ऑयल इंडिया लिमिटेड
(भारत सरकार का उद्यम)
Oil India Limited
(A Government of India Enterprise)

FRONTIER BASIN PROJECT
P.O: DULIAJAN, DIST: DIBRUGARH
ASSAM (INDIA), PIN-786602
Tel: +91-374-280 7458
Email: frontierbasin@oilindia.in
Website: www.oil-india.com

FORWARDING LETTER

M/s_____
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_____

Sub: IFB No. CNI8965P22 for 'Hiring of Bundled Services for 2 years (with provision of 1-year extension) for Drilling in Dima Hasao (OALP-III) and Karbi Anglong (NELP-IX) Blocks'.

GeM Availability Report ID: GEM/GARPTS/02122021/5XOMX0X6LV5S

Dear Sirs,

1.0 OIL INDIA LIMITED (OIL), a "Navaratna" Category, Government of India Enterprise, is a premier oil Company engaged in exploration, production and transportation of crude oil & natural gas with its Headquarters at Duliajan, Assam. Duliajan is well connected by Air with nearest Airport being at Dibrugarh, 45 km away.

2.0 In connection with its operations, OIL invites National Competitive Bids (NCB) from competent and experienced Contractors through OIL's e-procurement site for **'Hiring of Bundled Services for 2 years (with provision of 1-year extension) for Drilling in Dima Hasao (OALP-III) and Karbi Anglong (NELP-IX) Blocks'.** One complete set of Bid Document covering OIL's IFB for hiring of above services is uploaded in OIL's e-procurement portal. You are invited to submit your most competitive bid on or before the scheduled bid closing date and time through OIL's e-procurement portal. For your ready reference, few salient points of the IFB (covered in detail in the Bid Document) are highlighted below:

(i)	IFB No. /E-Tender No.	:	**CNI8965P22**
(ii)	Type of Bidding	:	Online Open Indigenous e-Tender: Single Stage-Two Bid System
(iii)	Tender Fee	:	Not Applicable
(iv)	Bid Closing Date & Time	:	As mentioned in OIL E-tender portal
(v)	Technical Bid Opening Date & Time	:	As mentioned in OIL E-tender portal
(vi)	Price Bid Opening Date & Time	:	Will be intimated only to the eligible/qualified Bidders nearer the time.

(vii)	Bid Submission Mode	:	Bids must be uploaded online in OIL's E-procurement portal
(viii)	Bid Opening Place	:	Office of CGM (HoD), Frontier Basin Project, Oil India Limited, Duliajan -786602, Assam, India.
(ix)	Bid Validity	:	120 (one hundred twenty) days from Bid Closing date
(x)	Mobilization Time	:	As defined in the tender
(xi)	Bid Security Amount	:	**Not Applicable**
(xii)	Bid Security Validity	:	**Not Applicable**
(xiii)	Original Bid Security to be submitted	:	**Not Applicable**
(xiv)	Amount of Performance Security	:	**3% of annualized contract value**
(xv)	Validity of Performance Security	:	Up to 3(three) months from date of completion of contract
(xvi)	Location of job	:	Dima Hasao and Karbi Anglong districts of Assam, India
(xvii)	Duration of the Contract	:	02 (Two) years from the date of commencement of operation with a provision for extension by another 01 (One) year at the option of OIL.
(xviii)	Quantum of Liquidated Damage for Default in Timely Mobilization	:	Refer **Clause No. 30.0** of Part-3, Section-I (General Conditions of Contract).
(xix)	Integrity Pact	:	Must be digitally signed & uploaded along with the Techno-commercial Bid.
(xx)	Bids to be addressed to	:	CGM (HoD), Frontier Basin Project, Oil India Limited, Duliajan -786602, Assam, India.
(xxi)	Pre-Bid Conference	:	Tentatively scheduled on **17.12.2021 and 18.12.2021**.
(xxii)	Last Date for receipt of Pre-bid Queries	:	**14.12.2021** **(Queries received after 14.12.2021 will not be entertained)**

3.0 Integrity Pact: The Integrity Pact must be uploaded in OIL's E-procurement portal along with the Technical Bid digitally signed by the same signatory who signed the Bid i.e. who is duly authorized to sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid shall be rejected straightway. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who signs the Bid.

4.0 **GUIDELINES FOR PARTICIPATING IN OIL'S E-PROCUREMENT:**

4.1 To participate in OIL's E-procurement tender, bidders should have a legally valid digital certificate **of Class 3 with Organization's Name and Encryption certificate** as per Indian IT

Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (http://www.cca.gov.in). **Digital Signature Certificates having "Organization Name" field as "Personal" are not acceptable**. However, aforesaid Digital Signature Certificates having Bidder's Name in the "Organization Name" field are acceptable. **Only in case of sole proprietorship firms, Digital Signature Certificates issued in the name of the proprietor is also acceptable provided the bid is submitted in the capacity of a proprietorship firm.**

4.2 Digital Signature Certificate comes in a pair of Signing/verification and Encryption/decryption certificate. Bidder should have both the Signing/verification and Encryption/Decryption certificate for Signing and encryption, decryption purpose respectively. The driver needs to be installed once, without which the DSC will not be recognized. While participating on e-Tendering the DSC token should be connected to your system.

4.3 Encryption certificate is mandatorily required for submission of bid. In case bidder created response with one certificate (using encryption key) and bidder change his Digital Signature Certificate then old certificate [Used for encryption] is required in order to decrypt his encrypted response for getting the EDIT mode of the response. Once decryption is done, bidder may use new DSC certificate for uploading and submission of their offer. It is the sole responsibility of the bidder to keep their DSC certificate properly. In case of loss of the certificate, OIL INDIA LTD. will not be responsible.

4.4 For participation, applicants already having User ID & Password for OIL's E-Procurement Portal need to register against the IFB. New vendors/existing vendors not having User ID & Password for OIL's E-Procurement Portal shall obtain User ID & password through online vendor registration (enlistment) system in E-Portal.

4.4.1 Bidders without having E-Tender Login ID and password should complete their online registration at least 07 (Seven) days prior to the scheduled Bid Closing Date and time of the tender. For online registration, bidder may visit OIL's E-Tender site - https://etender.srm.oilindia.in/irj/portal.

4.4.2 Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.

4.5 Parties, who do not have a User ID, can click on Guest login button in the e-Tender portal to view and download the tender. The detailed guidelines are given in User Manual available in OIL's E-Procurement site. For any clarification in this regard, bidders may contact E-Tender Support Cell at Duliajan at erp_mm@oilindia.in, Ph.: 0374- 2807171/7192.

4.6 The link for OIL's E-Procurement Portal is available on OIL's web site (www.oil-india.com).

5.0 **PRE-BID CONFERENCE:**

5.1 A Pre-Bid Conference is tentatively scheduled to be held on **17.12.2021 and 18.12.2021** through **Video Conference (VC)** to explain the requirements of Company in details to the interested prospective Bidders and to understand bidders' perspective including exchange of views/clarifications, if any, on the Scope of Work, Bid Rejection/Bid Evaluation Criteria and other terms & conditions of the Tender. The parties who want to participate in the pre-bid conference must confirm their participation and forward the **e-mail IDs and contact details of maximum 2(two) representatives** along with their pre-bid queries to email ID:

frontierbasin@oilindia.in , if any latest by **14.12.2021.** The link for VC shall be forwarded to the nominated representatives nearer the scheduled date of pre-bid conference.

5.2 It is recommended to the prospective Bidders to attend the pre-bid conference and to make site visits to familiarize themselves with all the salient features of terrain and available infrastructure in OIL's operational areas. This will help the bidder to understand the total requirement for proper bidding.

5.3 Maximum two (2) representatives from each prospective Bidder, who registered themselves against the tender shall be allowed to participate in the pre-bid conference. All costs associated to attend the pre-bid conference by their representatives shall be borne by the interested Bidders.

5.4 The prospective bidders shall submit their queries/clarifications against the tender through E-mail / Courier addressed to CGM (FB)-HoD, Frontier Basin Project, Oil India Limited, Duliajan -786602, Assam,_and such queries must reach OIL's office at Duliajan latest by **14.12.2021**. OIL shall provide clarifications to only those queries received within this date. Queries/ Clarifications against the tender received beyond **14.12.2021** will not be entertained and replied. OIL will not be responsible for non-receipt or late receipt of any bidder's query in OIL's office.

5.5 However, clarifications/exceptions/deviations, if required any, should be brought out by the bidder prior to or during the Pre-Bid Conference only. After processing these suggestions, as a sequel to the pre-bid conference, Company may communicate the changes in this regard, if agreed any, through an addendum to tender document to the prospective bidders who have registered against the tender. Company will not accept any exception/deviation to tender conditions/specifications once the same are frozen after the pre-bid conference and the non-compliant bid(s) shall be rejected outright against this tender.

5.6 The exact date and venue of pre-bid conference will be intimated later on. The Pre-Bid conference may be held through VC as well.

6.0 **IMPORTANT NOTES:**

Bidders shall take note of the following important points while participating in OIL's e-procurement tender:

i) **BACKING OUT BY BIDDER:** In case any bidder withdraws their bid within the bid validity period, the party will be put on Holiday as per the Banning Policy (available in OIL's website) of Company.

ii) **BACKING OUT BY L-1 BIDDER AFTER ISSUE OF LOA:** In case LOA issued is not accepted by the L1 bidder or the Performance Security is not submitted as per the terms of the contract within the time specified in the Bid Document, the Bid Security shall be forfeited and the bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.

iii) **FURNISHING FRAUDULENT INFORMATION/DOCUMENT**: The information and documents furnished by the bidder/ contractor in respect of the subject tender/contract are accepted to be true and genuine. However, if it is detected during technical scrutiny or after award of the contract or after expiry of the contract, that the bidder had submitted any fake/fraudulent document or furnished false statement, the offer/contract shall be rejected/ cancelled, as the case may be and the bidder (if fake document/false statement pertains to such bidder) shall be dealt as per the Banning Policy (available in OIL's website) of Company.

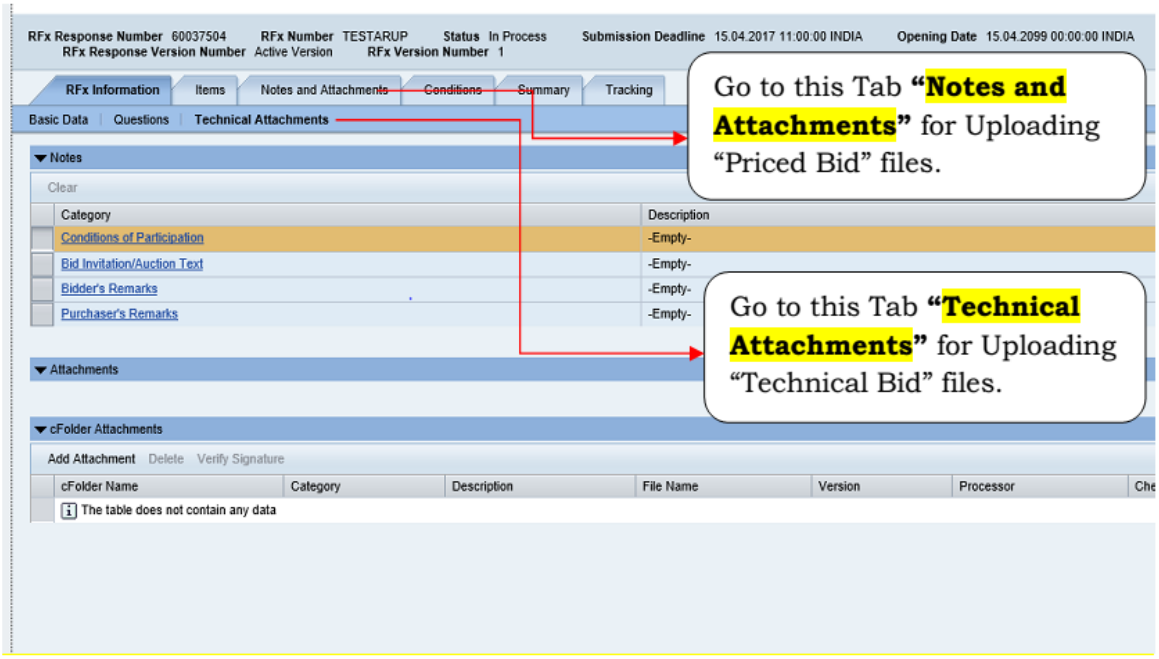
Undertaking of authenticity of information/documents submitted as per **Proforma-M** should be submitted along with the technical bids.

iv) **ERRING / DEFAULTING AGENCIES:** Erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be dealt as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website: www.oil-india.com.

v) Bid should be submitted online in OIL's E-procurement site up to 11.00 AM (IST)(Server Time) on the date as mentioned and will be opened on the same day at 2.00 PM(IST) at the office of the CGM-Contracts in presence of the authorized representatives of the bidders.

vi) If the digital signature used for signing is not of "Class-3" with Organizations name, the bid will be rejected.

vii) The tender is invited under **SINGLE STAGE-TWO BID SYSTEM**. The bidders shall submit both the "**TECHNICAL**" and "**PRICED**" bids through electronic form in the OIL's e-Procurement portal within the Bid Closing Date and Time stipulated in the e-Tender. The Technical Bid should be submitted as per Scope of Work & Technical Specifications along with all technical documents related to the tender and uploaded in **"Technical Attachments" Tab only**. **Bidders to note that no price details should be uploaded in "Technical Attachments" Tab Page. Details of prices as per Price Bid format/Priced bid can be uploaded under "Notes & Attachments" tab. A screen shot in this regard is shown below. Offer not complying with above submission procedure will be rejected as per Bid Evaluation Criteria.**



On "EDIT" Mode, Bidders are advised to upload "Technical Bid" and "Priced Bid" in the places as indicated above.

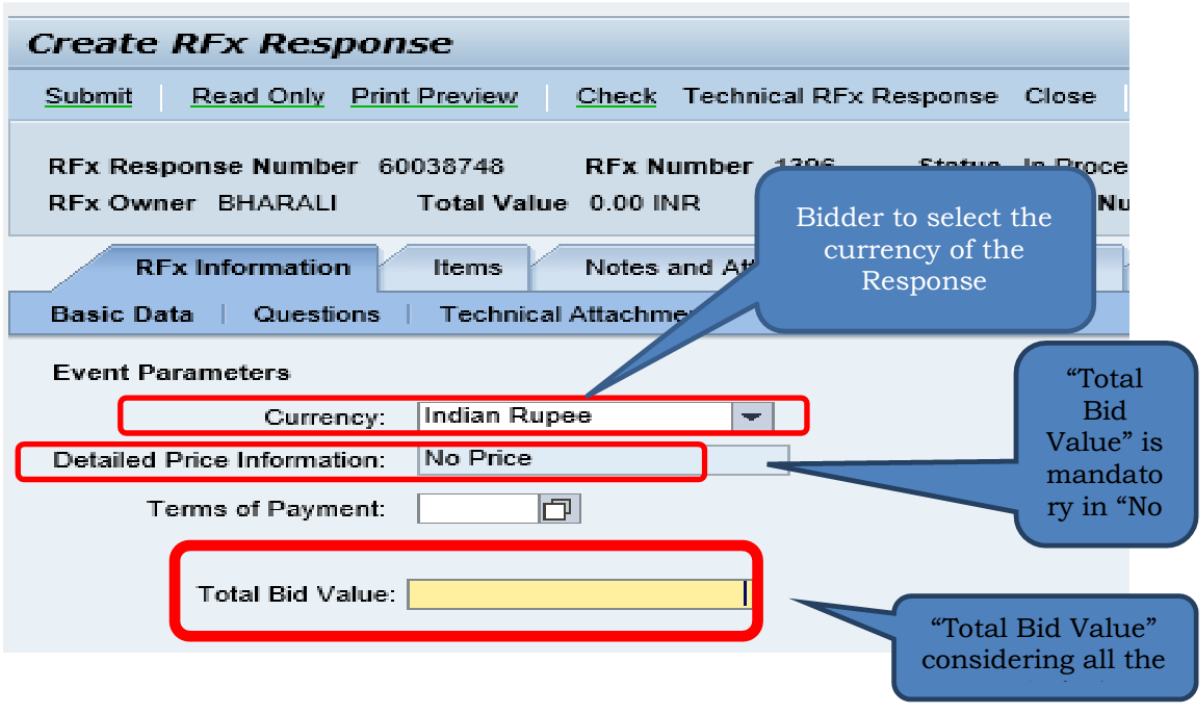
Notes:

* The "Technical Bid" shall contain all techno-commercial details **except the prices**.

** The "Priced bid" must contain the price schedule and the bidder's commercial terms and conditions, if any.For uploading Priced Bid, click on Add Atachment, a browser window will open, select the file from the PC and name the file under Description,

Assigned to General Data and click on OK to digitally sign and upload the File. Please click on Save Button of the Response to Save the uploaded files.

viii) Maintenance of Total bid value in the Response:For convenience of the Bidders and to improve transparency, the rates/costs quoted by bidders against the E-tender shall be available for online viewing to all the Techno-commercially qualified Bidders against the tender after price bids are opened in the system. For tenders where **Detailed Price Information under RFx Information Tab is "No price"**, the Price Bid is invited against the tender through attachment form under "Notes & Attachment". In such tenders, Bidders must upload their pricing as per the **"Price Bid Format – Proforma-B"** under **"Notes & Attachment"** and additionally fill up the **on-line field "Total Bid Value"** under **"RFx Information"** Tab Page with the Total Cost (Including the GST component) as per the amount of the Price Bid in attachment form.



The "Total Bid Value" as entered by the Bidder in the on-line response shall be displayed in the E-tender portal amongst the techno-commercially qualified bidders and Company will not take any responsibility whatsoever towards incorrect information furnished by the bidders on the "Total Bid Value" field.

It is to be noted that Amount mentioned in the "Total Bid Value" field will not be considered for bid evaluation and evaluation will be purely based on the Price bid submitted as per the "Price Bid Format: Proforma-B" under "Notes & Attachments" tab page.

7.0 RESTRICTIONS ON PROCUREMENT FROM A BIDDER OF A COUNTRY WHICH SHARES LAND BORDER WITH INDIA:

Subject to **Order No. F.No. 6/18/2019-PPD dated 23.07.2020** issued by Ministry of Finance, Department of Expenditure, Public Procurement Division, Govt. of India, Bidders should take note of the following:

7.1 Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority [Registration

Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)].

7.2 "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

7.3 "Bidder from a country which shares a land border with India" for the purpose of this Order means:

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose beneficial owner is situated in such a country; or
e. An Indian (or other) agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

7.4 The beneficial owner for the purpose of para 7.3 above will be as under:

7.4.1 In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation:

a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;

b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

7.4.2 In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

7.4.3 In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

7.4.4 Where no natural person is identified under 7.4.2 or 7.4.3 above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

7.4.5 In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

7.5 An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

7.6 The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. A declaration as per **Exhibit-I** in this respect to be submitted by the bidder.

7.7 **Validity of registration**: In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order. If the bidder was validly registered at the time of acceptance/placement of order, registration shall not be a relevant consideration during contract execution.

7.8 The bidders to provide an undertaking as per **Exhibit-II** along with their bid complying with Clause No. 7.1 above. If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law.

8.0 OIL now looks forward to your active participation in the IFB.

Thanking you,

Yours faithfully,
OIL INDIA LIMITED

Sd/-
(S. Patowary)
(E-mail ID: suvam.patowary@oilindia.in)
Sr. Officer – Contracts (FB)
For CGM(FB)-HoD

PART-1
INSTRUCTIONS TO BIDDERS (ITB)

1.0 Eligibility of the bidder:

1.1 The eligibility of the bidder are listed under BID EVALUATION CRITERIA (BEC), PART-2 of the Bid document.

1.2 Bidder shall bear all costs associated with the preparation and submission of bid. Oil India Limited, hereinafter referred to as Company, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

2.0 Bid Documents:

2.1 The services required, bidding procedures and contract terms are prescribed in the Bid Document. This Bid Document includes the following:

a) A Tender Forwarding Letter
b) Instructions to Bidders, (Part-1)
c) Bid Evaluation Criteria, (Part-2)
d) General Conditions of Contract, (Part-3, Section-I)
e) Terms of Reference/Technical Specification and Schedule of Rates [Exhibits-1 to 7], (Part-3, Section-II)
f) Special Conditions of Contract, (Part-3, Section-III)
g) General Schedule of Rates (Part-3, Section-IV)
h) Price Schedule Format, (Proforma-B)
i) Bid Form, (Proforma-C)
j) Statement of Non-Compliance (Proforma-D)
k) Bid Security Declaration (Proforma-E)
l) Performance Security Form, (Proforma-F)
m) Sample Agreement Form (Proforma-G)
n) Proforma of Letter of Authority (Proforma-H)
o) Authorisation for Attending Bid Opening (Proforma-I)
p) Integrity Pact (Proforma-J)
q) Safety Measures (Proforma– K)
r) Certificate of Annual Turnover and Net Worth (Proforma L1)
s) Certificate of Compliance of Financial Criteria (Proforma–L2)
t) Format of undertaking by Bidders towards submission of authentic information/documents (Proforma–M)
u) Undertaking by Vendor on submission of Performance Bank Guarantee (Proforma-N)
v) Undertaking for Mobilisation (Proforma–O)
w) Proforma for Framework Agreement (Proforma-Q)
x) Proforma towards percentage of Local Content in Services (Proforma–R)
y) Formats of Agreement between Bidder and Supporting Company, Parent/ Subsidiary Company Guarantee, Corporate Guarantee for Financial Standing (Proforma S1, S2, S3)
z) Apeendices A1 and A2
aa) Commercial Checklist (Checklist-I)
bb) Checklist for BEC (Checklist-II)
cc) Exhibits I and II

2.2 The bidder is expected to examine all instructions, forms, terms and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a bid not substantially responsive to the Bid Documents in every respect will be at the Bidder's risk & responsibility and may result in the rejection of its bid.

2.3 Bidders shall be deemed, prior to submitting their bids, to have satisfied themselves about the weather conditions, working culture in the area, socio-political environment, safety & security aspects, law & order situation and law of the land, and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

3.0 Transferability of bid documents:

3.1 Bid Documents are non-transferable. Bid can be submitted only by the bidder in whose name the Bid Document has been issued/registered.

3.2 In case of e-Tender, Bidder must submit the bid using Organizational Class-3 Digital Signature issued by the Competent Authority in favour of the bidder. Bid submitted using Digital Signature other than the Digital Signature of the bidder shall be summarily rejected.

3.3 Unsolicited bids will not be considered and will be rejected straightway.

4.0 Amendment of bid documents:

4.1 At any time prior to the deadline for submission of bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Documents through issuance of an Addendum(s)/Corrigendum(s)/Amendment(s).

4.2 The Addendum will be uploaded in OIL's E-Tender Portal in the Tab "Technical Rfx" and under External Area - "Amendments" folder. The Company may, at its discretion, extend the deadline for bid submission. Bidders are expected to take the Addendum into account in preparation and submission of their bid. Bidders are to check from time to time the E-Tender portal ["Technical RFx" Tab and under the folder "Amendments"] for any amendments to the bid documents before submission of their bids. No separate intimation shall be sent to the Bidders.

5.0 Preparation of Bids

5.1 Language of Bids:

5.1.1 The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the Bidder and the OIL shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, duly authenticated by local chamber of Commerce of bidder's country, in which case, for purposes of interpretation of the bid, the translation shall prevail.

5.2 Bidder's/Agent's Name & address:

5.2.1 Bidders should indicate in their bids their detailed postal address including the Fax/Telephone / Cell Phone Nos. and E-mail address. Similar information should also be provided in respect of their authorised Agents in India, if any.

5.3 Documents comprising the bid:

5.3.1 Bids are invited under Single Stage Two Bid System. The bid to be uploaded by the Bidder in OIL's E-Tender portal shall comprise of the following components:

(A) Technical Bid (to be uploaded in "Technical Attachments" tab)

a) Complete technical details of the services offered.
b) Documentary evidence established in accordance with Clause 9.0.
c) Bid Security Declaration as per Proforma-E.
d) Copy of Bid-Form without indicating prices in Proforma-C.
e) Statement of Non-compliance as per Proforma–D.
f) Proforma-A: List of items to be imported without the CIF values (For Global Tenders).
g) Copy of Priced Bid without indicating prices (Proforma-B).
h) Integrity Pact digitally signed by OIL's competent personnel as Proforma-J attached with the bid document to be digitally signed by the bidder's Authorised representative.
i) All Other relevant Undertakings and Proformas as applicable as part of Bid.

Note: Please note that, no price should be mentioned in the "Technical Attachments" tab.

(B) Price Bid (to be uploaded in "Notes and Attachments" tab)

Bidder shall quote their prices in the following Proforma available in OIL's E-procurement portal in the "Notes & Attachments" Tab:

a) Price-Bid Format as per Proforma-B
b) Bid Form as per Proforma-C
c) Proforma-A showing the items to be imported with the CIF values (For Global Tenders).

The Priced Bid shall contain the prices along with the currency quoted and any other commercial information pertaining to the service offered.

6.0 Bid Form:

6.1 The bidder shall complete the Bid Form and the appropriate Price Schedule furnished in their Bid.

7.0 Bid Price:

7.1 Prices must be quoted by the Bidders online as per the price bid format available in OIL's E-Tender Portal under "Notes & Attachment" Tab. Prices must be quoted by the bidders as per the Price/Bidding format.

7.2 Prices quoted by the successful bidder must remain firm during its performance of the Contract and is not subject to variation on any account.

7.3 All duties (except customs duty which will be borne by the Company) and taxes (excluding GST) including Corporate Income Tax, Personal Tax, Assam Entry Tax etc. and other Cess/levies payable by the successful bidder under the Contract for which this Bid Document is being issued, shall be included in the rates, prices and total Bid Price submitted by the bidder, and the evaluation and comparison of bids shall be made considering the quoted GST in the proforma. For example, personal taxes and/or any corporate taxes arising out of the profits on the contract as per rules of the country shall be borne by the bidder.

8.0 Currencies of bid and payment: Bidders shall submit their bid only in Indian Rupees and they will be paid in Indian Rupees only.

9.0 Documents establishing bidder's eligibility and qualifications:

9.1 These are listed in BID EVALUATION CRITERIA (BEC), PART-2 of the Bid document.

10.0 Bid Security: Not Applicable, however bidders shall submit along with their bid a signed "Bid Security Declaration" (Proforma-E) accepting that, if they withdraw or modify their bids during the period of validity; or if they are awarded the contract and they fail to sign the contract; or if they fail to submit performance security before the deadline defined in the NIT; they will be suspended for a period of two years. This suspension of two years shall be automatic without conducting any enquiry.

11.0 DELETED

12.0 PERIOD OF VALIDITY OF BIDS:

12.1 Bids shall remain valid as per the requirement mentioned in forwarding letter from the date of closing of bid prescribed by the Company. Bids of shorter validity will be rejected as being non-responsive. If nothing is mentioned by the bidder in their bid about the bid validity, it will be presumed that the bid is valid for 120 days from Bid Closing Date.

12.2 In exceptional circumstances, the Company may solicit the Bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing through Fax or e-mail. The Bid Security provided under Para 10.0 above shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request will neither be required nor permitted to modify their Bid.

13.0 **Signing & submission of bids:**

13.1 Signing of bids:

13.1.1 Bids are to be submitted online through OIL's E-procurement portal with digital signature. The bid and all attached documents should be digitally signed by the bidder using "Class 3" digital certificates with Organization's Name [e-commerce application (Certificate with personal verification and Organisation Name)] as per Indian IT Act 2000 obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India before bid is uploaded. Digital Signature Certificates having Bidder's Name in the "Organization Name" field are only acceptable. Digital Signature Certificate having "Organization Name" field other than Bidder's Name shall be rejected summarily.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidder holding a Power of Attorney to bind the Bidder to the contract.

If any modifications are made to a document after attaching digital signature, the digital signature shall again be attached to such documents before uploading the same. The Power of Attorney in original shall be submitted by bidder as mentioned in Para 13.2 below.

In case the digital signature is not of "Class-3" with organization name, the bid will be rejected. Bidder is responsible for ensuring the validity of digital signature and its proper usage by their employees.

13.1.2 The original and all copies of the bid shall be typed or written in indelible inks. Since bids are to be submitted ONLINE with digital signature, manual signature is NOT relevant. The letter of authorisation (as per Proforma-H) shall be indicated by written Power of Attorney accompanying the Bid.

13.1.3 Any physical documents submitted by bidders shall contain no interlineations, white fluid erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such correction shall be initialed by the person or persons who has/have digitally signed the Bid.

13.1.4 Any Bid, which is incomplete, ambiguous, or not in compliance with the Bidding process shall be rejected.

13.2 Submission of bids:

The tender is processed under single stage - Two bid system. Bidder shall submit the Technical bid and Priced bid along with all the Annexures and Proforma (wherever applicable) and copies of documents in electronic form through OIL's e-procurement portal within the Bid Closing Date & Time stipulated in the e-tender. For submission of Bids online at OIL's E-Tender Portal, detailed instructions is available in "User Manual" available in OIL's E-Tender Portal. Guidelines for bid submission are also provided in the "Forwarding Letter". The Technical Bid is to be submitted as per Terms of Reference/Technical Specifications of the bid document and Priced Bid as per the Price Schedule. The Technical Bid should be uploaded in the "Technical Attachment" Tab Page only. Prices to be quoted as per Proforma-B should be uploaded as Attachment just in the attachment link under "Notes & Attachments" Tab under General Data in the e-portal. No price should be given in the "Technical Attachment", otherwise bid shall be rejected. The priced bid should not be submitted in physical form and which shall not be considered. However, the following documents in one set should necessarily be submitted in physical form in sealed envelope superscribing the "IFB No., Brief Description of

services and Bid Closing/Opening date & Time along with the bidder's name and should be submitted to CGM-Contracts, Oil India Ltd., Duliajan-786602 (Assam) on or before 12.45 Hrs (IST) on the bid closing date indicated in the IFB:

~~a) The Original Bid Security along with 1(one) copy~~

b) Printed catalogue and literature if called for in the bid document.

c) Power of Attorney for signing of the bid digitally.

d) Any other document required to be submitted in original as per bid document requirement.

Documents sent through E-mail/Fax/Telephonic method will not be considered.

13.2.1 All the conditions of the contract to be made with the successful bidder are given in various Sections of the Bid Document. Bidders are requested to state their non-compliance to each clause as per Proforma-D of the bid document and the same should be uploaded along with the Technical Bid.

13.2.2 Timely delivery of the documents in physical form as stated in Para 13.2 above is the responsibility of the bidder. Bidders should send the same through Registered Post or by Courier Services or by hand delivery to the Officer in Charge of the particular tender before the Bid Closing Date and Time. Company shall not be responsible for any postal delay/transit loss.

13.2.3 Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.

14.0 Indian agent/representative/retainer/associate: (Not Applicable)

15.0 Deadline for submission of bids:

15.1 Bids should be submitted online as per the online tender submission deadline. Bidders will not be permitted by System to make any changes in their bid/quote after the bid submission deadline is reached. Bidders are requested to take note of this and arrange to submit their bids within the submission deadline to avoid last minute rush/network problems.

15.2 No bid can be submitted after the submission dead line is reached. The system time displayed on the e-procurement web page shall decide the submission dead line.

15.3 The documents in physical form as stated in Para 13.2 must be received by Company at the address specified in the "Forwarding Letter" on or before 12.45 Hrs(IST) on the Bid Closing Date mentioned in the "Forwarding Letter". Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

16.0 Late Bids:

16.1 Bidders are advised in their own interest to ensure that their bids are uploaded in system much before the closing date and time of the bid. The documents in

physical form if received by the Company after the deadline for submission prescribed by the Company shall be rejected and shall be returned to the Bidders in unopened condition immediately.

17.0 Modification and withdrawal of bids

17.1 The Bidder after submission of Bid may modify or withdraw its Bid prior to Bid Closing Date & Time in the e-portal using Digital Signature by the person or persons who has/have digitally signed the Bid. Withdrawal or modification of bid through physical correspondence shall not be considered and accepted.

17.2 No Bid can be modified or withdrawn subsequent to the deadline for submission of Bids.

17.3 No Bid can be withdrawn in the interval between the deadline for submission of Bids and the expiry of the period of Bid Validity specified by the Bidder on the Bid Form. Withdrawal of a Bid during this interval shall result in the Bidder's forfeiture of its Bid Security and bidder shall also be debarred from participation in future tenders of OIL.

18.0 Extension of bid submission date

18.1 Normally no request for extension of Bid Closing Date & Time will be entertained. However, OIL at its discretion, may extend the Bid Closing Date and/or Time due to any reasons.

19.0 Bid opening and evaluation

19.1 Company will open the Technical Bids, including submission made pursuant to clause 15.0, in presence of Bidder's representatives who choose to attend at the date, time and place mentioned in the Forwarding Letter. However, an authorisation letter (as per Proforma-I) from the Bidder must be produced by the Bidder's representative at the time of Bid Opening. Unless this Letter is presented, the representative will not be allowed to attend the Bid Opening. The Bidder's representatives who are allowed to attend the Bid Opening shall sign a register evidencing their attendance. Only one representative against each Bid will be allowed to attend. In technical bid opening, only “Technical Attachment” will be opened. Bidders therefore should ensure that technical bid is uploaded in the “Technical Attachment” Tab Page only in the E-portal.

19.2 In case of any unscheduled holiday or Bandh on the Bid Opening Date, the Bids will be opened on the next full working day. Accordingly, Bid Closing Date / time will get extended up to the next working day and time.

19.3 Bids which have been withdrawn pursuant to clause 17.0 shall not be opened. Company will examine bids to determine whether they are complete, whether requisite Bid Securities have been furnished, whether documents have been digitally signed and whether the bids are generally in order.

19.4 At bid opening, Company will announce the Bidder's names, written notifications of bid modifications or withdrawal, if any, the presence of requisite Bid Security, and such other details as the Company may consider appropriate.

19.5 Normally no clarifications shall be sought from the Bidders. However, for assisting in the evaluation of the bids especially on the issues where the Bidder confirms compliance in the evaluation and contradiction exists on the same issues due to lack of required supporting documents in the Bid (i.e. document is deficient or missing), or due to some statement at other place of the Bid (i.e. reconfirmation of confirmation) or vice versa, clarifications may be sought by OIL. In all the above situations, the Bidder will not be allowed to change the basic structure of the Bid already submitted by them and no change in the price or substance of the Bid shall be sought, offered or permitted.

19.6 Prior to the detailed evaluation, Company will determine the substantial responsiveness of each bid to the requirement of the Bid Documents. For purpose of these paragraphs, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bid Document without material deviations or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the Bid Documents, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. The Company's determination of Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

19.7 A Bid determined as not substantially responsive will be rejected by the Company and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

19.8 The Company may waive minor informality or nonconformity or irregularity in a Bid, which does not constitute a material deviation, provided such waiver, does not prejudice or affect the relative ranking of any Bidder.

20.0 Opening of priced bids

20.1 Company will open the Priced Bids of the techno-commercially qualified Bidders on a specific date in presence of representatives of the qualified bidders. The techno-commercially qualified Bidders will be intimated about the Priced Bid Opening Date & Time in advance. In case of any unscheduled holiday or Bandh on the Priced Bid Opening Date, the Bids will be opened on the next working day.

20.2 The Company will examine the Price quoted by Bidders to determine whether they are complete, any computational errors have been made, the documents have been properly signed, and the bids are generally in order.

20.3 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

accordingly. If there is a discrepancy between words, and figures, the amount in words will prevail. If any Bidder does not accept the correction of the errors, their Bid will be rejected.

21.0 (DELETED)

22.0 Evaluation and comparison of bids

The Company will evaluate and compare the bids as per BID EVALUATION CRITERIA (BEC), PART-2 of the Bid Documents.

22.1 Discounts / rebates

22.1.1 Unconditional discounts/rebates, if any, given in the bid will be considered for evaluation.

22.1.2 Post bid or conditional discounts/rebates offered by any bidder shall not be considered for evaluation of bids. However, if the lowest bidder happens to be the final acceptable bidder for award of contract, and if they have offered any discounts/rebates, the contract shall be awarded after taking into account such discounts/rebates.

23.0 Contacting the company

23.1 Except as otherwise provided in Clause 19.0 above, no Bidder shall contact Company on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded except as required by Company vide sub-clause 19.5.

23.2 An effort by a Bidder to influence the Company in the Company's bid evaluation, bid comparison or Contract award decisions may result in the rejection of their bid.

24.0 Award of contract

24.1 **Award criteria**

24.1.1 The Company will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

25.0 Company's right to accept or reject any bid

Company reserves the right to accept or reject any or all bids 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 affected bidder, or bidders or any obligation to inform the affected bidder of the grounds for Company’s action.

26.0 Notification of award

26.1 Prior to the expiry of the period of bid validity or extended validity, Company will notify the successful Bidder in writing by registered letter or by fax or E-mail (to be confirmed in writing by registered / couriered letter) that its Bid has been accepted.

26.2 The notification of award will constitute the formation of the Contract.

27.0 Performance security:

Successful bidder has to submit Performance Security amount as mentioned in GCC clause no. 10.0.

28.0 Signing of contract

28.1 At the same time as the Company notifies the successful Bidder that its Bid has been accepted, the Company will either call the successful Bidder for signing of the agreement or send the Contract Form provided in the Bid Documents, along with the General & Special Conditions of Contract, Technical Specifications, Schedule of Rates incorporating all agreements agreed between the two parties.

28.2 The successful Bidder shall sign and date the contract and return it to the Company after receipt of LOA. Till the contract is signed, the LOA issued to the successful bidder shall remain binding amongst the two parties.

28.3 In the event of failure on the part of the successful Bidder to sign the contract, OIL reserves the right to terminate the LOA issued to the successful Bidder and invoke the Bid Security or the Performance Security if submitted by the successful Bidder. The party shall also be debarred for a period of 2(two) years from the date of default.

(Signing of the Contract may be done at the place of award in presence of both parties)

29.0 Credit facility

Bidders should indicate clearly in the Bid about availability of any credit facility inclusive of Government to Government credits indicating the applicable terms and conditions of such credit.

30.0 Mobilisation and advance payment

30.1 Request for advance payment shall not be normally considered. However, depending on the merit and at the discretion of the Company, advance against mobilisation charge may be given at an interest rate of 1% above the prevailing Bank rate (CC rate) of SBI from the date of payment of the advance till recovery/refund.

30.2 Advance payment agreed to by the Company shall be paid only against submission of an acceptable bank guarantee whose value should be equivalent to the amount of advance plus the amount of interest covering the period of advance. Bank guarantee shall be valid for 2 months beyond completion of mobilisation and the same may be invoked in the event of Contractor's failure to mobilise as per agreement.

30.3 In the event of any extension to the mobilisation period, Contractor shall have to enhance the value of the bank guarantee to cover the interest for the extended period and also to extend the validity of bank guarantee accordingly.

31.0 Integrity pact:

31.1 OIL shall be entering into an Integrity Pact with the Bidders as per format enclosed vide Proforma-J of the Bid Document. The Integrity Pact has been duly signed digitally by OIL's competent signatory and uploaded in the OIL's e-portal. The

Integrity Pact shall be returned by the bidder (along with the technical Bid) duly signed by the same signatory who signed the Bid i.e. who is duly authorized to sign the Bid. Uploading the Integrity Pact in the OIL's E-portal with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who has signed the bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid shall be rejected straightway.

31.2 Bidders may contact the Independent External Monitors for any matter relating to the IFB at the following addresses:

a) Shri Sutanu Behuria, IAS (Retd); Ex-Secretary, Dept. of Heavy Industry, Ministry of Heavy Industries & Public Enterprises;
E-mail: sutanu2911@gmaiI.com

b) Shri Rudhra Gangadharan, IAS (Retd.), Ex-Secretary, Ministry of Agriculture;
E-mail: rudhra.gangadharan@gmail.com

c) Shri Om Prakash Singh, IPS (Retd.), Former DGP, Uttar Pradesh,
E-mail: Ops2020@rediffmail.com

32.0 Local conditions

It is imperative for each Bidder to be fully informed themselves of all Indian as well as local conditions, factors and legislation which may have any effect on the execution of the work covered under the Bidding Document. The bidders shall be deemed, prior to submitting their bids to have satisfied themselves of all the aspects covering the nature of the work as stipulated in the Bidding Document and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

No request will be considered for clarifications from the Company (OIL) regarding such conditions, factors and legislation. It is understood and agreed that such conditions, factors and legislation have been properly investigated and considered by the Bidders while submitting the Bids. Failure to do so shall not relieve the Bidders from responsibility to estimate properly the cost of performing the work within the provided timeframe. Company (OIL) will assume no responsibility for any understandings or representations concerning conditions made by any of their officers prior to award of the Contract. Company (OIL) shall not permit any Changes to the time schedule of the Contract or any financial adjustments arising from the Bidder's lack of knowledg**e** and its effect on the cost of execution of the Contract.

33.0 Specifications

Before submission of Bids, Bidders are requested to make themselves fully conversant with all Conditions of the Bid Document and other relevant information related to the works/services to be executed under the contract.

END OF PART-1

&&&&&

PART–2
BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

This tender is floated for entering into service agreement with the lowest eligible (L-1) bidder for hiring the bundled services as mentioned in Clause 2.2 herein for 2 years (with provision of 1-year extension) for Drilling in Dima Hasao (OALP-III) and Karbi Anglong (NELP-IX) Blocks, and also to shortlist the techno-commercially acceptable bidders for a **Framework Agreement** for a period of 03 (Three) years.

Thus, bidders who submit their offer on the basis of **consortium** or **on the basis of technical experience of their parent/ subsidiary/ sister subsidiary/ co-subsidiary company** are requested to confirm the validity of the Agreement, MOU, Guarantee etc. upto approximately 03 (three) years from the original bid closing date, i.e. up to **04.01.2025**, so as to cover the bidders under Framework Agreement. In the event of requirement for the tendered services within the validity of the framework agreement, price bid and financial criteria - net worth and annual turnover, vintage of equipment, etc. [if required] shall be sought with the same terms and conditions and scope of work from those techno-commercially qualified bidder(s). Bidders are to confirm the acceptance of framework agreement categorically in their offer for their consideration for Framework Agreement. A format (as per **PROFORMA-Q**) in this regard is to be provided as part of the Technical offer.

1.0 VITAL CRITERIA FOR BID ACCEPTANCE:

The bid shall conform generally to the specifications and terms and conditions given in this bid document. Bids shall be rejected in case the services offered do not conform to required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected.

2.0 TECHNICAL EVALUATION CRITERIA: Bidder must comply to the following vital technical conditions, failing which the bid will be rejected.

2.1 The bidder must be incorporated in India and must maintain more than 20% local content (LC) for the offered services to be eligible to bid against this tender.

Regarding calculation of local content and submission of documents during bidding & execution of contracts, provision of Purchase Preference Policy linked with Local Content (PP-LC) notified vide **Letter No. FP-20013/2/2017-FP-PNG dated 17.11.2020** by–MoPNG (including subsequent amendments thereof, if any) shall be applicable.

If such local content is not maintained during execution of contract, OIL reserves the right to invoke the Performance Securities submitted by the bidding and supporting companies, in addition to resorting to other options as may be deemed appropriate.

Whether **or not** the bidders want to avail PP-LC benefit against this tender, it is mandatory for them to meet the following at the bidding stage:

(a) The bidder must provide the **percentage (%) of local content** in their bid, without which the bid shall be summarily rejected being non-compliant.

(b) The Bidder shall submit an undertaking from the authorised signatory of bidder having the Power of Attorney alongwith the bid specifying the LC Percentage and such undertaking shall become a part of the contract, if awarded**.[Format enclosed vide Proforma-R]**

(c) The aforesaid undertaking of the bidder shall also be supported by a **certificate** from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of bids from entities other than companies) mentioning the percentage of local content.

(d) Bidder to submit a copy of their Certificate of Incorporation/Registration in India.

2.2 SCOPE OF WORK:

Bids should be complete covering the entire scope of work / supply and should conform to the technical specifications indicated in the bid document, duly supported with technical catalogues/literature wherever required. Incomplete and non-conforming bids will be rejected outright.

The Bidder shall be required to provide Bundled Services (with tools & equipment/units where ever required) with capable and experienced personnel for successful completion of jobs as per Scope of Work detailed in the tender document. These bundled services have to work for onshore exploratory drilling and completion operations with a 1400 HP Rig package to be hired by the Company for OIL blocks in Dima Hasao and Karbi Anglong districts, Assam. However, if the need arises, OIL may consider to engage these services (whole or part) in other parts of Assam and NE states operated by the company with mutually agreed rates and terms & conditions.

The Bidder must provide all services with units, tools & equipment and personnel as listed below under Bundled Services. Bid will be rejected if the bidder does not comply to provide any of the service(s) :

2.2.1 Bundled Services:

a) **Cementing Service** with Unit/s, Tools/Equipment including slurry design, supply of oil well cement, additives along with Cementing personnel.

b) **Mud Engineering Service** including supply of mud chemicals, laboratory services along with Mud Engineers.

c) **Directional Drilling Service (Regular)** along with equipment and personnel (For planned deviation drilling).

d) **Wire line Logging service** along with equipment and personnel.

e) **Mud Logging Unit (MLU) service** along with equipment and personnel.

f) **Liner Hanger Service (CALL-OUT)** along with tools & equipment and Engineer.

g) **Directional Drilling Service (CALL-OUT)** along with tools & equipment and Engineers.

2.3 ELIGIBILITY AND EXPERIENCE OF THE BIDDER:

(a) The Bidder should provide all the services mentioned in Clause 2.2.1 of its own (in-house). In case all the services are not available in-house, the Bidder must have at least the below mentioned 03 (three) services with experienced men and material of its own:

i. Cementing Service (Exhibit-1)
ii. Mud Engineering Service (Exhibit-2)
iii. Directional Drilling Service (Regular) (Exhibit-3)

(b) The Bidder must have in-house experience of providing all of the above mentioned **03 (three) oil-field services as per clause 2.3(a), with men and material for a minimum of 02 (two) nos. of onshore wells (for well depth more than 3500m) to any E&P companies (i.e. Companies engaged in the exploration and production of Crude Oil and Natural Gas)** in last 7 (seven) years preceding the original bid closing date.

(c) **For the remaining services except those mentioned above in 2.3 (a),** the Bidder can either offer to provide the services of its own (in-house) or through tie-ups with other service providers for providing the respective services. However, the bidder (in case of inhouse) or respective service provider(s) (in case through tie-ups) has to fulfil the below mentioned minimum experience criteria for the respective services:

Sl. No.	Type of service	Minimum experience
1.	Wireline Logging Service (Clause 2.2.1 (d))	i. The Bidder/ Service Provider must have 5 (five) years' experience of providing satisfactory Wireline Logging Services – both open-hole and cased-hole, perforations and other well completion Services. ii. Bidder/ Service Provider must have carried out at least 150 numbers each of open-hole and cased-hole jobs (logging, perforations and other well completion jobs) in the last 03 (three) years. Towards experience of 150 nos. of jobs, an **Undertaking** from the Authorized Signatory of Bidder/ Service Provider must be submitted. iii. Bidder/ Service Provider must have the experience of both open-hole and cased-hole logging, perforations and other services as per SOW in wells of more than 3500m depth.
2.	Mud Logging Unit (MLU) Service (Clause 2.2.1 (e))	Minimum 05 (five) years of experience of providing Mud logging services in last 07 (seven) years reckoned for the original bid closing date.
3.	Liner Hanger Service (Call out) (Clause 2.2.1 (f))	Minimum 03 (three) nos. of successful liner hanger jobs in last 05 (five) years reckoned for the original bid closing date.

4.	Directional Drilling Service (Call out) (Clause 2.2.1 (g))	Minimum of 02 (two) onshore wells (for well depth more than 3500m) in last 7 (seven) years preceding the original bid closing date.

Notes to Clause 2.3 above:

(i) **Documentary evidence must be submitted as per Clause 4.0 in support of experience mentioned in Clause 2.3 above.**

(ii) **Bidders quoting on the basis of tie-up with other service provider(s) for providing the services as mentioned under Clause 2.2.1 (d) to (g) must submit a duly Notarized Memorandum of Understanding (MOU)/Tie-up Agreement with the respective service provider clearly indicating their roles and responsibilities under the scope of work which shall be addressed to OIL and shall remain valid and binding for the contract period under this tender. The MoU should clearly state that the proposed service provider shall carry out the job in the event the contract is awarded to the bidder.**

(iii) **Bidder can offer to have a maximum of 04 (Four) nos. of tie-up arrangements with respective service providers (Only 01 tie-up shall be allowed for each of the services mentioned under Clause 2.2.1 (d) to (g))**

2.4 BID SUBMITTED ON THE BASIS OF THE TECHNICAL EXPERIENCE OF THE PARENT/SUBSIDIARY COMPANY:

Offers of those bidders who themselves do not meet the experience criteria as stipulated in Clause No. 2.3 above can also be considered provided the primary bidder complies to **Clause No. 2.1** above w.r.t. to being incorporated in India and maintaining more than 20% local content for the offered services and is a subsidiary company of the parent company **[supporting company]** in which the parent company has 100% stake **or** parent company can also be considered on the strength of its 100% subsidiary **[supporting company]**. However, the parent/subsidiary company of the bidder should on its own meet the experience as stipulated in Clause No. 2.3 above in the BEC and should not rely for meeting the experience criteria on its sister subsidiary/co-subsidiary company or through any other arrangement like technical collaboration agreement. In that case as the subsidiary company is dependent upon the experience of the parent company or vice-versa with a view to ensure commitment and involvement of the parent/subsidiary company for successful execution of the contract, the participating bidder should enclose an agreement (as per format enclosed as **PROFORMA-S1**) between the parent and the subsidiary company or vice-versa and Parent/Subsidiary Guarantee (as per format enclosed as **PROFORMA-S2** from the parent/subsidiary company to OIL for fulfilling the obligation under the Agreement, along with the Technical bid.

2.5 BID SUBMITTED ON THE BASIS OF THE TECHNICAL EXPERIENCE OF SISTER SUBSIDIARY/CO-SUBSIDIARY COMPANY:

Offers of those bidders who themselves do not meet the technical experience criteria as stipulated in Clause No. 2.3 above can also be considered based on the experience of their Sister Subsidiary/Co-Subsidiary company within the ultimate parent/holding company subject to meeting the conditions as stipulated below in Clause (a) and (b), provided the primary bidder complies to **Clause No. 2.1** above w.r.t. to being incorporated in India and maintaining more than 20% local content for the offered services.

(a) The sister subsidiary/co-subsidiary company and the bidding company are both directly or indirectly owned 100% subsidiaries of an ultimate parent/holding company.

(b) The sister subsidiary/co-subsidiary company on its own meets the technical experience criteria laid down in Clause No. 2.3 above and not through any other arrangement like technical collaboration etc.

(c) With a view to ensure commitment and involvement of the ultimate parent/holding company for successful execution of the contract, the participating bidder must submit an agreement, as per format furnished, between them, their ultimate parent/holding company, along with the technical bid.

Note: In the situations mentioned in **Clause No. 2.4 and 2.5** above, following conditions are required to be fulfilled/documents to be submitted:

(i) Undertaking by the supporting company to provide a Performance Security (as per format and instructions enclosed at **PROFORMA-S3**), equivalent to 50% of the value of the Performance Security which is to be submitted by the bidding company, in case the supported bidding company is the successful bidder. In cases where foreign based supporting company does not have permanent establishment in India, the bidding company can furnish performance security for an amount which is sum of performance security amount to be submitted by the bidder and performance security amount required to be submitted by the supporting company. In such case bidding company shall furnish an **Undertaking** that their foreign based supporting company is not having any permanent establishment in India in terms of Income Tax Act of India.

(ii) **Undertaking** from the supporting company to the effect that in addition to invoking the performance security submitted by the contractor, the performance security provided by supporting company shall be invoked by OIL due to non-performance of the contractor.

2.6 BIDS FROM CONSORTIUM:

a) In view of the complexity of nature of work involved as covered by the Bidding Documents, it is anticipated that some of the intending bidders may pool their resources and experiences to form Consortia. **However, consortium can be only be formed with sister subsidiary/co-subsidiary companies having the same parent/holding company or within the same ultimate parent/holding company**. The Leader of the consortium should satisfy the **Clause No. 2.1** above w.r.t. being incorporated in India and maintaining more than 20% local content for the offered services.

b) The leader of the Consortium can submit bid on behalf of consortium of bidders. Memorandum of Understanding (MOU) between the Consortium members duly executed by the CEOs or their authorised representative of the consortium members and Notarized must accompany the bid which should clearly define role/scope of work of each partner/member and should clearly define the leader of consortium. Memorandum of Understanding (MOU) must also state that all the members of consortium shall be jointly and severally responsible for discharging all obligations under the Contract. However, the Leader of the Consortium must submit an undertaking along with the technical bid towards unconditional acceptance of full responsibility for executing the 'Scope of Work' of this bid document. In case of award, such MOU shall be kept valid through the entire contract period, including extensions, if any. The following provisions should also be incorporated in the MOU executed by the members of the Consortium.

i) Only the Leader of the consortium shall register in the E-Tender portal and submit bid on behalf of the consortium. The other members of the Consortium shall ratify all the acts and decisions of the Leader of Consortium, which are taken in connection with and/or during the evaluation of the tender and execution of the contract.

ii) The Bid Security declaration shall be in the name of the Leader of the consortium on behalf of consortium with specific reference to consortium bid and name & address of consortium members. Similarly the Performance Security shall be in the name of the Leader on behalf of the consortium.

iii) The leader of the consortium on behalf of the consortium shall coordinate with OIL during the period the bid is under evaluation as well as during the execution of works in the event contract is awarded and he shall also be responsible for resolving dispute/ misunderstanding/undefined activities, if any, amongst all the consortium members.

iv) Any correspondence exchanged with the leader of consortium shall be binding on all the consortium/joint venture members.

v) Payment shall be made by OIL only to the leader of the consortium towards fulfilment of contract obligations.

vi) In case of Consortium bids, the bid shall be digitally signed by the leader of Consortium. The Power of Attorney from each member authorising the leader for signing and submission of Bid on behalf of individual member must accompany the Bid offer.

vii) Documents/details pertaining to qualification of bidder of document attached with the bidding documents must be furnished by each partner/member of consortium complete in all respects along with the bid clearly bringing up their experience especially in the form of work in their scope.

viii) **Constitution of Consortium:** If during evaluation of bid, a consortium leader proposes any alterations/changes in the constitution or replacement or inclusion or expulsion of any partner(s)/ member(s) of the consortium which had originally submitted the bid, to drive some advantages/benefits based on any development(s) having come to his knowledge at any time, the bid of such a consortium shall be liable for rejection.

ix) **Signing of Contract:** In the event of award of contract to the consortium, the contract to be signed by the members of the consortium and the liability of each one of them shall be jointly and severally.

x) Members of the consortium are not allowed to quote separately/independently against this tender. All the bids received in such case will be summarily rejected. Further, all bids from parties with technical support from the same Principal will be rejected.

xi) Certified copies (attested by Director/Company Secretary) of Board resolutions passed by respective Board of Directors of the companies (Consortium leader and members) agreeing to entering into such consortium with each other for submission of bid for the NIT and authorizing designated executives of each company to sign in the MOU to be provided along with the technical bid.

xii) The MOU/Agreement should be legally valid i.e. it should be on a non-judicial stamp paper and notarized. In case of involvement of overseas bidder/consortium partner, the MOU/Agreement should be notarized/endorsed by Indian Embassy.

2.7 VINTAGE: Vintage clauses for individual services shall be as follows;

Service Details	Vintage Clause
a) Cementing Service	-Cementing Unit/Batch mixture shall not be of more than 10 (Ten) years old as on the original bid closing date. -Bidder has to submit relevant documents in support of this vintage clause.
b) Mud Engineering Service	-Lab equipment as applicable shall not be of more than 07 (Seven) years old as on the original bid closing date. -Bidder has to submit relevant documents in support of this vintage clause.
c) Wire line Logging service	-All downhole tools including surface unit must have a vintage of not more than 07 (seven) years from the date of manufacturing as on the original Bid closing date. - Bidder has to submit relevant documents in support of this vintage clause.
d) Directional Drilling Service (Regular)	-Tools should either be new or recently refurbished. In case of refurbished tools, the refurbishment should not be more than 06(six) months old as on the original bid closing date.
e) Mud Logging Unit (MLU) service	-The Mud Logging Unit should not be more than 03 (three) years old and must be latest ISO/DNV certified as on the original bid closing date.
f) Call out service – Directional Drilling Service	-Tools should either be new or recently refurbished. In case of refurbished tools, the refurbishment should not be more than 06(six) months old as on the mobilization of the call out services.

f) Call out service –Liner Hanger Service	-Well consumables must be new/unused and have a vintage of not more than 03 (three) years from the date of manufacturing at the time of actual operation at the well.

Note: Documentary evidences must be provided in regard to ownership and proof of vintage as above together with the technical specifications for the Cementing Unit/Batch mixture and Wire line Logging unit. Also an **Undertaking** on the compliance of the Vintage requirement and a **Certification** to confirm that all the equipment/Tools will be deployed in well maintained and perfect working condition must be submitted alongwith the Techno-commercial bid. Documentary proof in respect of vintage for the Cementing Unit/Batch mixture and Wire line Logging unit should be submitted with the techno-commercial bid (un-priced) in the form of copies of relevant purchase order, B/L or invoice or any other documentary evidence that can substantiate the date of purchase/manufacture etc.

2.8 **MOBILIZATION**: Mobilization period for respective services under the Bundled Service would be as follows;

Service Details	**Mobilization period**
a) Cementing Service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
b) Mud Engineering Service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
c) Wire line Logging service	To be mobilized as per the well requirement, which will be responsibility of the bundled service provider
d) Directional Drilling Service (Regular)	To be mobilized as per the well requirement, which will be responsibility of the bundled service provider
e) Mud Logging Unit (MLU) service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
f) Call out service – Directional Drilling Service	Mobilization to be completed within 15 (Fifteen) days from the date of issue of mobilization Notice
f) Call out service – Liner Hanger Service	Mobilization to be completed within 15 (Fifteen) days from the date of issue of mobilization Notice

(a) Mobilization Notice shall be issued after issuance of LOA for this Bundled Service contract. The initial mobilization should be 90 days for the services and other respective services as per the well requirement. Offers indicating mobilization time more than 90 days mentioned above for individual service from the date of issue mobilization notice will be summarily rejected.

(b) Separate Mobilization notice will be served for the Services/tools/equipment/consumables for **Call out Services**.

(c) Details of Mobilization terms and conditions for respective services are to be followed as mentioned in individual Exhibits (1-7).

2.9 The bidder must undertake to provide all the resources and personnel with required qualification, experience, etc. for the various services as indicated in scope of work i.e. Exhibit-1 to Exhibit-7. An **Undertaking (as per Proforma-O)** in this respect to be submitted as part of techno-commercial bid/response.

2.10 Bidder should have well defined and documented QHSE policies/procedures to ensure quality and safe work performance during the operations. In support of the same, bidder is required to provide a brief on Health, Safety, Environment and Quality Assurance systems followed in the last 5 (five) years preceding the original bid closing date as part of techno-commercial bid/response.

2.11 The Bidder is required to have its own laboratory and testing facilities in India for the engineering, design and testing of equipment and systems wherever applicable. Documentary proof in this respect to be provided as part of techno-commercial bid/response.

3.0 FINANCIAL EVALUATION CRITERIA:

3.1 The bidder must have an **annual financial turnover** of at least of **INR 9.66 Crores** in any of the preceding three (03) financial/ accounting years reckoned from the original bid closing date.

3.2 **Net worth** of bidder must be **positive** for the preceding financial/ accounting year reckoned from the original bid closing date.

*[The **Net worth** to be considered against Clause No. 3.2 above, should be read in conjunction with the definition of Net worth as mentioned in Section 2 (57) of the Companies Act, 2013.]*

3.3 In case the bidder is a subsidiary company (should be a 100% subsidiary of the parent/ultimate parent/holding company) who does not meet financial criteria by itself and submits bid based on the financial strength of its parent/ultimate parent/holding company, then the parent/ultimate parent/holding company shall have an **annual financial turnover** of minimum **INR 9.66 Crores** during any of the preceding 03 (Three) financial/accounting years reckoned from the original bid closing date. **Net worth** of the parent/ultimate parent/holding company must be Positive for the preceding financial/accounting year.

3.4 In case of bid from Consortium of Companies as per Clause No. 2.6, any one member of the consortium shall have an annual financial turnover of minimum **INR 9.66 Crores** during any of the preceding 03 (Three) financial/accounting years reckoned from the original bid closing date and **positive Net Worth** for the preceding financial/accounting year. Other members of the consortium shall have an annual financial turnover of minimum **INR 4.83 Crores** during any of the preceding 03 (Three) financial/accounting years reckoned from the original bid closing date. **Net worth** of all the members must be **Positive** for the preceding financial/accounting year.

Notes to Clause 3.0 above:

(a) For proof of Annual Turnover & Net worth any one of the following documents must be submitted along with the bid:

(i) Audited Balance Sheet along with Profit & Loss account.

OR

(ii) A certificate issued by a practicing Chartered/Cost Accountant (with Membership Number and Firm Registration Number), as per format prescribed in **PROFORMA-L1.**

Note: Mention of UDIN (Unique Document Identification Number) is mandatory for all Certificates issued w.e.f. February 1, 2019 by Chartered Accountant in Practice.

(b) Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding **six months reckoned from the original bid closing date** *(If Central Board of Direct Taxes (CBDT) grants any extension, the same will be applicable)* and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial /accounting years excluding the preceding financial/accounting year shall be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year shall be considered. However, the bidder has to submit an undertaking in support of the same along with their technical bid as per **PROFORMA-L2.**

(c) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

(d) In case the bidder is a Government Department, they are exempted from submission of documents mentioned under Notes (a) and (b) above.

(e) Bid shall be rejected if not accompanied with adequate documentary proof in support of Annual Turnover and Net worth as mentioned in Clause Nos. 3.1 & 3.2.

(f) In case the bidder is a subsidiary company (should be a 100% subsidiary of the parent/ultimate parent/holding company), in addition to the document of proof of Annual Turnover & Net worth of the parent/ultimate parent/holding company, the bidder shall also submit the following:

i) Documents to substantiate that the bidder is a 100% subsidiary company of the parent/ultimate/holding parent company.

ii) Corporate Guarantee on parent/ultimate parent/holding company's letter head signed by an authorized official undertaking that they would financially support their subsidiary company for executing the project/job in case the same is awarded to them.

(g) In case the Audited Balance sheet and Profit Loss Account submitted along with the bid are in currencies other than INR, the bidder shall have to convert the figures in equivalent INR considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA Certificate is to be submitted by the bidder regarding converted figures in equivalent INR. ***Else, the Audited Balance Sheet and Profit & Loss Account shall be evaluated by considering the BC selling rate declared by State Bank of India (on the date on which the Audited Balance Sheet and Profit & Loss Account is signed) for conversion to INR.***

4.0 DOCUMENTS:

Bidders must furnish the following documentary evidences in support of fulfilling all the above requirement, failing which the bid shall be rejected.

(All Certificates and documentary evidences required to be submitted under this tender should be clearly legible and in the English language. If any certificate is submitted in a language other than English language, the same should be translated to English by a certified translator and submitted along with the bid. Illegible and incomplete certificates or documents or without English translation will not be considered for evaluation)

(a) **Identification of Services:** Bidder must categorically indicate the services proposed to be offered of its own (In-house) and/or those proposed to be offered through Tie-up with other service provider(s).

(b) **Technical Specifications Sheets** with brief description of equipment, tools, consumables, etc. for deployment in the event of a contract against indicated services.

(c) Categorical confirmation vide an **Undertaking** that the bidder shall deploy their experienced personnel for job execution in the event of a contract i.e. personnel for the various services with required qualification, experience, etc. as indicated in scope of work i.e. Exhibit-1 to Exhibit-7

(d) **Experience of Bidder:** Bidder must submit a statement in a tabular form as per table under **APPENDIX -A.1** indicating the details of jobs completed of their own in respect of experience criteria as mentioned in Clause 2.3 (b) for 03 nos of services under Clause No. 2.3 (a) during last 07 (seven) years reckoned from the original bid closing date.

Additionally, for the remaining services except those mentioned above in 2.3 (a), the bidder must also submit the **APPENDIX -A.1** indicating the details of jobs completed (either in-house or by service providers with whom the bidder is having Tie-up arrangement) against the experience requirement for respective services as mentioned under Clause 2.3 (c).

Notes to Clause 4.0 (d) above:

1. In support of the experience criteria of Clause No. 2.3 (b) and (c) above and as mentioned in Clause 4.0 (d), the bidder (and service provider, as the case may be) must furnish the following self-certified documentary evidence(s):

i) Copies of relevant pages of the contract document showing contract number, period of contract and scope of work.

ii) Completion certificate(s) or payment certificate(s) or any other documents which substantiate completion of the jobs, issued by the client(s) with contact details of the issuing person/organization (e-mail address, phone number/fax number.

iii) Only Letter of Intent (LOI)/Letter of Award (LOA) or Work Order(s) are not acceptable as evidence. Copies of Letter of Award (LOA)/Letter of Intent (LOI) along with bill payment/Service Entry Sheet (SES)/Certificate of Payment (COP) indicating the value of the job executed must be submitted. The Job Completion certificate should clearly mention the following:

a. Duration of Contract
b. Gross Value of Job Done
c. Job start & end date

d. Scope of work

2. With reference to experience criteria no. (ii) for Wireline Logging Service (Sl. No.1 of Clause 2.3 (c)), towards experience of 150 nos. of jobs, an **Undertaking** from the Authorized Signatory of Bidder/ Service Provider must be submitted.

3. Oil India Limited (OIL) reserves the right to contact the Client(s)/Vendors referred by the Bidder for authentication of the documents submitted by the Bidder. OIL may contact the clients/operators under intimation/copy to the respective Bidder. OIL will not be responsible for Client(s) not conforming or not replying to OIL's request for information. If OIL does not get an affirmative response within the stipulated time, then such Bidder's technical bid will be considered as non-responsive. It will be the responsibility of the Bidder to take up the matter with his Client(s) and arrange for the confirmation as desired by OIL. Otherwise the bid will be considered non-responsive and shall be rejected.

(e) Details of current work in hand and other contractual commitments of the Bidder (and service provider, as the case may be) must also be submitted in tabular form as per table under **APPENDIX-A.2**.

(f) **Financial Turnover of Bidder:** Statements to be furnished as per **Notes to Clause 3.0** above.

(g) **MOU/Agreement:** Valid legally tenable document, must be furnished in respect of tie-up arrangement/ Consortium as mentioned in the BEC/BRC.

(h) **Agreement between Bidder and Supporting Company, Parent/ Subsidiary Company Guarantee, Corporate Guarantee for Financial Standing:** Must be submitted, as may be applicable, pursuant to Clause 2.0 and 3.0 above, as per format attached herewith as **PROFORMA -S1, S2 and S3.**

(i) For the Cementing services, an **Undertaking** with categorical confirmation that the Bidder in the event of being awarded a contract, shall supply all the cement additives required for cementation job either directly or through tie-up with the following four international reputed cementing additives supply companies only.

1. M/s. Halliburton
2. M/s. BJ Services
3. M/s. Schlumberger
4. M/s. Weatherford

(j) In case of leased Tool/Equipment, the bidder must submit a copy of their Memorandum of Understanding/Lease Agreement concluded with the owner of the Cementing Unit. The above MOU/Agreement must be valid at least through the validity of bid with a specific stipulation that in the event of an award of contract by Company against this tender, the MOU/Agreement shall be kept valid for the entire period of contract including subsequent extension, if any.

(k) All the documents submitted towards compliance of BEC should be verified and certified by TPI as per Clause No. 10.0 below.

(l) **OIL reserves the right to ask for any Original or other relevant document to verify the certification**.

5.0 COMMERCIAL EVALUATION CRITERIA:

5.1 Bids shall be submitted under Composite Bid System i.e. Technical Bid and Priced Bid separately in the OIL's e-Tender portal. The Technical Bid is to be uploaded as per Scope of Work & Technical Specification of the tender in **"Technical**

Attachments" Tab and Priced Bid as per Proforma-B uploaded in the **"Notes & Attachments" Tab**. Bids shall be rejected outright if the prices are indicated in the technical bids. Bids not conforming to this two-bid system shall be rejected outright.

5.2 Bidder shall offer firm prices. Price quoted by the successful bidder must remain firm during the execution of the contract and not subject to variation on any account.

5.3 Bids should be valid for a period of **120 (One Hundred and Twenty)** days. Bids with shorter validity shall be rejected as being non-responsive.

5.4 Bid Security is not applicable against this tender. However, bidders shall submit along with their bid a signed **"Bid Security Declaration" (Proforma-E)** accepting that, if they withdraw or modify their bids during the period of validity; or if they are awarded the contract and they fail to sign the contract; or if they fail to submit performance security before the deadline defined in the NIT; they will be suspended for the period of two years. This suspension of two years shall be automatic without conducting any enquiry.

5.5 The Integrity Pact must be uploaded in OIL's E-Procurement portal along with the Technical Bid digitally signed by the same signatory who digitally signed the Bid i.e. who is duly authorized to sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid will be rejected.

5.6 Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.

5.7 The bid documents are non-transferable. Bid can only be submitted in the name of the bidder in whose name the User ID and Password have been issued. Unsolicited bids will not be considered and will be straightway rejected.

5.8 Any physical documents wherever called for, submitted by bidders shall contain no interlineations, white fluid erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such correction shall be initialed by the person or persons who has/have digitally signed the Bid.

5.9 Any Bid containing false statement will be rejected.

5.10 Bidders must quote clearly and strictly in accordance with the price schedule outlined in "Price Bid Format" of Bid Document, otherwise the Bid will be summarily rejected.

5.11 Bidders shall quote directly and not through their Agent/ Representative/Retainer/Associate.

5.12 Bidder must accept and comply with the following clauses as given in the Bid Document in toto failing which bid will be rejected:

i) Performance Security Clause
ii) Taxes Clause
iii) Insurance Clause
iv) Force Majeure Clause
v) Termination Clause
vi) Arbitration Clause
vii) Liability Clause

viii) Withholding Clause
ix) Liquidated damages Clause
x) Firm price
xi) Bid Security Declaration
xii) Integrity Pact

6.0 PRICE EVALUATION CRITERIA:

The bids conforming to the technical specifications, terms and conditions stipulated in the bidding document and considered to be responsive after subjected to bid evaluation criteria will be considered for further evaluation as per the price evaluation criteria given below:

6.1 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

6.2 The contract will be signed with successful bidder for the required services as per 'Scope of Work' of the IFB.

6.3 The bidders must quote their rates in the manner as called for vide "Schedule of Rates" under individual **Exhibits (1 to 7)** and the summarized price schedule format vide enclosed **Proforma-B**.

6.4 The quantities shown against each item in the "Price Bid Format (i.e. in Proforma-B)" shall be considered for the purpose of Bid Evaluation. It is, however, to be clearly understood that the assumptions made in respect of the number of days/parameters for various operations are only for the purpose of evaluation of the bid and the Contractor will be paid on the basis of the actual number of days/parameter, as the case may be.

6.5 **INTER-SE RANKING:** To ascertain the inter-se-ranking, the price comparison of the responsive bids will be made on Total Estimated Contract Cost, i.e., **TC – Total Cost for all the services under Bundled Services (all inclusive)** as mentioned below on the rates quoted by the bidders in the PRICE BID FORMAT as per **Proforma-B**, as follows:

TC – Total Cost for all the services under Bundled Services (All inclusive)

= **[CSC + MESC + WLSC + MLSC + DDRC + DDCC + LHCC]**

Where,

CSC–Cementing Service Cost (all inclusive) for 03 (three) nos. of wells

MESC- Mud Engineering Service Cost (all inclusive) for 03 (three) nos. of wells

WLSC- Wire Line Service cost (all inclusive) for 03 (three) nos. of wells

MLSC-Mud Logging Service cost (all inclusive) for 03 (three) nos. of wells

DDRC- Directional Drilling Service (Regular) cost (all inclusive) for 01 (one) no. of well.

DDCC- Directional Drilling Service (Call out) cost (all inclusive)- 01 (one) Service

LHCC- Liner Hanger Service (Call out) cost (all inclusive)-01 (one) each for 7" and 5" Liner

NOTE: The description of above items/services are defined under respective exhibits and Schedule of Rates/Price bid format.

6.6 Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST). To ascertain the inter-se-ranking, the comparison of the responsive bids will be made subject to loading for any deviation. Commercial Bids shall be evaluated taking into account the rates quoted in the Price Bid Format as per '**Proforma-B'.**

6.7 OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.

However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

6.8 Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST.

When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/Contracts will be binding on the bidder.

6.9 Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & the bids will be evaluated based on total price including GST.

6.10 **Based on the price bid evaluation of techno-commercially qualified bidders, the job will be awarded to L-1 bidder.**

7.0 <u>PURCHASE PREFERENCE TO MICRO AND SMALL ENTERPRISES</u>:

Purchase Preference to Micro and Small Enterprises registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME:

7.1 In case participating MSEs Quote price within price band of L1+15%, such MSE shall be considered for award of contract by bringing down their price to L1 price in a situation where L1 price is from someone other than an MSE.

7.2 In case of more than one such MSE qualifying for 15% purchase preference, the contract shall be awarded to lowest eligible MSE amongst all the MSEs qualifying for 15% purchase preference.

7.3 **Documentation required to be submitted by MSEs:**

Categorization and various criteria applicable to MSE bidders shall be guided by the Gazette Notification No. CG-DL-E-26062020-220191 dated 26.06.2020 issued by MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISE.

Bidders claiming the MSE status (MSE-General, MSE-SC/ST, MSE-Woman) against this tender has to submit the following document along with the technical bid for availing the benefits applicable to MSEs:

i. Udyam Registration Number with Udyam Registration Certificate.

OR

ii. Proof of registration with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or Udyog Aadhaar registration or registration with any other body specified by Ministry of MSME.

Note: In case bidding MSE is owned by Schedule Caste or Schedule Tribe or Woman entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur/Woman entrepreneur should also be enclosed.

7.4 Provisions such as seeking support from another company by way of Technical Collaboration, submission of JV/consortium bid etc., wherever allowed in the tender document shall be available to all interested bidders including MSEs. In those scenarios, MSE quoting on the strength of Technical Collaborators shall be eligible for the benefits reserved for MSEs (i.e. purchase preference). However, in case of submission of JV/consortium bids by MSEs (i.e. purchase preference), the MSE bidder shall have to rely on their own strength or on the strength of another MSE only to meet the various tender requirement including technical and financial evaluation criteria. Further, in case of bid from incorporated JV/consortium, in order to avail the benefits, all the members of the bidder i.e. incorporated JV/consortium shall have to be MSE.

8.0 PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT) (PP-LC): Purchase preference policy-linked with Local Content (PP-LC) - notified vide letter no. FP-20013/2/2017-FP-PNG dated 17th November, 2020 of MoPNG shall be applicable in this tender. [copy of the **notification is enclosed as Appendix-I].** Bidders to check the provisions of the Notification and their eligibility to bid and any claim on **Purchase preference.** Purchase preference will be applicable as per the Notification(s) and any amendment thereof.

8.1 Bidders seeking benefits, under Purchase Preference Policy (linked with Local Content) (PP-LC) shall have to comply with all the provisions of the **notification no.**

FP-20013/2/2017-FP-PNG dated 17th November, 2020 or subsequent amendments, if any.

8.2 Where both MSE and PPLC bidder(s) are entitled to Purchase Preference and neither of them is L-1, eligible MSE(s) (in order of ranking among MSEs) shall get preference over eligible PPLC bidder(s) to match their rates with that of L-1 bidder for award of contract. However, if eligible MSE(s) decline(s) to match down the price, then the eligible PPLC bidder(s) in order of ranking among themselves shall be given the opportunity to match down its price to the price of L-1 bidder for award of contract.

8.3 Where MSE is already L-1 in the tender evaluation, contract for L-1 portion shall be straightway awarded to MSE, without considering any Purchase Preference for PPLC bidder.

8.4 In case L-1 bidder is a PP-LC bidder, purchase preference shall be resorted to MSE bidder as per 'PPP for MSE-Order 2012'.

8.5 In case of participation of MSE and LC vendor against the tender, MSE vendor will be given preference over LC bidder to match with L1 bidder as per Public Procurement Policy. MSE vendor will be evaluated with 15% PP and LC vendor will be evaluated with **20% PP** as MSE vendor does not have Local Content conditions as per Public Procurement Policy and the PP-LC policy is not applicable for DMEP and MSME.

9.0 CUSTOMS DUTY: In terms of Sl. No. 404 of the Customs Notification No.50/2017-Cus dated 30.06.2017, imports of the items specified in List 33 of the Notification are subject to levy of concessional rate of customs duty @5% (BCD Nil & IGST @5%) subject to conditions specified therein (Condition No. 48). However, this is subject to change as per Government guidelines and the provisions ruling at the time of tender closing will be applicable.

9.1 Similarly, the domestic supply of such goods would attract 5% GST (i.e. IGST or CGST & SGST/UTSGT) on submission of EC in terms of GST Notification No. 03/2017.

10.0 VERIFICATION AND CERTIFICATION OF DOCUMENTS BY INDEPENDENT THIRD PARTY INSPECTION AGENCIES:

10.1 Oil India Limited (OIL) has engaged the following 09 (Nine) Independent Inspection Agencies for a period of 04 (four) years with effect from 06.05.2020 to verify and certify various documents required against BEC/BRC of the tender:

Sl. No.	Name of Independent Inspection Agency	Contact E-mail ID
i.	M/s. RINA India Pvt. Ltd.	a. ssd@rina.org b. Andrea.Vattuone@rina.org
ii.	M/s. Dr. Amin Controllers Pvt. Ltd.	a. rkjain@rcaindia.net b. info@rcaindia.net

iii.	M/s. Germanischer Llyod Industrial Services GmbH (DNV GL- Oil & Gas)	a. mangesh.gaonkar@dnvgl.com
iv.	M/s. TÜV SÜD South Asia Pvt. Ltd.	a. Jaimin.Bhatt@tuv-sud.in b. sanjaykumar.singh@tuv-sud.in c. Pankaj.Narkhede@tuv-sud.in d. Ajit.Yadav@tuv-sud.in
v.	M/s. IRCLASS Systems and Solutions Private Limited	a. abhishek.singh@irclass.org b. pradeep.bansal@irclass.org c. Asim.Hajwani@irclass.org d. Amit.Ketkar@irclass.org e. industrial_services@irclass.org
vi.	M/s. Gulf Llyods Industrial Services (India) Pvt. Ltd.	a. contact@gulflloyds.com b. bbhavsar@gulfllyods.com c. inspection@gulflloyds.com d. gulflloyds.india@gmail.com
vii.	M/s. TUV India Private Limited	a. salim@tuv-nord.com b. delhi@tuv_nord.com
viii.	M/s. TÜV Rheinland (India) Pvt. Ltd.	a. Shailesh.Deotale@ind.tuv.com b. ravi.kumar@ind.tuv.com c. rupeshkumar.singh@ind.tuv.com d. Neeraj.Chaturvedi@ind.tuv.com
ix.	M/s. Bureau Veritas (India) Private Limited	a. udit.chopra@bureauveritas.com b. vishal.sapale@bureauveritas.com c. dinesh.sukhramani@bureauveritas.com d. p.sridhar@bureauveritas.com e. hariprasad.jhawar@bureauveritas.com f. amit.shaw@bureauveritas.com g. business.support@bureauveritas.com h. labhanshu.sharma@bureauveritas.com i. pramodkumar.yadav@bureauveritas.com j. sonal.lad@bureauveritas.com k. bvindia.corporate@in.bureauveritas.com

10.2 The Bidders have to get verified and certified the various documents required against BEC/BRC of the tender by anyone of the above Independent Inspection Agencies and submit the duly certified Inspection Certificate by the Inspection Agencies along with the Technical Bid of the Tender. All Charges of the Third-party Independent Inspection Agencies towards verification of bidder's documents and certification thereof shall be borne by the respective bidders and Payments on account of above inspection, verification and certification shall be made directly by the Bidder to the Inspection Agency(s). OIL will not be responsible for any payment dispute between Bidders and Third Party Inspection Agencies.

10.3 As mentioned above, Bidder(s) have to submit the verified documents along with the Technical Bids. Bid submitted with un-verified supporting documents shall not be considered. However, in case a bidder submits its bid alongwith all relevant supporting documents as per BEC/BRC without getting all/some of them verified by the designated Independent Inspection agency, such bid can be provisionally considered provided it is accompanied by an Undertaking by the Bidder on their official letterhead to submit the duly verified copies/verification certificate within 07 (Seven) days of bid opening. Company will neither send any reminder nor seek any clarification in this regard from such bidders, and the bid will be rejected outright if the bidder fails to submit the verified copies/verification certificate within 07 (Seven) days of bid opening at its own risk and responsibility.

10.4 The methodology of inspection/ verification of documents followed by the agencies is broadly as under but not limited to:

(a) It is obligatory on the part of the interested Bidders, who choose to participate against the tender, to understand the tender requirements in entirety and the requisite documents sought for in support of the Bid Rejection & Bid Evaluation Criteria (BEC/BRC) mentioned in the tender in particular. The Bidder must produce all the appropriate documents before any of the OIL's empaneled third party certifying agencies for verification/certification. Neither OIL nor the third party certifying agency shall be held accountable in any manner regarding the choice of documents by the bidder for verification. Therefore, getting the appropriate documents inspected/verified by the agency in support of BEC/BRC clauses is the sole responsibility of the Bidder.

(b) The prospective bidder shall contact any of the empaneled inspection agencies. The agency shall go through the Tender Document, especially the requirements of BEC/BRC and list the documents to be verified. They shall depute their qualified/competent inspector to the Bidder's premises to check the original documents and certify the copies which the bidder shall submit along with their bids. OIL will reserve the right to ask the inspection agencies to verify the documents with source, if required **at no extra cost to OIL. Verification of documents by OIL's empaneled third party agency shall not automatically make the bidder eligible for award of contract**.

(c) Verification of documents (but not limited to) are normally categorized as under:

i. General Requirement:

- Check Bidder's PAN Card
- Check Bidder's GST Certificate
- Check ITR of Bidder
- Check Bidder's Certificate of Incorporation/ Registration under Applicable Act – Domestic Bidder.

ii. Additional Documents : (If applicable against the tender)

- Joint Ventures Agreements – To cross-check with JV Partners
- Consortium Agreements – To cross-check with Consortium Partners
- Holding/Parent/Subsidiary/Sister Subsidiary/Co-Subsidiary Company – To check the Share Holding pattern

iii. Technical Criteria

- To check Experience Proof- Completion Certificates, Reference contact verification, Original Work Order/Contract Copy and any other document(s), if called for vide BEC/BRC of the Tender.

iv. Financial Criteria

- Check and verify Audited Balance Sheet/CA certificate
- To check the Line of Credit, if incorporated in the tender.

Notes:

(i) If any documents LOI/LOA/Contracts etc. are submitted towards BEC/BRC experience criteria issued by Oil India Limited, such documents need not be verified by TPI agency.

(ii) Undertaking from TPI Agency as per format (**Proforma-P**) enclosed should be submitted along with the Bid.

11.0 GENERAL:

11.1 In case bidder takes exception to any clause of bid document not covered under BEC, then the Company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw/modify the deviation when/as advised by company. The loading so done by the Company will be final and binding on the bidders.

11.2 To ascertain the substantial responsiveness of the Bid the Company reserves the right to ask the bidder for clarification in respect of clauses under BEC also and such clarifications fulfilling the BEC clauses in toto must be received on or before the deadline given by the Company, failing which the offer will be summarily rejected.

11.3 If any of the clauses in the BEC contradict with other clauses of the Bid Document elsewhere, then the clauses in the BEC shall prevail.

12.0 **COMPLIANCE OF THE COMPETITION ACT, 2002**: The bidder shall strictly comply with the provisions of the Competition Act, 2002, more particularly, Section-3 of the Act. Any violation of the provisions of the Act shall attract penal action under the Act.

END OF PART-2

&&&&&

Part-3
SECTION-I
GENERAL CONDITIONS OF CONTRACT (GCC)

1.0 APPLICABILITY, DEFINITION & INTERPRETATION

1.1 Applicability

All clauses in the General Conditions of Contract [GCC] shall apply to all transactions except as otherwise stated in the Special Conditions of Contract [SCC] and/or BEC/BRC. Furthermore, in the event if there is any conflict between the Principal text of the Agreement and the Appendixes, the Principal text will prevail.

1.2 Definition & Interpretation

In the contract (as hereinafter defined) the following words and expressions shall have the meaning hereby assigned to them except where the context otherwise requires:

1.2.1 COMPANY/OIL/Operator:

Shall mean Oil India Limited [OIL] a public sector undertaking, incorporated under COMPANY's Act 1956 having its registered office at Duliajan-786602, Assam, India and includes its successor and permitted assigns.

1.2.2 CONTRACTOR:

Shall mean the person or persons, firm or COMPANY or corporation incorporated in India or abroad, who has been awarded with the contract and includes contractor's legal representatives, his successors and permitted assigns.

1.2.3 Contract:

Shall mean a written agreement between the COMPANY and the CONTRACTOR for execution of the services/works including all contract documents and subsequent amendments, if any.

1.2.4 Site:

Shall mean the place in which the operations/services are to be carried out or places approved by OIL for the purposes of the CONTRACT together with any other places designated in the CONTRACT as forming part of the site.

1.2.5 COMPANY's Site Representative/Engineer:

Shall mean the person or the persons appointed by the COMPANY from time to time to act on its behalf at the site for overall co-ordination, supervision and project management at site.

1.2.6 Sub-Contract:

Shall mean order/contract placed by the CONTRACTOR for any portion of the CONTRACT or work sublet with necessary written consent of COMPANY on third party. Such sub-letting shall not relieve the CONTRACTOR from any obligation, duty or responsibility under the CONTRACT.

1.2.7 Sub-Contractor:

Shall mean any person or firm or COMPANY (other than CONTRACTOR) to whom any part of the work has been entrusted by CONTRACTOR, with written consent of OIL or the persons appointed by OIL, successors and permitted assigns of such persons, firm or COMPANY).

1.2.8 Contractor's Representative:

Shall mean such person/or persons duly appointed representative at the site and base as the CONTRACTOR may designate in writing to the COMPANY as having authority to act for the CONTRACTOR in matters affecting the work and to provide the requisite services.

1.2.9 Contract Price/Value:

Shall mean the sum accepted or the sum calculated in accordance with the rates accepted in tender and/or the contract rates as payable to the CONTRACTOR for the entire execution and completion of the services/works, including amendments/modification/change order issued by the COMPANY.

1.2.10 Firm price:

The prices will remain unchanged, except for statutory changes, during currency of the CONTRACT unless specifically agreed to in writing by COMPANY.

1.2.11 Service/Works/Operations:

Shall mean and include all items and things to be supplied/done and all work/Service to be performed by the CONTRACTOR as specified in the Scope of Work under this CONTRACT and shall also include all extra, additional, altered or substituted works/services as required for the purpose of successful execution of the Contract.

1.2.12 Equipment/Materials/Goods:

Shall mean and include any equipment, machinery, instruments, stores, goods which CONTRACTOR is required to provide to the COMPANY for/under the CONTRACT and amendments thereto.

1.2.13 Drawings:

Shall mean and include all Engineering sketches, general arrangements/layout drawings, sectional plans, all elevations, photographs, etc. related to the CONTRACT together with modification and revision thereto.

1.2.14 Specifications:

Means and includes all technical specifications, provision attached and referred to in the tender/contract document regarding method and manner of performing the services and qualities of the service/materials to be provided under the contract and also as modified by the COMPANY/its site representative during the execution of contract in the best interest of service.

1.2.15 Engineer In-charge (EIC):

Shall mean the person designated from time to time by the COMPANY and shall include those who are expressly authorized by the COMPANY to act for and on its behalf for operation of the contract.

1.2.16 Inspectors:

Shall mean any person or outside Agency nominated by COMPANY to inspect equipment, materials and services, if any, in the CONTRACT (stage wise as well as final) as per the terms of the CONTRACT.

1.2.17 Tests:

Shall mean such process or processes to be carried out by the CONTRACTOR as are prescribed in the CONTRACT, considered necessary by the COMPANY or their representative to ascertain quality, workmanship, performance and efficiency of equipment or services thereof.

1.2.18 Approval:

Shall mean and include the written consent duly signed by COMPANY or their authorized official in respect of all documents, drawings or other particulars in relation to the CONTRACT.

1.2.19 Day:

Shall mean a calendar day of twenty –four (24) consecutive hours beginning at 00:00 hours with reference to local time at the site.

1.2.20 Month:

Shall mean a calendar month as per Gregorian calendar.

1.2.21 Year:

Shall mean calendar year as per Gregorian calendar.

1.2.22 Working day:

Means any day which is not declared to be holiday by the COMPANY.

1.2.23 Bid/offer:

Shall mean the proposal/Offer along with supporting documents submitted by the bidder in response to the tender or enquiry in accordance with the terms of Tender or Enquiry, for consideration by COMPANY, prior to award of contract.

1.2.24 Guarantee:

Shall mean the period and other conditions governing the warranty/guarantee of the services as provided in the CONTRACT.

1.2.25 Mobilization:

Shall mean rendering the equipment fully manned and equipped as per CONTRACT and ready to begin work at site designated by the COMPANY and accepted by the COMPANY after inspection.

1.2.26 De-mobilization:

Shall mean the removal of all items forming part of the mobilization from the site of the COMPANY and inspection and acceptance thereafter by the COMPANY including compliance of requirement in relation to re-export of imported equipment/materials under concessional duty scheme in accordance with relevant notification from Customs Authorities.

1.2.27 Wilful Misconduct:

Shall mean intentional disregard of good and prudent standards of performance or proper conduct under the Contract with knowledge that it is likely to result in any injury to any person or persons or loss or damage of property of the Company or Third Party.

1.2.28 Gross Negligence:

Shall mean any act or failure to act (whether sole, joint or concurrent) by a person or entity which was intended to cause, or which was in reckless disregard of or unjustifiable indifference to, avoidable and harmful consequences such person or entity knew, or should have known, would result from such act or failure to act. Notwithstanding the foregoing, Gross negligence shall not include any action taken in good faith for the safeguard of life or property.

1.2.29 Criminal Negligence:

Shall mean that the crime happened negligently, there was duty of care upon the Person but inadvertently due to his negligence, the duty was breached, which causes harm to the people in the form of death or serious injury.

1.2.30 GST Legislations:

'GST legislations' means 'any or all of the following legislations as may be applicable to the CONTRACTOR and OIL:

(A) The Central Goods & Services Tax Act, 2017;

(B) The Integrated Goods & Services Act, 2017;

(C) The Union Territory Goods & Services Tax Act, 2017;

(D) The respective State Goods & Service Tax Acts'

(E) The Goods and Services (Compensation to States) Act, 2017

(F) The Customs Act and the Customs Tariff Act.

(G) Any other applicable Act related to GST

2.0 CONTRACT DOCUMENT:

2.1 Governing language: The governing language for the CONTRACT shall be English. All CONTRACT documents and all correspondence and communication to be given and all other documentation to be prepared and supplied under the CONTRACT shall be written in English and the CONTRACT shall be construed and interpreted in accordance with English language.

2.2 Entire Agreement: The CONTRACT constitutes the entire agreement between OIL and the CONTRACTOR with respect to the subject matter of the CONTRACT and supersedes all communication, negotiations and agreement (whether written or oral) of the parties with respect thereto made prior to the date of this agreement, unless such communication(s) expressly forms part of the contract or included by reference.

2.3 Amendment in CONTRACT: No Amendment of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto. OIL shall not be bound by any printed conditions, provisions in the CONTRACTOR's BID, forms of acknowledgement of CONTRACT, invoice and other documents which purport to impose any condition at variance with or supplement to CONTRACT.

3.0 WAIVERS AND AMENDMENTS:

3.1 Waivers: It is fully understood and agreed that none of the terms and conditions of this contract shall be deemed waived by either party unless such waiver is executed in writing only by the duly authorized representatives of both the parties. The failure of either party to execute any right shall not act as a waiver of such right by such party.

3.2 Change Program: It is agreed that CONTRACTOR shall carry out work in accordance with the completion program (e.g. Drilling Programme) to be furnished by the COMPANY, which may be changed from time to time by reasonable modifications in the program as COMPANY sees fit. COMPANY's instruction in this regard shall be final and binding.

4.0 CONTRACT TIMELINE:

4.1 Effective Date of Contract:
The contract shall become effective as of the date COMPANY notifies the CONTRACTOR in writing that it has been awarded the contract. This date of issuance of Letter of Award (LOA) by the COMPANY will be the effective date of contract. All terms and conditions of the contract shall come into force with the date of issuance of LOA.

4.2 Date of Commencement of Operation:
The date on which the mobilization is completed in all respects and CONTRACTOR is ready to commence operation as per the contract provision [Certified by the COMPANY's representative] will be treated as the date of Commencement of Operation.

4.3 Duration of the contract:
The contract shall be valid for a period as defined in the LOA and Special Conditions of Contract [SCC].

5.0 SCOPE OF WORK/CONTRACT:

Scope of the CONTRACT shall be as defined in the CONTRACT, specifications, drawings and Appendices.

6.0 GENERAL OBLIGATION OF CONTRACTOR:

CONTRACTOR shall, in accordance with and subject to the terms and conditions of this Contract:

6.1 Perform the work described in the Terms of Reference/Scope of Work. The CONTRACTOR shall execute the work with professional competence and in an efficient and workman like manner.

6.2 Except as otherwise provided in the Terms of Reference and the special Conditions of the contract, employ all labours/personnel as required to perform the work.

6.3 Perform all other obligations, work and services which are required by the terms of this contract or which reasonably can be implied from such terms as being necessary for the successful and timely completion of the work.

6.4 Comply with all applicable statutory obligations specified in the contract.

6.5 CONTRACTOR shall be deemed to have satisfied himself before submitting their bid as to the correctness and sufficiency of its bid for the services required and of the rates and prices quoted, which rates and prices shall, except insofar as otherwise provided, cover all its obligations under the contract.

6.6 CONTRACTOR shall be deemed, prior to submitting their bids, to have satisfied themselves about the weather conditions, working culture in the area, socio-political environment, safety & security aspects, law & order situation and law of the land, and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

6.7 CONTRACTOR shall give or provide all necessary supervision during the performance of the services and as long thereafter within the warranty period as COMPANY may consider necessary for the proper fulfilling of CONTRACTOR's obligations under the contract.

7.0 GENERAL OBLIGATION OF COMPANY:

COMPANY shall, in accordance with and subject to the terms and conditions of this contract:

7.1 Pay CONTRACTOR in accordance with terms and conditions of the contract.

7.2 Allow CONTRACTOR access, subject to normal security and safety procedures, to all areas as required for orderly performance of the work as specified in the Scope of Works of the contract or work connected therewith.

7.3 Perform all other obligations required of COMPANY by the terms of this contract.

8.0 DUTIES AND POWER/AUTHORITY:

8.1 OIL's site representative/engineer:

The duties and authorities of OIL's site representative/engineer are to act on behalf of OIL for:

(a) Overall supervision, co-ordination and Project Management at site.

(b) Proper and optimum utilization of equipment and services.

(c) Monitoring of performance and progress

(d) Commenting/countersigning on reports made by the CONTRACTOR's representative at site in respect of works, receipts, consumption etc. after satisfying himself with the facts of the respective cases.

(e) He shall have the authority, but not obligation at all times and any time to inspect/test/examine/verify any equipment machinery, instruments, tools, materials, personnel, procedures and reports etc. directly or indirectly pertaining to the execution of the work. However this shall not construe to imply an acceptance by the inspector. Hence, the overall responsibility of quality of work shall rest solely with the CONTRACTOR.

(f) Each and every document emerging from site in support of any claim by the CONTRACTOR has to have the countersignature/comments of the OIL's representative/engineer without which no claim shall be entertained by the OIL.

8.2 CONTRACTOR's representative:

(a) The CONTRACTOR's representative shall have all the powers requisite for the performance of the Service/Works, subject to holding due authorization from the CONTRACTOR.

(b) Representative(s) shall liaise with OIL's representative/engineer for the proper co-ordination and timely completion of the works and on any matter pertaining to the works.

(c) Representative(s) shall extend full co-operation to OIL's representative/inspector/engineer in the manner required by them for supervision/inspection/observation of equipment, material, procedures, performance, reports and records pertaining to works.

(d) To have complete charge of CONTRACTOR's personnel engaged in the performance of the work and to ensure compliance of rules and regulations and safety practice.

9.0 Personnel to be deployed by contractor:

CONTRACTOR warrants that it shall provide competent, qualified and sufficiently experienced personnel to perform the work correctly and efficiently.

9.1 The CONTRACTOR should ensure that their personnel observe all statutory safety requirement including those prescribed by the COMPANY. Upon COMPANY's written request, CONTRACTOR, entirely at its own expense, shall remove immediately any personnel of the CONTRACTOR determined by the COMPANY to be unsuitable and shall promptly replace such personnel with personnel acceptable to the COMPANY. Replacement personnel should be mobilized within 15 days from the date of issuance of notice without affecting the operation of the COMPANY.

9.2 The CONTRACTOR shall be solely responsible throughout the period of the contract for providing all requirements of their personnel including but not limited to, their transportation to & fro from Duliajan/field site, enroute/ local boarding, lodging, personal protective gear & medical attention etc. COMPANY shall have no responsibility or liability in this regard.

9.3 However, COMPANY shall provide available medical assistance/facilities to CONTRACTOR's Personnel in case of emergency at its own establishment on chargeable basis.

9.4 CONTRACTOR's key personnel shall be fluent in English language (both writing and speaking).

10.0 PERFORMANCE SECURITY:

10.1 On receipt of notification of award from the COMPANY, the CONTRACTOR shall furnish the Performance Security to COMPANY within 15 (fifteen) days from the date of issue of LOA for an amount specified in the Forwarding Letter and Letter of Award (LOA) as per Proforma-F and must be in the form of a Bank Draft/Cashier's cheque/Banker's cheque*/ NEFT/RTGS/Electronic fund transfer to designated account of OIL# or Fixed Deposit Receipt (account OIL INDIA LIMITED) or irrevocable Bank Guarantee or irrevocable Letter of Credit (LC) from:

10.2 Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic CONTRACTOR/service provider, or

10.3 In case of foreign CONTRACTOR/service provider, the bank guarantee can be accepted from any scheduled bank in India or from International bank who has its branch in India registered with Reserve Bank of India.

Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India.

Bank Guarantee issued by a Scheduled Bank of India at the request of some other Non-Schedule Bank of India shall not be acceptable.

10.4 Bank Guarantee issued by a Bank, amongst others, must contain the following particulars of such bank:

Full address.

Branch Code.

Code Nos. of the authorized signatory with full name and designation.

Phone Nos., Fax Nos., E-mail address.

10.5 The domestic CONTRACTOR/service provider(s) will have to submit the Bank Guarantee from any of the scheduled banks and on non-judicial stamp paper of requisite value as per the Indian Stamp Act, purchased in the name of the issuing banker.

10.6 The foreign CONTRACTOR/service provider(s) will submit the Bank Guarantee from Banks of Indian origin situated in their country. In case no such bank of Indian origin is situated in their country, the Bank Guarantee may be submitted from the bankers as specified above.

10.7 The Performance Security shall be denominated in the currency of the contract.

10.8 The Performance Security specified above must be valid for the entire duration of the Contract and claim period should be valid for a minimum of 03 (three) months beyond the contract period. The Performance Security will be discharged by COMPANY not later than 30 days following its expiry of claim period. In the event of any extension of the Contract period, Bank Guarantee should be extended by CONTRACTOR by the period equivalent to the extended period.

10.9 The Performance Security shall be encashed by COMPANY on account of CONTRACTOR's failure to fulfil its obligations under the Contract and/or non-performance/un-satisfactory of the Contractor. Company shall not be required to proof any loss or damage on account of Contractor's non-performance/un-satisfactory performance.

10.10 The Performance Security will not accrue any interest during its period of validity or extended validity.

10.11 Failure of the successful Bidder to comply with the requirements of clause 10.0 shall constitute sufficient grounds for annulment of the award and forfeiture of the Bid Security. In such an eventuality, action will be initiated as per the Banning Policy of OIL in vogue.

#Subject to credit in OIL's account within prescribed time

*The validity of Bank Draft/Cashier's/Banker's cheque (as applicable) should not be less than 3 months.

In the event CONTRACTOR fails to honour any of the commitments entered into under this agreement, and/or in the event of termination of the contract under provisions of Integrity Pact and/or in respect of any amount due from the CONTRACTOR to OIL, OIL shall have unconditional option under the guarantee to invoke the above bank guarantee and claim the amount from the bank. The bank shall be obliged to pay the amount to OIL on demand.

11.0 SIGNING OF CONTRACT:

11.1 The successful bidder is required to sign a formal detailed contract with OIL within a maximum period of 60 days of date of LOA. Until the contract is signed, the LOA as well as GCC & SCC as prescribed in the Tender, shall remain binding amongst the two parties. In the event of failure on the part of the successful Bidder to sign the contract, OIL reserves the right to terminate the LOA issued to the successful Bidder and invoke the Bid Security or the Performance Security if submitted by the successful Bidder. Such CONTRACTOR shall be put on holiday as per the Banning Policy of OIL [available at www.oil-india.in].

12.0 CLAIMS, TAXES & DUTIES:

12.1 Claims:

CONTRACTOR agrees to pay all claims, taxes and fees for equipment, labour, materials, services and supplies to be furnished by it hereunder and agrees to allow no lien or charge resulting from such claims to be fixed upon any property of COMPANY. COMPANY may, at its option, pay and discharge any liens or overdue charges for CONTRACTOR's equipment, labour, materials, services and supplies under this CONTRACT and may thereupon deduct the amount or amounts so paid from any sum due, or thereafter become due, to CONTRACTOR hereunder.

12.2 Notice of claims:

CONTRACTOR or COMPANY, as the case may be, shall promptly give the other, notice in writing of any claim made or proceeding commenced for which that party is entitled to indemnification under the CONTRACT. Each party shall confer with the other concerning the defense of any such claims or proceeding, shall permit the other to be represented by counsel in defense thereof, and shall not affect settlement of or compromise any such claim or proceeding without the other's written consent.

12.3 Taxes:

12.3.1 CONTRACTOR, unless specified otherwise in the CONTRACT, shall bear all tax liabilities, duties, Govt. levies etc. including GST and customs duty, Corporate and personnel taxes levied or imposed on the CONTRACTOR on account of payments received by it from the COMPNAY for the work done under this CONTRACT. It shall be the responsibility of CONTRACTOR to submit to the concerned Indian authorities, the returns and all other concerned documents required for this purpose and to comply in all respects with the requirements of the laws in this regard, in time.

12.3.2 Tax levied on CONTRACTOR as per the provisions of Indian Income Tax Act and any other enactment/rules on income derived/payments received under the contract will be on CONTRACTOR's account.

12.3.3 CONTRACTOR shall be responsible for payment of personal taxes, if any, for all the personnel deployed in India by CONTRACTOR.

12.3.4 The CONTRACTOR shall furnish to the COMPANY, if and when called upon to do so, relevant statement of accounts or any other information pertaining to work done under the contract for submitting the same to the Tax authorities, on specific request from them in accordance with provisions under the law. CONTRACTOR shall be responsible for preparing and filing the return of income etc. within the prescribed time limit to the appropriate authority.

12.3.5 Prior to start of operations under the contract, the CONTRACTOR shall furnish the COMPANY with the necessary documents, as asked for by the COMPANY and/or any other information pertaining to the contract, which may be required to be submitted to the Income Tax authorities at the time of obtaining "No Objection Certificate" for releasing payments to the CONTRACTOR.

12.3.6 Corporate income tax will be deducted at source from the invoice at the specified rate of income tax as per the provisions of Indian Income Tax Act as may be in force from time to time and COMPANY will issue TDS Certificate to the CONTRACTOR as per the provisions of Income Tax Act.

12.3.7 Corporate and personnel taxes on CONTRACTOR shall be the liability of the CONTRACTOR and the COMPANY shall not assume any responsibility on this account.

12.3.8 All local taxes, levies and duties, sales tax, octroi, etc. on purchases and sales made by CONTRACTOR shall be borne by the CONTRACTOR.

12.3.9 CONTRACTOR shall provide all the necessary compliances/invoice/ documents for enabling OIL to avail Input tax credit benefits in respect of the payments of GST which are payable against the CONTRACT. The CONTRACTOR should provide tax invoice issued under GST legislations for the goods and Services (indicating GST). Payment towards the components of GST shall be released by OIL only against appropriate documents i.e.: Tax Invoice/Bill of entry for availing input tax credit (as applicable).

12.3.10 The tax invoices as per above provisions should contain all the particulars as required under the invoicing rules under the GST legislations, including, but not limited to the following:

(i) Name, Address and the GST Registration Number (under the relevant Tax Rules) of the Service Provider (CONTRACTOR).

(ii) Name and Address and GST Registration Number of the Service Receiver (Address of OIL).

(iii) Description, Classification and Value of taxable service/goods and the amount of applicable tax (CGST, SGST, IGST, UTGST and cess).

12.3.11 In case of imported goods, CONTRACTOR/supplier is required to provide original Bill of Entry or copy of Bill of Entry duly attested by Custom authority.

12.3.12 The CONTRACTOR should mention the Place of supply in the invoice raised under GST Law.

12.3.13 OIL would not accept any invoice without its GSTIN mentioned on the invoice

***Note**: CONTRACTOR who is under composition levy of the GST legislation would raise Bill of supply instead of Tax invoice, which will have GSTIN of supplier as well as OIL.*

12.4 Goods and Services Tax:

12.4.1 "GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import/ interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

12.4.2 Where the OIL is entitled to avail the input tax credit of GST:

OIL will reimburse the GST to the Supplier of Goods/Services (Service Provider) at actual against submission of Invoices as per format specified in rules/regulation of GST to enable OIL to claim input tax credit of GST paid. In case of any variation in the executed quantities, the amount on which the GST is applicable shall be modified in same proportion. Returns and details required to be filled under GST laws &rules should be timely filed by supplier with requisite details.

12.4.3 Where the OIL is not entitled to avail/take the full input tax credit of GST:

OIL will reimburse GST to the Supplier of Goods/Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST subject to the ceiling amount of GST as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which GST is applicable will be modified on pro-rata basis.

12.4.4 The CONTRACTOR will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the CONTRACTOR shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/duties by the CONTRACTOR shall be to CONTRACTOR's account.

12.4.5 In case of statutory variation in GST, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/Services (Service Provider) shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid due date and on the date of revision.

12.4.6 Beyond the contract period, in case OIL is not entitled for input tax credit of GST, then any increase in the rate of GST beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate GST shall be passed on to the OIL.

12.4.7 Beyond the contract period, in case OIL is entitled for input tax credit of GST, then statutory variation in applicable GST on supply and on incidental services, shall be to OIL's account.

12.4.8 Claim for payment of GST/Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) GST, otherwise claim in respect of above shall not be entertained for payment of arrears.

12.4.9 The base date for the purpose of applying statutory variation shall be the Bid Opening Date.

12.4.10 The CONTRACTOR will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and the CONTRACTOR will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/E-way Bill, if applicable etc.

12.5 Anti-profiteering clause

12.5.1 As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices.

12.5.2 In case rating of Contractor is negative/black listed after award of work for supply of goods/services, then OIL shall not be obligated or liable to pay or reimburse GST to such vendor/Contractor and shall also be entitled to deduct/recover such GST along with all penalties/interest, if any, incurred by OIL.

13.0 CUSTOMS DUTY, IF APPLICABLE:

13.1.1 CONTRACTOR shall be responsible to import the equipment/tools/ spares/consumables etc. required for execution of the contract. The CONTRACTOR shall undertake to complete all the formalities as required under the Customs Act/Foreign Trade Policy (FTP) and indemnify OIL from all the liabilities of Customs in this regard.

13.1.2 CONTRACTOR will be solely responsible for payment of all applicable Customs Duty and to comply all Rules and Regulations. Total Contract Price/Value is inclusive of all Customs Duty, if not mentioned otherwise elsewhere in the Contract.

13.1.3 Above clause is to be read with Customs Duty Clause in SCC, if any.

14.0 INSURANCE:

14.1 CONTRACTOR shall at his own expense arrange secure and maintain insurance with reputed insurance companies to the satisfaction of the Company as follows:

Contractor at his cost shall arrange, secure and maintain insurance as may be necessary and to its full value for all such amounts to protect the works in progress

from time to time and the interest of Company against all risks as detailed herein. The form and the limit of such insurance, as defined here in together with the under works thereof in each case should be as acceptable to the Company. However, irrespective of work acceptance the responsibility to maintain adequate insurance coverage at all times during the period of Contract shall be that of Contractor alone. Contractor's failure in this regard shall not relieve him of any of his responsibilities & obligations under Contract. All costs on account of insurance liabilities covered under Contract will be to Contractor's account and will be included in Value of Contract. However, the Company may from time to time, during the currency of the Contract, ask the Contractor in writing to limit the insurance coverage risk and in such a case, the parties to the Contract will agree for a mutual settlement, for reduction in value of Contract to the extent of reduced premium amounts. Contractor shall cover insurance with Indian Insurance Companies.

14.2 Any deductible set forth in any of the above insurance shall be borne by Contractor.

14.3 CONTRACTOR shall require all of his sub-Contractor to provide such of the foregoing insurance coverage as Contractor is obliged to provide under this Contract and inform the Company about the coverage prior to the commencement of agreements with its sub-Contractors.

14.4 All insurance taken out by Contractor or their sub-contractor shall be endorsed to provide that the underwriters waive their rights of recourse on the Company and to the extent of the liabilities assumed by Contractor under this Contract.

14.5 Certificate of Insurance:

Before commencing performance of the CONTRACT, CONTRACTOR shall furnish OIL with certificates of insurance indicating:

a) Kinds and amounts of insurance as required herein
b) Details of coverage
c) Insurance corporation or companies carrying the aforesaid coverage
d) Effective and expiry dates of policies
e) That OIL shall be given thirty (30) days written advance notice of any material change in the policy
f) Waiver of subrogation endorsement has been attached to all policies and
g) The territorial limits of all policies.

14.6 Contractor shall also inform the Company at least 60 days in advance regarding the expiry cancellation and/or changes in any of such documents & ensure revalidation/renewal, etc., as may be necessary well in time.

14.7 If any of the above policy expire or/are cancelled during the term of this CONTRACT and CONTRACTOR fails for any reason to renew such policies, OIL in no case shall be liable for any loss/damage occurred during the term when the policy is not

effective. Furthermore, a penal interest @1% of the Total contract value shall be charged towards not fulfilling of the contractual obligations. Notwithstanding above, should there be a lapse in any insurance required to be taken by the Contractor for any reason whatsoever, loss/damage claims resulting therefrom shall be to the sole account of Contractor.

14.8 Contractor on demand from Company shall furnish the Insurance Policy having detail terms and conditions, with respect to any Certificate of Insurance submitted to the Company.

CONTRACTOR shall, at his own expense, arrange appropriate comprehensive insurance to cover all risks assumed by the CONTRACTOR under this CONTRACT in respect of CONTRACTOR's equipment, tools and any other belongings of the CONTRACTOR and its personnel as well deputed under this CONTRACT during the entire period of their engagement in connection with this CONTRACT including extensions if any. The CONTRACTOR shall also carry adequate insurance cover against damage/loss to third party person/property. OIL will have no liability on this account.

14.9 Principal Assured

The following are to be included as Principal Assured(s) in the Insurance Policies (except in case of Workmen's Compensation/Employer's Liability insurance):
"Oil India Limited, and CONTRACTOR's name (as appearing in the Contract /LOA)".

14.10 Waiver of subrogation:

All insurance policies of the CONTRACTOR with respect to the operations conducted hereunder as set forth in clauses hereof, shall be endorsed by the underwriter in accordance with the following policy wording:

"The insurers hereby waive their rights of subrogation against Oil India Limited or any of their employees or their affiliates and assignees".

14.11 Deductible:

The CONTRACTOR shall take policy with minimum deductible as per IRDA prescribed for the policy(ies). That portion of any loss not covered by insurance provided for in this article solely by reason of deductible provision in such insurance policies shall be to the account of the CONTRACTOR.

14.12 Compliance with Sec 25(1), of "The General Insurance Business (Nationalization) Act 1972"

Section 25(1) of "The General Insurance Business (Nationalization) Act 1972" is reproduced below:

"No person shall take out or renew any policy of insurance in respect of any property in India or any ship or other vessel or aircraft registered in India with an insurer whose principal place of business is outside India save with the prior permission of the Central Government".

The above requirement of aforesaid Act needs to be complied with by the CONTRACTOR wherever the aforesaid provisions of Act apply, and compliance confirmations submitted.

14.13 Loss Payee Clause:

The Insurance Policies should mention the following in Loss Payee Clause:
"In respect of Insurance claims in which OIL's interest is involved, written consent of OIL will be required".

14.14 On account payment to OIL in case of claim

In case any loss or damage happen and where OIL's interest is involved, OIL reserves the right to recover the loss amount from the CONTRACTOR prior to final settlement of the claim.

14.15 CONTRACTOR shall require all of its SUB-CONTRACTORs to provide such of the foregoing insurance cover as the CONTRACTOR is obligated to provide under this CONTRACT.

14.16 CONTRACTOR shall at all time during the currency of the contract provide, pay for and maintain the following insurance amongst others:

i) **Workman Compensation and/Employers' Liability Insurance**: Workmen's compensation and employer's liability insurance as required by the laws of the country of origin of the employee.

ii) **Commercial General Liability Insurance**: Commercial General Public Liability Insurance covering liabilities including contractual liability for bodily injury, including death of persons, and liabilities for damage of property. This insurance must cover all operations of CONTRACTOR required to fulfil the provisions under this Contract.

iii) **Comprehensive General Automotive Liability**: Automobile Public Liability Insurance covering owned, non-owned and hired automobiles used in the performance of the work hereunder, with bodily injury limits and property damage limits shall be governed by Indian Insurance Regulations.

iv) **Carrier's Legal Liability Insurance:** Carrier's Legal Liability Insurance in respect of all CONTRACTOR's items to be transported by the CONTRACTOR to the site of work, for physical loss or destruction of or damage to goods or merchandise, while in transit.

v) **Public Liability Act Policy:** Public Liability Act Policy covering the statutory liability arising out of accidents occurring during the currency of the contract due to handling hazardous substances as provided in the Public Liability Insurance Act 1991 and the Rules framed there under.

vi) **Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti BimaYojana (PMJJBY):** CONTRACTOR shall, ensure that all his/its personnel deployed under this contract have obtained additional insurance

coverage under the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) through the participating banks and submit the proof of such insurance coverage to the satisfaction of OIL.

vii) CONTRACTOR's equipment used for execution of the work hereunder shall have an insurance cover with a suitable limit (as per international standards).

viii) Any other insurance policy set forth in the SCC

Note: An undertaking by the service provider has to be mandatorily provided during the Mobilization time that they have taken all the Insurance provisions as per the contract and as the Law and Insurance Regulation.

15.0 LIABILITY:

15.1 Except as otherwise expressly provided herein, neither COMPANY nor its servants, agents, nominees, CONTRACTORs, or sub-CONTRACTORs shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss of or damage to the property of the CONTRACTOR and/or their CONTRACTORs or sub-CONTRACTORs, irrespective of how such loss or damage is caused and even if caused by the negligence of COMPANY and/or its servants, agent, nominees, assignees, CONTRACTORs and sub-CONTRACTORs.

15.2 The CONTRACTOR shall protect, defend, indemnify and hold harmless COMPANY from and against such loss or damage and any suit, claim or expense resulting there from. Neither COMPANY nor its servants, agents, nominees, assignees, CONTRACTORs, sub-CONTRACTORs shall have any liability or responsibility whatsoever for injury to, illness, or death of any employee of the CONTRACTOR and/or of its CONTRACTORs or sub-CONTRACTOR irrespective of how such injury, illness or death is caused and even if caused by the negligence of COMPANY and/or its servants, agents nominees, assignees, CONTRACTORs and sub-CONTRACTORs. CONTRACTOR shall protect, defend, indemnify and hold harmless COMPANY from and against such liabilities and any suit, claim or expense resulting there from.

15.3 The CONTRACTOR hereby agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against COMPANY and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs for loss or damage to the equipment of the CONTRACTOR and/or its sub-CONTRACTORs and/or their employees when such loss or damage or liabilities arises out of or in connection with the performance of the contract limited to the CONTRACTOR's liabilities agreed to under this Contract.

15.4 The CONTRACTOR hereby further agrees to waive its right of recourse and agrees to cause its underwriters to waive their right of subrogation against COMPANY and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs for injury to, illness or death of any employee of the CONTRACTOR and of its CONTRACTORs, sub-CONTRACTORs and/or their employees when such injury, illness or death arises out of or in connection with

the performance of the contract limited to the CONTRACTOR's liabilities agreed to under this Contract.

15.5 Except as otherwise expressly provided herein, neither CONTRACTOR nor its servants, agents, nominees, CONTRACTORs or sub-CONTRACTORs shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss or damage to the property of the COMPANY and/or their CONTRACTORs or sub-CONTRACTORs, irrespective of how such loss or damage is caused and even if caused by the negligence of CONTRACTOR and/or its servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs. The COMPANY shall protect, defend, indemnify and hold harmless CONTRACTOR from and against such loss or damage and any suit, claim or expense resulting there from.

15.6 Except as otherwise expressly provided herein, neither CONTRACTOR nor its servants, agents, nominees, assignees, CONTRACTORs, sub-CONTRACTORs shall have any liability or responsibility whatsoever to whomsoever for injury or illness, or death of any employee of the COMPANY and/or of its CONTRACTORs or sub-CONTRACTORs irrespective of how such injury, illness or death is caused and even if caused by the negligence of CONTRACTOR and/or its servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs. COMPANY shall protect, defend indemnify and hold harmless CONTRACTOR from and against such liabilities and any suit, claim or expense resulting there from.

15.7 The COMPANY agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against CONTRACTOR and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs for loss or damage to the equipment of COMPANY and/or its CONTRACTORs or sub-CONTRACTORs when such loss or damage or liabilities arises out of or in connection with the performance of the contract.

15.8 The COMPANY hereby further agrees to waive its right of recourse and agrees to cause it underwriters to waive their right of subrogation against CONTRACTOR and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs for injury to, illness or death of any employee of the COMPANY and of its CONTRACTORs, sub-CONTRACTORs and/or their employees when such injury, illness or death arises out of or in connection with the performance of the Contract.

16.0 <u>LIMITATION OF LIABILITY</u>:

a) Notwithstanding any other provisions herein to the contrary, except only in cases of wilful misconduct and/or criminal acts and/or criminal negligence, neither the CONTRACTOR nor the COMPANY (OIL) shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided however that this exclusion shall not apply to any obligation of the CONTRACTOR to pay Liquidated Damages to the COMPANY and/or COMPANY's right to forfeit the Performance Bank Guarantee(s) in terms of the contract.

b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the CONTRACTOR in respect of this contract, whether under Contract, in tort or otherwise, shall not exceed 100% of the Contract Price (if not specified otherwise in SCC), provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the CONTRACTOR, or to any obligation of the CONTRACTOR to indemnify the COMPANY with respect to Intellectual Property Rights.

c) COMPANY shall indemnify and keep indemnified CONTRACTOR harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.

17.0 LIABILITY OF UNION GOVERNMENT OF INDIA:

It is expressly understood and agreed upon by and between CONTRACTOR and OIL INDIA LIMITED, and that OIL INDIA LIMITED is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that Union of India is not a party to this agreement and has no liabilities, obligations or rights, whatsoever hereunder. It is expressly understood and agreed that OIL INDIA LIMITED is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable laws of India and general principles of the Contract law. The bidder/CONTRACTOR expressly agrees, acknowledges and understands that OIL INDIA LIMITED is not an agent, representative or delegate of the Union of India. It is further understood and agreed that Union of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly, bidder/ CONTRACTOR hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Union of India arising out of this contract and covenants not to sue the Union of India as to any manner, claim, cause of action or thing whatsoever arising of or under this agreement.

18.0 CONSEQUENTIAL DAMAGE:

Except as otherwise expressly provided, neither party shall be liable to the other for special, indirect or consequential damages resulting from or arising out of the contract, including but without limitation, to loss or profit or business interruptions, howsoever caused and regardless of whether such loss or damage was caused by the negligence (either sole or concurrent) of either party, its employees, agents or sub-CONTRACTORs.

19.0 RISK PURCHASE:

In the event, CONTRACTOR's failure to provide the services as per the Contractual scope, terms and conditions, COMPANY (OIL) reserves the right to hire the services from any other source at the CONTRACTOR's risk & cost and the difference in cost shall be borne by the CONTRACTOR. Further, OIL shall retain the right of forfeiture

of Performance Bank Guarantee and any other action as deemed fit. In certain operational situations OIL reserves the right to take over the site including the service equipment at the risk and cost of the CONTRACTOR.

20.0 INDEMNITY AGREEMENT:

20.1 Except as provided hereof CONTRACTOR agrees to protect, defend, indemnify and hold COMPANY harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of CONTRACTOR's employees, agents, CONTRACTORs and sub-CONTRACTORs or their employees or in favour of any third party(is) on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

20.2 Except as provided hereof COMPANY agrees to protect, defend, indemnify and hold CONTRACTOR harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of COMPANY's employees, agents, CONTRACTORs and sub-CONTRACTORs or their employees or in favour of any third party(is) on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

21.0 INDEMNITY APPLICATION:

The indemnities given herein above, whether given by COMPANY or CONTRACTOR shall be without regard to fault or to the negligence of either party even though said loss, damage, liability, claim, demand, expense, cost or cause of action may be caused, occasioned by or contributed to by the negligence, either sole or concurrent of either party.

22.0 ROYALTY PATENTS:

Each party shall hold harmless and indemnify the other from and against all claim and proceedings for or on account of any patent rights, design, trade mark or other protected rights arising from any use of materials, equipment, processes, inventions and methods, which have not been imposed on the attending party by the terms of the contract or the specifications forming part thereof.

23.0 WARRANTY AND REMEDY OF DEFECTS:

23.1 CONTRACTOR warrants that they shall perform the work in a first class, workmanlike, and professional manner and in accordance with their highest degree of quality, efficiency and current state of the art technology/industry practices and in conformity with all specifications, standards and drawings set

forth or referred to in the Terms of Reference and with instructions and guidance, which COMPANY may, from time to time, furnish to the CONTRACTOR.

23.2 Should COMPANY discover at any time during the tenure of the Contract or till the Unit/equipment/tools are demobilized from site or base camp (if applicable) that the work does not conform to the foregoing warranty, CONTRACTOR shall after receipt of notice from COMPANY, promptly perform any and all corrective work required to make the services conform to the Warranty. Such corrective Work shall be performed entirely at CONTRACTOR's own expenses. If such corrective Work is not performed within a reasonable time, the COMPANY, at its option may have such remedial Work performed by others and charge the cost thereof to CONTRACTOR subject to a maximum of the contract value payable for the defective work which needs corrective action which the CONTRACTOR must pay promptly. In case CONTRACTOR fails to perform remedial work, or pay promptly in respect thereof, the performance security shall be forfeited.

24.0 SUBCONTRACTING/ASSIGNMENT:

24.1 CONTRACTOR shall not subcontract, transfer or assign the contract, or any part under this contract, to any third party(ies). Except for the main services under this contract, CONTRACTOR may sub-contract the petty support services subject to COMPANY's prior written approval. However, CONTRACTOR shall be fully responsible for complete execution and performance of the services under the Contract.

24.2 Consequent upon of placement of contract, if successful bidder(s)(other than Micro/Small Enterprise) is procuring materials/services from their sub-vendor, who is a Micro or Small Enterprise registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME with prior consent in writing of the purchasing authority/Engineer in Charge the details like Name, Registration No., Address, Contact No., details of material and value of procurement made, etc. of such enterprises shall be furnished by the CONTRACTOR at the time of submission of invoice/bill.

25.0 RECORDS, REPORTS AND INSPECTION:

The CONTRACTOR shall, at all times during the currency of the contract, permit the COMPANY and its authorized employees and representatives to inspect all the Work performed and to witness and check all the measurements and tests made in connection with the said work. The CONTRACTOR shall keep an authentic, accurate history and logs including safety records of each service item with major items consumed, which shall be open at all reasonable times for inspection by the COMPANY's designated representatives and its authorized employees. The CONTRACTOR shall provide the COMPANY's designated representatives with a daily written report, on form prescribed by the COMPANY showing details of operations during the preceding 24 hours and any other information related to the said services requested by the COMPANY whenever so requested. The

CONTRACTOR shall not, without COMPANY's written consent allow any third person(s) access to the said information or give out to any third person information in connection therewith.

26.0 CONFIDENTIALITY, USE OF CONTRACT DOCUMENTS AND INFORMATION:

26.1 CONTRACTOR shall not, without COMPANY's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing pattern, sample or information furnished by or on behalf of COMPANY in connection therewith, to any person other than a person employed by CONTRACTOR in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only, as may be necessary for purposes of such performance with prior permission from COMPANY. However, nothing hereinabove contained shall deprive the CONTRACTOR of the right to use or disclose any information which is:

a) possessed by the CONTRACTOR, as evidenced by the CONTRACTOR's written records, before receipt thereof from the COMPANY which however the CONTRACTOR shall immediately inform to COMPANY; or

b) required to be disclosed by the CONTRACTOR pursuant to an order of a court of competent jurisdiction or other governmental agency having the power to order such disclosure, provided the CONTRACTOR uses its best efforts to provide timely notice to COMPANY of such order to permit COMPANY an opportunity to contest such order subject to prior permission from COMPANY.

26.2 CONTRACTOR shall not, without COMPANY's prior written consent, make use of any document or information except for purposes of performing the contract.

26.3 Any document supplied to the CONTRACTOR in relation to the contract other than the Contract itself remain the property of COMPANY and shall be returned (in all copies) to COMPANY on completion of CONTRACTOR's performance under the Contract if so required by COMPANY.

26.4 During the currency of the Contract, COMPANY and its employees, agents, other CONTRACTORs, sub-CONTRACTORs (of any tier) and their employees etc. may be exposed to certain confidential information and data of the CONTRACTOR. Such information and data held by the COMPANY, its employees, agents, other CONTRACTORs, sub-CONTRACTORs (of any tier) and their employees in the strictest Confidence and shall not be disclosed to any other party except on a need to know basis.

However, the above obligation shall not extend to information which:

i) is, at the time of disclosure, known to the public which CONTRACTOR shall immediately inform COMPANY;

ii) is lawfully becomes at a later date known to the public through no fault of CONTRACTOR subject to CONTRACTOR's undertaking that no information has been divulged by them to the public;

iii) is lawfully possessed by CONTRACTOR before receipt thereof from COMPANY which should be immediately informed to COMPANY;

iv) is developed by CONTRACTOR independently of the information disclosed by COMPANY which should be shared with the COMPANY;

v) CONTRACTOR is required to produce before competent authorities or by court order subject to prior permission from COMPANY;

27.0 REMUNERATION AND TERMS OF PAYMENT:

27.1 COMPANY shall pay to the CONTRACTOR during the term of the Contract the amount due from time to time calculated according to the rates of payment set and in accordance with other provisions hereof. No other payments shall be due from COMPANY unless specifically provided for in the Contract. All payments will be made in accordance with the terms hereinafter described.

27.2 Request for payment/part payment to third party i.e. other than the party on whom the contract has been awarded will not be entertained by OIL under any circumstances.

27.3 MANNER OF PAYMENT: All payments due by COMPANY to CONTRACTOR hereunder shall be made at CONTRACTOR's designated bank. Bank charges, if any will be on account of the CONTRACTOR.

27.4 Payment of any invoices shall not prejudice the right of COMPANY to question the validity of any charges therein, provided COMPANY within one year after the date of payment shall make and deliver to CONTRACTOR written notice of objection to any item or items the validity of which COMPANY questions.

27.5 INVOICES: Mobilization charges will be invoiced only upon completion of mobilization as certified by COMPANY representative and CONTRACTOR is ready at site for starting the services/operation. Payment of mobilization charges shall be made within 45 days following the date of receipt of undisputed invoices by COMPANY.

27.6 CONTRACTOR shall send invoice to COMPANY on the day following the end of each month for all daily or monthly charges due to the CONTRACTOR.

27.7 CONTRACTOR will submit 02 (Two) sets of all invoices duly super scribed `Original' and `copy' as applicable to the COMPANY for processing payment. Separate invoices for the charges payable under the contract shall be submitted by the CONTRACTOR for foreign currency and Indian currency.

27.8 Payment of monthly invoices, if undisputed, shall be made within 30 days following the date of receipt of invoice by COMPANY.

27.9 COMPANY shall within 30 days of receipt of the invoice notify the CONTRACTOR of any item under dispute, specifying the reasons thereof, in which event, payment of the disputed amount maybe withheld until settlement of the dispute,

but payment shall be made of any undisputed portion on or before the due date. This will not prejudice the COMPANY's right to question the validity of the payment at a later date as envisaged in clause no. 27.4 above.

27.10 The acceptance by CONTRACTOR of part payment on any billing not paid on or before the due date shall not be deemed a waiver of CONTRACTOR's rights in any other billing, the payment of which may then or thereafter be due.

27.11 Payment of Final demobilization charges shall be made if applicable within 45 days on receipt of invoice by COMPANY accompanied by the following documents from the CONTRACTOR:

a) Audited account up to completion of the Contract.
b) Tax audit report for the above period as required under the Indian Tax Laws.
c) Documentary evidence regarding the submission of returns and payment to taxes for the expatriate personnel engaged by the CONTRACTOR or by its sub-CONTRACTOR.
d) Proof of re-export of all items including the unutilized spares and consumables (excepting consumables consumed during the contract period) and also cancellation of re-export bond if any.
e) Any other documents as required by applicable Indian Laws.

In case, no demobilization charges are payable, the documents mentioned above will have to be submitted by the CONTRACTOR before release of the final payment by the COMPANY. A certificate from Chartered Accountant on (a), (b) & (c) above will suffice.

27.12 CONTRACTOR shall maintain complete and correct records of all information on which CONTRACTOR's invoice are based upto 02 (two) years from the date of last invoice. Such records shall be required for making appropriate adjustments or payments by either party in case of subsequent audit query/objection.

28.0 PAYMENT OF COMMISSION/FEE/REMUNERATION OF INDIAN AGENT /CONSULTANT/REPRESENTATIVE/RETAINER/ASSOCIATE OF FOREIGN PRINCIPAL (APPLICABLE IN ICB TENDERS ONLY):

The Commission/fee/remuneration of the Indian agent/ consultant/ associate/ representative/retainer, if any, will be paid within 30 days of the payment of invoice made to the CONTRACTOR, The amount of commission/ fee/remuneration as a percentage of invoice value as per contract provisions will be deducted by COMPANY/OIL from the monthly invoices of the CONTRACTOR and paid to the Indian agent/ consultant/ representative/retainer/associate.

29.0 DETAILS OF STATUTORY PAYMENTS LIKE EPF AND ESI ETC.

Wherever applicable, the CONTRACTOR (including those engaging 'International Workers') shall have itself registered under Employees' Provident Fund and Miscellaneous Provisions Act, 1952 and Employees' State Insurance Act, 1948 and

follow the relevant statutory provisions including Rules made there-under concerning contractual workers.

The CONTRACTOR shall be required to submit the following documents/details to the Corporation:

(i) Copy of PF-ECR duly stamped by the designated Bank, along with a print of the digitally signed PDF data sheet of the ECR, as proof of payment, each month, details of this PDF data sheet shall be verified by the appropriate authority (i.e. Payment Making Authority) in the COMPANY from the official website of EPFO (http://www.epfindia.gov.in).

(a) Copy of the online challan endorsed/stamped by the designated bank as proof of receipt of payment towards monthly contribution of ESI contribution.

(b) Copy of Return of contribution in respect of ESI for each contribution period of the six months i.e. for the contribution period ended 30th Sept and the contribution period ended 31st March.

(ii) As an Annexure to each EPF-ECR and ESI Challan(s), CONTRACTOR shall also furnish the following Certificates:

1) The furnished information is correct to the best of his knowledge.
2) In case any discrepancies or irregularities is/are noticed in this undertaking, then OIL is free to inform the PF/ESIC Authorities.
3) Before the completion of contract, CONTRACTOR shall serve one-month notice to all his contractual workers, informing that their services will be terminated.
4) Within one month on completion/expiry of the contract, CONTRACTOR shall pay all the dues/terminal dues such as leave with wages, bonus (if applicable), Gratuity (if applicable), to all his contractual workmen, failing which CONTRACTOR's Bank Guarantee/Security Deposit may be withheld by OIL.

COMPANY may verify the deposit of statutory contribution made by the CONTRACTORs with the EPFO/ESI authorities, where deemed necessary. However, before making payment of the last bill/invoice of the CONTRACTOR, the COMPANY may verify the details/status of the payment towards EPF/ESI made by the CONTRACTOR from the authorities/official website of EPF/ESI (i.e. http://www.epfindia.gov.in and http://www.esic.in). In case the information furnished by the CONTRACTOR is found to be incorrect the COMPANY shall take appropriate action against the CONTRACTOR in accordance with law.

The CONTRACTOR agrees and undertakes to indemnify OIL for any liabilities arising out of declarations made by him in future on violation or provisions of the EPF Act 1952 and ESI Act 1948.

30.0 TIMELY MOBILISATION AND LIQUIDATED DAMAGES:

a) Time is the essence of this Contract. If the CONTRACTOR fails to mobilize and deploy the required manpower/equipment and/or fails to commence the operation

within the period specified as specified under mobilization clause under SCC, OIL shall have, without prejudice to any other right or remedy in law or contract including sub clause (b) below, the right to terminate the contract.

b) If the contractor is unable to mobilize/deploy and commence the operation within the period specified in sub clause (a) above, it may request OIL for extension of the time with unconditionally agreeing for levy and recovery of LD. Upon receipt of such a request, OIL may at its discretion, extend the period of mobilization and shall recover from the CONTRACTOR, as an ascertained and agreed Liquidated Damages, a sum equivalent to @ 0.5% of contract value including mobilization cost, per week or part thereof of delay subject to maximum of 7.5% of the Contract Price.

c) The parties agree that the sum specified above is not a penalty but a genuine pre-estimate of the loss/damage which will be suffered by OIL on account of delay on the part of the CONTRACTOR and the said amount will be payable without proof of actual loss or damage caused by such delay.

d) LD will be calculated on the basis of Total Contract value [(if not specified otherwise in SCC] excluding duties and taxes, where such duties/taxes have been shown separately in the contract. However, the applicable GST on the LD shall have to be borne by the CONTRACTOR. Accordingly, the liquidated damages shall be recovered from the CONTRACTOR along with applicable GST.

31.0 FORCE MAJEURE:

In the event of either party being rendered unable by 'Force Majeure' to perform any obligation required to be performed by them under the contract, the relative obligation of the party affected by such 'Force Majeure' will stand suspended as provided herein. The term force majeure as employed herein shall mean Acts of God such as earthquake, hurricane, typhoon, flood, volcanic activity etc.; war (declared/undeclared); riot, revolts, rebellion, terrorism, sabotage by persons other than the CONTRACTOR's Personnel; fires, explosions, ionising radiation or contamination by radio-activity or noxious gas, if not caused by CONTRACTOR's fault; declared epidemic or disaster; acts and regulations of respective Govt. of the two parties, namely the COMPANY and the CONTRACTOR and civil commotions, lockout not attributable to the CONTRACTOR.

Upon occurrence of such cause, the party claiming that it has been rendered unable as aforesaid thereby, shall notify the other party in writing within 72 (Seventy Two) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of its claim.

Should 'force majeure' condition as stated above occurs and should the same be notified within 72 (Seventy two) hours after its occurrence the `force majeure' rate (if specified in the SCC of the Contract) shall apply for the first 15 (fifteen) days for each such occasion.

Either party shall have the right to terminate the Contract if such `force majeure' conditions continue beyond successive 60 (Sixty) days [or exclusively mentioned in the SCC of the Contract] with prior written notice of 15 days, provided termination of the Contract does not result into safety hazard to the life and property on account of withdrawal of operations or the operation is at critical stage. COMPANY shall have the absolute right to decide whether any safety hazard exists or operation is at critical position and decision of the COMPANY shall binding upon the CONTRACTOR.

Should either party decide not to terminate the Contract even under such condition, no payment would apply after expiry of fifteen (15) days force majeure period. [or exclusively mentioned in the SCC of the Contract]

Time for performance of the relative obligation suspended by Force Majeure shall then stand extended by the period for which such cause lasts.

If however, relative obligation of the party affected by such 'Force Majeure' is limited to part of the obligation(s), the contract shall not be terminated and the parties shall continue to perform their respective obligations, which are not affected by the 'force majeure' condition, provided the obligations affected by the 'force majeure' do not preclude the parties in performing the obligations not affected by such conditions.

32.0 SET-OFF:

Any sum of money due and payable to the CONTRACTOR (including Performance Security refundable to them) under this or any other Contract, whether in progress or in future, may be appropriated by OIL and set-off against any claim of OIL (or such other person or persons contracting through OIL) for payment of a sum of money arising out of this contract or under any other contract made by the CONTRACTOR with OIL (or such other person or persons contracting through OIL).

33.0 WITHHOLDING:

COMPANY may withhold or nullify the whole or any part of the amount due to CONTRACTOR, after informing the CONTRACTOR of the reasons in writing, on account of subsequently discovered evidence in order to protect COMPANY from loss on account of:

33.1 For non-completion of jobs assigned as per Scope of Work/Terms of Reference.

33.2 Defective work not remedied by CONTRACTOR.

33.3 Claims by COMPANY's recognized sub-CONTRACTOR of CONTRACTOR or others filed or on the basis of reasonable evidence indicating probable filing of such claims against CONTRACTOR.

33.4 Failure of CONTRACTOR to pay or provide for the payment of salaries/ wages, contributions, taxes or enforced savings with-held from wages etc. with respect to personnel engaged by the CONTRACTOR.

33.5 Failure of CONTRACTOR to pay the cost of removal of unnecessary debris, materials, tools, or machinery.

33.6 Any failure by CONTRACTOR to fully reimburse COMPANY under any of the indemnification provisions of this Contract. If, during the progress of the work CONTRACTOR shall allow any indebtedness to accrue for which CONTRACTOR, under any circumstances in the opinion of COMPANY, may be primarily or contingently liable or ultimately responsible and CONTRACTOR shall, within five days after demand is made by COMPANY, fail to pay and discharge such indebtedness, then COMPANY may during the period for which such indebtedness shall remain unpaid, with-hold from the amounts due to CONTRACTOR, a sum equal to the amount of such unpaid indebtedness.

33.7 Withholding will also be effected on account of the following:

i) Order issued by a Court of Law or statutory authority in India.
ii) Income-tax deductible at source according to law prevalent from time to time in the country.
iii) Any obligation of CONTRACTOR which by any law prevalent from time to time to be discharged by COMPANY in the event of CONTRACTOR's failure to adhere to such laws.
iv) Any payment due from CONTRACTOR in respect of unauthorised imports.

When all the above grounds for withholding payments are removed, payment shall thereafter be made for amounts so with-held.

33.8 COMPANY reserves the right to disburse or deposit the amount so withheld to the concerned person(s) or agency or government authority, as the case may be, besides nullifying such amount on account of loss suffered by the COMPANY against 33.2, 33.3, 33.6 & 33.7 above.

34.0 APPLICABLE LAWS:

The Contract shall be deemed to be a Contract made under, governed by and construed in accordance with the laws of India for the time being in force and shall be subject to the sole and exclusive jurisdiction of Courts situated in Dibrugarh (or the Place where the contract is executed) and Principal Bench of Gauhati High Court (or the High Court under whose territorial jurisdiction, the place of execution of contract falls).

This Agreement including all matter connected with this Agreement, shall be governed by the laws of India (both substantive and procedural) for the time being in force and shall be subject to exclusive jurisdiction of Courts, mentioned hereinabove. Foreign companies, operating in India or entering into Joint ventures

in India, shall also be governed by the laws of India and shall be subject to sole and exclusive jurisdiction of above Courts.

The CONTRACTOR shall ensure full compliance of various Indian Laws and Statutory Regulations, as stated below, to the extent applicable, as stated below, but not limited to, in force from time to time and obtain necessary permits/licenses etc. from appropriate authorities for conducting operations under the Contract:

a) The Mines Act 1952
b) The Oil Mines Regulations, 2017
c) The Employees' Compensation Act, 1923
d) The Code of Wages, 2019
e) The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under
f) The Employees Pension Scheme, 1995
g) The Interstate Migrant Workmen Act., 1979 (Regulation of employment and conditions of service).
h) The Employees Provident Fund and Miscellaneous Provisions Act, 1952
i) Goods and Service Tax Act
j) Customs & Excise Act & Rules
k) Factories Act, 1948
l) Industrial Disputes Act, 1947
m) Payment of Gratuity Act, 1972
n) Environmental Protection Act, 1986 & other pollution control Acts.

Note: The above Acts are only indicative and not exhaustive. The Acts shall include the rules and regulations framed thereunder.

35.0 LABOUR LAWS:

i) CONTRACTOR shall comply with the provisions of various labour related laws, including but not limited to the Code of Wages, 2019, Employee Provident Fund and Miscellaneous Provisions Act 1952, COMPANY's Liability Act 1938, Employees' Compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961 and Contract Labour (Regulation and Abolition) Act 1970, Employment of Children Act 1938, Employees' State Insurance Act, 1948 or any modifications/amendment thereof or any other law relating thereto and rules made there under from time to time.

ii) No Labour below the age of eighteen [18] years shall be employed on the work.

iii) CONTRACTOR shall not pay less than what is provided under law to labourers engaged by him on the work.

iv) CONTRACTOR shall at his expense comply with all labour laws and keep the COMPANY indemnified in respect thereof.

v) CONTRACTOR shall pay equal wages for men and women in accordance with applicable Labour laws.

vi) If the CONTRACTOR is covered under the Contract Labour (Regulation and Abolition) Act, he shall obtain a license from licensing authority [i.e. office of the Labour Commissioner] by payment of necessary prescribed fee and the deposit, if any, before starting the work under the Contract. Such fee/deposit shall be borne by the CONTRACTOR.

vii) CONTRACTOR must obtain the PF Code from the concerned PF Authority under Employees Provident Fund and Miscellaneous Provisions Act, 1952. Similarly, CONTRACTOR must obtain ESI Code under Employees State Insurance Act.

viii) CONTRACTOR being the employer of the labours/personnel to be engaged under the contract shall be liable to pay gratuity to the labours/personnel as per the provision of the Payment of Gratuity Act, 1972 and accordingly, shall keep the COMPANY indemnified in respect thereof. If however, COMPANY requires to pay gratuity to such labour(s) as per the direction of the competent authority under the Act, COMPANY shall recover such amount from the outstanding dues payable to the CONTRACTOR under the contract or any other contract(s).

ix) CONTRACTOR shall furnish to Engineer in Charge the distribution return of the number & description, by trades of the work people employed on the works. CONTRACTOR shall also submit on the 4th& 19th of every month to Engineer in Charge a true statement showing in respect of the 2nd half of the preceding month & the 1st half of the current month (1) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act 1961 on Rules made there under and the amount paid to them.

x) Engineer in Charge shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the money due to the CONTRACTOR any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.

xi) The CONTRACTOR shall indemnify the COMPANY against any payments to be made under and for the observance of the provisions of the aforesaid acts without prejudice to his right to obtain indemnity from his sub-CONTRACTOR.

36.0 STATUTORY REQUIREMENTS:

During the tenure of this CONTRACT nothing shall be done by the CONTRACTOR in contravention of any law, act and/or rules/regulations, thereunder or any amendment.

37.0 GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) GUIDELINES:

37.1 It will be solely the CONTRACTOR's responsibility to fulfil all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job

(namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-CONTRACTORs hired by CONTRACTOR comply with the same requirement as the CONTRACTOR himself and shall be liable for ensuring compliance all HSE laws.

37.2 It will be entirely the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager/Safety Officer/ Engineer/Official/Supervisor/Junior Engineer for safe operation.

37.3 Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.

37.4 Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.

37.5 When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company shall have the right to direct the contractor to cease work until the non-compliance is corrected.

38.0 POLLUTION AND CONTAMINATION:

The CONTRACTOR shall be liable for all surface and sub-surface pollution to the extent caused by CONTRACTOR and resulting from CONTRACTOR's operation/service or spillage or dumping of solvents/additive substances or pollutants, which the CONTRACTOR brings to the Site for use in connection with Work to be performed under this Contract.

Notwithstanding anything to the contrary contained herein, it is agreed that except on the ground of willful misconduct or criminal misconduct, COMPANY shall release, indemnify and hold CONTRACTOR and its sub-CONTRACTORs harmless from any and all claims, judgments, losses, expenses and any costs related thereto (including but not limited to Court costs and "Attorney's fees") for:

a) Damage to or loss of any reservoir or producing formation; and/ or
b) Damage to or loss of any well; and/or
c) Any other subsurface damage or loss; and/ or
d) Any property damage or loss or personal injury or death arising out of or in connection with a blowout, fire explosion and loss of well control regardless of cause.

39.0 STATUTORY VARIATION/NEWLY ENACTED LAW:

39.1 All duties, taxes except otherwise specified in the Contract as applicable on the closing date of bid submission as per relevant acts and rules shall be in

CONTRACTOR's account. Variation in case of custom duty on CIF value declared by the bidder shall be to COMPANY account.

39.2 In the event of introduction of any new legislation or any amendment or enforcement of any Act or Law, rules or regulations of Government of India or State Government(s) or Public Body, which becomes effective after the date of submission of Price Bid or revised price bid, if any, for this CONTRACT and which results in increased/decreased cost of the works under the CONTRACT through increased/decreased liability of taxes and/or duties, required to be paid by the CONTRACTOR, (other than personnel and Corporate taxes), the Parties shall agree to a revision in pricing to reflect such change subject to the production of documentary proof to the satisfaction of the COMPANY/CONTRACTOR as applicable to the extent which directly is attributable to such introduction of new legislation or change or amendment as mentioned above and adjudication by the competent authority (applicable when disputed by COMPANY) & the courts wherever levy of such taxes/duties are disputed by COMPANY/CONTRACTOR.

39.3 Any increase in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date during the extended period will be to the CONTRACTOR's account, where delay in completion/mobilization period is attributable to the CONTRACTOR. However, any decrease in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date will be to COMPANY's account.

39.4 The Contract Price and other prices given in the Schedule of Prices are based on the applicable tariff as indicated by the CONTRACTOR in the Schedule of Prices. In case this information subsequently proves to be wrong, incorrect or misleading, COMPANY will have no liability to reimburse/pay to the CONTRACTOR the excess duties, taxes, fees, if any finally levied/imposed by the concerned authorities. However, in such an event, COMPANY will have the right to recover the difference in case the rate of duty/tax finally assessed is on the lower side.

39.5 Notwithstanding the provision contained in Clause-39.1 to 39.4 above, the COMPANY shall not bear any liability in respect of:

i. Personal taxes on the personnel deployed by CONTRACTOR, his sub-CONTRACTOR/sub-sub-CONTRACTORs and Agents etc.

ii. Corporate taxes and Fringe benefit tax in respect of CONTRACTOR and all of their sub-CONTRACTORs, agents etc.

iii. Other taxes & duties including Customs Duty and GST in addition to new taxes etc. in respect of sub-CONTRACTORs, vendors, agents etc. of the CONTRACTOR.

iv. Any liability on the CONTRACTOR, which was accrued under the old law or contract, which the CONTRACTOR is obligated to pay either to the COMPANY or to the Government Authority.

39.6 In order to ascertain the net impact of the amendment/ revisions/enactment of various provisions of taxes/duties, the CONTRACTOR is liable to provide following disclosure to COMPANY:

i. Details of each of the input services used in relation to providingservice to COMPANY including estimated monthly value of input service and GST tax amount.

ii. Details of Inputs (material/consumable) used/required for providing service to COMPANY including estimated monthly value of input and GST paid/payable on purchase of inputs.

39.7 The above provisions would be applicable only in case of variation in rate of taxes and duties on supply of services to OIL and not applicable on taxes and duties on input (goods and services) towards such services.

39.8 Any claim or reduction on account of change in law shall be accompanied with undertaking that the provisions of anti-profiteering clause under GST Act have been complied with.

40.0 SEVERABILITY:

Should any provision of this agreement be found to be invalid, illegal or otherwise not enforceable by any court of law, such finding shall not affect the remaining provisions hereto and they shall remain binding on the parties hereto.

41.0 Commission of misconduct/submission of fraudulent document by the bidder/contractor and Banning thereof:

The information and documents furnished by the bidder/CONTRACTOR in respect of the tender/contract are accepted by COMPANY to be true and genuine. However, if it comes to the notice of the COMPANY anytime either during the pendency of the tender or after award of the contract or after completion the contract that a Bidder/CONTRACTOR furnished fraudulent document/false information in relation to the subject tender/contract or committed any misconduct, appropriate action shall be taken against the Bidder/CONTRACTOR for debarment/banning of the bidder/CONTRACTOR from participating in any future tender of the COMPANY in terms of the COMPANY's Banning Policy, 2017 besides making the CONTRACTOR liable for other penal action including termination of ongoing contract(s) at his/her risk and peril. In such event, the Bid Security/Performance Security in respect of ongoing contract(s) shall be forfeited by the COMPANY.

42.0 SETTLEMENT OF DISPUTES:

42.1 Arbitration (Applicable for Suppliers/CONTRACTORs other than PSU and MSME):

1. Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, the same shall be referred to Arbitration as provided hereunder:

2. A party wishing to commence arbitration proceeding shall invoke Arbitration Clause by giving 30 days notice to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.

3. It is agreed and undertaken by the Parties that irrespective of country of origin of the CONTRACTOR, the arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996 and under no circumstances, the proceedings shall be construed as International Arbitration.

4. The number of arbitrators and the appointing authority will be as under:

Claim amount (excluding claim for interest and counter claim, if any)	Number of Arbitrator	Appointing Authority
Upto Rs.25.00 Lakh	Not applicable	Not applicable
Above Rs.25.00 Lakh Upto Rs.25 Crore	Sole Arbitrator	OIL
Above Rs. 25 Crore	3 Arbitrators	One Arbitrator by each party and the 3rd Arbitrator, who shall be the presiding Arbitrator, by the two Arbitrators.

5. The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.

6. If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.

7. Parties agree and undertake that neither shall be entitled for any pre-reference or pendente-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.

8. The arbitral tribunal shall complete the proceedings, make and publish the award within time stipulated in the Arbitration and Conciliation Act, 1996(as amended).

9. If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties. Where the proceedings are put in abeyance or terminated on account of mutual settlement of dispute by the parties, the fees payable to the arbitrators shall be determined as under:

   (i) 20% of the fees if the claimant has not submitted statement of claim.
   (ii) 40% of the fees if the pleadings are complete
   (iii) 60% of the fees if the hearing has commenced.
   (iv) 80% of the fees if the hearing is concluded but the award is yet to be passed.

10. Each party shall be responsible to make arrangements for the travel and stay etc. of the arbitrator appointed by it. Claimant shall also be responsible for making arrangements for travel/stay arrangements of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

    In case of sole arbitrator, both parties shall equally share all expenditures that may be required to be incurred.

11. The fees and other administrative/secretarial expenses of the arbitrator(s) shall not exceed the model fee as stipulated in Schedule--- of the Act and such expenses shall be equally borne by the parties.

12. The Place/Seat of Arbitration shall be Guwahati or the place where the contract is executed. The venue of the arbitration shall be decided by the Arbitrator(s) in discussion with the parties. The cost of arbitration sittings shall be equally borne by the parties.

13. The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.

14. Subject to aforesaid, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof shall apply to the arbitration proceedings under this clause.

42.2 Arbitration (applicable in case of Contract awarded on Public Sector Enterprise):

a) In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract (s) between Central Public Sector Enterprises (CPSEs) and also between CPSEs and Government

Departments/Organizations (excluding disputes -concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in OPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018.

b) A party wishing to commence arbitration proceeding shall invoke Arbitration Clause and refer the dispute(s) to AMRCD with a copy to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter.

c) Upon such reference, the dispute shall be decided by the Competent Authority appointed under the AMRCD, whose decision shall bind the parties finally and conclusively. The parties in the dispute will share equally the cost of the arbitration as intimated by the Arbitrator.

42.3 Arbitration (Applicable to Micro, Small and Medium Enterprise)

In the event of any dispute or difference relating to, arising from or connected with the Contract, efforts shall be made to resolve the dispute(s) amicably by mutual consultation and in case such dispute(s) cannot be resolved through mutual consultation, then same shall be resolved through the procedure as prescribed in Section-18 of the Micro, Small and Medium Enterprises Development Act, 2006.

42.4 Resolution of disputes through conciliation by OEC

(Not Applicable in cases where value of dispute is less than Rs. 25 Lakhs and more than 2 Crore)

If any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, Company at its discretion, on its own or on the request of the CONTRACTOR, may refer the dispute to Outside Expert Committee ("OEC") to be constituted by Corporate Business Committee (CBC), OIL as provided hereunder:

a) The party desirous of resorting to conciliation shall send a notice of 30 (thirty) days to the other party of its intention of referring the dispute for resolution through OEC. The notice invoking conciliation shall specify all the points of disputes with details of the amount claimed to be referred to OEC and the party concerned shall not raise any new issue thereafter.

b) OIL shall nominate three outside experts, one each from Financial/commercial, Technical and Legal fields from the Panel of Outside Experts maintained by OIL who shall together be referred to as OEC (Outside Experts Committee).

c) Parties shall not claim any interest on claims/counterclaims from the date of notice invoking conciliation till execution of settlement agreement, if so arrived at. In case, parties are unable to reach a settlement, no interest shall be claimed by either party for the period from the date of notice invoking conciliation till the date of OEC recommendations in any further proceeding.

d) The Proceedings of the OEC shall be broadly governed by Part III of the Arbitration and Conciliation Act, 1996 including any modifications thereof. Notwithstanding above, the proceedings shall be summary in nature and Parties agree to rely only upon documentary evidence in support of their claims and not to bring any oral evidence in the OEC proceedings.

e) OEC shall hear both the parties and recommend possible terms of settlement between the parties. The recommendations of OEC shall be non-binding and the parties may decide to accept or not to accept the same. Parties shall be at liberty to accept the OEC recommendation with any modification they may deem fit.

f) Where recommendations are acceptable to both the parties, a settlement agreement will be drawn up in terms of the OEC recommendations or with such modifications as may be agreed upon by the parties. The settlement agreement shall be signed by both the parties and authenticated by all the OEC members either in person or through circulation. This settlement agreement shall have the same legal status and effect as that of an arbitration award on agreed terms on the substance of the dispute rendered by an arbitral tribunal under Section 30 of the Arbitration and Conciliation Act, 1996.

g) OIL will share all other guidelines regarding reconciliation through OEC with the CONTRACTOR when it resorts to settlement through OEC. Both parties agree to adhere to these guidelines.

h) All the expenditure incurred in the OEC proceedings shall be shared by the parties in equal proportion. The parties shall maintain account of expenditure and present to the other for the purpose of sharing on conclusion of the OEC proceedings.

i) The OEC proceedings must be completed within a period of 3(three) months from the date of constitution of the OEC with a provision of extension of one months, subject to mutual agreement. The Place of OEC shall be either at New Delhi or Guwahati.

j) If the parties are not able to resolve the dispute through OEC or do not opt for conciliation through OEC, the party may invoke arbitration clause as provided in the contract.

k) The parties shall be represented by their in-house employees/executives. No party shall bring any advocate or outside consultant/advisor/agent. Ex-officers of OIL who have handled the matter in any capacity directly or indirectly shall not be allowed to attend and present the case before OEC on behalf of Contractor. However, ex- employees of parties may represent their respective organizations.

l) Solicitation or any attempt to bring influence of any kind on either OEC Members or OIL is completely prohibited in conciliation proceedings and OIL reserves the absolute right to close the conciliation proceedings at its sole discretion if it apprehends any kind of such attempt made by the Contractor or its representatives.

42.5 Exclusions

Parties agree that following matters shall not be referred to conciliation or arbitration:

i) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to initiate any proceedings for suspension or debarment or banning, or decision to suspend or to ban or to debar business dealings with the bidder/CONTRACTOR and/or with any other person involved or connected or dealing with bid/contract/bidder/CONTRACTOR.

ii) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision under the provisions of Integrity Pact executed between OIL and the Bidder/CONTRACTOR.

iii) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to comply with any order or directive of any statutory or government authority.

iv) Any claim which is less than Rs. 25 Lakh.

43.0 COMPLETION OF CONTRACT:

Unless otherwise terminated under the provisions of any other relevant Clause or extended through written communication, this Contract shall be deemed to have been completed at the expiry of the Period specified in the contract or period of defect liability, as provided for under the Contract, whichever is later.

44.0 TERMINATION:

44.1 Termination on expiry of the contract: This Agreement shall be deemed to have been automatically terminated on the expiry of the contract period unless OIL has exercised its option to extend this contract in accordance with the provisions, if any, of this contract.

44.2 Termination of contract for death: If the CONTRACTOR is an individual or a proprietary concern and the individual or the proprietor dies or if the CONTRACTOR is a partnership concern and one of the partners dies then unless, the COMPANY is satisfied that the legal heir of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing Contract, the COMPANY is entitled to cancel the Contract for the uncompleted part without being in any way liable for any compensation payment to the estate of the

deceased CONTRACTOR and/or to the surviving partners of the CONTRACTOR's firm on account of the cancellation of Contract. The decision of the COMPANY in such assessment shall be final & binding on the parties. In the event of such cancellation, the COMPANY shall not hold the estate of the deceased CONTRACTOR and/or the surviving partners of CONTRACTOR's firm liable for any damages for non-completion of the Contract.

44.3 **Termination on account of Force Majeure**: Unless the contract provides otherwise, either party shall have the right to terminate this Contract on account of Force Majeure as set forth in Article-31.0 above.

44.4 **Termination on account of insolvency**: In the event that the CONTRACTOR or its collaborator or its guarantor at any time during the term of the Contract, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt or under the process of insolvency or liquidation, then the COMPANY shall, by a notice in writing have the right to terminate the Contract and all the CONTRACTOR's rights and privileges hereunder, shall stand terminated forthwith.

However, COMPANY shall be at liberty to give the Receiver or Liquidator or Insolvency Professional Manager, as appointed by the Competent Court/Tribunal, the option of carrying out the Contract subject to its technical & financial competence and his providing a guarantee for due and faithful performance of the Contract.

44.5 **Termination for Unsatisfactory Performance**: If the COMPANY considers that, the performance of the CONTRACTOR is unsatisfactory, or not as per the provision of the Contract, the COMPANY shall notify the CONTRACTOR in writing and specify in details the cause of dissatisfaction. The COMPANY shall have the option to terminate the Contract by giving 15 days notice in writing to the CONTRACTOR, if CONTRACTOR fails to comply with the requisitions contained in the said written notice issued by the COMPANY. In the event CONTRACTOR rectifies its non-performance to the satisfaction of the COMPANY, the option of termination may not be exercised by the COMPANY. If however CONTRACTOR repeats non-performance subsequently, COMPANY shall exercise the option to terminate contract by giving 07 days notice. Such CONTRACTOR shall be put on holiday as per the Banning Policy of OIL [available at www.oil-india.in].

44.6 **Termination due to change of ownership and Assignment**: In case the CONTRACTOR's rights and/or obligations under this Contract and/or the CONTRACTOR's rights, title and interest to the equipment/ material, are transferred or assigned without the COMPANY's written consent, the COMPANY may at its option, terminate this Contract. COMPANY shall not be however under any obligation to accord consent to the CONTRACTOR for change of ownership & assignment of the contract.

44.7 If at any time during the term of this Contract, breakdown of CONTRACTOR's equipment results in CONTRACTORs being unable to perform their obligations hereunder for a period of 15 successive days, COMPANY at its option, may terminate this Contract in its entirely or partially to the extent non-performance,

without any further right or obligation on the part of the COMPANY, except for the payment of money then due. No notice shall be served by the COMPANY under the condition stated above.

44.8 **Termination for delay in mobilization**: CONTRACTOR is required to mobilize complete equipment along with crew for commencement of services at the specified site within the maximum allowed number of days from the date of LOA/Notice for Mobilization as specified in the special conditions of contract. If the CONTRACTOR (successful bidder) fails to complete the mobilization as above, OIL shall have, without prejudice to any other clause of the CONTRACT, the right to terminate the contract.

44.9 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the COMPANY on giving 30 (thirty) days written notice to the CONTRACTOR due to any other reason not covered under the above Article from 44.1 to 44.8 and in the event of such termination the COMPANY shall not be liable to pay any cost or damage to the CONTRACTOR except for payment of services as per the Contract upto the date of termination.

44.10 **Consequence of Termination**: In all cases of termination herein set forth, the relative obligations of the parties to the Contract shall be limited to the period up to the date of termination. Notwithstanding the termination of this Contract, the parties shall continue to be bound by the provisions of this Contract that reasonably require some action or forbearance after such termination.

Upon termination of this Contract, CONTRACTOR shall return to COMPANY all of COMPANY's properties, which are at the time in CONTRACTOR's possession.

In the event of termination of contract, COMPANY will issue Notice of termination of the contract with date or event after which the contract will be terminated. The contract shall then stand terminated and the CONTRACTOR shall demobilize their personnel & materials.

Demobilization charges shall not be payable by COMPANY in case of Article from 44.4 to 44.7.

45.0 TO DETERMINE THE CONTRACT:

In such an event (i.e. termination under Article No. 44.4 to 44.9 above), the contract shall stand terminated and shall cease to be in force from the date of such notification by the COMPANY. Thereafter the CONTRACTOR shall stop forthwith any of the work then in progress, except those work which the COMPANY may, in writing, require to be done to safeguard any property or work, or installations from damages, and the COMPANY may take over the remaining unfinished work of the CONTRACTOR and complete the same through a fresh CONTRACTOR or by other means, at the risk and cost of the CONTRACTOR, and any of its sureties if any, shall be liable to the COMPANY for any excess cost occasioned by such work having to be so taken over and completed by the COMPANY over and above the cost at the rate/cost specified in the schedule of quantities and rates/prices.

46.0 WITHOUT DETERMINING THE CONTRACT:

In such an event (i.e. termination under Article No. 44.4 to 44.9 above), the COMPANY may take over the work of the CONTRACTOR or any part thereof and complete the same through a fresh CONTRACTOR or by other means, at the risk and cost of the CONTRACTOR. The CONTRACTOR and any of its sureties are liable to the COMPANY for any excess cost over and above the cost at the rates specified in the schedule of quantities and rates/prices, occasioned by such work having been taken over and completed by the COMPANY.

47.0 ERRING/DEFAULTING AGENCIES:

Erring and defaulting agencies like bidder, CONTRACTOR, supplier, vendor, service provider will be dealt as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website: www.oil-india.com. Moreover, OIL reserves the right to take legal or any other action on the basis of merit of the case.

48.0 MISCELLANEOUS PROVISIONS:

CONTRACTOR shall give notices and pay all fees at their own cost required to be given or paid by any National or State Statute, Ordinance, or other Law or any regulation, or bye-law of any local or other duly constituted authority as may be in force from time to time in India, in relation to the performance of the services and by the rules & regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the services.

CONTRACTOR shall conform in all respects with the provisions of any Statute, Ordinance of Law as aforesaid and the regulations or bye-law of any local or other duly constituted authority which may be applicable to the services and with such rules and regulation, public bodies and Companies as aforesaid and shall keep COMPANY indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye-law.

During the tenure of the Contract, CONTRACTOR shall keep the site where the services are being performed reasonably free from all unnecessary obstruction and shall store or dispose of any equipment and surplus materials and clear away and remove from the site any wreckage, rubbish or temporary works no longer required. On the completion of the services, CONTRACTOR shall clear away and remove from the site any surplus materials; rubbish or temporary works of every kind and leave the whole of the site clean and in workmanlike condition to the satisfaction of the COMPANY.

Key personnel cannot be changed during the tenure of the Contract except due to sickness/death/resignation of the personnel or any other justified situation in which case the replaced person should have equal experience and qualification, which will be again subject to prior approval, by the COMPANY.

END OF SECTION–I

Part-3
SECTION-II

TERMS OF REFERENCE / TECHNICAL SPECIFICATIONS AND SCHEDULE OF RATES [EXHIBITS- 1 to 7]

1.0 INTRODUCTION:

The Dima-Hasao and Karbi-Anglong districts are located towards south central part of Assam and predominantly represents a hilly terrain inhabited by tribal population. The Karbi Anglong district covers an area of 10,434 sq.km. and forms an isolated hill in the core of the district, separating from the Brahmaputra alluvials and Dima Hasao district has a total land area of 4888 square kilometers which makes it the third largest district in Assam after Karbi Anglong and Sonitpur. The average annual rainfall of Karbi Anglong district is 1121.5 mm. The rainfall is unevenly distributed over the period of six months from April to September. About 60% of rainfall is received during July to September.The drainage network forms the upper catchment of Dhansiri river, Jamuna and Kopili rivers. The hills are generally NE-SW trending with height acquiring maximum of 1400 m asl. In Dima Hasao, owing to its hilly terrain, there is a lot of variation in climate ranging from sub-tropical monsoon type to temperate alpine type due to the varying altitude.
The two district are well connected with other districts through various routes. On the north it is covered by NH-37 and on the east by NH-39. The N.F. railways passes through the district touching only a few points along the boundary. They are Hawaipur, Lamsakhang, Borlangphar, Langsoliet, Nilalung, Diphu, Doldoloi, Dhansiri, Rongapahar, Khotkhoti, Bokajan in Karbi Anglong and New Haflong, Maibang, New Harangajao, Mahur in Dimahasao.

2.0 LOCATION, PROJECT INFORMATION AND GEOLOGY OF THE BLOCK AREA:

a. NELP-IX Block AA-ONN-2010/2:

The block was initially awarded to the consortium of M/s Oil India Limited (OIL), M/s Oil & Natural Gas Corporation Limited (ONGCL) and M/s Gail India Limited (GAIL) and M/s East West Petroleum, Canada with Participating Interests (PI) of 40%, 30%, 20% and 10% respectively during NELP-IX round of bidding. Following the signing of PSC on 28.03.2012, M/s East West Petroleum expressed their willingness to exit from the block and accordingly OIL being operator of the block, with consensus from partners and regulator acquired the 10 % PI thereby increasing its stake to 50% PI. Accordingly, the participation interest became as OIL: 50%, ONGC:30% and GAIL: 20%.

As per committed Minimum Work Programme (MWP) for the NELP-IX Block (AA-ONN-2010/2), Oil India Ltd. (OIL), being the Operator has to drill two exploratory well within stipulated time frame. For carrying out the drilling activities, company has planned to deploy one 1400 HP (minimum) capacity Land Drilling Rig Package with top drive system on chartered hire basis.

The exploration NELP-IX Block AA-ONN-2010/2 with an area of 396 sq. km is located in the district of Karbi-Anglong under the state of Assam. The block is located in the south-western part of Dhansiri Valley with Mikir Hills in north and Naga – Schuppen Belt towards ESE. Regional geo-morphological setting of the

block is the Dhansiri Valley of the South Assam Shelf and is located around 17 km south of the Mikir Hills. Dhansiri Valley is a part of the Assam and Assam-Arakan Basin situated in the SW part of the Brahmaputra valley separated from Upper Assam Shelf by a major E-W lineament Jorhat Fault. The valley exhibits a classic stable shelf environment with basement slope towards south and southeast. The granitic rocks of Pre-Cambrian age are exposed in major part of Mikir Hills and Neogene rocks outcrop at its periphery. The exposures of mostly Neogene, but some Barail sequences overlying the Naga Thrust are seen in western peripheral parts of Naga Hills which is the part of this block. Due to poly-phase deformational history of the basin, the fault system in the area is rather complex. The block has an undulating topography with maximum elevation of 350 m in the North- Western part. No well has been drilled within the block till now. However, the prominent discoveries by ONGC in proximity are the Khoraghat field and Nambar structure which are approximately 35-40 km and 25-30 km from the NE block boundary respectively.

NELP-IX Block AA-ONN-2010/2: Block Coordinates: (WGS-1984)

Points	Coordinates					
	Longitude			Latitude		
	Deg.	Min.	Sec.	Deg.	Min.	Sec.
A	93	34	30	25	56	0
B	93	39	0	25	56	0
C	93	39	0	25	55	0
D	93	40	30	25	55	0
E	93	40	30	25	49	27.96
F	93	30	0	25	39	10.31
G	93	30	0	25	42	0
H	93	28	30	25	42	0
I	93	28	30	25	46	0
J	93	27	0	25	46	0
K	93	27	0	25	52	0
L	93	30	0	25	52	0
M	93	30	0	25	54	0
N	93	33	0	25	54	0
O	93	33	0	25	55	0
P	93	34	30	25	55	0

b. BLOCK: AA-ONHP-2018/3(OALP-III)

The OALP-III BlockAA-ONHP-2018/3 Block, covering an area of 1234.42 Sq. km is located in Dima-Hasao District of Assam (Figure-1). MoP&NG, Govt. of India approved

the award of the block AA-ONHP-2018/3 to OIL for Exploration of Hydrocarbon vide letter ref. No. O-12017(II)/30/2018-ONG-II dated 11thJuly, 2019.

In pursuance of the RSC signed between OIL and the MoP&NG, Govt. of India, the Petroleum Exploration License (PEL) was granted by Govt. of Assam to OIL vide letter ref. No. PEM.141/2019/138 dated 24th April, 2020.

As per commitment in the RSC, OIL has to drill a minimum 3(three) numbers of Exploratory Wells for the purpose of exploration of Hydrocarbon in the Dima-HasaoAA-ONHP-2018/3 OALPIII Block. Accordingly, based on the review of available vintage G&G data, one (1) no. of drillable location has been identified.

The block AA-ONHP-2018/3 covers an area of 1234.42 sq.km. and is located in Dima-Hasao district of Assam. The northern part of the block is covered by the Dhansiri Reserve Forest and the Langting-Mupa Reserve Forest. The entire area is covered by thick vegetation. The granitic rocks of Pre-Cambrian age are exposed in major part of Mikir Hills and Neogene rocks outcrop at its periphery. The exposures of mostly Neogene, but some Barail sequences overlying the Naga Thrust are seen in western peripheral parts of Naga Hills which is the part of this block. Due to poly-phase deformational history of the basin, the fault system in the area is rather complex. The block has an undulating topography with maximum elevation of 350 m in the North- Western part. No well has been drilled within the block till now.
The boundary coordinates of the block AA-ONHP-2018/3 is given in Table. 2.1

AA-ONHP-2018/3 Block Coordinates: (WGS-1984)

Point	Longitude	Latitude
1	93°23'	25°20'
2	93°0'	25°20'
3	93°0'	25°40'
4	93°20'	25°40'
5	93°20'	25°33'
6	93°19'	25°33'
7	93°19'	25°32'
8	93°20'	25°32'

3.0 TENTATIVE PORE PRESSURE DATA BASED ON SEISMIC PROFILE

The tentative pore pressure obtained from seismic velocities indicates that, pore pressure follows a marginally higher hydrostatic trend from surface up to depth of around 2000m (TVD). The equivalent mud weight in this range varies from 9.31 ppg to 9.56ppg. After 2000m(TVD) gradual rise of pore pressure has been observed and reaches maximum up to 10.30ppg at around 2500m (TVD).

4.0 ANTICIPATED TEMPERATURE PROFILE:

The maximum anticipated bottom hole temperature at target depth (TVD) is expected to be between 70-80 Deg. Centigrade.

5.0 PROPOSED DRILLING PROGRAM (SUBJECTED TO CHANGE):

The tentative drilling program proposed for the wells to be drilled in Dima Hasao and Karbi Anglong blocks are as follows,

Sl. No.	Description	ODHA (Dima Hasao)	KNEA (Karbi Anglong)	KNEB (Karbi Anglong)
1	Type of Well	J-Bend Exploratory	Vertical- Exploratory	Vertical- Exploratory
2	Conductor Stage Hole Size/ Casing Size/ Depth	17 ½"x13 3/8" - 250m	17 ½"x13 3/8" - 250m	17 ½"x13 3/8" - 250m
3	Isolation Stage Hole Size/ Casing Size/ Depth	12 ¼"x 9 5/8"-1850m	12 ¼"x 9 5/8"-1850m	12 ¼"x 9 5/8"-1850m
4	Oil String Stage Hole Size/ Casing Size/ Depth	8 ½"x5 ½"-29000m	8 ½"x5 ½"-2200m	8 ½"x5 ½"-2300m
5	Type of Mud System	Water Based Mud	Water Based Mud	Water Based Mud

6.0 **PRESENCE OF CO_2 & H_2S:** Presence of CO_2 & H_2S is not yet recorded at the proposed areas. However, provision of requisite quantity of SCBA (Self-contained breathing apparatus) units with trained personnel for dealing with any H2S/or, any other toxic gas situation to be kept handy.

7.0 **SCOPE OF WORKS OF VARIOUS SERVICES UNDER BUNDLED SERVICE CONTRACT:**

This section establishes the scope and schedule of the works to be performed by Contractor at the designated location and describes references, specifications, instructions, standards, other documents, the specifications for any materials, tools & equipment, personnel with required experience, which Contractor shall satisfy or adhere to in the performance of the work. The detailed scope of work under bundled services are provided in the below mentioned individual exhibits:

a) Cementing Service **(Exhibit 1)**

b) Mud Engineering Service **(Exhibit 2)**

c) Directional Drilling Service (Regular) **(Exhibit 3)**

d) Wireline Logging Service **(Exhibit 4)**

e) Mud Logging Unit (MLU) service **(Exhibit 5)**

f) Liner Hanger Service (call out) **(Exhibit 6)**

g) Directional Drilling Service (call out) **(Exhibit 7)**

EXHIBIT-I: CEMENTING SERVICES

A. TERMS OF REFERENCE & TECHNICAL SPECIFICATIONS OF CEMENTING SERVICE:

The Contractor shall provide the complete range of cementing services by providing their Engineers, Operators, Technology, cementing unit, other related items, Cement, Cement Additives, consumables, Slurry Design, Spacer design and Spacer chemicals, pre-flush chemicals etc. as detailed below:

1.0 DETAILS OF SERVICES TO BE PROVIDED BY THE CONTRACTOR:

The Contractor is required to provide services described herein, but not limited to the under noted activities only:

a. To Provide Cement Slurry Design, Spacer design, Cementing Programme & Casing Stand-off design (centralizer's placement programme).

b. To carry out relevant tests on cement, cement additives and Spacer additives in their laboratory as per the API recommendations as well as actual simulations for cement slurry design/ Spacer design for each and every cementing job required to be performed as per well policy.

c. To collect well-site water samples for sending it to their laboratory for testing and slurry/ Spacer design purpose.

d. To carry out Primary Cementing jobs as per best industry practices.

e. To carry out two stage cementing jobs (if required).

f. To carry out isolation repairing job (if required).

g. To carry out Well ″Annulus Top-Up″ jobs as applicable (if required).

h. To carry out Liner cementing jobs.

i. To carry out secondary cementing (squeeze/ plug) jobs (if required).

j. To seal-off ″Loss Circulation Zone″ using loss circulation materials and placing cement, barites, bentonite-diesel-gunk plug. Requisite Barytes, Bentonite, Loss Circulation materials and Diesel for this purpose will be provided by the Company (OIL).

k. To carry out cement Plug/ Squeeze jobs through drill pipe/tubing.

l. To carry out Casing integrity Test.

m. To assist in carrying out well head test/BOP tests/LOT/PIT/Well Killing/TCP actuation/DST down hole tool actuation (if required).

n. To properly service and maintain all equipment belonging to contractor and thus avoid downtime.

o. To perform remedial and squeeze job, if required, using cement retainer (Contractor to provide the cement retainers suitable for 9⅝″ x 47 PPF, 7″ x 29 PPF, 5.1/2" X 20 PPF and 5″ x 15 PPF Casing/Liners respectively).

p. To supply entire requirement of API Class-G cement, all required Cement/ Spacer additives and consumables (if required).

q. To carry out installation & commissioning of required facility at designated drilling location and mobilisation of entire set up to next location (ILM) when advised by the Company with their own arrangement.

r. To carry out timely mobilization of tools / equipment / consumables/ personnel to designated drilling location.

s. To carry out dismantling of Contractor's facility & demobilization of the same upon receipt of demobilization notice from the Company.

t. Any other jobs generally connected with operational requirement to restore normalcy of the wells shall be provided by the Contractor when called upon to do so including supply of extra items/equipment/cement additives/consumables on mutually agreed terms and conditions

u. To carryout post job analysis of all critical cementation jobs in their simulator and to suggest ways and means to improve further quality of jobs.

v. The Contractor shall consider the availability of all the requisite equipment and additives for the cementation jobs at the planning stage. The contractors shall coordinate and recommend and ensure the availability of additives for all critical jobs prior to commencement of cementing job.

w. To collect slurry samples in briquettes prior and during pumping the slurry for recording setting time and hardness testing (to be conducted at their laboratory) as per API recommended practice. One sample to be provided to the company for cross testing at company's facilities.

x. To submit detail reports (within 3 days time) of all the cementation jobs performed.

y. To carry out any other job normally required to be done through the Cementing Unit (associated with drilling operation) as decided by company.

Notes:

a. In order to provide the above services, the Contractor shall mobilize their Cementing unit, Cement handling facilities, tools / equipment's, consumables, personnel/experts to the designated site. The competent personnel/experts will be required to liaise with Company Representative on regular basis for collecting relevant data as the well operation progresses. The Contractor's personnel to be deployed at well site shall be required to plan and execute above activities as per instructions given by the Company Representative from time to time.

b. Before Commencement of cementing jobs at location, the Contractor's personnel should liaise with Company Representative and representatives of other Contractors working for Company at Rig site to understand the rig facility and positions of various tools/equipment including mud handling system and solid control system etc., so that they can make proper and adequate arrangements/ connections etc. for smooth job execution.

2.0 SPECIFICATIONS OF TOOLS, EQUIPMENT TO BE DEPLOYED BY THE CONTRACTOR:

2.1 **CEMENTING UNIT**: Quantity – 1 (One) No.

The Cementing Unit should be a twin pump high pressure pumping unit suitable for all types of pressure pumping services including but not limited to cementing, stimulation and general pumping services. The unit should be mobile, self-driven or trailer mounted (skid mounted unit placed on trailer will not be accepted) with stand-by horse unit, having self-contained centrifugal pumps, circulating & mixing system, hoppers and feed water pump, etc.

The Cementing Unit should be complete with all accessories including but not limited to the following and capable of carrying out the specified jobs.

a) **Prime Mover**: The twin pumping unit should be powered by two diesel engines, each capable of delivering 320 BHP (Minimum).

b) **Pumps**: Two numbers of single acting triplex pumps with each pump having rated capacity of 10,000 PSI WP (Minimum) and pumping rate of 10 US BBLS per minute. The pumps should have a minimum output of 220 HP each. One or both the pumps should deliver fluid through the high-pressure manifold simultaneously. The high-pressure manifold should be rated for 15,000 PSI working pressure and should have valves to permit one or both the pumps to circulate back to the displacement tank.

c) **Re-circulating** Cement Mixing System: Re-circulating equipment consisting of re-circulating mixer used in conjunction with a two compartmental displacement tank, 8-10 bbls each.

d) **Displacement Tanks**: Twin calibrated displacement tanks graduated in 0.5 bbls increments and holding a minimum of 10 bbls each for a measured total of 20 bbls.

e) **Central Control Console**: Full sensor package of advanced technology like PACR (Portable Automatic Cement Recorder) for recording and report generating of the performed job.

f) **Safety System**: The Cementing Unit must incorporate adequate safety systems to avoid damage to the equipment or personnel in case of over pressurization.

2.2 **BATCH MIXER (On Callout Basis):**

(i) Twin Pod(50bbl each) 100bbl Capacity skid mounted cement batch mixer with re-circulating system and agitator: 1 No.

(ii) The batch mixer should be complete with all standard equipment, gadgets, pipe fittings etc. for preparing cement slurries as desired by Company.

(iii) The Batch Mixer may not be required for operation throughout the contract period. Therefore, Company reserves the right to utilize the services of Batch Mixer **on call-out basis** as and when required during the currency of contract serving thirty (30) days advance notice. Mobilization, demobilization and other charges as provisioned herein/to be quoted by the bidder will be paid by Company against each such call for batch mixer.

2.3 **BULK HANDLING EQUIPMENT:**

(i) Contractor is required to provide and maintain a bulk handling facility either through of its own or, through subcontracting, inclusive of pneumatic silos (total capacity to be based on the job that requires that maximum amount of cement) with all required accessories such as air compressor, cutting bottles, air dryer, dust collector, rock catcher, etc, for screening, blending etc. for quality control of dry/blended cement supplied at well site. All pressure vessel equipment should have pressure gauges and over pressure relief valves. The space & site for bulk facilities and transfer of cement/ blended cement to wellsite will be exclusive responsibility of contractor.

(ii) One (1) set consisting of Three (3) nos. of vertical (rocket) field storage silo for Rig site each having 1000 cu.ft. Capacity (i.e. total capacity of 1 set = 3000 cu.ft.).

Space of around 40 m^2 will be provided at well site for temporary placing vertical (rocket) silos for storing cement for cementation jobs.

2.4 OTHER CEMENTING EQUIPMENTS:

(i) Chiksan Loops: 2″ chiksan loops of 12 ft. length each & 10000 psi (minimum) rating line with necessary adaptors / connectors / cross-overs (includes swivel joints, bend, nipple, elbow, plug valves etc.) to connect cementing unit to circulating / cementing head at derrick floor / cellar – Total length 250 ft (Minimum).

(ii) Cementing Manifold of 15,000 psi WP for connections to cementing line, casing swedges, casing heads and standpipe for the rig.

(iii) Cementing hose suitable for topping-up / filling-up of Casing anulus

2.5 **CEMENTING HEAD WITH QUICK CHANGE ADAPTOR**:

(i) 13.3/8″ Standard double plug cementing head (WP not less than 5000 PSI) with quick coupler/adaptor having bottom Tenaris Blue pin thread connection for 13.3/8″ casing – 1 No.

(ii) 9⅝″ Standard double plug cementing head (WP not less than 5000 PSI) with quick coupler/adaptor having bottom VAM SLIJ-II pin thread connection for 9⅝″ casing – 1 No.

(iii) 7" Standard double plug cementing head (WP not less than 5000 PSI) with quick coupler/adaptor having bottom VAM SLIJ-II pin thread connection for 7″ casing/ Liner – 1 No.

(iv) 5.1/2" Standard double plug cementing head (WP not less than 5000 PSI) with quick coupler/adaptor having bottom VAM SLIJ-II pin thread connection for 5.1/2" casing – 1 No.

(v) Drill pipe cementing head (WP not less than 5000 PSI) with DSTJ or XT57 pin connection (NC-50) & suitable for use on 5″ OD drill pipes.

2.6 **LABORATORY FACILITY:**

The Bidder should have arrangements in place of an adequate Laboratory facility for designing cement slurry to meet Company's requirements. The Bidder should furnish details of the facilities and literatures/catalogues of the various tools & equipment available in the Lab to undertake cement formulation and slurry design covering all parameters along with the techno-commercial bid.

NOTE: Bidders are required to provide Technical literature with schematic diagram of major Tools / Equipment / Spares etc. showing all specifications listed in this exhibit.

3.0 VINTAGE OF CEMENTING UNIT, EQUIPMENT AND TOOLS FOR CEMENTING SERVICE:

a) The vintage of the Surface tools and other equipment including the Cementing Unit & batch mixer shall not be of more than ten (10) years preceding the bid opening date. Documentary proof in respect of vintage should be submitted with the techno-commercial bid (un-priced) in the form of copies of relevant purchase order, B/L or invoice or any other documentary evidence that can substantiate the date of purchase/manufacture etc.

b) All down hole equipment, if any must be new or in perfect working condition.

c) All down hole consumables, if any must be new and of within 3 years make from bid opening date.

d) All tools used for cementing/associated operations should be completely redressed with new parts and Contractor shall guarantee it's satisfactory performance.

4.0 SPACER AND CEMENT SLURRY FORMULATION:

a) The bidder is required to provide Spacer and cement slurry formulation for all types of casings/ liners Cementing jobs based on tentative parameters as provided below, in their Techno-commercial Bid.

b) The tentative parameters for Spacer and cement slurry formulation are indicated below. The formulation (stage wise) should be complete indicating tentative requirement (quantity) of API class-G HSR cement along with various additives (maxinum10% variation with proper justification is acceptable during actual/ finale formulation before the job) to be consumed in preparing finale Cement slurry and in preparing Spacer. Formulation for both spacer and cement slurry showing % requirements of required additives must be submitted along with the Bid itself.

Tentative Slurry Formulation Parameters for Cementing Jobs to be done

Basic Parameter	**17.5" X 13.3/8" Casing Cement Job**	**12.25" X 9.5/8" Casing Cement Job**		**8.5" X 5.1/2" Casing Cement Job**
Density (lbs/cft)	Single Slurry	Lead	Tail (gas tight)	Single slurry (gas tight)
	114	102	118	118
Max. Fluid Loss (cc)	NM	<300	<100	<100
Thickening Time (Min.)	240 ± 30	240 ± 30	180 ± 30	270 ± 30
Casing Shoe At (mtrs.)	250	1850		3000
Cement Top, mtrs.	Surface	Surface	**Lead**-1388 to surface **Tail** 1850 to 1388	Up to 1650
Tentative Percentage extra over theoretical volume	100%	80%		70%
BHST (deg C)	35	65		88
BHCT (deg C)	28	55		78

Note:

1. Actual Cement slurry volume and Spacer volume will be decided by OIL based on open hole caliper log data and other relevant information.
2. 7" & 5″ liner is under contingency plan only.
3. For all Gas tight slurries in order to confirm gas tight integrity of cement slurry, bidder has to submit static gel strength test reports using Static Gel Strength (SGS) analyzer (recommended in API) indicating transition time maximum 45 min from 100 lbf/100 sq. ft. to 500 lbf/100 sq. ft.

4. All Casing Shoe/ Float Collar, Centralizer's, Short Nipples and Cementing wiper Plugs will be supplied by OIL.
5. OIL reserves the rights to relook/ retest the Slurry/ Spacer formulation proposed by the service provider and may ask for modification in the design parameters before the job, if required.

5.0 SUPPLY OF HSR API Class 'G' CEMENT, CEMENT ADDITIVES & OTHER CONSUMABLES at Rig site:

a) The tentative requirements of API Class 'G' HSR Oil well Cement, Cement Additives, casing accessories & well consumables (if any) as assessed by Company are listed below. However, the actual requirement may vary depending upon the hole data nearer the time. The Contractor is required to supply these items (if required) as per actual requirement.

Payments against all API class G HSR cement and other chemicals consumed in the cementing job will be made to the Contractor on the basis of actual consumption as calculated as per Clause No. 4.0(b) and finale approved formulation plan only.

Under no circumstance, all the leftover items including Cement/Cement additives and all other additives/ chemicals at the end of contract shall be bought by Company, but the same are to be demobilized by the Contractor at their cost and arrangements. The Contractor is expected to exercise meticulous planning and approach to meet the requirements without affecting operation and quality of the jobs.

b) The contractor shall supply and deliver all required API Class 'G' HSR Oil well Cement (processed through bulk handling plant and ready for use), various cement additives and well consumables (if required) for all kinds of cementation jobs at respective well site. Contractor is also advised to establish a bulk storage and handling facility/main supply base, somewhere nearer to designated well site or other place from where the well site requirements can be fed as and when required in optimum quantity. The Contractor is required to stock sufficient quantity of cement, cement additives and consumables at their nearby supply base/bulk storage facility to meet any eventuality and the stock position must be reviewed and reported to Company Representative at least on weekly basis.

c) Contractor will be solely responsible for all kinds of transport/ logistic requirement's for mobilizing their man, material's and resources.

d) Tentative total requirement of API class-G cement:1200 MT (including 10% extra) for 3 similar wells however Contractor is advised to reassure the requirement as per Job volume and other related factors. Requirement of total quantity of Cement additives/ spacer additives/ pre-flush additive chemicals will be in percentage quantities of required Cement quantities which will be guided by the proposed cement slurry formulation.

Tentative Quantum of Jobs to be performed:

a. Estimated primary Cementing Jobs : 10 Nos.
b. Estimated Secondary (Plug + squeeze) job : 30 Nos.
c. Allied Jobs like BOP testing LOT/PIT etc. : 6 Nos.

NOTES:

i. Contractor has to maintain their own ware house facilities for storage of cement, cement additives and other casing consumables (if required) for uninterrupted supply/delivery to well site at their own arrangement/expenses.
ii. The Contractor shall provide product data for all materials, chemical & additives including but not limited to brand name, unit of packing, country of origin, specification and Material Safety Data Sheet (MSDS).

iii. All the chemicals should be in their original packing & conform to relevant API and OCMA specified standard. If any chemical is found to be not conforming to the specifications, contractor shall replace the defective material immediately with quality product that conforms to the specification.

iv. Contractor shall arrange to provide samples of whole lot of cement and additives in advance for re-testing and re-evaluation (if required) of the formulation provided by the contractor, at OIL's own cement laboratory at Duliajan.

v. Contractor has to supply all the cement/ spacer/ pre-flush additives/ and, all additive chemicals required for cementation job either directly or through tie-up with the following four international reputed cementing additives supply companies only to achieve required parameters and quality cement bond in wells.

a. M/s. Halliburton
b. M/s. BJ Services
c..M/s. Schlumberger
d.M/s. Weatherford

vi. "In the event any chemical brand name / category changes occurs during the period of contract due to unavoidable circumstance, the same shall be acceptable to the Company subject to no change in cost, concentration, properties and test report compliance from the Company's test lab only."

vii. The Company shall not buy any leftover cement or cement additives or any consumables brought by the Contractor. It would be the responsibility of the Contractor to re-export or dispose-off the left-over Cement and additives, as deemed fit, in accordance with existing government regulations.

6.0 MOBILISATION/INSTALLATION/DISMANTLING/INTER-LOCATION MOVEMENT/ DEMOBILISATION:

6.1 Mobilisation: The mobilization of complete Cementing Unit together with other requisite equipment, tools, accessories including set of vertical silo's at Company designated site and cementing crew etc. Align/test and make it ready for rendering service as per Scope of the contract should be completed by the Contractor within ninety (90) days from the date of mobilisation notice issued after the issue of Letter of Award (LOA) by the Company. The mobilization shall be deemed to be completed when Contractor's equipment, manpower and optimum quantity of consumables like Cement, additives and casing accessories (if any) are placed at the designated location (1st drilling location in Dima Hasao/Karbi Anglong) to take up the primary cementing jobs for one well. However, at the same time, the Contractor has to build up stock of cement and additives etc. at their nearby bulk storage facility/supply base as preparedness for the next job. Completion of mobilisation needs to be duly certified by the Company's Representative upon physical verification.

The additional items (Batch Mixer-when called for) to be mobilized at site within twenty (20) days of receipt of advance notice from Company as and when required during the currency of contract.

On operational requirement, Contractor's personnel (when called for) are to be mobilised/interim re-mobilised within three (03) days from the notice of the company and demobilised/ interim demobilised with immediate effect on issuance of notice by the Company as per scope of the respective Exhibit of the Contract.

6.2 Installation/Dismantling: The Cementing Unit and other related set up including Vertical Rocket Silo's & Batch mixer (when called for) will be installed, tested ok and made operational by the Contractor for carrying out assigned jobs in each location. No extra charge will be payable for installation/ testing /dismantling activities or personnel involved/ engaged in these or daily maintenance activities. At the end of the drilling operation in each location, the entire set-up will be dismantled and shifted to the next location by the Contractor along with all accessories and leftover consumables (if any), for installation and operation at the forward location as advised by Company.

6.3 Inter-location Movement (ILM): ILM of Cementing Unit, Batch Mixer (when called for) and other equipment/tools/accessories together with the leftover cement/additives/consumables, if any, and manpower etc. shall be the sole responsibility of the Cementing Contractor. ILM must be completed within the specified time.

6.3.1 Contractor should plan inter-location transportation of their resources and arrange for vehicles, loading & unloading etc. in synchronization with movement of Rig Package and other associated services, so that the Cementing Services can be made available at the next drilling location as per Company's plan for timely spudding in/starting of drilling operation. Only the services of Crane at the respective well site/location for loading & unloading of Contractor's materials will be arranged by Company free of charge through other third-party Contractor (i.e., Drilling Rig Contractor) on requisition.

6.3.2 Allowable time for inter-location movement: For cementing unit and other equipment/ tools and accessories including one set of vertical (Rocket) silos up to a distance of Thirty (30) Km will be Twenty (20) days. In case the distance between two locations exceeds 30Km, Five (05) extra days will be allowed to complete inter-location movement for each 30 Km extra or, part thereof beyond the initial thirty(30) Kms.

In the event of temporary suspension of inter-location movement due to occurrence of force majeure situation (pursuant to clause no. 31.0 in Section -1 of Part-3(GCC)), the contractor will be allowed extra time equivalent to the period lost (if any) on account of force majeure conditions.

Note:
ILM covers dismantling of equipment/ service set up at present location, transportation to next location and installation/re-aligning of equipment and tested ok and make ready for operations from all aspects. The time of ILM starts from the time as mentioned in ILM notice to the contractor till the contractor makes its services ready in all aspects for use in next location (within specified time).

6.4 Demobilisation: Demobilisation means pack off and carry back of all the equipment, accessories, items including leftover consumables and manpower brought in within the scope and terms and conditions of the contract required in relation to execution of the jobs/works. Demobilisation Notice is served by the Company to the Contractor on account of expiry/ termination of the Contract.

7.0 DETAILS OF PERSONNEL TO BE DEPLOYED BY THE CONTRACTOR AND THEIR RESPONSIBILITIES:

- **Cementing Engineer : 1(One)**
- **Cementing Operator/Technician : 1 (One)**

a) The Contractor shall deploy one (1) competent and trained Cementing Engineer and one (01) Cementing Operator/Technician to assist the Cementing Engineer. The personnel should be deployed at site on continuous 24 hours a day **on call out basis**. However Contractor may deploy more personnel based on their requirement for smooth operation but Company will not be liable for their obligations whatsoever.

b) **Qualification & Experience of Cementing Engineer**: The Cementing Engineer should possess minimum educational qualification of Bachelor in Engineering or equivalent with at least five (5) years of relevant work experience, out of which at least three (3) years in planning and supervising of oil & gas well cementing and stimulation jobs & other associated cementing jobs independently. He should have successfully completed well cementation jobs for at least three wells of minimum 3500 m depth.

c) However, if contractor deploys more personnel than what has been stated above towards the performance of any specific job at well site during the currency of the contract, company will not pay for such additional manpower.

d) The personnel should be deployed at site on continuous 24 hours a day on call out basis. The on-off pattern of Rig personnel must comply with the Mines Act 1952/ The mines regulation 2017 with latest amendment.

e) **Responsibilities of Cementing Engineer**: Cementing Engineer at designated drilling location will be the overall in-charge on behalf of the Contractor and will be responsible for all cementing operations assigned under the contract as per the scope of work. He has to plan, design and coordinate with the Company Representative for successfully carrying out all the jobs, provide technical support for all aspects of cementing, pressure testing and associated cementing units, equipment / tools and shall carry out all connected activities in accordance with the highest standards. He will ensure overall supervision on all critical jobs at site directly by himself. He will also submit a comprehensive well completion report within one month of completion of the well, including post job analysis and recommended corrective measures, if any, for improvement of the job.

f) The Cementing Engineer will also coordinate with Company Representative in sending cement and other samples to their base laboratory for design & testing of slurry before field operations.

g) **Qualification & Experience of Cementing Operator/Technician**: The Cementing Operator/Technician should have passed at least SSC or the equivalent with trade certificate from a reputed vocational institute and should have also undergone basic training in Cementing at a reputed Cementing School, such as Halliburton / Dowell Schlumberger / BJ / IDT or any other reputed Cementing School. The Cementing Operator/Technician should have at least five (5) years of experience in performing cementing services independently. He should have successfully completed primary cementation jobs for at least three(03) wells of minimum 3500m depth.

h) To carry out all the cementing, stimulation and allied jobs needs to be carried out with cementing unit during drilling of oil and gas well.

i) The bidders are requested to propose more personnel than required as per tender, out of which the selected/approved by Company can only be deployed for execution of this contract. Bidder must submit the bio-data (as per attached format as

Annexure-1) with copies of all required documents, as specified) of all offered personnel within 15 days of issue of Letter of Award (LOA) or 30 days prior to commencement of contract (whichever is later) for approval by the Company before commencement of work.

j) The Contractor shall provide the required PPE (Personal Protective Equipment) as per DGMS/OISD to all their personnel at his own cost.

k) Company will provide boarding & lodging facility at site for one (01) Cementing Engineer and One (01) Cementing Operator/Technician free of charge during callout period only.

However, the contractor should keep one Operator/Technician at site during the entire contract period at their own cost for carrying out maintenance of their tools/equipment and for shifting of the cementing unit (if required).

l) Medical Fitness: The Contractor shall ensure that all of the Contractor's Personnel shall have had a full medical examination (by a qualified and registered doctor) prior to commencement of the operation and the certificates of all such personnel in form 'O' of The Mines Act 1952 should be submitted by the contractor. Also all personnel deployed(directly or indirectly) by the Contractor to run this Contract should be properly vaccinated for COVID-19 as per guidelines issued by Health ministry from State/ Central Govt.

B. SCHEDULE OF RATES FOR CEMENTING SERVICES

The bidder shall quote the rates/prices in their Price Bid strictly as per PROFORMA-B (Appendix-1 and Appendix-2). The quantity/parameter/No. of Days etc. shown against each item in the Tables is tentative and valid for Bid Evaluation purpose only. Payment to the successful Bidder/Contractor shall be made on the basis of actual utilization/work done/quantity consumed. All "DAY RATE" charges shall be quoted for 24 hours a day basis. But, for part of a day, the same shall be payable on pro-rata up to the nearest half an hour basis. Commercial evaluation of Bids to establish inter-se ranking of all technically qualified bidders will be done based on the rates/charges quoted in these Tables only.

1.0 MOBILISATION CHARGES (LUMPSUM): (For all equipment & manpower, except the Batch Mixer which is on call out basis only)

a. The initial Mobilization charges shall be payable one-time lump sum which shall cover all local and foreign costs (if any) to be incurred by the Contractor only to mobilize the Cementing Unit complete with all necessary equipment, tools, accessories including cementing heads, one set (three nos.) of vertical silos and spare & consumables thereof and the requisite manpower (except cementing engineer and technician) as specified in the Contract, to the first drilling location in Dima Hasao/Karbi Anglong district, Assam, India and shall include all local taxes & levies , port fees, transportation/freight & insurance, state entry tax etc., but excluding GST and Customs Duty (GST, if applicable will be paid extra by Company)

b. Mobilization cost for equipment on call out basis (Batch Mixer) should be quoted separately as provisioned in price bid format.

c. Company will issue Recommendatory Letters on the basis of requisite documents to be provided by the Contractor for import of items (which shall have to be submitted to OIL at least 20 days in advance), if envisaged in PROFORMA-A1, for Contractor to obtain necessary Essentiality Certificates (EC) from the Directorate General of Hydrocarbon (DGH), India to avail nil/concessional Customs Duty, if applicable. However, securing EC and payment of port rent, demurrage etc. and clearance of goods through Indian Customs will exclusively rest on the Contractor.

d. The Mobilization charges shall be payable only when all requisite materials (including adequate quantity of Cement & all other Additives for cementation job of minimum one well), equipment and crew are mobilized at site and positioned to undertake/commence the assigned work under the Contract at the first drilling location in Dima Hasao/Karbi Anglong district, Assam and duly certified by Company's Representative.

e. The Mobilization Charges quoted should not exceed 7.5% of the total Contract value.

2.0 DEMOBILIZATION CHARGES: (LUMP SUM) (For all equipment & manpower, except the Batch Mixer)

a) The final Demobilization Charges shall be payable one time on lump sum basis which shall cover all expenses of Contractor towards demobilization of Cementing Unit complete with all necessary equipment, tools, accessories and spares & consumables thereof, leftover Cement & additives, if any, and the requisite manpower as specified and covered under this contract, from the last/all drilling location under the contract in Dima Hasao/Karbi Anglong district, Assam, India to Contractor's base or elsewhere (for re-export) upon completion/termination of the Contract. Demobilization cost of Batch Mixer should be quoted separately as provisioned herein, being the optional item on call-out basis.

b) All charges connected with demobilization including all fees, duties and taxes in relation thereto, insurance and freight within India or on export/re-export outside India will be to Contractor's account.

c) All contractual Day Rates/Charges shall cease to exist with effect from the date and time or event as to be specified by Company in the final demobilization notice. No charges whatsoever will be payable thereafter.

d) Demobilization charges shall be paid to the Contractor after successful completion of all their contractual obligations as per provisions of the contract including re-export formalities.

e) The Contractor will ensure that final demobilization is completed and Company's work-site is cleared-off all Contractor's property within 30 (thirty) days of notice from the Company.

f) The final Demobilization Charges quoted should not be less than 2.5 % of the total Contract value.

3.0 PERSONNEL CHARGES: PER DAY

DAY RATE FOR PERSONNEL:

Day Rate for Personnel shall be payable to the Contractor for deployment of following personnel as one unit under the contract on per Day (24 hours basis) at site, independent of any cementing jobs carried out in the wells. The same is also payable on pro-rata to the nearest half an hour basis for part of a day, if any.

(i) Cementing Engineer cum Cementing Unit Operator : One (1)
(ii) Technician to assist the Cementing Engineer : One (1))

(a) Besides above, the Contractor may engage additional personnel for maintenance or assistance in the performance of the assigned Work. However, Company will neither be responsible nor pay any charge or day rate for such additional personnel, if deployed any.
(b) The Day Rate for Personnel will be directly linked to the availability of manpower and associated equipment, tools etc. in perfectly operational conditions as per contractual assignment.
(c) Day Rate for Personnel shall be payable from the day/time, the Contractor completes mobilization at the designated Rig site including installation and commissioning of their entire facilities, and duly certified by the Company Representative.
(d) Day Rate for Personnel shall not be payable for unauthorized withdrawal or non-availability of any/all Contractor's personnel/equipment/tools from site without Company's permission.
(e) Day Rate for Personnel shall not be payable to Contractor in case any equipment handled by them fails to perform and the same will remain ceased until the equipment/tool is put back into operating condition or evidenced by demonstration of operation in actual tests or use to the satisfaction of the Company.
(f) Boarding and lodging for Contractor's personnel (03 Nos. as specified above) at drilling locations will be provided by Company free of charge. First-aid facility as available at site will also be extended to Contractor's personnel free of cost. However, it will be the sole responsibility of Contractor to provide specialized medical facility, if the need so arises.

(g) The Contractor shall provide statutory "OFF" to their well site Cementing Engineer and Technicians as per Mines Act & other statutes/regulations and arrange for crew change from time to time at their cost. All such expenditure including en-route expenses of Contractor's personnel shall be borne by the Contractor. No extra payment whatsoever will be due from Company on this account.

(h) Interim de-mobilisation and Interim re-mobilisation of contractor's personnel will be applicable on sole discretion of the company depending upon the job requirement of the company. Interim mobilization/ de-mobilisation for personnel will be intimated separately by the company. The time for interim re-mobilization of personnel to well site will be 03 days from the date of issue of call out notice and, interim de-mobilisation will be with immediate effect on issuance of notice from well site.

4.0 EQUIPMENT HIRING/RENTAL CHARGES: PER DAY (For the Cementing Unit and other equipment/tools, except the Batch Mixer which is on call out basis)

(a) The Hiring/Rental Charges for the Cementing Unit complete with other tools, equipment and accessories (including cementing heads) shall be quoted on per day of 24 hours basis and the same shall be payable with effect from the completion of initial mobilisation till date & time of final demobilization, except otherwise as provided hereunder, independent of any cementing jobs carried out in the wells. For part of a day, payment will be calculated on Pro rata basis to the nearest half an hour only. Day Rate (Rental charges) for Batch Mixer should be quoted separately as provisioned herein being the optional item on call-out basis.

(b) Equipment Hiring Charges shall include the rental of Cementing Unit all other equipment/tools (including cementing heads etc.). The cost of maintenance of all such equipment including supply of spares etc. as may be required from time to time during the Contract period shall also be included. The Contractor must maintain adequate stock of such regularly required items/spares/consumables at the drilling site under their possession to avoid downtime.

(c) Equipment Hiring Charges shall not be payable, if the Contractor withdraws the whole or part of the equipment or any manpower affecting operations. If any of the Contractor's equipment/tool fails to perform during the operation for any reason whatsoever, no equipment hiring charges shall be payable till the same is/are put back in to operating condition or evidenced by demonstration of operation in actual tests or use to the satisfaction of Company.

5.0 OPERATIONAL CHARGES : PER HOUR

a. Operational Charges shall be paid to the Contractor in addition to the "Day Rate for Personnel" and "Equipment Hiring Charges" as above for carrying out the following specific well related jobs. Operational Charges should be quoted on per hour basis for the expenditures, if any, to be incurred by the Contractor exclusively for such operations. Since payment for Rental of equipment, Charges for Personnel and cost of materials (Cement and all other additives) are provisioned herein separately and will be paid irrespective of these operations, Contractor must not include any such cost in their quoted Operational Charges. Operational charges will also be paid on pro-rata to the nearest half an hour for part of an hour, if any.

(i) Primary Cement job
(ii) Secondary Cement job
(iii) Liner Cement job
(iv) Stage Cement job
(v) Well Killing job
(vi) Plug job

(vii) Squeeze Cement job
(viii) Annular Top-up job
(ix) LOT
(x) Casing Integrity/Well Head Test
(xi) Circulation job etc.
(xii) Any other job associated with drilling operation and appropriate to Cementing Contractor and required to be carried out by the Cementing Unit as per advice of Company Representative at site.

b. Operational charges shall be payable for the period during which the Cementing Unit is in cementing operations.

6.0 INTER-LOCATION MOVEMENT (ILM) CHARGES: PER KM (For the Cementing Unit and other equipment/tools, except the Batch Mixer)

a. The Contractor shall be solely responsible to carry out inter-location shifting/transportation of their materials viz; Cementing Unit complete with all equipment, tools, accessories, consumables, leftover cement & additives and manpower etc. from one location after completion of drilling/testing program to the next location as to be decided/notified by Company to take up the Services at the forward location under the contract. Inter-location shifting/transportation charges will be paid per Kilometer (KM) basis depending on the actual distance between the two locations). Charges for inter-location shifting of one set of vertical(rocket) silos is to be indicated separately.

b. The inter-location movement charges (per Km Basis) includes transfer of contractor's entire onsite equipment/stores etc. including consumables from existing location to next location.
No any other charges shall be payable during the period of Inter-location Movement (ILM).

c. Vehicles and additional manpower, if required any, for the aforementioned inter-location shifting shall also be arranged by the Contractor. However, the services of Crane as may be required for loading and unloading at the respective well site/location will be arranged by Company free of cost through a third-party Service Provider (i.e., Drilling Rig Service Provider). But, necessary supervision to ensure safe loading and unloading will be the sole responsibility of Cementing Contractor.

d. The Contractor shall be allowed to complete the ILM of their belongings within twenty (20) days from the date of ILM notice issued by the Company upto an inter-location distance of thirty (30) KM. In case the distance between two locations exceeds 30 KM, five (5) extra days will be allowed to complete inter-location movement for each 30 KM or part thereof beyond the initial thirty KM.

e) ILM will be deemed to be complete once all the Contractor's tools / equipment /accessories / consumables are transferred to forward / next designated drilling location and installed, commissioned, tested, calibrated to its rated specifications & made operational to carry out activity assigned by the Company and operating personnel are positioned at operation site and duly certified by the Company's authorized representative regarding readiness of the equipment & personnel to undertake / commence the work assigned under the contract. ILM must be completed at the designated next/forward location within the specified time.

f) In case, inter-location movement is suspended due to Force Majeure situation, pursuant to Clause No.31.0 in Section-I of PART-3, the time lost on account of such

Force Majeure condition will be extended without any liquidated damages/penalty/ loss to the Contractor.

g) In the event of delay in inter-location movement for the reason solely attributable to Contractor or their sub-contractor, the total ILM charges shall be discounted by five percent (5%) for delay of each day or part thereof beyond the standard allowable period as stipulated in (d) above, upto the total calculated cost for that inter-location movement.

7.0 BATCH MIXER (OPTIONAL REQUIREMENT):

Based on operational requirements, Company may avail the services of one (1) No. of Batch Mixer of 100 bbl. capacity on call-out basis at any time during the currency of contract by serving thirty (30) days advance notice to the Contractor. Bidders to quote the following charges separately for Batch Mixer as above.

(i) Lumpsum Mobilisation Charges up to the designated well site in Dima Hasao/Karbi Anglong district.

(ii) Lumpsum De-mobilisation Charges from the well site in Dima Hasao/Karbi Anglong district.

(iii) Hiring (Rental) Charges per day

Note: No additional charge will be payable for operation of the Batch Mixer.

8.0 ZERO (NIL) RATES:

Notwithstanding any provision in the Contract, no charges shall be payable for the period during which the job or activity assigned to the Contractor is halted due to break-down of Contractor's tools, equipment/non-availability of personnel/ non-availability of consumables like Cement, additives and well consumables as provisioned herein in adequate quality & quantity or for any other reason whatsoever attributable to the Contractor.

9.0 FORCE MAJEURE DAY RATE: (LUMP SUM PER DAY):

a) Upon occurrence of force majeure situation pursuant to Clause No.31.0 in "Section-I of PART-3", only the Force Majeure Day Rate shall be payable by Company, which should be restricted to maximum fifty percent (50%) of the sum total of
(i) Personnel Day Rate (Clause No. 3.0), if applicable and
(ii) Equipment Hiring Day Rate (Clause No. 4.0).

No other payment whatsoever will be due to the Contractor from Company under force majeure situation as above.

b) The Force Majeure Day Rate shall be payable per 24 hours a day or part thereof on pro- rata basis to the nearest half an hour during the first fifteen (15) days period only of occurrence of force majeure situation. No payment shall accrue to the Contractor beyond the first fifteen (15) days period unless mutually agreed upon.

c) Payment towards Force Majeure Day Rate shall not exceed 50% (Fifty percent) of the sum total of Equipment Rental per day and Personnel Charges per day.

10.0 COST OF CEMENT/ADDITIVES/ OTHER CONSUMABLES (ON ACTUAL CONSUMPTION BASIS):

a) The entire requirement of API Class-G (Grade-HSR), Cement additives and other consumables as assessed by Company are indicated below, which shall be supplied by the Contractor at site on FOR Destination (Rig site/Drilling location) basis including all applicable taxes & duties for effective & efficient well cementation jobs throughout the contract period.

b) The Contractor shall bear the entire cost of shipment/transportation up to well site, transit insurance, storage/ loading/ unloading/ handling charges, port rent/ fees/ demurrage & other clearance charges as applicable, and all other statutory taxes and duties payable to statutory authorities.

c) Basic Customs Duty towards import of materials into India in connection with execution of this contract will be as per prevailing Govt. Policy, since the services under this contract are for Petroleum Exploration activities in NELP/OALP Block. For the purpose of availing Customs Duty exemption, Company will issue necessary Recommendatory Letters for Contractor to obtain Essentiality Certificates from the Directorate General of Hydrocarbon (DGH), India, for which the Contractor must submit their request letter at least twenty (20) days in advance along with the duly certified relevant commercial invoice.

d) In view of limited storing space at rig site, the Contractor shall maintain a supply base/warehouse/bulk storage facility in the vicinity of Rig site at their cost, from where the requirements will be fed regularly to the wells. All related expenditures must be included in the quoted rates.

e) Cost of Chemicals will be paid by Company against Contractor's monthly bill/invoice based on actual consumption in the wells as to be certified by Company's Representative.

(f) Tentative requirements of Cement & Additives: (Approx. requirements for three wells)

(i) API Class-G (Grade-HSR) Cement	: 935 MT
(ii) Low Temperature Fluid Reducer	: 7 MT
(iii) Low Temperature Retarder	: 1 MT
(iv) Friction Reducer	: 2 MT
(v) Defoamer	: 2000 litres
(vi) Gas Block additive	: 16 MT
(vii) Spacer (additive)	: 3 MT
(viii) SAPP (pre-flush additive-II)	: 1000 Kg
(ix) Teepol (pre-flush additive-II)	: 400 litres

GENERAL NOTES:

i. Bidders should categorically indicate name and address of their Indian agent and the percentage of commission involved in this contract, if any. Such agency commission should be included in the quoted rates. In case, no categoric confirmation in this regard is mentioned in the Bid, it will be construed that Indian agent commission is not involved and bids will be evaluated accordingly.

ii. Bidder should submit the list of items with CIF value to be imported into India in connection with execution of this contract as per PROFORMA-A1, enclosed. PROFORMA-A1 should also be included in the un-priced Techno-Commercial Bid

incorporating therein the item description and quantity only. No cost detail should be shown in this PROFORMA while submitting with the Techno commercial Bid. However, all the columns of this PROFORMA, including columns for rate & CIF value, must be duly filled up for the items proposed to be imported (including Cement, Additives & Consumables) while submitting along with the PRICE BID.

iii. From the PROFORMA-A1, bidder should identify the items of re-exportable in nature (i.e. items which will not be consumed during the execution of the contract and required to be exported outside India after completion of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (REEX).

iv. Similarly, from the PROFORMA-A1, bidder should identify the items of consumable in nature (i.e. items which will be consumed during the execution of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (CONSUMABLES).

&&&&&

PROFORMA-A1

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable) TO BE IMPORTED INCONNECTION WITH EXECUTION OF THE CONTRACT SHOWING CIF VALUE for CEMENTING SERVICES

Sl. No.	Item Description	Qty/ Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+H	J	K	L

(1) The items which are not of consumable in nature and required to be re-exported outside India after completion of the Contract should be indicated as "YES" in column "J".

(2) The items, which are of consumable in nature should be indicated as "NO" in column "J".

(3) For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".

Authorised Person's Signature: _____
Name: _____

Seal of the Bidder:

FORMAT FOR COST OF SERVICES FOR CEMENTING OPERATION (CSC)					
Sl No.	**DESCRIPTION OF SERVICES**	**UoM**	**QTY**	**UNIT RATE (in INR)**	**TOTAL AMOUNT (in INR)**
1	Mobilisation charges for complete cementing unit alongwith all related equipment, tools, accessories etc including 01(one) set of vertical silos.	Lumpsum	1		0
2	**Personnel Charges**				
2 (a)	Mobilisation / Interim Re Mobilisation Charges for cementing engineer	Lumpsum	40		0
2(b)	Mobilisation / Interim Re Mobilisation Charges for each technician	Lumpsum	92		0
2 (c)	Day rate for cementing engineer	Man-Day	120		0
2 (d)	Day rate for Technician (Per Technician per Day)	Man-Day	240		0
2 (e)	De-Mobilisation / Interim De-mobilisation charges for cementing engineer	Lumpsum	40		0
2 (f)	De-mobillisation/ Interim Demobilisation charges for each technician	Lumpsum	92		0
3	Equipment hiring/rental charges per day for the cementing unit and all other associated equipment and tools etc, including 1 (one) set of vertical silos	Day	730		0
3 (a)	Interim De-mob of complete cementing unit alongwith all related equipment, tools, accessories etc including 01(one) set of vertical silos.	Lumpsum	2		0
3 (b)	Interim Re-mob of complete cementing unit alongwith all related equipment, tools, accessories etc including 01(one) set of vertical silos.	Lumpsum	2		0
4	Operational Charges for Cementing Operation (Per hour basis)	Hour	365		0
5 (a)	Interlocation movement charges per KM for complete cementing unit alongwith all related equipment, tools, accessories and personnel of contractor, (**excluding the set of vertical silos)**	KM	175		0
5 (b)	Interlocation movement charges per KM for one set of vertical silos	KM	175		0
6	Demobilisation charges for complete cementing unit alongwith all related equipment, tools, accessories, consumables etc including one set of vertical silos.	Lumpsum	1		0
7	**Batch Mixer (Additional Item for Use on call basis)**				0

7 (a)	Mobilisation Charges for one (01) nos batch mixer	Lumpsum	1		0
7 (b)	Hiring charges per day for one (01) nos of batch Mixer	Day	175		0
7 (c)	De-mobilisation Charges for one (01) nos batch mixer	Lumpsum	1		0
Total estimated cost of cementing services for three(03) wells (including all taxes and duties excluding GST) in INR					0
	One (1) set consisting of Three (3) nos. of vertical (rocket) field storage silo each having 1000 cu.ft. Capacity (i.e. total capacity of 1 set = 3000 cu.ft.				

GENERAL NOTES FOR PROFORMA-B (APPENDIX-1):

1.0 The items referred above are to be read in conjunction with **PART- 3, Section-II, EXHIBIT-I (B. Schedule of Rates).** Mobilization charges, Demobilization charges & Force Majeure rates must be quoted within the restricted limits as specified in the "Schedule of Rates".

2.0 Bid in which the rate for any of the above services is not quoted shall be rejected. However, if no charge is involved for any of the above work, 'NIL' should be mentioned against such services.

3.0 Total price of Table A above (C1) is inclusive of all Taxes, except Basic Customs Duties.

4.0 GST is to be mentioned in the proper place of the Price Bid Format. Price Bid without giving any of the details of the GST will be considered as inclusive of all taxes including GST. When a bidder mentions GST as extra without specifying the rates & amount, the offer will be loaded with maximum value towards GST received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of contract/order on that bidder, GST mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.

5.0 Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods. However, in terms of Sl. No. 404 of the Customs Notification No.50/2017-Cus dated 30.06.2017, imports of the items specified in List 33 of the Notification are subject to levy of concessional rate of customs duty @5% (BCD Nil & IGST @5%) subject to conditions specified therein (Condition No. 48). Bidders should quote these GST component as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.
Note: Bidders offering to bring equipment/stores/materials in to India on re-exportable basis for execution of this contract shall have to re- export the same after completion of the assignment. The bidder will be fully responsible to pay the customs duty including penalty, if any, in case any such item is taken by them for use in other areas where customs duty is applicable on merit or not re-exported in due course of time provisioned herein.

6.0 The number of days and other parameters assumed above are only for the Bid evaluation purpose as assessed by Company. It is, however, to be clearly understood that payment will be made to the Contractor on the basis of actual number of days/parameters for which the equipment and crew are utilized during the currency of the Contract for job

execution. The quoted Day Rates shall be paid in full per 24 hours a day, else on pro-rata to the nearest half an hour basis for part thereof.

7.0 Please note that as per Section 171 of the GST act [Anti-Profiteering Provisions Under the GST Law], it is mandatory to pass on the benefit due to any reduction in rate of tax or from input tax credit to the consumer by the way of commensurate reduction in price.

8.0 OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is

entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

9.0 Zero% Input Tax Credit on GST (Goods & Service Tax) is available to OIL & the same shall be considered for the Purpose of evaluation

&&&&

PROFORMA-B (APPENDIX-2)

FORMAT FOR COST OF CEMENT & CEMENT ADDITIVES							
Sl. No.	**Item Description**	**Brand Name**	**Country of origin**	**UoM**	**Estimated Quantity**	**Unit Rate (in INR)**	**Total cost per well excl. GST (in INR)**
Requirement for 01 well							
1	Fluid Loss 1			MT	2.19		0.00
2	Dispersent 1			MT	1.04		0.00
3	Low Temp Retarder			MT	0.50		0.00
4	Gas Block Additive-1			MT	9.90		0.00
5	Defoamer (in KL)			Litres	2.29		0.00
6	Special Additive-1			MT	0.00		0.00
7	Special Additive-2			MT	0.00		0.00
8	Special Additive-3			MT	0.00		0.00
9	Spacer (Liquid/Powder) in LumSum qty			Litres	1.00		0.00
10	API Class 'G' Cement			MT	357.00		0.00
Total estimated cost of cement and cement additives for 01 well (including all taxes and duties excluding GST) in INR							**0**
Total estimated cost of cement and cement additives for 03 wells (including all taxes and duties excluding GST) in INR							**0**

GENERAL NOTES FOR PROFORMA-B (APPENDIX-2):

1.0 The bidder shall quote all-inclusive single rate on FOR Destination (well site) basis for each above items, which are required to be supplied by them for use in drilling locations under the contract. Quoted rates must include cost of the materials, packing & forwarding Charges, taxes & duties as applicable (except Basic Customs Duty), shipment & transportation cost up to the well sites, transit insurance and storing, warehousing & handling costs etc. or any other charges as are to be incurred by the Bidder/Contractor for successful job execution.

2.0 Generic brief descriptions/names of the items are shown above. The bidder may quote for equivalent/substitute items with detailed specifications, proper technical literatures and justifications. Bidders are requested to offer single rate against each item. In case any bidder offers multiple substitutes indicating rate of each thereof, the highest rate quoted amongst the substitute items will be taken for bid evaluation and Bidders' ranking will be determined accordingly for award of contract. However, in the event of award of contract, Company will have the right to select any of the substitutes for use at the quoted rate only.

3.0 Quoted rates must be net of all discounts (Digressively if offered will not be considered for financial evaluation of the bids).

4.0 Quantity shown above against each item is tentative only for the purpose of bid evaluation. However, Payment will be made on the basis of actual consumption in the wells.

5.0 Bidder must quote the rate schedule strictly as above instead of referring to their standard price list.

6.0 Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods. However, in terms of Sl. No. 404 of the Customs Notification No.50/2017-Cus dated 30.06.2017, imports of the items specified in List 33 of the Notification are subject to levy of concessional rate of customs duty @5% (BCD Nil & IGST @5%) subject to conditions specified therein (Condition No. 48). Bidders should quote these GST component as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

Note: Bidders offering to bring equipment/stores/materials in to India on re-exportable basis for execution of this contract shall have to re- export the same after completion of the assignment. The bidder will be fully responsible to pay the customs duty including penalty, if any, in case any such item is taken by them for use in other areas where customs duty is applicable on merit or not re-exported in due course of time provisioned herein.

7.0 Barytes or Bentonite as required for slurry/spacer during the cementation job(s) shall be provided by Mud Engineering Service under contract with Company.

8.0 Please note that as per Section 171 of the GST act [Anti-Profiteering Provisions Under the GST Law], it is mandatory to pass on the benefit due to any reduction in rate of tax or from input tax credit to the consumer by the way of commensurate reduction in price.

9.0 OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

10.0 GST is to be mentioned in the proper place of the Price Bid Format/above Table. Price Bid without giving any of the details of the GST will be considered as inclusive of all taxes including GST. When a bidder mentions GST as extra without specifying the rates & amount, the offer will be loaded with maximum value towards GST received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of contract/order on that bidder, GST mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.

11.0 Zero % Input Tax Credit on GST (Goods & Service Tax) is available to OIL & the same shall be considered for the Purpose of evaluation.

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ANNEXURE-I

BIO-DATA-FORMAT

a. NAME:
b. PRESENT ADDRESS:
c. PERMANENT ADDRESS:
d. FATHER'S NAME: NATIONALITY:
e. PASSPORT NO. AND VALIDITY:
(IN CASE OF EXPATRIATE)
f. DATE OF BIRTH:
g. DESIGNATED POST:
h. Educational Qualification:

AFFIX PASSPORT SIZE PHOTOGRAPH

Sl No.	Name of the Courses completed	Name of the institution	Year of passing

Job experience in Reverse order:

Duration of services		Post/Position held	Name of the Employer	Place of the work
From	To			

Relevant work experience in Cementing jobs during last five years:

Name of clients worked for	Duration of work (from -to)	Nature of cementing and associated jobs done	Details of wells worked in				
			Name of well or location	No. of casing stages with setting depth	Total depth of the well	Location/ Area	Brief on various stages of cementation

N.B: If required, more rows may be added.

Note: Attach copies of documents for Identity proof, Date of birth proof, proof of qualification (general and professional) and medical fitness certificate in Form 'O" (as per Mines act 1952).

Signature and seal of the Bidder:

Name of the Bidder:

EXHIBIT-2: MUD ENGINEERING SERVICE

A. TERMS OF REFERENCE & TECHNICAL SPECIFICATIONS OF MUD ENGINEERING SERVICE

The Contractor shall have to provide Mud Engineering Services including mud laboratory equipped with all desired testing equipment and supply of complete line of additives for drilling fluid in all phases of drilling wells at Dima Hasao and Karbi Anglong. The Bidder shall also provide completion fluid services, comprising heavy weight brines during well testing.

DETAILS OF SERVICES TO BE PROVIDED BY THE CONTRACTOR:

The Contractor shall provide mud engineering service in totality. The broad scope of work/supply includes but not limited to the following

1.0 Design of mud program
2.0 Personnel of Mud Engineering service.
3.0 Supply of complete line of chemicals and additives including LCM.
4.0 Well-site Laboratory with complete testing facility.
5.0 Well completion fluid
6.0 Mud and material management Services.
7.0 leftover chemicals and additive
8.0 Safety health and Environment.
9.0 Report generation (Mud Engineering Data & Hydraulics)

Each of these is defined in details as follows:

1.0 DESIGN OF MUD PROGRAM

The generic mud system proposed along with approximate section target depths for the wells to be drilled in Dima Hasao and Karbi Anglong are as follows.

a) 17½″ hole – Bentonite Spud Mud (Conductor Stage)
b) 12 1/4" hole – K_2SO_4 – Polymer Mud (Isolation Stage)
c) 8½″ hole – K_2SO_4-Glycol-Polymer Mud (Oil String Stage)

1.1 Depending upon the given Geological data, Bidder shall design phase-wise mud program, including but not limited to, all mud parameters, chemical proposed to be used, with total mud volume proposed for each hole section.

1.2 Bidder shall submit detailed mud program duly signed by authorized signatory for each section of the hole conforming to OIL's recommended parameters prior to commencement of operation.

1.3 Bidder shall prepare contingency plan to meet any down hole complicacies, anticipated contaminations etc. and have back up chemicals ready.

1.4 Bidder shall also plan for treatment of cement contamination, caving, hole pack off, differential sticking, Mud loss, hole erosion/ or any other bore hole problems.

1.5 Bidder shall ensure that composite mud system is environment friendly as per existing environmental laws.

1.6 Bidder shall also provide suitable completion brines services for well testing as per well requirements with brine chemical supply.

Notes:

a) Bidder should have requisite R&D facilities in India as well as regional/ Global back up capability of designing and troubleshooting of quoted mud system in terms of

detailed analysis. The bidder should have requisite facilities for designing and optimizing rheology properties for the proposed drilling fluid systems.

b) Bidder shall carry out detailed planning and designing, for mud preparation and maintenance required for drilling and completing the all phases of wells by using rig equipment and details drilling planned by OIL.

c) Bidder shall provide all the required mud testing equipment for testing of drilling fluid & Completion fluid as per requirement of the well and shall provide skid mounted laboratory at wellsite.

d) Bidder shall submit drilling fluid and well completion report after well completion of the well.

e) Bidder shall provide all technical literatures, hydraulic, surges, swap etc. and all other drilling fluid related calculations and detail mud history and mud programs.

f) Bidder shall provide daily mud report, mud recaps, hydraulic and hole cleaning optimization in real time from the rig site.

g) Bidder is required to facilitate for testing of various HSE related drilling fluid samples, drill Cuttings, effluent and waste water samples as per requirement of state pollution control board/ Central pollution control board and as per HSE regulations of OIL.

2.0 PERSONNEL OF MUD ENGINEERING SERVICES

a. Contractor shall have to deploy two (02) on-site mud engineers (one Lead Mud Engineer and one Second Mud Engineer) on 12-hour shift basis. The on-off pattern of rig personnel must comply with The Mines Act 1952 / The Oil Mine Regulation 2017 with latest amendment.

b. The Mud Engineers (Both lead and second) should have minimum educational qualification of Bachelor degree in Engineering/Science or equivalent.

c. Lead on-site mud engineer should have knowledge of working with the contractor's materials, equipment and procedures for the services provided by the contractor. Lead mud engineer should have a minimum of five (05) years relevant mud engineering experience and should have performed mud engineering in at least five (05) wells with proposed mud systems. The Mud Engineer should be competent enough/should have sufficient experience in solving down hole complications including but not limited to cement contamination, mud loss, torque/drag, stuck pipe, caving's, high pressure kicks etc.

d. Second on-site mud engineer should have knowledge in working with the contractor's materials, equipment and procedures for the services provided by the contractor. Second mud engineer should have a minimum of three (03) years relevant experience and should have performed mud engineering in at least three (03) wells with the proposed mud systems. The Mud Engineer should be competent enough/ should have sufficient experience in solving down hole complications including but not limited to cement contamination, mud loss, torque/drag, stuck pipe, caving's, high pressure kicks etc.

e. The on-site mud engineer shall collect all relevant operational data from driller or, any other data gathering system (e.g. MLU) and record it for taking operational decisions as well as for final well completion report (Mud Recap). The contractor shall submit the well completion report for the drilled section within 15 days of completion of the well.

f. The Mud Engineers should be in sound health and fit to work in drilling rig in remote locations. The maximum age of the Mud Engineers should not be more than 60 years as on the original bid closing date of the tender. Mud Engineers should be

proficient in English (written & verbal). Besides English, fluency in Hindi and/or local language will be an added advantage.

g. Bidder must submit the bio-data (as per attached format vide Annexure-2 with copies of all required documents, as specified) of all offered personnel within 20 days of issue of Letter of Award (LoA) or, 30 days prior to commencement of contract (whichever is later) for approval by the Company before commencement of work.

h. The Contractor shall provide the required PPE (Personal Protective Equipment) as per DGMS/OISD to all his personnel at his own cost.

i. Company will provide boarding & lodging facility for two Mud Engineers at site free of charge.

j. Medical Fitness: The Contractor shall ensure that all of the Contractor's Personnel shall have had a full medical examination (by a qualified and registered doctor) prior to commencement of the operation and the certificates of all such personnel in form 'O' of The Mines Act 1952 should be submitted by the contractor.

3.0 SUPPLY OF MUD CHEMICALS AND ADDITIVES

3.1 The selected bidder shall supply and provide all the required chemicals, additives and mud services for preparation and maintenance of mud system at the drilling site.

3.2 Transportation of chemicals, laboratory or, any other entity under mud services, handling of chemicals at well site, transportation of chemicals between locations or, between location and warehouse will be exclusive responsibility of the bidder.

3.3 The Bidder shall ensure that the chemical supplied under the contract shall meet the specifications mentioned in the tender.

3.4 Bidder shall supply complete list of Chemicals and additives including basic chemicals like Bentonite, Barites etc. required for preparation and maintenance of the specific mud systems.

3.5 Bidder shall ensure sufficient quantities of Chemicals and additives shall be made available to allow smooth and uninterrupted operations.

3.6 Bidder shall furnish test reports prior to delivery of chemicals to OIL. All the test reports must reflect the brand name and name of manufacturer as quoted in the bid and the Chemicals used in the wells shall be of the same brand and manufacturer.

3.7 Bidder shall provide the complete Chemical product data sheet including brand name and Manufacturer's name of Chemicals, specifications / test report of chemical and MSDS in respect of all chemicals proposed to be used along with bid.

3.8 OIL reserves the right to check the quality of Chemicals supplied under the contract through random sampling of chemicals (in presence of the contractor's representative) from drilling site/ warehouse/ storage facility for testing at the OIL's central laboratory at Duliajan, during the currency of the contract period. On demand the bidder shall arrange to deliver such samples of chemicals for testing at OIL's Central Chemical laboratory at Duliajan, at his own cost.

3.9 All required Mud Chemicals and Additives shall be delivered by the Contractor at respective well site. Bidder is also required to establish a bulk storage facility/main supply base at Dima Hasao/ Karbi Anglong, near to designated well site or, other place from where any kind of urgent chemical requirement at well site, can be fulfilled without any problems or, delay. The Contractor is required to stock sufficient quantity of Mud Chemicals and Additives at their nearby supply base/bulk storage facility to meet any eventuality and the stock position must be reviewed and reported to Company Representative on daily basis.

3.10 The Chemicals shall be in original packing of manufacturer. The packing of Chemicals shall be in bags of 25 kg / 50 kg or Lbs, and in drums or jars of not more than 220 L capacities which shall withstand the rigorous handling during transportation. Chemicals susceptible to moisture shall be packed in moisture proof multiwall paper bags with lining. Each container or pallet shall have clearly legible identification marks including the name of chemical, name and address of Manufacturer, date of manufacture and address of consignee. All Chemicals / drums shall be delivered in proper pallet/containers for safe & smooth transportation to well site. The barites of API specifications (min 4.15 sp. Gr.) shall be supplied by the bidder for use.

3.11 Bidder shall be responsible for replacing the chemicals received in torn packing or leaky/broken drums as it will not be sent to well site. Bidder shall deliver all Chemicals, packed in water proof pallets and container.

3.12 Payment shall be made as per actual consumption of Chemicals certified by company representative.

3.13 Barytes of API specifications (min 4.15 sp.gr) shall be supplied by the contractor. It is mandatory that the mercury and cadmium contents of barites should be less than 1mg/kg and 3mg/kg respectively. Barytes failing to this standard will not be accepted.

3.14 **Quality Control:**

(a) Bidder shall have an effective QC procedure that ensures that all chemicals and materials meet the design requirement and also comply with the relevant API/ BIS standards as appropriate, and OIL reserves the right to Audit Bidder's QC operation.

(b) To ensure quality of materials as per specifications, bidder shall submit the test report of each of chemical brought to their ware house prior to usage at the well site.

I If during the operations, any chemical is found to be substandard and/or not conforming to the specifications, bidder shall replace the material immediately.

(d) During the Mud Engineering service, if any foul smell emanates from the mud system due to addition of any of mud additives, successful bidder will be solely responsible for immediate replacement of the chemicals / additives. Service provider to ensure that the replaced chemicals supplied are of equivalent / better make or quality which is devoid of any foul smell.

4.0 WELL SITE LABORATORY & MUD TESTING FACILITY

4.1 The bidder shall provide a suitable well site laboratory (skid mounted) complete with all regular mud checking equipment, chemical reagents and consumables for testing of mud system as indicated under as per API standards.

4.2 The bidder shall have to provide all consumables, glass wares, reagents etc. required for testing of mud including any special tests.

4.3 The equipment/tools are required to be in fully operating condition; repair and preventive maintenance shall be carried without hampering operational requirements.

4.5 All testing equipment as applicable must have valid calibration record conforming to fitness for testing. List of the Laboratory equipment as indicated below shall be made available at wellsite for onsite testing/ analysis. Drilling Fluid testing facility should include following equipment, reagents and glass wares as provided under but not limited to,

a. SPECIMEN TABLE FOR MUD LIST OF TESTING EQUIPMENT:

Sl. No.	TEST EQUIPMENT PACKAGE	QUANTITY AT RIG
1	Mud Balanced	01
2	Pressurized Mud Balance	01
3	Marsh Funnel with Cup	01
4	Multi Viscometer (OFITE/Fann 35 SA)	01
5	API Filtrate test cell	01
6	Mud Retort Kit	01
7	Sand Content Kit	01
8	pH meter	01
9	Lubricity tester	01
10	Portable Laboratory Centrifuge (Electric) with centrifuge tube	01
11	Hamilton beach mixture with cup	01
12	Digital Weighing Balance	01
13	Glass thermometer 0^0C to 150 ^{0}C	01
14	Handheld Refractometer	01
15	HP-HT fluid loss apparatus	01
16	Magnetic Stirrer with Hot Plate	01

b. SPECIMEN TABLE FOR MUD PARAMETERS TESTING CAPABILITY OF LBORATORY:

The testing facility for mud shall be capable of testing for the following mud parameters. Accordingly successful bidder shall indicate all the applicable mud parameters in the mud programme proposed (meeting to OIL's requirement) to be submitted for each stage of drilling prior to commencement of operation and, shall report the parameters, as applicable during the currency of well operation,

a) Mud Density	b) Funnel Viscosity
c) Plastic Viscosity.	d) Yield Point.
e) Gel Strength.	f) RPM (3, 6, 100, 200, 300, 600)
g) API Filtration Loss	h) Oil content
i) Solid Content	j) Sand %
k) pH	l) Salinity
m) MBC	n) HPHT Filtrate Loss @150 ^{0}C/ 500 PSI.
o) Potassium ion test	p) Metal Concentration, if applicable.
q) Total Hardness as Ca^{2+} and Mg^{2+}	r) Mud Alkalinity (Pf/Mf)
s) Lubricity Coefficient	t) PHPA/Polyamine Tests

4.6 In case any item/ equipment is proposed to be imported for the purpose of execution of this contract, the details thereof must be furnished in the prescribed format as asked for in this bid document.

4.7 Bidder shall keep sufficient quantity and volume measurement types for glass wares which includes but not limits to graduated cylinder (10ml/25ml/ 50ml/250ml), conical flasks (50ml/ 250ml), beaker (200ml/100ml), round bottom flask (250ml), volumetric pipette (10ml), graduated pipette (1ml/ 2ml/ 10ml), burette, pipette stand, burette stand, glass thermometer, stirring rod etc, for trouble free and smooth testing of mud parameters.

5.0 WELL COMPLETION FLUID:

The bidder shall supply required quantity of Sodium Formate chemical to prepare clear well completion fluid to cater density of completion fluid up to 10.695 ppg in production testing stage. Any density requirement above to 10.695 ppg will be catered by drilling fluid present at well site.

6.0 MUD AND MATERIAL MANAGEMENT SERVICES:

6.1 Bidder shall ensure that sufficient quantities of materials and Chemicals shall be available to allow for a smooth, uninterrupted operation, bidder shall also provide actual delivery verification.

6.2 The Bidder shall provide copies of daily progress report inclusive of drilling fluid hydraulic generated with the help of suitable software package to the OIL representative. The report should also incorporate drilling operations, complete mud parameters analysis, chemicals consumed, volume of mud prepared and loss of mud and operation of solid control equipment as per standard practices.

6.3 Literature and details of software package for mud hydraulics, hole cleaning and engineering shall also be provided by the bidder.

6.4 Bidder shall provide details of Mud Engineering programs, including completion fluid design for the proposed well prior to commencement of well.

6.5 Bidder shall submit details mud Engineering program for the well at least three weeks prior to commencement of well. The program shall include but not limited to the following: -

a) Detailed mud program for each section.
b) Mud Parameters for each section.
c) Chemicals proposed for curing losses and releasing pipe stuck and for other drilling fluid related down hole complications with detailed procedures.
d) Based on the performance of mud systems, the bidder shall undertake suitable studies for improving the performance of the mud system and shall submit the recommendations time to time to OIL's representatives.

6.6 Software and Technical support:
Bidder shall provide technical support for customers and onsite Engineer along with a suite of software product suitability in the range of included data-based program to the proprietary package of drilling fluid management, advanced drilling fluid Engineering, environment program and reference data base containing at least technical literature and product summaries. Bidder shall provide higher technical support and back up whenever required by field personnel.

7.0 LEFTOVER CHEMICALS AND ADDITIVES

7.1 The Bidder shall lift the unused / left over Chemicals after completion of the contract from the well site within 15 days from the intimation about the same at their own cost.

7.2 The Company shall not buy any leftover mud chemicals/additives or any consumables brought by the Contractor. It would be the responsibility of the Contractor to re-export or dispose-off the left over Chemical and additives, as deemed fit, in accordance with existing regulations.

8.0 SAFETY, HEALTH AND ENVIRONMENT: -

Bidder shall ensure safe conditions and methods of work, and maintained the same throughout the period of contract. Bidder shall carry out all the activities in accordance with the highest international standards practices of the oil and gas Industries, ensure safe conditions and methods of work and maintained the same for the entire period of contract.

8.1 Bidder shall comply with the applicable environmental law, regulations and practices, and is required to perform work so as to minimize the generation of hazardous waste to the extent technically feasible.

8.2 Bidder shall comply with and shall ensure the Bidder personnel comply with the OIL requirements in relations to its weapons, alcohol and drug free policy as-

a) Alcohol and drugs, except those prescribed by qualified medical practitioner, are prohibited from the worksite.

b) Bidder shall ensure that any Bidder personnel who are either temporarily or permanently taking drugs under medical supervision are able to produce to OIL on request an appropriate letter from the recognized Medical practitioner. Such individuals shall immediate on arrival to the work place report to the Medical Officer or if not available, Oil representative and lodge with them a copy of their Medical practitioner's letter.

c) Bidder/Bidders shall obey all local rules, regulations and custom pertaining to Alcohol and drugs prevailing in the country where the work is to be performed.

d) Any person reporting to work either under or appearing to be under the influence of alcohol or drugs shall not be allowed to commence work or travel to worksite. Bidder shall be responsible for all costs relating to the replacement of such persons.

e) Bidder shall provide OIL representative with copies of any report or statements or written evidence incident or dangerous events which occurs during the performance of work or any other incident indicating the existence of adverse safety conditions of which Bidder personnel may become aware.

f) Bidder shall supply with the copies of all reports and documents regarding safety matters upon request by OIL as it is required by Legislation to Comply or maintain together with such other reports as OIL may require.

g) Bidder shall provide appropriate protective clothing where necessary for the protection of Bidder personnel whilst performing the work.

8.3 Environment Provision:

The Bidder shall in connection with the work hereunder.

8.3.1 Protect environment resources by applying best available techniques to eliminate or minimize any direct or indirect impact from operations.

8.3.2 Ensure that all activities are planned in a manner that will not create unnecessary danger, disturbance or effects on the environments or to other users.

8.3.3 Ensure that all the Chemicals and formulation used under this contract comply with any corporation standards and/or Legislation concerning the Environment in the location where the work is to be carried out.

8.3.4 Ensure that all persons affected or likely to be affected by executions of the work are not exposed to the substances or agents which may give rise to adverse health effects. Bidder shall ensure that all Bidder personnel are fully trained in appropriate control measures to be implemented and have been provided with and use the correct personal protective equipment.

8.3.5 Ensure that notice is given to OIL with the reasonable time prior to the delivery or removal from the work site of any substance which is Toxic and Hazardous to Health or potentially harmful to the Environment. The notice shall identify the hazards and affect and assess the risk to personnel and the environment. Details of precautions to be taken when using, handling, transportation, storing

or any other means of contact will also be provided. Bidder shall ensure that the substance is suitably packaged and 116esonate at all times.

8.3.6 Make available for all inspection by OIL upon request all registers, records or any other documentary or environmental aspects of the activity being carried out or on the environmental management system implemented by Bidder.

8.3.7 Bidder shall Prepare and maintain a plan documentary requirements, responsibilities and organization for environment management. The plan should be readily understandable by all personnel and shall cover routine, non-routine and emergency operations and be agreed in advance with OIL.

8.3.8 If applicable, ensure that prior to the commencement of work all Companies, Organizations and Communities that could potentially be affected by the activity have been notified:

8.3.9 Unless otherwise directed by OIL, avoid conducting activities in protected areas or where there is intolerable risk of damage to the sensitive environmental resources.

8.3.10 Document and report immediately to OIL any incident of Environment damage, any unforeseen activity or event, released of Hydrocarbons, breaches of Environmental regulations or complaint from local groups, Organizations or individuals.

8.3.11 Where Bidder is responsible for disposal of waste produced or occurring as a consequence of its activities under the Contract, all such disposals shall be in accordance with the OIL Industries standards, Legislation and best practices where ever same is applicable for Hazardous and non-hazardous waste. Bidder/Bidder shall be responsible for ensuring all necessary approvals or licenses are obtained and that any sub-Bidders utilized for this purpose shall fully comply with the requirements.

8.3.12 Maintain a logbook where in the waste generated from the mud system is recorded.

8.3.13 Selected bidder shall provide toxicity report for the mud system of each stage of drilling which should comply with the toxicity limits as per guidelines of Central pollution control board and/or State pollution control board**.**

9.0 REPORT GENERATION (MUD ENGINEERING DATA & HYDRAULICS):

9.1 Bidder shall comply with the following minimum reporting requirements. Bidder shall also provide additional report to the OIL representative as may be requested during the work.

9.2 Provide daily mud reports to Company representative at base/rig.

9.3 End of Well Recap: A detailed well completion report shall be prepared and submitted within 30 days of completion of the well.

9.4 Complication Report. In-case of any complications, such as pipe stuck, loss circulation, Well Kick, unusual caving, undesirable cutting bed formations etc. The onsite Mud Engineer of the bidder shall notify the OIL Chemist immediately. A detail draft report shall be submitted by the bidder, within 24 Hours of the incident (Operation permitting), with full details and reason of the same and remedial measures / recommended that shall be followed to ensure safe and complication free drilling.

10.0 MUD DESIGN:

The generic mud design comprising mud type, mud parameters and chemicals/additives proposed to be used for drilling the wells in Dima Hasao and Karbi Anglong are as follows,

10.1 MUD TYPE

HOLE SIZE	APPROXIMATE DEPTH (MTRS.)	MUD SYSTEM	PLANNED MUD WEIGHT* (PCF)
17 ½"	150	Bentonite Spud Mud	67-68
12¼″	1500	K_2SO_4 – Polymer Mud	74-76
8 ½″	2300-3000	K_2SO_4-Glycol-Polymer Mud	76-82
** The mud weights are proposed on the basis of seismic pore pressure profile which are stated to be purely indicative hence, mud weights are subjected to change as per actual drilling evidence. Sufficient amount of chemicals including Barytes is required to kept as back up to tackle any unforeseen situations.*			

10.2 MUD PARAMETERS

10.2.1 Spud mud for Conductor stage (17 ½" hole section – 0 m to 150 m)

The spud mud shall be prepared using bentonite clay, moderated with cellulosic viscosifiers. High Viscous pill sweeps will be required for proper hole cleaning. The base line of Rheology under normal conditions of drilling to be maintained in the top hole section is as follows however, additional support of viscosity and weight may be required depending on the type of cutting and formation encountered in the top hole section of the thrust areas of Dima Hasao and Karbi Anglong,

Sl. No.	Mud Parameters	
1	Mud Wt (PCF / SG)	67-68 pcf (SG: 1.075-1.09)
2	MF Viscosity (Sec)	75-65
3	PV (cp)	ALAP
4	YP (Lbs/100ft^2)	20-30
5	Gel (0'/10'/30'/60')	-
6	pH	8.0 – 9.0
7	API fluid loss (cc/30min)	NM
8	Sand Content (% by volume)	<0.25

10.2.2 K_2SO_4 – Polymer Mud for Isolation stage (12 ¼ ″ section – 150 m to 1500 m)

K_2SO_4- Polymer mud is proposed for 12 ¼ ″ hole section which shall primarily use cellulosic polymers, clay encapsulator, lubricants etc. The dual inhibition of polymers and K^+ ions is expected to help in dealing with the reactive clay formations (if any) and sealing the permeable zones, helping to avoid downhole problems like torque, drags and differential sticks. Adequate hole cleaning strategy and optimum lubrication will be required to ensure trouble free drilling and clean hole, while drilling thrust areas of Dima Hasao and Karbi Anglong. The generic mud program for isolation stage under normal conditions is as provided below.

Sl No	Mud Parameters	
1	Mud Wt (PCF / SG)	68-72 / 1.09-1.16
2	MF Viscosity (Sec)	65-55
3	PV (cp)	ALAP
4	YP (Lbs/100ft^2)	25-30
5	Gel (0'/10'/30/60')	10 – 12 / 20 – 30 (flat profile)

6	pH	9.0 – 9.5
7	API fluid loss (cc/30min)	10-8
8	Sand content (% by volume)	<0.25
9	K^+ ion concentration(ppm)	13776 – 18488

**The concentration of potassium ion and mud weight may require to be optimized as per actual drilling evidences.*

10.2.3 K_2SO_4 – Glycol- Polymer Mud for Oil string stage (8½″ section – 1500 m upto 2800 m)

Oil string stage drilling is proposed to be carried using K_2SO_4 – Glycol- Polymer Mud Mud System with adequate lubrication. The mud system envisaged for oil string section shall use xanthan polymers and anionic cellulosic polymers as rheology modifiers and fluid loss controllers respectively, with additional bridging property of micronized calcium carbonate (MCC) and optimum inhibition of K+ ion for reactive clays (if any). Adequate concentration of lubricants to maintain low frictions in deviated section of holes. The generic mud program for oil string stage under normal conditions is as provided below

Sl. No.	Mud Parameters	
1	Mud Wt (PCF / SG)	76-82 pcf (1.22-1.32 Sg. Gr)
2	MF Viscosity (Sec)	55-45
3	PV (cp)	ALAP
4	YP (Lbs/100ft²)	25-35
5	Gel (0'/10')	10 – 15 / 15 – 25 (flat profile)
6	pH	8.5 – 9.5
7	API fluid loss (cc/30min)	4 – 5
8	Filter cake (mm)	0.5-1
9	Sand content (% by volume)	<0.25
10	Solid content (% by volume)	15-22
11	Lubricity Coefficient	<0.2
12	HTHP at 200°F / 500psi (cc)	<15.0
13	K^+ ion concentration(ppm) *	13776 – 18488

**The concentration of potassium ion and mud weight may require to be changed as per actual drilling evidences.*

10.3 LIST OF CHEMICALS AND ADDITIVES

The list of chemicals proposed to be used during drilling the wells at Dima Hasao and Karbi Anglong are as given under.

TABLE-I: LIST OF CHEMICALS AND ADDITIVES

Sl. No	Name of Functional Chemical	Brand Name	Country of Origin SAC/HSN	MSDS
1	Bentonite			
2	Barytes			
3	CMC(H)			
4	Caustic Soda			
5	PAC-R			
6	XC-Polymer			
7	CMC(L)			
8	PHPA			
9	PAC-SL			

10	Resinex			
11	Mud Lubricant			
12	Accretion Inhibitor			
13	Sulphonated Ashphalt			
14	Glycol/Polyol			
15	Calcium Carbonate			
16	Biocide			
17	HP-HT F/L reducer			
18	H_2S scavenger			
19	Teepol (Surfactant)			
20	Defoamer			
21	Sod. Bicarbonate			
22	Corrosion Inhibitor			
23	Sodium Formate			
24	Oxygen Scavenger			
25	Walnut Shell (Medium)			
26	SAPP			
27	Cellophane Flake			
28	Mica			
29	Sawdust			
30	Spotting Fluid (Pipelax)			
31	Soda Ash			
32	Potassium Sulphate			
33	Zinc carbonate			
34	Starch			
35	Potassium Hydroxide			

11.0 COMPLETION FLUID / WORK OVER FLUIDS-

The successful bidder will be required to supply completion fluids for production testing of objects of oil & gas. Brine weights may range from 8.32 ppg to 10.695 ppg. The purity of sodium formate supplied at well site should be as per the specification provided in the tender document. The Contractor shall make available clear brines at wellsite as proposed below.

Sl. No.	CHEMICAL	BRINE WEIGHT (ppg)
1	Sodium Formate	8.32– 10.695

Provision for adequate volumes with sufficient back up should be present to cater to any well killing operations during well testing operations.

12.0 SPECIFICATION OF SOME CHEMICALS

As provided in the list of chemicals above, approximately 34 chemicals will be used during drilling operation. Contractor has to maintain the API/ OIL specification for all chemical. However, for better understanding of the standard of quality control measures to be followed during the course of operation, technical specification of some important chemicals are given below. Samples of chemicals when collected at the well site for quality testing must conform to these specifications.

12.1 BENTONITE:

Specification:

1. **Physical Properties**: The material as received should be in the form of fine light to greyish yellow buff or cream coloured powder, free from dirt and foreign matter.

2. Moisture Content, measured by drying at 105 +/- 2DegC to constant weight, % by mass, maximum. : 12.00

3. Sand Content, % by mass, max. : 2.00(retention on 200 B.S.S. mesh sieve or equivalent, by wet method).

4. Dry Screen Analysis, % by: 98.00 mass, min (passing through 100 B.S.S. mesh or equivalent by dry method).

5. **Performance Test**: Prepare a Bentonite suspension by mixing 7.5 gms of Bentonite per 100 ml distilled water. Stir the suspension in a multimixer for 15 minutes so that no lumps are left in the suspension after the stirring period. Age the suspension for 24hrs at 26 +/- 2 degC. After lapse of the aging period, stir the suspension for 15 minutes in a multimixer and then determine apparent viscosity, plastic viscosity and API fluid loss of the suspension at 26 +/- 2 deg C which should be as follows.

   (i) Apparent viscosity, cp, min. : 15,
   (ii) Plastic viscosity, cp, min. : 6
   (iii) API fluid loss, ml, maximum : 20

6. **Packing**: The material should be packed in new HDPE bags or moisture proof polythene lined (100 gauge) D.W. jute bags (9oz) strong enough to withstand rigorous of transit and storage. Capacity 50 Kgs. Net per bag.

7. **Markings**: Each bag should have clear legible markings as given bellow:
   i) Name of the product.
   ii) Name of the supplier/manufacturer.
   iii) Date/Month/Year of manufacture.

12.2 **BARYTES:**

Specification

1. **Physical Properties:**
The material as received shall be white/light greyish white/light pinkish white free flowing powder, free from dirt and foreign matter.

2. Specific Gravity of material, as received, at 26 +/- 2 degC minimum: 4.15

3. **Fineness:**
   (a) Wet Screen Analysis – Passing through 75 micron sieve, (ISS 6/BSS 200/ASTM 200), %by mass, minimum: 97.00
   (b) Passing through 53 micron sieve, (ISS 5/ BSS 300/ASTM 270, % by mass: 90 +/-5

4. Insoluble Minus Silica % by mass, minimum: 90.00

5. Water Soluble Content, % by mass, maximum: 0.02.

6. **Performance Test:** Prepare a Bentonite suspension by mixing 7.5 gm of OIL / API approved Bentonite per 100 ml distilled water, Stir the suspension in a multimixer for 15 minutes so that no lumps are left in the suspension after the stirring period. Age the suspension for 24 hrs at 26 +/- 2 degC. After the lapse of the aging period, adjust the apparent viscosity of the suspension in the range of 15-

20 cps with distilled water if necessary. Load the suspension with the Barytes sample as received, to 1.60 sp.gravity weight and stir in multimixer for 10 minutes. Measure apparent viscosity of mud so prepared at 26 +/- 2 degC. This should be as follows.

Apparent Viscosity, cp, maximum: 60.

N.B. Apparent viscosity to be measured by a Fann VG meter.

7. **Packing:** The material should be packed in brand new Double-Walled (DW) jute bags (9 Oz) with single polythene lining (100 gauge) or brand new HDPE bags strong enough to with stand rigorous of transit and storage. Capacity: 50 Kilogram (new) per bag.

8. **Markings:** Each bag should have clear legible markings as given bellow:

i) Name of the product.
ii) Name of the supplier/manufacturer.
iii) Date/Month/Year of manufacture.

12.3 **CARBOXY METHYL CELLULOSE, CMC (HVG):**
Specification

1. **Physical State:**
The material as received should be white to creamish coloured free flowing powder and free from lumps and visible extraneous impurities.

2. Moisture Content Measured by drying at 105 +/- 2 degC, % by mass, maximum: 10.00

3. Sodium Carboxy Methyl Cellulose content on dry basis, % by mass, minimum. : 55.00

4. Yield of 15 cp Apparent Viscosity Suspension: Prepare a 15cp apparent viscosity suspension of the sample by stirring in a multimixer for 30 minutes in distilled water and 3.5% salt water (prepared by dissolving 3.5 gram LR grade NaCl in 100 ml distilled water) and, calculate the yield of the sample which should be as follows:

a) Yield in distilled water, KL/MT,min. : 200
b) Yield in salt water, KL/MT, min. : 120

5. **Packing:** The material should be packed in moisture proof multiply (minimum5 ply) strong paper bags enough to withstand the rigorous of transit and storage. Capacity: 25 kg net per bags.

6. **Marking**: Each bag should have clear legible markings as follows:

i)Name of the product
ii) Name of the supplier
iii) Date/Month/Year of manufacture

N.B.: Apparent viscosity to be measured by a Fann VG meter.

12.4 **Sodium Hydroxide (Caustic Soda)**

Specification:

1. **Physical properties**: The material, as received, should be in the form of flakes and should be free from dirt and foreign matter.

2. Purity as NaOH, as received, % by mass (minimum): 95.00.

3. **Packing**: The material should be packed in moisture proof HDPE bag with an insert of 300 gauge polythene bag and strong enough to with stand rigorous of transit and storage.

4. The material should be supplied in the original packing of manufacturer. Capacity 25 kg / 50 kg net per bag.

5. **Marking**: Each bag should have clear legible markings as givenbelow:

i) Name of the product.
ii) Name of the supplier.
iii) Date/month/year of manufacture.

12.5 **Polyanionic Cellulose Regular Grade (PAC-R):**

Specification:

1. **Physical Properties:** The material, as received, should be a free flowing white to creamish / brownish white powder free from foreign matter and visible impurities.

2. Moisture Content at 105 +/- 2 Deg C, % by mass, maximum: 15.00

3. Apparent viscosity of 1.0 % (w/v) suspension of the material as received in fresh water and 4% salt water. Prepare a 1 % (w/v) suspension of the sample by stirring in multimixer for 30 minutes in distilled water and, 4 % salt water(prepared by dissolving 4 gm of LR grade NaCl in 100 ml (distilled water)and measure apparent viscosity at 26 +/- 2 degC by Fann VG meter.

(i) Apparent viscosity in fresh water, cp : 75-100
(ii) Apparent viscosity in salt water, cp : 65-85

4. Yield of 15 cp apparent viscosity suspension:
Prepare a 15 cp apparent viscosity suspension of the sample stirring in a multimixer for 30 minutes in distilled water and 4 % salt water (prepared by dissolving 4 gm of LR grade NaCl in 100ml distilled water) and calculate the yield of the sample which should be as follows.

(i) Yield in distilled water,KL/MT, min. : 250
(ii) Yield in 4 % salt water KL/MT, min. : 200

5. Sodium Carboxy Methyl Cellulose Content, % by mass (dry basis), minimum: 85.00

6. Degree of Substitution, minimum: 1.00

7. **Performance Test** :

A. In Fresh Water mud.

(i) **Preparation of base mud.**

Prepare a 10 % (w/v) suspension of OIL / API approved Bentonite in distilled water and stir the suspension for 15 minutes in a multimixer so that no lumps are left after the stirring period. Age the Bentonite suspension for 72 hrs at 90 +/- 2 degC. After the lapse of the aging period, cool and adjust apparent viscosity in the range 15-20 cp with distilled water. Also adjust pH in the range 9.0-9.5 with 10 % NaOH solution, if necessary. Stir the suspension for 15 minutes in multimixer and determine apparent viscosity, yield value and API fluid loss of the suspension at 26 +/- 2 DegC which should be as follows:

(a) Apparent viscosity, cp : 15 – 20 cp.
(b) Yield value,lbs/100 ftsq: To determine
I API fluid loss, ml : To determine

(ii) **Preparation of treated mud:**
Treat the base mud as per 7A (i) with 0.5% polyanionic cellulose I sample. Stir in a multimixer for 30 minutes and divide the mud into two parts.
Performance at 26 +/- 2 Deg C. Measure apparent viscosity, yield value and API fluid loss of one part of treated mud 7A (ii) at 26 +/- 2 degC which should be as follows:

(a) Apparent viscosity, cp minimum. : 4 times of 7A(i,a)
(b)Yield value, lb/100 ftsq. Minimum : 4 times of 7A(i,b)
I API fluid loss, ml maximum. : 40 % of 7A(i,c)

Performance at 120 +/- 2 Deg C.: Age second part of treated mud 7A (ii) at 120 +/- 2 DegC in rolling condition for 24 hrs. After aging, cool to 26 +/- 2DegC and stir in a multimixer for 15 minutes and determine apparent viscosity, yield value and API fluid loss of the mud at 26 +/- 2 DegC which should be as follows:

(i) Apparent viscosity, cp minimum. : 3 times of 7A(i, a)
(ii) Yield value,lb/100 sq.ft minimum. : 3 times of 7A (i,b)
(iii) API fluid loss, ml, maximum. : 40 % of 7A (i,c)

B. In Salt Water Mud *:*

(i) **Preparation of base mud:**
Prepare 10 % (w/v) Bentonite suspension of OIL / API approved Bentonite in distilled water and stir the suspension for 15 minutes in a multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 degC. After the lapse of aging period, cool and add 4% (w/v) NaCl (LR grade) and age for 24 hrs at 26 +/- 2 degC. Dilute the suspension with 4 % Nacl solution and adjust apparent viscosity in the range 15-20 cp. Adjust pH in the range of 9.0-9.5 with 10% NaOH solution if necessary. Determine apparent viscosity, yield value and, API fluid loss of the suspension at 26 +/- 2 degC which should be as follows:

(a) Apparent viscosity, cp : 15 – 20
(b) Yield value, lbs/100 ft sq. : To determine
I API fluid loss, ml : To determine

Treat the base mud prepared as per the 7B(i) with 0.5%(w/v) polyanionic cellulose I sample and stir in a multimixer for 30 minutes.

Performance at 26 +/- 2 degC. Determine apparent viscosity, yield value and, API fluid loss of mud 7B(ii) above at 26 +/- 2 DegC which should be as follows:

(a) Apparent viscosity, cp minimum. : 2 times of 7B (i,a)

(b) Yield value, lb/100 ftsq minimum. : 1.5 times of 7B (i,b)
I API fluid loss, ml maximum : 15 % of 7B(i,c)

8. **PACKING** : The material should be packed in multiwalled paper bags with at least two innermost layers suitably water-proofed, strong enough to withstand rigorous of transit and storage. The material should be supplied in the original packing of the manufacture. Capacity 25 Kg net per bag.

9. **Marking:** Each bag should have clearly legible markings as given below:
(i) Name of the product.
(ii) Name of the supplier / manufacturer.
(iii) Date/Month/Year of manufacture.

N.B:
1) Apparent viscosity and yield point to be determined by a Fann VG meter and fluid loss by standard API low pressure fluid loss apparatus using compressed air or, nitrogen as the pressure source.

2) The Supplied Materials must meet OIL's specifications in all respect.

12.6 **XC POLYMER- DISPENSIBLE (XCD)**

Specification:

1. **Physical Properties:**
The material, as received, should be a free flowing white to creamish / brownish white powder free from foreign matter and visible impurities.

2. Moisture Content, measured by drying at 105 +/- 2 degC, % by mass, maximum: 15.00.

3. Dispersibility / Solubility Test:
The material should be quickly and easily dispersible in water when sprayed in water taken in breaker and should not remain floating. 1.00% (w/v) solution of the product in distilled water after mixing in multimixer for 30 minutes should give clean solution without turbidity.

4. **Rheological properties:**
Prepare a 0.5% (w/v) solution of the sample in distilled water containing 1% (w/v) NaCl (LR grade) by stirring in a multimixer for30 minutes. Adjust pH of the solution in the range 8 – 9 by addition of 1N NaOH solution while stirring. Determine the rheological properties of the suspension at 26 +/- 2 degC which should be as follows:

(i) Apparent viscosity, cp : 15 – 25
(ii) "0" minute gel, lbs/100 ft sq, minimum: 8
(iii)"N" value at 200 & 100 rpm of Fann VG meter or equivalent, maximum. 0.405.

5. **Cross linking properties:**
To 500 ml of distilled water, add 5 ml of 3% (w/v) solution of Calcium Chloride (fused and analar grade) and to this solution, add 0.5% (w/v) of the sample while stirring in a multimixer. Stir the suspension further for 30 minutes in a multimixer. To this add 2% (w/v) chrome alum powder (LR grade) and stir for additional 10 min. Adjust the pH in the range 8-9 by 1N NaOH solution while stirring. Determine the rheological properties of the suspension at26 +/- 2 degC which should be as under:

(i) Apparent viscosity, cp, minimum: 40

(ii) Yield value, lbs/100 ftsq,minimum: 40
(iii) "0" minute gel, lbs/100ftsq, minimum: 20
(iv) "15" minute gel, lbs/100 ftsq, minimum: 100

6. **Performance Test:**
Prepare a 0.5% (w/v) solution of the sample in distilled water by stirring in a multimixer for 30 minutes. Adjust the pH to 8 – 9 with1N NaOH solution. Add to it 3% of the OIL / API approved Betonite powder and stir for 30 minutes. Determine apparent viscosity, yield value and API fluid loss of the mud at 26 +/- 2 degC.

(i) Apparent viscosity, cp: To determine
(ii) Yield value, lbs/100 ftsq : To determine
(iii) API fluid loss, ml: To determine

Age the treated mud at 100 +/- 2 degC for 18 hrs in rolling condition. Cool and stir for 15 minutes in a multimixer. Determine apparent viscosity, yield value and API fluid loss at 26 +/- 2 degC which should be as under:

(i) Apparent viscosity, cp: should not decrease
(ii) Yield value, lbs/100 ftsq : should not decrease
(iii) API fluid loss, ml: should not increase

7. **Temperature stability:**
Prepare 0.5% (w/v) solution of the sample in saturated salt water (prepared by dissolving analar grade NaCl in distilled water) by stirring in a multimixer for 30 minutes. Adjust PH to 8 – 9 by 1NnaOH solution. Record apparent viscosity and yield value of suspension at 26 +/- 2 degC.

(i) Apparent viscosity, cp: To determine
(ii) Yield value, lbs/100 ftsq: To determine

Age the solution in a roller oven in rolling condition at 120 +/- 2degC for 18 hrs. Cool and stir for 5 minutes. Measure apparent viscosity and yield value of the solution at 26 +/- 2 degC which should be as under:

(i) Apparent viscosity, cp: should not decrease
(ii) Yield value, lbs/100 ftsq: should not decrease

8. **Borate Sensitivity Test:**
Prepare a 0.5% (w/v) solution of the sample in distilled water by stirring in a multimixer for 30 minutes. Add to it 5 ml of 20% (w/v) hot solution of borax and stir for 5 minutes. No stiff gel formation should take place.

9. **Packing:**
The material should be packed in multi walled paper bags with at least two innermost layers are suitably water proofed strong enough to withstand rigorous of transit and storage. Pack Size: 25KG net per bag.

10. **Markings:**
Each bag should have clear legible markings as given below:
(i) Name of the product/brand name
(ii) Name of the supplier/manufacturer (Name of manufacturer must be marked on the bags in case the product is not branded).
(iii) Date/month/year of manufacture

N.B.

1) Apparent viscosity and yield value to be measured by a Fann VG meter or equivalent and API fluid loss to be measured in standard API fluid loss apparatus using compressed air or nitrogen as pressure source.

2) The Supplied Materials must meet OIL's specifications in all respect.

12.7 **Carboxy Methyl Cellulose (Low Viscosity Grade)**
Specification:

1. **Physical Properties:** The material, as received, shall be white to creamish white free flowing powder free from dirt and foreign matter.

2. Moisture Content, measured by drying at 105 +/- 2 deg C. (%by mass), maximum. : 10.00

3. Apparent viscosity of 2 % (w/v) suspension of the material as received, in distilled water at 6 +/- 2 degC, cp, maximum: 30.00cp

4. Dry sieve analysis, retained in 8 BSS or equivalent mesh, % by mass: NIL

5. Degree of substitution minimum: 0.70

6. Sodium carboxymethyl Cellulose content, on dry basis, % by mass, minimum. : 55.00

7. **Performance Test:**

(a) **Preparation of base mud:** Prepare a Bentonite suspension by mixing 7.5 gm of OIL / API approved Bentonite per 100 ml of distilled water using a multimixer. Stir the suspension for 15 minutes so that no lumps are left after the stirring period. Age the suspension for 24 hrs at 26 +/- 2 degC. After the lapse of the aging period, stir the suspension again for 15 minutes in multimixer and measure apparent viscosity and API fluid loss of the suspension at 26 +/- 2 Deg C which should be as follows:

(i) Apparent viscosity, cp, minimum. : 15
(ii) API fluid loss, ml: 20 +/- 1

(b) **Preparation of treated mud:** To the above Bentonite suspension prepared in 7(a), add 0.5 % of the CMC (LVG) sample (w/v), as received and stir in a multimixer for 30 minutes. Measure apparent viscosity and API fluid loss of this CMC (LVG) treated mud at 26+/2 degC which should be as under.

(i) Apparent viscosity, cp, max. : 2.5 times of 7(a)(i)
(ii) API fluid loss, ml, max. : 40% of 7(a)(ii)

8. **Packing:**
The material should be packed in moisture proof multiply (minimum 5 ply) paper bags strong enough to withstand rigorous of transit and storage. Capacity 25 kg net per bag.

9. **Markings:**
Each bag should have clear legible markings as given below:

(i) Name of the product
(ii) Name of the supplier

(iii) Data/month/year of manufacture

N.B. Apparent viscosity to be measured by a Fann VG meter and API fluid loss to be measured in standard API fluid loss apparatus using compressed air on nitrogen as pressure source.

12.8 **PHPA (Partially Hydrolysed Polyacryl Amide)**
Specification

1. **Physical Properties:** The material, as received, should be a free flowing white powder free from lumps and other impurities.

2. Moisture Content, measured by drying at 105 +/- 2 degC, % by mass, maximum. : 7.00

3. **Ionic character**: Anionic

4. **Relative CST value (capillary suction test)**
   (i) At 0.1% (w/v) polymer conc., min : 100
   (ii) At 0.2% (w/v) polymer conc., min : 200

5. Relative dispersibility at 0.2% (w/v) polymer conc. At 60+/- 5Deg C, max: 175

6. Degree of hydrolysis: 20-40 %(electrometric titration)

7. Apparent viscosity of 0.2% (w/v) polymer solution in distilled water.
   (i) At 26 +/- 2 deg C, cp, minimum: 9
   (ii)After aging at 110 degC for 18 hrs. : Should not decrease more than 20% of (i)

8. Effect on 4 cp Bentonite suspension: Prepare a 7.5% (w/v) Bentonite suspension in distilled water and stir in a multimixer for15 minutes so that no lumps are left after the stirring period. Age the suspension at 26 +/- 2 degC for 24 hrs. Prepare a 4 cp Bentonite suspension from it by dilution with distilled water. Add to it 0.2% (w/v) of powdered PHPA sample and stir for 30 minutes in multimixer. Adjust pH of the suspension to 9.0 using caustic soda solution. Measure apparent viscosity at 26 +/- 2 degC.

(i) Apparent viscosity should be 15 cp minimum

Age the suspension at 110 deg C for 24 hrs in rolling condition. After the aging period cool and stir for 15 minutes in multimixer. Measure apparent viscosity of the suspension at 26 +/- 2 degC.

(ii) Decrease of apparent viscosity 20% max. of 8(i)

9. Calcium tolerance: Prepare a 0.4% (w/v) suspension of thePHPA sample in distilled water by stirring in a multimixer for 15 min.

(i) Record apparent viscosity of the PHPA solution.

Prepare again a 0.4% (w/v) suspension of the PHPA sample in100 ppm Calcium solution by mixing in a multimixer. Measure apparent viscosity of the solution.

(ii) Apparent viscosity should be 60% minimum of 9(i)

10. **Packing:** The material should be packed in multiwall paper bags with at least two innermost layers suitably water proofed, strong enough to with stand rigorous of transit and storage. Capacity 25 kg net per bag.

11. **Markings** – Each bag should have clear legible markings as given below:
(i) Name of the product
(ii) Name of the supplier

N.B. Apparent viscosity will be measured by a Fann VG meter

12.9 **PIPE LAX:**
Specifications:

1. **Physical State:**
The material shall be homogeneous free flowing liquid at 24 ± 2 degC, free from visible impurities.

2. Miscibility with HSD Oil: Completely miscible.

3. Interfacial Tension of Distilled Water – HSD Oil containing 2.5% (w/v) Spotting Fluid, dynes /cm: 13 (Maximum)

4. Lubricity Coefficient of treated Bentonite Suspension: A Bentonite Suspension (prepared by dilution of Prehydrated Bentonite with Distilled Water) having Apparent Viscosity of 15 cp is treated with 1% (w/v) of the Additive and its Lubricity Coefficient is measured on a Lubricity Tester:
Lubricity Coefficient of the treated Bentonite suspension should not be more than 0.11.

5. **Mud Cake Cracking Test:** Prepare a Bentonite Suspension having Apparent Viscosity 15 cp by diluting Bentonite gel (pre-hydrated at 90 ± 2 degC for 72 hours) with Distilled Water and load it to Specific Gravity 1.20 with Barytes. Obtain a Filter Cake of this Mud in the API Filter Loss Apparatus by carrying out filtration for 30 minutes at 100 psi pressure (use Whatman No. 1filter paper). Throw the Mud away, wash the Mud Cake with a slow stream of water without removing the Mud Cake from the Cell and fill the Cell with 100 ml HSD oil containing 2.5% (w/v) Spotting Fluid. Apply 100 psi pressure, after closing the Cell and determine the Time required for collection of 100 ml filtrate. Filtration time should not be more than 50 minutes.

6. **Sticking Test:** Prepare loaded Bentonite Suspension of Specific Gravity 1.20 as in the case of Mud Cake Cracking Test and fill it in a Sticking Tester. Form a Filter Cake by applying 500psi pressure for 30 minutes. Stick the plate by pressing it on the cake for 5 minutes and leave for 1 hour under 500 psi pressure. Then release the pressure, drain off Mud from the cell by opening the bottom and top stoppers. Replace the bottom stopper and fill the cell with 100 ml of HSD Oil containing 2.5% (w/v) of the Sample of Spotting Fluid. Close the top stopper and again apply500 psi pressure. Note the time for release of stuck plate and if not released in 20 minutes, apply torque with a Torque Wrench.
The time required to release the stuck pipe if the plate gets released within 20 minutes

OR
Torque required for release of the stuck plate should not be more than 65 inch-pounds.

8. **Packing:** The material should be packed in 50 litre capacity leak proof HDPE carboy with leak tight stopper and screwcaps.

12.10 **EXTREME PRESSURE MUD LUBRICANT**
Specifications:

1. **Physical Properties:** The material, as received, should be yellow, brownish yellow, pinkish yellow coloured clear viscous liquid free from suspended materials and other impurities. The material should be vegetable oil based product, non-polluting, bio-degradable, non-fluorescent and should be environmentally friendly product and should yellow, brownish yellow, pinkish yellow coloured clear viscous liquid free from suspended materials and other impurities. The material should be vegetable oil based product, non-polluting, bio-degradable, non-fluorescent and should be environmentally friendly product and should not cause any pollution hazard.
The product should not be produced from petroleum oil and should not produce oil sheen in water.

2. **Miscibility/ Dispersibility:** The material should be dispersible/miscible with water without formation of oil sheen in water.

3. Density at 26 +/- 2 degC, gm/ml: 0.92 – 0.98

4. Performance Test:

A. **Lubricity Test:**

(i) **In fresh water mud:**
Prepare a 7.5% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 minutes in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs. at 90 +/- 2 degC. After the lapse of aging period, adjust apparent viscosity of the suspension to 15 +/-1 cp by dilution with distilled water. To this, add 0.5%(w/v) of the sample while stirring. After completion of addition, sir further for 30minutes in a multi- mixer. Measure lubricity co-efficient by using alubricity tester. Lubricity co-efficient should not be more than 0.15.

(ii) **In saline water mud** –
Prepare a 10% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 min. in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 degC. After lapse of aging period, add 4% NaCl (w/v) (AR grade) and stir for 15 minutes in a multimixer. Age the suspension for24 hrs. at 26 +/- 2 degC. Adjust the apparent viscosity to 15 +/- 1 cp by dilution with 4% NaCl solution, if necessary. To this saline mud, add 0.50%(w/v) of the sample in stirring condition and stir further for 30 minutes in a multimixer. Measure lubricity co-efficient by using a lubricity tester.

Lubricity co-efficient should not be more than 0.20

B. **Extreme pressure lubrication test:**
(i) **In fresh water mud** – Prepare a 7.5% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 minutes in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs. at 90 +/- 2 degC. After the lapse of aging period, adjust apparent viscosity of the suspension to 15 +/- 1 cp by dilution with distilled water and filter through200 mesh BSS mesh or equivalent sieve. Add 0.5% (w/v) of the sample to the Bentonite suspension while

stirring. After completion of addition, stir again in the multimixer for 30 min. Determine the film strength of the mud at 300 in-lb load with the help of a E.P. lubricity tester.
The film strength should be 25,000 psi, minimum.

(ii) **In saline water mud** – Prepare a 10% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 min. in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 degC. After lapse ageing period, add 4% NaCl (w/v) (AR grade) and stir for 15 minutes in a multimixer. Age the suspension for 24 hrs. at 26 +/- 2 degC. Adjust the apparent viscosity to 15 +/- 1 cp by dilution with 4% NaCl solution, if necessary and filter through 200 BSS mesh or equivalent mesh. Add 0.5% (w/v) of the sample while stirring and stir further for 30 minutes in multimixer. Determine the film strength of the mud at 300 in-lb load with the help of a E.P. lubricity tester.
The film strength should be 20,000 psi, minimum.

5. **Foam Test:**
Prepare a 7.5% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 min. in multi-mixer. Age the suspension for 24 hrs. at 26 +/- 2 degC. Adjust the apparent viscosity of the suspension to 15 +/-1 cp by dilution with distilled water. Add 0.5% (w/v) of the sample to it and stir for 30 minutes in a multimixer. Determine the specific gravity of the mud. The specific gravity of the mud should not be less than 0.8.

6. **Packing:**
The material should be packed in 50 litre capacity leak proof HDPE car buoys with leak tight topper and screw caps. Capacity 50 litre net per carbuoys.

7. **Markings:**
Each carbuoys should have clear legible markings as given below:
(i) Name of the product
(ii) Name of the supplier
(iii) Date/month/year of manufacture

N.B. Apparent viscosity will be measured by a Fann Vgmeter and lubricity should be measured by a E.P.lubricity tester.

12.11 **DRILLING DETERGENT:**
Specification:

1. **Physical properties:** The material, as received, should be soapy liquid, miscible with water. It should be free from visible impurities and any other suspended matter.
Should be determined visually

2. Density at 25 degC, gm/ml: 1.00 – 1.10,

3. Surface Tension of 0.25% (v/v) solution of the sample in distilled water at 25 degC, dynes/cm., maximum: 35.00

4. pH of 1 % (v/v) solution : 7.5 – 10.5 of the sample in distilled water.

5. **Emulsion Stability Test:** To 485 ml of distilled water, add 15 ml of HSD oil slowly while stirring in a multimixer and then add to it 1 ml. of the sample. Stir further for 15 minutes in the multimixer for formation of emulsion. Transfer the

contents to 500 ml. measuring cylinder and observe phase separation of the mixture which should be as follows. :

(i) Immediate separation of HSD oil should be nil.

(ii) Separation of HSD oil after 24 hrs. at room temperature should not be more than 5 ml.

6. **Mud Lubricity Coefficient**: Prepare a 10 cp Bentonite suspension by dilution of prehydrated Bentonite suspension (OIL / API approved Bentonite) and treat it with 0.5 %(v/v) of the sample and stir it for 15 minutes in a multimixer. Determine lubricity coefficient of the suspension in a lubricity tester. Lubricity co-efficient should not be more than 0.20

7. **Foaming tendency test:** Prepare 0.10% (v/v) solution of the sample in distilled water Stir the solution for 10 minutes in a multimixer. Transfer the content immediately to a measuring cylinder. Allow it to stand for 15 minutes and then measure the total volume of content along with foam. Calculate percent increase in volume due to foaming. Increase in volume should not be more than 5.00%

8. **Packing:** The material should be packed in 50 litre capacity leak proof HDPE carbuoys with leak tight stopper and screw caps.

9. Markings: each drum should have clear legible markings as given below:

(i) Name of the product

(ii) Name of the supplier

(iii) Date/month/year of manufacture

12.12 **POLYANIONIC CELLULOSE – SUPERLO GRADE (PAC-SL)**

Specification:

1. **Physical Properties:** The material, as received, should be a free flowing white to creamish/brownish white powder free from foreign matter and visible impurities.

2. Moisture content, measured by drying at 105+/- 2 degC, % by mass, maximum. : 15.00

3. Apparent viscosity of 1.0% (w/v) suspension of the material, as received, in fresh water and 4% salt water:
Prepare a 1% (w/v) suspension of the sample by stirring in a multimixer for 30 minutes in distilled water and 4% salt water(prepared by dissolving 4 gms of LR grade NaCl in 100 ml distilled water) and measure the apparent viscosity at 26+/- 2 degC by a Fann VG meter.

(i) Apparent viscosity in fresh water, cp, max.: 20

(ii) Apparent viscosity in salt water, cp, max.: 16

4. **Yield of 15 cp apparent viscosity suspension:**
Prepare a 15 cp apparent viscosity suspension of the sample by stirring in a multimixer for 30 minutes in distilled water and 4% saltwater (prepared by dissolving 4 gms of LR grade NaCl in 100 ml distilled water) and calculate the yield of the sample which should be as follows :

(i) Yield in distilled water, KL/MT, minimum: 100

(ii) Yield in 4% salt water, KL/MT, minimum : 80

5. Sodium carboxymethyl cellulose content, on dry basis, % by mass, (on dry basis), minimum. : 85.00

6. Degree of substitution, minimum: 1.00

7. **Performance test:**

A. **In fresh water mud-**
(i) **Preparation of base mud:**
Prepare a 10.0% (w/v) suspension of OIL / API approved Bentonite in distilled water and stir the suspension for 15 minutes in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90+/-2 degC. After the lapse of the aging period, cool and adjust apparent viscosity in the range of 15-20 cp with distilled water. Also adjust PH in the range of 9.0-9.5 with 10%NaOHsolution,if necessary. Stir the suspension for 15 minutes in multimixer and determine apparent viscosity, yield value and API fluid loss of the suspension at 26+/-2 degC which should be as follows:

(a) Apparent viscosity, cp : 15-20
(b) Yield value, lbs/100 ft sq : To determine
I API fluid loss, ml : To determine

(ii) **Preparation of treated mud.**
Treat the base mud 7A(i) with 0.5% (w/v) polyanionic cellulose(superlo grade) sample. Stir in a multimixer for 30 minutes and divide the mud into two parts.

Performance at 26+/- 2 degC

Measure apparent viscosity, yield value and API fluid loss of one part of the treated mud 7A (ii) at 26+/-2 degC which should be as follows.

(a) Apparent viscosity, cp, max. : 2.5 times of 7A, ia
(b) Yield value, lbs/100ftsq,max. : 1.5 times of 7A,ib
I API fluid loss, ml, max. : 50% of 7A,ic

Performance at 120+/-2 degC

Age second part of the treated mud 7A(ii) at 120 +/-2 degC in rolling condition for 24 hrs. After aging, cool to 26+/-2 degC and stir in a multimixer for 15 minutes and determine apparent viscosity, yield value and API fluid loss of the mud at 26+/-2 degC which should be as follows:

(a) Apparent viscosity, cp,max. : 1.5 times of 7A, ia
(b) Yield value, lbs/100ftsq.max : 1.5 times of 7A,ib
I API fluid loss, ml, max. : 35% of 7A, ic

B. **In salt water mud**
(i) Preparation of base mud:
Prepare a 105% (w/v) suspension of OIL / API approved Bentonite in distilled water and stir the suspension for 15 minutes in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90+/-2 degC. After the lapse of the aging period, cool and add 4% NaCl (w/v) LR grade) and age for 24 hrs.at 26+/-2 degC. Dilute the suspension with 4% NaCl solution and adjust apparent viscosity in the range 15-20 cp. Adjust PH in the range 9.0 – 9.5 with 10% NaOH solution, if necessary. Determine apparent viscosity, yield value and API fluid loss of the suspension at 26+/-2 degC which should be as follows.

(a) Apparent viscosity, cp: 15 – 20

(b) Yield value, lbs/100 ftsq : To determine
I API fluid loss, ml: To determine

Treat the base mud prepared as per 7B(i) with 0.5% (w/v) of polyanionic cellulose (superlo grade) sample and stir for 30minutes in a multimixer.
Performance at 26+/-2 degC

Determine apparent viscosity, yield value and API fluid loss of the treated mud 7B(ii) at 26+/-2 degC which should be as follows:

(a) Apparent viscosity, cp, min.: 2 times of 7B,ia
(b) Yield value, lbs/100ftsq, min: 1.5 times of 7B,ib
I API fluid loss, ml, max. : 15% of 7B, ic

8. **Packing:**
The material should be packed in multi walled paper bags with at least two innermost layers suitably water proofed, strong enough to with stand rigorous of transit and storage. Capacity 25 kgs net per bag.

9. Each bag should have clear legible marking as given below:
(i) Name of the product
(ii) Name of the supplier
(iii) Date/month/year of manufacture

N.B.:
1) Apparent viscosity to be measure by a Fan VG meter and API fluid loss to be measured in standard API fluid loss apparatus using compressed air or nitrogen as pressure source.

2) The Supplied Materials must meet OIL's specifications in allrespect.

12.13 **Resinated Lignite:**

Specification:
1. Physical State: The material, as received, should be black or brown coloured free flowing powder, free from lumps, dirt and foreign matter.

2. Moisture Content, measured at 105 +/- 2 deg C., % by mass, Maximum: 15.00

3. Solubility in Distilled water at 26 +/- 2 degC, % by mass, minimum: 70.00

4. Apparent Viscosity of 2 % solution in distilled water at 26 +/- 2degC, cp, and maximum. : 3.00

5. **Caking Tendency:** Should not display any caking tendency when heated to 50 degC

6. **Chemical Assay % by mass:**
(i) Element Iron maximum: 1.80
(ii) Elemental Chromium maximum: 0.10

7. **Performance Test:**

A. ***In Fresh Water Mud:***

(i) **Preparation of base mud**

Prepare a 10% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir the suspension in a multimixer for15 minutes so that no lumps are left after the stirring period. Age the suspension for 72 hrs. at 90 +/- 2 degC. After the lapses of the aging period cool the suspension and adjust the apparent viscosity to 52.5 +/- 2.5 cp by dilution with distilled water, if necessary divide the mud into two parts.

(ii) **Untreated mud.**
Age first part of base mud at 160 +/-2DegC in rolling condition for 24 hrs. Cool the mud and stir in a multimixer for15 minutes. Determine apparent viscosity at 26 +/- 2 degC and HPHT fluid loss at 160 degC and 500 PSI differential pressure.

(a) Apparent viscosity, cp: To determine
(b) HPHT fluid loss, ml : To determine

(iii) **Treated mud.**
Treat second part of base mud with 2.0 % (w/v) of the 134esonated lignite sample and stir the mud for 30 minutes in a multimixer. Adjust the PH of the mud to 9.5 – 10.0 by addition with 5N NaOH solution, if necessary. Age the treated mud at 160 +/- 2 degC for 24 hrs. in rolling condition. Cool and stir for 15 minutes in multimixer. Determine apparent viscosity at 26 +/- 2 deg C and HPHT fluid loss at 160 degC and 500 PSI differential pressure which should be as follows.

(i) Apparent viscosity, cp, maximum: 40 % of 7A (ii,a)
(ii) HPHT fluid loss, ml maximum : 50 % of 7A (ii,b)

B. In Saline Water Mud:

(i) Preparation of base mud.
Prepare a 10% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir the suspension in a multimixer for15 minutes so that no lumps are left after the stirring period. Age the suspension for 72 hrs. at 90 +/- 2 degC. After the lapse of the aging period cool and stir the suspension for 15 minutes in multimixer and determine apparent viscosity which should be 85+/- 5 cp To this mud add 4% Nacl (w/v) (LR grade) and stir for 30minutes in a multimixer. Age the mud 24 hrs. at 26 +/- 2 degC. After aging, stir the mud again for 15 minutes and determine apparent viscosity at 26 +/- 2 degC which should be 32.5 +/- 2.5cp. Divide the mud into two parts by dilution with distilled water, if necessary.

(ii) **Untreated mud.**
Age the first part of saline mud for 24 hrs. at 160 +/-2 degC in rolling condition cool the mud stir for 15 minutes and measure apparent viscosity 26 +/- 2 deg C and HPHT fluid loss at 160 degC and 500 PSI differential pressure for 24 hrs. Cool the mud and stir in a multimixer for15 minutes. Determine apparent viscosity at 26 +/- 2 deg C and HPHT fluid loss at 160 degC and500 PSI differential pressure.

(a) Apparent viscosity, cp : To determine
(b) HPHT fluid loss, ml : To determine

(iii) **Treated mud.**
Treat the second part of the saline mud with 2% 134esonated lignite sample and stir the mud for 30 minutes in multimixer. Age the treated mud for 24 hrs at 160 +/- 2 degC in rolling condition. Coolthe mud and stir in multimixer for 15 minutes. Determine apparent viscosity at 26 +/- 2 DegC and HPHT fluid loss at 160 degC and 500 PSI differential pressure which should be as under.

(i) Apparent viscosity, cp, max. : should not be more than that of 7B (ii,a)
(ii) (ii) HPHT fluid loss, ml max. : 50 % of mud of 7B (ii,b)

8. **Packing** : The material should be packed in good quality moisture proof multiply paper bag strong enough to withstand rigorous of transit and storage .Capacity 25 kg net per bag.

9. **Marking:** Each bag should have clear legible marking as given below.
(i) Name of the product.
(ii) Name of the supplier/manufacturer
(iii) Date/Month/Year of Manufacturer

N.B.: The apparent viscosity shall be measured by a Fann Vgmeter and the HPHT fluid loss shall be measured in standard HPHT fluid loss apparatus using nitrogen gas as the pressure source.

12.14 **LINSEED OIL:**

Specification:

1. **Physical Properties:** The material, as received, should be golden yellow, brownish yellow coloured clear viscous liquid free from suspended solids/impurities and other adulterants.
2. Density at 26 +/- 2 degC : 0.9230 – 0.9280
3. Acid value, mgKOH/gm, maximum: 10.00
4. Moisture content, % by mass, max. : 0.25
5. Refractive Index at 40 degC: 1.4720 – 1.4750
6. Performance Test:

A. **Lubricity test –**
(i) In fresh water mud : Prepare a 7.5% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir it for 15minutes in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 degC. After the lapse of aging period, adjust apparent viscosity of the suspension to 15 +/- 1 cp by dilution with distilled water. To this, add 0.5%(w/v) of the sample while stirring, after completion of addition, stir further for 30 minutes in a multimixer. Measure lubricity co-efficient by using a lubricity tester.
Lubricity co-efficient should not be more than 0.15

(ii) In saline water mud – Prepare a 10% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 min, in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 degC. After lapse of aging period, add 4% NaCl (w/v) (AR grade) and stir for 15minutes in a multimixer. Age the suspension for 24 hrs at 26 +/- 2degC. Adjust the apparent viscosity to 15 +/- 1 cp by dilution with4% NaCl solution, if necessary. To this saline mud, add 0.50%(w/v) of the sample in stirring condition and stir further for 30minutes in a multimixer. Measure lubricity co-efficient by using a lubricity tester.

Lubricity co-efficient should not be more than 0.20

B. Extreme Pressure Lubrication test –

(i) **In fresh water mud** – Prepare a 7.5% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 minutes in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs. at 90 +/- 2 degC.After the lapse of aging period, adjust apparent viscosity of the suspension to 15 +/- 1 cp by dilution with distilled water and filter through 200 BSS mesh or equivalent sieve. Add 0.5% (w/v) of the sample to the Bentonite

suspension while stirring. After completionof addition, stir again in the multimixer for 30 min. Determine the film strength of the mud at 250 in-lb load with the help of an E.P. lubricity tester.

The film strength should be 20,000 psi minimum.

(ii) **In saline water mud** – Prepare a 10% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stirfor 15 min. in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 degC. After lapse of aging period, add 4% Nacl (w/v) (AR grade) and stir for 15minutes in a multimixer. Age the suspension for 24 hrs. at 26 +/- 2degC. Adjust the apparent viscosity to 15 +/- 1 cp by dilution with4% NaCl solution, if necessary and filter through 200 BSS meshor equivalent sieve. Add 0.5% (w/v) of the sample while stirring and stir further for 30 minutes in multimixer. Determine the film strength of the mud at 250 in-lb load with the help of a E.P. lubricity tester.

The film strength should be 15,000 psi, minimum

C. **Foam Test:** Prepare a 7.5% (w/v) Bentonite suspension in distilled water using OIL / API approved Bentonite and stir for 15 min in multimixer. Age the suspension for 24 hrs. at 26 +/- 2 degC. Adjust the apparent viscosity of the suspension to 15 +/- 1 cp bydilution with distilled water. Add 0.5% (w/v) of the sample to it and stir for 30 minutes in a multimixer. Determine the specific gravity of the mud.
The specific gravity of the mud should not be less than 0.8.

7. **Field Performance Criteria:** The following performance needs to be fulfilled.

a) Linseed oil must be stable at Lower temperature (<15 degC) and there should not be any deposition at the bottom of the container at low temperature.
b) Linseed oil should be easily miscible with water and water based mud system.
c) It should be compatible with mud additives used in water based mud system.
d) Foaming should not occur during field application of the product.

8. **Packing:** The material should be packed in 50 litre capacity leak proof HDPE carbuoys with leak tight stopper and screw caps.

9. **Markings**: Each carbuoys should have clear legible markings as given below:
(i) Name of the product
(ii) Name of the supplier
(iii) Date/month/year of manufacture

N.B.: Apparent viscosity to be measured by a Fann VG meter and lubricity should be measured by a E.P. lubricity tester.

12.15 **Sodium Formate:**

Specifications

An environmental friendly, non-corrosive organic brine to use as weighing agent in drilling fluids, workover fluids, completion fluids/packer fluids in oilfield operations. The material should have the following specifications:

1. **Physical State:** The material should be in the form of white granules or crystalline free flowing white powder free from lumps and other impurities. The material should be easily soluble in water.

2. Purity as Sodium Formate, percent by mass, minimum: 95%, minimum

3. Moisture Content, % by mass: 1.00 maximum

4. Organic impurities, percent by mass, Maximum: 4.00

5. Volatile matter, percent by mass, maximum: 4.00

6. Matter insoluble in water, percent by mass, maximum: Nil

7. Sulphate content: Nil

8. Chloride Content: Nil

9. Iron content, ppm, max. : 10

10. **Packing:** The material should be packed in moisture proofedHDPE bag with insert of polythene bag or in multiply paper bags (6 ply) and should be strong enough to withstand rigorous of transit and storage.Net weight: 25/ 50 Kgs per bag.

12.16 **Glycol**

Specifications:

1. **Physical State**: The material shall be in the form of liquid at 24 ± 2 degC, free from visible impurities.

2. pH of 3% (v/v) Sample in 5% (w/v) KCl Solution in Distilled water : 6.0 – 7.5

3. Surface Tension of 3% (v/v) Sample in 5% (w/v) KCl Solution in Distilled Water, dynes / cm3.: 40 ± 5

4. Hydroxyl Value, mg KOH / g of Sample: 150 – 200

5. Iodoform Test for Confirmation of Presence of carbon in Sample: Should be Positive.

6. **Performance Test:**

(i) **Preparation of Base Mud:** Prepare 10 – 15 cp Bentonite Suspension from pre-hydrated Bentonite Suspension [prepared by stirring 10% (w/v) Bentonite in Distilled Water for 30 minutes using a laboratory stirrer (5000 # 6000 rpm) and aged for 72 hours at 90 ± 2 °C] by diluting with Distilled Water and stirring in a Hamilton Beach Mixer for 20 minutes. Treat the prepared Bentonite Suspension with KCl (5% w/v) and age for 24 hours at 24 ± 2 °C. After that add PHPA (0.2% w/v) + PAC (Regular Grade) (0.5% w/v) + PAC (Low Viscosity Grade) (0.3% w/v) + KOH (pH 9.0 – 9.5), while stirring in a Hamilton Beach Mixer at high speed for 20 minutes.

(ii) Hot roll the Base Mud at 100 °C for 18 hours in a roller oven. After aging cool the Mud to 24 ± 2 °C and stir in a Hamilton Beach Mixer for 20 minutes at high speed. Determine the Apparent Viscosity (cP) and the Yield Point (lbs/100 sq. ft) by Fann VG Meter or Equivalent. Also measure the Lubricity Coefficient, using a Lubricity Tester and HP-HT Filtration Loss (ml / 30 minutes) at 500 psi and 100 °C, using a HP-HT Filtration Apparatus. Record Apparent Viscosity, Yield Point, Lubricity Coefficient and HP-HT Filtration Loss of the hot rolled base mud.

a)Apparent Viscosity, cp = To determine
b) Yield Value, lbs/100 ft sq = To determine
c) HPHT Fluid liss, ml = To determine
d) Lubricity Coeficient = To determine

(iii) Treat the Base Mud with 3% (v/v) Sample in a Hamilton Beach Mixer stirring for 20 minutes. Hot roll the treated Base Mud at 100 °C for 18 hours in a roller oven. After aging cool the Mud to 24 ± 2 °C and stir in a Hamilton Beach Mixer for 20 minutes at high speed / medium speed. Determine Apparent Viscosity (cP), Yield Point (lbs/100 sq. ft), Lubricity Coefficient and HPHT Filtration Loss (ml / 30 minutes) at 500 psi and 100 °C, as in 6 (ii) above.

a) Apparent Viscosity of the treated hot rolled base mud should not be less than the value obtained for hot rolled base mud 6 (ii).

b) Yield Point of the treated hot rolled base mud should not be less than the value obtained for hot rolled base mud 6 (ii).

c) Lubricity Coefficient of the treated hot rolled base mud should not be more than 80% of the value obtained for hot rolled mud 6 (ii).

d) HP-HT Filtration Loss of the treated hot rolled base mud should not be more than 70% of the value obtained for hot rolled mud 6 (ii).

7. Cloud Point of 3% (v/v) Sample in 5% (w/v) KCl in Distilled Water: 60-72 deg C

12.17 **Micronized Calcium Carbonate (MCC):**

Specifications

1. **Physical properties:** State-Fine Powder free from dirt & foreign matter;
2. Water soluble content (by weight), max; 0.35%
3. Specific gravity (minimum) at 24+/-2degC: 2.6
4. Purity as Calcium Carbonate by weight (minimum): 96%
5. Solubility in 15% wt/wt HCl, by weight (minimum): 96%
6. Particle size distribution % by volume as measured by light scattering technology- D10- < 4 micron; D50- 4-15 micron; D90- 15-60micron.
7. Particle retain on 200 mesh ASTM- 2% by weight max.

12.18 **Pre-gelatinized Starch:**

Specifications:

1. **Physical State**: The material shall be in the form of powder, free from lumps and visible impurities

2. Moisture Content at 105 ± 2 °C, percent by mass: 10.0(Maximum)

3. pH of 2% (w/v) Solution of the Material in Distilled Water at 24 ±2 °C: 10.0 (Minimum)

4. Apparent Viscosity of 2% (w/v) Solution in Distilled Water at 24± 2 °C,: 10.0cP (Max)

5. Qualitative Test for Presence of Starch: Positive

6. **Bacterial Degradation test:** Should not Biodegrade for at least 3days.

7. **Performance Test:**

(a) ***In Fresh Water Mud:***
(i) Prepare Base Mud using OIL / API approved Bentonite having Apparent Viscosity 25 cP (Maximum) and API Filtration Loss 20 ± 2 ml at 24 ± 2 °C, from pre-hydrated Bentonite suspension (prepared by stirring 10% (w/v) Bentonite in Distilled Water for 30minutes using laboratory stirrer (5000 – 6000 rpm) and aged for 72hours at 90 ± 2 °C) by diluting with distilled Water and stirring in Hamilton Beach Mixer for 30 minutes at high speed. Measure Apparent Viscosity (cP) at 24 ± 2 °C by a Fann VG Meter or Equivalent and Filtration Loss (ml) by API Filtration Tester. RecordApparent Viscosity and API Filtration Loss of the fresh water base mud.

(a) Apparent viscosity, cp, max = 25
(b) API Fluid loss, ml = 18.0 – 22.0

(ii) Treat the Base Mud 7 (a) (i) with 1.0% Pre-gelatinized Starch (1.0 g of Sample for each 100 ml of Base Mud) while stirring in Hamilton Beach Mixer at high speed. Stir for 30 minutes and measure Apparent Viscosity and API Filtration Loss of Treated mud at 24 ± 2 ° C.
Apparent Viscosity of the treated fresh water base mud should not be more than 55.0 cp. API Filtration Loss of the treated fresh water base mud should not be more than 50% of the value obtained for fresh water base mud.

(b) ***In salt water mud:***
(i) Prepare 10.0% (w/v) Bentonite Suspension in Distilled Water from OIL / API approved Bentonite by stirring for 30 minutes in laboratory stirrer (5000 – 6000 rpm) and age it for 72 hours at 90 ±2 °C. Treat the Mud with 4.0% (w/v) NaCl (AR/GR grade) and0.35% (w/v) Sodium Bicarbonate (AR/GR grade). Stir for 15minutes at high speed in Hamilton Beach Mixer and age it for 24hours at 24 ± 2 °C. Further dilute the suspension as required with a solution of 4.0% NaCl (AR / GR Grade) in distilled water with stirring in Hamilton Beach Mixer at high speed for 30 minutes to achieve API Filtration Loss of 80 ± 5 ml at 24 ± 2 °C. Measure Apparent Viscosity (cP) and API Filtration Loss (ml) ofthe Salt Water Base Mud at 24 ± 2 ° C. Record Apparent Viscosity and API Filtration Loss of the salt water base mud.

(a) Apparent viscosity, cp, max = To determine
(b) API Fluid loss, ml = 75 -85

(ii) Treat the Base Mud 7 (b) (i) with 1.0% Pre-gelatinized Starch (1.0 g Sample, for each 100 ml of Base Mud) stir in Hamilton Beach Mixer at high speed for 30 minutes. Then determine Apparent Viscosity and API Filtration Loss at 24 ± 2 °C. Apparent Viscosity of the treated salt water base mud should not be less than the value obtained for the salt water base mud 7 (b)(i).API Filtration Loss of the treated salt water base mud should notbe more than 20% of the value obtained for the salt water base mud 7 (b) (i).
Note:

Packing: Moisture proof Multi-layered Paper bag with polythene inner lining (100 gauge) strong enough to withstand rigorous of transit and storage, capacity 25 kg net per bag.

Marking: Each bag shall have clearly legible marking as given below:
a) Name of Product

b) Name of Supplier
c) Date/Month/Year of manufacture

Note:
Packing: Moisture proof Multi-layered Paper bag with polythene inner lining (100 gauge) strong enough to withstand rigors of transit and storage, capacity 25 kg net per bag.

12.19 **SULPHONATED ASHPHALT:**

Specification:

1. **Physical properties:** The material, as received, should be a free flowing brown to black coloured powder, free from lump and other foreign matter.

2. Moisture content, measured by drying at 105 +/- 2 degC, % by mass, maximum: 10.00

3. Soluble matter content, % by mass
(i) In distilled water : 65 – 70
(ii) In dimethyl sulphoxide: 30 – 35

4. pH of 2% (w/v) solution in distilled water at 26 +/- 2 degC, minimum: 8.5

5. Qualitative test for presence of sulphonate group: Positive

6. Barium chloride test: Mix 1% (w/v) of the sample in distilled water and stirin multimixer for 10 minutes. To this add 150 ml distilled water and 0.5 gm barium chloride (LR grade) and again stir for 10 minutes in multimixer. Pour the content to a beaker and observe after 30 minutes. No formation and setting of black coloured precipitates should take place.

7. **Performance Test:**
A. **Lubricity test:** Prepare a 7.5% (w/v) Bentonite suspension in distilled water using OIL approved Bentonite and stir the suspension for 15 minutes in multimixer so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 degC. After the lapse of the aging period, cool the suspension and stir for 15 minutes in multimixer. Adjust apparent viscosity for the suspension to 15 cp by dilution with distilled water, if distilled water, if necessary. Treat the suspension with 2.0% (w/v) sulphonated asphalt sample and stir for 30 minutes in multimixer for lubricity test. Determine lubricity co-efficient using a standard mud lubricity tester.
Lubricity co-efficient should not be more than 0.30

B. **Inhibition Test:**
In Bentonite suspension:

(a) **Preparation of base mud**: Prepare a Bentonite suspension by stirring 7.5% (w/v) OIL / API approved Bentonite in distilled water in a multimixer for 15 minutes. Determine apparent viscosity and value of this base mud immediately at 26 +/- 2 degC.
(i) Apparent viscosity, cp : To record
(ii) Yield value, lbs/100 ftsq : To record

(b) **Preparation of treated mud:** Add 3% (w/v) sulphonated asphalt sample to distilled water and stir in multimixer for 15 mintes. To this add 7.5%(w/v) OIL / API

approved Bentonite and stir for additional 15 minutes in a multimixer. Determine apparent viscosity and yield value of this treated mud at 26 +/- 2 degC which should be as follows:

(i) Apparent viscosity ,cp,max. : 35% of 7B(I)(a,i)
(ii) Yield value,lbs/100 ftsq, max: 15% of 7B(I)(a,ii)

In Bentonite and kaolin mixture:

(a) **Preparation of base mud:** Prepare a base mud using 52.5 gms of OIL / API approved Bentonite and 263 gms of kaolin powder in 1000ml distilled water. Adjust PH to 10.5 by 5 N NaOH solutions. Mix thoroughly in a multimixer for 30 minutes and divide the suspension into two parts. Hot age one part at 65 degC in rolling condition for 18 hrs. After the lapse of the aging period, cool and stir for further 10 minutes in multimixer. Measure apparent viscosity and yield value of the mud at 26 +/- 2 degC.

(i) Apparent viscosity, cp : To record
(ii) Yield value, lbs/100 ftsq : To record

(b) **Preparation of treated mud:**

To the other part of the mud, add 3% (w/v) of the sulphonated asphalt sample and mix in multimixerfor 30 minutes. Hot age the mud at 65 degC in rolling condition for 18 hrs. After the lapse of the aging period, cool and stir the mud for 10 minutes in multimixer. Measure apparent viscosity and yield value at 26 +/- 2 degC which should be as follows:

(i) Apparent viscosity, cp,min.: 40% of 7B (II)(a,i)
(ii) Yield value,lbs/100 ftsq, min.:25%of 7B(II)(a,ii)

8. **Packing:**
The material should be packed in multi walled paper bags with at least six layers and two innermost layers suitably water proofed, strong enough to withstand rigorous of transit and storage. Capacity 25 kgs net per bag.

9. **Markings:**
Each bag should have clear legible markings as given below:

(i) Name of the product
(ii) Name of the supplier
(iii) Date/month/year of manufacture

N.B. Apparent viscosity will be measured by a Fann VG meter and API fluid loss will be measured, in standard API fluid loss apparatus using compressed air or nitrogen as pressure source.

12.20 **POTASSIUM SULPHATE**

Specifications:
General purpose of use: To use in environmental friendly polymer mud system as clay inhibiting agent (Potassium Ion source) in place of Potassium Chloride

1. Physical Properties: The material shall be in the form of crystalline solid or powder, free from visible impurities.
2. Moisture Content at 105 +/-2 DegC, % by mass: 2.00 (Maximum)
3. Matter Insoluble in Water on Dry Basis, percent by mass: 0.5 (Maximum)
4. Calcium as Ca++ on Dry Basis, ppm: 2000 (Maximum)

5. Purity as Potassium Sulphate on Dry Basis, percent by mass: 96.0 (Minimum)
6. Packing: The material should be packed in polythene bag (100 gauge) which in turn should be packed in HDPE bag strong enough to withstand rigours of transit and storage. The material should be supplied in the original packing of the manufacturer. Capacity 50 kg net per bag.
7. Marking: Each bag shall have clear legible markings as given below:

` I. Name of the product
II. Name of the supplier
III. Date/Month/Year of manufacture
IV. Supply order number against which the present supply is made

12.21 **POTASSIUM HYDROXIDE**

Specification:

1. Physical Properties: The material, as received, should be in the form of pallets or flakes free from dirt or foreign matter. Should be determined visually.
2. Total Alkalinity as KOH, % by mass: Minimum: 87.0
3. Sodium as Na, % by mass: Maximum: 1.00

KEY PERFORMANCE INDICATORS:

Bidder shall provide mud Engineering Services under this contract with respect to the following key performance Indicators:

a. NPT (Mud Loss)
b. NPT (Stuck-Pipe)
c. NPT (Logging)
d. Incidence/frequency of hole packing off.
e. Drilling Fluid Cost/meter
f. NPT (Supply of Chemicals)
g. Quality of additives
h. Hole cleaning efficiency
i. Caliper
j. Productivity of Well

&&&

B. SCHEDULE OF RATES (MUD ENGINEERING SERVICES)

The bidder shall quote the rates/prices in their Price Bid strictly as per PROFORMA-B (Appendix-3 and Appendix-4). The quantity/parameter/No. of days etc. shown against each item in the Tables is tentative and valid for Bid Evaluation purpose only. Payment to the successful Bidder/Contractor shall be made on the basis of actual utilization/ work done/quantity consumed. All "DAY RATE" charges shall be quoted for 24 hours a day basis. But, for part of a day, the same shall be payable on pro-rata up to the nearest half an hour basis. Commercial evaluation of Bids to establish inter-se-ranking of all technically qualified bidders will be done based on the rates/charges quoted in these Tables only.

1.0 MOBILIZATION CHARGES: (LUMP SUM)

[For Personnel, Mud Lab. Complete with all Equipment, Tools, Accessories & Consumables etc.]

a) Mobilization charges shall be payable one time lump sum which shall cover all local and foreign costs (if any) to be incurred by the Contractor to mobilize the Personnel, Mud Laboratory complete with all necessary equipment, tools, accessories and consumables as specified in the Contract, to the first drilling location in Dima Hasao/ Karbi Anglong, India and shall include all local taxes & levies (including State Entry Tax, any other tax under Schedule-VI area in Assam, if any, port fees, transportation/freight & insurance etc., but excluding Customs Duty.

b) Company will issue Recommendatory Letters on the basis of requisite documents to be provided by the Contractor for import of items at least 15 days in advance, if envisaged in PROFORMA-A2, for Contractor to obtain necessary Essentiality Certificates (EC) from the Directorate General of Hydrocarbon (DGH), India to avail concessional Customs Duty. However, securing EC and payment of port rent, demurrage etc. and clearance of goods through Indian Customs will be exclusive responsibility of the Contractor.

c) Mobilization charges shall be payable only when all requisite materials, equipment and crew are mobilized at site and positioned to undertake/commence the assigned work under the Contract at the first drilling location in Dima Hasao/ Karbi Anglong and duly certified by Company's Engineer/ Representative.
Total Mobilization Charges quoted for Mud engineering services should not exceed 7.5% of the total contract value for the Mud engineering service part.

2.0 DEMOBILIZATION CHARGES: (LUMP SUM)

[For Personnel, Mud Lab with all Equipment, Tools, Accessories & Consumables and Chemicals etc.]

a) The Demobilization Charges shall be payable one time on lump sum basis which shall cover all expenses of Contractor towards demobilization of Personnel, complete Mud Laboratory including all equipment, tools, accessories and leftover chemicals/ additives/consumables from the last drilling location to Contractor's base or elsewhere at the option of Contractor upon completion/termination of the Contract.

b) All charges connected with demobilization including all fees, duties and taxes in relation thereto, insurance and freight within India or on export/re-export outside India will be to Contractor's account.

c) All contractual Day Rates/Charges shall cease to exist with effect from the date and time or event as to be specified by Company in the demobilization notice. No charges whatsoever will be payable thereafter.
d) Demobilization charges shall be paid to the Contractor after successful completion of all their contractual obligations as per provisions of the contract including re-export formalities.
e) The Contractor will ensure that demobilization is completed and Company's work-site is cleared-off Contractor's property within 30 (thirty) days of notice from the Company.
f) Total Demobilization Charges quoted should not be less than 2% the total contract value for the Mud engineering service part.

3.0 CHARGES FOR MUD LAB AND ALL EQUIPMENTS: [For Mud Lab. Complete with all Equipment, Tools, and Accessories & Consumables etc.]

3.0.1. OPERATIONAL CHARGES (OPERATIONAL DAY RATE):

a) The Operational Charges (Operational Day Rate) for the Mud Laboratory including all testing equipment etc. shall be quoted on per day of 24 hours basis and the same shall be payable for the period of normal drilling operations at site with effect from the date of spudding in of the well. For part of a day, payment will be calculated on Pro-rata basis to the nearest half an hour only.
b) Operational Day Rate shall include the rental of Mud Laboratory & all other equipment/tools. Cost of operation & maintenance of all such equipment including supply of spares and consumables as may be required from time to time during the Contract period shall also be included. The Contractor must maintain adequate stock of such regularly required items/ spares at the drilling site under their possession to ensure uninterrupted service.
c) Equipment Hiring Charges shall not be payable, if the Contractor withdraws the whole or part of the equipment or any manpower affecting operations.
d) If Contractor's tool/equipment fails to perform, for any reason during the operation, no Hiring Charges shall become payable until the equipment/ tool is put back into operating condition or evidenced by demonstration of operation in actual tests or use to the satisfaction of OIL.

3.0.2. STANDBY/RENTAL CHARGES (STANDBY/RENTAL DAY RATE)

a) Standby/Rental charges for Contractor's Mud Lab. & other Testing Equipment shall be payable for the period beyond initial 48 hours when normal drilling operations are suspended due to rig repair/ or, any operational shutdown takes place for any reason not related to the services provided under this bundle service contract, leading to suspension of Mud Engineering Services continuously for more than 48 hours.
However, for the initial consecutive 48 hours of suspension of Mud Engineering Services under such conditions, the Operational Day Rate as per Clause "3.0.1" above shall be payable. The Standby/Rental Day Rate shall apply only for the period beyond initial 48 hours till resumption of normal services.

b) Equipment Standby/Rental Day Rate shall be quoted on per Day of 24 hours basis and for the purpose of payment the same shall be pro-rated to the nearest half an hour for part of a day, if any.

4.0 CHARGES FOR PERSONNEL:

4.0.1. OPERATIONAL CHARGES FOR MUD ENGINEERS (PER ENGINEER PER DAY):

a) Operational charges shall be payable for the Mud Engineers to be deployed by the Contractor on per Engineer per Day of 24 hours basis for two (2) Engineers on twelve (12) hourly shifts at site. The same is also payable on pro-rata to the nearest half an hour basis for part of a day, if any.

b) The Contractor may engage additional personnel for maintenance or assistance in the performance of the Work. However, Company will neither be responsible nor pay any charge or day rate for such additional personnel, if deployed any.

c) Operational charges shall be payable for the Mud Engineers to perform their Work as envisaged under the Contract from the day the Contractor completes Mobilization of Contractor's personnel at the designated Locations in conformity with the contractual provisions/mobilization notice.

d) The Contractor shall provide statutory "OFF" to their well site Mud Engineers and other personnel as per Mines Act. & other statutory regulations and arrange for crew change from time to time at their cost. All such expenditure including enroute expenses of Contractor's personnel shall be borne by the Contractor. No extra payment whatsoever will be due from Company on this account.

4.0.2. STANDBY/RENTAL CHARGES FOR MUD ENGINEERS (PER ENGINEER PER DAY)

a) Standby/Rental charges for Contractor's Mud Engineers shall be payable for the period beyond initial 48 hours when normal drilling operations are suspended due to rig repair/ or, any operational shutdown takes place for any reason not attributable to the services provided under this bundle service contract, leading to suspension of Mud Engineering Services continuously for more than 48 hours. However, for the initial 48 hours of suspension of Mud Engineering Services under such conditions, the Operational Day Rate as per Clause "4.0.1" above shall be payable. The Standby/Rental Day Rate shall apply only for the period beyond initial 48 hours till resumption of normal services.

b) Standby/Rental charges shall be payable for the Mud Engineers to be deployed by the Contractor on per Engineer per Day of 24 hours basis for two (2) Engineers on twelve (12) hourly shifts at site. The same is also payable on pro-rata basis to the nearest half an hour only for part of a day, if any.

5.0. INTER –LOCATION MOVEMENT (ILM) CHARGES:

(For Mud Lab., Tools, Equipment, Accessories, and Consumables & Personnel)

a) The Contractor shall be solely responsible to carry out inter-location movement of their materials viz; Mud Laboratory complete with all equipment, tools, accessories, consumables, leftover chemicals & additives and manpower etc. from one location after completion of drilling/testing program to the next location as to be decided by Company to take up the Mud Engineering Services at the

forward location under the contract. Inter-location move rate will be payable depending on the distance between the two locations. Therefore, the inter-location movement rate has been provisioned in two parts in this contract i.e.

(i) All-inclusive lump sum fixed charge for inter-location movement up to a maximum distance of thirty (30) KM.

(ii) All-inclusive Rate per KM for the distance beyond initial thirty (30) KM.

Wherever, the distance between two locations for inter-location movement exceeds 30 KM, both above rates will be considered to calculate the total inter-location movement charge and payment will be made accordingly.

b) The Contractor shall carry out inter-location movement of their materials on completion of operation at one well upon receipt of ILM notice from the Company. ILM Charges shall be payable after the materials and personnel of the Contractor are shifted entirely to the designated forward location and all equipment, tools etc. are placed/installed/tested/calibrated to its rated specifications to the satisfaction of OIL as per operational requirements.

c) During inter-location movement, shifting of Mud Laboratory complete with all equipment, tools, accessories, consumables, leftover chemicals & additives and manpower etc. deployed by the Contractor shall be the sole responsibility of the Contractor. However, the services of Crane as may be required for loading and unloading of Mud Lab. At the respective well site/location will be arranged by Company free of cost through a third party Service Provider (i.e., Drilling Rig Service Provider). But, necessary supervision to ensure safe loading and unloading will be the sole responsibility of Mud Engineering Contractor.

d) The Contractor shall be allowed to complete the ILM of their belongings within twenty (20) days from the date of ILM notice issued by the Company upto an inter-location distance of thirty (30) KM. In case the distance between two locations exceeds 30 KM, five (5) extra days will be allowed to complete inter-location movement for each 30 KM or part thereof beyond the initial thirty KM.

e) In case, inter-location movement is suspended due to Force Majeure situation, pursuant to Clause No.31.0 in Section-I under Part-3,the time lost on account of such Force Majeure condition may be extended without any liquidated damages/penalty/ loss to the Contractor.

f) In the event of delay in inter-location movement for the reason solely attributable to Contractor or their sub-contractor, the total ILM charges shall be discounted by five percent (5%) for delay of each day or part thereof beyond the standard allowable period as stipulated in (d) above, upto the total calculated cost for that inter-location movement.

6.0 ZERO (NIL) RATES

Notwithstanding any provision in the Contract, no charges shall be payable for the period, the job or activity assigned to the Contractor is halted due to break-down of Contractor's tools/equipment, non-availability of key personnel, non-availability of chemicals & additives of adequate quality & quantity or for any other reason whatsoever attributable to the Contractor.

7.0 FORCE MAJEURE DAY RATE: (LUMP SUM PER DAY)

a) Upon occurrence of force majeure situation pursuant to Clause No. 31.0 of Section-I in Part-3 (GCC), only the Force Majeure Day Rate shall be payable by Company, which should be restricted to maximum fifty percent (50%) of the sum total of (i) Operational charges for Mud lab and equipment (Clause No. "3.0.1") and (ii) Operational charges for two mud engineers (Clause No. "4.0.1"). No other payment whatsoever will be due to the Contractor from Company under force majeure situation as above.

b) The Force Majeure Day Rate shall be payable per 24 hours a day or part thereof on pro-rata basis to the nearest half an hour during the first 15 (fifteen) days period of occurrence of force majeure situation only. No payment shall accrue to the Contractor beyond the first 15 (fifteen) days period unless mutually agreed upon.

c) Payment towards Force Majeure Day Rate shall not exceed 50% (Fifty percent) of the sum total of (i) Operational charges for Mud lab and equipment (Clause No. "3.0.1") and (ii) Operational charges for two mud engineers (Clause No. "4.0.1").

8.0 COST OF CHEMICALS/ADDITIVES: (ON ACTUAL CONSUMPTION BASIS)

a) The complete line of Mud Chemicals and additives required for the Services shall be supplied by the Contractor at site on FOR Destination (Rig site/Drilling location) basis including all applicable taxes & duties for effective & efficient Mud Engineering Services throughout the contract period.

b) The Contractor shall bear the entire cost of shipment/transportation up to well site, transit insurance, loading/unloading/handling charges, port rent/fees/ demurrage & other clearance charges as applicable, GST and all other statutory taxes & duties payable to statutory authorities.

c) Customs Duty: In terms of Sl. No. 404 of the Customs Notification No.50/2017-Cus dated 30.06.2017, imports of the items specified in List 33 (CONDITION NO. 48) of the Notification are subject to levy of concessional rate of customs duty @5% (BCD Nil & IGST@5%) subject to conditions specified therein (Condition No.48). However, this is subject to change as per Government guidelines and the provisions ruling at the time of tender closing will be applicable. Similarly, the domestic supply of such goods would attract 5% GST (i.e. IGST or CGST & SGST/UTSGT) on submission of EC in terms of GST Notification No.03/2017.

(i) Contractor shall provide the list of items to be imported by them under the Contract in the format specified in Proforma-A2 along with their bid for issuance of Recommendatory Letter to DGH. Contractor shall make a written request to Company immediately after shipment of the goods indicated by them in Proforma-A2, along with the Invoices and all shipping documents (with clear 20 working days' notice) requesting Company for issuance of the Recommendatory Letter. OIL shall issue the Recommendatory provided all the documents submitted by the Contractor are found in

order as per contract. It shall however be Contractor's responsibility to obtain EC from DGH and clear the goods through customs. OIL shall not be liable in whatsoever manner for the rejection of their claims for zero customs duty by any of the authorities including DGH arising solely as a result of any default on the part of the Contractor.

(ii) All imports and import clearances under the contract shall be done by the contractor and OIL shall not provide any assistance in this regard.

(iii) However, in the event customs duty becomes leviable during the course of contract arising out of a change in the policy of the Government, Company shall be liable for payment of the customs duties leviable in India on Contractor's items as provided in Proforma-A2 or the actual whichever is less (for the first time import) and at actuals (for subsequent imports), provided Contractor furnishes all necessary documents indicating the estimated customs duty at least 10 days in advance. Such payment of Customs Duty shall be arranged by Company and made available to the representatives of Contractor at Kolkata within 3 working days after Contractor submits the undisputed and clear necessary documents / duty assessment papers at Company's office at Kolkata. Contractor would be responsible for passing such payment to customs authorities at the port of entry. Company's obligation for Customs Duty payment shall be limited / restricted to the tariff rates as assessed by the Customs on the day of clearance, or as on the last day of the stipulated mobilization period. In case of clearance thereafter, on the CIF value of items in Proforma-A2 will be frozen and any increase in Customs Duty on account of increase in value on these will be to the Contractor's account. Furthermore, in case the above CIF value is not acceptable to assessing Customs Officer and as a result if any excess Customs Duty becomes payable, it shall be to Contractor's account. Before filing Bill of lading, Bill of entry, the Contractor must consult the Company to avoid payment of excess Customs Duty.

(iv) Contractor shall, however, arrange clearance of such items from Customs and port authorities in India and shall pay all requisite demurrages, if any, clearance fees/charges, port fees, clearing and forwarding agent fees/ charges, inland transport charges etc. Company shall provide all assistance by issuance of necessary letter of authority or other relevant documents and necessary help.

(v) Notwithstanding what is stated above, the bidders should also consider the position in regard to import of goods as specified in list No. 33 of above notification against concessional rate of 5% Customs Duty. OIL is not liable in whatsoever manner, for the rejection of their claims for concessional rate of 5%Customs Duty by any of the authorities including the DGH.

(vi) The bidder while quoting would need to consider the duty drawback as per notification No. 23/2008 dated 01.03.2008 available to them upon re-export of the equipment, if any. The bidder should also note that input tax credit would also be available to them on the IGST paid by them excluding duty drawback and this aspect should also be considered by them while quoting their rates.

(vii) Similarly, such specified goods required for petroleum operations if procured from domestic sources would attract5% concessional GST (IGST

or CGST &SGST/UTGST) as per notification no. 3/2017 dtd. 28.06.2017 against issuance of EC by DGH for which OIL shall issue the recommendatory letter. Note: The recommendatory letter will be given only for those items which are either consumed during the execution of work or for those equipment/tools which are undertaken to be re-exported by the bidder. The recommendatory letter will not be issued when the bidder imports the equipment/tools on acquisition basis and does not undertake to re-export the same after the completion of the contract.

(viii) Contractor must ensure that the spares and consumables imported by them for providing the services under Contract are properly used in executing their job under the Contract in the PEL/ML areas of Company for which EC has been obtained. Contractor shall furnish to Company a certificate as and when the spares and consumables are used/consumed certifying that the spares and the consumables imported by them have been consumed in those ML and PEL areas under the contract for which Ecs were obtained by them. In order to avoid any misuse of the spares and consumables imported by the Contractor for providing the services under the Contract, Contractor shall furnish an Undertaking similar to that being furnished by Company to Customs of suitable amount before issue of the Recommendatory Letter.

d) In view of limited storing space at rig site, the Contractor shall maintain a supply base/warehouse/bulk storage facility in the vicinity of Rig site at their cost, from where the requirements will be fed regularly to the wells for uninterrupted operation. All related expenditures in this regard must be loaded with the quoted rates, no separate payments shall be made by the company for maintenance of supply base/warehouse or, bulk house.

e) Cost of Chemicals will be paid by Company against Contractor's monthly bill/invoice based on actual consumption in the wells as to be certified by Company's on-site Representative.

9.0 INTERIM DEMOBILIZATION/RE-MOBILIZATION CHARGES: (LUMP SUM) [For Personnel, Mud Lab. Equipment, Tools, Accessories etc.]

a) Mud lab with all equipment and accessories, personnel and well site chemicals shall be de-mobilized from the wellsite on interim basis by the Contractor within 03 (three) days from the date of issuance of interim demobilization notice. In such situation, Contractor shall be paid one time Interim De-mobilization and Interim Re-mobilization charges in lump sum. However, no other charges shall be payable after interim de-mobilization notice has been issued until the contractor on receipt of the notice from the company for remobilization, and re-mobilizes all its equipment, personnel, chemicals etc. to the wellsite, as certified by company representative for resuming operations.

b) Contractor shall re-mobilize required personnel including laboratory equipment, tools, and accessories for the next well within 12 (twelve) days from the date of interim re-mobilization notice.

GENERAL NOTES:

i) Bidders should categorically indicate name and address of their Indian agent and the percentage of commission involved in this contract, if any. Such agency commission should be included in the quoted rates. In case, no category confirmation in this regard is mentioned in the Bid, it will be construed that Indian agent commission is not involved and bids will be evaluated accordingly.

ii) Bidder should submit the list of items with CIF value to be imported into India in connection with execution of this contract as per PROFORMA-A2, enclosed. PROFORMA-A should also be included in the un-priced Techno-Commercial Bid incorporating therein the item description and quantity only. No cost detail should be shown in this PROFORMA while submitting with the Techno-commercial Bid. However, all the columns of this PROFORMA must be duly filled up for the items proposed to be imported (including Cement, Additives & Consumables) while submitting along with the PRICE BID.

iii) From the PROFORMA-A, bidder should identify the items of re-exportable in nature (i.e. items which will not be consumed during the execution of the contract and required to be exported outside India after completion of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (RE-EX).

iv) Similarly from the PROFORMA-A2, bidder should identify the items of consumable in nature (i.e. items which will be consumed during the execution of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (CONSUMABLES).

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PROFORMA-A2

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable& Chemicals) TO BE IMPORTED IN CONNECTION WITH EXECUTION OF THE CONTRACT for MUD ENGINEERING SERVICES.

Sr No.	Item Description	Qty / Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+ H	J	K	L

(1) **The items which are not of consumable in nature and required to be re- exported outside India after completion of the Contract should be indicated as "YES" in column "J".**

(2) **The items, which are of consumable in nature should be indicated as "NO" in column "J".**

(3) **For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".**

Authorized Person's Signature: _____

Name: _____

Seal of the Bidder:

PROFORMA-B (Appendix-3 and 4)

PRICE BID FORMAT (MUD ENGINEERING SERVICE)

This Price Bid Format (PROFORMA-B) comprises of Appendix-3 (Cost of Services) and Appendix-4 (Cost of Chemicals) as shown below. Bidders are requested to quote rates against each item of both the Appendices. The price bids will be evaluated on the basis of rates quoted in these Appendices and will be compared on the total value basis (Appendix-3 + Appendix-4) for the Mud Engineering Services in totality including supply of Chemicals for three (3) wells only, which is expected to be completed within a period of two years.

Appendix-3

FORMAT FOR COST OF MUD ENGINEERING SERVICES FOR 03 WELLS					
(PART-I) – COST OF SERVICES (MUD ENGINEERING OPERATION)					
Sl. No.	**Description of Services**	**UoM**	**Quantity (1)**	**Unit Rate in INR (excl GST) (2)**	**Total amount in INR (excl. GST) (3)=(1)x(2)**
1	**Charges for mobilisation**				
1(a)	Mobilisation Charges for the Mud Lab including all Lab equipments	Lumpsum	1		0.00
2	**Charges for Mud Lab with all equipments**				
2 (a)	Operational Charges for Mud Lab complete with all equipments	Day	595		0.00
2 (b)	Standby Charges for Mud Lab complete with all equipments	Day	90		0.00
3	**Charges for Personnel**				
3 (a)	Operational charges for Mud engineer (per engineer per day)	Man Day	1190		0.00
3 (b)	Standby charges for Mud engineer (per engineer per day)	Man Day	180		0.00
4	**Charges during Interlocation Movement (ILM)**				
4 (a)	Lumpsum all inclusive rate upto initial 30 Km	Lumpsum	2		0.00
4 (b)	Rate per Km beyond 30 Km	Km	200		0.00
5	**Charges for Interim De-mobilisation and Re-mobilisation**				

5 (a)	Interim Demobilisation Chrges for Mud lab including all equipments, Personnels, chemicals etc	Lumpsum	2		0.00
5 (b)	Interim Re-mobilisation Chrges for Mud lab including all equipments	Lumpsum	2		0.00
6	**Charges for De-mobilisation**				
6 (a)	Demobilisation Chrges for Mud lab including all equipments, Personnels, chemicals etc	Lumpsum	1		0.00
Total estimated cost of Mud Engineering Services in 03 wells (including all taxes and duties except GST) in INR					**0.00**

GENERAL NOTES FOR Appendix-3:

1. The items referred above are to be read in conjunction with **PART- 3, Section-II, EXHIBIT-2 (B. Schedule of Rates).**
2. The Bid in which the rate for any of the above services is not quoted shall be rejected. However, if no charge is involved for any of the above work, 'NIL' should be mentioned against such services.

3. While quoting the rates in Table-A above, Bidders must adhere to the following restrictions.

a. Total Mobilization Charges quoted for Mud engineering services should not exceed 7.5% of the total contract value for the Mud engineering service part (Table-A + Table-B).
Total Demobilization Charges quoted should not be less than 2% the total contract value for the Mud engineering service part (Table-A + Table-B).

b. Force Majeure Day Rate must be restricted to maximum 50% of the sum total of Operational Day rate for Mud lab and equipment [Rate for item Sl. No. 2(a)] and Operational Day Rate for two Mud Engineers [2 x Rate for item Sl. No.3(a)].

4. The bidders are to quote above rates inclusive of all liabilities, except the GST.

5. The number of days and other parameters assumed above are only for the Bid evaluation purpose as assessed by Company. It is, however, to be clearly understood that payment will be made to the Contractor on the basis of actual number of days/parameters for which the equipment and crew are utilized during the currency of the Contract for job execution. The quoted Day Rates shall be paid in full per 24 hours a day, else on pro-rata to the nearest half an hour basis for part thereof.

6. Unit of measurement "Man-Day" shown above against Personnel Charges means charges per Mud Engineer per day of 24 hours at site.

7. Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole works as described in Bidding Documents, based on the rates and prices submitted by the Bidder and accepted by the Employer. The

price/rate(s) quoted by the Bidders will be inclusive of all taxes except GST(i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and cess on GST , if applicable) on the final services. However, GST rate (including cess) to be provided in the respective places in the Price Bid.

8. Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods. However, in terms of Sl. No. 404 of the Customs Notification No.50/2017-Cus dated 30.06.2017, imports of the items specified in List 33 of the Notification are subject to levy of concessional rate of customs duty @5% (BCD Nil & IGST @5%) subject to conditions specified therein (ConditionNo.48). Bidders should quote these GST component as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

9. Please note that as per Section 171 of the GST act [Anti-Profiteering Provisions Under the GST Law], it is mandatory to pass on the benefit due to any reduction in rate of tax or from input tax credit to the consumer by the way of commensurate reduction in price.

10. Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services and Cost of Chemicals (Consumables per well) including GST (CGST & SGST/UTGST or IGST).

11. OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

12. Price Bid without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of contract/order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.

13. Zero% Input Tax Credit on GST (Goods & Service Tax) is available to OIL & the same shall be considered for the Purpose of evaluation.

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Appendix-4

FORMAT FOR COST OF MUD ENGINEERING SERVICES										
(PART-II) COST OF CHEMICALS (MUD ENGINEERING OPERATIONS)										
Sl. No	**Mud Chemical Description**	**HSN Code**	**Brand Name**	**Country of origin**	**UoM**	**Qty (Y)**	**Unit Rate (in INR) (X)**	**Total Cost of Chemicals excl GST (in INR) (Z= X*Y)**	**Specs enclosed (Yes/No)**	**MSDS enclosed (Yes/No)**
1	Bentonite				MT	300		0		
2	Caustic Soda				KG	1500		0		
3	Barytes				MT	1440		0		
4	CMC (High viscous grade)				KG	7500		0		
5	CMC (Low viscous grade)				KG	9000		0		
6	PAC -R				KG	12000		0		
7	PAC-L				KG	18000		0		
8	Linseed Oil				LIT	27000		0		
9	EP-Lube				LIT	27000		0		
10	Shale Stabiliser (Magcophasol)				KG	9000		0		
11	Encapsulating Polymer (PHPA)				KG	3000		0		
12	Resinex				KG	4500		0		
13	XC-Polymer				KG	15000		0		
14	Accretion Inhibitor (Drilling Detergent)				LIT	36000		0		
15	Glycol/Polyol				LIT	54000		0		
16	Calcium Carbonate (MCC)				KG	75000		0		
17	Formalin/ Biocide				LIT	6000		0		

18	Octyl Alcohol/ Defoamer				LITRE	1200		0		
19	Sodium Formate				KG	150000		0		
20	Mica				KG	1500		0		
21	Cellophane flakes				KG	1500		0		
22	Saw Dust				KG	1500		0		
23	Wall Nut Shell (Medium)				KG	1500		0		
24	Oxygen Scavenger				KG	600		0		
25	Pipe Lax/ Spotting Fluid				LIT	3000		0		
26	H2S Scavenger / Zinc Carbonate				KG	3000		0		
27	Sodium Bicarbonate				KG	450		0		
28	Teepol				LIT	300		0		
29	Acid Sodium Pyrophosphate				KG	600		0		
30	Corrosion Inhibitor (Brine)				LIT	600		0		
31	Soda Ash				KG	3600		0		
32	Potassium Sulphate				KG	210000		0		
33	Potassium Hydroxide				KG	7500		0		
Total estimated Cost of Chemicals for Mud Engineering Services (including all taxes and duties excluding GST) in INR								-		

GENERAL NOTES FOR APPENDIX-4:

1.0 The bidder shall quote single rate for each above chemical, which are required to be supplied by them on FOR Destination (Rig Site) basis for use in Dima Hasao/ Karbi Anglong under the contract. Quoted rates must include cost of the materials, packing & forwarding Charges, taxes & duties as applicable (**except GST**), shipment & transportation cost upto well sites in Mizoram, transit insurance and storing, warehousing & handling costs, if any, etc. as applicable.

2.0 In addition to above Chemicals, the Bidders may also separately quote for any proposed alternative chemical with total chemical requirements, other than the above, as may be envisaged for well in Dima Hasao and Karbi Anglong, but strictly as per above format (cost per Ltr./Barrel/Kg/MT). However, to ascertain

inter-se-ranking of bidders, evaluation of their Bids will be done strictly as per chemicals mentioned in Table-B above.

3.0 Chemical names shown above are generic in nature. The bidder may quote for equivalent/substitute chemicals with proper technical literatures and justification. Bidders are requested to offer single rate against each item. In case any bidder offers multiple substitutes indicating rate of each thereof under Table-B above, the highest rate quoted amongst the substitute items will be taken for bid evaluation and Bidders' ranking will be determined accordingly for award of contract. However, in the event of award of contract, Company will have the right to select any of the substitutes for use at the quoted rate only.

4.0 Quoted rates must be net of all discounts (Digressively if offered will not be considered for financial evaluation of the bids).

5.0 Quantity shown above against each item for completion of one well is as tentatively assessed by Company for the purpose of bid evaluation only. However, the actual requirement may vary during the drilling operation and payment will be made on the basis of actual consumption in the wells.

6.0 B i d d e r must quote the rate schedule strictly as above instead of referring to their standard price list.

7.0 Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole works as described in Bidding Documents, based on the rates and prices submitted by the Bidder and accepted by the Employer. The price/rate(s) quoted by the Bidders will be inclusive of all taxes except GST(i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and Cess on GST , if applicable) on the final services. However, GST rate (including cess) to be provided in the respective places in the Price Bid.

8.0 Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods. However, in terms of Sl. No. 404 of the Customs Notification No.50/2017-Cus dated 30.06.2017, imports of the items specified in List 33 of the Notification are subject to levy of concessional rate of customs duty @5% (BCD Nil & IGST @5%) subject to conditions specified therein (Condition No.48). Bidders should quote these GST component as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

9.0 Please note that as per Section 171 of the GST act [Anti-Profiteering Provisions Under the GST Law], it is mandatory to pass on the benefit due to any reduction in rate of tax or from input tax credit to the consumer by the way of commensurate reduction in price.

10.0 Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services and Cost of Chemicals (Consumables for 03 wells) including GST (CGST & SGST/UTGST or IGST).

11.0 OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be

loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

12.0 Price Bid without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of contract/order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.

13.0 Zero percent Input Tax Credit on GST (Goods & Service Tax) is available to OIL & the same shall be considered for the Purpose of evaluation.

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ANNEXURE-2

BIO-DATA FORMAT (MUD ENGINEERING SERVICES PERSONNEL)

1. NAME:
2. PRESENT ADDRESS:
3. PERMANENT ADDRESS:
4. FATHER'S NAME:
5. NATIONALITY:
6. PASSPORT NO. AND VALIDITY: (IN CASE OF EXPATRIATE)
7. DESIGNATED POST:
8. DATE OF BIRTH:
9. DETAILS OF PROFESSIONAL CERTIFICATE, LICENSE, ETC. WITH VALIDITY:

AFFIX PASSPORT SIZE PHOTOGRAPH

Educational Qualification:

Sl. No.	Course completed	Passed out School/ College/ University	Year of Passing
01.			
02.			
03.			

Job Experience in Reverse Order:

Duration of Service		Post/Position Held	Name of the Employer	Place of Work
From	To			

N.B: If required, more rows may be added.

Relevant Work Experience in Mud Engineering Jobs during last five years:

Name of the Clients worked for	Well Name	Well Depth (in mtrs.)	Location Area	Type of well	Type of Mud System	Duration of Service (from-to)	Type of down hole complications handled	Designation

N.B: If required, more rows may be added.

NOTE:

1. *Attach copies of documents for Identity Proof, Date of Birth Proof, Passport (for Expatriate) Proof of qualification (professional), Professional certificate/license etc.*
2. *Attach Medical Fitness Certificate in Form 'O' (as per Mines Act 1952).*
3. *Person should not be more than 60 years of age.*
4. *In case of replacement of personnel, the replacement personnel must have the requisite qualification and experience as per the Scope of Work and shall submit their credentials along with their recent photographs & documents to Company for approval.*

Signature and seal of the Bidder:

Name of Bidder:

&&&&

EXHIBIT-3: DIRECTIONAL DRILLING SERVICE (REGULAR)

A. TERMS OF REFERENCE & TECHNICAL SPECIFICATIONS OF DIRECTIONAL DRILLING SERVICE (REGULAR)

1.0 INTRODUCTION:

OIL intends to hire expert directional drilling services along with tools & equipment from professional company of repute for drilling of directional wells, side-track wells, re-entry wells or any other wells from kick off to target depths.

2.0 SERVICE WITH PROBE BASED MWD TOOLS:

(i) 01 (one) set of tools and equipment including services of personnel for 12.¼" hole section consisting of SDMMs, Probe based (retrievable/non-retrievable) MWD tools (Directional & Gamma), Drilling Jars and MWD Surface unit on regular basis.

(ii) 01(one) set of tools and equipment including services of personnel for 8.½" hole section consisting of SDMMs, Probe based (retrievable/non- retrievable) MWD tools (Directional & Gamma), Drilling Jars and MWD Surface unit on regular basis.

All of the above services are meant for carrying out directional drilling activity in OIL's PEL/ML areas. OIL will provide necessary recommendatory letter for EC for the tools/equipment, spares and consumables during initial and subsequent import of required materials against the contract. However, the total amount will be limited to the CIF value as declared in the bid as per **Proforma-A3.**

NOTE: Bidders to confirm to provide the set of tools and equipment including services of personnel as per the scope of work.

3.0 SCOPE OF WORK

3.1 BROAD SCOPE OF WORK

OIL intends to hire a total of 02 (TWO) sets of directional tools and equipment including the services of personnel with probe based retrievable type MWD system consisting of 01(one) independent operational set for 12.¼" hole section on regular basis and 01(one) independent operational set for 8½" hole section on regular basis for drilling of Directional/Side-track/Re-entry or any other types of wells from kick-off to target along with standby back-up tools for its exploration drilling activity in 01 (one) number of well in Dima Hasao area in the states of Assam. The Contractor shall provide the services along with all necessary tools, equipment & personnel, and carryout directional drilling operations in accordance with the Company's approved directional well plan. The approved well plan may be amended from time to time by reasonable modification as deemed fit by the Company. However, the Contractor shall be wholly responsible for rendering the services as per scope of work under this contract.

3.2 Under the service, the Contractor shall have to provide the following services with their tools and equipment.

3.2.1 Probe based (retrievable/non-retrievable) MWD tools (compatible with SDMM) with Positive Mud Pulse Telemetry system shall have to be provided under this service. The Bidder should categorically confirm to this effect.

3.2.2 SDMMs, Probe based (retrievable/non-retrievable) MWD tools and Drilling Jars to be deputed under the service should comply with the following:

i) All down hole tools including surface units must be of recent version. These tools should either be new or recently refurbished. In case of refurbished tools, the refurbishment should not be more than 06(six) months old. Bidder must submit relevant documents of the tools in this respect as documentary evidence before mobilization of the tools. Bidder to categorically confirm the same. However, in case of brand new tools, the same will not be applicable.

ii) In addition to the above, Bidder must submit maintenance schedule and certificates against all tools as per Bidder's policy before mobilization of the tools under the Contract for scrutiny by OIL. Bidder to confirm the same.

Note: Part nos./Identification nos. must be noted in the maintenance records.

iii) The Bidder should provide the technical literature/catalogue for the offered SDMM, MWD and JAR tools.

iv) The Bidder shall submit Calibration certificates of MWD tools before mobilization showing Inclination, Azimuth, Tool-face and Dip angle accuracies as applicable for scrutiny by OIL. Calibration certificates for accuracy of measurement should not be more than 6(six) months old. In case, the calibration certificates are of 01(one) year validity, the same will not be applicable, provided the certificates are valid at the time of mobilization. Bidder to confirm the same.

v) SDMM, MWD and Jar tools provided by the Contractor shall be supported with spares and services during the duration of the Contract.

vi) Bidder has to submit relevant test certificates of the drilling jars for scrutiny by OIL before mobilization of the same.

vii) All tools/equipment and spares deployed by the Contractor should meet OIL's specified requirement.

viii) MWD tools initially mobilized by the Contractor and any replacement thereof should be accompanied by Calibration sheets, approved by Contractors QA/QC engineers/TPI. Bidder to confirm the same.

4.0 TOOLS, EQUIPMENT & SERVICES:

The Sets shall consist of the tools and equipment as per below:

TABLE-1

Sl. No.	Description of Equipment	No of Tools per Set		No of Sets	Total No of Tools & Equip/Service
		Main	Backup		
1.0	**12¼" Hole Section Tools & Equipment- Regular basis**			**1**	
1.1	SDMM with Stabilizers & Accessories	1	1	1	2
1.2	MWD (Directional & Gamma)	1	1	1	2
1.3	Drilling Jar	1	1	1	2
1.4	MWD Surface Unit	1	0	1	1
2.0	**8½" Hole Section Tools & Equipment-**			**1**	

	Regular basis				
2.1	SDMM with Stabilizers & Accessories	1	1	1	2
2.2	MWD (Directional & Gamma)	1	1	1	2
2.3	Drilling Jar	1	1	1	2
2.4	MWD Surface Unit	1	0	1	1

4.1 TOOLS, EQUIPMENT & SERVICES FOR 12.¼" HOLE SECTION- (REGULAR BASIS):

i) 1(one) set of Directional Drilling Tools and Equipment consisting of SDMMs with Stabilizers, Probe based (retrievable/non-retrievable) MWD tools with Directional & Gamma, Drilling Jars, MWD surface unit and related directional tubular and accessories (NMDCs, UBHO subs, Float subs, Crossover subs etc., as applicable) are to be provided for drilling of 12.¼" hole section as a complete package as per Table-1 (Sl. No. 1.0 to 1.4) on regular basis. The complete system should be capable of building, holding and dropping well angle and direction as per approved well plan.

ii) The MWD system should be based on positive mud pulse telemetry system. It should transmit data from down hole to surface in real time on continuous basis. The Surface unit should be complete with necessary computers, monitors printers, plotters etc., and other equipment as necessary to execute the job.

iii) The Directional Drilling Tools and Equipment will be put in operation as per OIL's requirement. To ensure uninterrupted directional drilling activity considering logistical constraints in the North-Eastern part of India, the Contractor has to bring sufficient quantity of back up tools, equipment and spares in addition to the primary sets/quantity of tools for 12.¼" hole section as defined in Table1. Servicing of tools will be allowed at no workload period only.

iv) **Gamma Ray Measurement tools:** The Gamma Ray tools for 12.¼ " hole section should be combinable or an integral part of the MWD tool system and should be compatible with other related equipment. The tools should have provision for real time data transmission as well as for recording of Data in memory mode. Data is also to be recorded while pulling out by back reaming/with pump-on whenever required.

v) Services of Directional Drillers to operate SDMMs and MWD Engineers to operate MWD tools for 12.¼" hole section are to be provided for execution of directional drilling program as per Company's plan. Minimum 2(two) directional drillers and minimum 2(two) MWD Engineers are required to be provided always during operation.

vi) The 12.¼" hole section shall have to be drilled by the Contractor with the help of SDMM-MWD-JAR tools in combination in consultation with OIL. Phase length of the section may be around 1800m (MD) with a total displacement of around 1000m or more at sectional TD.

vii) The SDMM and MWD tools should be best in class tools of the Bidder that are to be engaged in the business. The complete system should be able to kick-off from

vertical and should be efficient to drill high angle high displacement wells of sail angle 55°-85°.

4.2 TOOLS, EQUIPMENT & SERVICES FOR 8.½" HOLE SECTION - (REGULAR BASIS):

i) 01(One) set of Directional Drilling Tools and Equipment consisting of SDMMs with Stabilizers, Probe based (retrievable/non-retrievable) MWD tools with Directional and Gamma, Drilling Jars, MWD surface unit and related directional tubular and accessories (NMDCs, UBHO subs, Float subs, X-Over subs etc. as applicable) are to be provided for drilling of 8.½" hole as a complete set as per Table-1 (Sl. No. 2.0 to 2.4) on regular basis. The complete system should be capable of building, holding and dropping well angle and direction as per approved well plan trajectory.

ii) The MWD system for 8½" hole section should be based on positive mud pulse telemetry system. It should transmit data from down hole in real time on continuous basis. The Surface MWD unit should to be complete with necessary computers, monitors printers, plotters etc., and other equipment as necessary to execute the job.

iii) The Directional Drilling Tools and Equipment for 8.½" hole section will be put in operation as per OIL's requirement. To ensure uninterrupted directional drilling activity considering logistical constraints in the North-Eastern part of India, the Contractor has to bring sufficient quantity of back up tools, equipment and spares in addition to the primary sets/quantity of tools for 8.½" hole section as defined in Table-1. Servicing of tools will be allowed at no workload period only.

iv) **Gamma Ray Measurement tools:** The Gamma ray tools for 8.½" hole size and should be combinable or an integral part of the MWD tool system and should be compatible with other related equipment. The tools should have provision for real time data transmission as well as for recording of Data in memory mode. Data is also to be recorded while pulling out by back reaming/with pump-on whenever required.

v) Services of Directional Drillers to operate SDMM and MWD Engineers to operate MWD tools are to be provided for execution of drilling program as per Company's plan. Minimum two directional drillers and minimum two MWD Engineers are required to be provided always during operation.

vi) The 8½" hole section shall have to be drilled by the Contractor with the help of SDMM-MWD-JAR tools in combination in consultation with Company. Phase length of the 8.½" sections may be around 1200M (MD) with a total displacement of around 1500m at sectional TD.

VII) The SDMMs and MWD tools should be best in class tools of the Bidder that are to be engaged in the business. The complete system should be able to kick-off from vertical and should be efficient to drill high angle high displacement wells of sail angle 55°-85°.

4.3 DETAILS OF TOOLS, EQUIPMENT & SERVICES REQUIREMENT:

The Contractor shall confirm to provide the following services against each of the above 2(TWO) sets of services:

4.3.1 Well Planning Services:

Company will design the well trajectory and share the same along with other relevant data with the Contractor. Contractor shall accept the plan and carry out directional drilling accordingly. However, Contractor may review the Company's plan at their end and suggest anticipated Torque & Drag issues, Hydraulics requirement and Anti-collision issues. If required, Company may review the well plan in consultation with the Contractor to sort out any kind of well trajectory related issues. In that case, the re-viewed plan must be accepted by the Contractor. Thereafter, it shall be the responsibility of the Contractor to drill the curve section of hole from kick off point till target depth of the particular section is reached. Contractor shall design at their end the Well Trajectory, Torque & Drag, Hydraulics, Anti-collision, proposed BHA etc., with their latest directional software and share the same for the particular hole section of a directional well during actual drilling. Bidder shall submit end of Well Report after completion of the assigned Section/Well in hard as well soft copies (.pdf format).

4.3.2 MWD equipment and Services:

a) The Contractor shall confirm to provide 1 (one) complete set of probe based (retrievable/non-retrievable) MWD (Measurement While Drilling) System against both the 2(two) regular sets, for continuous real time monitoring of tool face, inclination, direction (azimuth) while drilling 12.¼" and 8½" hole sections. The MWD system must be able to work at flow rates of 400-1000 GPM or better.

b) The MWD system should be based on positive pulse, mud telemetry for drilling (12.¼" & 8.½") hole as per requirement of OIL provided in the MWD specifications in Annexure-C (B), along with cross-over subs, Non Magnetic Drill Collars, Float Subs – if required with all sets of electronic packages, surface computers and other accessories required for continuous real time monitoring of tool face, inclination, direction (azimuth) and gamma while drilling (12.¼" & 8.½" hole). Contractor will have to maintain sufficient back up tools & spares to meet contingent situation like Lost-in-Hole/Tool-failure etc.

c) Contractor shall confirm to provide Gamma Ray Tool compatible with the offered MWD system. Contractor shall provide the Company with Gamma Vs True Vertical Depth and Measured Well Depth. The Gamma Ray measurement shall be as per requirement of OIL provided in Annexure-C (B), Bidder will maintain sufficient back up tools & spares to meet contingent situation like Lost in Hole/Tool failure etc.

d) Contractor shall provide MWD System based on mud pulse telemetry, Positive Pulse system, with MTBF (Mean-time Between Failure) exceeding 1000hrs. Bidder to confirm that MTBF certificate will be submitted before mobilization).

NOTE:

1) All the MWD tools should be able to interface with each other and facilitate 2-way communication & integration of data and commands.

2) Contractor to provide additional NMDC if required for MWD survey accuracy.

3) In case of non-retrievable type of Probe based MWD tool, for whichever section it is used, LIH value will not be payable (i.e. for MWD, NMDC, UBHO, Float Sub, etc.).

4) In case of retrievable type of Probe based MWD tool, for whichever section it is used, LIH value will not be payable for the retrievable MWD tool in the event of failure to recover it with wireline in a LIH situation.

4.3.3 Surface Equipment:

01 (one) no. of Surface MWD unit with computers/printers' accessories to record and print real time data with necessary transducers and connections to work with rig power supply 220 volts, 50 Hz. AC as per requirement of OIL as stated in the Annexure-A (B) (Bidder to fill up the Annexure). System should also have following features:

(a) Record data like angle, azimuth, depth and tool face and transmit it to surface with rig floor display. System should have features for dynamic tool face recording when drilling with motors.

(b) System should be able to record stand pipe pressure, weight on bit and Rate of penetration with depth counter facility.

(c) Record and print real time API Gamma measurement with measured depth.

(d) Record and print real time API Gamma measurement with TVD.

NOTE: The Work station should come with minimum 150m of 3-Phase power cables for cluster locations. Bidder to confirm the same.

4.3.4 SDMM equipment along with Services:

a) The Contractor shall provide Steerable Downhole Positive Displacement Mud motors with all accessories e.g. stabilizers etc., as per Annexure-D (B) for 12.¼" and 8.½" hole sizes. SDMMs should be high torque, low to medium speed and stabilized positive displacement steerable multi-lobe mud motor for high angle drilling. The directional drillers are required to operate these motors and drill the hole as per Company's approved well plan. The motors should have API rotary shoulder connections with built-in/screw-on bearing Stabilizer housing & adjustable bent housing. SDMM should be suitable for build-up rates & straight drilling in rotary mode. The SDMMs should be with mud lubricated bearing/Oil sealed bearing assembly and equipped with rotor catcher feature. SDMMs to be provided with float sub with ported floats for preventing wet pull out and transmission of drill pipe pressure to surface whenever the BOP/well is closed due to any reason.

Note:
1) Near bit stabilizer fitted on the motor shall be 1/8" under gauge for all the motor sizes. String stabilizer to be of similar design as of bearing housing stabilizer.
2) SDMMs would be run mostly in stabilized mode to avoid clean out run.
3) Whenever required, the SDMMs will be used in slick mode also.
4) SDMM should be from any of the reputed manufacturers as given in the list under clause 6.0 (Table-2) only.

b) **Stabilizers:** Contractor to provide stabilizers of integral blade design with 3(three) or 4(four) slight spiral blades of sufficient blade length and double tapered at both leading and trailing ends. Stabilizers should have sufficient opening/annular clearance with taper blade on stabilizer body. The stabilizers may also be used independently for making rotary assemblies for drilling/cleanout trips in case of requirement.

Sizes of String Stabilizer:

1. Stabilizers for 12.¼" Hole section: 2(two) nos. each of 12" and 11.¾" string stabilizer with 6.⅝" API Reg box-pin connection, 7.¾"/8" OD fishing neck X 2.13/16"/3" ID.

2. Stabilizers for 8.½" Hole section: 2(two) nos. each of 8" and 7.¾" string stabilizer with 4"IF/4.½"IF box-pin connection, 6.½"/6.¾" OD fishing neck X 2.13/16"/3" ID.

4.4.5 Drilling Jars and Services:

The Contractor shall confirm to provide Hydro-mechanical/Hydraulic Drilling jars to withstand the rugged abuse and demanding application with up/down stroke mechanism, minimum stroke length as per requirement of OIL provided in Annexure-E (B), for (12¼" and 8½" hole sizes). The Jars should be from any of the reputed manufacturers as given in the list under clause 6.0 only (Table-2).

5.0 PERSONNEL:

Bidder shall confirm to provide qualified and experienced personnel under the following categories for running the well operation of OIL on round the clock basis:

i) **Directional Driller:** Minimum 2 (two) nos. per set.
ii) **MWD/LWD Engineer:** Minimum 2 (two) nos. per set.

NOTE: The Directional Drillers and MWD Engineers should be a Graduate/Diploma in Engineering with 3 (three) years of relevant field experience.

The details of Personnel are given below:

i) Directional Driller:

Bidders to confirm that minimum 02(two) numbers of qualified Directional Drillers having minimum 3(three) years of relevant field experience with Graduation/Diploma in Engineering and having drilled at least 10 (ten) numbers of directional wells with SDMM-MWD-JAR in combination shall be deputed per set. The Directional Drillers will be working independently (12- hour shift) on a suitable ON/OFF day rotation basis at the Rig site and should be able to execute the job of high angle-high displacement or side track wells or any other well from kick off to target on continuous basis. They should have complete knowledge of the job from planning to execution along with associated calculations and decision making so that they can perform the job independently. However, in case of operational problems, OIL's decision will be final.

The Directional Drillers will work in close liaison with OIL Engineers on the Rig/base. They should be fluent in speaking and writing English language. Directional drillers should be conversant with the job assigned and should have complete knowledge of the tools and equipment of the Contractor. Directional drillers of the Contractor shall assist OIL technically during round trip and clean out trips after completion of sectional TD. However, OIL reserves the right to modify its requirement of on-site Directional Drillers anytime.

NOTE: Particulars of directional driller must be submitted in the format **Annexure – 3** to OIL for approval prior to deployment at well site.

ii) MWD Engineer:

Bidders to confirm that minimum 02 (two) nos. of qualified and experienced MWD/LWD Engineers having minimum 3 (three) years of relevant field experience with Graduation/Diploma in Engineering be deputed per set for OIL's operation. The MWD Engineers will be required to work independently on a suitable ON/OFF day rotation and 12-hour shift basis at the rig site as per plan given by OIL. The engineers must be fluent in written and spoken English.

The MWD Engineers will be responsible including but not limited to the following:

a) Prepare Logging plan and program, timely delivery of quality data logs, LAS, DLIS as per Scope of Work.
b) Run, maintain and manage the MWD tools and unit.
c) Prepare daily reports of major real time observations and annotation of markers as defined by Company Geologist.

NOTE: Particulars of MWD engineers must be submitted in the format **Annexure –3** to OIL for approval prior to deployment at well site.

GENERAL NOTES FOR CLAUSE 5.0:

1) The Bidder will have to submit the Bio-Data of personnel proposed to be deployed for all the services mentioned under scope of work prior to deployment for OIL's approval.

2) MWD Engineers, Directional Drillers should be an employee of the Bidder. Necessary documents in this regard to be submitted prior to deployment for OIL's approval. In case, the personnel are newly recruited in the organization, necessary documents including appointment letters supporting the previous experience criteria have to be submitted for approval.

3) Bidder will submit an undertaking in the bid stating that they will provide Directional Drillers, MWD Engineers having 3 (three) years' experience throughout the Contract period.

4) Company reserves the right to instruct for removal of any of the Contractor's personnel who in the opinion of Company is technically not competent or not rendering the services faithfully, or due to other reasons. The cost of replacement of such personnel will be fully on the Contractor's account and the Contractor shall have to replace this/these personnel within 10(ten) days of such instruction. The replacement personnel must have the requisite qualification and experience as indicated in the contract and their credentials along with recent photographs must be submitted to OIL for approval prior to their engagement.

6.0 APPROVED LIST OF MAKES FOR TOOLS/EQUIPMENT & SERVICES:

The Contractor should provide Tools/Equipment & Services (mentioned above) from any of the approved companies as per the list as given below. Tools/Equipment of make other than the companies mentioned below will not be acceptable.

APPROVED LIST OF MAKES

Table 2

A. Mud Motor	**B. Drilling Jar**
i) Schlumberger	i) Houston Engineers
ii) Halliburton	ii) Weatherford
iii) Weatherford	iii) National Oil Well Varco
iv) Baker Hughes	iv) Bowen
v) National Oil Well Varco	v) Schlumberger
vi) APS Technology Inc.	vi) Halliburton
	vii) ITS
	viii) APS Technology Inc.

B. SCHEDULE OF RATES

1.0 The bidders must quote the rates in their price bids as per the attached Price-Bid Format **Proforma-B (Appendix-10).** The payment shall be made for the actual work done. All Day Rate Charges shall be pro-rated to the nearest hour.

2.0 MOBILIZATION CHARGES OF TOOLS AND EQUIPMENT INCLUDING PERSONNEL:

2.1 Mobilization charges as lump sum amount against individual set of tools and equipment including personnel will be payable when all tools and equipment (free of defects/ encumbrances) and OIL approved operating personnel for that particular set are positioned at Company's designated well site and duly certified by the Company representative regarding readiness of the tools, equipment and personnel to undertake/commence the work assigned under the contract which shall be no later than 03 working days from the date of arrival.

Note: OIL will certify within 03 working days for first mobilization.

2.2 Mobilization charges should cover local and foreign costs to be incurred by the Contractors to mobilize the equipment to the mobilization point as decided by OIL and should include all duties including all local and foreign taxes, port fees/charges including demurrage (if any) and inland transport to the mobilization point as decided by OIL etc., (on the items declared in Proforma-A3), except customs duty, which will be to OIL's account, if applicable.

2.3 The services will be used in PEL/ML areas of OIL and Company will issue necessary Recommendatory Letter for EC as required for custom clearance on receipt of request from the Contractor. All such requests must be made by the Contractor well in advance, so that the Company can make necessary arrangements for providing the documents in time without causing any delay for the customs/port clearance.

2.4 Mobilization charge shall not be released only on the basis of arrival of individual tool/equipment, although there will be individual mobilization charges (lump sum) for different tools/equipment. Mobilization will be considered to be completed only after following conditions from (a) to (e) (without any exception) are met with.

a) All tools & equipment (surface & sub surface) as per contractual obligation (technical Specification & quantity wise) arrive at OIL's designated site, unless specified otherwise by OIL.

b) All tools & equipment arrive at OIL's designated site as per (**C. SPECIAL NOTES FOR DIRECTIONAL DRILLING SERVICES (REGULAR))** for commencing directional drilling activity.

c) All relevant documents (technical specification, drawing, vintage, Make, Model etc.) of each & every tool & equipment are to be made available (as per contractual obligation) by Contractor for scrutiny by OIL.

d) All relevant documents are found to be technically acceptable by OIL on scrutiny.

e) Company issues "acceptance/clearance certificate" for tools & equipment in writing. This "acceptance/clearance" certificate will be provisional in nature till performances of tool/equipment are established in operation.

Note: The above clause is to be read in conjunction with clause 2.5 below regarding acceptance of set after passing the 1st test on the Rig.

2.5 For the purpose of Liquidated damage (LD), the Mobilization would be deemed complete for a particular set of Tools & Equipment including personnel belonging to any hole section on the date as per 2.4 above, only if the complete set of Tools & equipment passes the first Surface Test on the Rig. Otherwise, Mobilization would be deemed complete only when complete set of Tools & Equipment passes the first Surface test on the Rig on subsequent date. For the purpose of Payment, Mobilization for a particular set of Tools & Equipment including personnel belonging to any hole section would be deemed complete after issuance of acceptance/clearance certificate from the Company, if it passes the first Surface test and work commences smoothly. If it fails of the first Surface test, Mobilization will be considered complete on acceptance of complete set of Tools & Equipment on subsequent test.

2.6 The total Mobilization charges per unit set for each hole section shall not exceed 1% of the total value per unit set for the respective hole section in the Price Bid. However, the total Mobilization charges per unit set for each hole section if quoted in excess of 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the excess amount shall be paid at the end of the contract.

2.7 Each down hole tool/equipment should have sufficient number of backup tool/equipment/spares/consumables for ensuring un-interrupted directional drilling activity.

3.0 DE-MOBILIZATION CHARGES OF TOOLS AND EQUIPMENT INCLUDING PERSONNEL:

3.1 The Contractor shall arrange for and execute demobilization of their Tools/Equipment/Spares/Accessories etc. (one or more sets), upon receipt of notice from the Company. Contractor shall bear all such costs/charges, if any towards De-mobilization of the same from drilling location to Contractor's base and the same will be guided by as per (**C. SPECIAL NOTES FOR DIRECTIONAL DRILLING SERVICES (REGULAR))**

3.2 All rates on Tools/Equipment/Spare/Accessories etc. shall cease to exist with effect from the day the Contractor is issued de-mobilization notice by Company. No charges whatsoever will be payable with effect from the date and time as notified in the demobilization notice.

3.3 Company shall give notice to Contractor to commence demobilization. This shall be applicable with immediate effect. No other charges shall be payable after issuance of de-mobilization letter. However, after issue of final demobilization notice by the Company, the Contractor shall ensure that demobilization is completed and Company's worksite is cleared-off Contractor's property and/or waste material, if

any within 21 (twenty-one) days from the date of demobilization notice from the Company, failing which, demobilization charge may be held up.

3.4 Demobilization charges will be payable on clearance of all the equipment from Indian Port/ Custom authorities for re-export of equipment to Contractor's base. However, OIL shall not be obliged to pay demobilization charges of tools and equipment, if on completion/termination of Contract, Contractor does not remove their tools from the area of last operation of Company's designated Rig/Site within 21 (twenty-one) days and also if the Contractor commences operation against any other contract(s) for other operators. All charges connected with demobilization including all fees, duties and taxes in relation thereto, insurance and freight within India or on export/reexport outside India will be to Contractor's account.

3.5 Upon completion of duration of the contract, the contractor shall submit their last invoice for payment along with any document(s) as required by the Indian laws and asked for by the Company to enable release of payment.

3.6 The total De-Mobilization charges per unit set for each hole section of shall not be less than 1% of the total value per unit set for the respective hole section in the Price Bid. However, the total De-mobilization charges per unit set (including callout set) for each hole section if quoted in deficit or less than 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the deficit amount shall be paid at the end of the contract along with the final De-mobilization charges.

4.0 OPERATING & STANDBY CHARGES:

The Contractor is required to provide tools and equipment including personnel for 1(one) regular set for 12.¼" hole section and 1(one) regular set for 8.½" hole section as per the terms and conditions specified earlier. At any stage of operation, the operating set/sets of tools and equipment including personnel will be paid for the quoted operating charges only. During non-operating period, only standby charges for the set/sets as quoted will be payable when not used by OIL but the tools and equipment of the sets are in functional condition. However, detailed charges payable under different conditions will be guided as described below.

4.1 OPERATIONAL CHARGES OF TOOLS & EQUIPMENT INCLUDING PERSONNEL:

1. Under the contract, the Contractor shall be entitled to operational day rate charges as detailed below. These rates are inclusive of spares etc., if required (including spares for running repairs and maintenance of SDMM-MWD-JAR etc.) for the successful completion of the work.

2. Operational Day Rate Charges shall be payable for all tools and equipment of the Contractor for the period the tools and equipment are in operational mode from the time of successful completion of Surface Testing (as defined below) of Contractor's BHA (consisting of downhole tools/equipment) after lowering it below rotary table (BRT) in the well and till the same is pulled out of hole. This period will be considered as operating period and shall be pro-rated to the nearest hour.

SURFACE TESTING: Surface Testing is defined as function testing of Contractor's BHA components consisting of downhole tools and equipment after lowering it below rotary table (BRT).

DURING APPLICABLE OPERATING PERIOD MENTIONED ABOVE, ONLY OPERATING CHARGES SHALL BE PAYABLE AND NO OTHER CHARGES SHALL BE APPLICABLE. DURING NON-OPERATING PERIOD, ONLY STANDBY CHARGES SHALL BE PAYABLE. BIDDER SHOULD TAKE THIS INTO CONSIDERATION AND QUOTE ACCORDINGLY.

3. Operating Charges shall also be paid during stuck up/ fishing operation for the first 36 (thirty-six) hours (per occurrence) beyond which only Standby Charges shall be payable. Standby Charges shall cease to be paid from the time OIL decides to call off fishing operations to recover Contractor's tool/ equipment from hole and notifies Contractor accordingly.

4. Operating Charges shall be payable with Tool/equipment in hole for the first 36 (thirty-six) hours, per occurrence, in case drilling is stopped due to well activity and mud loss conditions. Standby Charges only shall be payable beyond 36(thirty-six) hours till normal operation is resumed.

5. In the event the Contractor's operating crew is not available for operation at any point of time during the period of contract no payment shall be made for such period.

6. Operating Charges shall not be payable for any tool/equipment of BHA if it fails to function below Rotary Table after "Surface Testing".

7. Zero Rate will be applicable for entire Bottom Hole Assembly, in case of discontinuation/ suspension of normal operation (drilling or round trip) leading to pulling out of drill string due to malfunctioning of any one component (i.e. MWD or SDMM or Jar) of BHA. Operating rate for entire Bottom Hole Assembly will cease to be paid under this circumstance.

8. Under above circumstances, Zero rate will continue for entire Bottom Hole Assembly for the period starting with pulling out from particular depth through running in till normal (identical) operation is resumed at the same depth. However, any shut down period (such as crew shortage, machinery failure, rig repairing, local bandh etc.) owing to OIL or other reasons (not attributable to Contractor's fault) during the zero-rate period will be appropriately deducted from zero rate period.

9. Selective Zero rate will be applicable only for those malfunctioning components of BHA, when normal operation (drilling or round-trip) is continued with other functional components of BHA. The Selective Zero rate for non-functional tool will continue from the time of fault detection (down hole) till the drill string is pulled out of hole after completion of normal operation. The functional components of BHA will continue to be paid operating rate under such circumstances.

4.2 STANDBY CHARGES OF TOOLS & EQUIPMENT INCLUDING PERSONNEL:

1. Stand by charges for tools & equipment including manpower will be applicable for non-operating period of tools & equipment. Once the operating day rate is applicable no Stand by charges will be payable for tools/equipment and manpower.

2. During Stand by period, the equipment has to be in fully operating condition, save repair and preventive maintenance with prior permission from OIL.

3. Stand by charges shall not be payable once the de-mobilization notice is issued by OIL for any tool(s)/equipment including personnel.

4. Stand by charges shall be applicable for any tool/equipment of Contractor's BHA including personnel during the period it lies on surface and during surface testing of same after lowering it below rotary table.

5. If the Contractor withdraws the whole or part of the equipment or any personnel resulting in breakdown of operation, zero Rate will be paid.

6. Stand by charges for complete consignment of Tools / Equipment will continue to be payable during "Dismantling of Contractor's facility in one location, Inter-Location movement, Re-Installation & Re-Commissioning of Contractor's facility in next location".

7. Stand by charges includes supply of spares & consumables, replacement/maintenance cost and any other operational requirement if any during the contractual period. The Contractor must maintain sufficient stock of any such regularly required items at the drilling site under their possession to ensure uninterrupted service.

8. All other necessary equipment, tools and accessories etc. will be provided by the Contractor for due performance of the intended services without any additional charges to Company.

9. Stand by charges will be payable for full day or part thereof on pro-rata basis up to the nearest hour.

10. If, Contractor's tool /equipment fails to perform, for any reason, attributable to the Contractor in the duration of operation, then no Standby charges for the down hole tools/equipment including personnel shall become payable until the equipment/tool is put back into operating condition or evidenced by demonstration of operation in actual tests or use to the satisfaction of OIL.

11. If a particular tool/equipment is found to be non-functional during operation in first well after initial mobilization thereby causing total shut down of operation, in that case neither operating rate nor standby charges shall be applicable from the date of receipt of entire consignment of different tool/equipment at OIL designated site. Also, the Contractor shall commit themselves to replace the defective tool/equipment with the same specification (as per contract) within a very short period.

12. Contractor can withdraw their personnel during non-operating period at their own cost, subjected to ensuring their availability once operation starts.

13. The quoted unit Standby rate of each tool/equipment including personnel must not exceed 50% of the corresponding unit operating rate quoted for the respective tools/equipment including personnel in the Price Bid.

5.0 FORCE MAJEURE RATE:

5.1 Force majeure conditions are defined in Clause 31.0 of Section-I, "General Terms and Conditions" of this Contract.

5.2 All rates shown in Schedule of Rates shall be restricted to 50% of Standby charges for the service being provided by the Contractor at the time of occurrence of 'force majeure' condition irrespective of the operation being carried out. This will be considered as FORCE MAJEURE RATE under all conditions.

5.3 The Force Majeure Rate shall be payable during the first 15 (fifteen) days period of force majeure situation in case of all operations. No payment shall apply after expiry of 15 (fifteen) days force majeure period, unless otherwise agreed to.

6.0 ZERO RATE:

Notwithstanding any provision in the contract, no charges (standby or operating charges for tools/equipment including personnel) shall be payable for the period, the job or activity assigned to the Contractor is halted/suspended due to default on the part of the Contractor as a result of break-down/non-availability of Contractor's tools/equipment, non-availability of spare parts/consumables for Contractor's tools/ equipment, non-availability of Contractor's key personnel or for any other reason whatsoever attributable to the Contractor.

7.0 GENERAL NOTES:

7.1 Bidder should submit the list of items with CIF value to be imported into India in connection with execution of this contract as per Proforma-A3.

7.3 From the Proforma-A3, bidder should identify the items of re-exportable in nature (i.e. items which will not be consumed during the execution of the contract and required to be exported outside India after completion of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (RE-EX).

7.4 Similarly from the Proforma-A3, bidder should identify the items of consumable in nature (i.e. items which will be consumed during the execution of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (CONSUMABLES).

7.5 Operating rate for SDMM and accessories shall be applicable only after Below Rotary Table (BRT). No separate charges are applicable for stabilizers.

7.6 Directional BHA making including surface testing time should be limited to 4(Four) hrs. max. Beyond 4(Four) hrs. zero rate will be applicable. However, in case of the delay beyond 4(Four) hrs. on account of rig, will not be on the Contractor.

C. SPECIAL NOTES FOR DIRECTIONAL DRILLING SERVICES (REGULAR)

1.0 MOBILIZATION/DE-MOBILIZATION/ TIME OF CONTRACT:

1.1 The mobilization schedule for the contract will be as under:

i) **Mobilization**: The Contractor shall mobilize all of their tools and equipment including personnel of both the sets [consisting of 1(one) regular set for 12¼" hole section and 1(one) regular set for 8½" hole section] to the Company's base/designated site within the time schedule given below. Mobilization shall be deemed to be completed only when Contractor's tools and equipment including personnel are placed at the designated location and are in readiness to commence work as envisaged under the Contract duly certified by the Company's representative. The Contractor has to mobilize the minimum number of tools and equipment including personnel against each individual set as described in the "Scope of Work" in Section-II [Terms of Reference]. However, OIL reserves the right to mobilize the sets in a phased manner depending on its operational requirement. In that case, individual mobilization notice will be issued against each set as per OIL's requirement. Contractor shall mobilize the particular number of set/sets (as applicable) as per instruction from OIL.

ii) **Mobilization Time**:

Regular sets: Contractor's Tools and Equipment including Personnel of 1(one) regular set for 12¼" hole section and 1(one) regular set for 8½" hole section shall have to be mobilized as per the scope of work by the Contractor **within 90(ninety) days** from the date of issuance of mobilization notice.

ii) **De-mobilization Time:**

Contractor's Tools and Equipment including Personnel of any particular number of set/sets belonging to any one or more hole section as indicated by OIL shall have to be de-mobilized as per the scope of work by the Contractor **within 21(twenty-one) days** from the date of issuance of de-mobilization notice. No charges shall be payable from the date of issuance of the final de-mobilization notice for that/those particular set/sets (as applicable).

Note: For mobilization, OIL will issue mobilization notice after issuance of LOA. The succeeding day of issuance of mobilization notice shall be counted as day 1(one) for the purpose of calculation of mobilization/de- mobilization period.

1.2 Date of Commencement of Operation:

The date on which mobilization is completed in all respects for both the sets of tools and equipment including personnel consisting of 2(two) regular sets as stated in the tender and certified by the Company's representative will be treated as date of Commencement of Operation for all of the 2(two) regular sets. In case of mobilization of the sets individually in a phased manner, the date on which mobilization is completed in all respects for the first individual set and certified by the Company's representative will be treated as date of Commencement of Operation.

Note:

i) Once the Contractor's Equipment are ready to commence services and have reached the designated location, Contractor shall issue a Notice of Readiness for Inspection to the Company against each individual set.

ii) Company shall inspect the Contractor's Equipment within 3(three) working days from receipt of the Contractor's Notice regarding Readiness for Inspection, and confirm completion of mobilization against each individual set. Company Representatives inspecting the Contractor's Equipment shall notify the Contractor of any deficiency in the set(s) of equipment, and only on removal of such deficiency, mobilization shall be deemed complete.

iii) The succeeding day of receipt of notice from the Contractor Notice regarding Readiness for Inspection shall be counted as day 1(one) for the purpose of calculation of inspection period for mobilization.

1.3 Duration of Contract:

This particular contract of **Directional Drilling Service (Regular)** shall be valid for a single well only to be drilled at Dima Hasao area. Duration of the contract shall be from the Date of Commencement of Operation and till the Company issues final de-mobilization notice after reaching Target Depth (TD) of the well.

2.0 LOSS OF SUB-SURFACE EQUIPMENT:

Notwithstanding any provision under this contract to the contrary, Company shall assume liability except in the event of Wilful Misconduct or Gross Negligence on the part of the contractor for loss to the contractor's equipment/ tool in hole below rotary table, subject to conditions prescribed herein below. Company shall reimburse the contractor for the value of lost equipment/ tool as declared in the import invoices at the time of import (for foreign items)/ purchase invoice (for indigenous items) or CIF value declared in the contract in the list of imported items (for foreign items) whichever is lower for any such loss, less depreciation @ 3% per month or part thereof from the date of import invoice/indigenous invoice up to a maximum depreciation equivalent to 50% of CIF/Ex-works value as indicated by the contractor.

2.1 All such cost shall be payable by Company, provided the equipment/tool is not covered under Insurance and provided such equipment/tool are included in the exclusion list of the Insurance Policies submitted by the Contractor in terms of Clause 14.16 (vii) under GCC of the Contract. All such cost shall be payable only after contractor furnishes notarized undertaking in the prescribed format (Sample Copy Attached) to the extent that the particular equipment/ tool in question is not covered by contractor's insurance.

2.2 For claims of lost equipment/tools, contractor must intimate the Company of his intention to lodge claim in writing within one month of the declaration of lost tool by company and final claim thereof must be made within six months of the date of the lost tool or before expiry of the Contract, whichever is earlier.

2.3 OIL shall declare the Loss in Hole immediately after the fishing operation is called off upon non-retrieval of the downhole items and intimate the Contractor, so that replacement and claim for the loss of downhole items can be done within the stipulated time. The contractor should replace the lost tool(s) within a stipulated time of 30 Days from the date of declaration of Lost In Hole by the company, failing which Zero rate will be applicable thereafter. During this period, payment at the rate of 75% of the Standby rates will be payable for the set from the time of declaration of the LIH only if the backup tools are in operational conditions. The company at its discretion may decide on utilization of the set without the back-up tool(s) considering the operational urgency and in such case ODR will be paid till the replenishment of tool(s) and equipment by the contractor is done after due inspection and certification by the company's representative. However, during the course of utilization of the backup tools and the same fails to operate, zero rate will be imposed immediately until replacement is provided and operation resumes.

2.4 In case of loss of indigenous items used in the downhole assembly which were declared and inspected as part of mobilization, will also be covered for LIH reimbursement on the basis of purchase invoice submitted during the time of mobilization.

Note:
1. No Mobilization cost would be payable towards replacement of LIH tools.
2. GST, if applicable on LIH, will be reimbursed by OIL.

2.5 DOCUMENTATION OF LOSS IN HOLE:

Whenever any loss, damage or destruction to any of the Contractor's Equipment occurs, as stated in Clause-2.0 above, the Contractor shall immediately notify the same to OIL describing the loss/ damage. Whenever the Contractor makes any claim pursuant to the provisions under the above Clause, the Contractor shall furnish in support thereof as noted below:

a) List of the Equipment lost or damaged,
b) Extent of the damage,
c) Particulars of import, Customs assessed Bill of entry & invoices,
d) Vouchers, invoices or any other documents indicating the date of first use of the Equipment in India,
e) Costs of repairs, if any, supported by evidence of the same.
f) Documentary/ Self Declaration/Undertaking stating that the particular equipment/ tool is question is not covered by contractor's insurance
g) Approval from Contractor's competent authority for writing off the LIH item in the books of the contractor.

&&&

PROFORMA-A3

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable) TO BE IMPORTED INCONNECTION WITH EXECUTION OF THE CONTRACT SHOWING CIF VALUE for DIRECTIONAL DRILLING SERVICE (REGULAR)

Srl #	Item Descrip-tion	Qty /Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+H	J	K	L

(1) The items which are not of consumable in nature and required to be re-exported outside India after completion of the Contract should be indicated as "YES" in column "J".

(2) The items, which are of consumable in nature should be indicated as "NO" in column "J".

(3) For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".

Authorized Person's Signature: _____

Name: _____

Seal of the Bidder:

PROFORMA-B (Appendix-10)

Format for Cost of 2 Sets of Directional Drilling Services with SDMM, Probe based MWD and JAR along with Personnel consisting of 1 Set for 12¼" hole section and 1 Set for 8½" hole section on regular basis					
Description of Items for 12¼" Hole Section		**UOM**	**Qty**	**Unit Rate (INR)**	**Total Cost excl. GST (INR)**
S. No.	**Mobilization charges of tools and equipments including manpower:**				
1	Directional MWD Surface Unit	NO	1		-
2	Drilling Jars	NO	1		-
3	SDMM with Stablisers & Accessories	NO	1		-
4	Directional MWD with Gamma Ray tool	NO	1		-
	Total Mobilization charges of Tools & Equipment including Personnel in INR excl GST (A.1)				**-**
S. No.	**De-Mobilization charges of tools and equipments including manpower:**				
1	Directional MWD Surface Unit	NO	1		-
2	Drilling Jars	NO	1		-
3	SDMM with Stablisers & Accessories	NO	1		-
4	Directional MWD with Gamma Ray tool	NO	1		-
	Total De-Mobilization charges of Tools & Equipment including Personnel in INR excl GST (B.1)				**-**
S. No.	**Operating Charges of Tools and Equipments including manpower**				
1	Directional MWD Surface Unit	DAY	30		-
2	Drilling Jars	DAY	30		-
3	SDMM with Stablisers & Accessories	DAY	30		-
4	Directional MWD with Gamma Ray tool	DAY	30		-
	Total Operating Charges of Tools & Equipment including Personnel in INR excl GST (C.1)				**-**
S. No.	**Standby Charges of Tools and Equipments including manpower**				
1	Directional MWD Surface Unit	DAY	25		-
2	Drilling Jars	DAY	25		-
3	SDMM with Stablisers & Accessories	DAY	25		-
4	Directional MWD with Gamma Ray tool	DAY	25		-

	Total Standby charges of Tools & Equipment including Personnel in INR excl GST (D.1)	-
	Total Cost of 1 Set of Tools & Equipment including Personnel for 12¼" Hole Section in INR excl GST (E1=A.1+B.1+C.1+D.1)	-

Description of Items for 8.1/2" Hole Section		**UOM**	**Qty**	**Unit Rate (INR)**	**Total Cost excl. GST (INR)**
S. No.	**Mobilization charges of tools and equipments including manpower:**				
1	Directional MWD Surface Unit*	NO	1	0	0
2	Drilling Jars*	NO	1	0	0
3	SDMM with Stablisers & Accessories	NO	1		-
4	Directional MWD with Gamma Ray tool	NO	1		-
	Total Mobilization charges of Tools & Equipment including Personnel in INR excl GST (A.2)				-
S. No.	**De-Mobilization charges of tools and equipments including manpower:**				
1	Directional MWD Surface Unit*	NO	1	0	0
2	Drilling Jars*	NO	1	0	0
3	SDMM with Stablisers & Accessories	NO	1		-
4	Directional MWD with Gamma Ray tool	NO	1		-
	Total De-Mobilization charges of Tools & Equipment including Personnel in INR excl GST (B.2)				-
S. No.	**Operating Charges of Tools and Equipments including manpower**				
1	Directional MWD Surface Unit	DAY	45		-
2	Drilling Jars	DAY	45		-
3	SDMM with Stablisers & Accessories	DAY	45		-
4	Directional MWD with Gamma Ray tool	DAY	45		-
	Total Operating Charges of Tools & Equipment including Personnel in INR excl GST (C.2)				-
S. No.	**Standby Charges of Tools and Equipments including manpower**				
1	Directional MWD Surface Unit	DAY	25		-
2	Drilling Jars	DAY	25		-
3	SDMM with Stablisers & Accessories	DAY	25		-
4	Directional MWD with Gamma Ray tool	DAY	25		-

	Total Standby charges of Tools & Equipment including Personnel in INR excl GST (D.2)	-
	Total Cost of 1 Set of Tools & Equipment including Personnel for 8.1/2" Hole Section in INR excl GST (E.2= A.2+B.2+C.2+D.2)	-
Total Estimated Cost of Directional Drilling Services on regular basis (including all taxes and liabilities excluding GST) in INR (E1+E2)		-

NOTE:

1) Mob/De-mob/Operating/Standby Charges of Personnel are to be included in the respective Mob/De-mob/Operating/Standby Charges of tools/equipment. No separate payments will be made for Personnel.
2) The quantities shown above against each item in the Price Bid Schedule are for evaluation purpose only. However, quantities may vary in actual as per Company's requirement and payment will be made on actuals only.
3) Mobilization charges per unit set for each hole section shall not exceed 1% of the total quoted value per unit set for each respective hole section in the Price Bid Schedule. However, the total Mobilization charges per unit set for each hole section if quoted in excess of 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the excess amount shall be paid at the end of the contract.
4) De-Mobilization charges per unit set for each hole section shall not be less than 1% of the total quoted value per unit set for each respective hole section in the Price Bid Schedule. However, the total De-mobilization charges per unit set (including callout set) for each hole section if quoted in deficit or less than 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the deficit amount shall be paid at the end of the contract along with the final De-mobilization charges.
5) The unit Standby rate for each of the tool/equipment including personnel of each hole section must not exceed 50% of quoted unit Operating rate for the respective tool/equipment including personnel of each hole section in the Price Bid Schedule.
6) The unit Standby rate for each of the tool/equipment including personnel of each hole section must not be less than 25% of total quoted unit Operating rate for the respective tool/equipment including personnel of each hole section in the Price Bid Schedule.
7) All rates shown in Schedule of Rates shall be restricted to 50% of Standby charges for the service being provided by the Contractor at the time of occurrence of 'force majeure' condition, irrespective of the operation being carried out.
8) * For Directional MWD Surface Unit and Drilling Jars, Mobilisation and De-Mobilisation charges shall be paid once only as these same equipment will be used in both 12.1/4" and 8.1/2" hole sections.

ANNEXURE – A (B)

DETAILS OF MWD SURFACE UNIT

Sl. No.	OIL's Requirement	(To be filled by Bidder)	
		Bidder's Offer	Ref: File & Page No.
1	Online surface recording system for running MWD services while carrying out directional drilling in various hole sizes with all accessories like signal pressure transducers, precision depth assembly and MWD logs including TVD logs in real time.		
2	MWD work station should be capable of recording stand pipe pressure, WOB, drill string weight along with MWD data for all types of directional wells.		
3	Data to be recorded in real time as well as in memory mode. System should be able to provide raw as well as processed data. Data to be provided in electronic media (PDF, LASS and standard industry format like DLIS / CLIS) in CD / DVD. System to have capability to retrieve data in memory mode at the site.		
4	Unit should have provision for data compression feature and security protection as per prevalent Oil Industry standards.		
5	System should have color printing/plotting facility at site. Internet connectivity to be provided by the bidder for data transmission.		
6	In the event of fault and failure of equipment & software hired from the CONTRACTOR, their personnel should be available for attending rectification of the problem.		
7	Unit should come with minimum 150m of 3-Phase power cables for cluster locations.		

ANNEXURE – C (B)

DETAILS OF MWD TOOL FOR 12¼" & 8½" HOLE SECTIONS:

Sl. No.	Tool Features		OIL's Requirement		To be filled by the bidder	
					Bidder's Offer	Ref: File & Page No.
1	Telemetry Type		Probe based retrievable/non-retrievable			
2	Pulse		Positive mud pulse			
3	Collar sizes		a) 12¼" Section: 7¾" or 8" or 8¼" or 9.1/2"			
			b) 8½" Section: 6½" or 6¾"			
4	DLS (PER 100')		a) 12¼" Section: (2°- 6°)/100'			
			b) 8½" Section: (2.5°-7°)/100'			
5	Flow Range (GPM)		a) 12¼" Section	**Refer below ###**		
			b) 8½" Section			
6	Max Operating Temp.		150° C			
7	Max Operating Pressure		(15000 – 20000) Psi			
8	Real Time Update Period		<= 45 Secs			
9	Survey Time		<= 120 Secs			
10	Directional Measurement Point from Bit	With Gamma	NA			
11	Measurement Accuracy	Tool Face	± 2°			
		Azimuth	± 1.5°			
		Inclination	± 0.2°			
12	Measurement range		(0-100) deg or more			
13	Gamma Detector Type		API GR			
14	Lost Circulation Material (Max Size & Concentration)		Medium size & 40 PPB			
15	Power Source (Operating Time in Hrs)		Li-ion battery (life >= 200 Hrs.)/ Turbine			
16	Gamma real time		Yes			
17	Gamma measurement point from bottom of tool		NA			

18	Data Recording	Yes. To be provided in Gamma counts.		
19	Data Transmission Rate (Bits/Sec)	Min. 3 bits/sec. or more and should be suitable to transmit data of various tools quoted in different segments of the tender		
20	MTF/GTF Switch	Yes		
21	Manufacturer / Model	Model quoted should be latest and best in class		

Note:

1) The system to be complete with pulsar, electronic sensors, power source etc. for transmitting and recording down-hole data in real time.
2) These tools will have to fit into one standard length (30') NMDC provided by bidder.
3) Additional features/information (if any) is to be provided by the bidder.

###: Flow Range

a) 12¼" hole section- Min. Flow Rate: 400 GPM or less & Max. Flow Rate: 750 GPM or more.

b) 8½" hole section- Min. Flow Rate: 300 GPM or less & Max. Flow Rate: 550GPM or more.

Note:
9½" sized Collar for MWD against 12¼" hole section is also acceptable with the following conditions:

i) The Mud motor should also be of 9½"/9⅝" size when a 9½" collar for MWD is used for 12¼" hole section.

ii) The bit box connection of the 9½"/9⅝" mud motor should be 6.5/8" regular for connecting 12¼" bit.

iii) Overshot to catch 9½" collar and 9½"/9⅝" mud motor in 12¼" hole to be provided by the Contractor.

ANNEXURE – D (B)

1. SPECIFICATION OF 8"/8. ¼" /9.1/2" /9.5/8" STEERABLE DOWNHOLE MUD MOTOR

Sl. No.	Tool Features		OIL's Requirement	To be filled by the bidder	
				Bidder's Offer	Ref: File & Page No.
1	Type		High Torque, Low to Medium Speed, Stabilized, Multi-lobe, Multistage Positive displacement Mud Motor		
2	Flow rate range(approx.)		250 GPM or more – 1000 GPM or less		
3	AKO/ABH Range (Min. Achievable)		0° - 2° or more		
4	Bit speed range (approx.)		35 RPM or more – 275 RPM or less		
5	Housing Type		Steerable with Adjustable Kick off sub /Adjustable Bend Housing		
6	Bearing type		Mud Lube or Oil sealed		
7	Length (within)		37 feet (max)		
8	Type of Connection		6⅝" API Reg. Box down & 6⅝" API Reg. Box Up or Any other proprietary connection of the Bidder		
9	Ported float sub		Contractor to assure that by theuse of float sub there will be no wet pull out. There should be provision for transmitting the drill pipe pressure whenever theBOP/well is closed. So float sub should have a port for transmission of drill pipe pressure to the surface		
10	Lifting Sub Connection		6⅝" API Reg. Pin or matching proprietary connection pin for the Bidder's SDMM.		
11	Operating Differential Pressure		600 PSI or more.		
12	Power Output		185HP or more		
13	Torque Operating		10,500NM or more		
14	DLS (Maximum Achievable)		4°/100′ or more		
15	Pass Through DLS:	a) Sliding	4°/100′ or more		
		b) Rotary	4°/100′ or more		
16	Stabilization		12⅛"screwed-on/built-in		
17	Manufacturer / Model		From the list of makes specified in NIT.		

Notes on mud motor sizes:

9½/9⅝" sized Mud motor against 12.1/4" hole section is also acceptable with the following conditions:

i) The bit box connection of the 9½"/9⅝" mud motor should be 6.5/8" regular for connecting 12¼" bit.

ii) Overshot to catch 9½" collar and 9½"/9⅝" mud motor in 12¼" hole to be provided by the Contractor.

iii) Acceptable collar sizes with 9½/9⅝" mud motor will be 7¾" or 8" or 8¼" or 9½".

ANNEXURE – D (B)

2.SPECIFICATION OF 6½"/6¾" STEERABLE DOWNHOLE MUD MOTOR

Sl. No.	Tool Features		OIL's Requirement	To be filled by the bidder	
				Bidder's Offer	Ref: File & Page No.
1	Type		High Torque, Low to Medium Speed, Stabilized, Multi-lobe, Multistage Positive displacement Mud Motor		
2	Flow rate range (approx.)		250 GPM or more – 700 GPM or less		
3	AKO/ABH Range (Min. Achievable)		0° - 2.5° or more		
4	Bit speed range (approx.)		35 RPM or more – 300 RPM or less		
5	Housing Type		Steerable with Adjustable Kick offsub /Adjustable Bend Housing		
6	Bearing type		Mud Lube or Oil sealed		
7	Length (within)		37 feet (max)		
8	Type of Connection		4½" API Reg. Box down &4½"/4" API IF Box Up or Any other proprietary connection of the Bidder		
9	Ported float sub		Contractor to assure that by the use of float sub there will be no wet pull out. There should be provision for transmitting the drill pipe pressure whenever the BOP/well is closed. So float sub should have a port for transmission of drill pipe pressure to the surface		
10	Lifting Sub Connection		4½"/4" API IF Pin or matching proprietary connection pin for theBidder's SDMM		
11	Operating Differential Pressure		600 PSI or more		
12	Power Output		160 HP or more		
13	Torque Operating		6500 NM or more		
14	DLS (maximum achievable)		4°/100′ or more		
15	Pass Through DLS:	a) Sliding	4°/100′ or more		
		b) Rotary	4°/100′ or more		
16	Stabilization		8 3/8" screwed-on/built-in		
17	Manufacturer / Model		From the list of makes specifiedin NIT.		

Notes:

a) Match on sub have to be provided by the bidder in case of proprietary connection for fishing and other job along with the lifting sub. In case of non-standard tubular, bidder has to provide overshoot tool for fishing job.

b) In case of proprietary connection, all cross over sub have to be provided by the bidder to match OIL's string.

c) System should be able to drill cement, float collar, float shoe and formation.

d) Additional features/information (if any) is to be provided by the bidder using additional sheet.

ANNEXURE – E (B)

SPECIFICATION OF DRILLING JARS

1. Specification of 6½"/6¾" OD Drilling Jar				
Sl. No.	Drilling Jar features	OIL's Requirement	To be filled by the bidder	
			Bidder's Offer	Ref: File& Page No.
1	Type	Double Acting Hydro-Mechanical/Double Acting Hydraulic Drilling Jar		
2	OD	6½"/6¾"		
3	ID	2½" / 2¾"		
4	Length (max)	30 feet (± 3 feet)		
5	Tool Joint	4½" API IF Box x Pin		
6	Tensile Yield	7,50,000 Lbs or more		
7	Torsional Yield	50,000 ft-lbs or more		
8	Jar load (Up-stroke)	1,75,000 lbs or more		
9	Jar load (Down-stroke)	(37600-175000) lbs or more		
10	Free Stroke (Up)	6" or more		
11	Free Stroke (Down)	6" or more		
12	Total free stroke (up+dn)	12" or more		
13	Max operating temp.	120-degree C or more		
14	Max operating press.	18000 psi or more		
15	Make & model	From the list of makes specified in NIT		

Notes:

a) All cross-over subs required for connection of Contractor's BHA with Operator's drill string is to be provided by the CONTRACTOR.
b) In case the Contractor provides retrievable RA sources, assembly should have the suitable ID to retrieve the sources if any.
c) Additional features/information (if any) is to be provided by the bidder.

Annexure-3

BIO-DATA AND EXPERIENCE OF PERSONNEL

(Format for CV of MWD Engineer and Directional Driller)

Name:

Educational Qualification:

Certifications:

PHOTO

Experience in last three years

Year	From Date	To Date	Name of Organization	Client / Project	No. of days worked	No. of wells drilled	Type of wells drilled	Worked as

Format for Other Details:

1 CATEGORY OF JOB / POST :

2 NAME OF INCUMBENT :

3 PRESENT ADDRESS :

4 HOME ADDRESS :

5 NATIONALITY :

6 DATE OF BIRTH :

7 ACADEMIC QUALIFICATION :

8 TECHNICAL QUALIFICATION :

9 TOTAL EXPERIENCE IN THE RELATED FIELDS (IN YEARS) :

10 JOB EXPERIENCE RESUMES :

SL NO	WORK EXPERIENCE		TYPES OF WELL DRILLED	NAME OF COMPANY	PLACE OF WORK
	FROM	TO			

NOTE: TO ATTACH ALL SUPPLEMENTARY including present & previous Appointment letter and Client's approval DOCUMENTS.

Signature of Authorized Person:

Name:

Seal of the Bidder:

EXHIBIT-4: WIRELINE LOGGING SERVICES

A. TERMS OF REFERENCE & TECHNICAL SPECIFICATIONS OF WIRELINE LOGGING SERVICES

1.0 DETAILS OF SERVICES TO BE PROVIDED BY THE CONTRACTOR:

The Contractor shall provide the services as stated below along with all necessary equipment/tools and personnel to carryout both open hole & cased hole logging, perforation and data processing services in accordance with the approved well plan. The approved well plan may be amended from time to time by reasonable modification as deemed fit by the company. However, the contractor shall be wholly responsible for rendering the services as per scope of work under this contract.

Two categories of services, viz., Standard and Special are required for logging service under this tender. Tools, equipment, etc. under Standard Services category will have to be mobilized by the successful bidder during initial mobilization. Tools, equipment, etc. under Special Services category will be mobilized by the successful bidder at a later date as per written advice issued by the Company. The bidder has to quote for all the services listed below. The undernoted tools and equipment of the Contractor will be utilized primarily for performance drilling in 17-1/2″, 12-1/4″ 8-1/2″ Hole and 13-3/8”, 9-5/8”, 7”, 5-1/2”, 5”, 2-7/8” Casing/liner/tubing.

2.0 LIST OF SERVICES REQUIRED

Sl. No.	Service Code	Service Description	Tools / service required (No)
Standard Services			
1	TR-1	Logging Unit fitted with dual / split / double drum with logging cables and other accessories	1
2	TR-2	Wellhead Control Equipment	1
3	TR-3	Pressure Control Equipment	1
4	TR-4	Logging While Fishing	1
5	TR-5	Data transmission	1
6	CR-1	Personnel/Crew	1
7	CIS	Customer Instrument Service	1
8	A-1	Dual Laterolog Resistivity with Micro Resistivity (with SP and caliper)	1
9	A-2	Dual Spaced Compensated Neutron Porosity	1
10	A-3	Formation Density (with Pe & caliper)	1
11	A-4	Natural Gamma ray	1
12	A-5	Spectral Gamma ray	1

13	A-6	Side Wall Core	1
14	A-7	Borehole deviation survey	1
15	A-8	Cement Bond Evaluation / Borehole Compensated Sonic	1
16	A-9	Free Point Survey	1
17	A-10	Back off/String Shot	1
18	A-11	Bridge Plug / Retainer Packer Setting	1
19	A-12	Through Tubing perforation gun (Deep Penetration charges)	1
20	A-13	Casing gun perforation (Big Hole & Deep Penetration charges)	1
21	A-14	Depth Determination (Dummy / GR / CCL / Junk Basket)	1
22	A-15	Explosive Pipe Cutter	1
23	A-16	Severing / Colliding tool	1
24	A-17	Puncture services (2 ⅞" tbg - 5" drill pipe)	1
Special Services (to mobilize / demobilize as per requirement)			
25	S-1	Dipole Shear Sonic	1
26	S-2	Vertical Seismic Profiling	1
27	S-3	Nuclear Magnetic Resonance Service	1
28	S-4	Micro-electric Imager	1
29	S-5	Dynamic Formation Tester	1
30	S-6	Pipe Conveyed Wireline Logging	1

3.0 LIST OF DATA PROCESSING SERVICES REQUIRED

S. N.	OIL's Code	Data acquired by	Post Processed data requirements
1	P-Basic	Basic OH evaluation tools	Basic log Interpretation (probabilistic method viz. ULTRA or ELAN Plus or equivalent) of standard log data (Gamma ray - Resistivity - porosity - density - sonic log and/or other available data) for quantitative analysis of lithology/ mineralogy, effective & total porosity, permeability, fluid saturation (movable/residual) & fluid type from log data acquired by the Contractor or by a third party including OIL's in-house logging services for OIL's wells originating from any part of the world.

S. N.	OIL's Code	Data acquired by	Post Processed data requirements
2	PS-1(I)	Dipole shear sonic imager	***I) Processing of Dipole Shear-Sonic Imager data for evaluation of*** i) Compressional, Shear (both X & Y direction) and Stoneley slowness with integrated travel time, Vp/Vs & gas zone detection. ii) Geo-mechanical properties viz. Young, shear and bulk modulus, Poisson's ratio, etc. iii) Evaluation of formation anisotropy around borehole, anisotropy map iv) Permeability from Stoneley v) Stoneley fracture identification
3	PS-1(II)	Dipole shear sonic imager	***II) Borehole stability analysis and prediction of safe mud window.***
4	PS-1(III)	Dipole shear sonic imager	***III) Geo-Mechanical Modeling*** Geo - Mechanical modeling of an area combining shear sonic data with other necessary data viz. shear sonic data acquired using DSI or equivalent, Resistivity /density/neutron, resistivity image log data and any other available relevant data to guide well planning viz. casing depth, well trajectory, borehole stability analysis and prediction of safe mud window etc. Such analysis may be carried out using data from one or more than one well located in the same structure/area.
5	PS-1(IV)	Dipole shear sonic imager	***IV) Sand Ingression Analysis*** Examination & analysis of **potential sanding issues** using available data such as well logs (Sonic & density etc.) and core data of study area. Identification of potential cause of sanding in the study area. Recommendation of suitable solution to control sand production and suitable completion methodology in sand prone formation. Such analysis may be carried out using data from one or more than one well located in the same structure/area.

S. N.	OIL's Code	Data acquired by	Post Processed data requirements
6	PS-2	Vertical Seismic Profiling	Processing of Borehole Seismic Services (VSP) data in open hole & cased hole relevant to acquisition mode with report comprising of: i) Composite Display of Down-going waves, corridor stack (repeating 6-7 times) with check-shot corrected Sonic, Density, Gamma and Formation Tops. This display is to be with respect to SRD (seismic reference datum). ii) Display of original Down-going (i.e. after separation) waves and display of Down-going waves after Deconvolution. iii) Details of velocity filter and Deconvolution parameters as part of processing note. iv) VSP Velocity Listing Table: The primary use of VSP is for accurate well – to- seismic ties. Seismic sections are always based on the SRD (seismic reference Datum). Therefore, velocity listing table should have a column mentioning SRD so that the average velocity and interval velocity can be seen w.r.t. SRD. v) Time-Depth Curve: The Depth axis should start from SRD level. At right hand side, there should be a color bar indicating the Formation Tops and Thickness. vi) Time-Depth Table: Interval velocity and Average velocity should be mentioned along with TWT. vii) Checkshot data. viii) Report on acquisition and processing.
7	PS-3	Nuclear Magnetic Resonance	Processing of data of Nuclear Magnetic Resonance Logging Services for i) Determination of total and effective porosity, capillary and clay-bound water & free fluid volume, pore size distribution, permeability, ii) Hydrocarbon typing and quantification. iii) Continuous saturation profiling. iv) All answer products relevant to acquisition mode, such as saturation profiling, high resolution processing, T1 profiling, fluid characterization & multi-depth magnetic resonance (MR) Output.

S. N.	OIL's Code	Data acquired by	Post Processed data requirements
8	PS-4	Micro-electric imager	Processing of Borehole Imaging data i) Static and dynamic image, image enhancement for structural, sedimentological study. ii) Interactive and manual dip picking iii) Structural interpretation from dip and image data (Using Interactive Dip Picking) for presence of fault, fracture and other structural features and their nature, borehole breakout pattern and indicated pattern etc. iv) Stratigraphic interpretation: identification of beds, bedding internal structure like cross laminations and depositional environment indicated integrating other basic log data. v) Fracture analysis, aperture evaluation including fracture aperture, fracture density, fracture porosity curves and fracture dips in plots. vi) Texture characterization and heterogeneity analysis.
9	PS-5	Dynamic Formation Tester	Processing of Pretest data for i) Identification of fluid pressure gradient, fluid contacts, mobility/permeability, flow regime, viscosity/GOR & bubble point and any other answer product relevant to acquisition mode. ii) Live real-time fluid analysis product and any other answer product relevant to acquisition mode.

NOTE:

I. Bidders have to quote the processing charge for Service Codes PS-1(II), PS-1(III), PS-1(IV) and P-Basic as per the Price Bid Format. Bidders will have to process for service codes PS-1(II), PS-1(III), PS-1(IV) and P-Basic of data of any of OIL's wells anywhere in the world, recorded by OIL or any other service provider

II. Bidders have to submit the processing with interpretation reports for the Service Codes PS-1(I), PS-2, PS-3, PS-4 and PS-5, cost of which is to be included in "operating cost per job".

III. For service code P-basic (Basic log interpretation), Contractor has to process standard log data (Gamma ray - Resistivity - porosity - density - DTC suite) of any of OIL's wells located anywhere in the world. For this purpose, Contractor has to process data acquired either by the Contractor or by OIL's in-house logging services or by a third party for OIL using any industry standard tool, within 48 hours of receiving the data.

4.0 SPECIFICATIONS OF TOOLS, EQUIPMENT TO BE DEPLOYED BY THE CONTRACTOR:

The contractor shall provide logging tools as per the specification stated below:

Service Code: TR-1	**LOGGING UNIT**	
OIL's Required Specifications		**Bidder's Offer**
SPECIFICATIONS	The unit must be State-of-the-art capable of carrying out all the operations mentioned in the SOW up to a depth of **3500m** in vertical/deviated wells. The 7-conductor cable shall have minimum rated breaking strength of **23,500 lbs**. The cable should be new and without splice at the time of deployment. The logging cabin must have seating place for the witness attending the logging job.	

Service Code : TR-2	**WELLHEAD CONTROL EQUIPMENT**	
OIL's Required Specifications		**Bidder's Offer**
SPECIFICATIONS	Wellhead Control Equipment for Standard Logging Cable for its use in CBL under pressurized condition and for casing gun perforations: Minimum pressure rating **3 kpsi.**	

Service Code : TR-3	**PRESSURE CONTROL EQUIPMENT FOR THROUGH TUBING OPERATIONS**	
OIL's Required Specifications		**Bidder's Offer**
SPECIFICATIONS	Pressure Control Equipment for Through Tubing Operations for slim cable. Minimum pressure rating **10 kpsi**. The height of PCE should be able to accommodate **6 m** TTP gun perforation to be carried out in one run.	

Service Code : TR-4	**LOGGING WHILE FISHING**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENT	The service should enable recording of log while recovering a stuck toolstring in order to save the time of an additional logging run and associated conditioning trip. The LWF system should enable recording of overlapping continuous log interval equal to the distance between the casing shoe and rig floor by suitable placement of Cable Side Entry Sub.	
OTHER REQUIREMENTS	Cable Side Entry Sub of sizes 3¼" to 7¼" for use in different conditions depending on Bit /drill	

	pipe size. Logging While Fishing Adaptor or any other cross-over to be provided by bidder.	

Service Code : TR-5	**DATA TRANSMISSION AND COMMUNICATION**	
OIL's Required Specifications		**Bidder's Offer**
SPECIFICATIONS	Unit should have facility of data transmission by contractor's VSAT or 3G/4G communication required for data transmission and receiving /downloading data at OIL's base while logging.	

Service Code : A-1	**SERVICE: DUAL LATEROLOG RESISTIVITY + MICRO RESISTIVITY (with SP and calliper)**	
OIL's Required Specifications for DUAL LATEROLOG RESISTIVITY		**Bidder's Offer**
MEASUREMENTS	i) Deep and medium focused Laterolog resistivity measurement of formation for simultaneous deep and shallow depths of investigation. ii) Spontaneous potential measurements. **Note**: High Resolution Array Laterolog tool is also acceptable against Dual Laterolog tool. HRLA tool should provide at least 4 depths of investigations (DOI ≥35in median response) with 1 ft or better vertical resolution	
DEPTH OF INVESTIGATION	LLD: 55-84 inches minimum LLS: 16-36 inches minimum	
RANGE:	LLD: 0.2–40,000 ohm m LLS: 0.2-2,000 ohm m	
ACCURACY	± 0.2 ohm-m at 0.2 to 1 ohm m +/- 5 % at 1-1000 ohm m +/- 10 % at 1000-2000 ohm m	
SAMPLING RATE	Minimum 2 samples/ft	
VERTICAL RESOLUTION	24 inches or better	
TOOL DIAMETER	Industry standard to log wells drilled with 6 inches to 17 ½ inch bit	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	
OTHER REQUIREMENTS	Fully combinable with service A-2, A-3, A-4, A-5, A-7, A-8 and S-1.	
OIL's Required Specifications for MICRO RESISTIVITY		
MEASUREMENTS	Invaded Zone Resistivity for Rxo measurement with borehole calliper	
INVESTIGATION DEPTH	0.5 inch to 1.5 inches	
RANGE	0.2-2000 Ohm m, Calliper- 6 inches to at least 20 inches	
ACCURACY	i) Resistivity: :+/- 5% at 0.2 to 200 ohm m	

	: +/- 10% at 200-2000 ohm m ii) Calliper : : +/- 10 % Accuracy	
SAMPLING RATE	2-8 samples/ft	
VERTICAL RESOLUTION	3.0 inch or better	
TOOL DIAMETER	Industry standard to log wells drilled with 6 inches to 17 ½ inch bit	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	

Service Code : A-2	**DUAL SPACED COMPENSATED NEUTRON POROSITY**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS	Formation porosity measurement using Dual Spaced Compensated Neutron Services	
INVESTIGATION DEPTH	1.0-5.5 inches minimum	
RANGE	0 to 60 PU (Limestone) with a linear response in 0-40 PU range.	
ACCURACY	+/- 1.4 PU for 0-20 PU +/- 3 PU for 20-30 PU +/- 6 PU for 30-*45 PU	
SAMPLING RATE	2-8 samples/ft	
VERTICAL RESOLUTION	Standard: 36 inch	
TOOL DIAMETER	Industry standard to log wells drilled with 6 inches to 17 ½ inch bit	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	
OTHER FEATURES	i) Provision to record high resolution data. ii) Provision to correct neutron porosity when recorded in cased hole. iii) Combinable with Service A-4.	

Service Code: A-3	**FORMATION DENSITY with Pe and CALLIPER**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS	Tool to measure Bulk Density, Density Correction, Photo-electric Absorption Cross-section and calliper.	
DEPTH OF INVESTIGATION	1.5-4.0 inches minimum	
RANGE	RHOB: 1.3-3 gm /cc, 0-10 PE	
RESOLUTION	Density: +/- 0.015 gm/cc PE : +/- 5%	
ACCURACY	Density: +/- 2% for 1.0-1.67 gm/cc : +/- 1.5% for 1.67-3 gm/cc	
SAMPLING RATE	2-8 samples/ft	

VERTICAL RESOLUTION	Standard : 33 inches Enhanced Mode : 9 inches	
TOOL DIAMETER	Industry standard to log wells drilled with 6 inches to 17 ½ inch bit	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	
OTHER FEATURES	i) Provision to record high sampling rate for high resolution data through software control. ii) Resolution enhancement through post processing	

Service Code : A-4	**NATURAL GAMMA RAY SERVICE**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS	Tool to measure total GR in API units using Scintillation counter (NaI Thallium activated)	
RANGE:	0 to 400 API, linear response from 0 to 200 API	
ACCURACY:	±7% of the reading	
TOOL DIAMETER:	Industry standard to log wells drilled with 6 inch to 17 ½" bit	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	

Service Code : A-5	**SPECTRAL GAMMA RAY SERVICE**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS:	i) Total GR 0-1500 API ii) U, Th, K concentration measurements separately iii) Minimum 2 sample per ft	
TOOL DIAMETER:	Industry standard to log wells drilled with 6 inch to 17 ½" bit	
RANGE:	Minimum of : 0 to 400 API Total GR 0-40 PPM (U) 0-40 PPM (Th),	
ACCURACY:	±5 % of measurement (GR) ±4 % of measured value for U, Th and K	
PRESSURE RATING:	**15000 psi minimum**	
REMARKS:	Combinable with all standard tools	

Service Code : A-6	**SIDE WALL CORE GUN**	
OIL's Required Specifications		**Bidder's Offer**

REQUIREMENTS:	i) Side wall core recovery in soft, medium and hard formations. ii) Depth positioning of SWC by Gamma ray. iii) Core barrel size 0.85" x 1.4"	
SPECIFICATIONS:	At least 24 samples from single run extended up to 48 samples or more. Gamma ray 0 to 200 API	
TOOL DIAMETER:	Industry standard to recover side wall cores in wells drilled with 6 inch to 12 ¼ inch Bit.	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	
OTHER FEATURES:	i) Core to be provided in bottle. ii) Bullet design suitable for optimum core recovery in various range of formation consolidation. iii) Minimum two guns combinable in one run.	

Service Code : A-7	**BOREHOLE DEVIATION SURVEY SERVICES**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS	Bore hole deviation, hole azimuth, relative bearing	
RANGE	Hole deviation: 0-90°, Hole Azimuth: 0-360°, RB : 0-360°	
RESOLUTION/ACCURACY	Azimuth: ± 4°, Deviation: ± 2°	
TOOL DIAMETER	Industry standard to log wells drilled with 8 ½, 12 ½ & 17 ½ inch bit	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	

Service Code : A-8	**CEMENT BOND EVALUATION SERVICES**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS	Cement Bond Evaluation (including VDL, Travel time, GR, CCL) based on sonic arrival amplitude in 5 ½", 7", 9 ⅝" 13 ⅜" casings/liners. Recording under pressurized condition is also required.	
RANGE	i) Acoustic amplitude 0-100 mV ii) VDL 200-1200 µs iii) GR 0-200 API.	
VERTICAL RESOLUTION	CBL: 3 ft VDL: 5 ft	
TOOL DIAMETER	Suitable for above mentioned casings/liners.	
TEMPERATURE RATING	: 300° F Minimum.	

PRESSURE RATING	15000 psi minimum	

Service Code : A-8	**BOREHOLE COMPENSATED SONIC**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS	Delta-T compressional (formation slowness)	
RANGE	40 to 190 µs/ft	
VERTICAL RESOLUTION	2 feet or better	
TOOL DIAMETER	Suitable for hole drilled with 8 ½ inch, 12 ¼ inch bit or more for Delta-T compressional.	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	

Service Code : A-9	**FREE POINT SURVEY (STUCK-UP DETECTION)**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS:	Percentage free in stretch and in torque (including log presentation) for tubing, casing and drill pipe ranging from 2 ⅞ inch to 9 ⅝ inch.	
TOOL DIAMETER:	Suitable for pipe sizes 2 ⅞ inch to 9 ⅝ inch drill-pipe/tubing/casing.	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	
OTHER FEATURES:	Should be run with CCL	

Service Code : A-10	**BACK-OFF / STRING SHOT SERVICES**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENT	Explosive detonation for attempting to release or back-off stuck tubing, casing and drill pipe.	
PIPE SIZES:	2 ⅞ inch to 9 ⅝ inch Tubing/casing/Drill pipes	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	
OTHER FEATURES:	Should be run with CCL	

Service Code : A-11	**BRIDGE PLUG SETTING / RETAINER PACKER SETTING**	

OIL's Required Specifications		**Bidder's Offer**
REQUIREMENT	a) Bridge plug setting and retainer packer setting for 5 ½", 7" and 9 ⅝" liner/casing. b) Setting tool compatible with "**Baker make**" plug/packer. c) Junk Basket for 5 ½", 7" and 9 ⅝" OD casing.	
TOOL DIAMETER	Industry standard to carry out plug/packer setting in casing/liner sizes 5 ½", 7" & 9 ⅝".	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	
OTHER REQUIREMENTS	i) Combinable with CCL. ii) Bridge plugs and packers will be supplied by OIL.	

Service Code : A-12	**THROUGH TUBING PERFORATION (SEMI-EXPENDABLE/RETRIEVABLE)**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENT	Retrievable/Semi-expendable perforation gun system for passing through 2 ⅞" tubing (ID of 2.44"). **Fully expendable gun systems are not acceptable.** Perforator system tested as per API RP43/19B, performance normalized to 5000psi target compressive strength**.** The gun system must be capable of upto 6m perforation in single run.	
1- $^{11}/_{16}$" Deep Penetration Charge (Zero Phase, 6 spf)	EHD ≥ 0.22 inches TTP ≥ 16 inches (Bidder to provide API RP43/19B certificate.)	
2"-2 ⅛" Deep Penetration Charge (Spiral, 6 spf)	SPF: 4 and 6 EHD ≥ 0.26 inches TTP ≥ 27 inches (Bidder to provide API RP43/19B certificate.)	
2"-2 ⅛" Deep Penetration Charge (Zero phase, 6 spf)		
TOOL DIAMETER:	Industry standard suitable for tubing sizes 2 ⅞ inches.	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	
OTHER REQUIREMENTS:	i) Should include surface equipment to perforate in under-balanced conditions and live wells. ii) Suitable to be operated using Crane/mast unit also.	

Service Code : A-13	**CASING GUN PERFORATION**	

OIL's Required Specifications		**Bidder's Offer**
REQUIREMENT	3⅛-3 ⅜" and 4½-4 ⅝" Casing gun system for perforation in 5 ½", 7" and 9 ⅝" casing. Perforator system tested as per API 19B/ API 43, performance normalized to 5000psi target compressive strength**.**	
3⅛-3 ⅜" DEEP PENETRATION CHARGE	SPF: 5 or 6 EHD ≥ 0.32 inch TTP ≥ 35 inch *Bidder to provide API 19B/* API 43 *certificate.*	
3⅛-3 ⅜" BIG HOLE CHARGE	SPF: 5 or 6 EHD ≥ 0.6 inch TTP ≥ 4 inch *Bidder to provide API 19B/* API 43 *certificate.*	
4½-4 ⅝" DEEP PENETRATION CHARGE	SPF: 5 or 6 EHD ≥ 0.33 inch TTP ≥ 45 inch *Bidder to provide API 19B/* API 43 *certificate.*	
4½-4 ⅝" BIG HOLE CHARGE	SPF: 5 or 6 EHD ≥ 0.7 inch TTP ≥ 5 inch. *Bidder to provide API 19B/* API 43 *certificate.*	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	
OTHER FEATURES:	i) Necessary Adapter kit for the above services will be provided by the contractor. ii) Combinable with CCL	

Service Code : A-14	**DEPTH DETERMINATION**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENTS	1) Any combination from the following tools shall be required to be run in tubing/liners/casing/drill pipe for the purpose of depth determination or hole debris cleaning: **CCL, Gamma Ray, Sinker bar, Dummy, Junk basket** 2) Combinability with all cased hole services.	
TOOL DIAMETER	**Suitable for depth determination in tubular from 2 ⅞" tubing/drill pipe to 13 ⅜ inch casing.** GR and CCL tool should be suitable these sizes. Junk baskets with gauge rings suitable for 5", 5 ½ ", 7" & 9 ⅝" liner/casings. Required dummy sizes for DD-NPO runs: 1-11/16" and 2 ⅛".	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	

Service Code : A-15	**EXPLOSIVE PIPE CUTTER**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENTS:	**Explosive Jet Cutter for following Tubing/Casing:** 2 ⅞ inch OD tubing 5 ½ inch OD casing 7 inch OD casing 9 ⅝ inch OD casing	
TOOL DIAMETER	Suitable for above pipe sizes.	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	10000 psi minimum.	

Service Code : A-16	**SEVERING/COLLIDING TOOL**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENTS:	**Severing/Colliding Tool for following drill pipes/drill collar:** 2 ⅞" SLH 90 drill pipe 4 ½" OD drill-pipe 5" OD drill-pipe 6 ½" OD drill collar 8" OD drill collar	
TOOL DIAMETER	Suitable for above pipe sizes.	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum.	
Service Code : A-17	**PUNCTURE SERVICES**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENT	To puncture 2 ⅞ inch OD tubing to 5 inch OD drill pipe.	
TOOL DIAMETER:	Tool must be capable of running in through above tubular.	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	

Service Code : S-1	**DIPOLE SHEAR SONIC IMAGER**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS	i) Delta T shears in cross dipole mode (fast slowness & slow slowness with direction). ii) Delta T Stoneley iii) Delta T Compressional	
HOLE SIZE LIMIT	6 inch to 17.5 inch dia.	
TEMPERATURE RATING	300° F Minimum.	

PRESSURE RATING	15000 psi minimum	
OTHER FEATURES	i) **Minimum** 2 dipole transmitter orthogonally placed. ii) Two dipole measurement for redundancy. iii) Direction measurement with anisotropy measurement in single run. iv) Measurement to compute absolute value of effective permeability from Stoneley. v) Measurements to compute formation anisotropy, identification of fracture orientation, geo-mechanical properties and borehole stability.	
WELLSITE PRODUCT	i) Shear, Compressional & Stoneley Slowness with integrated travel times, Vp/Vs, Poisson's ratio. ii) Raw waveforms of Shear, Compressional & Stoneley. iii) Coherence plot of waveform.	
POST PROCESSED DATA	i) Compressional, Shear (both X & y direction) and stonely slowness with integrated travel time, Vp/Vs & gas zone detection. ii) Geo-mechanical properties viz. young, shear and bulk modulus, Poisson's ratio etc. iii) Evaluation of formation anisotropy around borehole, anisotropy map. iv) Permeability from Stoneley, Stoneley fracture identification. v) Report on acquisition and processing.	

Service Code : S-2	**VERTICAL SEISMIC PROFILING**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENTS:	i) Tri axial data acquisition to provide high quality VSP compressional and shear event. ii) At least five shuttle arrays to save measurement time, adjustable distance between shuttles from 10 meter to 20 metre or more. iii) Energy source : air gun. iv) Bidder shall provide energy source, surface equipment and all other accessories as required. v) Suitable for Data acquisition in cased hole and open-hole.	
MEASUREMENTS:	Seismic stacks travel time v/s depth plots and raw seismic traces of individual shots	
RESOLUTION:	± 1 m sec for shots at same level, ± 2 m sec for shots fired in up and down passage on the same level	
HOLE SIZE LIMIT:	6 inches to 17.5 inches diameter in openhole	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING:	15000 psi minimum	

OTHER FEATURES:	Tri-axial measurement data must be made available in SEG-Y.	
POST PROCESSED DATA:	Processing of Borehole Seismic Services (VSP) data in open hole & cased hole relevant to acquisition mode with report comprising of: i) Composite Display of Down-going waves, corridor stack (repeating 6-7 times) with check-shot corrected Sonic, Density, Gamma and Formation Tops. This display is to be with respect to SRD (seismic reference datum). ii) Display of original Down-going (i.e. after separation) waves and display of Down-going waves after Deconvolution. iii) Details of velocity filter and Deconvolution parameters as part of processing note. iv) VSP Velocity Listing Table: The primary use of VSP is for accurate well-to-seismic ties. Seismic sections are always based on the SRD (seismic reference Datum). Therefore, velocity listing table should have a column mentioning SRD so that the average velocity and interval velocity can be seen w.r.t. SRD. v) Time-Depth Curve: The Depth axis should start from SRD level. At right hand side, there should be a color bar indicating the Formation Tops and Thickness. vi) Time-Depth Table: Interval velocity and Average velocity should be mentioned along with TWT. vii) Checkshot data. viii) Report on acquisition and processing.	

Service Code : S-3	**NUCLEAR MAGNETIC RESONANCE LOGGING**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS:	i) T2 distribution from 0.5 millisecond or less to 3.0 seconds. ii) Formation lithology independent porosity, pore size distribution & permeability measurements. iii) Free fluid index, clay & capillary bound fluids. iv) **Permeability estimation**. v) **Pore size distribution**. vi) **Hydrocarbon typing and quantification in continuous recording mode.** vii) **Continuous saturation profiling.**	
VERTICAL RESOLUTION:	6 feet or better	
HOLE SIZE LIMIT:	6 inch to 12.25 inch dia.	
TEMPERATURE RATING:	300° F Minimum.	

PRESSURE RATING:	15000 psi minimum	
WELL SITE PRODUCT:	**NMR porosity, T2 distribution, free fluid index, permeability estimation.**	
POST PROCESSED DATA:	Processing of data of Nuclear Magnetic Resonance Logging Services for i) Determination of total and effective porosity, capillary and clay-bound water & free fluid volume, pore size distribution, permeability, ii) Hydrocarbon typing and quantification. iii) Continuous saturation profiling. i) All answer products relevant to acquisition mode, such as saturation profiling, high resolution processing, T1 profiling, fluid characterization & multi-depth magnetic resonance (MR) Output. ii) Report on acquisition and processing.	

Service Code : S-4	**MICROELECTRIC IMAGER TOOL**	
OIL's Required Specifications		**Bidder's Offer**
MEASUREMENTS:	i) High resolution micro-resistivity based borehole imaging for formation image extraction with direction in open hole to characterize sedimentary bodies, sedimentary dips, structural analysis, secondary porosity evaluation, reservoir characterization etc. ii) At least 59% coverage in 7 ⅞ inch hole in one pass. iii) Each calliper arm must have independent electronics.	
MEASURING RANGE:	Micro resistivity : 0.2 to 2000 ohm m Azimuth : 0 to 360 degree Rotation : 0 to 360 degree Deviation : 0 to 90 degree Calliper : 6 to 16 inch	
VERTICAL RESOLUTION	0.2 inch in resistivity measurements.	
HOLE SIZE LIMIT	6 inch to 16 inch dia.	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	
WELL SITE PRODUCT:	i) Colour image of static image processing. ii) Raw micro Resistivity measurement with deviation, calliper and Gamma ray data for post processing. iii) Computed Mean Square Dip (well site/ post processed data).	

POST PROCESSED DATA:	i) Processing of data for Static and dynamic image, image enhancement for structural, sedimentological study. ii) Structural analysis from dip and image data (Using Interactive Dip Picking) for presence of fault fracture and other structural features and their nature, borehole breakout pattern and indicated pattern etc. iii) Sedimentological analysis from dip and image data (Using Interactive Dip Picking) for identification of beds, bedding internal structure like cross laminations, broad depositional environment indicated integrating other basic log data. iv) Fracture analysis, aperture evaluation including fracture aperture, fracture density, fracture porosity curves and fracture dips in plots. v) Texture characterization and heterogeneity analysis. vi) Report on acquisition and processing.	

Service Code : S-5	**DYNAMIC FORMATION TESTER**	
OIL's Required Specifications		**Bidder's Offer**
	Dynamic formation testing and fluid sampling service with i) **Single probe/ Dual probe** combinable with spectral/ resonance/density based fluid analyzer. ii) Any number of pressure test in one run. iii) Formation and mud pressure with **quartz pressure gauge**, pressure gradient, flow rate and mobility. iv) Facility to collect minimum two PVT samples of 450 cc each or more and two non PVT 1000 cc each or more (may be combinable using 2 or more sample chambers for 1000 cc collection) **in single run.** v) Minimum two PVT and two Non- PVT sample bottles. vi) If required bidder has to provide the facility to collect more than two PVT/Non-PVT samples along with sample bottles. vii) 4 PVT sample bottles must be mobilized with tool. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter. viii) Pump out module with ability to control flow rate down hole while sampling. ix) Live real time fluid **analysis to distinguish oil/gas and water** x) Capable of measuring viscosity/GOR or density of sample and bubble point etc.	

	xi) Differentiation capability of formation fluid from filtrate while sampling in combination with resistivity measurement and takes only formation fluid sample.	
RESOLUTION	Quartz Gauge: **0.01 psi (14.7-15000 psi) or better** **SG : 0.1 psi (14.7–15000 psi)**	
TOOL DIAMETER	Industry standard to log wells drilled with 6" to 12 ¼" dia or more	
TEMPERATURE RATING	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	
OTHER FEATURES	i) Different types and sizes of probes are to be provided as per technical requirement to make the Dynamic Formation Testing job successful.	
WELL SITE PRODUCT	i) Provision to provide mobility values at drill site and bring out gradient plots. Pre-test summary sheet with details of pretest data and as per format provided by company. ii) Live real-time fluid analysis product.	
POST PROCESSED DATA	i) Identification of fluid pressure gradient, fluid contacts, mobility/permeability, viscosity/ GOR or density of sample & bubble point. ii) Live real-time fluid analysis product and any other answer product relevant to acquisition mode. iii) Report on acquisition and processing.	

Service Code : S-6	**PIPE CONVEYED WIRELINE LOGGING**	
OIL's Required Specifications		**Bidder's Offer**
REQUIREMENTS:	Pipe conveyed wire line logging equipment (TLC/TPL or equivalent) with following minimum features: i) Tool protection in holes with large and medium radius of curvature. ii) Mud circulation through drill pipe. iii) Multiple wet connections without tripping tools. iv) Cable side entry sub must have 1000 psi (min) working pressure cable pack-off seal.	
TOOL DIAMETER:	Industry Standard to log wells mostly drilled with 8 ½ inches bit	
TEMPERATURE RATING:	300° F Minimum.	
PRESSURE RATING	15000 psi minimum	

NOTE: (1) The following services have to be **fully combinable** with each other so as to enable combo runs in any desired combination: **A-1, A-2, A-3, A-4, A-5, A-7, A-8 and S-1.**

(2) Environmental correction charts for different tools must be provided

5.0 VINTAGE OF EQUIPMENT AND TOOLS:

(i) All downhole tools including surface unit must have a vintage of **not more than 7 years** from the date of manufacturing at the time of Bid opening. Bidder must submit relevant documents as documentary evidence before mobilization of the tools.

In addition to the above, bidders must also submit maintenance schedule and certificates for all tools as per bidder's policy before mobilization of the tools in the event of Contract. Bidder should confirm the same in their bid.

Note: Part no. / Identification no. of tools and equipment must be indicated / recorded in the maintenance schedule.

(ii) The bidder shall provide Calibration certificate of all wireline logging tools as applicable. Calibration certificates for accuracy of Measurement should not be more than 1 year old and bidder has to confirm the same.

6.0 LOG DATA SUBMISSION REQUIREMENTS:

Log data recorded have to be submitted as follows:

a) **Well site data submission (immediately after recording):**

i) Digital data have to be submitted in CD/DVD/USB in LIS/DLIS and LAS format. Soft copy of the reports, figures etc. should be presented in PDF/Tiff or similar format and should be submitted in CD/DVD/USB.

ii) Paper prints of each log suite to be submitted in 1:600 & 1:240 scale, two sets in each scale.

b) **Final data submission**: Final data to be submitted within 03 (three) days of recording as follows:

i) Digital data in CD/DVD in LIS/DLIS and LAS format with proper label showing well name, service run etc. Soft copy of the reports, figures etc. should be presented in PDF/Tiff or similar format and should be submitted in CD/DVD/USB.

ii) Paper prints of each log suite in 1:600 & 1:240 scale, two sets in each scale showing acquisition/calibration information & header information.

7.0 DATA PROCESSING & INTERPRETATION REQUIREMENTS:

Bidder should have a data processing centre within India with experienced processing and interpretation geoscientists / engineers for carrying out detailed processing of the data.

(i) The data processing and interpretation Geoscientists/ Engineers will have to carry out detailed processing of the data and submit the provisional result within 48 hours from the time the survey is completed/ after handing over the recorded data to Contractor at Duliajan. Final result is to be submitted within 72 hrs (soft copy acceptable). Final processed product is to be submitted in hard copy and soft copy (in suitable media) within 7 days. Processed/ interpreted data must be submitted by Bidders representative stationed at Duliajan base.

(ii) Transfer of raw/ processed data between Contractor's base and processing/ interpretation centre is Contractor's responsibility and Company will not pay any additional charge for it.

(iii) Details of the data processing facilities at the processing centre and its location must be submitted along with the bid.

(iv) The processed data should be submitted both in hard copies (two sets) and soft copies (two set). The scale of the hard copies should be as per industry standard. Processed output (digital data) should be of LAS/LIS/DLIS to be submitted in suitable media. Soft copy of the reports, figures, processed log etc. should be presented in PDF/Tiff or similar format and should be submitted in DVD.

(vii) In case of processing where second opinion is required for interpretation, the same must be made available by the Contractor from their other bases in India/abroad. Company will not provide equipment (viz. licensed satellite/Electronic media/Landlines etc.) necessary to transmit data to and from its Computer Center. Data transmission will be the responsibility of the Contractor.

8.0 CUSTOMER INSTRUMENT SERVICE (CIS):

Customer Instrument Service (CIS) is for running tools and/or services of OIL and/or other Contractors utilizing Contractor's unit or vice versa, under mutual agreement between Contractor and other Contractor/OIL duly endorsed by the Company. CIS shall be availed under operational exigency, subject to technical suitability.

Bidders have to agree for running tools and/or services of OIL and/or other Contractors utilizing Contractor's unit and/or cable or vice versa, under mutual agreement between Contractor and other Contractor/OIL, provided the same is technically compatible.

Contractor providing Unit/ Winch/Cable System: Contractors providing logging unit under CIS shall provide cable, winch system, rig-up equipment, well head system/pressure control equipment and operate the winch to lower the tool through his cable/system. Contractor will perform the rig-up and provide assistance in interfacing of the other Contractor's/OIL's equipment with their logging unit.

Contractor providing Tool(s)/Services: Contractors providing Tool(s) / service shall arrange all the equipment/ tools/ accessories required for successful logging operation. The Contractor must ensure compatibility with provided Logging units, arrange necessary Hardware, Crossovers, Connectors, Surface Panels and Operating Software for successful logging with such tools.

9.0 DETAILS OF PERSONNEL TO BE DEPLOYED BY THE CONTRACTOR AND THEIR RESPONSIBILITIES:

a) The Contractor shall deploy competent **Wireline Logging Engineer with Crew [4 (Four) Nos.]** for providing services on 24 hours basis at rig site during drilling/logging operation at the rig. The on-off pattern of wireline logging personnel must comply with The Mines Act 1952 / The Oil Mine Regulation 2017 with latest amendment.

b) **Qualification & Experience of Wireline Logging Engineer**: The Wireline Logging Engineer must have three (3) years relevant experience of carrying out wireline logging and perforation and related services as specified in tender. Deployed logging engineers must be able to handle independent assignments and must have logged at least 10 wells in an independent capacity in earlier assignments on the bid closing date. Should be well versed in English (speaking, reading, and writing).

c) **Replacement of Contractor Personnel:** Due to sickness / death / resignation etc. if contractor wishes to replace Logging engineer, the Contractor shall submit the bio-data of the new personnel for approval by Company prior to deployment. The replacement personnel should fulfil the above experience and qualification criteria on the date of application for replacement.

d) **Data Processing Geoscientists / Engineers and Processing Centre**: Bidder should have a data processing centre in India with experienced processing and interpretation geoscientists / engineers for carrying out detailed processing of the data. The Data Processing Geoscientists / Engineers must have minimum four (4) years experience in processing and interpretation of wireline log data as mentioned in the tender.

e) The bidders are requested to propose more personnel than required as per tender, out of which the selected/approved by Company can only be deployed for execution of this contract. Bidder must submit the bio-data (as per attached format vide Annexure-4 with copies of all required documents, as specified) of all offered personnel within 15 days of issue of Letter of Award (LoA) or 30 days prior to commencement of contract (whichever is later) for approval by the Company before commencement of work.

f) The Contractor shall provide the required PPE (Personal Protective Equipment) as per DGMS/OISD to all their personnel at his own cost.

g) **Medical Fitness**: The Contractor shall ensure that all of the Contractor's Personnel shall have had a full medical examination (by a qualified and registered doctor) prior to commencement of the operation and **the certificates of all such personnel in form 'O' of The Mines Act 1952 should be submitted by the contractor**

10.0 PENALTY: In the event, the unit/tools/equipment malfunctions and fail to provide the desired satisfactory service as required under the terms of the Contract, no rental shall be paid to the Bidder till the unit/tools/equipment are rectified and the unit/tools/ equipment give satisfactory performance. If the unit /tools / equipment becomes operational (certified by company representative) within 3 hour duration no penalty will be imposed however on the event of more than 3 hour duration no charges will be paid till the time the unit/ tools/ equipment becomes fully operational or evidenced by demonstration of operation in actual tests or use to the satisfaction of Company.

11.0 FISHING: In case it is necessary for Company to "fish" for any of Bidder's instruments or equipment, Company assumes the entire responsibility for such operations. However, Bidder will, if so desired by Company and without any responsibility or liability on bidder's part render assistance, if required, for the recovery of such equipment and/or instruments. None of Bidder's employees are authorized to do anything other than assist/ advise and consult with Company in connection with such "fishing" operations, and any fishing equipment furnished by Bidder is solely as an accommodation to Company and Bidder shall not be liable or responsible for a damage that Company may incur or sustain through its use or by reason of any advice or assistance rendered to Company by Bidder's agents or employees irrespective of cause.

12.0 IMPORTANT NOTES:

(A) Wireline logging tools/accessories Mobilization:

1. Detailed Specification of all the offered Tools and Equipment and Accessories beside the indicated particulars/ features, are to be provided with the bid.
2. Mobilization (except special services): All the tools, equipment and accessories required for 17-1/2", 12-1/4" & 8-1/2" hole sections are to be mobilized along with initial mobilization of other services.
3. Special services are to be mobilized on rig within 90 days (if first time mobilisation) or 15 days (if re-mobilised) from the date of intimation or by the date required by OIL, whichever is later. Applicable respective charges will be effective only upon completion of mobilization on the Rig and tool/ equipment is ready in all respect to render the service. OIL reserves the right to opt for any one or more of the Special tools/ equipment/ services which contractor shall be liable to provide.
4. OIL at its discretion will have option to demobilize any individual tool/ equipment or set/ package of tools, equipment & accessories under special service when such tools / equipment felt/ accessories are no more required. No charges other than applicable Mobilization and Demobilization charges shall be payable for any demobilized tools/ equipment/ accessories.
5. Mobilization and Demobilization shall be treated as complete when items are mobilized on to the rig and out of rig respectively.
6. The Contractor may choose to keep sufficient back up tools, equipment & accessories to meet the workload and for situations such as tool failure/lost in hole etc. and ensure uninterrupted operations. At least one backup tool/equipment is expected to be kept always on rig for immediate replacement against failure/ loss/ non-performance/ malfunction etc. at no extra cost to OIL.
7. Contractor shall ensure that the equipment is delivered and maintained in a fit condition for the intended work and shall, at its cost and expense, man, operate, replace, supply, repair and maintain the equipment as per the contract.
8. The tools should have no restriction to pump LCM material (at least up to 40 ppb of fine to medium nut plug) in case of any mud loss or situation arises during the course of drilling operations.
9. If any tool is run additionally by the Contractor as integral part of any suite/ package with the tools to be run as per requirement of Operator, it will not be chargeable to the Operator and the data recovered/ recorded thereof shall be made available to OIL
10. Some of the items/ services mentioned as "special" may or may not be required by OIL. If OIL opts for the items/ services, the bidder/ contractor shall be liable to provide the item/ items & render services as required by OIL as per Terms and conditions of the tender/ contract with in stipulated mobilization period.

(B) OIL shall inspect at Contractor's base/Rig in India, the units along with surface equipment and accessories as well as tools to be mobilized for providing the services and satisfy itself that the same are as per requirement and in proper working condition and will be adequate to provide the services as per requirement.

13.0 BASE SHIFTING/ ILM

It may be necessary for operational requirement that the Contractor's logging base be shifted from the place of original mobilization/wellsite to other wellsite camp/

other base camp. The Company shall give a notice for shifting of base when requirement arises.

Contractor will be solely responsible for executing shifting of base that covers shifting of Logging Unit/Equipment/Personnel include all taxes/ transit insurance etc. as applicable.

13.1 The Contractor shall be allowed to complete the ILM of their belongings within twenty (20) days from the date of ILM notice issued by the Company upto an inter-location distance of thirty (30) KM. In case the distance between two locations exceeds 30 KM, five (5) extra days will be allowed to complete inter-location movement for each 30 KM or part thereof beyond the initial thirty KM.

14.0 COMPLIANCE TO EXPLOSIVE RULES:

The Contractor will obtain necessary import license for explosives and have to make their own arrangement for storage of explosives after obtaining all necessary permissions. Import/export and transportation of explosives shall be Contractor's responsibility. The Contractor shall comply with the requirements as per Explosives Act 1884, the Explosives Substance Act 1908 and the Explosives Rule 2008 or later and also the directive given by the Chief Controller of Explosives, Nagpur, India, from time to time.

The Contractors have to make their own arrangement for storage of explosives obtaining all necessary permissions etc. under Explosives Act 1884, the Explosives Substance Act 1908 and the Explosives Rule 2008 or later and also the directive given by the Chief Controller of Explosives, Nagpur, India, from time to time.

Any damaged or un-used explosives at the end of the contract period shall be re-exported/liquidated at Contractor's own cost.

15.0 COMPLIANCE TO AERB REGULATIONS:

Contractor will obtain necessary licenses for storage of radioactive sources/materials for providing the services. However, OIL shall provide necessary assistance in the form of recommendatory letters for availing licenses/permissions. CONTRACTOR shall comply with the relevant sections of the Atomic Energy Act, 1962; Radiation Protection Rules, 1971, Atomic Energy Safe Disposal Rules, 1987 and all such statutory regulations as may be imposed by the Atomic Energy Regulatory Board, in respect of all operations pertaining to the handling of radioactive sources and storage and transportation of the same.

16.0 RADIOACTIVE MATERIAL

In accepting any order to perform or attempt to perform any service involving the use of radioactive material, Company agrees that Contractor shall not be liable or responsible for injury to or death of persons or damage to property (including, but not limited to, injury to the well), or any damages whatsoever irrespective of the cause, growing out of or in any way connected with Contractor's use of radioactive materials. Company shall absolve and hold Contractor harmless against all losses, cost, damages and expenses incurred or sustained by Company or any third party irrespective of the cause excluding willful and gross negligence by Contractor or its agents, servants, officers or employees, resulting from any such use of radioactive

material. In case of radio-active source lost in hole during logging operation, action will be initiated as per AERB guidelines.

17.0 REIMBURSEMENT FOR LOSS OF SUB-SURFACE EQUIPMENT IN HOLE:

Notwithstanding any provision under this contract to the contrary, Company shall assume liability except in the event of gross negligence or Willful Misconduct on the part of Contractor, for loss or damage to the Contractor's or sub contractor's sub-surface equipment and the downhole property of Contractors or Sub-contractors in the hole below the rotary table, subject to conditions prescribed herein below. Company shall at its option either reimburse the Contractor for the value of lost or damaged equipment/tools as declared in the import invoices at the time of mobilization (or subsequent replacement/addition) of the same equipment/ tools or CIF value as reflected in Proforma-B hereto whichever is lower (Plus customs duty paid by the contractor for the equipment tool lost/ damaged, provided that the said custom duty was not borne by the Company and contractor produces the documentary evidence towards payment of customs duty.) for any such loss or damage, less depreciation @3% per month from the date of commencement of this contract or intermittent mobilization whichever is later with a maximum depreciation equivalent to 50% of CIF value as indicated by the Contractor or at its option replace similar equipment/tools to the satisfaction of the Contractor and any transportation expenses incurred in connection herewith. All such costs shall be payable by Company only after Contractor has produced documentary evidence that the particular equipment/tools in question was not covered by Contractor's insurance policies. For such claims Contractor should notify the Company within one month. The inspection of recovered equipment from down hole need to be done by Company representative before submission of the invoice by Contractor.

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B. SCHEDULE OF RATES (WIRELINE LOGGING SERVICES)

The following rates shall be applicable for various charges under this Contract for each service:

1.0 MOBILIZATION CHARGES (ONE TIME LUMP SUM CHARGES):

i. Shall include charges for mobilization of the Standard services, Special services and manpower.
ii. Mobilization charges cover all local and foreign costs to be incurred by the Contractors to mobilize the complete Bundled Service to the first location of the Company and shall include all local taxes (including Assam Entry Tax, if applicable), port fees, inland transport etc., but excluding Customs duty (which will be to OIL's account, if applicable).
iii. The well location for mobilization is Karbi Anglong / Dima Hasao which are around 350 KM away from Guwahati, Assam.
iv. Mobilization charges shall be paid once after completion of mobilization as certified by Company (OIL). However, in case Contractor mobilizes part of the Services Company may decide to start well operation with the short-mobilized services. However Mobilization charge shall be paid once the remaining services are mobilized and ready for operation. For the rendered services other rates (monthly rental, operating charges etc. as applicable) shall be payable from the time of start of operation.

2.0 DEMOBILIZATION CHARGES (LUMP SUM):

Demobilization charges include all charges for demobilization of the Standard services, Special services and manpower. All charges connected with demobilization including all fees, taxes, insurance, freight on export outside India will be to Contractor's account. Demobilization charges shall be paid only once after completion of the contractual period/ demobilization of the services and manpower by Contractor. All the other rates under the contract shall cease to exist with effect from the day the Contractor is issued de-mobilization notice by Company. No charges whatsoever will be payable with effect from the date the notice is served.

3.0 MONTHLY RENTAL CHARGES (MRC):

Contractor shall be paid Monthly Rental Charges for the hired services from the time they are mobilized / commissioned and made ready in all respects to start operations at the respective designated locations as per Mobilization clause during entire period of the Contract, except when specifically, otherwise provided for in this Contract as per the rates given at rate schedule.

4.0 OPERATING CHARGES (OC):

Contractor shall be paid Operating Charges (which included Rate per job unit, Depth charge and Flat charge) per successful logging job. The quoted operating charge should be inclusive of processing charges wherever applicable.

5.0 MILEAGE CHARGE:

Mileage charge is the per trip transportation charge for transportation of Logging Unit along with Crew/Equipment and shall be applicable for each round trip to well site from Contractor's base camp.

6.0 BASE SHIFTING/ ILM CHARGES:

Base Shifting charge shall be payable for shifting of Logging Unit/ Equipment/ tools from the place of original mobilization to well site camp or to other base camp as per advice of Company. During ILM period no rental charge shall be payable.

7.0 **CABLE SPILICING**

Cable splicing charge shall be payable by the Company in case of contractor's cable loss or damage due to fishing operation. Contractor to maintain unit with sufficient cable at all times to carry out logging operation in well depths as stipulated in the SOW and Technical specification of Logging Unit

8.0 **CANCELLED OPERATIONS:**

No charges for cancelled operations are payable if a job is cancelled after crew and equipment has been mobilized to well site but before any tool is lowered into the well. Only Mileage charges shall be applicable in such cases if any.

9.0 **INCOMPLETE OPERATIONS:**

If any tool lowered in the well cannot descent to required depth due to bad well condition or for other reasons except tool or equipment failure, the operation shall constitute incomplete operation. For incomplete operations, Depth Determination charge shall be payable

10.0 **DATA PROCESSING AND INTERPRETATION CHARGE:**

Data Processing and Interpretation charges will be paid for each processing/interpretation service carried out as per advice of Company and will be payable item wise as per Price Bid Format

11.0 **FORCE MAJEURE CHARGES:**

Upon occurrence of force majeure situation, Force Majeure rate shall be applicable and contractor shall be paid by Company @ 50% of the normal rental charges for equipment and personnel quoted by the bidder.

12.0 **DEPTH DETERMINATION (DD):**

Depth determination job means combination/sub-combination of GR-CCL-Dummy-Junk-basket either carried out prior to some services or run standalone for the purpose of hole probing, trapping debris in basket, bottom tagging or for any other miscellaneous run made with wire line cable. A single DD charge shall be payable per logging run from surface to deepest logging point, including any repeat sections as instructed by company

i. DD run Preceding main Operation shall be provided at no separate charge to OIL
ii. Indented DD run not attached to any other services shall be payable by company
iii. GR log or CCL log for depth correlation recorded with any service(s) in any combination should not attract any separate operating charge. However, if GR/CCL service is run alone, DD charges shall be applicable

13.0 **CUSTOMER INSTRUMENT SERVICE (CIS):**

i. For contractor providing Unit/Winch/Cable system: For one rig up, one CIS charge will be directly payable which shall also include one run carried out using other Contractor's tools. For any additional runs carried out in the well in the same rig up, additional 10% of CIS charge shall be payable for each run in the well irrespective of the performance of the third-party logging tools.

ii. For Contractor providing Tools/services: For Contractor providing tools/services, one CIS charge shall be payable for one rig up (irrespective of the number of CIS runs) in addition to operating charges for the respective services

14.0 **SCHEDULE OF PAYMENT:**

Payment against the contract shall be made on Monthly basis except for Mobilization and Demobilization charges which may be made on completion of Mobilization and Demobilization as per contract.

NOTES:

1. Mobilization charges of the Unit and tools shall not exceed their respective one month's rental charge.

2. Demobilization charge cannot be more than mobilization charges.

3. Monthly rental charges (Standard and Special) should not be more than 5% of the CIF Value.

4 . Operating charge of any equipment/service (including processing charges wherever applicable) should be between 50% and 100% of its monthly rental charge. This limit however does not apply for the following services:

   A-12 - Through Tubing Perforation
   A-13 - Casing Gun Perforation
   A-15 - Explosive Pipe Cutter
   A-16 - Severing/Colliding Tool
   A-17 - Puncture Services

5. Operating charge of Depth Determination (A-14) service shall not be more than the lowest Operating charge of services A-1 to A-17 in the Standard services category.

6. CIS charges shall not be more than 300% of Depth Determination (A-17) service.

7. Quoted mobilization charges should not be more than 7.5% of the Total Contract Value and if quoted in excess the balance amount will be released at the end of the contract.

8. The total evaluated rental charge of Unit including crew plus Standard and Special Tools should not exceed 50% of the total estimated contract value.

9. Rental charge of logging Unit per month should not exceed 45% of the sum of the monthly rental of Unit and Standard and Special Tools.

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PROFORMA-A

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable& Chemicals) TO BE IMPORTED IN CONNECTION WITH EXECUTION OF THE CONTRACT.

Sr No.	Item Description	Qty / Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+ H	J	K	L

Notes:

(1) The items which are not of consumable in nature and required to be re- exported outside India after completion of the Contract should be indicated as "YES" in column "J".

(2) The items, which are of consumable in nature should be indicated as "NO" in column "J".

(3) For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".

Authorized Person's Signature: _____

Name: _____

Seal of the Bidder:

PROFORMA-B (Appendix-6)

DETAILED FORMAT FOR COST OF WIRELINE LOGGING SERVICES																
Sl. No.	**Service Code**	**Description of Services**	**Mobilization/ demobilization charges for one equipment excl. GST (in INR)**		**Monthly rental charges for one equipment excl. GST (in INR)**			**Operating Charges excl. GST (in INR)**								
			Mobilization charge per equipment (A)	Demobilization charge per equipment (B)	Estimated hiring period in months (C)	Monthly Rental per equipment (D)	Total rental for the contract period (E)	Job Unit (F)	Estimated Job units per job (G)	Rate per job unit including processing (H)	Depth charge (per meter) (I)	Flat charge (per run) (J)	Service wise cost per job GxH+4000xI+J = (K)	No of jobs (L)	Operating cost (O) = KxL
A. STANDARD SERVICES																
1	TR-1	Onshore Truck mounted Logging Unit			24		0	NA	NA	NA	NA	NA	NA	NA	NA	
2	TR-2	Wellhead Control Equipment (BOP)			24		0	NA	NA	NA	NA	NA	NA	NA	NA	
3	TR-3	Pressure Control Equipment			24		0	NA	NA	NA	NA	NA	NA	NA	NA	
4	TR-4	Logging While Fishing			24		0	Per fishing job	1				0	3	0	
5	TR-5	Data transmission			24		0	Log run (hrs)	5		NA		0	1	0	
6	CR-1	Personnel/Crew			24		0	NA	NA	NA	NA	NA	NA	NA	NA	
7	CIS	Customer Instrument Service	NA	NA	NA	NA	NA	Per Rigup	1		NA		0	9	0	
8	A-1	Dual Laterolog Resistivity - Micro Resistivity			24		0	Survey (m)	1400				0	9	0	

9	A-2	Dual-spaced Compensated Neutron Porosity				24		0	Survey (m)	1400				0	9	0
10	A-3	Formation Density (with Pe & caliper)				24		0	Survey (m)	1400				0	9	0
11	A-4	Natural Gamma ray				24		0	Survey (m)	1400				0	30	0
12	A-5	Spectral Gamma ray				24		0	Survey (m)	1400				0	6	0
13	A-6	Side Wall Core				24		0	Sample (no.)	24				0	12	0
14	A-7	Borehole Deviation Survey				24		0	Survey (m)	1400				0	12	0
15	A-8	A-8A Cement Bond Evaluation				24		0	Survey (m)	1400				0	9	0
16	A-8	A-8B Borehole Compensated Sonic							Survey (m)	1400				0	9	0
17	A-9	Free Point Survey				24		0	Survey (m)	500				0	12	0
18	A-10	Back off/String Shot				24		0	Backoff (no.)	1				0	12	0
19	A-11	A-11A Bridge Plug Setting				24		0	Plug (no.)	1				0	12	0
20	A-11	A-11B Retainer Packer Setting							Packer (no.)	1				0	3	0
21	A-12	A-12A	Through Tubing perforation - Deep Penetration Charge	1 11/16" Zero phase, 6 spf		24		0	Per meter	3				0	1	0
22	A-12	A-12B		2"-2 ⅛" Spiral, 4 spf					Per meter	3				0	1	0
23	A-12	A-12C		2"-2 ⅛"Spiral, 6 spf					Per meter	3				0	13	0

24		A-12 D		2"-2 ⅛" Zero phase, 4 spf						Per meter	3				0	1	0
25		A-12 E		2"-2 ⅛" Zero phase, 6 spf						Per meter	3				0	14	0
26	A-13	A-13 A	Casing gun perforation - 6 spf	Size 3 ½" to 3 ⅜" Deep Penetration			24		0	Per meter	3				0	1	0
27		A-13 B		Size 3 ½" to 3 ⅜" Big Hole						Per meter	3				0	1	0
28		A-13 C		Size 4 ½" to 4 ⅝" Deep Penetration						Per meter	3				0	1	0
29		A-13 D		Size 4 ½" to 4 ⅝" Big Hole						Per meter	3				0	1	0
30	A-14		Depth Determination (Dummy/GR/CCL/Junk Basket)				24		0	Survey (m)	500				0	18	0
31	A-15	A-15 A	Explosive Pipe Cutter	Explosive jet cutter 2 ⅞" Tubing			24		0	Cut (no.)	1				0	1	0
32		A-15 B		Explosive jet cutter 5 ½" Casing						Cut (no.)	1				0	3	0
33		A-15 C		Explosive jet cutter 9 ⅝" Casing						Cut (no.)	1				0	2	0
34	A-16	A-16 A	Severing / Colliding tool	Severing 2 ⅞" SLH 90 Drill pipe			24		0	Cut (no.)	1				0	1	0
35		A-16 B		Severing 4 ½" OD Drill pipe						Cut (no.)	1				0	1	0
36		A-16 C		Severing 5" OD Drill pipe						Cut (no.)	1				0	2	0

37		A-16 D		Severing 6 ½" OD Drill collar						Cut (no.)	1				0	1	0
38		A-16 E		Severing 8" OD Drill collar						Cut (no.)	1				0	1	0
39	A-17		Puncture services (2 ⅞" tbg - 5" drill pipe)				24		0	Puncture (no)	1				0	15	0
TOTAL CHARGES FOR LOGGING UNIT AND STANDARD SERVICES EXCL. GST (in INR)					**0**	**0**			**0**								**0**
B. SPECIAL SERVICES																				
1	S-1		Dipole Shear Sonic Imager				24		0	Survey (m)	1400				0	6	0
2	S-2		Vertical Seismic Profiling (VSP)				24		0	Level (no.)	100				0	3	0
3	S-3		Nuclear Magnetic Resonance Logging				24		0	Survey (m)	500				0	6	0
4	S-4		Microelectric Imager				24		0	Survey (m)	1000				0	6	0
5	S-5	Dynamic Formation Tester	a) Pressure test				24		0	Test (no.)	30				0	6	0
			b) Fluid sampling (Normal/PVT)							Sample (no.)	2						
			c) Pumping out time before sampling							Time (hr)	1						
			d) Real Time Fluid Analysis (LFA)							Analysis (no.)	4						
6	S-6		Pipe Conveyed Wireline Logging				24		0	Survey (m)	1400				0	3	0
TOTAL CHARGES FOR SPECIAL SERVICES EXCL. GST (in INR)					**0**	**0**			**0**								**0**

C. DATA PROCESSING SERVICES																
1	PS-1 (ii)	Dipole Shear Sonic Imager - Borehole stability analysis and prediction of safe mud weight window.	NA	NA	NA	NA	NA	Metre	500		NA		0	2	0
2	PS-1 (iii)	Dipole Shear Sonic Imager - Geo-Mechanical modelling	NA	NA	NA	NA	NA	NA	NA	NA	NA		0	2	0
3	PS-1 (iv)	Dipole Shear Sonic Imager - Sand Ingression Analysis	NA	NA	NA	NA	NA	NA	NA	NA	NA		0	2	0
4	P-Basic	Log Interpretation of standard log data (Gamma ray - Resistivity - Porosity - Density - Sonic log and/or other available data)	NA	NA	NA	NA	NA	Metre	200		NA		0	2	0
TOTAL DATA PROCESSING CHARGES EXCL. GST (in INR)																**0**
D. OTHER CHARGES																
1	TR-6	Cable Splicing Charge	NA	NA	NA	NA	NA	Splicing (no.)	1		NA	NA	0	1	0
2	TR-7	Mileage Charge - Logging Unit	NA	NA	NA	NA	NA	Per km	30		NA	NA	0	3	0
3	TR-8	Base Shifting Charge	NA	NA	NA	NA	NA	Per shift	1		NA	NA	0	2	0
4	TR-9	Interim De-Mobilisation charges	NA	NA	NA	NA	NA	Each	1		NA	NA	0	2	0
5	TR-10	Interim Re-Mobilisation charges	NA	NA	NA	NA	NA	Each	1		NA	NA	0	2	0
TOTAL OTHER CHARGES EXCL. GST (in INR)																**0**

PROFORMA-B (Appendix-5)

SUMMARY SHEET FOR WIRELINE LOGGING SERVICE

Sl. No.	Description of Services	UoM	Total amount excl. GST (in INR)
1	Total Mobilization charge for Logging Unit and Standard tools & services	Lumpsum	0
2	Total Demobilization charge for Logging Unit and Standard tools & services	Lumpsum	0
3	Total Mobilization charge for Special tools & services	Lumpsum	0
4	Total Demobilization charge for Special tools & services	Lumpsum	0
5	Total monthly rental charge for Logging Unit and Standard tools & services	Lumpsum	0
6	Total monthly rental charge for Special tools & services	Lumpsum	0
7	Total Operating charge for Standard tools & services	Lumpsum	0
8	Total Operating charge for Special tools & services	Lumpsum	0
9	Total Data Processing Fee	Lumpsum	0
10	Total Other Charges	Lumpsum	0
Total Estimated Cost of Wireline Logging Services (including all taxes and duties excluding GST) in INR			**0.00**

Annexure-4

BIO-DATA OF KEY PERSONNEL (WIRELINE LOGGING)

PHOTO	Name: Highest Educational Qualification: Total experience (in years) in Wireline Field operations: Current Designated post:

Work experience details (employment history):

Period	Position & Company	Remarks, if any

Tick the services of which you have experience of independent assignments:

Code	Service name	Tick	Code	Service name	Tick
A1-A17	All services in Standard category		S-4	Micro-electric Imager	
S-1	Dipole Shear Sonic		S-5	Dynamic Formation tester	
S-2	Vertical Seismic Profiling		S-6	Pipe Conveyed Wireline Logging	
S-3	Nuclear Magnetic Resonance				

Safety courses undertaken if any:

Year	Course Name/Description

Sign & Seal of Company representative

EXHIBIT-5: MUD LOGGING SERVICE (MLU)

A. TERMS OF REFERENCE & TECHNICAL SPECIFICATIONS OF MUD LOGGING SERVICE (MLU)

1. SCOPE OF WORK

OIL is planning to include one skid mounted Mud Logging Unit in the Bundle Services which is under preparation in Frontier Basin Project. The company should have a minimum of five (5) years' experience of providing mud logging services (as mentioned in the terms of reference /scope of work/ technical specifications) during the last 7 (seven) years as on the original bid closing date. The Mud Logging services are required for a period of two (2) years with an option to extend for one more year at the sole discretion of the Company under the same terms and conditions.

2. DETAILS OF SERVICES REQUIRED

2.1. The Bidder is required to provide the following to OIL:

2.1.1. To provide one (1) skid mounted Mud Logging Unit.

2.1.2. To provide qualified and experienced personnel to operate and maintain the Unit.

3. TECHNICAL REQUIREMENT OF MUD LOGGING UNIT:

The essential capabilities of the Mud Logging Units are as given below:

3.1. Mud Logging Unit: The unit is required to be skid mounted, fully insulated, dual air conditioned (low noise <60 dB with dehumidifier and heating elements), pressurized, equipped with safety & hazard resistant kits (electrical fire extinguisher, gas masks with oxygen cylinder etc. in adequate quantity), with wall mounted LCD or LED monitors, PC/printers/other peripherals and having sufficient working place for technical personnel of both the Bidder and company to work safely inside the unit with LCD or LED monitors and PC/printers/other peripherals should be wall mounted. The mud logging unit will be equipped with PC based online real time monitoring system and most advanced software with latest version of each software which is suitable to gather, store, process, re-process, storage, real-time transmission of various drilling, mud, gas and geological and calculated parameters from all the signals retrieved from various sensors used for on-shore operation. The unit should be installed with LEL gas detector, smoke, fire, H2S detectors, Explosive proof lamp, with an automatic shutdown system in case of loss of unit pressure or presence of any combustible gas, Local Exhaust Ventilation (LEV) or Fume Extractor and manual circuit breakers so that it is able to tackle any emergency situations. The unit should not be more than 2 (two) years old and must be latest ISO/DNV certified as on the bid closing date of this tender and transportable in oil-field truck.

Transportation (mobilization, inter-location movement between wells/ yard, demobilization) of the MLU to & fro to the well sites is the sole responsibility of the Bidder. **OIL will not provide any service during loading and unloading of MLU at well-site.**

3.2. The Bidder must be an ISO/DNV certified (ISO: 9001, 14001, 18001/45001, 27001, 29001) or equivalent company in terms of Quality, Health, Safety & Environment

management, Data security and the ISO certification must be valid during the entire contract period. OMR and all oilfield HSE standards as per Govt. of India directives need to be fulfilled. All field mounted sensors to be intrinsically safe and connected via explosion proof junction boxes meeting safety standards for operating in hazardous area as per API and OMR. All electrical wiring & fixtures, breakers, relays, plugs, earthing etc. confirm to industrial regulations & standards. (Necessary certificates to be provided).

Note: Bidder must provide written assurance along with the bid that all such sensors and junction boxes shall comply the standards defined by Director General of Mines Safety (DGMS).

3.3. The software should be able to input/ output in standard formats such as ASCII / LIS / LAS and be able to generate "composite logs" by combining the data extracted from mud logging unit with basic wire-line logs such as gamma ray, porosity, resistivity etc. The software should have the ability to generate periodic work summary reports and a standard "completion report". Hardware should be adequate/ compatible with desired products. The furniture and air-conditioners of the unit should be new. To provide suitable paper plotters (A-4 banner paper / A-4 size) for displaying various sensor signals and parameters.

3.4. Power Supply: The power to the Unit will be supplied from rig. Since availability of stabilized power supply from rig is a big constraint because of very high voltage spikes and harmonics during operation, Bidder is required to provide necessary equipment etc. to handle the spikes and harmonics. The Unit is required to be equipped with isolation transformer and online UPS system (minimum 30 minutes battery backup) having modern filter circuits (linear power supply for all the sensitive equipment connected with MLU) to eliminate spikes generated by SCR power converter and harmonics during operations. Company will not be responsible for damage to any equipment/ computer system of the MLU due to spikes and harmonics arising out of power supplied from rig. The MLU will have to be equipped with 3-phase transformer, isolation transformer etc. as it is necessary to obtain required power output and to take care of high voltage spikes. **Mud Logging Unit should have 100% adherence for:**

3.4.1. Data acquisition, FID gas chromatograph, FID Total hydrocarbon gas detection, degasser, critical sensors, hook load, stand pipe pressure, draw works, SPM, RPM, mud flow out.

3.4.2. Data storage in at least two locations in the Unit.

3.5. The Bidder has to provide suitable Mud Logging Units complete with all intrinsically safe and explosion proof sensors and detectors having digital display, audio/visual alarm & external alarms. The Mud Logging Units should be equipped to record the following parameters:

3.5.1. Rate of Penetration (ROP): (m/hr and Min/m) and Depth (m)

a) Accuracy : 0.1% (+/-0.5m)
b) Recording interval : 0.3 meter
c) Sensor : Proximity
d) Drilling break alarm : User defined

3.5.2. Travelling Block Height:

a) Accuracy : 0.1% (+/-0.5m)
b) Recording interval : 0.3 meter
c) Sensor : Proximity

3.5.3. Total Hydrocarbon Gas Detection:

a) Sensitivity : 1-100 ppm
b) Range : 0 to 100%
c) Detector : FID type
d) Sampling mode : Automatic / manual
e) Methane gas for calibration : Gas should be 99.9% pure

3.5.4. Weight on Hook and Weight on Bit:

a) Accuracy : ± 1%
b) Sensor : Hydraulic/Pressure Transducer
c) Range : 0 to 1000 Tons
Option : 50 bar Pressure sensor/ Electrical Tensiometer

3.5.5. Mud Pump Strokes (As per rig provisions) and Cementing Unit Pump strokes:

a) Accuracy : ± 1 Stroke
b) Range : 0 to 200 SPM
c) Sensor : Proximity

3.5.6. Rotary RPM:

a) Accuracy : ± 1% (+/- 1 RPM)
b) Sensor : Proximity
c) Range : 0 to 200 RPM

3.5.7. Mud Pit & Trip tank Volumes (As per provisions on rig) including Sand Traps:

a) Sensor : Ultrasonic (4-20 mA)
b) Accuracy for Mud Pits : ± 1.25bbl in a tank of 2.5m x 2m
c) Accuracy for Trip Tank : ± 0.5 bbl in a tank of 2.5m x 2m
d) Range : 0 to 700 bbl per pit

3.5.8. Flow Rate In and Out

a) Flow rate in Accuracy : ± 1% (calculated for Flow in)
b) Range : 0 to 1200 gall. /min. (calculated)
c) Flow rate out Sensor : Potentiometric, paddle type/ Ultrasonic
d) Flow rate out Accuracy : ± 1%
e) Range : 0 to 100% flow.

3.5.9. H_2S Detection (Four Channels):

a) Accuracy : ± 1 ppm
b) Detector : Solid state semiconductor/ electro-chemical sensing element
c) Range : 0 to 100 ppm
d) Calibration ampoules : 15 ppm and 60 ppm

3.5.10. CO_2 Detection:

a) Sensor : Non-Dispersive Infra-red
b) Accuracy : 5% of reading
c) Range : 0-20 (non-diluted), 100% (Diluted 5X)

3.5.11. On-line Data Acquisition:

a) The state-of-art processor, Intel Core i-7 or equivalent or higher version PC with graphics card of reputed brand (**assembled PC will not be acceptable**) with its peripherals viz. colour monitor, mouse, keyboard and colour printers for on-line data acquisition shall be capable of on-line real time processing, monitoring, printing, plotting of mud, drilling and gas parameters, storing and retrieval of processed and organized data at 0.2m, 0.5m & 1m interval of depth data and 0.1/ 1 sec interval of time data with Audio/Visual alarm settings (includes parameters value, process and hardware failure) and calibration of parameters.

b) All software for on-line data acquisition shall be licensed version and available in CGS system. These should include but not limited to the following: Software for on-line calibration of sensors and detectors, continuous signal acquisition from sensors and detectors, processing, color printing, plotting, displaying on color monitor, storing, organization and retrieval of the processed data to monitor all gas, drilling, mud, geological and calculated parameters.

c) Software should have input / output provisions in standard formats such as ASCII/ LIS / DLIS/ LAS etc.

d) Software for online D-Exponent log, Sigma log and Gas composition.

e) Installation, operation and Maintenance of necessary hardware and software for aggregation of all data acquired by the mud logging unit in REAL TIME in WITSML 1.3 standard from well site to specified Operator Locations. Bidder must provide necessary hardware (s) including reputed branded PC of Core i-7 PC or higher version and software(s) with multiple user IDs/license (Minimum three (3) user IDs/license) for remote viewing of mud logging data in real time at operator's office and any global location with scroll back facility.

3.5.12. Gas Chromatography:

a) Sensitivity : 1-100% (1-5ppm)
b) Detector : FID type
c) Sampling mode : Automatic / manual
d) Cycle time : 45 sec or below
e) Accuracy : 10ppm

f) Range : 0-100%

g) Percentage analysis of Methane, Ethane, Propane Butane (ISO and Normal) and Pentane (ISO and Normal) in automatic/manual mode.

h) Methane Gas for calibration shall be 99.9% pure.

i) Mixture gas shall be as C1=10%, C2= 1%. C3= 1%, nC4= 1%, iC4=1%, iC5=0.5% and rest being Hydrogen and Nitrogen.

3.5.13. Mud Degasser: Mud degasser system should be a **Constant Volume Degasser** type so as to maintain constant volume of mud during degassing process irrespective of fluctuation in mud level in flow line. The Mud Degasser should maintain constant flow rate with the use of variable frequency drive to supply power to the peristaltic pump. Bidder should have experience to run Constant Volume Degasser system at least 1 well in last 3 years (**Documentary evidence required**).

3.5.14. Hydrogen generator: Hydrogen carrier gas for FID equipment.

3.5.15. For back up a Gas Chromatography with explosion proof electric or pneumatic degasser motor with agitator mounted on degasser trap with facility to prevent mud and moisture from entering the gas suction line should stand by along with a backup bottle of hydrogen carrier gas or a backup hydrogen generator.

3.5.16. Rotary Torque:

a) Accuracy : ± 1%
b) Sensor : Electric
c) Range (Electric) : 0 to 1000 Amps
d) Range (Hydraulic) : As suitable

3.5.17. Pressure (Stand Pipe, Well Head, Choke & Kill Line, Cement Unit, Casing):

a) Accuracy : ± 1%
b) Sensor : Hydraulic/Pr. Transducer
c) Range : 0 to 15000 psi
d) Linearity : 0.5%
Option : 400-750 bar Pressure sensor

3.5.18. Mud Weight In and Out:

a) Mud specific gravity range : 6 to 24ppg
b) Sensor : Differential Pressure
c) Accuracy : ± 0.5%
Option: Coriolis Effect Sensor/ Pressure differential sensor

3.5.19. Mud Temperature In and Out:
a) Range : 0 to 200°C
b) Sensor : Platinum Resistance
c) Accuracy : ± 1%

3.5.20. Mud Conductivity In and Out:
a) Range : 0 to 300 m Mhos/Cm

b) Sensor : Toroidal Transformer
c) Accuracy : ± 1%
Option: CND-200 sensor

3.5.21. Off-line Data Processing:

a) A state-of-art processor Intel Core i-7 or equivalent or higher version based standalone PC (assembled PC will not be acceptable), not connected to On-line Data acquisition, having the following peripherals viz. colour monitor, mouse, keyboard, and continuous colour printers. The On-line and Off-line PC should be compatible for interchange. The Off-line PC shall be loaded with both on-line and off-line software.

b) All Off-line software shall be of licensed version and available in CGS system. These shall include but not limited to the following:

Software for Master log, Well Deviation, Well Construction, Kick Control, Gas Composition, Leak-off Test, Fracture Gradient, Pore Pressure Gradient, Hydraulics, Daily Progress Report, Word Processor, MS Access system for WCR (Well Completion Report), and Anti-virus Package shall be upgraded regularly.

3.5.22. Calcimetry (Auto-calcimeter):

Detection Range	: 0 to 100%
Sensitivity	: ± 1% or better
Balance	: As suitable

The calcimeter should have the capability of storing the data online in the computer system while the analysis is being performed. Calcimeter with complete Kit & Electronic Balance should be able to detect occurrences and percentages of Limestone & Dolomite & should be with the facility to record calcimetry plot. Calcimetry should be carried out on real time basis/regular intervals and/or as required by the well-site geologist.

3.5.23. Digital Microscopy system: Required specifications as below:

a) Zoom stereo microscope body with zoom range 4:1. Microscope shall be linked to a digital camera and computer for capturing, storing the sample images and also for transmitting the data to base. Microscope shall be capable of displaying sample image over monitor.

b) Basic magnification continuously variable between 8X and 32X (minimum) without extra objective and eyepieces.

c) Built-in binocular tube with 10X/20 fixed or focusable eyepieces that cover large area of sample 25 mm to 6 mm (minimum).

d) Resolution upto 170 Lp/mm (minimum).

e) Interpupillary distance ~ 50 – 75 mm with the working distance of about 100 mm.

f) Integrated LED illumination for reflected and transmitted light. Light quality homogeneous with variable light intensity control.

g) Microscope should be equipped with dedicated phototube, digital camera & fitting for Digital photomicrography (minimum 5 MP digital imaging) with colour bar and grain size reference for all images. Microscope should have facility to transfer image to online computer and logs.

Note: Documentary evidences in support of the microscope specifications should be enclosed with the technical bid.

3.5.24. Fluoroscopy: Jobs shall be carried out by utilizing minimum two UV tubes of different wave lengths (Short-Wave: 200 nm or 254 nm and Long Wave: 365 nm) and one white tube with guarded viewing glass. The casing shall have built-in adjustable convex lens of 5X magnification. The tube arrangement shall be detachable. Sample chamber doors on left and right side with opening size of 12 cms. X 12 cms. Each tube shall have separate on-off switch. **Bulb section to be detachable for use in scanning of cores.**

3.5.25. Shale Density: The measurement will be done by utilizing suitable balance method.

3.5.26. Flow back finger printing, for quick detection of well ballooning, volume variation should be provided.

3.5.27. Lithological Sample Description and Basic Geological Equipment:

a) Chemicals and glass-wares shall be provided for testing and Lithology Description of sample cuttings.

b) Drying Facility for sample cuttings in an oven accommodating ten sample plates of 6" diameter in its chamber shall be provided.

c) Sample and Core Collection by utilizing (i) Sieves Set, size range 0.063 – 5 mm, (ii) SS Spot Trays, (iii) SS Probes, (iv) SS Tweezers (big and small), (v) PET Bottles for packing wet sample cuttings and Plastic bottle for packing dry sample cuttings, (vi) Glass bottles (scot duran) having capacity of 30 ml, 500 ml and 1000ml (vii) stainless steel sample trays(viii) Permanent Marking Pens shall be provided. (ix) Grain size comparison chart (x) colour chart (xi) pestle mortar. (xii) Paint Marker pens.

d) Drafting equipment, Master Log sheets and Core Report sheets shall be provided.

3.5.28. Cutting Gas Detection:

a) Sensitivity : 1000 ppm
b) Detector : FID type
c) Sampling mode : Manual
d) Range : 0 to 100%

4. SAMPLE COLLECTION AND PACKAGING:

Bidder should give special attention, so that the samples are collected in sufficient quantity and packaged in the proper order as per OIL's requirement. Items required for collection of samples and packaging are specified below:

ITEM	PURPOSE
Plastic bags, Cloth	Unwashed and Washed samples
Plastic/Fiber Boxes with label	Storage, Shipment of dried samples
Bucket	Sample collection at shale shakers
Plastic bottle with label Size: Length-4-inch Diameter-1.5 inch	Packing of individual washed and dried samples
Type- Bottle should be air- tight & weatherproof	
Sieves	Standard (ASTM Sieve No. 25, 40, 80, 170, 230 and 270)
Isotubes, Stainless Steel or aluminium gas sampler	**For collection of Gas samples during drilling, as and when required (sampler is free from leakage and gas can be stored for at least 2 years without chemical or isotopic degradation. Supporting documents from Manufacturer will be required)**

Note: All the packaged samples (as above) should be delivered by the bidder to the company at Frontier Basin Office, Duliajan.

5. GEOLOGICAL SURVEILLANCE WORK:

Geological surveillance work is required to be carried out round the clock at drilling site in Mud Logging Unit as detailed below:

5.1. Examination / Analysis:

a) During Sample Analysis/Examination, MLU personnel must be concerned about the followings:

i. Perform microscopic examination of samples to identify rock types, percentages and visual characteristics using comparison chart to determine grain size, sorting, roundness and standard classification system. Additionally, the lithology description should include the followings –
ii. Colour, Fabric / Texture, Hardness, Fossil identification, Shape- Sphericity, Angularity.
iii. Grain Size.
iv. Mineral identification (calcite, clay, silica, metallic minerals etc.).
v. Visual Porosity/Permeability estimation.

b) On lithology work sheet, to write sample description for each new lithology, using standard terms and order.

c) If necessary, to perform selective Calcimetry study, Shale Density and any other analysis required by OIL.

d) The foreign materials should not be included in lithology description. Foreign material includes caving from the hole, and where identifiable, mud additives, loss circulation material, cement and pipe dope etc. If any foreign materials are observed then it should be noted on the Master Log. MLU personnel have to take care of the following hydrocarbon detection method:

i. UV fluorescence
   - Direct
   - Cut
   - Residual

ii. Intensity of any petroleum odor.
iii. Staining and Bleeding.
iv. Oil reaction in acid.
v. Wettability
vi. Gas composition

e) **Gas analysis:** Detection of gas from C1 through C5 along with volume percentage.

5.2. Detection of Down-hole Problems / Anomalies, etc.:

i. High / Abnormal Pressure Prediction: Analysis / Computation of relevant data for detection of high-pressure zones based on Dc Exponent, Shale Density, Shale Factor, Sigma log and detection of H2S, CO2 etc. with accuracy up to 10ppm and 5% respectively.
ii. Immediate detection of kick and monitoring of pipe pressure.
iii. Detection of mechanical failure of bit, drill string and pumps.
iv. Promptly inform Rig floor, Company Man & Wellsite Geologist above down-hole problems.

5.3. Determination of Geological / Drilling Parameters:

i. Determination of Shale Density (preferably with Zinc Bromide solution and Density beads), Shale Factor.
ii. Determination of kill mud weight, volume, etc.
iii. Real time plots of continuous recording of gas and FID based analysis of gas (C1-C5).
iv. Determination of volume of mud loss in case of circulation loss.
v. Determination of pressure drops in mud circuit, jetting velocity, bottom dynamic pressure and Equivalent Circulation Density.
vi. Determination of Gas Quality Control.

5.4. Plotting and Preparation of Data:

5.4.1. Mud Log:

To use an industry standard mud-log format, generate and maintain current mud-logs in the computer and prepare their plots as requested by OIL geologists in 1:240, 1:500 and 1:600 scale including the followings:

a) The mud log should display lithological information in two ways, they are – i) Percentage, in which the rocks are described as a percentage of an aggregate sample over a specified interval and ii) Interpretative, in which recovered rocks are correlated with drill rate and gas. An abbreviated lithology description is to be given in the remark column.

b) Plotting should be - both the Total Gas curve and the Component Gas curves on log scales in units of ppm. Plot on gas track should include formation gas, connection gas, trip gas and carbide lags.

c) Presentation of mud weight in and mud weight out should be in the fourth cycle of the gas track on all depth scales. Mud weights need to be recorded as a comment every 12 hours while drilling and whenever a mud weight change is made. Also, to record and plot all trip gas, bottom-up gas and connection gas.

d) To record hole problems (for example lost returns, drill pipe sticking etc.) on the log.

e) To record all casing and logging points on the Master log.

f) To record all bit trips, bit number, bit size and type on the Master log.

g) Mud additive information on the log (as Remarks) should be:

- Mud additives name
- The depth range of different additives used

h) To plot the bit penetration rate (ROP) as meter/hour and weight on bit with rate increasing towards the left edge of the log. Gamma ray (from MWD/ Wireline) plot should be increasing towards right side.

i) Also, at the end of drilling a well, Bidder will provide "**Composite Logs**" containing the mud logging data together with basic wire-line logs (gamma, resistivity, porosity etc.). The Bidder will also compute and plot the drilling "Dc" Exponent, Equivalent Circulation Density (ECD) calculation.

5.4.2. Gas Ratio Log: The log should be prepared in 1:240, 1:500 and 1:600 scale with a summary of interpretation displaying the following ratios:

- Wetness Ratio (Wh) = (C2+C3+C4+C5) / (Cl+C2+C3+C4+C5)
- Balance Ratio (Bh) = (C1+C2) / (C3+C4+C5)
- Character Ratio (Ch) = (C4+C5) / C3

5.4.3. Lag times:

- Lag time is to be recorded every shift or 500 meter while drilling or whenever required by using Mud Tracer. (Preferentially butane can also be used as tracer as it will show its presence on chromatograph mud log).

- To Indicate time of bottom-up and method of determining that time on the Master Log (to include total number of strokes and time in minutes).

5.4.4. Other Requirements:

a) Geo-pressure log: To prepare in 1:240, 1:500 and 1:600 scale.

b) Deviation plot: In case of a deviated well (both J & S Bend), deviated section of the hole to be plotted (plan and vertical section) after computation of the data.

c) Hole profile and drilling progress chart: To be plotted on regular basis / daily.

d) Plotted data to be routinely (as advised) handed over/forwarded to Company representative.

e) Daily progress reports (including hydraulic report) to be submitted to Company's geologist every morning or as advised by the geologist.

f) An updated PDF file of the Mud log, Pressure log, Drilling log, Gas log and Time log are to be given to Company's well-site geologist as well as send to Company's operational office daily. Print out of Mud logs should be furnished as & when required by the Company Geologist at well-site and operational office.

5.4.5. Drilling log: The log should be prepared with a summary of important drilling events in 1:240, 1:500 and 1:600 scale.

5.4.6. Core Log: The log to be prepared in 1:200 scales during conventional coring.

5.5. Digital Data Storage: To store acquired, measured and observed data digitally Bidder has to provide the digital data on storage drive in LAS or ASCII format to Oil India Ltd, immediately after completion of the well. All the time & depth-based data to be stored and provided to the Company at the completion of well in digital data storage drives.

6. FINAL WELL REPORTS: One original plus four copies of Well History or Well Completion Report must be submitted to OIL in hard copies and also all the data to be submitted in digital data storage drives within 15 (fifteen) days from completion of rig down of the Unit.

7. ACCESSORIES: The Bidder shall make available the following accessories in the Mud Logging Unit:

7.1. An explosion proof purged LCD or LED monitor with real time display should be installed at the Rig floor along with provision for an intrinsically safe audio alarm (Details in Sl. No. 9.4 below).

7.2. A Suitable LCD or LED monitor (minimum 42") to display various real time sensor signals, parameters and also to represent graphical display of parameters with time to time comments in the mud logging unit.

7.3. Three suitable LCD or LED monitors (minimum 17") in MLU for Data Engineer, Mud Logger & Sample Catcher.

7.4. CD/DVD writer with necessary software to back up all recoded time-based mud logging data for the entire well operations.

7.5. One online repeater LCD or LED monitor (minimum 17") to be installed in each of Company Supervisor's office, Geologist's office, mud engineer's office or at mud pit area.

7.6. Back-up facility of 24 hours online graphical screen saving with comments.

7.7. It is mandatory to put meaningful comments in the graphical screen(s) (with clear visibility) normally every 10 minutes interval. Moreover, it is also

necessary to display comments in the remote display monitors during MLU operations.

7.8. Sufficient number of tools, and spare sensors (minimum 2 sets) should be available at MLU for smooth day to day un-interrupted operations.

7.9. UPS for backup power for the data processing / acquisition systems. UPS capable of supplying at-least 30 minutes of electrical power to the equipment within the unit in the event of a power failure.

7.10. Intercoms with minimum 6 (six) terminals connecting derrick floor, mud attendant, Company representative office, Geologist's office/ bunkhouse, mud engineer's office and MLU.

7.11. Fire Extinguishers, One (1) Eye Wash Station, First Aid Kit and Safety Harness (Full-Body Type).

7.12. Ditch Magnet of 1-meter length.

7.13. All other supplies as required to complete the SERVICES, including, but not limited to bactericide for samples intended for geochemistry and paleontological analysis, aluminium foil, plastic cling wrap, wax, packing tape, indelible maker pens, etc.

8. BACK-UP EQUIPMENT AND MATERIALS: Bidder is responsible for supplying all back-up equipment, materials in order to provide smooth and uninterrupted mud logging services to Oil India Ltd. **Minimum one sets of back up sensor (but two sets of vital sensors viz. Draw-work, pumps, pressure, pit-level), gas panel and paper, printer ink (three sets) with very essential materials must be available at MLU. Faulty sensors, if any, shall not be considered as back-up sensor.**

9. **OTHER SERVICES:** Bidder's personnel will be responsible for supervision and co-ordination for the above and also for the analysis and report of the followings:

9.1. Labelling Cuttings and Fluid Samples:

- To mark directly on can or bag in large legible letters in English. Do not use attachable labels. Use a waterproof marking pen on bags. To use indelible ink on cans and gas cylinders.

- Labels should state the well name, sample depth in meters and sample type (i.e. washed or wet cuttings, SWC or whole core).

9.2. Daily Summary of vital Drilling Parameters

- Monitor of pit level and hole volumes. Provide summary detailing estimation of mud losses and gains.

9.3. Conventional and Side-Wall Core samples: MLU personnel need to assist the well-site geologist or other OIL representatives during coring operations. Mud logger's duty during coring job is as under:

- Collect circulated samples during drilling operation.
- Monitor drilling parameters for signs of problems down-hole.

When core is brought to surface, the Mud-logger has to assist in the laying out of the core (core catching) on the drill floor, transfer from drill floor to processing area, and also to assist during initial analysis and packaging prior to transportation. Wire-line operator shall provide packaging of side-wall cores. Mud logger shall aid in the description and handling of side-wall cores as directed by the OIL's well site engineer and geologist.

9.4. Real Time Monitors: 3 nos. of remote display LED screen of size not less than 55'' capable of displaying graphic and alpha numerical real time data from Mud Logging Units shall be placed in the OIL's Frontier Basin Project office, Duliajan. **The real time monitoring system should also include necessary software for manual playback/ scroll back for viewing earlier events.** The Real Time Monitors system should include:

- Remote, secure, real-time monitoring of time and depth-based data from any global location.
- Data viewable through any web browser / web enabled device that include PC, laptop, smart phone and tablets (apps based).
- Support and visualization for mud logging & drilling data.
- Number of access license: 3
- Facility for streaming in of 3rd party data like MWD, LWD, or any other data stream in WITS, WITSML from the rig site.

Note: Clientless remote desktop access in not acceptable.

Bidder will arrange necessary communication service viz. internet connection from drilling location to OIL's office at Duliajan. ***OIL is not liable to provide internet / VSAT facility****. Bidder has to ascertain the integrity of data in case of intermittent failure of communication link (i.e. data sync during communication failure).*

Bidder should have experience to install and run successfully Real Time monitoring system in last 1 year (Documentary evidence required).

Rig Floor Monitor: The Rig Floor monitor should have flat-screen (LCD or LED) monitor and shall be housed in a stainless-steel enclosure (Purge system) to be operated in Class I Division I hazardous areas – virtually installable in all area where a data display may be necessary. Continuous airflow at modest rate shall be necessary to maintain positive pressure. Installation can be as far as 100 meters away from video source without boosting signal. Signal boosters in classified areas may be required.

9.5. OPERATION: The Mud Logging Units will need to be operated round the clock at drilling site for uninterrupted recording of various drilling events/ parameters, lag time and mud parameters continuously.

Bidder shall maintain all equipment in operating condition and shall supply all relevant certification requested by the OIL. Any premature replacement and repeated failure and if the incident / accident reporting system does not substantiate it then the Company/ OIL reserves the right to deduct such incidental spread cost from the invoice of the Bidder.

10. Two (2) QFT-2 apparatus (Quantitative Fluorescence Technique is a patented technique) to be used commonly for all the units for the analysis of drill cuttings by measuring fluorescence, to give quantitative values for the oil content in the cuttings. The advice for the analysis will be given as and when required by the OIL/ user department/ OIL representative.

11. BIDDER'S PERSONNEL:

11.1. The Bidder shall provide well qualified and competent crew to operate and maintain MLU efficiently round the clock on board the rig to perform the work.

11.2. **List of Personnel:** Bidder shall deploy the following personnel to ensure smooth running of operations:

Sl. No.	Description	Nos.
1	Data Engineer	01 per unit (Stationed at Well site)
2	Mud Logger during operation	2 per unit (1 day + 1 night)
3	Sample Catcher during operation	2 per unit (1 day + 1 night)

Note: All The above personnel need to be properly trained in HSE and other safety requirements involving in onshore Drilling Rigs.

11.3. DATA ENGINEER:

a) Qualification: M.Tech/ M.Sc. in Applied Geology / Geology / Geosciences or Graduate in Engineering.

b) Experience:

- Should have work experience for minimum five (5) years, of which at least two (2) years should be as a TDC/ Data Engineer.
- Must have good geological & sound technical knowledge of the MLU, sensors & software for smooth operation.
- Should be responsible to calculate/ detect pore pressure as and when required.
- Detail bio-data should be provided as per Annexure-5 (to be provided separately
- *Data Engineer should be stationed at well site during critical operation apart from his normal duty hours.*

c) Certification/License/ Health:

- Should produce safety course completion certificates as applicable to Mines Act, 1952, OISD (Oil Industry Safety Directorate), India.
- Must have sound health to work in adverse weather condition in drilling oil/ gas well-site.

11.4. MUD LOGGER (ML):

a) Qualification: M.Tech./ M.Sc. in Applied Geology/ Geology/ Geosciences

b) Experience:

- Should have work experience for minimum three (3) years as a Mud Logger.
- Must have good geological & technical knowledge for smooth operation of MLU.
- Should be responsible to calculate/detect pore pressure as and when required in absence of TDC/ Data Engineer at well site.
- Detail bio-data should be provided as per Annexure-5 (to be provided separately)

c) Certification/License/ Health:

- Should produce safety course completion certificates as per applicable to Mines Act, 1952, OISD (Oil Industry Safety Directorate), India.
- ii) Must have sound health to work in adverse weather condition in drilling oil/gas wellsite.

11.5. SAMPLE CATCHER:

a) Qualification: 10+2 standard or equivalent.

b) Experience: Should be familiar with his specified jobs. Earlier experience as sample Catcher will be preferred.

c) Certification/License/ Health:

- As applicable to Mines Act, 1952, OISD (Oil Industry Safety Directorate), India.
- Should be of sound health to travel and work.

11.6. The Bidder will provide a list of personnel with detailed resume as per format enclosed vide "PROFORMA as enclosed (to be provided separately), along with their Techno-commercial Bid and obtain approval from the Company before actual deployment at Rig site. Company reserves the right to accept or reject the Bidder's proposed personnel. Bidder will assign one set of mud logging crew as above for operations on the rig and will follow on/off pattern as applicable.

Note: The company/ OIL may arrange a interactive session with the personnel to be deployed in the MLU before implementation of the contract. Company reserves the right to accept or reject the personnel to be deployed in the MLU without any further clarification, if found unsatisfactory.

12. MAINTENANCE OF MLU:

The complete Mud Logging Unit all its Sensors & accessories are to be maintained in proper working condition by Bidder throughout the period of contract, including

extension, if any, to deliver uninterrupted services. The MLU crew to be deployed by the Bidder must be capable, competent and experienced enough to carry out routine maintenance of the Unit to provide round the clock trouble free services. Any breakdown, defect, malfunction, etc. of any item/equipment will be attended/replaced immediately as may be required. For this purpose, necessary spares and consumables to carry out on site repair/maintenance will need to be kept readily available at the Units so that the drilling, mud and other related parameters are available online/on continuous basis.

13. DGMS APPROVAL CERTIFICATE:

Bidder must ensure that all electronic / electrical equipment to be used in the well-sites under hazardous zone 1 & 2 shall satisfy the clauses of Indian Oil Mines Regulation Act (OMR), 2017.

14. HEALTH SAFETY AND ENVIRONMENT:

Bidder shall submit the safety manual and operating procedure manual well in advance to the Company/ OIL for review and comments, if any. The Bidder shall also submit a tool preventive maintenance system to exhibit that a pro-active/ predictive system can be in place to avoid unforeseen down-time and valid ISO/ DNV certificates as mentioned in Para 3.2 above. Bidder has to strictly follow all the HSE rules and regulation and follow safety rules practiced in a well-site and provide safety gears to their personnel. MLU should be fitted with safety equipment as per international practice. Bidder also needs to submit their Corporate HSE policy, highlighting the salient features to be followed in the well-sites. Safety gears viz. Coverall, Shoes, Helmets, etc. should be replaced yearly.

15. POLLUTION CONTROL:

Bidder undertakes that substances or rubbish in any form originating from Bidder's equipment shall not be dumped or discharged at, or around the well location. However, in the event of such dumping or discharge by Bidder, Bidder shall immediately assume all responsibility for the cost of the removal of items, substances or rubbish so dumped or discharged and for any resulting pollution or contamination in any form, in the well location and the surrounding area.

16. INSPECTION AND CERTIFICATES:

16.1. Company reserves the right to inspect the complete Mud Logging Unit, Sensors and other related accessories at Bidder's Works/ workshop or any other suitable place (to be arranged by the Bidder) before its mobilization to the first drilling location under this contract to ascertain & certify its suitability and completeness. For this purpose, Bidder will notify Company regarding its readiness for mobilization at least fifteen days in advance, so that Company can depute its competent personnel for this pre-dispatch inspection in time. All expenses of Company's personnel towards the pre- dispatch inspection will be borne by Company. However, Bidder will arrange for testing facilities etc. to the satisfaction of Company personnel. Any complain/rectification/ replacement etc. as may be advised during such inspection must be set right before mobilizing the Unit to site. Company will not assume any responsibility in this regard whatsoever, leading to delay in completion of

mobilization. Therefore, it is the prerogative of the Bidder to satisfy themselves and plan mobilization schedule before offering the Unit for pre-dispatch inspection by Company representatives.

16.2. Bidder shall acknowledge that Company may audit tools and equipment used by the Bidder at any time during the Contract period. Bidder's personnel at well site will ensure free access for Company's inspectors/site geologists to the MLU at any time during the currency of the contract and will co-operate in carrying out random testing of the tools used for its operation. Upon successful commissioning of MLU at the designated drilling locations, Company will provide **MLU commissioning certificates** to the Bidder. Additionally, the Bidder must generate a Monthly working certificate of MLU operations as per format to be provided by OIL and obtain signature thereon of the Company's well site Geologist. The MLU Commissioning Certificate and Monthly working certificates as aforesaid must be submitted along with all monthly running invoices/ bills of Bidder for release of payment by Company.

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B. SCHEDULE OF RATES (MUD LOGGING SERVICE)

1.0 MOBILIZATION CHARGES (LUMP SUM)

1.1 This lump sum includes the cost of transportation of 1(one) No. of Mud Logging Units including crew to appointed site. This charge shall be payable after successful commissioning of the aforesaid Mud Logging Units at the drilling site as specified by OIL after mobilization. The mobilization will be treated as complete after keeping the MLU under observation on working condition for at least 72 hrs and certified by Company's representative that the Unit is ready to undertake the operation/services.

1.2 Contractor shall raise invoice for the lump sum mobilization charges when the MLU & equipment(s) and personnel are ready at site and after successful commissioning of the Mud logging Unit.

2.0 OPERATING DAY-RATE

2.1 This charge covers cost on day rate basis for providing the Mud Logging Unit services to OIL during operation (Drilling) at site round the clock when full crew is present including deployment charge(s) of MLU and equipment. The operating day rate will also include the cost of maintenance, spares, charges against personnel and cost of all consumable that are required to operate the MLU smoothly and efficiently. These charges are payable from the time the mobilization is completed in all respect at the first drilling site and payable during the Mud Logging Unit is in operation. It is considered that the Unit is in operation only when the online data is generated. In other words, operating day rate is payable as long as the Mud Logging Unit generates the online data.

2.2 For Mud logging Unit Operating Day-Rate charges, Contractor shall raise invoices at the end of each calendar month. Contractor must submit the Performance Report of the sensors duly certified by Company Representative along with the invoice.

3.0 PARTIAL STAND-BY DAY-RATE

3.1 This rate shall be 70% of the Operating Day-Rate and shall be payable during partial stand-by period. The partial stand-by period means the period when mud logging unit is not fully in operation and without complete crew present in the well-site during operations like long fishing job, wire-line logging operation, cementing job, Casing running-in, long completion job, etc.

3.2 For Mud logging unit partial stand-by charges, Contractor shall raise invoices at the end of each calendar month along with Operating Charges.

4.0 FULL STAND-BY DAY-RATE

4.1 This rate shall be 60% of the Operating Day Rate charge and shall be payable during full stand-by period. The full stand-by period means the period when the equipment is not in operation and without any crew.

4.2 **This rate shall also be payable during Inter-Location Movement (ILM) of MLU**, i.e. period from rig-down in one location to rig-up in the next location. The Contractor shall be allowed to complete the ILM of their belongings within twenty (20) days from the date of ILM notice issued by the Company upto an inter-location distance of thirty (30) KM. In case the distance between two locations exceeds 30

KM, five (5) extra days will be allowed to complete inter-location movement for each 30 KM or part thereof beyond the initial thirty KM.

4.3 For Mud logging unit full stand-by charges, Contractor shall raise invoices at the end of each calendar month along with Operating Charge.

5.0 NO CHARGE PERIOD

5.1 No charges are payable during the period the Mud Logging Unit is not in working condition for non-availability of crew, spares or consumables or for any other reason attributable to the Contractor.

6.0 DEMOBILIZATION CHARGES

6.1 This lump sum charge shall cover demobilization of the Mud Logging Unit from the last drilling site at the end of the Contract period.

7.0 FORCE MAJEURE RATE:

7.1 Force majeure conditions are defined in Clause 31.0 of Section-I, "General Terms and Conditions" of this Contract.

7.2 Contractor shall be paid 50% of Full Standby charges for the service being provided by the Contractor at the time of occurrence of 'force majeure' condition irrespective of the operation being carried out. This will be considered as FORCE MAJEURE RATE under all conditions.

7.3 The Force Majeure Rate shall be payable during the first 15 (fifteen) days period of force majeure situation in case of all operations. No payment shall apply after expiry of 15 (fifteen) days force majeure period, unless otherwise agreed to.

8.0 INTERIM DEMOBILIZATION/RE-MOBILIZATION CHARGES: (LUMP SUM)

8.1 All equipment along with personnel shall be de-mobilized from the wellsite on interim basis by the Contractor within 03 (three) days from the date of issuance of interim demobilization notice. In such situation, Contractor shall be paid one-time Interim De-mobilization and Interim Re-mobilization charges in lump sum. However, no other charges shall be payable after interim de-mobilization notice has been issued until the contractor on receipt of the notice from the company for remobilization, and re-mobilizes all its equipment, personnel, etc. to the wellsite, as certified by company representative for resuming operations.

8.2 Contractor shall re-mobilize required personnel including laboratory equipment, tools, and accessories for the next well within 12 (twelve) days from the date of interim re-mobilization notice.

9.0 GENERAL NOTES FOR MUD LOGGING SERVICE:

1. Above rates will be applicable for original 1(one) no. of MLU Unit only.

2. Operating Day-Rate charges include all consumables which are required to run unit smoothly and in effective way e.g. spares of all sensors/ equipment of MLU, sample bags, printer ink, paper, continuous printing papers, dusters, marker pens, colour pencils, oils - used in sensors, moderate modification required to make in sensors settings, O-rings, degasser motors, electrical components, chemicals, hand tools,

bulbs, chemical equipment (dishes, sample trays, test tubes, stands, holders etc.), filters, plastic tubes, coils, heater, component of unit air-conditions, gas detectors etc. and also Charges against Personnel engaged by the Contractor.

3. Number of days, against Operating Day-Rate Charges is for estimation purposes only. During operation, number of days may vary accordingly (e.g. Operating Day/ Stand-by Day). Hence, charges against Unit will be paid on actual basis.

4. Company shall not be held responsible for any damage of the unit / equipment during inter-location movement

5. The estimated total days of operation of the Mud Logging Unit in one year will be three hundred sixty-five (365) days (will be considered for evaluation of bids only)

6. The rates/charges indicated above shall include all applicable taxes, insurance, but excluding customs duty and service tax which shall be on OIL's accounts

7. Charges toward operational, standby, consumable shall be processed on monthly basis

8. A full day rate will be considered starting from 5 AM to next 24 hours

9. Total quoted Mobilization charges shall not exceed 1% of the total Contract cost value for 3(three) Years operation. In case the mobilization charges exceed 1% of the estimated contract value, the excess amount shall be released after completion of the contract and however, the same shall not accrue any interest

10. De-mobilization Charge should not be less than 1% of total contract cost for 03 years. If same is less than 1% of total contract cost for 03 years then for payment purpose De-mobilization Charge will be considered as 1% of total contract cost for 03 years

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PROFORMA-A5

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable) TO BE IMPORTED INCONNECTION WITH EXECUTION OF THE CONTRACT SHOWING CIF VALUE for MUD LOGGING SERVICE (MLU)

Srl #	Item Descrip-tion	Qty /Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+H	J	K	L

1) **The items which are not of consumable in nature and required to be re-exported outside India after completion of the Contract should be indicated as "YES" in column "J".**

2) **The items, which are of consumable in nature should be indicated as "NO" in column "J".**

3) **For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".**

Authorized Person's Signature: _____

Name: _____

Seal of the Bidder:

PROFORMA B (Appendix-7)

FORMAT FOR COST OF MUD LOGGING UNIT SERVICES						
Sl No.	**Description of Sevices**	**UoM**	**Quantity**	**SAC/HSN Code**	**Unit Rate (in INR)**	**Total Amount excluding GST (in INR)**
1	Mobilisation Charges for 01 (One) No. Mud Logging unit	Lumpsum	1			-
2	Operating Day rate for 01 (One) No. Mud Logging unit	Day	675			-
3	Interim De-mob charges for 01 (One) No. Mud Logging unit	Lumpsum	2			-
4	Interim Re-mob charges for 01 (One) No. Mud Logging unit	Lumpsum	2			-
6	De-mobilisation Charges for 01 (One) No. Mud Logging unit	Lumpsum	1			-
Total estimated cost of Mud Logging Unit Services (including all taxes and duties excluding GST) in INR						**-**

Annexure-5

BIO-DATA FORMAT (MLU SERVICE PERSONNEL)

AFFIX PASSPORT SIZE PHOTOGRAPH

1. NAME:
2. PRESENT ADDRESS:
3. PERMANENT ADDRESS:
4. FATHER'S NAME:
5. NATIONALITY:
6. PASSPORT NO. AND VALIDITY: (IN CASE OF EXPATRIATE)
7. DESIGNATED POST:
8. DATE OF BIRTH:
9. DETAILS OF PROFESSIONAL CERTIFICATE, LICENSE, ETC. WITH VALIDITY:

Educational Qualification:

Sl. No.	Course completed	Passed out School/ College/ University	Year of Passing
01.			
02.			
03.			

Job Experience in Reverse Order:

Duration of Service		Post/Position Held	Name of the Employer	Place of Work
From	To			

N.B: If required, more rows may be added.

Relevant Work Experience in MLU during last five years:

Name of the Clients worked for	Duration of Work (from-to)	Nature of jobs done with MLU	Details of Wells worked in		
			Type of well (gas/oil)	Total Depth of well (MD)	Location/Area

N.B: If required, more rows may be added.

NOTE:

1. *Attach copies of documents for Identity Proof, Date of Birth Proof, Passport (for Expatriate) Proof of qualification (professional), Professional certificate/license etc.*
2. *Attach Medical Fitness Certificate in Form 'O' (as per Mines Act 1952).*
3. *Person should not be more than 60 years of age.*
4. *In case of replacement of personnel, the replacement personnel must have the requisite qualification and experience as per the Scope of Work and shall submit their credentials along with their recent photographs & documents to Company for approval.*

Signature and seal of the Bidder:

Name of Bidder:

EXHIBIT-6: LINER HANGER SERVICE (CALL OUT)

A. TERMS OF REFERENCE & TECHNICAL SPECIFICATIONS OF LINER HANGER SERVICE (CALL OUT)

The Contractor shall provide the Liner Hanger System and Services as per the requirement of well on **CALL OUT BASIS** by providing their Engineers, Tools/ Equipment, Technology, consumables, etc. as detailed below:

I. Liner Hanger Systems (7″ & 5″) with Packer & Associated accessories (consumables) are to be provided **on actual consumption basis**. 7″ and 5″ liners have been provisioned as contingency plan.

i. Supply of Liner Hanger & Packer System include Liner Hanger, Top Packer, Drill Pipe Wiper Plugs/ Darts, Liner Wiper Plug, landing collar with Ball Catcher / Float Collar with Ball Deflector, Reamer Shoe with dual Float valves, Setting Balls and any other consumable accessories/ items that may be required for successful deployment of Liner Hanger & packer and Liner cementation. **In addition to the above, Drill pipe cementing head (WP not less than 5000 PSI) with NC50 pin connection & suitable for use on 19.5ppf x 5″ OD drill pipes is also to be provided by the service provider**

ii. The Liner Hanger & Packer System shall be supplied and paid on actual consumption basis as per firm quote (Schedule of Rate). **Minimum two sets (1 + 1 back-up) of each size (7″ & 5″) are to be mobilized against requirement of one set each for the one well campaign.**

iii. 7″ & 5″ Liner Hanger and Packer system are to be mobilized **within 15 days** of call out notice.

II. Services with Tools/ Equipment are to be mobilized **on callout basis** for Lowering & Setting of the Liner Hangers, successful cementation of liners, setting of Packers and Retrieval of Running-Setting tools as described further. The Tools/Equipment & Accessories for the services shall be taken back by the bidder/ contractor after successful execution of respective jobs at their own arrangement, cost and responsibility.

i. All the rental tools, equipment, accessories required for the services of lowering, setting, cementing of Liner hanger & packer systems shall be mobilized within **15 days** of call out notice.

ii. Under services, contractor shall provide services of Running-Setting tools, Cementing Manifolds, Handling Nipple/ Joint, Special purpose/ Job specific tools if any, Spares required (if any) and also services of Liner Hanger Service/ Field Engineer for each (7″ & 5″) Liner Hanger, Liner Tie-Back& Packer job.

iii. The Contractor will provide all the consumables and rental tools/equipment/ accessories required for successful lowering of the Liner String to setting depth, Setting of Hanger & Packer, Setting of Tie-back assembly if required, Cementing of Liner & Tie-back string and Retrieval of Running-Setting tools.

iv. The scope of supply does not include the equipment/materials for cement slurry preparation & pumping, Liner handling tools/equipment and Liner-Centralizers & Scratchers.

v. Service Day Rate (inclusive of all services rendered and rental of tools/equipment and accessories) will be paid for the entire Service package of Tools, Equipment & accessories from the day the same is mobilized on the rig till demobilized from the rig.

III. To provide services of Liner Hanger Engineer for running, setting & testing of Liner Hanger(s) and if required, tie-back string(s) also **on callout basis**.

i. Liner Hanger Engineer shall be mobilized along with the equipment/tools as per **call out notice**. However, it is the responsibility of the Contractor to plan and provide Liner Hanger Service Engineers in timely manner as per requirement of the wells, in coordination with Company.

ii. Liner Hanger engineer shall be paid Day Rate for his required period of stay on the rig during the Liner Hanger job only. Separate calls will be made for 7″ and 5″ Liner Hanger jobs.

iii. If the Service Engineer does not report on the scheduled day, Rental for all the Services will be on Zero rate if it results in delay of operation on rig or rig shutdown, till Liner hanger is made ready to be lowered.

1.0 DETAILS OF SERVICES TO BE PROVIDED BY THE CONTRACTOR:

The contractor is required to provide services described herein but not limited to following:

a. To provide expert services with Tools/Equipment/Accessories and Consumables for Running 7″ liner with hanger assembly in 8½″ open hole through 9⅝″ casing. Setting of Hanger & packer inside 9⅝″ x 47 ppf x N-80 casing.

Scope of Supply shall include but not be limited to Supply of Liner Hanger with Packer and associated accessories (including floating/ guiding equipment except liner-centralizers, scratchers) that are consumable for 7″ liner hanger & packer.

- Tubular & Liner Hanger Details

Details of 9⅝″ casing in which 7″ liner is to be run and set:	**7″ Liner Hanger fully compatible and having minimum physical characteristics & performance properties in compliance with the 7″ Liner specified below.**
Pipe Properties: Nominal O.D: 9⅝″ Weight: 47 ppf Grade: P110/N-80 Thread Type: BTC	**Liner/ Pipe Properties**: Nominal O.D: 7.00″ Weight: 29.00 ppf Grade: P110 Thread Type: BTC (special clearance)

b. To provide expert services with Tools/Equipment/Accessories and Consumables for **Running 5″ Contingency liner (if Called for)** with hanger assembly in 6″ open hole through 7″ casing. Setting of Hanger & packer inside 7″ x 29 ppf x P-110 x BTC (special clearance) casing.

Scope of Supply shall include but not be limited to Supply of Liner Hanger with Packer and associated accessories (including floating/ guiding equipment except liner-centralizers, scratchers) that are consumable for 5″ liner hanger & packer.

- Tubular & Liner Hanger Details

Details of 7″ casing/ liner in which 5″ liner is to be run and set:	**5″ Liner Hanger fully compatible and having minimum physical characteristics & performance properties in compliance with the 5″ Liner specified below.**
Liner/ Pipe Properties: Nominal O.D: 7.00″ Weight: 29.00 ppf Grade: P110 Thread Type: BTC (special clearance)	**Liner Properties**: Nominal O.D: 5″ Weight: 15 ppf Grade: P110 Thread Type: FL4S

1.1 The system shall comprise of but not be limited to the following items:

I. Liner Hangers shall be of the hydraulically set type, Mechanical/ Hydraulic release with Mechanical/ Hydraulic set Top Packer. No Weld part & only solid body design.

II. Liner Hangers shall be supplied with a complete set of Tools/ equipment & accessories. Tools/ equipment & accessories for Running and setting of Liner Hanger with Packer, Cementing of the Liner string and Retrieval of Running-Setting tool shall be provided on rental basis.

III. The Liner Hanger & Packer System tool shall have RPOB (Retrievable Pack off Bushing) which is to be retrieved simultaneously with retrieval of the Running/ Setting tool so that drilling out of Pack off bushing is eliminated.

IV. Reamer shoes with dual Float valves, Landing Collar with Ball Catcher / Float Collar with Ball Deflector and any other item/ accessories required with the Liner string for cementing process. These shall be drillable both by PDC bit as well as conventional TCR bits.

V. Working Pressure of Float equipment shall be 10000 psi minimum and meet API 10 specifications

VI. Both the Plugs shall be rotationally locked upon latching into the Landing Collar and drillable both by PDC bit as well as conventional TCR bits.

VII. All Crossovers from running/setting tool to drill pipe and drill pipe to Cementing head/manifold.

VIII. Drill pipe cementing head (WP not less than 5000 PSI) with NC50 pin connection & suitable for use on 19.5ppf x 5″ OD drill pipes is also to be provided by the service provider

IX. Other accessories specific to contractors proposed equipment

X. All Running, Setting and Releasing tools necessary to install the Liner Hanger & Packer system and to retrieve Running-Setting tools/system.

XI. A Cement Manifold(s) (top drive compatible, 10K psi rating) including flag sub and ball dropping sub with Flag capable of simultaneous cementation and hoisting operations.

XII. In case tie back receptacle is an integral part of the liner hanger system, the length of the TBR should be 10 ft. (minimum).

NOTE:

(i) **Bidders are required to provide Technical literature with schematic diagram of major Tools/Equipment, technical specification indicating Make, Model & Type of each & every accessory of Liner Hanger assembly including Setting Tool, Cementing Manifold etc.**

(ii) **All consumable items must be brand new & un-used.**

2.0 CONTRACTOR'S RESPONSIBILITIES:

i. To maintain an up to date inventory of all tools and equipment held on the well site and to submit a report prior to and after running the liner hanger in the well.

ii. Pre-Planning of the job is critical and OIL will work closely with Contractor to supply data such as drilling survey, mud data etc. to allow Contractor to properly set up tools for deployment. The bidder will provide the detail program

- running in procedure for liner hanger along with drawing(s) & sizes for complete liner hanger assembly.

iii. To assemble Liner Setting tool with all accessories such as: Setting Collar with TBR / Liner Hanger / RPOB / Slick Joint etc. on ground in coordination with Company Representative & Tool Pusher.

iv. To service RPOB and dress with a brand-new set of inner & outer seal before inserting inside setting collar.

v. To make up Shoe, Float Collar and Landing Collar with Liner joint on ground (using thread lock compound).

vi. To monitor Liner running-in operation performed by Rig Crew in coordination with Company Representative & Tool Pusher.

vii. To monitor the makeup torque while tightening shoe / float collar / landing collar /liner hanger etc.

viii. To monitor casing fill–up volume & Hole fill up volume.

ix. To supervise ″making-up″ Liner setting Tool complete with all accessories with liner string on Drill floor.

x. To design the configuration of drill pipe string for lowering Liner as well as setting slips in coordination with Company Representative & Tool Pusher.

xi. To monitor hook load (Liner string & drill pipe string) during running-in.

xii. To monitor drifting of all drill pipe before lowering into hole.

xiii. To monitor the tally of drill pipe string and Liner string during running-in.

xiv. To monitor circulating pressure as and when it is decided to establish circulation during running in liner.

xv. To arrange for and set liner hanger hydraulically with liner shoe as close as possible to drilled depth.

xvi. To re-establish circulation after setting hanger and to supervise liner cementation job. (The cementation job will be carried by the Contractor through his Cementing Services under this contract).

xvii. To release Liner string from setting tool.

xviii. To monitor reverse/forward circulation (for pumping out any excess cement after the drill pipe string is pulled out above receptacle). The reverse circulation depth will be just above the Tie Back Receptacle (TBR).

xix. A positive liner test shall be completed prior to tools being POOH. The test pressure will be 2000-2500 psi or as per pressure requirement of the Well.

xx. To monitor laying down Heavy Duty Cementing manifold from drill floor after completion of cementing operation.

xxi. To supervise laying down setting tool with Slick Joint, once it is pulled out of hole.

xxii. To supervise running-in of tie-back string. Match-on the tie-back string & cementation of same.

xxiii. To perform a detailed post job evaluation after each liner running operation. This should be submitted to the Company Representative within 24 hours of completion of the job.

xxiv. To maintain and service all equipment in order to avoid downtime.

xxv. Any other jobs generally connected with such services or bringing-in a well to health shall be provided by the Contractor when called upon to do so including supply of extra items/equipment (on mutually agreed terms & conditions).

xxvi. To perform a detailed recap (be submitted to OIL within 15 days at the end of operations) of the liner running operation at the end of the well. The recap should include as a minimum the following:

- An evaluation of each operation performed on the well including recommendations to improve future performance
- A detailed review of any problems encountered including any recommendations to avoid reoccurrence

Note:

A. In order to provide the above services, the Contractor shall mobilize their tools/equipment, consumables, personnel/experts. The competent personnel/experts will be required to liaise with Company Representative on regular basis for collecting relevant data as the well operation progresses. The Contractor's personnel to be deployed at well site shall be required to plan and execute above activities as per instructions given by the Company Representative from time to time.

B. Before Commencement of liner jobs at location, the Contractor's personnel should liaise with Company Representative and representatives of other Contractors working for Company at Rig site to understand the rig facility and positions of various tools/equipment, so that they can make proper and adequate arrangements/ connections etc. for smooth job execution.

C. The Liner Hanger and Packer must be lowered and set in one trip (Drill string will be used to run, set & cement the Liner string).

3.0 SUPPLY OF CONSUMABLES:

List of Consumables: Following is the tentative list of consumables to be delivered by the Contractor at respective well site. The Company shall reimburse the cost of consumables at actual to the Contractor.

Liner Hanger category	**Consumables to supply Quantity required - minimum 2 set on rig. One as mandatory requirement and one as contingency / backup.**
7″ Liner Hanger & Packer System for 7″, 29 ppf, P-110 Liner String with BTC connection to be set inside 9⅝″ x 47 ppf, P-110 casing	7″ x 9⅝″ Liner Hanger & Packer System
	Retrievable Pack off Bushing (RPoB) for 7″ Liner Hanger
	7″ Landing Collar with Ball Catcher / Float Collar with Ball Deflector
	7″ Reamer shoes with dual Float valves
	5″ Drill pipe Wiper Plug/ Dart
	7″ x 29 ppf Liner Wiper Plug
	Setting Balls
	Any other item as/ if required in addition to above for the Liner Hanger & Packer System and Cementation.

5″ Liner Hanger & Packer System for 5″ x 15ppf, P-110 Liner String with FL4S Connection to be set inside 7″ x 29 ppf, P-110 liner/casing	5″ x 7″ Liner Hanger & Packer System
	Retrievable Pack off Bushing (RPoB) for 5″ Liner Hanger
	5″ Landing Collar with Ball Catcher / Float Collar with Ball Deflector
	5″ Reamer shoes with dual Float valves,
	5″ Drill pipe Wiper Plug/ Dart
	5″ x 15 ppf Liner Wiper Plug
	Setting Balls
	Any other item as/ if required in addition to above for the Liner Hanger & Packer System and Cementation

NOTES:

1. Drill pipe details will be available once the rig is firmed up. It is the Contractor's responsibility to gather the information from the Company at appropriate time to plan ahead requirement of compatible items and supply the same to avoid operational delay/ inconvenience/ interruption.
2. The Company shall not buy any leftover consumables brought by the Contractor. It would be the responsibility of the Contractor to re-export the unused consumables in accordance with existing regulations.

4.0 DETAILS OF PERSONNEL TO BE DEPLOYED BY THE CONTRACTOR:

a) **Qualification & Experience of Liner Hanger Service/Field Engineer**: The Liner Hanger Service/Field Engineer should possess minimum educational qualification of Diploma in Mechanical Engineering or equivalent with at least three (3) years of relevant work experience in carrying out Liner hanger & packer and tie-back jobs in deep oil & gas wells independently. He should have successfully completed liner hanger & packer setting jobs independently for at least three wells of minimum 3000m depth.

b) The bidders are requested to propose more personnel than required as per tender, out of which the selected/approved by Company can only be deployed for execution of this contract. Bidder must submit the bio-data with copies of all required documents of all offered personnel within 15 days of issue of Letter of Award (LoA) or 30 days prior to commencement of contract (whichever is later) for approval by the Company before commencement of work.

c) The Contractor shall provide the required PPE (Personal Protective Equipment) as per DGMS/OISD to all his personnel at his own cost.

d) Company will provide boarding & lodging facility at site for one Liner Hanger Engineer free of charge during callout period only.

e) **Medical Fitness**: The Contractor shall ensure that all of the Contractor's Personnel shall have had a full medical examination (by a qualified and registered doctor) prior to commencement of the operation and **the certificates of all such personnel in form 'O' of The Mines Act 1952 should be submitted by the contractor**

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PROFORMA-A6

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable& Chemicals) TO BE IMPORTED IN CONNECTION WITH EXECUTION OF THE CONTRACT for LINER HANGER SERVICE (CALL OUT)

Sr No.	Item Description	Qty / Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+ H	J	K	L

(1) **The items which are not of consumable in nature and required to be re- exported outside India after completion of the Contract should be indicated as "YES" in column "J".**

(2) **The items, which are of consumable in nature should be indicated as "NO" in column "J".**

(3) **For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".**

Authorized Person's Signature: _____

Name: _____

Seal of the Bidder:

PROFORMA-B (Appendix-8)

FORMAT FOR COST OF LINER HANGER SERVICES (ON CALLOUT BASIS)					
Sl no.	**Description of Services**	**UOM**	**Quantity**	**Unit Rate (in INR)**	**Total Cost excl. GST (in INR)**
			(1)	**(2)**	**(1) x (2)**
1	Mobilisation Charges for Liner Hanger Personnel	Lumpsum	2		₹ 0.00
2	De-mobilisation Charges for Liner Hanger Personnel	Lumpsum	2		₹ 0.00
3	Service Charges for Tools/equipment including Manpower (per day)	Day	30		₹ 0.00
Total estimated cost of Liner Hanger Services (including all taxes and duties excluding GST) in INR					₹ 0.00

Notes:
1. It is the Contractor's responsibility to plan for timely mobilisation and availability of above services during rig operations in consultation with OIL.
2. It is to be noted that above days are for evaluation purpose only. The payment shall be made as per actual use.
3. The payment shall be made at the above rates for the period of stay of Engineers/Operators on board the rig.
4. Any other tools/equipment required for successful completion of the liner hanger job has to be provided by the service provider. Any charges for such tools/equipment shall be included in the Service Charges for Tools/equipment including Manpower(per day).

PROFORMA-B (Appendix-9)

FORMAT FOR COST OF CONSUMABLES UNDER LINER HANGER SERVICES (ON CALLOUT BASIS)					
Sl no.	**Description of Items**	**UOM**	**Quantity**	**Unit Rate at Rig (in INR)**	**Total Price at Rig excl. GST (in INR)**
1	7" Liner Hanger, P-110, 29 ppf c/w hanger packer, floating guiding equipment and accs. as per SoW without tie-back assy.	Set	1		₹ 0.00
2	5" Liner Hanger, P-110, 15.5 ppf (10000 psi) c/w hanger packer, floating guiding equipment and accs. as per SoW	Set	1		₹ 0.00
Total estimated cost of Consumables under Liner Hanger Services (including all taxes and duties excluding GST) in INR					**₹ 0.00**

Notes: -
1. Quantities mentioned above are tentative requirement for 01 well and is for evaluation purpose only. Adequate back up for these consumables must be available on rig during the respective stage of operation.
2. Payment will be as per actual well consumption.
3. The rates quoted above shall be applicable for the entire duration of the contract.

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Annexure-6

BIO-DATA FORMAT (LINER HANGER PERSONNEL)

1. NAME:
2. PRESENT ADDRESS:
3. PERMANENT ADDRESS:
4. FATHER'S NAME:
5. NATIONALITY:
6. PASSPORT NO. AND VALIDITY: (IN CASE OF EXPATRIATE)
7. DESIGNATED POST:
8. DATE OF BIRTH:
9. DETAILS OF PROFESSIONAL CERTIFICATE, LICENSE, ETC. WITH VALIDITY:

AFFIX PASSPORT SIZE PHOTOGRAPH

Educational Qualification:

Sl. No.	Course completed	Passed out School/ College/ University	Year of Passing	Division/ Rank
01.				
02.				
03.				

Job Experience in Reverse Order:

Duration of Service		Post/Position Held	Name of the Employer	Place of Work
From	To			

N.B: If required, more rows may be added.

Relevant Work Experience in Liner Hanger & Packer and Tie-Back Jobs during last three years:

Name of the Clients worked for	Duration of Work (from-to)	Nature of Liner Hanger & associated jobs done	Details of Wells worked in			
			Name of well or Location and Area	Liner Sizes with setting depth(s)	Total Depth of well (MD)	Brief on Liner Hanger & packer and Tie-Back Jobs

N.B: If required, more rows may be added.

NOTE:

1. *Attach copies of documents for Identity Proof, Date of Birth Proof, Passport (for Expatriate) Proof of qualification (professional), Professional certificate/ license etc.*
2. *Attach Medical Fitness Certificate in Form 'O' (as per Mines Act 1952).*
3. *Person should not be more than 60 years of age.*
4. *In case of replacement of personnel, the replacement personnel must have the requisite qualification and experience as per the Scope of Work and shall submit their credentials along with their recent photographs & documents to Company for approval.*

Signature and seal of the Bidder:

Name of Bidder:

&&&&&

EXHIBIT-7: DIRECTIONAL DRILLING SERVICES (CALL OUT)

A. TERMS OF REFERENCE & TECHNICAL SPECIFICATIONS OF DIRECTIONAL DRILLING SERVICES (CALL OUT)

I. INTRODUCTION:

OIL intends to hire expert directional drilling services along with tools & equipment from professional company of repute for drilling of side-track wells, re-entry wells or any other wells from kick off to target depths.

II. SERVICE WITH PROBE BASED MWD TOOLS:

(i) 01(one) set of tools and equipment including services of personnel for 8½" hole section consisting of SDMMs, Probe based (retrievable/non- retrievable) MWD tools (Directional & Gamma), Drilling Jars and MWD Surface unit on regular basis.

The above noted tools and equipment of the Contractor shall be utilized primarily for side tracking and directional drilling in 8.5"Hole. **This service will be on callout (i.e. to be mobilized within 15 days' notice from OIL) basis.**

All of the above services are meant for carrying out directional drilling activity in OIL's PEL/ML areas. OIL will provide necessary recommendatory letter for EC for the tools/equipment, spares and consumables during initial and subsequent import of required materials against the contract. However, the total amount will be limited to the CIF value as declared in the bid as per **Proforma-A7**

NOTE: Bidders to confirm to provide the set of tools and equipment including services of personnel as per the scope of work.

III. SCOPE OF WORK

1.0 BROAD SCOPE OF WORK

OIL intends to hire 01 (one) set of directional tools and equipment including the services of personnel with probe based retrievable type MWD system consisting 01(one) independent operational set for 8½" hole section on **Call out basis** for drilling of Directional/Side-track/Re-entry or any other types of wells from kick-off to target along with standby back-up tools for its exploration drilling activities in Dima Hasao and Karbi Anglong areas in the states of Assam. The Contractor shall provide the service along with all necessary tools, equipment & personnel, and carryout directional drilling operations in accordance with the Company's approved directional well plan. The approved well plan may be amended from time to time by reasonable modification as deemed fit by the Company. However, the Contractor shall be wholly responsible for rendering the services as per scope of work under this contract.

2.0 Under the service, the Contractor shall have to provide the following services with their tools and equipment.

2.1 Probe based (retrievable/non-retrievable) MWD tools (compatible with SDMM) with Positive Mud Pulse Telemetry system shall have to be provided under this service. The Bidder should categorically confirm to this effect.

2.2 SDMMs, Probe based (retrievable/non-retrievable) MWD tools and Drilling Jars to be deputed under the service should comply with the following:

i) All down hole tools including surface units must be of recent version. These tools should either be new or recently refurbished. In case of refurbished tools, the refurbishment should not be more than 06(six) months old. Bidder must submit relevant documents of the tools in this respect as documentary evidence before mobilization of the tools. Bidder to categorically confirm the same. However, in case of brand new tools, the same will not be applicable.

ii) In addition to the above, Bidder must submit maintenance schedule and certificates against all tools as per Bidder's policy before mobilization of the tools under the Contract for scrutiny by OIL. Bidder to confirm the same. Note: Part nos./Identification nos. must be noted in the maintenance records.

iii) The Bidder should provide the technical literature/catalogue for the offered SDMM, MWD and JAR tools.

iv) The Bidder shall submit Calibration certificates of MWD tools before mobilization showing Inclination, Azimuth, Tool-face and Dip angle accuracies as applicable for scrutiny by OIL. Calibration certificates for accuracy of measurement should not be more than 6(six) months old. In case, the calibration certificates are of 01(one) year validity, the same will not be applicable, provided the certificates are valid at the time of mobilization. Bidder to confirm the same.

v) SDMM, MWD and Jar tools provided by the Contractor shall be supported with spares and services during the duration of the Contract.

vi) Bidder has to submit relevant test certificates of the drilling jars for scrutiny by OIL before mobilization of the same.

vii) All tools/equipment and spares deployed by the Contractor should meet OIL's specified requirement.

viii) MWD tools initially mobilized by the Contractor and any replacement thereof should be accompanied by Calibration sheets, approved by Contractors QA/QC engineers/TPI. Bidder to confirm the same.

3.0 TOOLS, EQUIPMENT & SERVICES:

The Sets shall consist of the tools and equipment as per below:

Table-1

Sl. No.	Description of Equipment	No of Tools per Set		No of Sets	Total No of Tools & Equip/Service
		Main	Backup		
1.0	**8½" Hole Section Tools & Equipment-Callout basis**			**1**	
1.1	SDMM with Stabilizers & Accessories	1	1	1	2
1.2	MWD (Directional & Gamma)	1	1	1	2
1.3	Drilling Jar	1	1	1	2
1.4	MWD Surface Unit	1	0	1	1

3.1 TOOLS, EQUIPMENT & SERVICES FOR 8½" HOLE SECTION - (CALL OUT BASIS):

i) 01(One) set of Directional Drilling Tools and Equipment consisting of SDMMs with Stabilizers, Probe based (retrievable/non-retrievable) MWD tools with Directional and Gamma, Drilling Jars, MWD surface unit and related directional tubular and accessories (NMDCs, UBHO subs, Float subs, X-Over subs etc. as applicable) are to be provided for drilling of 8½" hole as a complete set as per Table-1 (Sl. No. 1.0 to 1.4) on regular basis. The complete system should be capable of building, holding and dropping well angle and direction as per approved well plan trajectory.

ii) The MWD system for 8½" hole section should be based on positive mud pulse telemetry system. It should transmit data from down hole in real time on continuous basis. The Surface MWD unit should to be complete with necessary computers, monitors printers, plotters etc., and other equipment as necessary to execute the job.

iii) The Directional Drilling Tools and Equipment for 8½" hole section will be put in operation as per OIL's requirement. To ensure uninterrupted directional drilling activity considering logistical constraints in the North-Eastern part of India, the Contractor has to bring sufficient quantity of back up tools, equipment and spares in addition to the primary sets/quantity of tools for 8½" hole section as defined in Table-1. Servicing of tools will be allowed at no workload period only.

iv) **Gamma Ray Measurement tools:** The Gamma ray tools for 8½" hole size and should be combinable or an integral part of the MWD tool system and should be compatible with other related equipment. The tools should have provision for real time data transmission as well as for recording of Data in memory mode. Data is also to be recorded while pulling out by back reaming/with pump-on whenever required.

v) Services of Directional Drillers to operate SDMM and MWD Engineers to operate MWD tools are to be provided for execution of drilling program as per Company's plan. Minimum two directional drillers and minimum two MWD Engineers are required to be provided always during operation.

vi) The 8½" hole section shall have to be drilled by the Contractor with the help of SDMM-MWD-JAR tools in combination in consultation with Company.

VII) The SDMMs and MWD tools should be best in class tools of the Bidder that are to be engaged in the business. The complete system should be able to kick-off from vertical and should be efficient to drill high angle high displacement wells of sail angle 55°-85°.

4.0 DETAILS OF TOOLS, EQUIPMENT & SERVICES REQUIREMENT:

The Contractor shall confirm to provide the following services against the 1(one) sets of services on call out basis:

4.1 Well Planning Services:

Company will design the well trajectory and share the same along with other relevant data with the Contractor. Contractor shall accept the plan and carry out directional drilling accordingly. However, Contractor may review the Company's plan at their end and suggest anticipated Torque & Drag issues, Hydraulics requirement and Anti-collision issues. If required, Company may review the well plan in consultation with the Contractor to sort out any kind of well trajectory related issues. In that case, the re-viewed plan must be accepted by the Contractor. Thereafter, it shall be the responsibility of the Contractor to drill the curve section of hole from kick off point till target depth of the particular section is reached. Contractor shall design at their end the Well Trajectory, Torque & Drag, Hydraulics, Anti-collision, proposed BHA etc., with their latest directional software and share the same for the particular hole section of a directional well during actual drilling. Bidder shall submit end of Well Report after completion of the assigned Section/Well in hard as well soft copies (.pdf format).

4.2 MWD equipment and Services:

a) The Contractor shall confirm to provide 1 (one) complete set of probe based (retrievable/non-retrievable) MWD (Measurement While Drilling) System against the 1(one) call out set, for continuous real time monitoring of tool face, inclination, direction (azimuth) while drilling 8½" hole sections. The MWD system must be able to work at flow rates of 400-1000 GPM or better.

b) The MWD system should be based on positive pulse, mud telemetry for drilling 8½" hole as per requirement of OIL provided in the MWD specifications in Annexure-C (B), along with cross-over subs, Non Magnetic Drill Collars, Float Subs – if required with all sets of electronic packages, surface computers and other accessories required for continuous real time monitoring of tool face, inclination, direction (azimuth) and gamma while drilling 8½" hole. Contractor will have to maintain sufficient back up tools & spares to meet contingent situation like Lost-in-Hole/Tool-failure etc.

c) Contractor shall confirm to provide Gamma Ray Tool compatible with the offered MWD system. Contractor shall provide the Company with Gamma Vs True Vertical Depth and Measured Well Depth. The Gamma Ray measurement shall be as per

requirement of OIL provided in Annexure-C (B). Bidder will maintain sufficient back up tools & spares to meet contingent situation like Lost in Hole/Tool failure etc.

d) Contractor shall provide MWD System based on mud pulse telemetry, Positive Pulse system, with MTBF (Mean-time Between Failure) exceeding 1000hrs. Bidder to confirm that MTBF certificate from TPI will be submitted before mobilization).

NOTE:

1) All the MWD tools should be able to interface with each other and facilitate 2-way communication & integration of data and commands.

2) Contractor to provide additional NMDC if required for MWD survey accuracy.

3) In case of non-retrievable type of Probe based MWD tool, LIH value will not be payable (i.e. for MWD, NMDC, UBHO, Float Sub, etc.).

4) In case of retrievable type of Probe based MWD tool, LIH value will not be payable for the retrievable MWD tool in the event of failure to recover it with wireline in a LIH situation.

4.3 **Surface Equipment:**

01 (one) no. of Surface MWD unit with computers/printers' accessories to record and print real time data with necessary transducers and connections to work with rig power supply 220 volts, 50 Hz. AC as per requirement of OIL as stated in the Annexure-A (B) (Bidder to fill up the Annexure). System should also have following features:

(a) Record data like angle, azimuth and tool face and transmit it to surface with rig floor display. System should have features for dynamic tool face recording when drilling with motors.

(b) System should be able to record stand pipe pressure, weight on bit, rotary RPM and Rate of penetration with depth counter facility.

(c) Record and print real time API Gamma measurement with measured depth.

(d) Record and print real time API Gamma measurement with TVD.

NOTE: The Work station should come with minimum 150m of 3-Phase power cables for cluster locations. Bidder to confirm the same.

4.4 **SDMM equipment along with Services:**

a) The Contractor shall provide Steerable Downhole Positive Displacement Mud motors with all accessories e.g. stabilizers etc., as per Annexure-D (B) for 8½" hole size. SDMMs should be high torque, low to medium speed and stabilized positive displacement steerable multi-lobe mud motor for high angle drilling. The directional drillers are required to operate these motors and drill the hole as per Company's approved well plan. The motors should have API rotary shoulder connections with built-in/screw-on bearing Stabilizer housing & adjustable bent housing. SDMM should be suitable for build-up rates & straight drilling in rotary mode. The SDMMs

should be with mud lubricated bearing/Oil sealed bearing assembly and equipped with rotor catcher feature. SDMMs to be provided with float sub with ported floats for preventing wet pull out and transmission of drill pipe pressure to surface whenever the BOP/well is closed due to any reason.

Note:

1) Near bit stabilizer fitted on the motor shall be 1/8" under gauge for the motor size. String stabilizer to be of similar design as of bearing housing stabilizer.
2) SDMMs would be run mostly in stabilized mode to avoid clean out run.
3) Whenever required, the SDMMs will be used in slick mode also.
4) SDMM should be from any of the reputed manufacturers as given in the list under clause 6.0 (Table-2) only.

b) **Stabilizers:** Contractor to provide stabilizers of integral blade design with 3(three) or 4(four) slight spiral blades of sufficient blade length and double tapered at both leading and trailing ends. Stabilizers should have sufficient opening/annular clearance with taper blade on stabilizer body. The stabilizers may also be used independently for making rotary assemblies for drilling/cleanout trips in case of requirement.

Sizes of String Stabilizer:

1. Stabilizers for 8½" Hole section: 2(two) nos. each of 8" and 7¾" string stabilizer with 4" IF/4½" IF box-pin connection, 6½"/6¾" OD fishing neck X 2.13/16"/3" ID.

4.5 Drilling Jars and Services:

The Contractor shall confirm to provide Hydro-mechanical/Hydraulic Drilling jars to withstand the rugged abuse and demanding application with up/down stroke mechanism, minimum stroke length as per requirement of OIL provided in Annexure-E (B), for 8½" hole size. The Jars should be from any of the reputed manufacturers as given in the list under clause 6.0 only (Table-2).

5.0 PERSONNEL:

Bidder shall confirm to provide qualified and experienced personnel under the following categories for running the well operation of OIL on round the clock basis:

i) **Directional Driller:** Minimum 2 (two) nos. per set.

ii) **MWD/LWD Engineer:** Minimum 2 (two) nos. per set.

NOTE: The Directional Drillers and MWD Engineers should be a Graduate/Diploma in Engineering with 3 (three) years of relevant field experience.

The details of Personnel are given below:

i) Directional Driller:

Bidders to confirm that minimum 02(two) numbers of qualified Directional Drillers having minimum 3(three) years of relevant field experience with Graduation/Diploma in Engineering and having drilled at least 10 (ten) numbers of directional wells with SDMM-MWD-JAR in combination shall be deputed per set. The Directional Drillers will be working independently (12- hour shift) on a suitable ON/OFF day rotation basis at the Rig site and should be able to execute the job of high angle-high displacement or side track wells or any other well from kick off to target on continuous basis. They should have complete knowledge of the job from planning to execution along with associated calculations and decision making so that they can perform the job independently. However, in case of operational problems, OIL's decision will be final.

The Directional Drillers will work in close liaison with OIL Engineers on the Rig/base. They should be fluent in speaking and writing English language. Directional drillers should be conversant with the job assigned and should have complete knowledge of the tools and equipment of the Contractor. Directional drillers of the Contractor shall assist OIL technically during round trip and clean out trips after completion of sectional TD. However, OIL reserves the right to modify its requirement of on-site Directional Drillers anytime.

NOTE: Particulars of directional driller must be submitted in the format **ANNEXURE – 7** to OIL for approval prior to deployment at well site.

ii) MWD Engineer:

Bidders to confirm that minimum 02 (two) nos. of qualified and experienced MWD/LWD Engineers having minimum 3 (three) years of relevant field experience with Graduation/Diploma in Engineering be deputed per set for OIL's operation. The MWD Engineers will be required to work independently on a suitable ON/OFF day rotation and 12-hour shift basis at the rig site as per plan given by OIL. The engineers must be fluent in written and spoken English.

The MWD Engineers will be responsible including but not limited to the following:

a) Prepare Logging plan and program, timely delivery of quality data logs, LAS, DLIS as per Scope of Work.
b) Run, maintain and manage the MWD tools and unit.
c) Prepare daily reports of major real time observations and annotation of markers as defined by Company Geologist.

NOTE: Particulars of MWD engineers must be submitted in the format **ANNEXURE –7** to OIL for approval prior to deployment at well site.

GENERAL NOTES FOR CLAUSE 5.0:

1) The Bidder will have to submit the Bio-Data of personnel proposed to be deployed for all the services mentioned under scope of work prior to deployment for OIL's approval.

2) MWD Engineers, Directional Drillers should be an employee of the Bidder. Necessary documents in this regard to be submitted prior to deployment for OIL's approval. In case, the personnel are newly recruited in the organization, necessary documents including appointment letters supporting the previous experience criteria have to be submitted for approval.

3) Bidder will submit an undertaking in the bid stating that they will provide Directional Drillers, MWD Engineers having 3 (three) years' experience throughout the Contract period.

4) Company reserves the right to instruct for removal of any of the Contractor's personnel who in the opinion of Company is technically not competent or not rendering the services faithfully, or due to other reasons. The cost of replacement of such personnel will be fully on the Contractor's account and the Contractor shall have to replace this/these personnel within 10(ten) days of such instruction. The replacement personnel must have the requisite qualification and experience as indicated in the contract and their credentials along with recent photographs must be submitted to OIL for approval prior to their engagement.

6.0 APPROVED LIST OF MAKES FOR TOOLS/EQUIPMENT & SERVICES:

The Contractor should provide Tools/Equipment & Services (mentioned above) from any of the approved companies as per the list as given below. Tools/Equipment of make other than the companies mentioned below will not be acceptable.

APPROVED LIST OF MAKES

Table 2

C. Mud Motor	**D. Drilling Jar**
i) Schlumberger	i) Houston Engineers
ii) Halliburton	ii) Weatherford
iii) Weatherford	iii) National Oil Well Varco
iv) Baker Hughes	iv) Bowen
v) National Oil Well Varco	v) Schlumberger
vi) APS Technology Inc.	vi) Halliburton
	vii) ITS
	viii) APS Technology Inc.

&&&&

B. SCHEDULE OF RATES

1.0 The bidders must quote the rates in their price bids as per the attached Price-Bid Format **Proforma-B2.** The payment shall be made for the actual work done. All Day Rate Charges shall be pro-rated to the nearest hour.

2.0 MOBILIZATION CHARGES OF TOOLS AND EQUIPMENT INCLUDING PERSONNEL:

2.1 Mobilization charges as lump sum amount against the set (on call out basis) of tools and equipment including personnel will be payable when all tools and equipment (free of defects/ encumbrances) and OIL approved operating personnel for that particular set are positioned at Company's designated site and duly certified by the Company representative regarding readiness of the tools, equipment and personnel to undertake/commence the work assigned under the contract which shall be no later than 03 working days from the date of arrival.

Note: OIL will certify within 03 working days for first mobilization.

2.2 Mobilization charges should cover local and foreign costs to be incurred by the Contractors to mobilize the equipment to the mobilization point as decided by OIL and should include all duties including all local and foreign taxes, port fees/charges including demurrage (if any) and inland transport to the mobilization point as decided by OIL etc., (on the items declared in Proforma-A7), except customs duty, which will be to OIL's account, if applicable.

2.3 The services will be used in PEL/ML areas of OIL and Company will issue necessary Recommendatory Letter for EC as required for custom clearance on receipt of request from the Contractor. All such requests must be made by the Contractor well in advance, so that the Company can make necessary arrangements for providing the documents in time without causing any delay for the customs/port clearance.

2.4 Mobilization charge shall not be released only on the basis of arrival of individual tool/equipment, although there will be individual mobilization charges (lump sum) for different tools/equipment. Mobilization will be considered to be completed only after following conditions from (a) to (e) (without any exception) are met with.

a) All tools & equipment (surface & sub surface) as per contractual obligation (technical Specification & quantity wise) arrive at OIL's designated site, unless specified otherwise by OIL.

b) All tools & equipment arrive at OIL's designated site as per "General Terms and Conditions of Contract" in (**C. SPECIAL NOTES FOR DIRECTIONAL DRILLING SERVICES (CALLOUT))** for commencing directional drilling activity.

c) All relevant documents (technical specification, drawing, vintage, Make, Model etc.) of each & every tool & equipment are to be made available (as per contractual obligation) by Contractor for scrutiny by OIL.

d) All relevant documents are found to be technically acceptable by OIL on scrutiny.

e) Company issues “acceptance/clearance certificate” for tools & equipment in writing. This “acceptance/clearance" certificate will be provisional in nature till performances of tool/equipment are established in operation.

Note: The above clause is to be read in conjunction with clause 2.5 below regarding acceptance of set after passing the 1st test on the Rig.

2.5 For the purpose of Liquidated damage (LD), the Mobilization would be deemed complete for a particular set of Tools & Equipment including personnel belonging to any hole section on the date as per 2.4 above, only if the complete set of Tools & equipment passes the first Surface Test on the Rig. Otherwise, Mobilization would be deemed complete only when complete set of Tools & Equipment passes the first Surface test on the Rig on subsequent date. For the purpose of Payment, Mobilization for a particular set of Tools & Equipment including personnel belonging to any hole section would be deemed complete after issuance of acceptance/clearance certificate from the Company, if it passes the first Surface test and work commences smoothly. If it fails of the first Surface test, Mobilization will be considered complete on acceptance of complete set of Tools & Equipment on subsequent test.

2.6 The total Mobilization charges per unit set for each hole section shall not exceed 1% of the total value per unit set for the respective hole section in the Price Bid. However, the total Mobilization charges per unit set for each hole section if quoted in excess of 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the excess amount shall be paid at the end of the contract.

2.7 Each down hole tool/equipment should have sufficient number of backup tool/equipment/spares/consumables for ensuring un-interrupted directional drilling activity.

3.0 DE-MOBILIZATION CHARGES OF TOOLS AND EQUIPMENT INCLUDING PERSONNEL:

3.1 The Contractor shall arrange for and execute demobilization of their Tools/Equipment/Spares/Accessories etc. (one or more sets), upon receipt of notice from the Company. Contractor shall bear all such costs/charges, if any towards De-mobilization of the same from drilling location to Contractor's base and the same will be guided by as per (**C. SPECIAL NOTES FOR DIRECTIONAL DRILLING SERVICES (CALLOUT)).**

3.2 All rates on Tools/Equipment/Spare/Accessories etc. shall cease to exist with effect from the day the Contractor is issued de-mobilization notice by Company. No charges whatsoever will be payable with effect from the date of notice for demobilization.

3.3 Company shall give notice to Contractor to commence demobilization. This shall be applicable with immediate effect. No other charges shall be payable after issuance of de-mobilization letter. However, after issue of final demobilization notice by the Company, the Contractor shall ensure that demobilization is completed and Company's worksite is cleared-off Contractor's property within 21 (twenty-one) days

from the date of demobilization notice from the Company, failing which, demobilization charge may be held up.

3.4 Demobilization charges will be payable on clearance of all the equipment from Indian Port/ Custom authorities for re-export of equipment to Contractor's base. However, OIL shall not be obliged to pay demobilization charges of tools and equipment, if on completion/termination of Contract, Contractor does not remove their tools from the area of last operation of Company's designated Rig/Site within 21 (twenty-one) days and also if the Contractor commences operation against any other contract(s) for other operators. All charges connected with demobilization including all fees, duties and taxes in relation thereto, insurance and freight within India or on export/reexport outside India will be to Contractor's account.

3.5 Upon completion of duration of the contract, the contractor shall submit their last invoice for payment along with any document(s) as required by the Indian laws and asked for by the Company to enable release of payment.

3.6 The total De-Mobilization charges per unit set for each hole section of shall not be less than 1% of the total value per unit set for the respective hole section in the Price Bid. However, the total De-mobilization charges per unit set (including callout set) for each hole section if quoted in deficit or less than 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the deficit amount shall be paid at the end of the contract along with the final De-mobilization charges.

4.0 OPERATING & STANDBY CHARGES:

The Contractor is required to provide tools and equipment including personnel for 1(one) set (on call out basis) for 8½" hole section as per the terms and conditions specified earlier. At any stage of operation, the operating set/sets of tools and equipment including personnel will be paid for the quoted operating charges only. During non-operating period, only standby charges for the set/sets as quoted will be payable when not used by OIL but the tools and equipment of the sets are in functional condition. However, detailed charges payable under different conditions will be guided as described below.

4.1 OPERATIONAL CHARGES OF TOOLS & EQUIPMENT INCLUDING PERSONNEL:

1. Under the contract, the Contractor shall be entitled to operational day rate charges as detailed below. These rates are inclusive of spares etc., if required (including spares for running repairs and maintenance of SDMM-MWD-JAR etc.) for the successful completion of the work.

2. Operational Day Rate Charges shall be payable for all tools and equipment of the Contractor for the period the tools and equipment are in operational mode from the time of successful completion of Surface Testing (as defined below) of Contractor's BHA (consisting of downhole tools/equipment) after lowering it below rotary table (BRT) in the well and till the same is pulled out of hole. This period will be considered as operating period and shall be pro-rated to the nearest hour.

SURFACE TESTING: Surface Testing is defined as function testing of Contractor's BHA components consisting of downhole tools and equipment after lowering it below rotary table (BRT).

DURING APPLICABLE OPERATING PERIOD MENTIONED ABOVE, ONLY OPERATING CHARGES SHALL BE PAYABLE AND NO OTHER CHARGES SHALL BE APPLICABLE. DURING NON-OPERATING PERIOD, ONLY STANDBY CHARGES SHALL BE PAYABLE. BIDDER SHOULD TAKE THIS INTO CONSIDERATION AND QUOTE ACCORDINGLY.

3. Operating Charges shall also be paid during stuck up/ fishing operation for the first 36 (thirty-six) hours (per occurrence) beyond which only Standby Charges shall be payable. Standby Charges shall cease to be paid from the time OIL decides to call off fishing operations to recover Contractor's tool/ equipment from hole and notifies Contractor accordingly.

4. Operating Charges shall be payable with Tool/equipment in hole for the first 36 (thirty-six) hours, per occurrence, in case drilling is stopped due to well activity and mud loss conditions. Standby Charges only shall be payable beyond 36(thirty-six) hours till normal operation is resumed.

5. In the event the Contractor's operating crew is not available for operation at any point of time during the period of contract no payment shall be made for such period.

6. Operating Charges shall not be payable for any tool/equipment of BHA if it fails to function below Rotary Table after "Surface Testing".

7. Zero Rate will be applicable for entire Bottom Hole Assembly, in case of discontinuation/ suspension of normal operation (drilling or round trip) leading to pulling out of drill string due to malfunctioning of any one component (i.e. MWD or SDMM or Jar) of BHA. Operating rate for entire Bottom Hole Assembly will cease to be paid under this circumstance.

8. Under above circumstances, Zero rate will continue for entire Bottom Hole Assembly for the period starting with pulling out from particular depth through running in till normal (identical) operation is resumed at the same depth. However, any shut down period (such as crew shortage, machinery failure, rig repairing, local bandh etc.) owing to OIL or other reasons (not attributable to Contractor's fault) during the zero-rate period will be appropriately deducted from zero rate period.

9. Selective Zero rate will be applicable only for those malfunctioning components of BHA, when normal operation (drilling or round-trip) is continued with other functional components of BHA. The Selective Zero rate for non-functional tool will continue from the time of fault detection (down hole) till the drill string is pulled out of hole after completion of normal operation. The functional components of BHA will continue to be paid operating rate under such circumstances.

4.2 STANDBY CHARGES OF TOOLS & EQUIPMENT INCLUDING PERSONNEL:

1. Stand by charges for tools & equipment including manpower will be applicable for non-operating period of tools & equipment. Once the operating day rate is applicable no Stand by charges will be payable for tools/equipment and manpower.

2. During Stand by period, the equipment has to be in fully operating condition, save repair and preventive maintenance with prior permission from OIL.

3. Stand by charges shall not be payable once the de-mobilization notice is issued by OIL for any tool(s)/equipment including personnel.

4. Stand by charges shall be applicable for any tool/equipment of Contractor's BHA including personnel during the period it lies on surface and during surface testing of same after lowering it below rotary table.

5. If the Contractor withdraws the whole or part of the equipment or any personnel resulting in breakdown of operation, zero Rate will be paid.

6. Stand by charges for complete consignment of Tools / Equipment will continue to be payable during "Dismantling of Contractor's facility in one location, Inter-Location movement, Re-Installation & Re-Commissioning of Contractor's facility in next location".

7. Stand by charges includes supply of spares & consumables, replacement/maintenance cost and any other operational requirement if any during the contractual period. The Contractor must maintain sufficient stock of any such regularly required items at the drilling site under their possession to ensure uninterrupted service.

8. All other necessary equipment, tools and accessories etc. will be provided by the Contractor for due performance of the intended services without any additional charges to Company.

9. Stand by charges will be payable for full day or part thereof on pro-rata basis up to the nearest hour.

10. If, Contractor's tool /equipment fails to perform, for any reason, attributable to the Contractor in the duration of operation, then no Standby charges for the down hole tools/equipment including personnel shall become payable until the equipment/tool is put back into operating condition or evidenced by demonstration of operation in actual tests or use to the satisfaction of OIL.

11. If a particular tool/equipment is found to be non-functional during operation in first well after initial mobilization thereby causing total shut down of operation, in that case neither operating rate nor standby charges shall be applicable from the date of receipt of entire consignment of different tool/equipment at OIL designated site. Also, the Contractor shall commit themselves to replace the defective tool/equipment with the same specification (as per contract) within a very short period.

12. Contractor can withdraw their personnel during non-operating period at their own cost, subjected to ensuring their availability once operation starts.

13. The quoted unit Standby rate of each tool/equipment including personnel must not exceed 50% of the corresponding unit operating rate quoted for the respective tools/equipment including personnel in the Price Bid.

5.0 **FORCE MAJEURE RATE:**

5.1 Force majeure conditions are defined in Clause 31.0 of Section-I, "General Terms and Conditions" of this Contract.

5.2 All rates shown in Schedule of Rates shall be restricted to 50% of Standby charges for the service being provided by the Contractor at the time of occurrence of 'force majeure' condition irrespective of the operation being carried out. This will be considered as FORCE MAJEURE RATE under all conditions.

5.3 The Force Majeure Rate shall be payable during the first 15 (fifteen) days period of force majeure situation in case of all operations. No payment shall apply after expiry of 15 (fifteen) days force majeure period, unless otherwise agreed to.

6.0 ZERO RATE:

Notwithstanding any provision in the contract, no charges (standby or operating charges for tools/equipment including personnel) shall be payable for the period, the job or activity assigned to the Contractor is halted/suspended due to default on the part of the Contractor as a result of break-down/non-availability of Contractor's tools/equipment, non-availability of spare parts/consumables for Contractor's tools/ equipment, non-availability of Contractor's key personnel or for any other reason whatsoever attributable to the Contractor.

7.0 **GENERAL NOTES:**

7.1 Bidder should submit the list of items with CIF value to be imported into India in connection with execution of this contract as per Proforma-A7.

7.3 From the Proforma-A7, bidder should identify the items of re-exportable in nature (i.e. items which will not be consumed during the execution of the contract and required to be exported outside India after completion of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (RE-EX).

7.4 Similarly from the Proforma-A7, bidder should identify the items of consumable in nature (i.e. items which will be consumed during the execution of the contract). Total CIF value of such items should be shown in the "PRICE BID FORMAT" as CIF (CONSUMABLES).

7.5 Operating rate for SDMM and accessories shall be applicable only after Below Rotary Table (BRT). No separate charges are applicable for stabilizers.

7.6 Directional BHA making including surface testing time should be limited to 6(six) hrs. max. Beyond 6(six) hrs. zero rate will be applicable. However, in case of the delay beyond 6(six) hrs. on account of rig, will not be on the Contractor.

C. SPECIAL NOTES FOR DIRECTIONAL DRILLING SERVICES (CALL OUT)

1. MOBILIZATION /DE-MOBILIZATION/ TIME OF CONTRACT:

1.1 The mobilization schedule for the contract will be as under:

i) **Mobilization**: The Contractor shall mobilize all of their tools and equipment including personnel of the set (on call out basis) for 8½" hole section to the Company's base/designated site within the time schedule given below. Mobilization shall be deemed to be completed only when Contractor's tools and equipment including personnel are placed at the designated location and are in readiness to commence work as envisaged under the Contract duly certified by the Company's representative. The Contractor has to mobilize the minimum number of tools and equipment including personnel against each individual set as described in the "Scope of Work" in Exhibit-7[Terms of Reference].

ii) **Mobilization Time**:

Call out set: Contractor's Tools and Equipment including Personnel of 1(one) call out set for 8½" hole section shall have to be mobilized as per the scope of work by the Contractor **within 30 (thirty) days** from the date of issuance of call out notice.

ii) **De-mobilization Time:**

Contractor's Tools and Equipment including Personnel of any particular number of set/sets belonging to any hole section as indicated by OIL shall have to be de-mobilized as per the scope of work by the Contractor **within 21(twenty-one) days** from the date of issuance of de-mobilization notice. No charges shall be payable from the date of issuance of the final de-mobilization notice for that/those particular set/sets (as applicable).

Note: For mobilization, OIL will issue call out notice after issuance of LOA. The succeeding day of issuance of call out notice shall be counted as day 1(one) for the purpose of calculation of mobilization/de- mobilization period.

1.2 Date of Commencement of Operation:

The date on which mobilization is completed in all respects for the set of tools and equipment including personnel on call out basis as stated in the tender and certified by the Company's representative will be treated as date of Commencement of Operation for the call out set.

Note:

i) Once the Contractor's Equipment are ready to commence services and have reached the designated location, Contractor shall issue a Notice of Readiness for Inspection to the Company against each individual set.

ii) Company shall inspect the Contractor's Equipment within 3(three) working days from receipt of the Contractor's Notice regarding Readiness for Inspection, and confirm completion of mobilization against each individual set. Company Representatives inspecting the Contractor's Equipment shall notify the Contractor of any deficiency in the set(s) of equipment, and only on removal of such deficiency, mobilization shall be deemed complete.

iii) The succeeding day of receipt of notice from the Contractor Notice regarding Readiness for Inspection shall be counted as day 1(one) for the purpose of calculation of inspection period for mobilization.

1.3 Duration of Contract:

This particular contract of **Directional Drilling Service (call out)** shall be valid for period of 02 (two) years with provision of extension by another 01 (one) year at the same T&C of the contract and mutually agreed rates but not higher than the current contract.

2.0 LOSS OF SUB-SURFACE EQUIPMENT:

Notwithstanding any provision under this contract to the contrary, Company shall assume liability except in the event of Wilful Misconduct or Gross Negligence on the part of the contractor for loss to the contractor's equipment/ tool in hole below rotary table, subject to conditions prescribed herein below. Company shall reimburse the contractor for the value of lost equipment/ tool as declared in the import invoices at the time of import (for foreign items)/ purchase invoice (for indigenous items) or CIF value declared in the contract in the list of imported items (for foreign items) whichever is lower for any such loss, less depreciation @ 3% per month or part thereof from the date of import invoice/indigenous invoice up to a maximum depreciation equivalent to 50% of CIF/Ex-works value as indicated by the contractor.

2.1 All such cost shall be payable by Company, provided the equipment/tool is not covered under Insurance and provided such equipment/tool are included in the exclusion list of the Insurance Policies submitted by the Contractor in terms of Clause 14.16 (vii) under GCC of the Contract. All such cost shall be payable only after contractor furnishes notarized undertaking in the prescribed format (Sample Copy Attached) to the extent that the particular equipment/ tool in question is not covered by contractor's insurance.

2.2 For claims of lost equipment/tools, contractor must intimate the Company of his intention to lodge claim in writing within one month of the declaration of lost tool by company and final claim thereof must be made within six months of the date of the lost tool or before expiry of the Contract, whichever is earlier.

2.3 OIL shall declare the Loss in Hole immediately after the fishing operation is called off upon non-retrieval of the downhole items and intimate the Contractor, so that replacement and claim for the loss of downhole items can be done within the stipulated time. The contractor should replace the lost tool(s) within a stipulated time of 30 Days from the date of declaration of Lost In Hole by the company, failing which Zero rate will be applicable thereafter. During this period, payment at the rate of 75% of the Standby rates will be payable for the set from the time of declaration of the LIH only if the backup tools are in operational conditions. The company at its discretion may decide on utilization of the set without the back-up tool(s) considering the operational urgency and in such case ODR will be paid till the replenishment of tool(s) and equipment by the contractor is done after due inspection and certification by the company's representative. However, during the course of utilization of the backup tools and the same fails to operate, zero rate will be imposed immediately until replacement is provided and operation resumes.

2.4 In case of loss of indigenous items used in the downhole assembly which were declared and inspected as part of mobilization, will also be covered for LIH reimbursement on the basis of purchase invoice submitted during the time of mobilization.

Note:

1. No Mobilization cost would be payable towards replacement of LIH tools.

2. GST, if applicable on LIH, will be reimbursed by OIL.

2.5 DOCUMENTATION OF LOSS IN HOLE: Whenever any loss, damage or destruction to any of the Contractor's Equipment occurs, as stated in Clause-2.0 above, the Contractor shall immediately notify the same to OIL describing the loss/ damage. Whenever the Contractor makes any claim pursuant to the provisions under the above Clause, the Contractor shall furnish in support thereof as noted below:

a) List of the Equipment lost or damaged,

b) Extent of the damage,

c) Particulars of import, Customs assessed Bill of entry & invoices,

d) Vouchers, invoices or any other documents indicating the date of first use of the Equipment in India,

e) Costs of repairs, if any, supported by evidence of the same.

f) Documentary/ Self Declaration/Undertaking stating that the particular equipment/ tool is question is not covered by contractor's insurance

g) Approval from Contractor's competent authority for writing off the LIH item in the books of the contractor.

****

PROFORMA-A7

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable& Chemicals) TO BE IMPORTED IN CONNECTION WITH EXECUTION OF THE CONTRACT for DIRECTIONAL DRILLING SERVICE (CALL OUT)

Sr No.	Item Description	Qty / Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+ H	J	K	L

Notes:

(1) **The items which are not of consumable in nature and required to be re- exported outside India after completion of the Contract should be indicated as "YES" in column "J".**

(2) **The items, which are of consumable in nature should be indicated as "NO" in column "J".**

(3) **For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".**

Authorized Person's Signature: _____

Name: _____

Seal of the Bidder:

PROFORMA-B (Appendix-11)

Format for Cost of 1 Set of Directional Drilling Services with SDMM, Probe based MWD and JAR along with Personnel for 8½" hole section on Call Out basis					
Description of Items for 8.1/2" Hole Section		**UOM**	**Qty**	**Unit Rate (INR)**	**Total Cost excl. GST (INR)**
S. No.	**Mobilization charges of tools and equipments including manpower:**				
1	Directional MWD Surface Unit	NO	1		-
2	Drilling Jars	NO	1		-
3	SDMM with Stablisers & Accessories	NO	1		-
4	Directional MWD with Gamma Ray tool	NO	1		-
	Total Mobilization charges of Tools & Equipment including Personnel in INR excl GST (P)				-
S. No.	**De-Mobilization charges of tools and equipments including manpower:**				
1	Directional MWD Surface Unit	NO	1		-
2	Drilling Jars	NO	1		-
3	SDMM with Stablisers & Accessories	NO	1		-
4	Directional MWD with Gamma Ray tool	NO	1		-
	Total De-Mobilization charges of Tools & Equipment including Personnel in INR excl GST(Q)				-
S. No.	**Operating Charges of Tools and Equipments including manpower**				
1	Directional MWD Surface Unit	DAY	30		-
2	Drilling Jars	DAY	30		-
3	SDMM with Stablisers & Accessories	DAY	30		-
4	Directional MWD with Gamma Ray tool	DAY	30		-
	Total Operating Charges of Tools & Equipment including Personnel in INR excl GST (R)				-
S. No.	**Standby Charges of Tools and Equipments including manpower**				
1	Directional MWD Surface Unit	DAY	25		-
2	Drilling Jars	DAY	25		-
3	SDMM with Stablisers & Accessories	DAY	25		-

4	Directional MWD with Gamma Ray tool	DAY	25		-
	Total Standby charges of Tools & Equipment including Personnel in INR excl GST (S)				**-**
Total Estimated Cost of Directional Drilling Services with 1 Set of Tools & Equipment including Personnel for 8.1/2" Hole Section on call-out basis (including all taxes and liabilities excluding GST) in INR (=P+Q+R+S)					**-**

NOTES:

1) Mob/De-mob/Operating/Standby Charges of Personnel are to be included in the respective Mob/De-mob/Operating/Standby Charges of tools/equipment. No separate payments will be made for Personnel.
2) The quantities shown above against each item in the Price Bid Schedule are for evaluation purpose only. However, quantities may vary in actual as per Company's requirement and payment will be made on actuals only.
3) Mobilization charges per unit set for each hole section shall not exceed 1% of the total quoted value per unit set for each respective hole section in the Price Bid Schedule. However, the total Mobilization charges per unit set for each hole section if quoted in excess of 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the excess amount shall be paid at the end of the contract.
4) De-Mobilization charges per unit set for each hole section shall not be less than 1% of the total quoted value per unit set for each respective hole section in the Price Bid Schedule. However, the total De-mobilization charges per unit set (including callout set) for each hole section if quoted in deficit or less than 1% of the total quoted value per unit set of each respective hole section in the Price Bid, the deficit amount shall be paid at the end of the contract along with the final De-mobilization charges.
5) The unit Standby rate for each of the tool/equipment including personnel of the hole section must not exceed 50% of quoted unit Operating rate for the respective tool/equipment including personnel in the Price Bid Schedule.
6) The unit Standby rate for the tool/equipment including personnel of the hole section must not be less than 25% of total quoted unit Operating rate for the respective tool/equipment including personnel in the Price Bid Schedule.

ANNEXURE – A (B)

DETAILS OF MWD SURFACE UNIT

Sl. No.	OIL's Requirement	(To be filled by Bidder)	
		Bidder's Offer	Ref: File & Page No.
1	Online surface recording system for running MWD services while carrying out directional drilling in various hole sizes with all accessories like signal pressure transducers, precision depth assembly and MWD logs including TVD logs in real time.		
2	MWD work station should be capable of recording stand pipe pressure, WOB, drill string weight, RPM along with MWD data for all types of directional wells.		
3	Data to be recorded in real time as well as in memory mode. System should be able to provide raw as well as processed data. Data to be provided in electronic media (PDF, LASS and standard industry format like DLIS / CLIS) in CD / DVD. System to have capability to retrieve data in memory mode at the site.		
4	Unit should have provision for data compression feature and security protection as per prevalent Oil Industry standards.		
5	System should have color printing/plotting facility at site. Internet connectivity to be provided by the bidder for data transmission.		
6	In the event of fault and failure of equipment & software hired from the CONTRACTOR, their personnel should be available for attending rectification of the problem.		
7	Unit should come with minimum 150m of 3-Phase power cables for cluster locations.		

ANNEXURE – C (B)

DETAILS OF MWD TOOL 8½" HOLE SECTION:

Sl. No.	Tool Features		OIL's Requirement	To be filled by the bidder	
				Bidder's Offer	Ref: File & Page No.
1	Telemetry Type		Probe based retrievable/non-retrievable		
2	Pulse		Positive mud pulse		
3	Collar sizes		a) 8½" Section: 6½" or 6¾"		
4	DLS (PER 100')		a) 8½" Section: (2.5°-7°)/100'		
5	Flow Range (GPM)		a) 8½" Section **Refer below ###**		
6	Max Operating Temp.		150° C		
7	Max Operating Pressure		(15000 – 20000) Psi		
8	Real Time Update Period		<= 45 Secs		
9	Survey Time		<= 120 Secs		
10	Directional Measurement Point from Bit	With Gamma	<=5 M		
11	Measurement Accuracy	Tool Face	± 2°		
		Azimuth	± 0.5°		
		Inclination	± 0.2°		
12	Measurement range		(0-100) deg or more		
13	Gamma Detector Type		API GR		
14	Lost Circulation Material (Max Size & Concentration)		Medium size & 40 PPB		
15	Power Source (Operating Time in Hrs)		Li-ion battery (life >= 200 Hrs.)/ Turbine		
16	Gamma real time		Yes		
17	Gamma measurement point from bottom of tool		Approx. 2M		
18	Data Recording		Yes. To be provided in Gamma counts.		
19	Data Transmission Rate (Bits/Sec)		Min. 3 bits/sec. or more and should be suitable to transmit		

		data of various tools quoted in different segments of the tender		
20	MTF/GTF Switch	Yes		
21	Manufacturer / Model	Model quoted should be latest and best in class		

Note:

1) The system to be complete with pulsar, electronic sensors, power source etc. for transmitting and recording down-hole data in real time.
2) These tools will have to fit into one standard length (30') NMDC provided by bidder.
3) Additional features/information (if any) is to be provided by the bidder.

###: Flow Range

8½" hole section- Min. Flow Rate: 300 GPM or less & Max. Flow Rate: 550GPM or more.

&&&&&

ANNEXURE – D (B)

1.SPECIFICATION OF 6½"/6¾" STEERABLE DOWNHOLE MUD MOTOR

Sl. No.	Tool Features		OIL's Requirement	To be filled by the bidder	
				Bidder's Offer	Ref: File & Page No.
1	Type		High Torque, Low to Medium Speed, Stabilized, Multi-lobe, Multistage Positive displacement Mud Motor		
2	Flow rate range (approx.)		250 GPM or more – 700 GPM or less		
3	AKO/ABH Range (Min. Achievable)		0° - 2.5° or more		
4	Bit speed range (approx.)		35 RPM or more – 300 RPM or less		
5	Housing Type		Steerable with Adjustable Kick off sub /Adjustable Bend Housing		
6	Bearing type		Mud Lube or Oil sealed		
7	Length (within)		37 feet (max)		
8	Type of Connection		4½" API Reg. Box down &4½"/4" API IF Box Up or Any other proprietary connection of the Bidder		
9	Ported float sub		Contractor to assure that by the use of float sub there will be no wet pull out. There should be provision for transmitting the drill pipe pressure whenever the BOP/well is closed. So float sub should have a port for transmission of drill pipe pressure to the surface		
10	Lifting Sub Connection		4½"/4" API IF Pin or matching proprietary connection pin for the Bidder's SDMM		
11	Operating Differential Pressure		600 PSI or more		
12	Power Output		160 HP or more		
13	Torque Operating		6500 NM or more		
14	DLS (maximum achievable)		4°/100′ or more		
15	Pass Through DLS:	a) Sliding	4°/100′ or more		
		b) Rotary	4°/100′ or more		
16	Stabilization		8 3/8" screwed-on/built-in		
17	Manufacturer / Model		From the list of makes specified in NIT.		

ANNEXURE – E (B)

SPECIFICATION OF DRILLING JARS

1. Specification of 6½"/6¾" OD Drilling Jar				
Sl. No.	Drilling Jar features	OIL's Requirement	To be filled by the bidder	
			Bidder's Offer	Ref: File & Page No.
1	Type	Double Acting Hydro-Mechanical/Double Acting Hydraulic Drilling Jar		
2	OD	6½"/6¾"		
3	ID	2½" / 2¾"		
4	Length (max)	30 feet (± 3 feet)		
5	Tool Joint	4½" API IF Box x Pin		
6	Tensile Yield	7,50,000 Lbs or more		
7	Torsional Yield	50,000 ft-lbs or more		
8	Jar load (Up-stroke)	1,75,000 lbs or more		
9	Jar load (Down-stroke)	1,75,000 lbs or more		
10	Free Stroke (Up)	6" or more		
11	Free Stroke (Down)	6" or more		

ANNEXURE–7

BIO-DATA AND EXPERIENCE OF PERSONNEL

(Format for CV of MWD Engineer and Directional Driller)

Name:

PHOTO

Educational Qualification:

Certifications:

Experience in last three years

Year	From Date	To Date	Name of Organization	Client / Project	No. of days worked	No. of wells drilled	Type of wells drilled	Worked as

Format for Other Details:

1 CATEGORY OF JOB / POST :

2 NAME OF INCUMBENT :

3 PRESENT ADDRESS :

4 HOME ADDRESS :

5 NATIONALITY :

6 DATE OF BIRTH :

7 ACADEMIC QUALIFICATION :

8 TECHNICAL QUALIFICATION :

9 TOTAL EXPERIENCE IN THE RELATED FIELDS (IN YEARS) :

10 JOB EXPERIENCE RESUMES :

SL NO	WORK EXPERIENCE		TYPES OF WELL DRILLED	NAME OF COMPANY	PLACE OF WORK
	FROM	TO			

NOTE: TO ATTACH ALL SUPPLEMENTARY including present & previous Appointment letter and Client's approval DOCUMENTS.

Signature of Authorized

Person: Name:

Seal of the Bidder:

END OF SECTION-II

Part-3
SECTION-III
SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) shall supplement and/or supersede, if any, the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

1.0 EFFECTIVE DATE, MOBILISATION TIME, DATE OF COMMENCEMENT AND DURATION OF CONTRACT:

1.1 **EFFECTIVE DATE:** The contract shall become effective as on the date Company notifies Contractor in writing through Letter of Award (LOA) that it has been awarded the contract. The date of issue of Letter of Award (LOA) by Company to the Contractor shall be the Effective Date of the Contract.

1.2 **MOBILISATION TIME**: The mobilization time for the services under Bundled services contract shall commence from the date Company issues Notice for Mobilization for respective services after Award of Contract (issue of LOA). Mobilization shall be treated complete only when all the service packs including manpower (except Call out services) are mobilized and integrally aligned at designated well site for rendering services with man, materials and all tools as per the respective scope of work under this bundled service contract, as duly tested and certified by the company representative upon inspection. The date of completion of mobilization for this bundle service will also be treated as the **Commencement Date of the Contract**. The mobilization of the bundle services, its equipment/ accessories, personnel etc.as per Scope of work of individual services, should be completed by Contractor within the timeline as mentioned in the table below.

SERVICE DETAILS	MOBILIZATION PERIOD
Cementing Service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
Mud Engineering Service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
Directional Drilling Services (Regular)	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
Mud Logging Unit (MLU) service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
Wire line Logging service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
Call out service - Directional Drilling Services	Mobilization to be completed within 15 (Fifteen) days from the date of issue of Call out Notice
Call out service - Liner Hanger Service	Mobilization to be completed within 15 (Fifteen) days from the date of issue of Call out Notice

The Contractor has to submit the copies of import documents like B/L and assessed Bill of Entry & custom assessed invoice at the time of mobilization, which clearly show the F.O.B. & C.I.F. values. For items available in India also, the Contractor will have to submit relevant import and customs clearance documents. For indigenous items if any, Contractor may submit the copy of relevant purchasing document

1.2.1 **PRE-MOBILIZATION INSPECTION BY COMPANY**

Company's personnel or its authorized representative shall have the right to inspect any of the equipment / items offered under any of the services covered under this contract prior to mobilization.

1.3 **DATE OF COMMENCEMENT OF CONTRACT:** On completion of mobilization as duly certified by company representative, the date/time on/at which company notifies the contractor to commence work (through issuance of work order) shall be treated as Date of Commencement of the Contract.

1.4 **DURATION OF CONTRACT**: The duration of this Bundled Services contract including all the services *except Directional Drilling Service (Regular)* shall be initially for a period of **02 (Two) years** from the Date of Commencement of the Contract with an option to extend by **another 01 (one) year** at the discretion of Company at the same terms and conditions and mutually agreed rates but not higher than the original rate(s) of the contract. The terms and conditions shall continue until the completion/ abandonment of the last well being drilled at the time of the end of the Contract. The contract shall be automatically terminated after completion of the contract duration or, termination of the contract.

1.4.1 *For Directional Drilling Services (Regular as provided in Exhibit-3) the duration of the service shall be for the period required to complete the directional drilling of one well only and, separate mobilization and De-mobilization notice shall be served for this service.*

1.5 This Bundled Services contract is primarily being hired for the 1400 HP land drilling rig to be used for exploratory drilling campaigns at Dima Hasao and Karbi Anglong areas in Assam. Initially 03 (three) numbers of exploratory wells (depth of around 2800m) are being planned to be drilled in the first stretch of the drilling campaign and then another 02 (two) numbers of wells shall be lined up for drilling (depth around 2600m) at the same areas.

2.0 LIQUIDATED DAMAGES FOR DEFAULT IN TIMELY MOBILISATION:

Time is the essence of this Contract. In the event of the Contractor's default in timely mobilization for commencement of operations as per scope of works within the stipulated period, the Contractor shall be liable to pay liquidated damages @ 0.5% of total contract cost including mobilization cost, per week or part thereof of delay subject to maximum of 7.5%. Liquidated Damages will be reckoned from the date after expiry of the scheduled mobilization period till the date of commencement of Contract as defined above.

2.1 If mobilization of part of the bundle services are completed, Company (OIL) may decide to start well operation with the mobilized services. However, Liquidated Damage on the total contract cost shall be applicable till completion of entire services. In this situation Mobilization charges shall be payable only after completion of mobilisation of all services (except callout services). However, all other applicable charges for the availed services shall be payable from the time of start of operation.

2.2 Delay in mobilization period shall be calculated separately for Call out services.

3.0 SUSPENSION AT COMPANY'S REQUEST (STACK CONDITION):

The Company shall have the right, without cause, at any time to require the Contractor to suspend the work under this Contract on giving notice to the Contractor specifying the estimated duration of the suspension period. The work shall resume at the end of suspension period or such other date as the Company may specify to the Contractor by notice in writing. During the suspension period, Contractor shall be paid as per the provisions of **Clause 11.0 of Section - IV 'General Schedule of Rates'**. The Company shall notify the Contractor, whether it requires the Contractor to stack the services at its current location or at a different location. The suspension period during the Contract initially shall be 15 days, however extending the stack period for the services beyond 15 days is subjected to review. The Company, at its discretion, may add back such suspension period to the original Contract duration at the same rates, terms and conditions by giving 30 (thirty) days' notice to the Contractor before the expiry of the Contract.

4.0 INTERIM DEMOBILISATION AND INTERIM REMOBILISATION

The contractor shall demobilize all/part of services (as notified), equipment, accessories, and personnel from the wellsite on interim basis within 03 (three) days from the date of issuance of interim demobilization notice by the company. In such situation, Contractor shall be paid one-time Interim De-mobilization charges on lumpsum basis. No other charges shall be payable during this demobilized period.

4.1 Contractor on receipt of the notice from the company for remobilization shall re-mobilizes all its equipment, personnel, etc. to the wellsite and shall make ready for rendering operation as per scope of work, certified by the company representative. Subsequent upon interim Re-mobilization the contractor shall be paid with interim remobilization charges on lump sum basis as per the rate quoted against respective services, wherever applicable.

4.2 Contractor shall remobilize all/part of services (as notified) including equipment, accessories, and personnel to the wellsite and make it ready for operation within 12 days from the date of interim re-mobilization notice.

5.0 DE-MOBILISATION:

Contractor shall have to start dismantling and demobilization of all unit/s, tools & equipment along with personnel immediately after receipt of demobilization notice from Company (OIL) on completion / termination of the contract and vacate the drill site within 30 days from date of demobilisation notice and remove litter, debris and/or any leftover items of the contractor (from present location and all previous locations, if any).

5.1 For import and re-export, EXIM policy of Govt. of India should be followed. However, the Contractor has to check the latest position themselves as per the law of the land. Contractor should submit all the relevant documents regarding re-export of all the equipment / material if re-exported, within 60 days after completion / termination of the Contract.

Note: After the completion of work, all equipment, accessories etc. brought into India on re-export basis shall be re-exported by Contractor except consumables

and spares, which were consumed during the course of job execution under the contract. In case of failure to do so in the allotted time hereof except under circumstances relating to Force Majeure, Company reserves the right to invoke the performance guarantee submitted by the Contractor or withhold the estimated amount equivalent to the customs duty and/or penalty leviable by customs on such default in re-export from Contractor's final settlement of bills.

5.2 In the event all/part of the equipment etc. are transferred by Contractor within the country to an area where no nil customs duty is applicable and/or sold to a third party after obtaining permission from Company and other appropriate government clearance in India, then Contractor shall be fully liable for payment of the custom duty

5.3 In the event all / part of the equipment etc. are transferred by Contractor after expiry/termination of the contract within the country to another operator for providing services, and/or sold to a third party, Contractor shall obtain all necessary Govt. of India clearances including the Customs formalities for transferring to another operator and/or sale of the Rig package, its accessories, equipment and the unused spares and consumables to a third party. Company will not be responsible for any non-compliance of these formalities by Contractor. Payment of Customs Duty and penalties (if any) imposed by Govt. of India or Customs authorities for transferring the items in part or in full to an area where Nil Customs Duty is not applicable or sale of the items shall be borne by the Contractor and Contractor indemnifies Company from all such liabilities.

6.0 SPECIAL SITUATION DURING NIL DAY RATE:

During the period when Nil day Rate (NDR) is in force the contractor must ensure health, safety and integrity of the well. For that purpose, the contractor shall have to continue Mud Engineering Service activities and Company shall pay SPECIAL RATE DURING NIL DAY RATE at 50% of the applicable Mud Engineering Service rates.

7.0 WELL MATERIALS /CONSUMABLES:

For well materials (consumables) the reimbursement shall be on actual consumption basis as per the Schedule of Rates.

Note: However, Contractor shall be solely responsible for supply of all consumables, items & services at its own cost that will be required to render services as per the scope of work of this contract, including but not limited to items like fuel, lubricants, logistic support etc.

8.0 PERMITS, CLEARANCES AND LICENSES

Contractor agrees that it shall secure permits, clearances and licenses for operations of the Bundled services, if required and Contractor shall pay any expenses in this regard. Contractor shall take required License(s) from the appropriate regulatory agencies of Govt. of India at Contractor's cost. However, the Company shall assist the Contractor in obtaining the requisite permit, clearances and licenses.

9.0 INSPECTION OF MATERIALS

9.1 INSPECTION BY CONTRACTOR

CONTRACTOR agrees to perform a visual inspection, using its personnel, of all materials and appliances furnished by the Company when delivered into CONTRACTOR's possession and shall notify Company's representatives of any apparent defects observed therein so that Company may replace such defective materials or appliances. If CONTRACTOR fails to notify Operator of any apparent defects as provided above, it shall be conclusively presumed that such materials and appliances, are free from such apparent defect. CONTRACTOR shall not be liable for any loss or damage resulting from the use of materials or appliances furnished by Company containing latent defects. Upon the termination of this Contract, CONTRACTOR shall return to Operator at the well site all machinery, equipment, tools, spare parts and supplies received by CONTRACTOR from Company or purchased by CONTRACTOR for Company 's account and not used or consumed in the operations, in as good condition as when received by CONTRACTOR. If damage to any Company's equipment is caused due to sole negligence of the CONTRACTOR same will be repaired or replaced at CONTRACTOR's cost. CONTRACTOR shall, if requested by Company, also maintain or repair, at its cost, any of Company's items, at the Drilling Unit which CONTRACTOR is qualified to and can maintain or repair with CONTRACTOR's normal complement of personnel and the equipment at the Drilling Unit, provided however that Company shall at its cost provide all spare parts and materials required to maintain or repair Company's items. However, it shall remain the Company's basic responsibility and liability to ensure that such items are always in good workable condition.

9.2 INSPECTION BY COMPANY:

Company shall have the right to inspect and reject for any valid cause any items furnished by CONTRACTOR and CONTRACTOR, shall replace or repair at its sole expense such items so rejected with items free of defects, to the satisfaction of Company.

10.0 DEFICIENCIES

CONTRACTOR's all equipment shall be maintained by CONTRACTOR in sound and efficient operating condition at all times. Should the performance of CONTRACTOR's equipment and Bundled services becomes unsatisfactory or performance of work hereunder be reduced because of defective CONTRACTOR's furnished equipment or by reason of CONTRACTOR's incompetence or negligence, OIL shall give CONTRACTOR written notice specifying the causes of its dissatisfaction to correct the specified deficiency within 15 days failing which OIL shall have the right to terminate this Contract by giving thirty (30) days advance written notice to the CONTRACTOR, unless the specified deficiency is corrected within such thirty (30) days period. In this event no demobilization fees will be payable by the company notwithstanding the provision contained in the Contract. OIL shall recover the mobilization charges, if any, paid in terms of **clause 5.0** in case the deficiency occurs during pendency of the Contract, on pro-rata basis for the period of non-performance, in addition to invoking of performance bond due to failure of the CONTRACTOR in executing the Contract faithfully.

11.0 PERSONNEL

(a) CONTRACTOR will at all times at its sole expense and under its exclusive responsibility arrange supervisory, technical and other personnel to properly perform the work, in the numbers and categories as set forth under respective

exhibits hereof. CONTRACTOR shall be responsible for securing work permits and security passes for CONTRACTOR's employees and personnel, if required, as per the Indian Government laws. Company shall issue necessary documentary assistance in this regard, if required.

(b) The Contractor shall be responsible for arranging relief of personnel during vacation, statutory off days, sickness etc. entirely at their cost. However, such relievers must also have the qualification/experience as indicated in respective exhibits and Contractor should submit qualification/ bio-data / experience / track record of the personnel. Moreover, the Contractor will have to obtain prior permission/approval from Company for the relief personnel of the Contractor.

(c) Replacement of Contractor's Personnel: The Contractor will immediately remove and replace any of their personnel, who in the opinion of the Company is incompetent or negligent or of unacceptable behavior or whose employment is otherwise considered by Company to be undesirable. The replacement personnel must also have the qualification/experience as indicated in respective exhibits. The Contractor shall submit qualification/biodata/experience/track record of the replacement personnel and shall obtain prior permission/approval from Company for the replacement personnel. The replacement of such personnel will be fully at the cost of the Contractor and shall be made within ten (10) days of such instruction from the Company.

12.0 LIST OF EXPATRIATES:

List of Expatriates and Indian personnel with their bio-data and experience in respective areas of work must be furnished within 15 days of issue of letter of award or 30 days prior to commencement of contract (whichever is later) for approval by the Company before commencement of work.

13.0 MATERIALS, SUPPLIES, EQUIPMENT, SERVICES & PERSONNEL TO BE FURNISHED BY COMPANY

(a) i) All items of equipment, materials, supplies, service personnel required for operations hereunder, other than items to be supplied by CONTRACTOR as set forth will be furnished by the COMPANY at the designated location.

ii) All items of equipment, materials, supplies and services required to be furnished by the Company, will be furnished by the Company, or at Company's request, such items or any other items which Company is required to furnish under this Contract may be furnished by CONTRACTOR and billed to and be reimbursed by the Company at actual invoice cost provided that if the item is furnished out of CONTRACTOR's inventory the lowest quote from three reputable vendors/ suppliers will establish the replacement cost less any cash discount obtained by CONTRACTOR, plus actual documented freight, packing and insurance costs of such items obtained outside the area of operations.

When such items are sent by air, at the specific request of the Company the entire cost thereof shall be for the account of Company, including Air freight. In the event CONTRACTOR is requested to furnish any single item of equipment, materials or supplies which, Company is required to furnish under this Contract, CONTRACTOR's fee of 5% will be payable by the Company on FOB value less discount if any, for each procurement to cover total costs, to CONTRACTOR on account of such procurement and actual cost of services against documents.

iii) For all services rendered or materials supplied to CONTRACTOR by Company at CONTRACTOR's request, which services or materials are the obligations of the CONTRACTOR, the Company shall charge the CONTRACTOR for actual costs as supported by vendor's invoice plus 5% fee on FOB value for each procurement, thereon to cover costs on account of such procurement and actual cost for services.

Company will provide recommendatory letter to the CONTRACTOR for the items ordered / brought by the CONTRACTOR under the Contract and CONTRACTOR shall obtain EC from DGH for availing custom duty exemptions. In case, customs duty becomes applicable the same would be reimbursed at actuals against documentary evidence, in addition to transportation charges for the ordered items.

(b) Any equipment, materials, or supplies purchased by CONTRACTOR on account of Company shall thereafter become the property of the Company upon payment by Company.

14.0 MATERIALS, SUPPLIES, EQUIPMENT, SERVICES & PERSONNEL TO BE FURNISHED BY CONTRACTOR

14.1 Contractor shall provide Contractor's items to perform the services under the contract as specified in this document. Contractor shall be liable to obtain any permits or licenses required for the use of Contractor's Items.

14.2 The Contractor shall be responsible for maintaining at his cost adequate stock levels of Contractor's items including spares and replenishing them as necessary.

14.3 Contractor shall be responsible for the maintenance and repair of all Contractors' items and will provide all spare parts, materials, consumables etc. during the entire period of the contract.

14.4 The Contractor shall provide all fuel & lubricants for operation of Contractor's equipment both at well site and camp site at Contractor's cost. There shall be no escalation in day rates throughout the duration of the Contract including extension, on account of any price increase in fuel/lubricants etc.

14.5 Contractor shall manage their inventories in pro-active manner so that supply of critical items for operations remains uninterrupted.

15.0 CONTRACTOR'S SPECIAL OBLIGATIONS:

15.1 It is expressly understood that Contractor is an independent Contractor and that neither it nor its employees and its sub-contractors are employees or agents of Company, provided however, Company is authorized to designate its representative, who shall at all times have access to the Contractor's Units, related equipment and materials and all records, for the purposes of observing, inspecting and designating the work to be performed hereunder by Contractor. The Contractor may treat Company's representative at well site as being in-charge of all Company's designated personnel at well Site. Company representative may, amongst other duties, observe, test, check and control implementation of work programs and inspect works performed by Contractor or examine records kept at well site by Contractor.

15.2 COMPLIANCE WITH COMPANY'S INSTRUCTIONS: Contractor shall comply with all instructions of Company consistent with the provisions of

this Contract. Such instructions shall, if Contractor request, be confirmed in writing by Company's representative.

15.3 All items including consumables if imported against Essentiality Certificate (EC) under 'concessional' (Nil) Customs Duty shall be recorded in the proper format, indicating date of receipt, type, consumption, date of replacement etc.

15.4 The Contractor shall complete re-export formalities upon completion/ termination of this contract against all such items which were brought into India on re-exportable basis and provide the list of the items, equipment, consumables etc. to Company along with all relevant export documents. It will also be the sole responsibility of the Contractor to ensure cancellation & discharge of all undertakings/bonds from Customs authorities which were provided by Company at the time of import against this contract.

15.5 In case the Contractor imports the equipment etc. on re-exportable basis, the Contractor shall ensure for re-export of the equipment and all consumables and spares (except those consumed during the contract period) and complete all documentation required. Company will issue necessary certificates etc. as required. The Contractor should arrange for re-export of equipment within sixty (60) days of notice of de-mobilization issued by Company. If the re-export is not completed within the specified period, customs duty, penalty etc. levied by customs authorities for such delay shall be to Contractor's account and same will be deducted by the Company from Contractor's bills and Performance Security.

15.6 Contractor should furnish the list of items, which are required to be imported by Contractor for execution of this contract, in the format specified in Proforma– A for respective Exhibits, towards which the recommendatory letters to the Directorate General of Hydrocarbons (DGH), New Delhi would be issued subsequently by Company on request for clearance of goods from Indian customs by Contractor at concessional (nil) rate of customs duty.

15.7 Contractor shall arrange for inland transportation of all equipment, etc. from the port to the place of work and back at the end of the work at their own expense. Arrangement of Road Permits and payment of Entry Tax for bringing Contractor's equipment/materials to Work place shall be Contractor's responsibility.

16.0 CONFIDENTIALITY:

Contractor agrees to be bound by professional secrecy and undertake to keep confidential any information obtained during the conduct of various Operations, including, but not limited to depths, formations penetrated, results of coring, testing and surveying of the well etc. and to take all reasonable steps to ensure that the Contractor's personnel likewise keep such information confidential.

a. This obligation shall remain in force even after the termination date and until such information is disclosed by Company.
b. Contractor shall handover to Company all Company's documents or drafts concerning operations carried out and which are still in its possession before transferring to another sphere.

17.0 TERMS OF PAYMENT:

17.1 Company shall pay to the Contractor during the term of the Contract the amount due from time to time calculated according to the rates of payment set and in accordance with other provisions hereof. No other payments shall be due from Company unless specifically provided for in the Contract. All payments will be made in accordance with the terms hereinafter described.

17.2 MANNER OF PAYMENT: All payments due by Company to Contractor hereunder shall be made at Contractor's designated bank with Reserve Bank of India (RBI)'s approval, if applicable. Bank charges, if any will be on account of the Contractor.

17.3 Payment of any invoices shall not prejudice the right of Company to question the validity of any charges therein, provided Company within 2 (two) year after the date of payment shall make and deliver to Contractor written notice of objection to any item or items the validity of which in question.

17.4 Invoices: Mobilization charges will be invoiced only upon completion of mobilization (after commencement of operation at the first well), submission /production of appropriate inventory documents, and physical verification by Company representative.

17.5 Contractor shall submit monthly invoices to Company only after the end of each calendar month for all daily or monthly charges due to the Contractor.

17.6 Billings for daily charges/day rates will reflect details of time spent (calculated to the nearest quarter of an hour) and the rates charged for that time. This should be in the form of monthly time analysis chart(s).

17.7 Invoice for reimbursable charges, if any, related to the Contract will be accompanied by documents supporting the cost incurred and duly certified by Company representative.

17.8 Contractor will submit 02(Two) sets of all invoices duly super scribed 'Original' and 'copy' as applicable to the company for processing payment. Separate invoices for the charges payable under the contract shall be submitted by the Contractor for foreign currency and Indian currency.

17.9 Payment of monthly invoices, if undisputed, shall be made within 30 days following the date of receipt of invoice by Company excepting for the first two (2) and last monthly invoices where some delay (up to two months) may occur.

17.10 Company shall within 30 days of receipt of the invoice notify the Contractor of any item under dispute, specifying the reasons thereof, in which event,

payment of the disputed amount may be withheld until settlement of the dispute, but payment shall be made of any undisputed portion on or before the due date. This will not prejudice OIL's right to question the validity of the payment at a later date as envisaged in Clause 3 above.

17.11 The acceptance by Contractor of part payment on any billing not paid on or before the due date shall not be deemed a waiver of Contractor's rights in any other billing, the payment of which may then or thereafter be due.

17.12 Payment of other invoices as set forth in Clause 7 (reimbursable items) shall be made within 60 days following the date of receipt of the invoices by Company.

17.13 Payment of Mobilization Charges shall be made within 45 days following the date of receipt of undisputed invoices by Company. Mobilization should be complete in all respect before raising invoice.

17.14 Payment of Demobilization charges shall be made when applicable within 45 days following receipt of invoice by Company accompanied by the following documents from the Contractor:

a. Audited account up to completion of the Contract.
b. Tax audit report for the above period as required under the Indian Tax Laws.
c. Documentary evidence regarding the submission of returns and payment of taxes for the personnel engaged by the Contractor or by its sub-contractor
d. Proof of re-export of all items including the unutilized spares and consumables (excepting consumables consumed during the contract period) and also cancellation of re-export bond if any.
e. Any other documents as required by applicable Indian Laws. In case, no de mobilization charges are payable, the documents mentioned above will have to be submitted by the Contractor before release of the final payment by OIL.

17.15 Contractor shall maintain complete and correct records of all information on which Contractor's invoice are based up to 2 (two) years from the date of last invoice. Such records shall be required for making appropriate adjustments or payments by either party in case of subsequent audit query / objection. Any audit conducted by Company of Contractor's records, as provided herein, shall be limited to Company's verification (i) of the accuracy of all charges made by Contractor to Company and (ii) that Contractor is otherwise in compliance with the terms and conditions of this Contract.

18.0 SET-OFF: Any sum of money due and payable to the Contractor (including Performance Security refundable to them) under this or any other Contract may be appropriated by OIL and set-off against any claim of OIL (or such other person or persons contracting through OIL) for payment of a sum of money arising out of this contract or under any other contract made by the Contractor with OIL (or such other person or persons contracting through OIL).

19.0 SUBSEQUENTLY ENACTED LAWS: Subsequent to the date of bid submission, if there is a change in or enactment of any law or interpretation of existing law, which results in addition/reduction in cost to Contractor on account of the operation contemplated under the Contract, the Company/ Contractor shall reimburse the Contractor/pay Company for such additional/reduced costs actually incurred/saved by Contractor, subject to the submission of documentary evidence by Contractor/Company.

20.0 CUSTOMS DUTY

20.1 Company shall use the units/tools/items with the Services under the Contract in the PEL/ML areas renewed / issued to Company after 1.4.1999 and therefore, as specified in List -33 under Sl. No 404 of table (condition No. 48) of Notification No. 50/2017-Customs dated 30.06.2017 for items imported in connection with petroleum operations under this Contract would attract zero customs duty. Company will issue Recommendatory Letter to Directorate General of Hydrocarbons (DGH), Ministry of Petroleum & Natural Gas, as per Government guidelines for issuance of Essentiality Certificate (EC) from Directorate General of Hydrocarbons, to enable the Contractor to import goods at concessional (Nil) customs duty so as to provide the services under this Contract provided these goods are specified in the List- 33 of the aforesaid Notification**.**

20.2 Bidder should provide the list of items to be imported by them under the Contract in the format specified in **Proforma-A (for respective services)** along with their bid for issuance of Recommendatory Letter to DGH. Contractor shall made written request to Company immediately after shipment of the goods indicated by them in **Proforma-A**, **(for respective services)** along with the Invoices and all shipping documents (with clear 20 working days' notice) requesting Company for issuance of the Recommendatory Letter. Company shall issue the Recommendatory Letter provided all the documents submitted by the Contractor are found in order as per contract. It shall be however, Contractor's responsibility to obtain EC from DGH and clear the goods through customs. Company shall not be liable in whatsoever manner for the rejection of their claims for Nil rate of customs duty by any of the authorities including DGH. Contractor shall indemnify Company from all liabilities of Customs Duty.

20.3 All costs of imports and import clearances under the contract shall be borne by the contractor and Company shall not provide any assistance in this regard.

20.4 However, in the event customs duty becomes leviable during the course of Contract arising out of a change in the policy of the Government, the Company shall be liable for payment of the customs duties leviable in India on Contractor's items as provided in **Proforma-A (for respective services)** or the actual whichever is less, provided the Contractor furnishes all necessary documents indicating the estimated customs duty at least 10 days in advance. Such payment of Customs Duty shall be arranged by the Company and made available to the representatives of Contractor at Kolkata (Port of Importation in India) within 3 working days after the Contractor submits the undisputed and clear necessary documents/duty assessment papers at Company's office at Kolkata. Contractor would be responsible for passing such payment to customs authorities at the port of entry. Company's obligation for Customs Duty payment shall be limited / restricted to the tariff rates as assessed by the Customs on the day of clearance, or as on the last day of the stipulated

mobilization period. In case of clearance thereafter, on the CIF value of items in Proforma-A will be frozen and any increase in Customs Duty on account of increase in value on these will be to the Contractor's account. Furthermore, in case the above CIF value is not acceptable to assessing Customs Officer and as a result if any excess Customs Duty becomes payable, it shall be to Contractor's account. Before filing Bill of lading, Bill of entry, the Contractor must consult the Company to avoid payment of excess Customs Duty.

20.5 Contractor shall, however, arrange clearance of such items from Customs and port authorities in India and shall pay all requisite demurrages, if any, clearance fees/charges, port fees, clearing and forwarding agent fees/ charges, inland transport charges etc. Company shall provide all assistance by issuance of necessary letter of authority or other relevant documents and necessary help.

20.6 Contractor must ensure that the spares and consumables imported by them for providing the services under Contract are properly used in executing their job under the Contract in the PEL/ML areas of Company for which EC has been obtained. Contractor shall furnish to Company a certificate as and when the spares and consumables are used/consumed certifying that the spares and the consumables imported by them have been consumed in those ML/PEL areas under the contract for which ECs were obtained by them. In order to avoid any misuse of the spares and consumables imported by the Contractor for providing the services under the Contract, Contractor shall furnish an Undertaking similar to that being furnished by Company to Customs of suitable amount before issue of the Recommendatory Letter.

21.0 **COMPANY'S INSTRUCTIONS**

Company may from time to time through its authorized representative or representatives, issue written or oral (to be followed by writing) instructions to CONTRACTOR concerning operations.

22.0 FISHING OF EQUIPMENT

22.1 In the event any of the CONTRACTOR'S Equipment is lost / stuck in the well, then the COMPANY shall, at its expense, attempt to recover or retrieve the same. As and when the COMPANY decides to fish for any of the CONTRACTOR'S Equipment, then the COMPANY shall have full responsibility and liability for such Operations but the CONTRACTOR shall render assistance in an advisory capacity at all times in connection with such fishing operations.

22.2 It is expressly understood between the Parties that the CONTRACTOR's personnel are not authorized or entitled to do anything other than to advise the COMPANY in connection with such fishing operations and about any fishing tools which may be furnished by the CONTRACTOR at the COMPANY's request. Furnishing of such fishing tools is solely as an accommodation to the COMPANY and the CONTRACTOR shall not be responsible or liable for any loss or damage which may result with the use of such tools or by reason of any advice or assistance provided to the COMPANY by the CONTRACTOR or its personnel regardless of the cause of such loss. "

23.0 LIABILITY FOR THE WELL OR RESERVOIR

Notwithstanding anything else contained herein to the contrary, in accepting an order to perform any services and or to furnish any Equipment, the CONTRACTOR does so with the understanding that they do not guarantee results. Further notwithstanding anything else contained herein to the contrary, the CONTRACTOR shall not be liable or responsible for or in respect of:

(i) any sub-surface damage (including but not limited to damages or loss of a well or reservoir or formation, the loss of any oil or gas therefrom), or any surface loss or damage or injury or death arising out of a sub-surface damage; and/or (ii) blowout, fire, explosion of other uncontrolled well condition; and/or

(ii) damage to, or loss of oil or gas from, any pipelines, vessels or storage or production facilities; and/or

(iii) any loss or damage or injury or death whatsoever, direct or consequential, including liability arising from pollution originating below the surface and any clean-up costs, whether caused by their personnel or Equipment or otherwise arising from or in any way connected with such sub-surface Operations or in performing or attempting to perform any such Operations

Irrespective of the cause and the COMPANY agrees that it shall absolve the CONTRACTOR and protect, defend, indemnify and hold the CONTRACTOR and its co-lessees, its sub-Contractors, its agents and its parents, subsidiaries and affiliates, its other CONTRACTORs and/or its and their directors, officers, employees, consultants and invitees harmless from and against all claims, suits, demands and causes of actions, liabilities, expenses, costs and judgements of every kind and character (including without limitation for the loss or damage of any property, or the injury or death of any person), without limit, in favour of any person, party or entity, resulting from any of the above, except on account of any Gross Negligence on the part of CONTRACTOR, its Sub-Contractor, their employees or equipment and tools, including costs incurred by COMPANY in this respect."

24.0 INTERPRETATION LIABILITY

In making any interpretation of logs, whether directly or by means of electronic transmission or data processing or otherwise, or in making any recommendations based on interpretation of logs or otherwise, the CONTRACTOR'S employees shall give the COMPANY the benefit of their best judgment. Nevertheless, since all interpretation and or recommendations are only opinions, based in part on inferences from electrical or other measurements and since all electronic transmission and data processing is subject to error which may be beyond their control, the CONTRACTOR cannot and does not guarantee the accuracy or correctness of any such interpretations or recommendations and, except in case of willful misconduct and or Gross Negligence on the part of the CONTRACTOR, the CONTRACTOR shall not be liable for and the COMPANY shall indemnify and hold the CONTRACTOR harmless against any loss or damage whatsoever, whether incurred by the COMPANY or any other person, resulting from, or arising out of, directly or indirectly, any such interpretation or recommendation or resulting from logs being interpreted by others when transmitted by electronic process."

25.0 RADIO ACTIVE SOURCES

The COMPANY acknowledges, that it is aware that the radioactive sources used in Operations by the CONTRACTOR are potentially dangerous both to humans and to animals and should any such source be lost in the well, special precautions must be taken in fishing operations in order that the container of

the source is not broken or damaged, and that such source if not recovered must be isolated by cementing it in place or by some other appropriate means; and the COMPANY by requesting the CONTRACTOR to perform any service involving the use of radioactive material accepts the possibility of such risks and agrees that the CONTRACTOR shall not be liable or responsible, except in case of willful misconduct and or Gross Negligence on the part of the CONTRACTOR for any injury to or death of persons or damage to property (including but not limited to, injury to or loss of a well or reservoir) or any other loss or damage whatsoever, direct or consequential, irrespective of the cause, whether caused by the CONTRACTOR'S personnel or Equipment or otherwise, arising from or in any way connected with the use or placing by the CONTRACTOR of radioactive material in a bore hole, and the COMPANY agrees that it shall absolve, indemnify and hold the CONTRACTOR harmless except in case of willful misconduct and or Gross Negligence on the part of the CONTRACTOR from and against all liability for any and all losses, costs, damages and expenses incurred or sustained by the COMPANY or any other person resulting from any such use of radioactive material. The CONTRACTOR shall provide the COMPANY complete information on the construction of radioactive sources, pressure vessels and shields and certificates on usability and safety. The CONTRACTOR shall not use any material, which is not certified by the International Atomic Energy Agency (I.A.E.A) for use under the conditions prevailing in the well."

26.0 POLLUTION AND CONTAMINATION:

Notwithstanding anything to the contrary contained herein, it is understood and agreed by the Contractor and Company that the responsibility for pollution or contamination shall be as follows:

i) The Contractor shall assume all responsibility for cleaning up and controlling pollution or contamination which originates from Contractor's equipment and facilities above the surface. Contractor shall protect, defend and save the Company harmless from and against all claims, demands and causes of action of every kind and character arising from all pollution, contamination, which may occur from any cause, save and except pollution or contamination for which the Company assumes liability in terms of Sub-clause (ii) below.

ii) The Company shall assume all responsibility for all other pollution and contamination (including control and removal of the pollutant involved) and shall protect, defend and save the Contractor harmless from and against all claims, demands and causes of action of every kind and character arising from all pollution, contamination, which may occur from any cause, save and except pollution or contamination for which the Contractor assumes liability in terms of Sub-clause (i) above.

iii) In the event, a third party commits an act or omission which results in pollution or contamination for which either the Contractor or Company, for whom such party is performing work, is held to be legally liable, the responsibility therefore shall be considered as between the Contractor and Company, to be the same as if the party for whom the work was performed and all of the obligations respecting defiance indemnity, holding harmless and limitations of responsibility and liability, shall be specifically applied.

27.0. **WAIVERS AND AMENDMENTS**:

It is fully understood and agreed that none of the terms and conditions of the contract shall be deemed waived or amended by either party unless such waiver or amendment is executed in writing by the duly authorized agents or

representatives of such party. The failure of the Company to execute any right of termination shall not act as a waiver or amendment of any right of the Company provided hereunder.

28.0 **RIGHTS AND PRIVILEGES OF THE COMPANY**:

Company shall be entitled –

i. To check various functional units and Contractor's items before the commencement Date. If they are not found in good order or do not meet specifications as per respective exhibits or in case of non-availability of some of the Contractor's items listed therein, the Contractor may not be allowed for commencement until the Contractor has remedied such default.

ii. To change the drilling programme, mud programme, well depths to complete or abandon any well at any time.

iii. To approve the choice of sub-contractors for any essential third-party contract, concerning materials, equipment, personnel and services to be rendered by Contractor. Sub-contract may be entered into by Contractor only after Company's approval.

iv. To check, at all-times, Contractor's stock level, to inspect Contractor 's equipment and request for renovation or replacement thereof, if found in unsatisfactory condition or not conforming to regulations or specifications.

v. To order suspension of operations at Nil Day Rate while and whenever:

a) Contractor's personnel is deemed by Company to be not satisfactory
b) Contractor's equipment does not conform to regulations or to the specifications laid down in the Contract.
c) Contractor's equipment turns into a danger to personnel on or around the rig or to the well.
d) Contractor's insurance in connection with the operations hereunder is found by Company not to conform to the requirements set forth in the contract.
e) Contractor fails to meet any of the provisions in the Contract.
f) Any shortage in key/additional (compulsory) personnel and inadequacy of other personnel.
g) Contractor is found non-compliant to HSE requirements as per Safe Operating Practices or applicable laws.

vi. To reduce the rates reasonably, at which payments shall be made if the Contractor is allowed to continue the operation despite having certain deficiency in meeting the requirements as per provision in the contract.

29.0 **FIRM PRICE:** The rates payable under this Contract, shall be firm during the Contract period including the extension period, if any, under Clause 1.2.10 of the Section-I 'General Conditions of Contract'.

30.0 **HEADINGS:** The headings of the clauses of the Contract are for convenience only and shall not be used to interpret the provisions hereof.

31.0 **SUSPENSION AT COMPANY'S REQUEST**: The Company shall have the right, without cause, at any time to require the Contractor to suspend the work under this Contract on giving notice to the Contractor specifying the estimated duration of the suspension period. The work shall resume at the end of suspension period or such other date as the Company may specify to the Contractor by notice in writing. During the suspension period, Contractor shall be paid as per the provisions of Clause 8.0 of Section - IV 'Schedule of Rates'. The Company shall

notify the Contractor, whether it requires the Contractor to stack Equipment and/or Personnel at its current location or at a different location.

Company shall review the condition/situation during initial 15 days of stack day rate and the company will review for extension of stack period further or, to go for interim Demobilization. The Company, at its discretion, may add back such suspension period to the original Contract duration at the same rates, terms and conditions by giving 30 (thirty) days' notice to the Contractor before the expiry of the Contract.

32.0 COMPREHENSIVE 'HSE' GUIDELINES:

The contractor is required to abide by and adhere to the following comprehensive 'HSE' guidelines, as applicable, during the entire contract period.

a. The Contractor shall be solely responsible to comply all the statutory norms as applicable while executing the job. It will be solely the Contractor's responsibility to fulfill all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely: the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-contractors hired by him comply with the same requirement as the Contractor himself and shall be liable for ensuring compliance of all HSE laws by the sub-contractors. It will be the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all HSE measures and statutory Rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by representative of OIL.

b. The Contractor engaged for any electrical installation, maintenance, repairs etc., should possess a valid electrical Contractor license issued by the State Electricity Licensing Board and engage adequate number of competent electrical personnel. All the Competent persons shall have appropriate Work Permit/ Supervisory License issued by State Electricity Licensing Board. It shall be included in Terms and Conditions of contract agreement/NIT (Notice Inviting Tender) and shall be ensured by the OIL Engineer in charge.

c. The Contractor shall ensure complete safety of the personnel engaged by him, and of all the equipment, they will handle and must take full responsibility for their safety.

d. Contractor's arrangements for health and safety management shall be consistent with those for the company (OIL).

e. A Contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's Actor omissions at work.

f. The Contractor should frame a mutually agreed bridging document between OIL & the Contractor for all issues not envisaged under the terms and conditions of the contract with the roles and responsibilities clearly defined.

g. Statutory forms to be maintained in respect to Mines Act, 1952, Mines Rules 1955, Oil Mines Regulations 2017, the Environment (Protection) Act-1986 and other applicable laws.

h. The Contractor, wherever applicable, shall obtain necessary hazardous waste authorization from the Stat Pollution Control Board for storage, handling and disposal of hazardous waste.

i. As per DGMS circular & Gazette Notification for maintenance of register as required by the Mines Act1952 and Mines Rules, 1955, the forms A, B, D and E have been updated and modified. The above-mentioned forms need to be maintained as per the new format.

j. The Contractor shall submit to DGMS returns indicating — Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment work persons, Number of work persons deployed, how many work hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.

k. The return shall be submitted quarterly (by 10th of April. July, October & January) for contracts of more than one year. However, for contracts of less than one year, returns shall be submitted monthly.

l. The Contractor has to keep a register of the persons employed by him/her. The Contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.

m. The health check-up of Contractor's personnel is to be done by the Contractor in OIL empaneled Hospital and the reports and statutory forms as applicable to be vetted from the OIL authorized Medical Officer. The frequency of periodic medical examinations should be every five years for the employees up to 45 years of age and every three years for employees of 45 years of age and above. Initial Medical Examination should be in line with the standard followed by OIL.

n. All persons deployed by the Contractor for working in a mine must undergo Mines Vocational Training, initial medical examination and Periodic Medical Examination (if required). They should be issued cards stating the name of the Contractor and the work and its validity period, indicating status of MVT, IME & PME. Note: Contractor can nominate their personnel to undergo MVT at any MVT institute recognized by DGMS (also includes OIL's MVT institute) without affecting the operations.

o. Every person deployed by the Contractor must use appropriate PPEs (Personal Protective Equipment) to be provided by the Contractor. The Contractor shall provide Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company's PPE schedule. Safety appliances like protective footwear, Safety Helmet and Full Body harness, Fall Prevention Devises (FPD) shall conform to relevant IS codes. Necessary supportive document shall have to be available at site as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may request to the Company (OIL) for providing the same. In case of exigency OIL will provide the safety items if available. However, in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work. Contractor employees should be trained in the proper use and maintenance of PPE. In absence of appropriate PPEs, the representative of OIL has the right to stop the work which will be binding for the Contractor. Moreover, the accountability towards any delay in work/ penalty due non-adherence to PPE shall be binding to the Contractor.

p. Soft copy of the Standard Operating Procedures (SOPs) related to scope of work shall be handed over to the representative of OIL by Contractor including an assessment of risk, wherever possible and safe methods to deal with it/them. Printout of copy (spiral binding) of the SOP mentioned above is to be kept with all working teams at all times. The SOP clearly stating the risk arising to men, machineries & material from the mining operation / other operations to be done by the Contractor and how it is to be managed. However; in case of any doubts, the Contractor shall reconfirm the same from the Engineer In Charge (OIL).

q. Contractor has to ensure that all work is carried out in accordance with the Statute and the SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For the work which is not covered under SOP, the Contractor shall develop it and submit to the representatives of OIL.

r. In case of deviation of SOP or non-availability of SOP, Job Safety Analysis (JSA) shall be carried out before commencement of the work.

s. Necessary cold and hot work permits including excavation clearance and permission for working at height, Confined Space Entry as applicable are to be obtained by the competent person of the Contractor from the site representative of OIL before start of the job(s). Work Permit System should be inline as per guidelines issued by HSE Department

t. Necessary facilities for monitoring the levels of parameters in respect of Methane, Oxygen, Hydrogen Sulphide and Carbon Monoxide should be provided at mines. Portable multi-gas detector (LEL/O2/CO/H2S) and FLP torch light to be made available at site.

u. The Contractor's personnel should be aware about the existing as well as probable hazards and ensured their training to tackle such untoward events by the Contractor. If the Company (OIL) arranges any safety awareness program / training for the working personnel at site (company employee, Contractor worker, etc.) the Contractor will not have any objection to any such training.

v. The Contactor personnel shall arrange daily meeting and monthly pit level meeting headed by the OIL Engineer and maintain records accordingly. Safety Briefing, Evacuation plan in case of emergency and how to inform (in case of emergency) to be discussed during the Tool Box meeting. When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE measures Company will have the right to direct the Contractor to cease work until the non- compliance is corrected.

w. After receipt of the work order the Contractor shall have to submit authorized list of Contract Personnel, who will be engaged for the jobs including name of the Contractor's competent persons and every contact details. No person shall be engaged in any job in a mine unless his competency has been assessed and approved by the OIL Engineer In Charge.

x. The Contractor shall not engage minor laborer below eighteen (18) years of age under any circumstances.

y. OIL will communicate all information to the Contractor or his authorized representative only.

z. The Contractor shall have to report all incidents including near miss to the representative of OIL who shall be supervising the Contractor's work.

aa. Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the Contractor only.

bb. Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the Contractor and their medical treatment/ facilities in case of accidents should be provided by the same Contractor. The Contractor's personnel should be aware about the existing as well as probable hazards and ensured their training to tackle such untoward events by the Contractor.

cc. Contractor shall keep a reasonable degree of order by disposing of accumulated rubbish and excess material. Disposal of solid wastes generated by the Contractor shall be in accordance with the company's Procedure for Solid Waste Management. The Contractor Personnel have to take every possible care to keep the environment clean and free from pollution.

dd. The Contractor have to ensure the quality and reliability of all the tools, equipment and instruments they use. The supporting documents relevant to prove the above should be submitted. Defective tools shall be immediately removed.

ee. The Contractor should prevent the frequent change of his deployed employees as far as practicable. The Contractor shall not employ or terminate his worker without the knowledge of the OIL engineer in charge. However, if OIL Engineer In Charge found any person not appropriate to with respect to job, the Contractor

has to remove the person and replace a suitable person within the timeline as per the terms of the Contract.

ff. Contractor's Supervisor/ Contractor's personnel need to be aware about the site-specific emergency response plan (which includes display of emergency contact nos., establish telephone communication, layout of working area, use of fire extinguisher, emergency exit, assembly point).

gg. All Lifting equipment of the Contractor like Crane etc. shall have to be duly calibrated. Calibration Certificate of this equipment shall have to be submitted to the representatives of OIL and a copy of the same to be made available at site.

hh. Necessary sign-board / warning signals like caution, "hot work" in progress, emergency telephone numbers, no entry without permission etc. should be used while working on tanks. The said signals / sign-boards shall have to be arranged by the Contractor and shall be in line with the circular of signboards issued by HSE Department, Oil India Limited.

ii. Barricading of area to be done with reflecting tapes as applicable during work.

jj. The First-Aid box should be provided by the Contractor and the same has to be kept ready to use at the site throughout the working hours.

kk. The availability of First-Aid Fire Fighting equipment should be ensured by the Contractor at all working hours.

ll. Smoking is prohibited in all Company restricted areas except in authorized smoking areas/ shelters. Carrying of matches and lighters into the Hazardous Area is prohibited. Cellular phones shall not be used in operating areas / hazardous areas unless they have been classified as 'intrinsically safe' for use in that atmosphere. Consumption of alcohol and possession of non- prescribed drug in Company work site is strictly prohibited.

mm. When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company will have the right to direct the Contractor to cease work until the non-compliance is corrected.

nn. The Contractor personnel should understand the implication of the known hazards related to the work undertaken by them and the necessity of having an emergency plan approved by OIL to counter them, if anything goes wrong.

oo. In case Contractor is found non-compliant of HSE laws as required and all the above mentioned general HSE points, company will have the right for directing the Contractor to take action to comply with the requirements, and for further non-compliance, the Contractor will be penalized as per the terms of the Contract.

pp. Considering the ongoing Covid-19 pandemic, those who are engaged in the above operations should be followed the Covid-19 Protocol as per the prevailing Government Guidelines.

qq. Any requirement arise by the Statutory Authorities during the period of contract shall be applicable and binding for the Contractor.

33.0 RECORDS & DOCUMENTS TO BE MAINTAINED AT WELL SITE:

Documentation, record keeping of all operations and safety practices should be maintained and up-dated by the Contractor as per applicable international/Indian laws, acts, regulations etc. as per standard Oilfield practice and these records should be made available for inspection at any point of time. The H.S.E (Health, Safety and Environment) policy manual, SOP (safe operating practices), risk register & bridging document should be available at site. Compliance of these shall be the sole responsibility of the Contractor.

34.0 **GOODS AND SERVICES TAX:**

34.1 In view of GST Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST/VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in GST. Accordingly reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax or any other form of indirect tax except of GST mentioned in the bidding document shall be ignored. Bidders are required to submit copy of the GST Registration Certificate while submitting the bids wherever GST (CGST & SGST/UTGST or IGST) is applicable.

34.2 "GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import / interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

34.3 Quoted price/rate(s) should be inclusive of all taxes and duties, except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and cess on GST if applicable) on the final service. However, GST rate (including cess) to be provided in the respective places in the Price Bid. Please note that the responsibility of payment of GST (CGST & SGST or IGST or UTGST) lies with the Supplier of Goods/Services (Service Provider) only. Supplier of Goods/Services (Service Provider) providing taxable service shall issue an Invoice/Bill, as the case may be as per rules/regulation of GST. Further, returns and details required to be filled under GST laws & rules should be timely filed by Supplier of Goods/Services (Service Provider) with requisite details.

34.4 Bidder should also mention the Harmonised System of Nomenclature (HSN) and Service Accounting Codes (SAC) at the designated place in SOR.

34.5 **Where the OIL is entitled to avail the input tax credit of GST:** OIL will reimburse the GST to the Supplier of Goods/Services (Service Provider) at actual against submission of Invoices as per format specified in rules/regulation of GST to enable OIL to claim input tax credit of GST paid. In case of any variation in the executed quantities, the amount on which the GST is applicable shall be modified in same proportion. Returns and details required to be filled under GST laws &rules should be timely filed by supplier with requisite details.
The input tax credit of GST quoted shall be considered for evaluation of bids, as per evaluation criteria of tender document.

34.6 **Where the OIL is not entitled to avail/take the full input tax credit of GST:** OIL will reimburse GST to the Supplier of Goods/Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST subject to the ceiling amount of GST as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which GST is applicable will be modified on pro-rata basis.
The bids will be evaluated based on total price including GST.

34.7 Payments to Service Provider for claiming GST amount will be made provided the above formalities are fulfilled. Further, OIL may seek copies of challan and certificate from Chartered Accountant for deposit of GST collected from OIL.

34.8 Contractor/Contractor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL. In the event that the contractor/Contractor fails to provide the invoice in the form and manner prescribed under the GST Act read with GST Invoicing Rules there under,

OIL shall not be liable to make any payment on account of GST against such invoice.

34.9 GST shall be paid against receipt of tax invoice and proof of payment of GST to government. In case of non-receipt of tax invoice or non-payment of GST by the contractor/Contractor, OIL shall withhold the payment of GST.

34.10 GST payable under reverse charge mechanism for specified services or goods under GST act or rules, if any, shall not be paid to the contractor/Contractor but will be directly deposited to the government by OIL.

34.11 Where OIL has the obligation to discharge GST liability under reverse charge mechanism and OIL has paid or is/liable to pay GST to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to OIL or ITC with respect to such payments is not available to OIL for any reason which is not attributable to OIL, then OIL shall be entitled to deduct/setoff/recover such amounts against any amounts paid or payable by OIL to Contractor/Supplier.

34.12 Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the GST charged by the Contractor/Contractor is denied by the tax authorities to OIL for reasons attributable to Contractor/ Contractor, OIL shall be entitled to recover such amount from the Contractor /Contractor by way of adjustment from the next invoice. In addition to the amount of GST, OIL shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL.

34.13 TDS under GST, if applicable, shall be deducted from contractor's/Contractor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the contractor/Contractor.

34.14 The Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/duties by the contractor shall be to contractor's account.

34.15 It is the responsibility of the bidder to quote the correct GST rate. The classification of goods/services as per GST (Goods & Service Tax) Act should be correctly done by the contractor to ensure that input tax credit on GST (Goods & Service Tax) is not lost to the OIL on account of any error on the part of the contractor.

34.16 In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference and in case the rate of duty/taxes finally assessed is on the lower side.

34.17 Notwithstanding anything mentioned elsewhere in the Bidding Document the aggregate liability of OIL towards Payment of Taxes & Duties shall be limited to the volume of GST declared by the bidder in its bid & nothing shall be payable extra except for the statutory variation in taxes & duties.

34.18 Further, it is the responsibility of the bidders to make all possible efforts to make their accounting/IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.

34.19 GST liability, if any on account of supply of free samples against any tender shall be to bidder's account.

34.20 In case of statutory variation in GST, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/ Services (Service Provider) shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid due date and on the date of revision.

34.21 Beyond the contract period, in case OIL is not entitled for input tax credit of GST, then any increase in the rate of GST beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate GST shall be passed on to the OIL.

34.22 Beyond the contract period, in case OIL is entitled for input tax credit of GST, then statutory variation in applicable GST on supply and on incidental services, shall be to OIL's account.

34.23 Claim for payment of GST/Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) GST, otherwise claim in respect of above shall not be entertained for payment of arrears.

34.24 The base date for the purpose of applying statutory variation shall be the Bid Opening Date.

34.25 The contractor will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/E-way Bill, if applicable etc.

34.26 In case the bidder is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST/UTGST or IGST). Further, such bidder should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.

34.27 OIL will prefer to deal with registered supplier of goods/services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

34.28 Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods (i.e. the goods covered under List-34 of Customs Notification no. 12/2012-Cus dated. 17.03.2012 as amended). Customs duty is not payable as per the policy. However, under GST regime, IGST Plus GST compensation cess (if applicable) would be leviable on such imports. Bidders should quote GST as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

34.29 Documentation requirement for GST:

The Contractor will be under the obligation for invoicing correct tax rate of tax/duties as prescribed under the GST law to OIL, and pass on the benefits, if any, after availing input tax credit.

Any Invoice issued shall contain the following particulars:

a) Name, address and GSTIN of the supplier;
b) Serial number of the invoice;
c) Date of issue;
d) Name, address and GSTIN or UIN, if registered of the recipient;
e) Name and address of the recipient and the address of the delivery, along with the State and its code,
f) HSN code of goods or Accounting Code of services [SAC];
g) Description of goods or services;
h) Quantity in case of goods and unit or Unique Quantity Code thereof;
i) Total value of supply of goods or services or both;
j) Taxable value of supply of goods or services or both taking into discount or abatement if any;
k) Rate of tax (IGST, CGST, SGST/ UTGST, cess);

l) Amount of tax charged in respect of taxable goods or services (IGST, CGST, SGST/UTGST, cess);
m) Place of supply along with the name of State, in case of supply in the course of interstate trade or commerce;
n) Address of the delivery where the same is different from the place of supply and
o) Signature or digital signature of the supplier or his authorized representative.
GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner:

i) The original copy being marked as ORIGINAL FOR RECIPIENT;
ii) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and
iii) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER. In case of any advance given against any supplies contract, the supplier of the goods shall issue Receipt Voucher containing the details of details of advance taken along with particulars as mentioned in clause no. (a), (b), (c), (d), (g), (k), (l), (m) & (o) above.

34.30 **Anti-profiteering clause**: As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. The Supplier of Goods/Services may note the above and quote their prices accordingly.

34.31 In case the GST rating of Contractor on the GST portal/Govt. official website is negative/black listed, then the bids may be rejected by OIL. Further, in case rating of bidder is negative/black listed after award of work for supply of goods/services, then OIL shall not be obligated or liable to pay or reimburse GST to such Contractor and shall also be entitled to deduct/recover such GST along with all penalties/interest, if any, incurred by OIL.

35.0 NOTICES:

35.1 Any notice given by one party to other, pursuant to this Contract shall be sent in writing or by telex or Fax and confirmed in writing to the applicable address specified below:

Company
For technical and contractual matters:
CGM(FB)-HoD
FRONTIER BASIN PROJECT
OIL INDIA LIMITED
PO DULIAJAN - 786602
ASSAM, INDIA
Email: ajitbarua@oilindia.in
Ph. No. 0374-280-7487

Contractor
_____
_____
Fax No.:

35.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

36.0 GENERAL OBLIGATION OF CONTRACTOR RELATED TO PAYMENT OF WAGES:

36.1 The Contractor shall also have to comply with all types of labour wages rates applicable in Assam and Arunachal Pradesh for unskilled, semi-skilled, skilled and highly skilled labourers employed locally or by the Contractor's Sub-Contractors throughout the period of the contract.

36.2 The contractor shall periodically submit the monthly challans/receipts/ proof of provident fund deposited amount along with a list of his workers to Company's representative. The contractor shall be required to deposit contribution towards Provident fund or any other statutory payments to be made in respect of his workers well in time and submit a copy of challan to Company's representative on monthly basis, failing which, OIL will deduct from his bills the amount equivalent to such deductions with penalty as per the provisions of applicable act.

36.3 The contractor shall pay the wages to the workers engaged under the Contract latest by 7th of every month as per notification issued by the Ministry of Labour & Employment, Government of India from time to time. In case payments are not made regularly, subsequent invoices might be kept on hold.

36.4 Contractor shall comply statutory minimum labour wages, P.F. to his workers at the prevailing rates as fixed by statutory bodies from time to time.

36.5 The contractor shall issue wages slip every month to each worker as per THE CONTRACT LABOUR (REGULATION AND ABOLITION) CENTRAL RULES, 1971, Chapter VII, Section 78(1)(b) vide Form XIX and pay the monthly wages to the workers through bank transfer to each individual worker's bank account. Contractor must submit the monthly wages' Bank statement/Wages Register statement & PF Statement to the Company along with their invoices.

36.6 The contractor must pay at least the minimum wage as applicable throughout the Contract period including PF. The payment should be made through on-line bank transfer to the worker.

36.7 Contractor shall ensure deployment of personnel under the contract preferably from local area to the extent possible. Preference should be given to personnel who have experience of working with OIL for similar services.

36.8 The Service Provider must make the Wages to all the personnel/Manpower deployed under the contract as per the Minimum wages act wherever applicable as defined under this service and it should be in compliance with the minimum wage act of govt. as per notification issued by the Ministry of Labour & Employment, Government of India in respect of workers engaged in employment in various mines such as Gypsum mines and Bauxite mines for work above grounds and revised from time to time. Employment card to be issued as per the CONTRACT LABOUR (REGULATION AND ABOLITION) CENTRAL RULES, 1971, vide form XIV.

36.9 An additional allowance of INR 2,250.00 per month shall be payable by the Contractor to the contract labours engaged under the Contract at the rig site. This additional allowance has to be paid on a pro-rata basis along with the monthly minimum wages based on the actual attendance.

36.10 The Contractor shall have to bear the responsibility for employment matters and any problem in this regard inclusive of employment of local people and other issues pertaining to the Contractor's operations with Oil India Limited (OIL). In case there is any disruption of work at the well site under such conditions, as stated above, the Contractor will be paid at 'Zero' rate for first 24 (twenty-four) hours of affected period beyond which penalty will be levied at proportionate operating day rate in addition to zero rate.

END OF SECTION-III

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PART-3
SECTION IV
GENERAL SCHEDULE OF RATES

The Company agrees to pay the Contractor for Bundled services as per Schedule of Rates of the Contract. The general schedule of rates are provided below, however the schedule of rates mentioned in individual Exhibits (1 to 7) shall be referred for details. **The Schedule of Rates mentioned in individual Exhibits (1 to 7) shall supplement and/or supersede, if any, the General Schedule of Rates (GSOR).**

The following rates shall be applicable for various charges under this Bundle Contract for each service:

1.0 MOBILIZATION CHARGES (LUMP SUM CHARGES):

i. The Contractor shall mobilize all the individual services except the call out services under this contract at designated well site to commence operation as per the scope of individual services, within 90 days from the issue date of Mobilization Notice for respective services after issuance of LOA. If mobilization of any service fails to meet the mobilization timeline as mentioned above will lead to levy of Liquidated Damages as per Clause No. 30.0 of Part-3, Section-I (GCC) for that particular service subject to the condition that well operation is not hampered in any way due to delayed mobilization of that service.

ii. Mobilization charges cover all local and foreign costs to be incurred by the Contractors to mobilize the complete Bundled Services to the first drilling location at Dima Hasao/Karbi Anglong as advised by the company and shall include all local taxes (including Assam Entry Tax, any other taxes under schedule-VI if applicable), port fees, inland transport etc., but excluding Customs duty considering NIL custom duty norms, if applicable.

iii. Mobilization charges shall be paid only once after completion of mobilization of all the services to the first drilling location as certified by Company (OIL) representative. However, if Company (OIL) decides to start well operation with available mobilized services, mobilization charges shall be payable for that particular services. For the remaining services LD shall be applicable as per provision of the contract.

iv. If Contractor mobilizes part of the Bundled Services with which rig operation cannot be started due to non-availability of some other services then mobilization shall not be considered as complete for the entire Bundled Services and LD shall be applicable on all the services under Bundled Services contract.

2.0 DEMOBILIZATION CHARGES (LUMPSUM CHARGES):

Demobilization charges include all charges for demobilization of the complete bundle service package, unutilized spares & consumables and manpower. All charges connected with demobilization including all fees, taxes, insurance, freight on export outside India will be to Contractor's account. Demobilization charges shall be paid only once after completion of the contractual period/ demobilization the bundle service packages and manpower by Contractor. All the other rates under the contract shall cease to exist with effect from the day, the

Contractor is issued de-mobilization notice by Company. No charges whatsoever will be payable with effect from the date, the notice is served.

3.0 OPERATING DAY RATE/ INDIVIDUAL SERVICE DAY RATE (DAY RATE):

Contractor shall be paid Operating Day Rate/ Individual Service Day Rate (SDR) for all the respective services as per the terms and conditions detailed in the scope of work under the exhibits for individual services under the bundle service contract.

4.0 NIL/ZERO DAY RATE:

Nil Day Rate shall be applicable for the entire bundled services for the entire period of Non-Performance in situations as follows:

i. Whenever planned and/or scheduled well jobs are hampered/delayed due to non-availability of Contractor's Personnel, items or on account of non-compliance by the Contractor to any of their obligation under the scope of this contract and/or failure of any of the individual services under Bundled Services to perform as per scope of this contract.

ii. In conditions as stipulated under the force majeure clause of Clause No. 31.0 of Part-3, Section-I of the tender (GCC)

iii. During running of well operation if part of the services under Bundled Services is/are found to be non-functional and company decides to continue well operation with available services, NIL day rate shall be applicable for that particular non-functional service/s for the entire non-functional period (Details in exhibits of respective services.)

Note: During the period of NIL Day Rate (NDR) Contractor shall have to ensure the health and safety of the well in all possible manner.

5.0 STANDBY CHARGES (DAY RATE):

Contractor shall be paid standby charges (wherever applicable) for the services as per the terms and conditions detailed in the scope of work under the exhibits for individual services under the bundle service contract.

6.0 RENTAL/ HIRING CHARGES (DAY RATE):

Rental/ Hiring Charges (wherever applicable) shall be payable for the individual services as per terms and conditions detailed in the scope of work under the exhibits for individual services under the bundle service contract.

7.0 INTER LOCATION MOVEMENT (ILM) CHARGES (LUMPSUM/KM BASIS):

Inter-location movement (ILM) operation will start from the moment the company releases the Bundled Services at present location and shall end after the entire setup of Bundled Services at next location is completed and the well is spudded in. All materials of Bundled Services including the additional and optional items, if any, are to be transferred from present location to the next location by the contractor. The Contractor shall complete all jobs and make the individual services ready for spud in and subsequent drilling operations as per standard safety norms.

7.1 Time allowed for each inter-location movement between two locations of entire bundled services for a distance up to 30 (thirty) Kms shall be 20 (twenty) days. For more kilometer-age, the time allowed shall be in proportions of 05 (five) days for each 30 (thirty) km or part thereof.

7.2 The time for inter-location movement suspended by force majeure, shall be extended by the period for which the Force majeure conditions last. No day rate will be payable for extended period due to force majeure conditions.

7.3 The ILM charge shall be discounted by 5% for each day's delay beyond the standard, as mentioned above, of total cost for inter-location movement rate payable for the bundle services, when the services are delayed beyond the standard.

8.0 INTERIM DE-MOBILISATION AND RE-MOBILISATION (LUMPSUM CHARGES)

Interim De-mobilization and Re-mobilization charges (on lumpsum basis) shall be payable to the Contractor when contractor is required to effect the interim Demobilization and Re-mobilization of part/whole of the services (as applicable) as per the price quoted against respective services under this contract.

9.0 FORCE MAJEURE CHARGES (DAY RATE):

The Force Majeure charges shall be payable during the first 15 (fifteen) days period of occurrence of force majeure situation pursuant to Clause No. 31.0 "Force Majeure" of Section-I (General Conditions of Contract). The Force Majeure Day Rate shall be payable on per 24 hours a day or part thereof on pro-rata basis to the nearest hour during the first 15 (fifteen) days period of occurrence of force majeure situation

Payment towards force majeure day rate shall be restricted to 50% of either Operating Day Rate/ Individual Service Day Rate or Rental charge or Standby charge as applicable at the time of entering into force majeure situation for the individual services under this bundle service contract.

No rate/charges shall be payable to the contractor for the period beyond the first 15 (fifteen) days period of the force majeure conditions.

10.0 SHORT DEPLOYMENT RATES:

In case, particular crew personnel of the services as specified in the contract is not available, corresponding mentioned short deployment charges for that category shall be deductible for that period and Contractor shall invoice the Company (Operator) accordingly.

11.0 STACK DAY RATE

The Stack Day Rate (STDR) shall be payable when the services under this contract are stacked under suspension in accordance with **Clause 3.0 of Section- III (SCC)** and as further set out below:

i. If Company notifies the Contractor that the services are to be stacked at its current location, the Standby Day Rate/ Rental/ Hiring Charges (whichever is applicable) shall apply for the first 02 (two) days from the time of such notification and Stack Day Rate shall apply thereafter. Stack Day Rate shall apply until such time as the services are ready to recommence operations after the notification from Company to commence the operation.

ii. ii) If Company notifies the Contractor to stack the services at a different location; the Stack Day Rate shall apply from the time that the services arrives at the

stacking site. Inter Location Move rate shall apply during the period that the services are being moved to/ from the stacking site.

iii. Should "Stack Day" condition as stated above occurs the Company shall review the condition/situation during initial 15 days of stack day rate and the company will review for extension of stack period further or, to go for interim Demobilisation.

iv. Contractor shall have to bring the services back ready to operation within 03 (three) days from the date of notification for withdrawal of stack period.

v. Payment towards "Stack Day Rate" shall be 50% (Fifty percent) of Standby Day Rate/ Rental/ Hiring Charges, as applicable for respective exhibits.

Note:

i. All charges against respective services will be guided by respective schedule of rates provided in the respective exhibits. Under the condition when payment rates and terms & conditions are not defined in the respective exhibits, the rate and terms & conditions of Section-IV and Section-III (SCC) shall be applicable and further to Section-I (GCC) of this contract.

ii. Payment against the contract shall be made on Monthly basis except for Mobilization and Demobilization charges which may be made on completion of Mobilization and Demobilization as per contract.

iii. All "Day Rate" charges are for 24 hours a day basis. But for the part of a day, the same shall be payable on pro-rata up to nearest hour basis.

iv. Daily rates are based on 24 (twenty-four) hours work day, calculated from 00:00 hrs to 24:00 hrs or as per shift schedule. No interest shall be payable on delayed payments / disputed claims.

END OF SECTION IV
END OF PART-3
****

PROFORMA-B

PRICED BID FORMAT for IFB No. CNI8965P22

THE PRICE BID FORMAT IS ATTACHED UNDER "NOTES AND ATTACHMENTS" TAB OF THE OIL's E-TENDER PORTAL AND SHALL BE AS PER TERMS AND CONDITIONS OF EXHIBITS- 1 TO 7

PROFORMA-C

BID FORM

To
M/s. Oil India Limited,
P.O. Duliajan, Assam, India

Sub: IFB No. CNI8965P22

Gentlemen,

Having examined the General and Special Conditions of Contract and the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we the undersigned offer to perform the services in conformity with the said conditions of Contract and Terms of Reference for the sum as mentioned in the Bid.

We undertake, if our Bid is accepted, to commence the work within (_____) days calculated from the date issue of LOA.

If our Bid is accepted, we will obtain the guarantee of a bank in a sum not exceeding _____ for the due performance of the Contract.

We agree to abide by this Bid for a period of 120 days from the date fixed for Bid closing and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

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

Dated this _____ day of _____ 20__.

Authorised Person's Signature: _____

Name: _____
Designation:_____

Seal of the Bidder:

PROFORMA-D

STATEMENT OF NON-COMPLIANCE
(Only exceptions/deviations to be rendered)

1.0 The Bidder shall furnish detailed statement of **exceptions/deviations,** if any, to the tender stipulations, terms and conditions in respect of each Section of Bid Document in the following format:

Section No.	Clause No. (Page No.)	Non-Compliance	Remarks

* As a sequel to the Pre-Bid Conference, Bidder must submit a **"NIL exception/deviation"** statement along with their Technical Bid.

Authorised Person's Signature: _____

Name: _____
Designation:_____

Seal of the Bidder:

NOTE: OIL INDIA LIMITED expects the bidders to fully accept the terms and conditions of the bid document. However, should the bidders still envisage some exceptions/deviations to the terms and conditions of the bid document, the same should be indicated as per above format and submit along with their bids. If the "**Statement of Non-Compliance**" in the above Proforma is left blank (or not submitted along with the technical bid), then it would be construed that the bidder has not taken any exception/deviation to the tender requirements.

PROFORMA-E

Bid Security Declaration

(to be submitted on Bidder's letter head)

M/s. Oil India Limited
……,
……

Tender No.: **CNI8965P22**

I/We, the undersigned, declare that:

1.0 I/We understand that, according to your Tender conditions, bids must be supported by a Bid Security, which is in the form of a Bid-Security Declaration.

2.0 I/We the undersigned hereby declare that, if we withdraw or modify our Bids during the period of its validity, or if we are awarded the contract and fail to sign the contract, or to submit a performance security before the deadline defined in the Tender document, we will be suspended for a period of two years. This suspension of two year shall be automatic without conducting any enquiry.

Name and Signature of

Authorized Signatory and Company Seal

PROFORMA-F

FORM OF PERFORMANCE BANK GUARANTEE

To:
M/s. OIL INDIA LIMITED,
FRONTIER BASIN PROJECT
DULIAJAN, ASSAM, INDIA, PIN - 786 602.

WHEREAS _____ (Name and address of Contractor) (hereinafter called "Contractor") had undertaken, in pursuance of Contract No. _____ to execute (Name of Contract and Brief Description of the Work) _____ (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee as security for compliance with Contractor's obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee; NOW THEREFORE we hereby affirm that we are Guarantors on behalf of the Contractor, up to a total of (Amount of Guarantee in figures) _____ (in words _____), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way cease us from any liability under this guarantee, and we hereby waive notice of such change, addition or modification.

This guarantee is valid until the ----------day of ----------

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:
   BANK FAX NO:
   BANK EMAIL ID:
   BANK TELEPHONE NO.:
   IFSC CODE OF THE BANK:

B. Controlling Office:
   Address of the Controlling Office of the BG issuing Bank:
   Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____
Designation: _____
Name of Bank: _____
Address: _____

Witness: _____
Address: _____
_____

Date:_____
Place: _____

Note:

The Bank Guarantee issuing bank branch must ensure the following:

(a) The Bank Guarantee issued by the bank must be routed through SFMS platform as per the following details:

i) "MT 760 / MT 760 COV for issuance of bank guarantee.

ii) "MT 760 / MT 767 COV for amendment of bank guarantee.

The above message/intimation indicating the Contract No.--------shall be sent through SFMS by the BG issuing bank branch to HDFC Bank, Duliajan Branch; IFS Code – HDFC0002118; SWIFT Code – HDFCINBBCAL; Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

(b) Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

(c) Further correspondence against BG towards Performance Security must contain the Contract Number.

PROFORMA-G

AGREEMENT FORM

This Agreement is made on ____ day of _____ between Oil India Limited, a Government of India Enterprise, incorporated under the Companies Act 1956, having its registered office at Duliajan in the State of Assam, hereinafter called the "Company" which expression unless repugnant to the context shall include executors, administrators and assignees on the one part, and M/s _____ (Name and address of Contractor) hereinafter called the "Contractor" which expression unless repugnant to the context shall include executors, administrators and assignees on the other part,

WHEREAS the Company desires that Services _____ (brief description of services) should be provided by the Contractor as detailed hereinafter or as Company may requires;

WHEREAS, Contractor engaged themselves in the business of offering such services represents that they have adequate resources and equipment, material etc. in good working order and fully trained personnel capable of efficiently undertaking the operations and is ready, willing and able to carry out the said services for the Company as per Section-II attached herewith for this purpose; and

WHEREAS, Company had issued a firm Letter of Award No. _____ dated _____ based on Offer No. _____ dated _____ submitted by the Contractor against Company's IFB No. **CNI8965P22**

WHEREAS, Contractor accepted the above Letter of Award vide--------- and submitted Performance Bank Guarantee No. ---------- Dated---------- valid till---------- issued by ----------(Bank's name with detailed address) for an amount of ----------.All these aforesaid documents shall be deemed to form and be read and construed as part of this agreement/contract. However, should there be any dispute arising out of interpretation of this contract in regard to the terms and conditions with those mentioned in Company's tender document and subsequent letters including the Letter of Intent and Contractor's offer and their subsequent letters, the terms and conditions attached hereto shall prevail. Changes, additions or deletions to the terms of the contract shall be authorized solely by an amendment to the contract executed in the same manner as this contract.

NOW WHEREAS, in consideration of the mutual covenants and agreements hereinafter contained, it is hereby agreed as follows -

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. In addition to documents herein above, the following Sections and Annexures attached herewith shall be deemed to form and be read and construed as part of this agreement viz.:

(a) Section-I indicating the General Conditions of this Contract;
(b) Section-II indicating the Terms of Reference;
(c) Section-III indicating the Special Conditions of Contract;
(d) Section-IV indicating the Schedule of Rates.

3. In consideration of the payments to be made by the Company to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Company to provide the Services and to remedy defects therein in conformity in all respect with the provisions of this Contract.

4. The Company hereby covenants to pay the Contractor in consideration of the provision of the Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS thereof, each party has executed this contract at Duliajan, Assam as of the date shown above.

Signed, Sealed and Delivered,

For and on behalf of Company (Oil India Limited)	for and on behalf of Contractor (M/s. _____)
Name:	Name:
Status:	Status:
In presence of	In presence of
1.	1.
2.	2.

PROFORMA–H

PROFORMA LETTER OF AUTHORITY

To:
ED-BM(FRONTIER)
Oil India Ltd.,
P.O. Duliajan - 786 602
Assam, India

Sir,

Sub: OIL's IFB No. CNI8965P22

We _____ confirm that Mr. _____ (Name and address) as authorised to represent us to Bid, negotiate and conclude the agreement on our behalf with you against Tender Invitation No. _____ for hiring of services for _____.

We confirm that we shall be bound by all and whatsoever our said representative shall commit.

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____
Designation: _____

Seal of the Bidder:

Note: This letter of authority shall be on printed letter head of the Bidder and shall be signed by a person competent and having the power of attorney (power of attorney shall be annexed) to bind such Bidder. If signed by a consortium, it shall be signed by members of the consortium.

PROFORMA–I

AUTHORISATION FOR ATTENDING BID OPENING

TO, Date: _____

ED-BM(FRONTIER)
Oil India Ltd.,
P.O. Duliajan - 786 602
Assam, India

Sir,

Sub: OIL's IFB No. CNI8965P22

We authorise Mr. /Mrs. _____ (Name and address) to be present at the time of opening of the above IFB due on _____ at Duliajan on our behalf.

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____
Designation: _____

Seal of the Bidder:

Note: This letter of authority shall be on printed letter head of the Bidder and shall be signed by a person who signs the bid.

&&&&&&&&&&

PROFORMA-J

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder).....hereinafter referred to as "The Bidder/Contractor"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for **services under Tender No. CNI8965P22.** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section: 1 -Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(i) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

(ii) The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.

(iii) The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or

if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officers and in addition can initiate disciplinary actions.

Section: 2 -Commitments of the Bidder/Contractor

(1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(i) The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which h e/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

(ii) The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(iii) The Bidder (s) / Contractor (s) will not commit any offence under the relevant Anticorruption Laws of India, further, the Bidder (s) / Contractor (s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(iv) The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(v) Bidders to disclose any transgressions with any other company that may impinge on the anti-corruption principle.

(vi) The Bidder (s)/ Contractor (s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder (s)/ Contractor (s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further, all the payments made to the Indian agent/ representative have to be in India Rupees only.

(vii) Bidders not to pass any information provided by Principal as part of business relationship to others and not to commit any offence under PC/ IPC Act;

(2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(3) The Bidder/Contractor signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

Section 3 -Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties till the final completion of the contract **or as mentioned in Section 9- Pact Duration whichever is later**. Any violation of the same would entail disqualification of the

bidders and exclusion from future business dealings. Any issue relating to execution of contract, if specifically raised before the IEMs shall be looked into by IEMs.

Section 4 -Compensation for Damages

1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit / Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to Security Deposit / Performance Bank Guarantee.

3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 -Previous transgression

1. The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section: 6 -Equal treatment of all Bidders/Contractor/Subcontractors

1. The Principal will enter into Pacts on identical terms with all bidders and contractors.

2. The Bidder / Contractor undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.

3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section: 7 -Criminal charges against violating Bidders/Contractors/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section: 8 -External Independent Monitor/Monitors

1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality. However, the documents/records/information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.

4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the bidder / contractor to present its case before making its recommendations to the Principal.

6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

7. If the Monitor has reported to the Chairperson of the Board a Substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8. The word 'Monitor' would include both singular and plural.

9. In case of any complaints referred under IP Program, the role of IEMs is advisory and would not be legally binding and it is restricted to resolving the issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidder.

Section:9 -Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section:10 -Other provisions

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.

2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

3. If the Contractor / Bidder is a Joint Venture or a partnership concern or a consortium, this agreement must be signed by all partners or consortium members. In case of sub-contracting, the Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor and all sub-contractors shall also sign the IP.

4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

5. Issues like warranty / guarantee, etc. shall be outside the purview of IEMs.

.....	**.....**
For the Principal	**For the Bidder/Contractor**
	Witness 1: .....
Date :	
	Witness 2: .....
Place :	

(Note: Uploading in the OIL's E-portal with digital signature will be construed that the same has been signed by the bidder's authorized signatory who has signed the bid).

&&&&

PROFORMA-K

To
ED-BM(FRONTIER)
OIL INDIA LIMITED
DULIAJAN-786602

SUB: SAFETY MEASURES FOR TENDER NO. CNI8965P22

DESCRIPTION OF WORK/ SERVICE:

Sir,

We hereby confirm that we have fully understood the safety measures to be adopted during execution of the above contract and that the same have been explained to us by the concerned authorities. We also give the following assurances.

a) Only experienced and competent persons shall be engaged by us for carrying out work under the said contract.

b) The names of the authorised persons who would be supervising the jobs on day to day basis from our end are the following:

i) _____
ii) _____
iii) _____

The above personnel are fully familiar with the nature of jobs assigned and safety precautions required.

c) Due notice would be given for any change of personnel under item(b) above.

d) We hereby accept the responsibility for the safety of all the personnel engaged by us and for the safety of the Company's personnel and property involved during the course of our working under this contract. We would ensure that all the provisions under the Oil Mines Regulations, 1984 and other safety rules related to execution of our work would be strictly followed by our personnel. Any violation pointed out by the Company's Engineers would be **rectified forthwith** or the work suspended till such time the rectification is completed by us and all expenditure towards this would be on our account.

e) We confirm that all persons engaged by us would be provided with the necessary Safety Gears at our cost.

f) All losses caused due to inadequate safety measures or lack of supervision on our part would be fully compensated by us and the Company will not be responsible for any lapses on our part in this regard.

(Seal)
Date_____ Yours Faithfully

M/s_____

FOR & ON BEHALF OF CONTRACTOR

PROFORMA-L1

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING **CHARTERED ACCOUNTANTS' FIRM** ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

This is to certify that the following financial positions extracted from the audited financial statements of M/s..... (Name of the Bidder) for the last three (3) completed accounting years upto _____ are correct.

YEAR	**TURN OVER** In INR (Rs.) Crores or US $ Million)	**NET WORTH** In INR (Rs.) Crores or US $ Million)

Rate of Conversion (if used any): USD 1.00 = INR.....

Place:
Date:
Seal:

Membership Code:
Registration No. :
Signature

PROFORMA-L2

ON THE OFFICIAL PAD OF THE BIDDER TO BE EXECUTED BY THE AUTHORIZED SIGNATORY OF THE BIDDER

Certificate of Compliance of FINANCIAL CRITERIA:

Ref Clause No. 3.3 of the BEC of Tender No. CNI8965P22

I …… the authorized signatory(s) of …… (Company or firm name with address) do hereby solemnly affirm and declare / undertake as under:

The balance sheet/Financial Statements for the financial year _____ (as the case may be) has actually not been audited as on the Original Bid Closing Date.

Place: ……

Date: …… Signature of the authorized signatory

Note: Please note that any declaration having date after the Bid Closing Date will not be considered and will be rejected. This certificate is to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date.

PROFORMA-M

Format of undertaking by Bidders towards submission of authentic information/documents

(To be typed on the letter head of the bidder)

Ref. No._____ Date _____

To,
ED-BM(FRONTIER)
OIL INDIA LIMITED
DULIAJAN-786602

Sub: Undertaking of authenticity of information/documents submitted

Ref: Your tender No._____ dated _____

Sir,

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,

For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

PROFORMA-N

UNDERTAKING BY VENDOR ON SUBMISSION OF PERFORMANCE BANK GUARANTEE

To,
The Oil India Limited
Frontier Basin Project
Duliajan – 786 602
Assam

We M/s .....are submitting the performance security in favour of Oil India Limited, Duliajan in the form of bank guarantee bearing reference no. ..... for an amount of INR ..... valid up to ..... as per terms and conditions of our Purchase Order/Contract No.....

PBG issuing bank details:

Bank Branch IFS Code	
Contact Details E-mail Addresses	Mobile Telephone Fax
Correspondence Address H No/Street/City	State Country Pin Code

Declaration:
We have arranged to send the confirmation of issuance of the performance bank guarantee via SFMS portal through our bank using the details mentioned in the contract/purchase order and hereby confirming the correctness of the details mentioned.

Authorised Signature_____
Name _____
Vendor Code_____
Email ID _____
Mobile No _____

Encl: Original performance bank guarantee

IFB No. CNI8965P22 ***PROFORMA-O***

To,
HoD-Frontier Basin
Oil India Limited
Duliajan-786602

Sub: Undertaking for Mobilization

I, (Name of the firm……) hereby agreed, that I will complete mobilization as follows (as per Clause 2.8 of Part-2(BEC/BRC)):

Service Details	**Mobilization period**
a) Cementing Service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
b) Mud Engineering Service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
c) Wire line Logging service	To be mobilized as per the well requirement, which will be responsibility of the bundled service provider
d) Directional Drilling Service (Regular)	To be mobilized as per the well requirement, which will be responsibility of the bundled service provider
e) Mud Logging Unit (MLU) service	Mobilization to be completed within 90 (ninety) days from the date of issue of mobilization Notice
f) Call out service – Directional Drilling Service	Mobilization to be completed within 15 (Fifteen) days from the date of issue of mobilization Notice
f) Call out service –Liner Hanger Service	Mobilization to be completed within 15 (Fifteen) days from the date of issue of mobilization Notice

I, further, declare that equipment and personnel deployed against this contract will be in compliance with vintage criteria and experience respectively specified in the Contract document.

Mobilization shall be treated complete only when all the service packs including manpower (except Call out services) are mobilized and integrally aligned at designated well site for rendering services with man, materials and all tools as per the respective scope of work under this bundled service contract, as duly tested and certified by the company representative upon inspection.

I am liable for appropriate action as in accordance with the Company's rules in case any of the above information is found to be false.

Authorised Person's Signature: _____
Name: _____
Designation: _____

Seal of the Bidder

PROFORMA-P

PROFORMA FOR UNDERTAKING FROM THIRD PARTY INSPECTION AGENCY

(To be submitted on official letter head)

TO
M/s OIL INDIA LIMITED
P.O. DULIAJAN-786602
Assam, India

Sir,

SUB: OIL's IFB No. CNI8965P22

M/s _____ having registered office at _____ intend to participate in the above referred tender of OIL INDIA LIMITED.

The tender conditions stipulates that the bidder shall submit documents pertaining to Bid Evaluation Criteria (BEC), duly verified and certified by designated independent Third Party Inspection Agency.

In this regard, we hereby certify that copies of documents pertaining to Bid Evaluation Criteria (BEC) submitted to us by the bidder, M/s _____ have been verified and certified by us with originals and found to be genuine and authentic. We have signed and stamped on the copies of all the verified and certified documents having ____ nos. of pages.

Note: In the event of any requirement, OIL reserves the right to ask the inspection agencies to verify the documents with source, if required at no extra cost to OIL.

Thanking you,

Authorised Person's Signature: _____

Name: _____

Proforma for entering into Framework Agreement for a period of 03 (Three) years from the Original bid Closing Date against Tender No CNI8965P22

(on the official pad of the bidder to be executed by the authorized signatory of the bidder)

Consent for entering into Framework Agreement:

Reference Bid Evaluation Criteria Clause on Framework Agreement, we confirm our acceptance to enter into a framework agreement for period of 03 (Two) years from the Original bid Closing Date against Tender No CNI8965P22 with Oil India Limited for 'Hiring of Bundled Services for 2 years (with provision of 1-year extension) for Drilling in Dima Hasao (OALP-III) and Karbi Anglong (NELP-IX) Blocks'.

Place: ……

Date: ……

Signature of the authorized signatory

Format of Declaration/Undertaking by bidder towards percentage of Local Content in Services

(To be submitted on Bidder's letter head)

To,

Head of the Department
Frontier Basin Project
Oil India Limited
P.O. Duliajan-786602
Dist. Dibrugarh, Assam.

Sub: PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT) (PP-LC)

Dear Sirs,

I/We _____ (Name of the bidder) undertake that we meet the mandatory minimum Local Content (LC) requirement i.e. _____ % as per Clause No. 2.5 & 4.4 (a) of the policy vide Letter No. **FP-20013/2/2017-FP-PNG dated 17th November, 2020** of MoPNG to bid against **Tender No. _____.**

The percentage of local content in the bid is _____%.

Yours faithfully,

For (Name of the firm _____)

Signature of Authorised Signatory/ POA

Name:

Designation:

Place:

Date:

(Affix Seal of the Organization here)

FORMAT OF AGREEMENT BETWEEN BIDDER AND THEIR PARENT COMPANY/*100% SUBSIDIARY COMPANY (As the case may be)*
(**TO BE EXECUTED ON STAMP PAPER OF REQUISITE VALUE AND NOTARIZED**)

This agreement made this ___ day of ____ month ____ year by and between M/s _____ (Fill in the Bidder's full name, constitution and registered office address) hereinafter referred to as bidder on the first part and M/s _____ (Fill in full name, constitution and registered office address of Parent Company/Subsidiary Company, as the case may be) hereinafter referred to as "Parent Company/Subsidiary Company (Delete whichever not applicable)" of the other part:

WHEREAS

M/s Oil India Limited (hereinafter referred to as OIL) has invited offers vide their tender No. _____ for _____ and M/s _____(Bidder) intends to bid against the said tender and desires to have technical support of M/s _____[Parent Company/Subsidiary Company-(Delete whichever not applicable)] and whereas Parent Company/Subsidiary Company (Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the services as required by the bidder for successful execution of the contract, if awarded to the bidder.
Now, it is hereby agreed to by and between the parties as follows:

1. M/s._____(Bidder) will submit an offer to OIL for the full scope of work as envisaged in the tender document as a main bidder and liaise with OIL directly for any clarifications etc. in this context.

2. M/s. _____ (Parent Company/Subsidiary Company (Delete whichever not applicable) undertakes to provide technical support and expertise, expert manpower and procurement assistance and project management to support the bidder to discharge its obligations as per the Scope of work of the tender/ Contract for which offer has been made by the Parent Company/Subsidiary Company (Delete whichever not applicable) and accepted by the bidder.

3. This agreement will remain valid till validity of bidder's offer to OIL including extension if any and till satisfactory performance of the contract in the event the contract is awarded by OIL to the bidder.

4. It is further agreed that for the performance of work during contract period bidder and Parent Company/Subsidiary Company (Delete whichever not applicable) shall be jointly and severely responsible to OIL for satisfactory execution of the contract.
5. However, the bidder shall have the overall responsibility of satisfactory execution of the contract awarded by OIL.

In witness whereof the parties hereto have executed this agreement on the date mentioned above.

For and on behalf of (Bidder)	For and on behalf of (Parent Company/Subsidiary Company (Delete whichever not applicable)
M/s. Witness: 1) 2)	M/s. Witness: 1) 2)

PARENT COMPANY/SUBSIDIARY COMPANY GUARANTEE
(Delete whichever not applicable)
(**TO BE EXECUTED ON STAMP PAPER OF REQUISITE VALUE AND NOTARIZED**)
DEED OF GUARANTEE

THIS DEED OF GUARANTEE executed at ..... this ..... day of ..... by M/s ..... (mention complete name) a company duly organized and existing under the laws of ..... (insert jurisdiction/country), having its Registered Office at ..... hereinafter called "the Guarantor" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successors and permitted assigns.

WHEREAS
M/s Oil India Limited, a company duly registered under the Companies Act 1956, having its Registered Office at Duliajan in the State of Assam, India, hereinafter called "OIL" which expression shall unless excluded by or repugnant to the context thereof, be deemed to include its successor and assigns, invited tender number ..... for ..... on ..... M/s ..... (mention complete name), a company duly organized and existing under the laws of ..... (insert jurisdiction/country), having its Registered Office at ..... (give complete address) hereinafter called "the Company" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successor and permitted assigns, have, in response to the above mentioned tender invited by OIL, submitted their bid number ..... to OIL with one of the condition that the Company shall arrange a guarantee from its parent company guaranteeing due and satisfactory performance of the work covered under the said tender including any change therein as may be deemed appropriate by OIL at any stage.
The Guarantor represents that they have gone through and understood the requirement of the above said tender and are capable of and committed to provide technical and such other supports as may be required by the Company for successful execution of the same.

The Company and the Guarantor have entered into an agreement dated ..... as per which the Guarantor shall be providing technical and such other supports as may be necessary for performance of the work relating to the said tender.
Accordingly, at the request of the Company and in consideration of and as a requirement for OIL to enter into agreement(s) with the Company, the Guarantor hereby agrees to give this guarantee and undertakes as follows:

1. The Guarantor (Parent Company/***100% Subsidiary Company (Delete whichever not applicable***) unconditionally agrees that in case of non-performance by the Company of any of its obligations in any respect, the Guarantor shall, immediately on receipt of notice of demand by OIL, take up the job without any demur

or objection, in continuation and without loss of time and without any cost to OIL and duly perform the obligations of the Company to the satisfaction of OIL.

2. The Guarantor agrees that the Guarantee herein contained shall remain valid and enforceable till the satisfactory execution and completion of the work (including discharge of the warranty obligations) awarded to the Company.

3. The Guarantor shall be jointly with the Company as also severally responsible for satisfactory performance of the contract entered between the Company and OIL.

4. The liability of the Guarantor, under the Guarantee, is limited to the 50% of the annualized contract price entered between the Company and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Company.

5. The Guarantor represents that this Guarantee has been issued after due observance of the appropriate laws in force in India. The Guarantor hereby undertakes that the Guarantor shall obtain and maintain in full force and effect all the governmental and other approvals and consents that are necessary and do all other acts and things necessary or desirable in connection therewith or for the due performance of the Guarantor's obligations hereunder.

6. The Guarantor also agrees that this Guarantee shall be governed and construed in accordance with the laws in force in India and subject to the exclusive jurisdiction of the courts of ....., India.

7. The Guarantor hereby declares and represents that this Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.

8. The Guarantor represents and confirms that the Guarantor has the legal capacity, power and authority to issue this Guarantee and that giving of this Guarantee and the performance and observations of the obligations hereunder do not contravene any existing laws.

For & on behalf of (Parent Company/Subsidiary Company (Delete whichever not applicable))

M/s _____

Witness:

Signature_____

1. Signature _____

Name

Full Name _____

Address _____

_____

Designation _____

Signature

Common seal of the

_____

Company_____

Full Name

_____

Address

_____

Witness:

2. Signature _____
   Full Name _____
   Address _____

FORM OF PERFORMANCE BANK GUARANTEE FOR ULTIMATE PARENT/SUPPORTING COMPANY

To
M/s OIL INDIA LIMITED (OIL)
FRONTIER BASIN PROJECT
DULIAJAN, ASSAM, INDIA,
PIN-786602

WHEREAS_____ (Name and address of Contractor) (hereinafter called "Contractor", which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) had undertaken, in pursuance of Contract No.___to execute ---------- -------- (Brief Description of the Work)(hereinafter called "the Contract").

Further, M/s _____ (Name of the ultimate parent) having its registered/head office at _____ is the "Ultimate Parent" of "Supporting Company" M/s.....(Name of the supporting company with address)/M/s.....(Name of the Contractor with address, in case experience is taken from the ultimate parent) (hereinafter referred to as the 'SUPPORTING COMPANY'/"ULTIMATE PARENT", which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees). Based on the experience/technical strength of the "Supporting Company"/"Ultimate Parent" (whichever is applicable), the CONTRACTOR has qualified for award of contract and has agreed to provide complete technical and other support to the CONTRACTOR for successful completion of the contract as mentioned above, entered between OIL and the CONTRACTOR and OIL having agreed that the "ULTIMATE PARENT/SUPPORTING COMPANY", shall furnish to OIL a performance guarantee for Indian Rupees/US$ ..... towards providing complete technical and other support to the CONTRACTOR for successful completion of the contract as mentioned above,

AND WHEREAS we have agreed to give the "ULTIMATE PARENT/SUPPORTING COMPANY", such a Bank Guarantee; NOW THEREFORE we hereby affirm that we are Guarantors on behalf of the "ULTIMATE PARENT/SUPPORTING COMPANY", up to a total of (Amount of
Guarantee in figures) _____ (in words _____), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt

from the Contractor/ULTIMATE PARENT/SUPPORTING COMPANY before presenting us with the demand.
We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way cease us from any liability under this guarantee, and we hereby waive notice of such change, addition or modification.

This guarantee is valid until the _____day of _____.

The details of the Issuing Bank and Controlling Bank are as under:

B. Issuing Bank:

Tender No. _____
BANK FAX NO:
BANK EMAIL ID:
BANK TELEPHONE NO:
IFSC CODE OF THE BANK:

C. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:
Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____
Designation _____

Name of Bank _____
Address _____
Witness _____
Address _____
_____

Date: _____
Place: _____

Note:
The Bank Guarantee issuing bank branch shall ensure the following:

a. The Bank Guarantee issued by the bank shall be routed through SFMS platform as per the following details:

i) "MT 760/MT 760 COV" for issuance of bank guarantee.
ii) "MT 760/MT 767 COV" for amendment of bank guarantee.

The above message/intimation shall be sent through SFMS by the BG issuing bank branch indicating the Tender No. _____ to HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN – 786602.

b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

APPENDIX-A1

EXPERIENCE STATEMENT OF BIDDER/ SERVICE PROVIDER

Tender No: _____

Bidders' experience statement for their Service in previous Seven (7) years to be reckoned from the original bid closing date of the tender.

Sl. No.	Contract No.	Name & Contact details of client	Place of Operation	Capacity of Rig in HP	Details of Oil and/or Gas Wells drilled & completed			Commencement date of contract	Completion date of contract
					Name of Well / Location	Drilled Depth of the Well	Nature of Well (vertical/ Deviated / Horizontal)		
1					1. 2. 3.				
2					1. 2. 3.				
3					1. 2. 3.				

Add rows as required.

Note: As a proof of successful completion of well(s), bidder must attach either copy of end of the well report or copy of daily progress report or any other document duly certified by Client for substantiating the drilled depth, name of well/location, Rig HP with contract number.

APPENDIX-A2

DECLARATION BY BIDDER REGARDING CONCURRENT COMMITMENT

I/We _____ age_____ son of_____ do hereby solemnly affirm and declare as follows for and on behalf of the Firm:

LIST OF EXISTING COMMITMENT AND ONGOING WORKS

Sr. No.	Name of Works	Duration of Contract	Client Name & Address	Work Order Value (INR)
1	2	3	4	5

It is certified that the above particulars furnished are true and correct. If any information given is found to be misleading at a later date OIL will have the authority to take necessary action as per provision of the Contract and as per laid down procedure of the Company (OIL).

SIGN AND STAMP OF BIDDER (AUTHORISED SIGNATORY HAVING POWER OF ATTORNEY)

CHECKLIST-I

COMMERCIAL CHECK LIST

Bidder's Name:_____

TENDER NO. CNI8965P22

This Questionnaire duly filled in should be returned along with each copy of Un-priced Bid. Clauses confirmed hereunder should not be repeated in the Bid.

Sl. No.	Description	Bidder's Confirmation
1.	Bidding structure	
2	Bidder's name and address:	
3.	It is noted that deviations to Terms & Conditions shall lead to rejection of offer, as specified in the Tender.	
4.	Ensure and confirm that prices quoted in 'Schedule of Rates', are for complete scope of work as defined in the tender	
5.	Indicate SAC Code Indicate rate of GST applicable.	SAC Code: GST ……..%
6.	EMD Details: EMD No., Issuing bank, amount with currency and Validity	
7.	Confirm to Submit PBG as per Tender requirement	

8.	Confirm that the offer shall remain valid for acceptance up to hundred and twenty (120) days from final Bid Due Date/Date of opening of bids.	
9.	Whether Mobilization and Completion period of contract is complied?	
10.	Whether Integrity Pact Submitted?	
11.	Confirm that currency of quoted prices: (The same will be finally converted to Indian Rupees for evaluation).	
12.	Confirm that quoted prices shall remain firm and fixed until completion of the contract.	
13.	Confirm that you have submitted all documents as mentioned in the Tender/Annexures	
14.	Confirm acceptance to all terms & conditions of the Tender.	
15.	Confirm that all correspondence must be in English Language only.	
16.	Indicate Name & Contact No. (Telephone/Fax/E-mail) of person signing the bid.	Name: Contact No.: Fax: Email:
17.	Confirm that all Bank charges associated with	

	Bidder's Bank shall be borne by Bidder.	
18.	Please indicate the following: (i) PAN No. (ii) GST Regn. No.	

Bidder confirms that in case of conflicting version of various terms & conditions at different places, the confirmation furnished as above shall be considered over-riding and final and any other deviation indicated elsewhere shall be treated as redundant.

Signature _____

Name _____

Designation _____

Office Stamp _____

CHECKLIST-II

CHECKLIST FOR BID EVALUATION CRITERIA (BEC) (Part 2 of tender doc)

Bidders to mention Complied/Not Complied/Deviation along with the Reference File No. and page No. whichever is applicable.

Sl. No.	Clause No. of Tender Document	Bidder's Remarks		Bidder to indicate relevant File/ Page No/Technical Brochure of the Bid Document to support its remarks
		Complied	Not Complied/ Deviation	
1.	1.0			
2.	2.0			
3.	2.1			
4.	2.2			
5.	2.2.1			
6.	2.3 (a)			
7.	2.3 (b)			
8.	2.3 (c)			
9.	2.4			
10.	2.5			
11.	2.6			
12.	2.7			
13.	2.8			
14.	2.9			
15.	2.10			
16.	2.11			
17.	3.0			
18.	3.1			
19.	3.2			
20.	3.3			

21.	3.4			
22.	4.0			
23.	4.0 (a)			
24.	4.0 (b)			
25.	4.0(c)			
26.	4.0 (d)			
27.	4.0(e)			
28.	4.0(f)			
29.	4.0(g)			
30.	4.0(h)			
31.	4.0(i)			
32.	4.0(j)			
33.	4.0 (k)			
34.	4.0(l)			
35.	5.0			
36.	5.1			
37.	5.2			
38.	5.3			
39.	5.4			
40.	5.5			
41.	5.6			
42.	5.7			
43.	5.8			
44.	5.9			
45.	5.10			
46.	5.11			

47.	5.12			
48.	6.0			
49.	6.1			
50.	6.2			
51.	6.3			
52.	6.4			
53.	6.5			
54.	6.6			
55.	6.7			
56.	6.8			
57.	6.9			
58.	6.10			
59.	7.0			
60.	7.1			
61.	7.2			
62.	7.3			
63.	7.4			
64.	8.0			
65.	8.1			
66.	8.2			
67.	8.3			
68.	8.4			
69.	8.5			
70.	9.0			
71.	9.1			
72.	10.0			
73.	10.1			
74.	10.2			
75.	10.3			
76.	10.4			
77.	11.0			
78.	11.1			
79.	11.2			

80.	11.3			
81.	12.0			

&&&&

EXHIBIT–I

UNDERTAKING FOR WORKS INVOLVING POSSIBILITY OF SUB-CONTRACTIONG

(REF. CLAUSE NO. 7.6 OF THE FORWARDING LETTER)

We, M/s _____ , have read the clause regarding restrictions on procurement from a country which shares a land border with India and on sub-contracting to contractors from such-countries, we certify that we are not from such a country/or if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

EXHIBIT–II

UNDERTAKING TOWARDS COMPLIANCE OF CLAUSE NO. 7.1 OF THE FORWARDING LETTER

We, M/s _____ , have read the clause regarding restrictions on procurement from a country which shares a land border with India, we certify that we are not from such a country/or if from such a country, has been registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Yours faithfully,

For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

--End of Tender Document—
&&&