29°-40'-00" N	Longitude 69°-55'-00" E
<u>QINT C:-</u>	Latitude 29°-20'-00" N	Longitude 69°-55'-00" E
<u>QINT D:-</u>	Latitude 29°-20'-00" N	Longitude 69°-50'-00" E
<u>QINT E:-</u>	Latitude 29°-17'-00" N	Longitude 69°-50'-00" E
<u>QINT F:-</u>	Latitude 29°-17'-00" N	Longitude 69°-45'-00" E
<u>QINT G:-</u>	Latitude 29°-15'-00" N	Longitude 69°-45'-00" E
<u>QINT H:-</u>	Latitude 29°-15'-00" N	Longitude 69°-30'-00" E
<u>QINT I:-</u>	Latitude 29°-18'-00" N	Longitude 69°-30'-00" E
<u>QINT J:-</u>	Latitude 29°-18'-00" N	Longitude 69°-20'-00" E
<u>QINT K:-</u>	Latitude 29°-28'-00" N	Longitude 69°-20'-00" E
<u>QINT L:-</u>	Latitude 29°-28'-00" N	Longitude 69°-30'-00" E

From point L the boundary of the area runs due N back to the starting point-A.

GEOLOGICAL FRAMEWORK

The Kalchas E.L area is a part of the Southern Sulaiman Range. This folds & thrust belt separates the relatively undeformed Indus Platform in the east and south from the highly deformed Ophiolite bearing Axial Belt to the west. The intensity of the deformation and the age of the exposed rocks generally increase towards the interior of the fold belt. The fold & thrust belt is genetically related to a major decollement, located in the Lower – Middle Jurassic shale and Carbonates. The Jurassic to Eocene rocks are thrust southwards along the basal detachment to develop large doubly plunging folds. Mostly Paleocene/Cretaceous rocks are exposed in the cores of the surface anticlines. In the surrounding areas, Eocene to Jurassic rocks have been penetrated in the wells. The Jandran Gas Field is located in its north while Pirkoh, Loti and Sui Gas Fields are in the south west of the area.

2- SCOUTING OF THE SURVEY AREA

The Company requires that the Contractor is fully aware of all local conditions in relation to seismic operations. Contractor should conduct a detailed scouting trip prior to submission of technical & financial Bid proposal of the Project area to address, amongst others, the following issues:

1. Sufficient base station locations for the survey system, as required.
2. Hazard Maps.
3. Operational Risk Assessment
4. Baseline Environmental assessment of the survey area
5. Evaluate effects and disturbance of the operation on the local habitats.
6. Road Maps and location of airstrips
7. Location of proposed base camp
8. Local logistics and infrastructure.
9. Local legal frame work, in particular for labor and safety regulations.

10. Licensing permits and tax requirements,
11. Explosive magazines requirements etc.

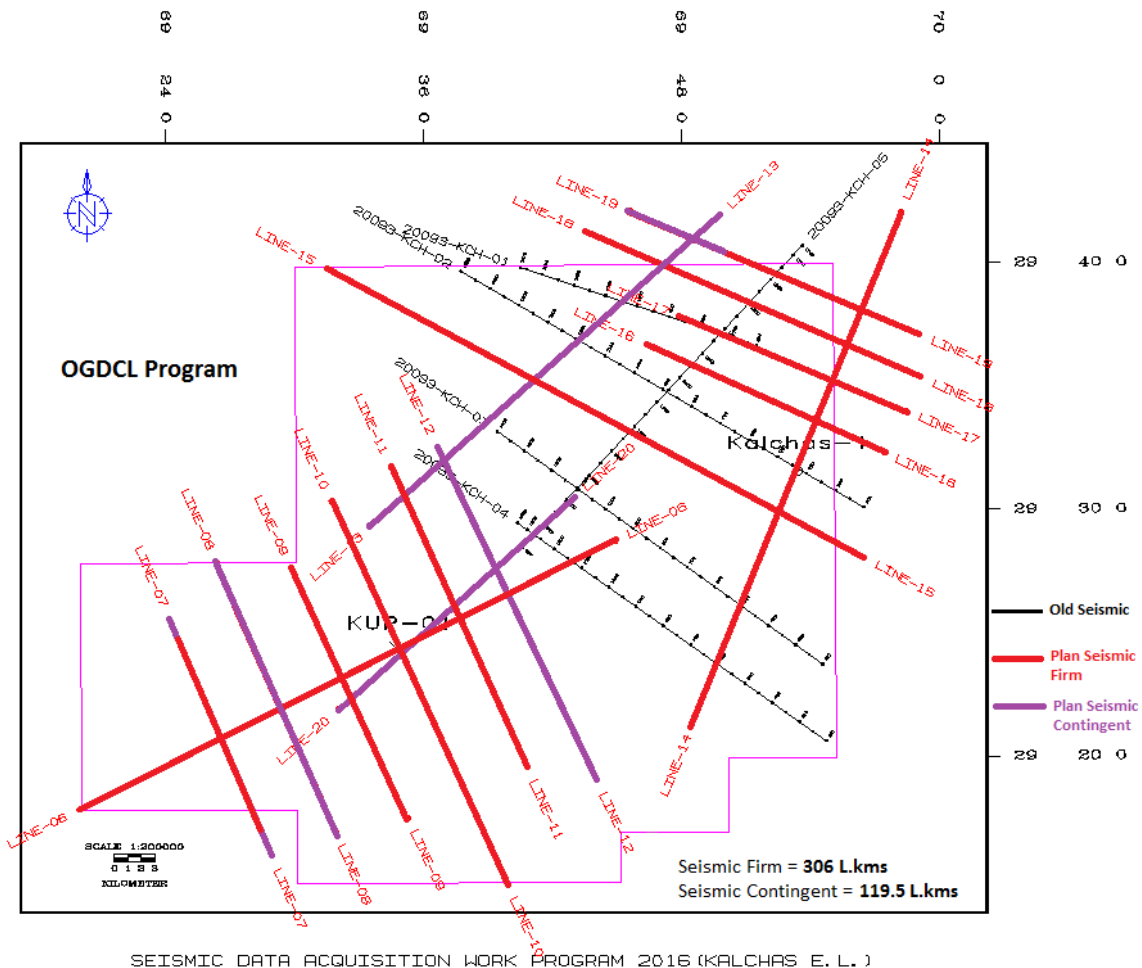
3- SEISMIC OBJECTIVES

The aim of the 2D seismic program is to upgrade the existing mapping after 2D seismic acquisition. This seismic reflection survey will help to further delineate the structural configurations and shall be used:

1. To enhance image on reservoir levels for better drilling locations and development of the field.
2. To Identify and map major and minor faults at shallow / deep exploration targets.
3. To seek reservoir characterization, Reservoir Monitoring.

4- SEISMIC WORK PLAN

The seismic work plan includes acquisition of 306(firm) L.km 2D data and 119.5 L.km contingents. The completion time of the project is 06 months after signing of the contract



5- SEISMIC WORK PROGRAM

The Detailed 2D seismic work program is given below.
Kalchas 2D (Coordinates in UTM zone-42)

Seismic work program 306(firm)L.km 2D data and119.5L.km contingent

Kalchas Work Program 2016 (All values in UTM zone-42)					
Line Name	Shotpoint	X	Y	L.kms	Remarks
Line-06	1	532188.19	3241086.00		
Line-06	2	572370.44	3261174.00	44.92372	Firm
Line-07	1	538996.13	3255299.00		
Line-07	2	539808.00	3253432.00	2.035886	Contingent
Line-07	1	539808.00	3253432.00		
Line-07	2	545830.00	3239478.00	15.19798	Firm
Line-07	1	545830.00	3239478.00		
Line-07	2	546617.00	3237622.00	2.015963	Contingent
Line-08	1	542516.63	3259592.00		
Line-08	2	551446.00	3239414.00	22.06548	Contingent
Line-09	1	548097.88	3259163.00		
Line-09	2	556856.13	3240444.00	20.66659	Firm
Line-10	1	551102.00	3264133.00		
Line-10	2	564326.44	3235463.00	31.57301	Firm
Line-11	1	555568.13	3266720.00		
Line-11	2	565786.13	3244222.00	24.70966	Firm
Line-12	1	559045.69	3268265.00		
Line-12	2	570981.00	3243277.00	27.69209	Contingent
Line-13	1	580109.75	3285523.00		
Line-13	2	554108.44	3262341.00	34.83494	Contingent
Line-14	1	593807.00	3285812.00		
Line-14	2	578053.00	3246961.00	41.92361	Firm
Line-15	1	591035.56	3259975.00		
Line-15	2	550759.69	3281575.00	45.70236	Firm
Line-16	1	592490.25	3267840.00		
Line-16	2	574766.88	3275934.00	19.48412	Firm
Line-17	1	594182.44	3270929.00		
Line-17	2	577387.50	3277914.00	18.18956	Firm
Line-18	1	570197.50	3284368.00		
Line-18	2	595254.56	3273444.00	27.33478	Firm
Line-19	1	595134.31	3276651.00		
Line-19	2	579990.00	3283139.00	16.47557	Firm
Line-19	1	579990.00	3283139.00		
Line-19	2	573546.00	3285886.00	7.00508	Contingent
Line-20	1	569306.63	3264400.00		
Line-20	2	551618.38	3248602.00	23.71605	Contingent
				425.546	
Firm Program = 306 L.kms Contingent Program = 119.5 L.kms					

6- GENERAL TERMS AND CONDITONS

Contractors will prepare their bid in two parts i.e. technical proposal (part-I) and financial proposal (part-II) strictly in line with the instructions given in the TOR.

The contractor shall be required to comply with and conduct all operations in accordance with all applicable laws and Government orders, rules and regulations of Pakistan and of the Political Sub-Division in which work is to be performed including, but not limited to income tax laws and regulations, and working hours laws, safety rules and any regulations pertaining to the conduct of seismic operations in Pakistan.

7. TECHNICAL PROPOSAL

7.1 The Technical Proposal of bidder should include the following documents/information, as the contractor shall have to meet the minimum technical eligibility criteria as per details provided in Schedule B, C & D.

7.2 List and detail CV of Technical personnel's, Expatriate and local proposed to be included in basic operating unit as per Schedule C.

7.3 Technical detail and list of equipment and quantities as per Schedule C.

7.4 List of test and quality standards as detailed in Schedule D.

7.5 Complete/comprehensive schedule of work program

7.6 Detailed reconnaissance report (Scouting Report of the Survey area).

7.7 Documented Experience in similar type of survey areas.

7.8 A copy of their current safety manual, HSE Organization and sample of accident /incident reporting forms, together with details of their safety record for the past two years.

7.9 EHS exceptions e. g .Emergency Response Plan, Medical arrangements, camp clinics, field magazine and security etc.

7.10 Copy of all crew operational procedures for land and transition zone operations.

7.11 The Checklist at Annexure-I must be provided in the Technical proposal.

7.12 Technical Performa to be filled by the bidder in Annexure –II.

Note:-Technical Evaluation criteria are mentioned in Annexure –III.

8. FINANCIAL PROPOSAL

Bidder should quote their charges in the financial bid strictly in accordance with the Schedule E.

SCHEDULE - B

TECHNICAL SPECIFICATION AND PARAMETERS

1- INTRODUCTION

The Company requires that all seismic equipment supplied for the survey to be in new or nearly new condition in particular the spread cable and geophone strings. Geophone receiver elements should not be more than two years old.

All equipment proposed for the survey will be subject to audit for technical and safety before acceptance by the Company.

Specifications of all seismic, equipment and positioning equipment should also be provided with the Bid Proposal.

2- ACQUISITION PARAMETERS

Following are the tentative field parameters for 2D seismic data acquisition work to be tested in Kalchas2D Project.

2D Acquisition Parameters

Receiver Parameters	
No of Channels	480
Spread	Symmetric Split
Station Interval	25 m
Source Interval	50 m
No of geophones	24 (02 strings)
Geophone array	Areal/linear
Group Base	23.92m
Geophone interval	1.04m
Fold	120
Record Length	6 sec
Sampling	2 m sec
Near Offset	+/- 37.5 m
Far offset	6012.5m

Final parameters shall be selected after experimentation in field.

Source Parameters for 2D surveys:

A) Deep hole drilling	
No. of holes	01
Hole Depth	18m, 20m, 24m, 27m
Charge size	4, 6, 8,10, 12 kg
B) Pop Shot	
No of holes	6,9,12
Hole Depth	1.8 m
Charge / hole	0.5 kg, 1Kg
C) Vibroseis	
No. of vibrators	04 + 01 spare
Peak force	minimum 60,000 lbs
Sweep length	10,12,14,16 sec
Sweep frequency	8-96 Hz (8-64, 8-72, 8-80, 10-60, 10-70, 10-80, 12-60, 12-72, 12-84, 12-96, 14-70, 14-84 Hz e.t.c) will be tested and finalized after experimentation.
No of sweeps	8,10,12,14, 16

Final parameters shall be selected after experimentation in field.

SCHEDULE – C

PERSONNEL AND FIELD EQUIPMENT

1- PERSONNEL

Following is the list of minimum personnel to be made a part of the agreement for seismic data acquisition, between the Company and Contractor for 2D seismic reflection data acquisition in Kalchas Project

1	<u>Party Chief</u>	01
2	Data Acquisition Engineers (05 to 15 years experience)	05
3	QC Geophysicists (05 to 15 years experience)	02
4.	On-site seismic data processor(05 to 15 years experience)	02
5.	HSE Advisor (one for base and one for fly camp)	02
6.	Medical Doctor	02
7.	Accounts / Admin Assistants	02
7	Surveyors	07
8	Radio Operator	02
9	Recording Field Assistant	02
10	Recording men	08
11	Drilling Technicians	04
12	Vibrator Technicians & Shooting Supervisor	03
13	Vibrator Operators	06
14	Plant Attendant / Electrician	02
15	Mechanics	05
16	Drillers	08
17	Shooters and technician	05
18	Carpenter	01
19	Dozer Operators	As required
20	Any other as per requirement (cook & bearer)	

2- FIELD EQUIPMENT

Following is the basic field equipment which will be provided by the Contractor to perform the 2D seismic reflection data acquisition job in Kalchas Project.

A.	RECORDING EQUIPMENT 24 bit latest telemetry system (Like 428 XL&G3i) or better with details as under.	
	1.	Recording / Instrument Type / Make / Model / Specification / maximum Number of active channels available/ channel capability with Vibroseis / dynamite mode /online data quality control system and Vibroseis QC system
	2.	Detail of Ground Electronics / cables with years of purchase Number of available Geophone strings / (SM-24/ SG-10 or equivalent / better). Please provide Technical Literature
	3.	12 Nos. of Geophone per string(Configuration, 06 series +06 series & both series in parallel)
	4.	Detail of auxiliary / test equipment for ground electronics and geophone groups
	5.	Encoder / Decoder (Shooting Equipment) Equipped with GPS.
B.	SOURCE EQUIPMENT	
		Dynamite / Vibroseis Mode/Energy source for the area
	1.	Rigs/Type/Drilling Capacity/Numbers (30m capacity)
	2.	Portable Rigs/ Jack hammers / No. of units available
	3.	Truck Mounted Rigs / /No. of units available
	4.	Vibrators (At least 05 Nos.), Peak force not less than 60000 lb equipped with DGPS System.
C.	REFRACTION / UPHOLE LOGGING UNITS	
	1.	Up-hole Logging Unit
		24 bit Instrument with Specification, type of geophones & numbers (4.5 HZ)
		Rig with Capacity(100m)
	2.	LVL / Refraction Survey Unit, type of geophones & numbers
		Instrument Specification / Spread Length / Channels
		LVL processing & Statics calculation software
D.	ON-SITE SEISMIC DATA PROCESSING UNIT AND 2D PLANNING AND DESIGNING SOFTWARE	
	1.	Make / Model of Hardware / Plotter
	2.	Detail of 2D Processing Software
E	GPS AND SURVEY EQUIPMENT	
	1.	Make /Model of GPS and other equipment
	2.	Version Number
	3.	Survey Computation Software
F.	Detail of vehicles and other machinery like dozers, tractors and Generators in the crew.	
G.	Radio and Communication equipment & facilities	
H.	Experience of working in Pakistan	
I.	Miscellaneous equipment etc.	

TEST AND QUALITY CONTROL STANDARDS

A. FIELD PROCESSING SYSTEM

An on-site data processing system will be required for monitoring quality control of seismic data acquisition and in-field data processing. The system should include work station, a 24" thermal plotter, cartridge drives, printer, consumables and a complete set of a state-of-the-art 2D basic and advanced seismic data processing software package.

MAIN FUNCTIONS OF THE SYSTEM WILL BE:

1. Daily quality control of the data.
2. Optimization of the processing parameters.
3. Data processing to the final/migrated stack level.
4. Instrument test analysis.

FOLLOWING BASIC PROCESSING FLOW WILL BE FOLLOWED:

1. De multiplexing
2. Building of geometry
3. Display field records
4. Editing of bad & noisy traces
5. Early mute application
6. Filter analysis & application
7. Trace balancing
8. De convolution analysis & application
9. Application of field static / Refraction static
10. Velocity analysis & application
11. Preliminary stack
12. Compute residual statics & application
13. Velocity analysis
14. NMO and mute
15. Initial stack
16. DMO
17. Velocity analysis
18. Final stack
19. Migration (FD, Kirchoff)
20. Random Noise attenuation
21. Time variant filter and trace scaling
22. Final plotting with side label

A report should be prepared after the completion of each line. This report should contain a summary of all kinds check done (geometry, coordinates, traces, records etc), results and observation during processing.

Final version of stacked sections, test plots and interpolated up-hole result on paper should be attached to the report. A CD/DVD should be attached to the report with the following data.

- Updated SPS files

- Interpreted uphole result in Pdf or excel format
- Seismic section in SEG Y format with XY coordinates in the headers.
- Any other data related to on-site processing

B. TEST AND QUALITY CONTROL

1. DAILY TESTS

According to instrument specifications and tolerances given by manufacture, the following tests should be recorded daily on tapes.

- Noise and offset of all channel units lay to start production.
- Internal pulse test.
- External geophone pulse test.
- Short dynamite range determination.
- Ambient noise (line noise). The test may be repeated whenever there is increase in noise.

2. MONTHLY TESTS

- Noise and offset.
- Internal pulse test.
- Dynamic range determination.
- Cross feed test.
- A-D Non Linear test.
- Geophone tap test.

3. PARITY AND SYNC ERROR

The system should be maintained in good mechanical and electromagnetic condition to ensure minimum parity and sync error within published specifications.

4. RECORDING SYSTEM POLARITY

SEG Standard, A positive signal at the amplifier input produce positive numbers recorded on magnetic tape and upward reflection of field monitor.

5. PAPERRECORD

Data traces and timing should be clearly visible with constant paper speed (within 1% error).

6. NOISE SPECIFICATION

Noise specification will be based on fixed gain monitors to maintain a signal to noise ratio of 1.5:1 or improved. A fixed gain monitor of spread noise recorded will be taken on field tape and will be displayed on paper monitor daily prior to start seismic recording and any time requested by company representative.

The spread noise will be recorded with normal recording filters and recording setting. A record with all the channels will be analyzed by the seismic QC system.

7. CABLE AND GEOPHONES

Contractor will continually check the faulty groups with proper

geophone group tester.

All the significant noise, dead traces and groups with low response will be repaired or removed from the line and will be repaired as early as possible.

If the recording spread does not fulfill the operation specification as listed in the contract, the company representative has the authority to suspend the operation at any time.

8. **RECEIVERS**

The contractor will ensure the vertical plantation of geophones with good ground coupling. In case of wind noise the geophones should be completely buried in the ground to reduce the effect of wind on geophones where ground condition do not permit the burying the geophones and spread noise is outside normal acceptable standards, The company representative must be informed the situation.

All the geophones will be planted at correct spacing to ensure the validity of recommended array.

To avoid effect of noise from pipelines, the change in lay out plan source and receiver may be required at places.

9. **SEISMIC SOURCE**

9.1 **DYNAMITE**

- Charge in the shot holes will be loaded with poles to ensure its placing at recommended depth.
- Time break confirmation and up-hole time should be systematically recorded for each shot point.
- All the charges must be properly tamped to avoid blowouts.
- Any charge that is loaded at shallower depth must be reported to Company Representative who will decide to take it as production shot point or to re-drill/ re-load.
- Extra care must be taken while drilling source points, loading & shooting explosive close to the pipe lines & populated areas. Standard Operating Procedures will be adhered while handling explosive.

Shooting System

1 - Shooting system should be equipped with GPS system.

2 - Timing test is performed by blasting of a detonator cap, which breaks a low voltage DC electric circuit wound around the cap. The following signals have to be recorded on tape using the auxiliary and data traces of the equipment:

- The voltage of the DC circuit,
- Clock time break (TB) supplied by the encoder,
- Confirmation TB supplied by the decoder (shooting box)

3 Up-hole time test

First breaks from the two single geophones planted close to each other are used for the test. The sources have to be located far enough from the geophones so that the difference in the direct arrival time to geophones is below one millisecond.

4- Data of one of the geophones have to be recorded on an auxiliary trace, while data from the other geophone on a data trace. Time break has to be recorded on both, an auxiliary and a data trace.

5- Up-hole time read out from the auxiliary and the data traces have to be corresponding within one millisecond. Up-hole time

read out from the auxiliary traces and the shooting box has to correspond within 2 milli-sec.

6- Prior to the commencement of the acquisition, Contractor shall perform both, timing and up-hole tests for each shooting box at the crew.

7- Additional tests have to be performed if

- Any part of the shooting system (shooting box or radio, cables) has been changed,
- The type of detonator caps changed
- The equipment newly joined the crew
- When the accuracy or stability of the system becomes doubtful.

8-Up-hole or shallow refraction Equipment

The tests prescribed by the manufacturer have to be run first at start-up and later every time before the start of acquisition of a new up-hole or shallow refraction point.

9- The time break has to be recorded and must correspond to the zero time of recording.

9.2 VIBROSEIS

- Vibrators should be equipped with DGPS for GPS positioning and navigation and latest model of vibrator control electronics, real time quality control and data monitoring.

The following signals have to be recorded on the auxiliary and data traces of the seismic recorder (All traces polarities have to meet SEG standards).

- i) Mass accelerator
- ii) Base plate accelerator
- iii) Ground force
- iv) True reference sweep
- v) Pilot sweep (pilot sweep generated by sweep encoder)
- vi) Sweep time break

- All the polarities have to meet the SEG Standards. Polarity has to be checked in pulse mode when downward moving base plate (positive number on the tape and upward signal on camera display).

The ground force signal has to be used for phase-locking.

- The phase shift between the reference sweep and the ground force signal has to be set to 180 degrees.

Periodic tests:

The periodic tests have to be accomplished to each vibrators

periodicity	Tests	Remarks
Start-up	Hardwire Similarity Radio similarity GPS	To be recorded on separate magnetic tape
Daily	Radio Similarity	To be Recorded on a production Tape
Weekly	Hardwire-wire similarity	To be Recorded on a production Tape

- Additional wire line and radio similarity has to be performed when
 - The vibrator newly joined the crew.
 - The vibrator has been repaired
 - The sweep has changed

The vibrator GPS test has to be logged and the results have to be handed over to Company Representative.

During production a continuous quality control will be performed through the real time vibrator QC system in the Recorder. Average and peak phase, distortion and force of each operating vibrator on every sweep will be recorded on diskette and delivered to company representative on daily basis.

Tolerances for vibrator performance, with the exception of the tapered zones.

Parameter	Tolerance
Avg. phase error	Less than two (2) degree
Peak phase error	Less than ten (10)degree
Avg. force	Not less than 80% of nominal drive level
Avg. distortion	Less than 25%
Start time difference	Less than 0.5 m sec between two vibrators
Tolerance for GPS	
Horizontal	2 meters
Vertical	2 meters

On normal areas, the actual position of any vibrator shall not differ from its theoretical position by 3 meters. In case of discrepancy the source point can be repeated or actual position is surveys depending on the Company representative advice.

10. RECORDING.

- Recording equipment has to be tested as it is prescribed in the standard seismic equipment tests.
- The recording parameters.
 - Are either set in the Geophysical Data Acquisition Contract (Agreement) or
 - Given by company representative in writing before the start of the data acquisition.

During the recording the seismic data all events, which may be important from the point of view of any later check-up, processing or interpretation of recorded data, are recorded on automatic and/or manual log (observer log). The seismic crew is responsible for the completeness, exactness and unanimity of data logged.

The observer log (s) have to contain at least the following information:

- i) Company
- ii) Contractor
- iii) Block, Country
- iv) Recorder type & Serial No.
- v)Parameter settings
- vi) 2D line name
- vii) Date
- vii)3D swath number
- ix) recorder position
- x) Source type
- xi) Reel No.
- xii) Record No.
- xiii) Source position
- xiv) Up-hole time
- xv) Recording time
- xvi) Spread description
- xvii) weather conditions
- xviii) Remarks
- The ambient noise has to be checked permanently during recording. Every reasonable effort shall be made to minimize the ambient noise. Company representative has to be informed on the increase of noise level.During the recording, the recording truck shall be offset from the receiver lines at least 150 meters.

- Any switch settings or modification in the recording electronics, vibrators, blasting units or the related equipment including their driving
- software that can result in the change of the value or format or the control of the digital data recorded, can only be changed or done after company's approval or instruction.
There shall be no bad traces on the spread at the beginning of the day. During the normal day of operations a maximum of 1% of the traces may be bad (except for surface restrictions).
Playback of records shall be produced at a scale agreed by company representative.
- Monitor record of every 5th shot point will be provided to Company Representative. Each monitor must be annotated to show line number, shot point number etc. and signature of the observer.
- However if required by the Company QC / representative monitor record of any shot point will be provided to him.
Auxiliary channels have to contain at least the following signals:
 - • Clock time break
 - • Vibroseis Recording
 - True reference sweep
 - Autocorrelation wavelet
 - • Dynamite Recording
 - Up-hole from encoder

Dynamite shooting will be controlled by radio shooting system. The transmitted time break must be synchronized to recording within 0.250 milli-seconds.

Safety distances:

Minimum distance from any vibrator positions to local pipelines (buried or surface fixed, water or oil wells, permanent buildings etc) at normal acquisition will be maintained.

Minimum safety distance from any deep shot hole to the local main pipe lines (buried or surface fixed), water or oil wells, permanent buildings at normal conditions will be maintained.

However, an increased safety distance has to be kept to avoid excessive damages in case of increased charge, unstable structures, gas/oil/water pipelines of overriding importance, sensitive environments, etc.

11. MAGNETIC RECORDING TAPES:

- The seismic data will be recorded on new magnetic tapes/HD/NAS/SAS of branded acceptable company.
Proper precautions would be observed in recording, sealing, storing and transportation of magnetic tapes.
- Tapes will be labeled showing line number, file number, shot point numbers, calendar date, Prospect Area, Client's name and Contractor's name. Recorded tapes will be numbered in a serial order.

Seismic Data Recording Deliverables.

Contractor shall be responsible and bear the cost of surveying consumables for the 2D Seismic Data recording including field tapes and explosives, caps and firing line. The Contractor shall provide the following:

- The original field Data of all recording on 3592/LTO2/LTO3/LTO4 cartridge tape in SEG-D format.
- A second copy of field Data of all recording 3592/LTO2/LTO3/LTO4 cartridge tape in SEG-D format.
- A third copy of field Data of all recording on 3592/LTO2/LTO3/LTO4 cartridge tape in SEG-D format

12. MISFIRE AND SKIPPED SHOTS (Dynamite/ Vibroseis)

A misfire any seismic record not correctly recorded.

The following are examples of misfire.

- Loss of magnetic recording.
- Loss of time break.
- Time break is not synchronized to the system cycle delay time.
- Explosive in shot point does not detonate.
- Explosive partially detonate resulting unacceptable data quality.
- Vibroseis record is of low energy due to missing sweeps.
- SP/VP is unnecessarily recorded at offset not recommended by company representative.
- Ground coupling of vibrators is not upto standard.
- Company representative will decide the re-shot schedule for misfire and skipped shots.

13. SURVEYING AND POSITIONING

Before the beginning of the survey, Contractor shall accomplish a scouting of the area to specify all factors which can substantially influence the location/ acquisition of seismic lines. In case of existence of such factors, Contractor informs Company immediately on the facts and its recommendations and, according to Company's instructions performs the necessary modifications.

All the survey equipment shall be calibrated and tested prior to the start of operations and latter, during the operations according to the manufacturer's specification and good survey practice.

Where seismic line location is considered obviously unfavorable for the efficiency of the acquisition of seismic data or the data quality, lines may be modified, strictly according to the instruction of company.

The receiver station points will be numbered increasingly from the western end of the lines.

Contractor shall be responsible for the construction and installation of permanent markers.

Position, coordinates and access to the permanent markers should be logged and reported in the final operations report.

Based on the primary network points, Contractor will survey a secondary control network from which the seismic lines will be setout.

All the control points will be permanently marked and clearly described to allow recovery in the future.

Generally Observations with less than five satellites are not allowed. Check shots will be made on 5% of the surveys stations, evenly distributed during the observation period.

All the necessary computations will be completed on site. Final coordinates and elevations will be produced in SPS format.

The final survey report will be a part of the final operation report and will include at least the following information.

- Co-ordinates and elevation of the receiver and source points of

seismic lines including deviated points.

- List of key survey personnel.
- List of equipment used (types and versions)
- List and description of software used (types and versions)
- Description of processing method/Surveying parameter used (spheroid, projection, datum shift etc)
- Listing of coordinates, elevations and description of permanent markers.
- Listing of coordinates and elevations of seismic lines crossing
- Listing of coordinates and elevations of control points
- Listing of disk ID-s directories and file names
- Field notes
- Line description
- Factors influencing the accuracy and efficiency of survey
- Any problems encountered during the processing of survey data.
- Loop closure maps ,if required, (bearing, coordinates and elevation) and operation maps in scale accepted by company.

NOTE: Provision of any other data relevant to project, if required by client should be provided.

SCHEDULE E

COMPENSATION / FEES

The Contractor shall provide rates for the 2D seismic data recording in KALCHAS 2D Project for the performance of work according to the parameters proposed by the Company and included in Schedule – B of Term of Reference in the format given below. All the rates should be quoted on a production basis.

All quoted rates are inclusive of all required taxes (except Provincial Sales Tax/ ICT Tax on Services), duties, levies etc.

ACQUISITION RATES

PAYMENT ITEMS		Rates	Amount in US Dollars
1.	MOBILIZATION/DEMobilizatiON	Lump Sum	
	The Lump Sum shall include all cost related to entire project for mobilizing and transporting Contractor's Personnel, equipment, and supplies to the location where service will be performed.		
2.	DAY RATES / HOURLY RATES		2D
2.1	Day rate (12 hours per day)/hour rate)		
a.	Field experimentation for selection of acquisition parameters (about 3 days for 2D seismic data experimentation)		
b.	Hourly rates shall be applicable during testing at company's request provided that this test program is not covered by turnkey rate.		
2.2	Standby Rate per day rate/ hour rate (Maximum 2 days) CONTRACTOR shall be paid daily standby rate for each day when the Contractor's crew is ready and available to perform services, but is prevented from doing so due to.		
a.	Force Majeure.		
b.	No daily (full day) production due to weather or safety reasons.		
c.	When the contractor is unable to move between the base camp / fly camp and the work site due to law and order situation, or if the movement of the contractor's personnel and equipment is prevented in the program area but not relating to land permitting. The standby Rate shall not be applicable prior to commencement of recording on the 2D seismic program lines. The Standby Rate shall not apply during any period of time when delay is caused by something for which Contractor is responsible.		
d.	No standby will be applicable against Gazetted / Public Holidays when crew is not working.		

3. **TURNKEY RATES FOR SEISMIC DATA ACQUISITION**

Quoted turnkey rates should include the acquisition cost and security charges.

Rates for 2D seismic data acquisition will be provided on separate sheets for dynamite and vibroseis mode.

Note: Average rates of the each individual following item (A, B & C) will be utilized for a financial bid evaluation.

A. Dynamite Source (Deep Drilling)

No. of Holes = 01

Depth	Charge (Kgs)				
	4	6	8	10	12
18 m					
20 m					
24 m					
27 m					

B. Dynamite Source (Pop Shots)

No. of Holes =6,9,12

Hole Depth = 1.8 m

Charge / hole = 0.5 kg/hole and 1.0 kg/hole

C. Vibroseis Source

Peak force 60,000 lbs minimum

No. of Vibrators = 04

Sweep frequency will be selected after experiment.

No. of sweeps	Sweep Length (sec)			
	10	12	14	16
8				
10				
12				
14				
16				

All the shot holes will be drilled to its required depth and loaded with required charge sizes then all loaded charges in shot holes will be securely tamped with gravel so that energy from the detonation is contained at the base of shot holes.

Vibrators sweeps must not be missed. Coupling of the base plate (100%) should be firm with the ground. Shots with weak energy due to poor coupling/ missed sweeps will be repeated.

No charges will be paid for misfire or skipped shots.

Note:

Contractor shall be fully responsible for arrangement of security.

Contractor will be also responsible for transport, accommodation and food for the security agencies that will provide security cover to the Contractor's Crew/ employees, company Representative, all crew's equipment and consumables. Company will advise on security matters required at the request of the Contractor.

4.	<u>REFRACTION (WZ) RECORDING</u> Note: Estimated 50 WZpoints. Rates per point should be quoted and to be used for financial evaluation purpose.	
5.	<u>UPHOLE LOGGING UPTO 100 M DEPTH</u> Approximately 130 upholes for 2D project Up-hole depth will be determined after experimentation. Charges per meter should be quoted.	
6.	<u>CABLE POINT CHARGES</u> (Approximately 1500 cable points for 2D project) Rates per cable point should be quoted.	

7. LAND / CROP COMPENSATION RATES

The Contractor will be responsible for obtaining all permits from land owners prior to start of surveying for Seismic Data Acquisition program areas and pay all cost incurred for permitting, land surface and sub-surface (shot holes) damage caused by Seismic Data Acquisition and negligent damage caused by Contractor.

Rates Per line km for 2D seismic survey should be quoted:

NOTE: Financial Evaluation shall be carried out on complete package basis.

8. GENERAL SERVICES CONDITIONS

Services and Items to be supplied by CONTRACTOR but not limited to:

- a. Salaries, wages, travel social insurance, food and lodging and all other personnel costs for Contractor's personnel listed in the chapter PERSONNEL.
- b. Local labor and associated cost (transport, taxes, workman's compensation etc).
- c. All fuels and lubricants, including transport fees.
- d. Insurance for personnel and equipment.
- e. All consumables including recording tapes/ cartridges.
- f. Food, boarding & lodging, and office facilities for four of Company's personnel and Two (4 x 4) vehicles for company representatives.
- g. Spare and repair parts and maintenance of equipment listed in the Chapter of Equipment.
- h. All permits and authorizations for the execution of the services including land entry permits.
- i. If the Contractor is responsible for delay in progress of the Work(s), it shall use such additional equipment and or personnel as may be necessary to eliminate delay in completion of the work on the dates specified by the Company at no additional cost.

COMMUNICATIONS AND REPORTS

Following reports shall be supplied by the Contractor.

1. Daily Progress Report and HSE Statistics
2. Fortnightly progress reports and HSE Statistics
3. Monthly progress reports and HSE Statistics
4. Monthly HSE reports and HSE Statistics
5. Final seismic Survey reports, and HSE Statistics (3 Hard & 6 soft copies)

All reports shall preferably be in Microsoft Word/Excel format. LVL/ Up-hole data will be submitted in Microsoft Excel format on CD/DVD. All survey data will be submitted in both UKOOA and Excel formats on a CD's/DVD's. Provision of any other data relevant to project, if required by client should be provided.

ENVIRONMENT PROTECTION SAFETY AND HEALTH

1. General HSE regulations to be observed:
 - 1.1 CONTRACTOR in the conduct of its operations should adhere to, at a minimum, the safety regulations published in the Safety Manual of the International Association of Geophysical Contractors.
 - 1.2 A safety meeting should be carried out in the Crew at least twice a month, or more often if deemed necessary, with all members of the crew in which hazards of the operation are analyzed and safety measures discussed. Special attention will be given to safe driving methods and proper handling of explosives. A copy of these meetings should be forwarded to the Company.
 - 1.3 Sufficient hygienic facilities shall be provided for all employees and shall be well maintained.
 - 1.4 CONTRACTOR shall provide adequate supply of drinking water for all employees at campsites and in the area where crews are working.
 - 1.5 One full time medical specialist and a Safety Officer with sufficient infrastructure shall be providing in the base camp and fly camps if any.
 - 1.6 All vehicles will be equipped with seat belts for all passengers and driver, and first aid kits and five extinguishers shall be provided.
 - 1.7 Any accident in the crew which may result in personnel injuries and /or work-days lost should be reported in writing to Company, explaining cause of accident and measures taken to prevent similar one in the future.
 - 1.8 CONTRACTOR shall exercise all due diligence to conduct the work in a manner that will prevent pollution and shall comply with the applicable laws, rules and regulations. No trash, waste oil, fuel bilge water or other pollutants shall be purposely discharged or otherwise allowed to escape from Contractor's equipment, cars, trucks etc. and CONTRACTOR shall promptly clean up all and any discharge of such pollutants whether discharged purposely or accidentally as required by applicable law.
 - 1.9 CONTRACTOR shall collect all non-permanent markers set at any phase of operation soon after the completion of the data acquisition on the area.
 - 1.10 CONTRACTOR shall comply with, and shall cause its personnel and any other person (s) acting under the direction of Contractor, or acting for or on behalf of Contractor to so comply with all applicable laws, orders and rules & regulations pertaining to the safety, health and environment prevention standards under Pakistan law and with all standards / procedures formulated by Safety Health and Environment Division of the Operator's Company.
 - 1.11 All operations are to be conducted in accordance with the International safety and environmental protection standards. Every effort should be made to prevent environmental damage during the course of the survey and to fulfill any conditions stipulated in the final Contract Agreement.
 - 1.12 CONTRACTOR shall be liable for and shall save, defend indemnify and hold COMPANY harmless from and against any and all claims resulting from any such pollution.
2. CONTRACTOR shall comply with all the Company's HSE regulations that are available with its Environment Protection and Safety Department for reference and strict compliance on request.

Check List

(The bidder must quote the rates item wise in their commercial offer.

Sr.No	Item Description	Please tick item wise for the rates quoted				
1	Mobilization /Demobilization cost					
2	Day Rates / Hourly Rates					
2.1	Day rate/Experimentation (12 hours per day)/hour rate)					
2.2	Standby Rate (per day/ hour rate)					
3	Turnkey Rates Per L.kms For Seismic Data Acquisition including Security Charges.	Dynamite	Vibrosei s			
	Rates for 306 Firm Lkm and 119.5Contingent Lkm2D seismic data acquisition					
A. Dynamite source single deep hole	Depth	Charge (Kg)				
		4	6	8	10	12
	18m					
	20m					
	24m					
27m						
B. Dynamite source Pop shots	No of Holes	Charge Size				
		0.5 Kg * 1.8m and 1.0 kg * 1.8m				
	6					
	9					
12						
C.Vibrosei Source	No of sweeps	Sweep Length (sec)				
		10	12	14	16	
	8					
	10					
	12					
	14					
16						
4	LVL REFRACTION (WZ) RECORDING					
5	UPHOLE LOGGING UPTO 100 M DEPTH					

6	CABLE POINT CHARGES	
7	LAND / CROP COMPENSATION RATES Per Line Km 2D Seismic survey	

TECHNICAL PROFORMA TO BE FILLED BY THE BIDDER

Category No.	Description of Technical Information
1	Company History & Profile
	No. of years Since establishment
	Experience in similar project areas
	List / No. of 2D/3D Seismic surveys
	2D/3D seismic coverage for last 2 years
2	Specific technical information of equipment detailed for the job.
	<p>RECORDING EQUIPMENT</p> <ol style="list-style-type: none"> 1. 24 bit latest telemetry system (like 428 XL/, G3i) or better (Instrument Type / Make / Model), with details as under: 2. Maximum capability of recording system capable of dynamite/ Vibroseis operation and available ground electronics, it is to record 2DSeismic surveys as per tentative parameter in the bid. 3. Type of data storage and on-site real time quality control system. <p>Type of geophones (10 Hz) Make/ type and manufacturing year.</p> <ol style="list-style-type: none"> 1. Total no. of geophone strings available with 12 geophones per string(SM-24/SG-10 or equivalent/06 series+06 series both series in parallel, length 110-130m) 2. No. of marshy, submersible geophones / hydrophones & transition zone equipment (Geophones / Units / Cables etc) available (10HZ). 3. Detail of laboratory equipment (make/ model) <ul style="list-style-type: none"> ▪ Type of geophone tester. ▪ Ground electronic tester and repair system <p>SHOOTING EQUIPMENT Total available number and detail of Encoder / Decoder / Shooting Equipment/ equipped with GPS.</p>
	<p>SOURCE EQUIPMENT (Dynamite/ Vibroseis)</p> <ol style="list-style-type: none"> 1. Total No. of truck mounted mud pump/ duel system rigs with drilling capacity (make/type / model). 2. Total no. of air compressor rigs/ dual system rigs with drilling Capacity with make type/ model and Portable rigs(Capacity 30m). 3. No. of jack hammer with capacity to drill up to 1.8 m with make/ type/ model.

4. Vibrators (At least 05 Nos), Peak force not less than 60000 lbs Equipped with DGPS.

REFRACTION / UPHOLE LOGGING UNITS

1. 24 bit recorder with at least 24 recording channels to record a spread of 220 to 260 m (Make/ type / Model)
2. No. of LVL geophones with make type / model(4.5)
3. Type of source with description to record refraction survey to determine LVL if other than dynamite.
4. Make/ type/ model of rig to drill a hole upto 100 m depth to record up-hole logging survey.
5. Up/hole / LVL processing and calculation static correction software (make/type and)

QC AND ONSITE PROCESSING FACILITIES

1. Detail of hardware with capability for onsite processing of seismic data (Make / type/ model).
2. Detail of 2D on-site seismic Processing Software (make/ type/ model).

GPS/ SURVEY EQUIPMENT AND PROCESSING SOFTWARE

1. No of units available and detail of survey equipment with specifications equivalent or better than dual frequency GPS-1200 RTK/Trimble R-8 (Make/type/ model).
2. Detail of Survey Processing Software with specification equivalent or better to Leica Geo Office/TBC (make/ type/ model).

MISCELLANEOUS EQUIPMENT

EARTH MOVING MACHINES

1. No. of Dozers, tractors with make/ type/ model.

RADIO EQUIPMENTS

1. Total Nos. and detail of VHF radios for field operation make/ type model.
2. Total No. and details of walki talki set for field operation.
3. Fax and satellite facility

VEHICLES

1. No. of LT vehicles (make/type/Model)
2. No of HT vehicles/Trucks (make/type/Model)
 - a) 4 x 2
 - b) 4 x 4
3. Cable Buggies etc

	<p>CAMP KIT</p> <ol style="list-style-type: none"> 1. No. of electric generators (make / type / model). 2. No. of living caravans with living capacity and accessories. Messing/dining facilities. 3. Description of workshop, data acquisition lab, medical unit, water purification facility, security, POL and explosive storage and any detail the bidder want to give
3	Human Resource deputed for the job
	List of crew Professionals.
	Qualification & Experience of key personnel. All professionals/ technical staff should have the experience more than five years in their relevant field.
	Back-up & replacement options. List of additional staff to meet any replacement of professionals in the crew due to leave or on recommendations of representative of client on performance basis.
4	Execution plan/Completion of Survey
	<ol style="list-style-type: none"> 1. Availability of crew. 2. Schedule of work, survey, line clearance, drilling, recording etc in the form of bar chart. 3. Confirmation of date to commence operation.
5	HSE POLICY
	<ol style="list-style-type: none"> 1. Detail of HSE policy. 2. Procedures to implement HSE Policy. 3. Crew HSE plan and Operational procedures 4. Detail of Accidents if any 5. Detail of emergency response plan, Medivac arrangements, camp clinics etc 6. Provision of a field magazine and security etc.
6	<p>Check List</p> <p>Check list to be filled by the bidder</p>

ANNEXURE -III

Technical Evaluation Criteria (Qualifying Marks 75 %)

Technical proposal of the bid shall be reviewed first to determine/check its responsiveness and conformity with the requirement of bid. The technical evaluation will be carried out on the basis of information supplied by the bidders in their technical proposals and the criteria spelled out at Annexure-A/ITB provided with this document. The bidders securing 75 % or more marks will qualify.

The detail breakup of the relevant information to be provided by the bidder and comprehensive marking criteria are tabulated below. There are five categories and the bidders are required to obtain at least qualifying marks 70 %) in each category. Technically responsive and financially lowest bidder will be considered for award of job. Further, any information related to seismic operation will be provided by bidder if required.

Cat. No.	Description of Technical Information	Qualifying Criteria	Max. Marks	
1	Company History & Profile		16	
	No. of years since establishment	5-7 Years - 2 marks More than 7 years - 4 marks	4	
	No. of 2D/3D Seismic surveys	Less than 2 surveys- 2 marks 2 to 4 surveys - 4 mark More than 4 surveys - 6 marks	6	
	2D/3D seismic coverage in last 2 years	From 200 to 500 kms- 4 Marks	4	
	No. of Crews	One seismic crew 1- mark Two or more seismic crew 2- marks	2	
2	Specific technical information of equipment detailed for the job.		52	
	RECORDING EQUIPMENT (detail with make / type/ model) 24 bit latest telemetry system (like 428 XL / G3i) or better. maximum Number of active channels available <u>Number of available Ground Electronics:</u> Cables Geophone strings 12 No. of geophones per string (SM-24/SG-10 equivalent or better). Type of data storage and onsite real time QC system Detail of auxiliary / test equipment Encoder / Decoder (Shooting Equipment) equipped with GPS		16	
	SOURCE EQUIPMENT (detail with make / type/ model) Dynamite Rigs/Type/Drilling Capacity		12	

<p>and Numbers. Portable Rigs/ Jack hammers / No. of units available Air compressor rigs/Truck Mounted Mud Rigs / dual system Rigs/ No. of units available.</p> <p>Vibroseis No. of vibrators with peak force not less than 60,000 pounds, equipped with DGPS system.</p>			
<p>REFRACTION / UPHOLE LOGGING UNITS (detail with make / type/ model) 24 Bit Up-hole Logging Unit Instrument with Specification, type of geophones & numbers Rig with Capacity LVL / Refraction Survey Unit, type of geophones & numbers Instrument Specification / Spread Length / Channels Source type if other than dynamite. LVL processing & Statics calculation software</p>		4	
<p>QC & ONSITE PROCESSING (detail with make / type/ model) Detail of hardware for on-site seismic data processing Make / type and model Detail of 2D Processing Software</p>		4	
<p>GPS/SURVEY EQUIPMENT AND PROCESSING SOFTWARE Detail of survey equipment, Make/type/ model Detail of GPS/ survey processing software</p>		8	

	MISCELLANEOUS EQUIPMENT EARTH MOVING MACHINERY Bulldozers etc and supporting vehicles & Boats RADIO/ COMMUNICATION EQUIPMENT. VHF Radio Equipment Walki Talki Internet, Fax, Satellite phone facility. CAMP KIT Detail of all facilities/ personnel in the Base Camp/ Fly Camp VEHCLES Detail of vehicles.		8	
3	Human Resource deputed for the job		12	
	Total no. of Professionals. Give detailed list		4	
	Qualification & Experience of Key professional. (minimum 5 year experience is required)		4	
	Back-up & replacement options		4	
4	Execution of Seismic Survey		15	
	Availability of crew in Pakistan.		4	
	Schedule of work Confirmation of date to commence survey		11	
5	HSE		5	
	Compliance to HSE policy		5	
TOTAL MARKS (Qualifying Marks 75 %)			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/EXPL-
 3153/2017** 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\$ USD 170,000/-** (United States Dollar One Hundred Seventy Thousand Only) 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:
 - i. Withdraw their bid during bid validity.
OR
 - ii. Fails to provide performance bond/or advance bank guarantees.
OR
 - iii. Submit forged document in support of their bid.
OR
 - iv. Fails to execute contract as per terms of contract.
OR
 - v. 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

Note: 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.

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 cartelise 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:

1. That I am competent to swear this affidavit being proprietor/one or the partners/ Director of M/s _____
2. That M/s _____ is a proprietorship/partnership firm/company is participating in tender process conducted by OGDCL.
3. That I hereby confirm and declare that none of my/our group/sister concern/associate company is participating/ submitting this tender.
4. 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.
5. That there is no change in the Name & Style, Constitution and Status of the firm, after Pre-qualification.
6. 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:

COMPLETION PERIOD:

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 & PST NUMBER (FOR
PAKISTAN BASE COMPANY ONLY

ANNEXURE –F DULY ATTESTED BY
NOTARY PUBLIC.

PROVINCIAL REGISTRATION NUMBERS

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 & PST 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 for a period of (period).

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% 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:

- 5.1 The contract price includes all taxes (except Provincial Sales Tax/ Islamabad Capital Tax on services in Pakistan), 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.
- 5.2 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.
- 5.3 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 of 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_____