



FORWARDING LETTER

M/s _____

Sub: IFB No. CDG8856P22 for ‘Hiring of Integrated Drilling Services (IDS-2) for wells in Assam and Arunachal Pradesh for a period of 03 (Three) years with a provision for extension by another one (01) year in the states of Assam & Arunachal Pradesh’.

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 International Competitive Bids (ICB) from competent and experienced Contractors through OIL’s e-procurement site for **‘Hiring of Integrated Drilling Services (IDS-2)’**. 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.	:	CDG8856P22
(ii)	Type of Bidding	:	Online Open Global e-Tender: Single Stage-Two Bid System
(iii)	Tender Fee	:	Not Applicable
(iv)	Bid Closing Date & Time	:	6th January, 2022 [11:00Hrs (IST)]
(v)	Technical Bid Opening Date & Time	:	6th January, 2022 [14:00Hrs (IST)]
(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 General Manager-Contracts Contracts Department, 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 total contract value
(xv)	Validity of Performance Security	:	Up to 3(three) months from date of completion of contract
(xvi)	Location of job	:	Assam and Arunachal Pradesh
(xvii)	Duration of the Contract	:	03(three) years from the date of commencement of operation, with a provision for extension by another one year at OIL's option.
(xviii)	Quantum of Liquidated Damage for Default in Timely Mobilization	:	Refer Clause No. 15.0 of Part-3, Section-III (Special Conditions of Contract).
(xix)	Integrity Pact	:	Must be digitally signed & uploaded along with the Techno-commercial Bid.
(xx)	Bids to be addressed to	:	GM-Contracts, Contract Department, Oil India Limited, Duliajan-786602, Assam, India.
(xxi)	Pre-Bid Conference	:	Tentatively scheduled on 8th December 2021
(xxii)	Last Date for receipt of Pre-bid Queries	:	4th December 2021 (Queries received after 04.12.2021 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 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/iri/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 Details of process for submission of Bid Security (EMD) through the online payment gateway are available in Vendor User Manual under E-Procurement Portal. **(Note:** Important Points for on-line Payment can be viewed at Oil India's website at url:<http://oil-india.com/pdf/ETenderNotification.pdf>).

4.7 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 **8th December, 2021** through **Physical Mode / 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: contracts@oilindia.in, if any latest by **4th December, 2021**. The link for VC or exact venue for pre-bid conference shall be communicated 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 GM-Contracts, Oil India Ltd., Duliajan-786602, Assam and such queries must reach OIL's office at Duliajan latest by **04.12.2021**. OIL shall provide clarifications to only those queries received within this date. Queries/ Clarifications against the tender received beyond **04.12.2021** 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, Bid Security will be forfeited and the party will be put on Holiday as per the Banning Policy (available in OIL's website) of Company.
- ii) **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-S** should be submitted along with the technical bids.
- iii) **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.
- iv) 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.
- v) If the digital signature used for signing is not of "Class-3" with Organizations name, the bid will be rejected.
- vi) 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.**

RFx Response Number: 60037504 RFx Number: TESTARUP Status: In Process Submission Deadline: 15.04.2017 11:00:00 INDIA Opening Date: 15.04.2099 00:00:00 INDIA

RFx Response Version Number: Active Version RFx Version Number: 1

RFx Information Items Notes and Attachments **Conditions** Summary Tracking

Basic Data Questions Technical Attachments

▼ Notes

Clear

Category	Description
Conditions of Participation	-Empty-
Bid Invitation/Auction Text	-Empty-
Bidder's Remarks	-Empty-
Purchaser's Remarks	-Empty-

▼ Attachments

▼ cFolder Attachments

Add Attachment Delete Verify Signature

cFolder Name	Category	Description	File Name	Version	Processor	Chk
The table does not contain any data						

Go to this Tab **"Notes and Attachments"** for Uploading "Priced Bid" files.

Go to this Tab **"Technical Attachments"** for Uploading "Technical Bid" files.

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 Attachment, 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.
- vii) 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"** 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.

Create RFX Response

Submit | Read Only | Print Preview | Check | Technical RFX Response | Close

RFX Response Number 60038748 RFX Number 1306 Status In Proce
 RFX Owner BHARALI Total Value 0.00 INR

RFX Information | Items | Notes and At

Basic Data | Questions | Technical Attachme

Event Parameters

Currency: Indian Rupee

Detailed Price Information: No Price

Terms of Payment: ☐

Total Bid Value:

Callouts:

- Bidder to select the currency of the Response
- "Total Bid Value" is mandatory in "No
- "Total Bid Value" considering all the

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 7.4.1 or 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-II** 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-III** 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/-
(B. Brahma)
Sr. Manager – Contracts
For General Manager – Contracts
FOR RESIDENT CHIEF EXECUTIVE

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, (Part-3, Section-II)
 - f) Special Conditions of Contract, (Part-3, Section-III)
 - g) Schedule of Rates, (Part-3, Section-IV)
 - h) Estimated CIF value of items at the time of import, (Proforma-A)
 - i) Price Schedule Format, (Proforma-B)
 - j) Bid Form, (Proforma-C)
 - k) Statement of Non-Compliance (Proforma-D)
 - l) Bid Security Declaration (Proforma-E)
 - m) Performance Security Form, (Proforma-F)
 - n) Sample Agreement Form (Proforma-G)
 - o) Proforma of Letter of Authority (Proforma-H)
 - p) Authorisation for Attending Bid Opening (Proforma-I)
 - q) Financial Turnover & Networth Certificate (Proforma-J)
 - r) Safety Measures (Proforma- K)
 - s) Proforma of Bank Guarantee towards Purchase Preference-Local Content (Proforma-L)
 - t) Integrity Pact (Proforma-M)
 - u) Format of agreement between bidder & their parent/100% subsidiary company (Proforma-N)
 - v) Format for parent company/subsidiary company guarantee (Proforma-O)
 - w) Parent/Ultimate parent company's corporate guarantee towards financial standing (Proforma-P)
 - x) Format of agreement between bidder, their sister subsidiary & ultimate parent company (Proforma-Q)
 - y) Form of PBG for ultimate parent/supporting company (Proforma-R)
 - z) Undertaking of authenticity of information/documents submitted (Proforma-S)
 - aa) Certificate of Compliance of Financial Criteria (Proforma-T)
 - bb) Undertaking by Vendor on submission of Performance Bank Guarantee (Proforma-U).

- cc) Undertaking format for TPI (Proforma-V)
- dd) Undertaking format for Local Content (Proforma-W)
- ee) Commercial Checklist (Proforma-X)
- ff) Undertaking from contractors personnel (Proforma-Y)
- gg) Other Annexures, Exhibits & Appendix.

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-M 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:

- 8.1 A bidder expecting to incur its expenditures in the performance of the Contract in more than one currency, and wishing to be paid accordingly, shall so indicate in the bid. In such a case, the bid shall be expressed in different currencies and the respective amounts in each currency shall together make up the total price.
- 8.2 Indian bidders too can submit their bids in any currency (including Indian Rupees) and receive payment in such currencies on par with foreign bidders. However, currency once quoted will not be allowed to be changed.

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 initialled 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) Printed catalogue and literature if called for in the bid document.
- b) Power of Attorney for signing of the bid digitally.
- c) 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

Foreign bidders shall clearly indicate in their bids whether they have an Agent/Representative/Retainer/Associate in India. In the event the overseas bidder is having an Agent/Representative/Retainer/Associate in India, the bidder should furnish the name and address of their Agent/Representative/Retainer/Associate in India and clearly indicate nature and extent of services to be provided by such an Agent/Representative/Retainer/Associate in India and also stating in their bids whether the Agent/Representative/Retainer/Associate is authorized to receive any commission. The rate of the commission included in the quoted rates of bidder should be indicated which would be payable to Agent/Representative/Retainer/Associate in non-convertible Indian currency according to Import Trade Regulation of India. Unless otherwise specified, it will be assumed that agency commission is not involved in the particular bid.

Further, overseas bidders shall submit their bids directly and not through their Agent/Representative/Retainer/Associate in India. Bid submitted by Indian Agent/Representative/Retainer/Associate on behalf of their foreign principals will not be considered and will be rejected straightway. Moreover, one Indian Agent/ Representative/ Retainer /Associate cannot represent more than one foreign bidder against the IFB.

The Indian Agent/Representative/Retainer/Associate will not be permitted to submit any Bid Security and Performance Security on behalf of their foreign principals and also the Indian Agent/Representative/Retainer/Associate will not be allowed to execute the contract and receive payment against bid submitted by their foreign principals. Such bids shall be rejected straightway.

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 Conversion to single currency

While evaluating the bids, the closing rate (B.C. Selling Rate) of exchange declared by State Bank of India on the day prior to price bid opening will be taken into account for conversion of foreign currency into Indian Rupees. Where the time lag between the opening of the price bids and final decision exceeds three months, the rate of exchange declared by State Bank of India on the date prior to the date of final decision will be adopted for conversion.

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.

22.2 Loading of foreign exchange

There would be no loading of foreign exchange for deciding the inter-se-ranking of domestic bidders.

22.3 Exchange rate risk

Since Indian bidders are now permitted to quote in any currency and also receive payments in that currency, Company will not be compensating for any exchange rate fluctuations in respect of the services.

22.4 Repatriation of rupee cost

In respect of foreign parties rupee payments made on the basis of the accepted rupee component of their bid, would not be repatriable by them. A condition to this effect would be incorporated by the Company in the contract.

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

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.
- 26.3 Upon the successful Bidder's furnishing of Performance Security pursuant to Clause 27.0 below, the Company will promptly notify each unsuccessful Bidder and will discharge their Bid Security, pursuant to Clause 10.0 hereinabove.

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-M** 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 In case of a joint venture, all the partners of the joint venture should sign the Integrity pact.
- 31.3 In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of Independent External Monitors (IEMs) in a time bound manner. If required, the organizations may adopt any mediation rules for this purpose. In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms and conditions of the contract. The fees/expenses on dispute resolution shall be equally shared by both the parties.
- 31.4 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@gmail.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 knowledge 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.

34.0 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 **EXHIBIT-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.

34.1 In case a bidder is eligible to seek benefits under PP-LC policy as well as Public Procurement Policy for MSEs - Order 2012, then the bidders should categorically seek benefits against only one of the two policies i.e. either PP-LC or MSE policy.

34.2 Upon award of Contract based on PP-LC policy, the bidder shall have to submit additional Bank Guarantee (format enclosed as Proforma-O) equivalent to the amount of Performance Security towards fulfilment of conditions pertaining to Local Contents in accordance with the value mentioned in the certificate of LC.

END OF PART-1

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PART-2
BID EVALUATION CRITERIA (BEC)

1.0 VITAL CRITERIA FOR BID ACCEPTANCE:

The bid shall conform generally to the specifications and terms and conditions given in the Bid Documents. Bidders are advised not to take any exception/ deviation to the Bid Documents. Exceptions/Deviations, if any, should be brought out during the **Pre-Bid Conference** as scheduled against this Tender. After processing such suggestions, Company may communicate the changes, if any, through an addendum to the tender document in this regard to the prospective bidders who purchased the tender document. Still, if any exceptions/deviations are maintained in the bid, such conditional/ nonconforming bids shall not be considered, but shall be rejected outright.

- 1.1 GENERAL CONFORMITY:** The bid shall conform generally to the specifications and terms & conditions given in this bid document. Bids shall be rejected in case the services offered do not conform to the 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.

A. TECHNICAL EVALUATION CRITERIA:

The Bidder shall have to meet the following criteria:

- 1.0** The following minimum criteria should be met by the Bidder failing which their bid/offer will be rejected:

- a) Bidder should be a Directional Drilling and Logging while drilling Service Provider Company engaged in providing Rotary Steerable System (RSS) integrated with collar based MWD & LWD tools to E & P Industry (company involved in exploration & production of Oil & Gas) since last 7 years to be reckoned from the original bid closing date. Bidder should have also successfully completed at least 01(One) Contract of minimum 01(One) year duration using RSS with MWD/LWD in last 05(Five) years as on original bid closing date.
- b) The bidder should have also successfully completed minimum 6 (Six) directional wells using RSS – MWD/LWD tools in combination. Each well should have a minimum drift displacement of 2000 m.
- c) In case any Prime bidder who does not have Mud services on their own and brings in a partner with tie up, the Mud engineering partner should individually have experience of providing Mud engineering services to any E & P company for minimum 02(Two) year under a single contract in the last 05(Five) years and additionally should have completed minimum Mud service in 03(Three) wells of minimum 3000m or more as on original bid closing date.

2.0 The Bidder shall confirm to provide the following:

(a) **Two identical package each having all of the following services:**

- i) One set of SDMM + MWD with Directional and Gamma Ray + Jar for 17½" hole section along with MWD/LWD surface Unit.
- ii) One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling and Resistivity (Induction Type) tool along with MWD/LWD surface Unit for 12¼" hole section.
- iii) One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling, Resistivity (Induction Type) tool, Neutron-Azimuthal Density with imaging & calliper along with MWD/LWD surface Unit for 8½" hole section.
- iv) Mud Engineering Service.

(b) **6" Callout Set (Common for both Package-1 & Package-2):** One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling, Resistivity (Induction Type) tool, Neutron-Azimuthal Density with imaging & calliper, Sonic While Drilling, FPWD, Nuclear Magnetic Resonance along with MWD/LWD surface Unit for 6" hole section on call out basis.

3.0 In case the bidder does not have all the services of their own, they can have pre-tender tie-up only for the Mud Engineering & Jar/Intensifier. However, the prime bidder has to have the Directional Drilling services of its own.

3.1 In case of pre-tender tie-up, the bidder should execute a legally enforceable MOU/ Agreement valid for entire duration of the contract including extension, if any. Copies of the pre - tender tie-up for each third-party service mentioned under clause 3.0 above, should be furnished along with the Technical Bid clearly referring to OIL's tender document number & indicating the scope of work for technical partner of the bidder. Notwithstanding the MOU, bidder shall clearly undertake the single point responsibility of completing the project as offered by the bidder.

4.0 **Mobilization:** Bidder has to confirm mobilization of all the tools, equipment and personnel within **120** (One Hundred Twenty) days from date of issue of the 1st mobilization notice **under each package (refer Clause A 2.0)**. However, OIL reserves the right to mobilize each of the **packages in a phased manner** and in that case, the separate call out notice will be issued. Offers indicating mobilization time more than 120 days from the date of issuance of mobilization notice for the set of tools(s) will be rejected.

For Mud Engineering Services, Bidder has to confirm mobilization of Mud Engineering services along with personnel within **120** (One Hundred Twenty) days from date of issue of the 1st mobilization notice.

In case of call out service, 60 days mobilization notice will be issued.

5.0 For proof of requisite Experience (refer Clause No.A.1.0); the following documents/ photocopy (self-attested/attested) must be submitted along with the un-priced Techno-commercial bid:

- (a) Documentary evidence(s) in the form of relevant pages of the contract(s) executed showing detailed address(es) of client(s), scope of work and work order(s) along with completion certificate(s)/payment certificate(s) issued by the client(s) or any other document(s) which substantiate the 07 (Seven) years' experience and also details of documents for 01(One) completed Contract of drilling Directional Wells using RSS/SDMM along with MWD/LWD. The same should also be submitted as per **Annexure-A**.
- (b) Documentary evidence(s) in the form of relevant pages of the contract(s) executed showing detailed address(es) of client(s), scope of work and work order(s) along with completion certificate(s)/payment certificate(s) issued by the client(s) or any other document(s) which substantiate the 01(One) completed Contract of Mud Engineering Service to any E & P Company. For 03(Three) wells of minimum 3000 m or more, bidder has to submit the DMR of the particular wells.
- (c) Documentary evidence(s) in the form of work order(s)/end of well report(s)/well completion report(s)/directional survey reports/ completion certificate(s) or any other document(s) in support of the successful completion of the 06 (Six) nos. of High-Displacement Directional Wells shall have to be submitted in support of the Technical experience criteria (A.1.0.b). The same should also be submitted as per **Annexure-B**.
- (d) Bidder can also provide self-certified documents duly signed by the authorized signatory of the bid/CEO of the firm confirming execution of required number of High Displacement directional wells with drift displacement of minimum 2000 meters, clearly indicating Contract no., well name and operator's details. However, for Mud engineering Service, the declaration has to be signed by the authorized signatories of the bid/CEO of both the partners of the bid confirming execution of Mud service in 03(Three) wells of minimum 3000m or more.

NOTE: Oil India Limited (OIL) reserves the right to contact the Client(s) 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.

- 6.0** A job executed by a bidder for its own organization / subsidiary will not be considered as experience for the purpose of meeting BEC.

7.0 Bids from 100% subsidiary:

Bids of those bidders, who themselves do not meet the experience criteria as stipulated in the tender, can also be considered provided the bidder is a 100% subsidiary company of the parent company which itself meets the experience criteria. In such case, as the subsidiary company is dependent upon the experience of the parent company with a view to ensure commitment and involvement of the parent company for successful execution of the contract, the participating bidder should enclose an agreement (as per format furnished vide **Proforma-N**) between the parent company and the subsidiary company and Corporate Guarantee (as per format furnished vide **Proforma-O**) from the parent company to OIL for fulfilling the obligation under the contract, along with the technical bid.

- 8.0 In case Bid is 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 stipulated in A.1.0 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 following conditions:

- (a) Provided that the sister subsidiary/co-subsidiary company and the bidding company are both 100% subsidiaries of an ultimate parent/holding company either directly or through intermediate 100% subsidiaries of the ultimate parent/holding company or through any other 100% subsidiary company within the ultimate parent/holding company. Documentary evidence to this effect to be submitted by the ultimate parent/holding company along with the technical bid.
- (b) Provided that the sister subsidiary/co-subsidiary company on its own meets the technical experience criteria laid down in Clause A.1.0 above and not through any other arrangement like technical collaboration etc.
- (c) Provided that 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 vide **Proforma-Q**, between them, their ultimate parent/holding company, along with the technical bid.

9.0 BIDS FROM CONSORTIUM:

In case the Bidder is a Consortium of Companies, the following requirements must be satisfied by the Bidder:

(i) Acceptable Memorandum of Understanding (MOU) has to be made between the consortium partners, which should be duly signed by the authorized executives of the consortium members clearly defining the role/scope of work of each partner/member, binding the members jointly and severally to any & all responsibilities and obligations under the contract, if awarded, and identifying the Leader of the Consortium.

(ii) The leader of the consortium must satisfy the minimum experience requirement as per clause **A.1.0** above.

(iii) The leader of the consortium must confirm unconditional acceptance of full responsibility of executing the “Scope of Work” of this tender. This confirmation must be submitted along with the technical bid.

(iv) MOU/Agreement concluded by the bidder with consortium partners, should be addressed to the Company, clearly stating that the MOU/Agreement is applicable to this Tender and shall be binding on them for the entire contract period, including extension, if any. The MOU must unconditionally and unequivocally declare that the MOU shall remain valid during the validity of the Contract. The MOU/Agreement should be submitted along with the Technical bid.

(v) Only the Leader of the consortium shall register against the tender on e-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.

(vi) The Bid Security shall be in the name of the Leader of the consortium on behalf of consortium with specific reference to consortium bid and with name(s) & address(es) of Consortium members. Similarly, the Performance Security shall be in the name of the Leader on behalf of the Consortium.

(vii) 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 shall also be responsible for resolving dispute/ misunderstanding/ undefined activities, if any, amongst all the Consortium members.

(viii) Any correspondence exchanged with the leader of consortium shall be binding on all the consortium members.

(ix) Payment shall be made by OIL only to the leader of the consortium towards fulfilment of contract obligations. OIL may consider direct payment to individual consortium members within the same vertical, provided the consortium, so formed is complied with the terms of the Circular No. 07/2016 dated 07th March, 2016 issued by the Central Board of Direct Taxes (CBDT). Besides, for direct payment required for their part of scope of works, the same should be clearly indicated in the bid as well as MoU along with member-wise details of price break-up

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

(xi) Documents/details pertaining to qualification of the BIDDER 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.

(xii) **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.

(xiii) **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.

(xiv) 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.

B. FINANCIAL EVALUATION CRITERIA

1.0 The bidder must have minimum **annual financial turnover** of at least **INR 152.82 Crores or USD 20.24 Million** in any of the preceding three (3) financial/accounting years reckoned from the original bid closing date as per the Audited Annual Reports.

2.0 In case of Consortium of companies, any member of the Consortium shall have an annual financial turnover of minimum **INR 152.82 Crores or USD**

20.24 Million during any of the preceding 03 (Three) financial/ accounting years reckoned from the original bid closing date and other member(s) of the consortium shall have an annual financial turnover of minimum **INR 76.41 Crores or USD 10.12 Million** during any of the preceding 03 (Three) financial/accounting years reckoned from the original bid closing date. Borrowing support from parent/supporting company is not allowed to meet the financial criteria.

- 3.0** "Net Worth" of the bidder should be positive for the financial/accounting year preceding the Original Bid Closing date. Similarly, in case of consortium bidding, the Net Worth of all the consortium partners individually should be positive for the accounting year preceding the original bid closing date.

[Net worth] shall mean: "Share capital + Reserves created out of profits and securities Premium – Aggregate value of accumulated losses (excluding revaluation reserves) – deferred expenditure – Miscellaneous Expenditure to the extent not written off and carried forward Loss – Reserves created out of write back of depreciation and amalgamation".

- 4.0** In case the bidder is a subsidiary company (should be a 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 following documents need to be submitted along with the technical bid:

- (i) Annual Turnover of the parent/ultimate parent/holding company in any of preceding three (3) financial /accounting years reckoned from the original bid closing date as per the Audited Annual Reports shall be minimum **INR 152.82 Crores or USD 20.24 Million**.
- (ii) Net Worth of the parent/ ultimate parent / holding company should be positive for the financial/accounting year preceding the original bid closing date.
- (iii) Corporate Guarantee (as per **Proforma-P**) 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, and
- (iv) The bidder is a subsidiary company of the parent/ultimate parent /holding parent company.
- (v) *Notwithstanding to the existing provision in the tender, Bidders who wish to submit the latest audited financial statements of the just concluded FY in support of meeting Turnover and Net worth (Financial BEC) shall also be considered against this tender.*

- 5.0** 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 /within the due date for furnishing of audit report as per Section 139(1) of IT Act, 1961 (read along with latest circulars/notifications issued by CBDT from time to time) 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 will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 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 as per format.

6.0 Note to Financial Evaluation Criteria:

- (i) For proof of Annual Turnover & Net worth, Working Capital, Bid Capacity & Debt Equity Ratio any one of the following documents must be submitted along with the bid:
- (a) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover, Net worth, Working Capital, Bid Capacity & Debt Equity Ratio as per format prescribed in **Proforma-J**. Please note that mentioning of UDIN (Unique Document Identification Number) is mandatory for all Certificates issued by Chartered Accountant w.e.f. 1st February 2019.
- OR**
- (b) Audited Balance Sheet along with Profit & Loss account. In case of foreign bidders, self-attested/digitally signed printed published accounts are also acceptable.
- (ii) 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.
- (iii) In case the Audited Balance sheet and Profit Loss Account submitted along with the bid are in currencies other than INR or US\$, the bidder shall have to convert the figures in equivalent INR or US\$ considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA Certificate (with Valid UDIN) is to be submitted by the bidder regarding converted figures in equivalent INR or US\$. 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.

C. COMMERCIAL EVALUATION CRITERIA:

- 1.0 Bids shall be submitted under single stage two Bid system i.e. Un-priced Techno-Commercial Bid and Priced Bid separately in the OIL's e-Tender portal. The Un-priced techno-commercial bid (or Technical bid) is to be uploaded as per Scope of Work & Technical Specification of the tender in "Technical RFx Response" Tab and Priced Bid as per **Proforma-B, B1 (Imported), B1(Indigenous) & B2 (Call-out)** 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.
- 2.0 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. Bids with adjustable price terms will be rejected
- 3.0 Bid received with validity of offer less than **120 (One twenty) days** from Original Bid Closing Date will be rejected.
- 4.0 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 a period of two years. This suspension of two years shall be automatic without conducting any enquiry
- 5.0 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide **"Proforma-M"** of the tender document. The proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial 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 with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid will be rejected.
- 6.0 Physical Bids, if any received from the bidders, shall not be considered and will be rejected.
- 7.0 Bids submitted after the Bid Closing Date and Time will be rejected.

- 8.0 Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.
- 9.0 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.
- 10.0 Bids documents shall be typed or written in indelible ink and shall be digitally signed by the bidder or his authorised representative.
- 11.0 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 initialled by the person or persons who has/have digitally signed the Bid.
- 12.0 Any Bid containing false statement will be rejected.
- 13.0 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.
- 14.0 Bidders shall quote directly and not through their Agent/ Representative/Retainer/Associate in India. Bids submitted by Indian Agent/ Representative/Retainer/Associate on behalf of their foreign principals will not be considered and will be rejected straightway. One Indian Agent/Representative/Retainer/Associate cannot represent more than one foreign principal.
- 15.0 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 Guarantee Clause
 - ii) Force Majeure Clause
 - iii) Tax Liabilities Clause
 - iv) Arbitration Clause
 - v) Acceptance of Jurisdiction and Applicable Law
 - vi) Liquidated damage and penalty clause
 - vii) Safety, Environment & Labour Law
 - viii) Termination Clause
 - ix) Integrity Pact
- 16.0 The Bids and all uploaded documents must be digitally signed using “Class 3” digital certificate [e-commerce application (Certificate with personal verification and Organization name)] as per Indian IT Act obtained from the

licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

D. PRICE EVALUATION CRITERIA:

The bids conforming to the technical specifications, terms and conditions stipulated in the bidding document and considered to be responsive after subjecting to Bid Evaluation Criteria mentioned above will be considered for further evaluation as per the Price Evaluation Criteria given below:

- 1.0 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.
- 2.0 For conversion of foreign currency into Indian currency for evaluation of Bids, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of priced bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceeds 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.
- 3.0 The bidders must quote their charges/rates in the manner as called for vide "Schedule of Rates" under Section-IV and the summarized price schedule format vide enclosed **Proforma-B, B1 (Imported), B1(Indigenous) & B2 (Call-out)**.
- 4.0 The quantities shown against each item in the "Price Bid Format" shall be considered for the purpose of Price 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/parameters, as the case may be.
- 5.0 Bidders to note the following:
 - i) Mobilization charges for each Package shall not exceed 1% of the total quoted value of each respective Package in the Price Bid format. However, Mobilization charges if quoted in excess of 1% total quoted value for the Package, the excess amount shall be paid at the end of the contract.
 - ii) De- Mobilization charges for each Package should not be less than 1% of the total quoted value of each respective Package in the Price Bid format. If De-mobilization is quoted in deficit or less than 1% of total quoted value for the Package, the deficit amount shall be

withheld from the first invoice and the same will be paid at the end of the contract along with Demobilization charges.

- iii) Interim Mobilization charges of each Package should not exceed 0.5 % of total quoted value for each respective Package in the Price Bid format.
- iv) Interim De-mobilization charges of each Package should not exceed 0.5 % of total quoted value of each respective package in the Price Bid format.
- v) Standby charges of each tools/ equipment (applicable for all sizes) shall not exceed 50% of the quoted operating Unit rate for the respective tools/ equipment in the Price Bid.

- 6.0** 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, B1 (Imported), B1(Indigenous) & B2 (Call-out)**.

Total Estimated Contract Cost for 03(Three) years including all Taxes & Duties including GST but excluding Basic Customs Duty:

$$T = T1 + T2 + \text{GST}$$

Where,

T = Total contract cost for 03 (Three) years

T1 = Total Cost of Regular Service

T2 = Total Cost of Call Out Service

E. GENERAL:

- 1.0** 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.
- 2.0** To ascertain the substantial responsiveness of the Bid the Company reserves the right to ask the bidder for clarification in respect of clauses covered 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.
- 3.0** 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.

- 4.0 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.

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.

5.0 PURCHASE PREFERENCE TO MICRO AND SMALL ENTERPRISES:

- 5.1** Categorisation and various criteria applicable to MSE bidders shall be guided by the Gazette Notification No. CG-DL-E-26062020-220191 dated 26.06.2020 and Amendment vide Gazette Notification no. CG-DL-E16062021-227649 DATED 16th June, 2021 issued by MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES. The existing enterprises registered under EM-Part-II or UAM till 30th June 2020 shall continue to be valid only for period up to the 31st day of December, 2021.
- 5.2** 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 a MSE.
- 5.3** In case of more than one such MSE qualifying for 15% purchase preference, the contract shall be awarded to lowest eligible MSE amongst the MSEs qualifying for 15% purchase preference.
- 5.4 DOCUMENTATION REQUIRED TO BE SUBMITTED BY MSEs:**

The Bidder claiming as MSE status (MSE-General, MSE-SC/ST, MSE-Woman) against this tender has to submit the following documents 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 Centres 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 Adhaar 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 entrepreneur or Woman Entrepreneur, valid documentary

evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur/Woman Entrepreneurs should also be enclosed.

- 5.6** 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, MSEs quoting on the strength of technical collaborators will be eligible for the benefits reserved for MSEs (i.e. exemption from payment of EMD and purchase preference). However, in case of submission of Consortium bids by MSEs, in order to avail the benefits reserved for MSEs (i.e. exemption from payment of EMD and 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 requirements including technical and financial evaluation criteria. In that case, all the members of the Consortium including the leader of the Consortium should be eligible MSEs. Further, in case of bid from incorporated JVC, in order to avail the above MSE benefits, the bidder i.e. JVC shall have to be MSE unit.

6.0 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-FPPNG dated 17th November, 2020 of MoPNG shall be applicable in this tender. [Copy of the **notification is enclosed as Exhibit-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.

- 6.1** 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. FP20013/2/2017-FP-PNG dated 17th November 2020 or subsequent amendments, if any.
- 6.2** 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.
- 6.3** 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.
- 6.4** 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'.

- 6.5** 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.

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

- 7.1** 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 Lloyd 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@gulflloyds.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
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7.2 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.

7.3 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 along with 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

7.4 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 empanelled 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 empanelled 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 empanelled third-party agency shall not automatically make the bidder eligible for award of contract.

(c) Verification of documents are normally categorized as under:

i. General Requirement:

- Check Bidder's PAN Card
- Check Bidder's GST Certificate
- Check ITR of company – last three years (minimum)
- Check Bidder's Certificate of Incorporation – 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

- To 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-V**) enclosed should be submitted along with the Bid.

8.0 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 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 requirements 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 prove 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 Bidding 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 Bidding 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 COMPANY 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 Bima Yojana (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 LIMITATION OF LIABILITY:

- 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:

1. is, at the time of disclosure, known to the public which CONTRACTOR shall immediately inform COMPANY;
2. 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;

3. is lawfully possessed by CONTRACTOR before receipt thereof from COMPANY which should be immediately informed to COMPANY;
4. is developed by CONTRACTOR independently of the information disclosed by COMPANY which should be shared with the COMPANY;
5. 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, alongwith 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 providing service 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 3 rd 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 pendent-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 entirety 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 alongwith 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
SCOPE OF WORK (SOW)/TERMS OF REFERENCE (TOR)/TECHNICAL
SPECIFICATIONS

1.0 INTRODUCTION

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 Field Headquarters at Duliajan, Assam. Duliajan is well connected by Air with nearest Airport at Dibrugarh, about 45 km away.

1.1. NAME OF THE SERVICE

Integrated Drilling Service-2 (IDS-2) where all services, equipment and material procurement are integrated under the contract for a period of 03 (two) years and extendable by one (01) year with annualized proportionate number of wells in the state of Assam & Arunachal Pradesh.

2.0 BRIEF DESCRIPTION OF SERVICE

There will be two identical packages (bundles) under the service as **Integrated Drilling Service-2 (A) and Integrated Drilling Service-2 (B)**, i.e. IDS-2(A) and IDS-2(B). The contractor shall have to provide the following services with their tools & equipment under each packages including manpower:

- (a) IDS Coordinator
- (b) Directional Drilling Services
- (c) Mud Engineering Services
- (d) Supply of Bits

3.0 SCOPE OF SECTION

This section establishes the scope and schedule of the work to be performed along with equipment, consumable to be supplied by the Service provider and describes the specifications, instructions, standards and other documents including the specifications for any materials, tools or equipment, which the Service Provider shall satisfy or adhere to in the performance of the work.

4.0 BRIEF DISCRIPTION OF PLACE OF ENGAGEMENT:

The area of operation as planned for this contract shall be in Assam and Arunachal Pradesh of India. The following information is for general guidelines to the bidders but shall not be treated as absolute. Company is not responsible for any deviation of figures being spelt out or met with for reason beyond their control and no claim shall be entertained based these:

- (a) Maximum width of the well site approach road = 3.66 m
- (b) Turning Radius = 15m (Generally), 12 m (exceptionally)

- (c) Max allowable unit load inclusive of fare weight for class AA loading = 50 tons
- (d) Maximum overhead clearance = 4.25 m
- (e) Highest recorded wind velocity in Assam = 80 km/hour
- (f) Max. recorded ambient temp = 45 deg. Celsius
- (g) Min. recorded ambient temp.= 5 deg. Celsius
- (h) Weather Pattern: Frequent rains from May/June to September/ October and Occasional during the remaining period
- (i) Nature of top soil: Usually clay/Alluvium/ Unconsolidated
- (j) Source of water - Through shallow bore wells. Usually available at well Site. Otherwise, from bore well situated at convenient Locations. Depth of bore well 15 to 50 mtrs.
- (k) Average annual rainfall: 250 / 300 cm
- (l) Humidity: max. 98%
- (m) Allowable axle load rating of weakest section of road: 12 Tons
- (n) The approximate well plinth area is 8000 - 9000 sq. m.
- (o) The content of solid effluent may be sand, shale, clay, coal, silt, mudstone, sandstone and other minerals/
- (p) The approximate volume of solid effluent may be up to 80 cubic mtrs during drilling of upper section of the hole.

5.0 GEOLOGY & RESERVOIR INFORMATION:

Geological and reservoir information of the few fields where the proposed services shall be put into operation are furnished below. However, the Services may be deployed also in fields other than the below mentioned ones at the discretion of OIL.

5.1 BRIEF DESCRIPTION OF BLOCKS

The Upper Assam Basin, which is a part of Assam Arakan Petroliferous Basin, lies in a syntaxial position which is surrounded on three sides by thrust belts. In the south the Naga Thrust Belt has been developed due to convergence between the Indian plate and the West Burma Block and the syntaxial closure has resulted from the Himalayan collision to the north and northeast. The Basin has developed as a foredeep / foreland basin with respect to Naga Thrust Belt advancement. The foredeep phase was deposited under marine/deltaic conditions and the foreland stage mainly under fluvial environments.

Present thrust for hydrocarbon exploration by Oil India Limited in Upper Assam Basin is on the Paleocene – Lower Eocene shelf sediments and Oligocene-Miocene fluvial to fluviodeltaic & lacustrine sediments, where numbers of oil/gas bearing structures have been identified. Sandstones deposited in a fluviodeltaic environment (Langpar Formation) to marginal

marine environment (Lakadong & Narpuh Member of Sylhet Formation), fluvio-deltaic to deltaic (Barail Formation), fluvial (Tipam) & lacustrine (Girujan) act as the key reservoir facies and major oil and gas accumulations are found in mostly structural traps. Recent exploratory drilling in the deeper and frontier part of the Basin towards east, southeast and northern bank of the river Brahmaputra away from the Central Basement High area has revealed interesting information on the reservoir facies development pattern within the Paleocene-Lower Eocene sediments.

5.1.1 KUMCHAI [NIGRU PML]:

The KUMCHAI oilfield is a hanging wall structure concealed beneath the alluvial cover in the Changlang District of Arunachal Pradesh. Geologically, the KUMCHAI structure is a fairly large structural 'high' located in the extreme eastern part of the Upper Assam Basin. Structurally, it is an NE-SW trending doubly plunging elongated anticline with a possible areal extent of about 18 sq. km. at Upper Girujan (Mio-Pliocene) stratigraphic level. The structure is bounded by a thrust/ reverse fault in the north and a normal fault in the south. The structural configuration at the underlying Tipam (Miocene) level more or less conforms to the structural picture of the overlying Girujan level. The closure area is expected to be about 8 sq. km. at the Tipam level. The structural configuration of the field has been depicted through time/ depth contour maps within Girujans and Tipams.

Approximate surface area of field = 25 Sq. Km.

5.1.2 BALIMARA [DUMDUMA PML]:

The study area is located in the southern part of OIL's operational area in Upper Assam basin. Balimara structure was identified in a regional study published in June, 2005 as a review of Greater Shalmari-Nahorkatiya area for prospect generation and exploratory drilling. The Balimara structure appears as a faulted anticlinal structure at Barail Top as well as Barail Sand top level. The structure is bounded in the north by a WNW-ESE trending fault separating it from Jaipur structure. The structure is bounded in the north-west by NE-SW trending fault, whereas the surface trace of the Naga thrust lies in the south-west of the structure. The Balimara area shows similar structural pattern as that of Barail at Tipam and Eocene levels.

Approximate surface area of field = 50 Sq. Km.

5.1.3 BAGHJAN + SOUTH BAGHJAN (BAGHJAN PML):

The Baghjan oilfield is located in the North-eastern corner of OIL's operational area in Upper Assam Basin and very close to the Baghjan (High Displacement Well) which is situated towards north of Baghjan. Drilling of wells has been carried out in Baghjan area and no well has been drilled in Baghjan (High displacement well) area yet. The Baghjan structure was first identified at the Paleocene-Lower Eocene level during the interpretation of 2D seismic data of Chandmari area in 2000. It is an elongated structure and lies on the up-thrown side of the major east-west trending fault at Paleocene-Lower Eocene level. The discovery of hydrocarbon in this structure was made during March 2003 after the successful completion of the first well Baghjan-

1. The main hydrocarbon bearing horizons are confined to the Paleocene / Lower Eocene reservoirs (3.5-4.0) Km below the surface level. The Baghjan structure lies in Baghjan PML which is limited by Baghjan (High Displacement Well) in the north. **Approximate surface area of field = 60 Sq. Km.**

5.1.4 LAKAWAGAON (MORAN PML):

The Lakuwagaon oilfield is located in the western part of OIL's operational area in Upper Assam Basin and is situated towards west of established Moran oilfield. Six (6) wells have so far been drilled in this area. The Lakwagaon structure is an elongated faulted anticline identified at Barail (Arenaceous) Formation during the interpretation of Haldibari-Dikharipathar 3D seismic data in 2009. The discovery of hydrocarbon in this structure was made during 2017 after the successful completion of the first well Lakwagaon-1. The main hydrocarbon bearing horizons are confined to the Barail 4th+5th sand reservoirs. The Lakwagaon structure lies in the westernmost corner of the Moran PML. **Approximate surface area of field = 35 Sq. Km.**

5.1.5 GENERALIZED STRATIGRAPHY / LITHOLOGY OF 4 THRUST AREA WITH FORMATION TOPS OF DRILLED LOCATIONS IN THESE AREAS

(a) KUMCHAI [NINGRU PML]:

Ground Level Elevation above Sea level =180 m

Table-1: Formation Tops (Well: Kumchai-10)

Formation	TVDSS (m)	TVD (m BDF)
Alluvium	Surface	Surface
Namsang	1851	2021
Girujan	3010	3180

(b) BALIMARA [BALIMARA PML]:

Ground Level Elevation above Sea level =120 m

Table-2: Formation Tops (Well: Balimara-1)

Formation	TVDSS (m)	TVD (m BDF)
Alluvium	Surface	Surface
Girujan	1620	1747
Tipam	2735	2862
Barail (Argillaceous)	3579	3706
Barail (Arenaceous)	3904	4032
Kopili	4444	4571

(c) **BAGHJAN [BAGHJAN PML]:**

Ground Level Elevation above Sea level =122 m

Table-3: Formation Tops (Well: Baghjan-1)

Formation	TVDSS (m)	TVD (m BDF)
Alluvium	Surface	Surface
Girujan	Absent	Absent
Tipam	1921	2050
Barail	2228	2357
Kopili	2970	3099
Prang	3284	3413
Narpuh	3337	3466
Lakadong+Theria	3447	3576
Langpar	3607	3736
Basement	3715	3844

(d) **LAKAWAGAON [MORNA PML]:**

Ground Level Elevation above Sea level = 95 m

Table-4: Formation Tops (Well: Lakwagaon-1)

Formation	TVDSS (m)	TVD (m BDF)
Alluvium	Surface	Surface
Namsang	1531	1637
Girujan	2254	2360
Tipam	2462	2568
Barail	3132	3238
Kopili	3607	3713
Prang	4091	4197
Narpuh	4151	4257
Lakadong+Theria	4198	4304
Langpar	4267	4373
Basement	4320	4426

6.0 PROJECTION PARAMETERS:

Reference spheroid for local projection : WGS 84

Projection system : Lambert Tangential.

7.0 DESCRIPTION OF DRILLING WELL

Drilling locations may be one with one well or cluster of wells/offset wells. Profiles of the wells are vertical or directional with “J”, “S”, and “Horizontal” profile. Multilateral drilling with several lateral drain holes from one mother well is also in planning stage. Standard/tentative sectional targets for a well with depth of 4500 meter is as follows:

Table (5): Standard/tentative sectional target for a well with depth of 4500 meter

Table No. 5: Tentative Sectional target for Hole Size

Sl No	Hole Size (inches)	Sectional Target
1	26	250
2	17½	250-2300
3	12¼	2300-3600
4	8½	3600-4200
5	6"	4200+

Note: However, above is only a general illustration, hole size and sectional may differ depending upon well design and geology respectively.

8.0 PRESENCE OF CO₂ & H₂S

Presence of CO₂ is expected in the wells. The wells are expected to be H₂S free. Accordingly, the equipment/tools etc. to be offered by the Service provider shall be for generally H₂S free environment.

9.0 BROAD SCOPE OF WORK OF IDS-2

Following services, tools, equipment including manpower to be submitted under the **Integrated Drilling Service-2**

A.0 IDS COORDINATOR:

The Bidder shall provide one qualified and experienced IDS Coordinator for managing the Integrated Drilling Service-2 based at OIL's Office. He should be of sound health, must be fluent in written/spoken English and employee of the Service provider.

CATEGORY

Competent official as described in regulation (21), i.e. Appointment of officials and competent persons.

JOB SPECIFICATION JOB DESCRIPTION JOB LEVEL

He shall be the single point of contact between OIL and the Contractor with responsibility for working closely with OIL. Shall be responsible for successful management for timely completion of each well as per program.

Table No. 6: Experience & Certification of IDS Coordinator

Sl. No.	Name of position	Educational Qualification	Experience & Certification	Stationed	Working Hours	OFF as per Note	Total (excl'd off)
1	IDS Coordinator	Graduate Engineer from AICTE/UGC recognised institute/ Govt. recognized University	<i>i)</i> Should have BE/B Tech with 15 years' experience in deep drilling oil / gas wells. <i>ii)</i> Should be conversant with mud chemicals & maintenance of mud property. <i>iii)</i> Should have completed at least three wells with depth more than 3500 meter, out of which one well with 4500-meter depth.	At base office of	(24 hrs x7 days on call basis)	Off as per Note	01

JOB RESPONSIBILITY

He shall be responsible for

- (a) Delivering of the deliverables to the Client in accordance with scope of work under the Contract.
- (b) Liaise with the Client team and prepare the mobilization plan upon award of main Contract.
- (c) Co-ordinating with internal segments and third parties to ensure timely mobilization of equipment and services, if any.
- (d) Co-ordinating with Company or any other agency for any operational/ administrative matter of the rig and well site.
- (e) Providing all requisite data for preparation of "look-ahead plan" for 7/15/30 days, as applicable, comprising/compiling the "look-ahead plan" for 7/15/30 in advance.
- (f) Attending the Daily Progress Review meetings and fine tune Daily / Weekly look ahead in line with the operational updates and decisions.
- (g) Manpower planning, Assigning the responsibility to the team members and ensure co-ordination on all fronts.
- (h) Participation in the Service Quality Meetings and implementation of correction measures, if any.

- (i) Compliance of QHSSE, Ethics and other policies & standards on part of the Contractor and third-party personnel (if any) harmonising same with client and/or as agreed.
- (j) Maintaining the record & document management system as per code of practices of Oil India. He will also maintain the records or documents not covered under the aforesaid code of practice(s), subsequently as a part of legal and QHSSE requirement.
- (k) Monitoring plans, programs, and work progress to maintain quality and timeline.
- (l) Ensuring equipment and materials under the contract meet quality control standards and regulatory requirements.
- (m) Ensuring an adequate inventory of equipment and materials as per the contract to carry out the work without interruption.

HSE RESPONSIBILITY

He shall be responsible for

- (a) Submitting the legal compliance in the format subscribed by OIL.
- (b) Issuance of PPE to Service provider personnel.
- (c) Replacement of Service provider's personnel due to leave and sickness and shall arrange suitable replacement in reasonable time.
- (d) Implementation of commitment under HSE clause as per SCC.

RESPONSIBILITIES RELATED TO MATERIALS / CONSUMABLES

He shall be responsible for

- (a) Ensuring all mobilisation, demobilisation, interim mobilisation, and interim remobilisation related to manpower, tools, equipment, consumables, and materials well before the requirement of the materials/services so as to avoid waiting for materials/services as per the contract.
- (b) To keep records of inventory at well site and make necessary arrangement to ascertain availability of all essential items in time at site.
- (c) To keep record of material movement & consumption and give daily report to Company's office on inventory status.
- (d) To maintain list of all left over materials & consumables at the end of completion of the operation.

B.0 DIRECTIONAL DRILLING SERVICES

Under the contract the contractor shall have to provide the following services with their tools & equipment under each package **(i.e. Package-1 and Package-2)**:

- (a) One set of SDMM + MWD with Directional and Gamma Ray + Jar along with bit hole for 17½" section along with MWD surface Unit.

- (b) One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling and Resistivity (Induction Type) tool for 12¼" hole section along with MWD/LWD surface Unit, bit and Mud Engineering Service.
- (c) One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling, Resistivity (Induction Type) tool, Neutron-Azimuthal Density with imaging & calliper for 8½" hole section along with MWD/LWD surface Unit, bit and Mud Engineering Service.
- (d) **ON CALL OUT BASIS:**

The following 6" tools and equipment will be on Callout basis and will be used under both the Packages (Package-1 & Package-2) as per OIL's discretion on the basis of necessity.

One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling, Resistivity (Induction Type) tool, Neutron-Azimuthal Density with imaging & calliper, Sonic While Drilling, FPWD, Nuclear Magnetic Resonance along for 6" hole section with MWD/LWD surface Unit, bits and Mud Engineering Service for 6" hole section.

Note:

- a) All the above services are meant for PEL / ML areas for directional drilling activity. OIL will provide necessary recommendatory letter for EC for the tools/equipment, spares & consumables during initial & 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-A.
- b) Contractors to provide the above services, together with Manpower as per scope of work.
- c) Company reserves the right to mobilize individual tools mentioned under Call out services at its own discretion on the basis of necessity.

9.1 SERVICE REQUIRMENT UNDER DIRECTIONAL DRILLING SERVICES:

The Contractor shall provide the services along with all necessary equipment/tools and personnel and carryout directional drilling operations in accordance with the approved directional well plan. The approved well plan may be amended from time to time by reasonable modification as mutually agreed by both Parties. However, the contractor shall be wholly responsible for rendering the services as per scope of work under this contract.

Under the service, the contractor shall have to provide the following services with their tools & equipment:

9.1.1 Collar based MWD / LWD tools (Compatible with RSS/SDMM) with Positive Mud Pulse Telemetry system shall be provided under this service. **The Contractor should categorically confirm to this effect.**

9.1.2 RSS, SDMM, MWD/LWD & Jar/Jar Intensifier to be deputed under the service should comply with the followings:

- (i) All down hole tools including surface unit must be of recent version. **These tools should either be new or in case of refurbished tools- the refurbishment should not be more than 06(Six) months old.** Contractor must submit relevant documents of the tools in this respect as documentary evidence before mobilization of the tools. However, in case of brand-new tools, the same will not be applicable.

In addition to the above, Contractor must submit **maintenance schedule and certificates** against all tools as per Contractor's policy before mobilization of the tools under the Contract. This will be scrutinized by OIL and Contractor to confirm the same.

Note: Part no. / Identification no. must be noted in the maintenance records

- (ii) The Contractor should provide the technical literature/catalogue for all the offered tools.
- (iii) The Contractor shall provide Calibration certificate of MWD & LWD tool before mobilization showing Inclination, Azimuth, Tool face & Dip angle accuracies as applicable. Calibration certificates for accuracy of Measurement should not be more than 6 months old. In case of **calibration, certificates are of 01 (One) year validity**, the same will also be acceptable. Contractor needs to confirm the same.
- (iv) RSS/SDMM/MWD/Jar/LWD tools provided by the Contractor shall be supported with spares and service during the duration of the Contract.
- (v) Contractor would provide relevant test certificates for the drilling jar. Test certificates has to be provided before mobilization.
- (vi) All tools/equipment and consumables deployed by the Contractor should meet OIL's specified requirement.
- (vii) RSS/SDMM/MWD/Jar/LWD initially mobilized by the Contractor and any replacement thereof, should be accompanied by Calibration sheets, approved by Contractors QA/QC engineers/TPI. Contractors to confirm the same.

9.1.3 SDMM WITH MWD + JAR FOR DRILLING 17½"HOLE SECTION

- (i) SDMM + MWD with Directional and Gamma Ray + Jar are to be provided for drilling 17½" hole as a complete package. System should be capable of building, holding and dropping well angle and direction as per approved well plan trajectory.

- (ii) System to transmit data from down hole in real time on continuous basis.
- (iii) System to be complete with one surface unit with necessary computers, monitors printers, plotters etc. and other equipment as necessary to execute the job.
- (iv) **One set of tools & equipment shall consist** 01 No. SDMM for 17½" hole size, one directional MWD + Gamma, one number of Drilling jar with other directional tubular if required for drilling the Section (i.e., NMDC, UBHO, Float Sub etc. if required). The surface unit along with its tool/equipment/software/hardware/accessories must be common and compatible to use all sections (i.e. 17½", 12¼", 8½" and 6") and all tools/equipment under the directional services as per the contract.
- (v) CONTRACTOR has to bring sufficient back up tools over and above the minimum required back up tools for the particular hole size to ensure un-interrupted directional drilling activity considering logistic constraints in the Northeast as per the table above. Servicing of tools will be allowed at no workload period.
- (vi) Services of Directional Drillers and MWD Engineers are to be provided for execution of drilling program as per plans of OIL. Minimum two directional driller and minimum two MWD Engineer are required to be provided always during operation at well site.
- (vii) 17½" section hole will be drilled by the Contractor as per approved OIL's well plan. Phase length of the section will be around 2000 Mtr (MD) with displacement around 600 mtr or more.

9.1.4 RSS/SDMM WITH MWD + JAR/INTENSIFIER FOR DRILLING 12¼" HOLE SECTION

- (i) SDMM + + RSS + MWD/LWD + Jar/Intensifier are to be provided for drilling 12¼" hole having directional and Gamma ray tool, Resistivity (Induction Type), Annulus Pressure and Temperature tool in the system as a complete package. System should be capable of building, holding, and dropping well angle and direction as per well plan trajectory.
- (ii) One set of tools & equipment shall consist of one surface unit, 1 no. of RSS/SDMM for 12¼" hole size, 01no Directional MWD + Gamma, 01 no of 6¾" Drilling jar with intensifier and other directional tubular for drilling the Section (i.e., NMDC, UBHO, Float Sub etc. if required).
- (iii) However, in case of RSS it should be capable of simultaneously changing azimuth and inclination in rotary drilling mode.
- (iv) System should respond to downlink command given from surface in real time and should perform to desired command down hole. System to transmit data from down hole in real time on continuous basis.

- (v) System should have two-way communication system i.e., real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- (vi) System to be complete with one surface unit with necessary computers, monitors printers, plotters etc. and other equipment as necessary to execute the job.
- (vii) CONTRACTOR has to bring back up tools over and above the minimum required back up tools for the particular hole size to ensure un-interrupted directional drilling activity considering logistics constraints in the Northeast as per the table above. Servicing of tools will be allowed at no workload period.
- (viii) Services of Directional Drillers to operate RSS/SDMM and MWD/LWD Engineers are to be provided for execution of drilling program as per well plan of OIL. Minimum two directional drillers and minimum two MWD Engineer are required to be provided always during operation at well site.
- (ix) 12¼" section hole will be drilled by the Contractor with the help of Rotary steerable system or SDMM in consultation with OIL. Phase length of the section will be around 2000 M (MD) with a total displacement of around 1500m or more at sectional TD.
- (x) Rotary Steerable Tools should be best in class tools engaged in the business of the contractors. System should be efficient to drill S-bend, J-bend, horizontal and ERD/HDD well of sail angle 55° - 85°. System should be able to kick off the well from vertical. Directional gamma ray tools should be integrated part of steerable system.

9.1.5 RSS/SDMM WITH MWD AND LWD + JAR/INTENSIFIER FOR DRILLING 8½" SECTION:

- i) SDMM + RSS + MWD/LWD + Jar/Intensifier are to be provided for drilling 8½" hole having directional and Gamma ray tool, annulus Pressure & annulus Temperature while drilling, Resistivity (Induction Type), Neutron-Azimuthal Density with imaging & calliper in the system as a complete package. System should be capable of building, holding, and dropping well angle and direction as per well plan trajectory
- ii) One set of tools & equipment shall consist of one surface unit, 1 no. of RSS/SDMM for 8½" hole size, 01 no of Directional MWD + Gamma + annulus Pressure & annulus Temperature while drilling+ Resistivity (Induction Type) + Neutron-azimuthal Density (four quadrants) with imaging & calliper and 01 no of 6 ½" / 6 ¾" drilling jar with intensifier and other directional tubular for drilling the Section (i.e. NMDC, UBHO, Float Sub etc. if required)..

- iii) However, in case of RSS it should be capable of simultaneously changing azimuth and inclination in rotary drilling mode.
- iv) System should respond to downlink command given from surface in real time and should perform to desired command down hole. System to transmit data from down hole in real time on continuous basis.
- v) System should have two-way communication system i.e., real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- vi) System to be complete with one surface unit with necessary computers, monitors printers, plotters etc. and other equipment as necessary to execute the job.
- vii) RSS will be put to use for operation from one well to another subject to OIL's requirement.
- viii) CONTRACTOR has to bring sufficient back up tools over and above the minimum required back up tools for the particular hole size to ensure un-interrupted directional drilling activity considering logistic constraints in the Northeast as per the table above. Servicing of tools will be allowed at no workload period.
- ix) Services of Directional Drillers to operate RSS/SDMM and MWD/LWD Engineers are to be provided for execution of drilling program as per well plan of OIL. Minimum two directional drillers and minimum two MWD Engineer are required to be provided always during operation at well site.
- x) 8½" section hole will be drilled by the Contractor with the help of Rotary steerable system in consultation with OIL. Phase length of the section will be around 1500M (MD) with a total displacement of around 2000 m or more at sectional TD.
- xi) Rotary Steerable Tools should be best in class tools engaged in the business of the contractors. System should be efficient to drill S-bend, J-bend, horizontal and ERD/HDD well of sail angle 55° - 85°. System should be able to kick off the well from vertical. Directional gamma ray tools should be integrated part of steerable system.

9.1.6 SDMM WITH LWD/MWD + JAR FOR DRILLING 6" HOLE SECTION (CALL OUT SERVICE)

- i) SDMM + RSS + MWD/LWD + Jar/Intensifier are to be provided for drilling 6" hole having directional and Gamma ray tool, annulus Pressure & annulus Temperature while drilling, Resistivity (Induction Type), Neutron-Azimuthal Density with imaging & calliper ,Sonic While Drilling, FPWD and NMR in the system as a complete package.

System should be capable of building, holding, and dropping well angle and direction as per well plan trajectory

- ii) OIL at its discretion and operational requirement will issue Callout notice for each tools in the set. However additional directional tubulars (i.e. NMDC, UBHO, Float Sub, control subs etc. if required) will have to be brought by the contractor on its own to make the string ready for the operation
- iii) However, in case of RSS it should be capable of simultaneously changing azimuth and inclination in rotary drilling mode.
- iv) System should respond to downlink command given from surface in real time and should perform to desired command down hole. System to transmit data from down hole in real time on continuous basis.
- v) System should have two-way communication system i.e., real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- vi) System to be complete with one surface unit with necessary computers, monitors printers, plotters etc. and other equipment as necessary to execute the job.
- vii) RSS will be put to use for operation from one well to another subject to OIL's requirement.
- viii) CONTRACTOR has to bring sufficient back up tools over and above the minimum required back up tools for the particular hole size to ensure un-interrupted directional drilling activity considering logistic constraints in the Northeast as per the table above. Servicing of tools will be allowed at no workload period.
- ix) Services of Directional Drillers to operate RSS/SDMM and MWD/LWD Engineers are to be provided for execution of drilling program as per well plan of OIL. Minimum two directional drillers and minimum two MWD Engineers are required to be provided always during operation at well site.
- x) 6" section hole will be drilled by the Contractor as per approved OIL's well plan with the help of SDMM or RSS. Phase length of the section will be around 800 M (MD) with a total displacement of around 2300 mtrs or more at sectional TD.
- xi) Rotary Steerable Tools should be best in class tools engaged in the business of the contractors. System should be efficient to drill S-bend, J-bend, horizontal and ERD/HDD well of sail angle 55° - 85°. System should be able to kick off the well from vertical. Directional gamma ray tools should be integrated part of steerable system.

9.2 SPECIFIED REQUIREMENTS

The contractor is required to comply with following specified requirements:

- (i) To provide all X-over subs required between Contractor's BHA to Company's drill string and any other X-over required for Contractor's BHA is to be identified and furnished by the Contractor. Drill String available with "OIL" for Drilling in 17½", 12¼", 8½" & 6" hole. These details are furnished in **Annexure-C**.
- (ii) To provide the 5" Drill Pipe Screen, backup tools/equipment with sufficient spares & consumables.
- (iii) To provide detailed specification of equipment/sensors along with catalogue and also all the features available in their MWD & LWD system. The Contractor should also indicate the limitations of their tools/sensors such as temperature, pressure and discharge limitations with ability to pump LCM materials in Mud Loss conditions through the tool and accordingly the equipment & sensor must perform.
- (iv) The Contractor shall keep fishing tools including spares required for Contractor's non-standard equipment/ tools, if any.
- (v) The minimum drift diameter of Hydro-Mechanical Jar/Hydraulic Jar should be as below:
 - For 8" Jar, it should be 3",
 - For 6.1/4-6.1/2-6.3/4 Jar it should be 2.5" - 2.75" and
 - For 4¾" it should be 2"
- (vi) To provide X-over from 6000 Psi to 15000 Psi fitting for H- Manifold.
- (vii) 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.
- (viii) In case of proprietary connection, all cross over sub have to be provided by the bidder to match OIL's string.
- (ix) System should be able to drill cement, float collar, float shoe and formation.
- (x) **Each Package will require only 01 no MWD/LWD Surface unit, which should be compatible with all the different sets of tools within the package**

- (xi) Any Service provider not quoting for all the services as per the Scope of work will be considered non responsive. Additional features/information (if any) is to be provided by the bidder

9.3 DETAILS OF EQUIPMENT & SERVICES REQUIREMENT:

The Contractor shall confirm to provide the following services:

9.3.1 WELL PLANNING SERVICES:

- (i) OIL will design the well trajectory and share the same along with other data with the contractor. Contractor shall accept the plan prior to start of directional drilling. However, contractor may suggest anticipated Torque & Drag, hydraulics and anti-collision for such plan. If required, well plan may be re-viewed in consultation with the contractor to sort out any kind of well trajectory issues. In that case, the re-viewed plan must be accepted by the contractor. Thereafter, it shall be the responsibility of the Contractor to maintain the well profile of the hole as per plan till target depth of the particular section is reached.
- (ii) Contractor shall share Torque & Drag, Hydraulics, Anti-collision, proposed BHA for any particular hole section of a directional well during actual drilling with their latest directional software.
- (iii) Contractor shall submit end of Well Report after completion of the assigned Section/Well in hard as well soft copies (Both in Word and PDF format).

9.3.2 MWD/LWD PRE-JOB PLANNING AND POST LOGGING CLOSING:

Service provider shall assign one Geo-science personnel not necessarily at Duliajan base, who will be a liaison officer with in-house G&G team in terms of relevant data gathering and detailed planning of the proposed LWD job. The personnel will be responsible for matters related to various logs interpretation | processing | assumptions | clarification on post logging report submission etc. Pre-job planning and post log closing should include minimum of the following:

- (i) A **MWD/LWD** Program should contain
 - (a) Document Control (approval/ Distribution List/revision history etc)
 - (b) Well Data Summary
 - (c) Job Objectives and Acceptance Criteria
 - (d) Design and Special Considerations (Design Criteria vs. Job Objectives)
 - (e) Recommendations
 - (f) Pre-Job Requirements
 - (g) Job Procedure

- (h) HSE Procedure
- (i) Contingency Plans
- (ii) Post logging Report as per SoW.

Note:

The topics shown under MWD/LWD Program are indicative only which are subjected to change or modification as per OIL's requirement.

9.3.3 MWD EQUIPMENT AND SERVICES:

- (i) The contractor shall provide one complete set of MWD (Measurement While Drilling) System. MWD tools should be collar specific, i.e. for different collar sizes, outside diameter of sensors is different except of directional sensor. The bore must be empty with no probe except for the directional part. Mud must be able to pass through the inserts (i.e. Battery pack, Gamma pack, Electronics, etc.) at respective flow rates. MWD tools with same size of probe fixed mechanically (fixed collar/collar mounted) for different collar sizes are not to be considered as collar based tools. Probe based tools are not acceptable.
- (ii) MWD system should be based on positive pulse, mud telemetry for drilling (17. ½" , 12. ¼", 8.1/2" & 6") hole as per requirement of OIL provided in the MWD specifications in **Annexure-D**, 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 (17. ½" , 12. ¼", 8.1/2" & 6"). Contractor will maintain sufficient back up tools & spares to meet contingent situation like Lost in Hole / Tool failure etc.

NOTE:

- (i) Contractor shall provide RSS, SDMM, Directional tools based on positive mud pulse telemetry with MTBF (Mean-time Between Failure) exceeding 1000 hrs
- (ii) Contractor to provide additional NMDC if required for MWD/LWD survey accuracy.

9.3.4 LWD EQUIPMENT ALONG WITH SERVICES FOR (12¼", 8½" & 6" – CALLOUT & HOLE):

Contractor shall confirm to provide Resistivity Tool & Density-Porosity tool compatible with the offered MWD. The surface system for Resistivity, Density-Porosity and MWD with Gamma should be same. The Resistivity & Density-Porosity services will be used along with MWD for accuracy. Contractor shall provide the Company with Resistivity, Gamma, Density-Porosity (including density images) Log Vs True Vertical Depth and Measured Well Depth for reservoir boundary identification. The Resistivity measurement shall be as per requirement of OIL provided in **Annexure-G**.

Contractor will maintain sufficient back up tools & spares to meet contingent situation like Lost in Hole / Tool failure etc.

NOTE: The MWD & LWD tools should be able to interface with Rotary Steerable System (wherever used) and facilitate 2-way communication & integration of data and commands.

9.3.5 SDMM EQUIPMENT ALONG WITH SERVICES:

The Contractor shall provide Steerable Downhole Positive Displacement Mud motors with all accessories e.g. stabilizers etc. as per **Annexure-M** for **17½", 12¼", 8½" & 6** hole sizes. SDMMs should be high torque, low to medium speed & 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 plan trajectory. 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 steerable downhole mud motors should be with mud lubricated bearing/ Oil sealed bearing assembly and equipped with rotor catcher feature.

9.3.6 MWD/LWD SURFACE UNIT & DATA TRANSMISSION SYSTEM

Surface MWD/ LWD 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. / 415V AC, 3 Phase, 3 wire AC as per requirement of OIL as stated in **Annexure-K** (Contractor to fill up the Annexure). System should also have following features:

- i) A common LWD/MWD Surface unit compatible with all the sets to be provided per package
- ii) 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.
- iii) Surface Unit should have the facility for online surface recording system capable for running MWD / LWD services in 17½", 12¼", 8½" & 6" " hole section with all accessories like signal pressure transducers, precision depth assembly and MWD/LWD logs including TVD logs in real time.
- iv) System should be able to record standpipe pressure, and Rate of penetration with depth counter facility.
- v) Data should be recorded both in real-time as well 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.
- vi) Unit should have provision for data compression feature and security protection as per prevalent Oil Industry standards.

- vii) System should have colour printing/ plotting facility at base office. Internet connectivity to be provided by the Service provider for data transmission. Hardware and software facilities required for real time data transmission from wellsite to designated office locations should be made available by the Service provider. The rate of data transmission should be fast enough for real time analysis by the respective OIL representatives from OIL's office.
- viii) The Service provider should arrange for state of the art portable VSAT & Antenna at the wellsite (wherever service is deployed) for real time data transmission to OIL's base for uninterrupted data transmission.
- ix) In the event of fault and failure of equipment & software (pertaining to real time data transmission) hired from the SERVICE PROVIDER, their personnel should be available for attending rectification of the problem within 24 hours of detection of the problem.

Note: If the Service provider fails to resolve the data transmission issue within the stipulated 24 hours, OIL will deduct 5% of the ODR rate beyond 24hours till resolution of the data transmission issue to the satisfaction of OIL.

- x) Each Surface Unit should be supplied with all necessary electrical apparatus/computers/printers and other accessories including air conditioners which must be of FLP type and should be suitable for use in hazardous area of zone-I and gas group IIA & IIB in oil mine and shall conform to IS/IEC/EN: 60079-0:2011 & IS/IEC/EN: 60079-1:2007 as per clause No.: 107 of OMR-2017. The bunk house should come with at least 150 m 3-Phase Power cable.
- xi) Real time data Monitoring Services at rig site as well as at Company's base office in Duliajan for 24x7 monitoring of Drilling Operation to be provided both in desktop version and in mobile app. All logs of MWD/LWD tools along with drilling parameters i.e., ROP, Temp, ECD, Survey, SPP, Depth, Hook load curve etc. should be available in the system. No additional charges will be payable for this.
- xii) Service provider has to sign a confidentiality and non-disclosure agreement as per the format enclosed.

9.3.7 Collar based MWD / LWD tools (Compatible with Rotary BHA) with Positive Mud Pulse Telemetry system shall be provided under this service. The Service provider should categorically confirm to this effect.

9.3.8 All MWD/LWD tools along with Jar & Intensifier deployed under the service should comply with the followings:

- i) All downhole tools including surface unit must be of recent version. These tools should either be new or in case of refurbished tools- the refurbishment should not be more than 06(Six) months old. Service provider must submit relevant documents of the tools in this respect

as documentary evidence before mobilization of the tools. However, in case of brand new tools, the same will not be applicable.

- ii) In addition to the above, Service provider must submit maintenance schedule and certificates against all tools as per Service provider's policy before mobilization of the tools under the Contract. This will be scrutinized by OIL and Service provider to confirm the same.

Note: Part no. / Identification no. must be noted in the maintenance records

- iii) The Service provider should provide the technical literature/catalogue for all the offered tools along with the submitted bids. However, the Service provider may have to re-submit the same to the concerned user section during initial/ re-mobilization (if asked for).
- iv) The Service provider shall provide Calibration certificate of MWD & LWD tool before mobilization showing Inclination, Azimuth, Tool face & Dip angle accuracies as applicable. Calibration certificates for accuracy of Measurement should not be more than 06 (six) months old. In case of calibration certificates which are of 01 (One) year validity, the same will not be applicable. Service provider needs to confirm the same.
- v) MWD/LWD/Jar/Intensifier tool provided by the Service provider shall be supported with spares and service during the duration of the Contract.
- vi) Service provider would provide relevant test certificates for the drilling jar/intensifier. A test certificate has to be provided during mobilization. However, the Service provider, if asked for, should be able to submit the relevant certificates during subsequent replacement/refurbishment.
- vii) All tools/equipment and consumables deployed by the Service provider should meet OIL's specified requirement.
- viii) MWD / LWD initially mobilized by the Service provider and any replacement thereof should be accompanied by Calibration sheets, approved by Service providers QA/QC engineers / TPI. Service providers to confirm the same.

9.3.9 MWD/LWD FOR 12¼", 8½" & 6" (call out) HOLE SECTION:

MWD/LWD services consisting of real time Directional, Gamma, Resistivity, Density (four quadrants), Neutron porosity, Annulus Pressure and Annulus Temperature, Sonic while drilling, FPWD, NMR (wherever applicable) should have two-way communication system i.e. real time up link and down link facility with mud pulse telemetry

- i) The Service provider shall provide one complete set of MWD (Measurement While Drilling) System. MWD tools should be collar specific, i.e. for different collar sizes, outside diameter of sensors are different except of directional sensor. The bore must be empty with

no probe except for the directional part. Mud must be able to pass through the inserts (i.e. Battery pack, Gamma pack, Electronics, etc.) at respective flow rates. MWD tools with same size of probe fixed mechanically (fixed collar/collar mounted) for different collar sizes are not to be considered as collar based tools. Probe based tools are not acceptable.

9.3.10 MEASUREMENT WHILE DRILLING

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) Measurement while drilling package should consists of Inclination, Direction and API quality continuous gamma ray measurement recorded both in real as well as memory mode.
- iv) MWD system should be based on positive pulse, mud telemetry for drilling in 17½", 12. ¼", 8.1/2" & 6" " hole section
- v) The MWD system should include the Directional Display Unit/Rig floor display at the derrick floor to check the SDMM tool face as and when required by OIL.
- vi) Directional Survey response time should be less than 120 secs.
- vii) The system should consist of pulsar, electronic sensors, power source for transmitting and recording down hole data in real time with tool face update every 20 seconds or less. Data also is to be recorded while pulling out by back reaming / with pumps-on.
- viii) Mud flow rate: **(As per Annexure D)**
- ix) Data transmission rate should be 5bits/sec or more and the system should be able to transmit data of various tools quoted in the tender without distortion
- x) Data Density should be minimum 2data/ft in real time and minimum 6 data/ft in memory mode
- xi) Measurement accuracy: TF+/- 3.0 deg, Az +/- 1.5 deg, INC +/- 0.2deg or better
- xii) MTF/GTF programmable at surface
- xiii) Should be compatible with the entire range of LWD tools within the scope of the contract

9.3.11 LWD MEASUREMENTS:

Resistivity, Gamma ray, density, neutron porosity, sonic while drilling along with all other callout items under the scope of the contract for 12. ¼, 8.1/2" & 6" " hole size should be combinable & compatible with MWD and other LWD equipment. The provision of real time data transmission should exist. Data is also to be recorded in memory mode as well. Data also is to be recorded while running in/ reaming/pulling out by back reaming with pump-on/off mode. Tools should work with temperature of

120° C or more, Pressure rating: 18000 PSI or more, Tool curvature: 6.5° / 100' (Rotary) or better.

Note: The Memory Capacity for each downhole LWD tools should be able to sustain drilling activity for not less than 300 circulating hours at highest quality of data capturing.

However, breakdown of any tool beyond 300 circulating hours will attract Zero rate if prior intimation for replacement of the tools are not informed by the Service provider.

9.3.11.1 GAMMA RAY MEASUREMENT

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) Sampling Rate: minimum 6 sample/feet in memory mode
- iv) Gamma ray logging should be compatible and combinable with other LWD tools
- v) Gamma Ray Range: 0-250 API or more

9.3.11.2 RESISTIVITY MEASUREMENT (INDUCTION TYPE)

Specifications are given in Annexure: G

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) Sampling Rate: minimum 6 sample/feet in memory mode
- iv) To be recorded in Multiple frequencies and in multiple depth of investigations
- v) Bore-hole compensated phase & attenuation measurement systems with multiple depths of investigation
- vi) Depths of investigation.
- vii) True resistivity (Rt) data.
- viii) Resistivity measurement: 0.2 to 2000 Ohm-m
- ix) Sampling Rate: minimum 6 sample/feet in memory mode
- x) Invasion Profile from curve separations
- xi) Resistivity logging should be compatible and combinable with other LWD tools

9.3.11.3 NEUTRON, AZIMUTHAL DENSITY & IMAGING WITH CALLIPER (ACOUSTIC)

Specifications are given in Annexure: I

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more

- iii) Azimuthal Density Range = 1.0 to 3.10 gm/ cc
- iv) P_e = 1 to 20 units
- v) Neutron porosity = 0 to 100 P.U.
- vi) Azimuthal density from four quadrant and images are to be provided as per the operational requirement with 16 BINS/ 16 Sectors measurement and real time transmission at a rate of 4 BINS/ 4 Sectors or more.
- vii) Ultrasonic/ Density derived Calliper log to be provided

9.3.11.4 ANNULUS PRESSURE & ANNULUS TEMPERATURE WHILE DRILLING

Specifications are given in Annexure: H

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) Pressure sensor to identify ECD(Equivalent Circulating Density) and ESD(Equivalent Static Density)
- iv) APWD pressure and temperature resolution should be 5 psi or less and 1.2 deg. C or less respectively
- v) Should be able to provide measurements in both OFF and ON conditions of the pumps
- vi) Should be able to take min and max pressure measurements during LOT with facilities for multiple pressure measurements
- vii) APWD tool should be combinable or integrated part of MWD & Induction resistivity tools with flexibility for detaching pressure sensors as per operational requirement. Separate rates are to be quoted for the APWD tool. (Bidder to confirm whether APWD is independent or integrated with resistivity tool.)
- viii) If integrated with resistivity/MWD, the CIF value of APWD portion only to be quoted in Proforma-A.

9.3.11.5 SONIC WHILE DRILLING (6" Call out):

Specifications are given in Annexure: L

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) Sampling Rate: minimum 6 sample/feet in memory mode
- iv) Tool should be capable of monopole/multipole excitation mode to deliver real-time delta-T compressional and interval transit time.
- v) Tool should be able to provide formation shear slowness (delta-T) where mud velocities are slower than formation shear arrival.
- vi) Tool should be able to record complete waveform in memory mode for post logging processing and interpretation to extract Delta-t

compressional, shear, stoneley, maximum and minimum stress direction etc.

- vii) Tool should be able to transmit a quality factor in real-time (coherence).
- viii) Tool should be able to detect top of cement in real/ memory processed data.
- ix) Multiple modes of acquisition: monopole, dipole, quadruplets for comprehensive acoustic interpretation. Programmable at surface.
- x) Wide Band receivers to minimize drilling noise

9.3.11.6 DATA DELIVERABLE OF REGULAR PACKAGE

- i) Real time/Memory mode Compressional, Shear and Stonily slowness with integrated travel time, V_p/V_s .
- ii) Geo-mechanical properties viz. Young, shear and bulk modulus, Poisson's ratio, etc.
- iii) Rock Mechanical property determination
- iv) Gas zone detection
- v) Top of Cement determination
- vi) Acoustic porosity
- vii) Permeability from Stonily
- viii) Evaluation of formation anisotropy around borehole, anisotropy map.
- ix) Borehole stability analysis and prediction of safe mud window.
- x) The Post-processed detailed logs/report should be submitted within 72hours of acquisition to OIL's G&G team.

9.3.12 SERVICE REQUIREMENT OF FORMATION PRESSURE WHILE DRILLING (6" CALLOUT)

Specifications are given in Annexure: J

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) Should be combinable with other LWD tools
- iv) Probe based formation pressure measurements
- v) Tool orientation should be detected from the surface.
- vi) Should be able to carry out measurement irrespective of the tool orientation
- vii) Tool Stabilizers should be an integral part i.e no clamps on
- viii) Should have both MWD turbine and battery power source for both pumps on/off condition

9.3.12.1 DATA DELIVERABLES:

Post Processing of Pressure test 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) A comprehensive Interpretation Report has to be submitted by the service provider within 72 hours of completion of data collection and retrieval of tool at surface.

9.3.13 NUCLEAR MAGNETIC RESONANCE (6" CALLOUT):

Specifications are given in Annexure: N

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more

Tool should provide:

- a) Mineral independent porosity
- b) Lithology independent porosity
- c) Permeability Analysis
- d) Bound fluid volume and free fluid volume in real time and in recorded mode
- e) Identification of moveable fluid type
 - Shell diameter 12 inches or more
 - Vertical resolution: 4 ft or less at 100ft/hr ROP
 - Porosity accuracy +/- 1pu or ± 5% whichever is greater
 - Tool should be combinable with other 6" hole size LWD Tools. Also, after post-processed should be able to combine with other LWD/wireline information for complete petro physical analysis

9.3.13.1 DATA DELIVERABLES (POST PROCESSED DATA):

- i) Real time data transmission to surface
- ii) Rust log print of memory data within 24 hrs of memory data collection
- iii) Post processing of data with detailed report should include-
- iv) Determination of total and effective porosity, capillary, bound and free fluid volume, pore size distribution, permeability estimation
- v) Hydrocarbon typing and quantification
- vi) Continuous saturation profiling
- vii) All answer products relevant to acquisition mode, such as saturation profiling, high resolution processing, T1-T2 profiling, fluid characterization and multi-depth magnetic resonance output

- viii) The Post-processed detailed logs/report should be submitted within 72 hours of acquisition to OIL's G&G team.

9.3.14 DRILLING JARS AND INTENSIFIER 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 for (17½", 12¼", 8½" & 6" hole sizes).

9.3.14.1 DRILLING JAR (Specification):

Specifications are given in Annexure (E)

The Service provider has to provide drilling Jar as per the specification given below.

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) Double Acting Jar of hydraulic or hydro-mechanical from approved list
- iv) Size: 8", 6¼"/6½"/6¾" & 4¾"
- v) Length (Maximum): 30 feet (± 3 feet)
- vi) Tool Joint: 6.5/8" Reg, 4.1/2" IF & 3½" IF
- vii) Additional Specifications (As per Annexure E)

9.3.14.2 JAR INTENSIFIER (Specification):

Specifications are given in Annexure F

The Service provider has to provide drilling Jar Intensifier as per the specification given below.

- i) Temp rating: 300 deg F or more
- ii) Pressure rating: 18000 PSI or more
- iii) ID (Minimum): 3"/2¾"/2½"
- viii) Size: 8", 6.1/4"/6.1/2"/6.3/4" & 4.3/4"
- ix) Tool Joint: 6.5/8" Reg, 4.1/2" IF & 3½" IF
- iv) Torsional yield (Minimum): 41000-56200 ft-lbs
- v) Jar Up stroke minimum: 175000-180000 lbs
- vi) Jar Down-stroke minimum: 150000- 175000 lbs
- vii) Stroke length (Up & Down): 12" minimum
- viii) Tensile yield (minimum): 700000 lbs
- ix) Manufacturer/Model: From Approved list

9.4 APPROVED LIST FOR TOOLS / EQUIPMENT & SERVICES:

The Contractor should provide Tools / Equipment & Services (mentioned above) from the approved list as shown in the table below:

(i) MUD MOTOR:

- a) Schlumberger
- b) Halliburton
- c) Weatherford
- d) Baker Hughes
- e) National Oil Well Varco

(ii) RSS:

- a) Schlumberger
- b) Halliburton
- c) Weatherford
- d) Baker Hughes

(iii) Drilling Jar/Intensifier:

- a) Houston Engineers
- b) Weatherford
- c) National Oil Well Varco (Griffith)
- d) Bowen
- e) Schlumberger
- f) Halliburton
- g) ITS

9.4.1 STRING STABILIZER:

- (i) **Stabilizers for 17 ½" Hole section :** 1 no of each 17¼" and 17" string stabilizer with 7⅝" / 6⅝" API Reg box-pin connection, 8" - 9 ⅝" OD fishing neck X 2. 13/16"/3" ID
- (ii) **Stabilizers for 12 ¼" Hole section:** 1 no of each 12" and 11¾" string stabilizer with 6⅝" API Reg box-pin connection, 7¾" / 8" OD fishing neck X 2. 13/16"/3" ID
- (iii) **Stabilizers for 8 ½" Hole section:** 1 no of each 8" and 7¾" string stabilizer with 4" IF /4½" IF box-pin connection, 6½"/ 6¾" OD fishing neck X 2. 13/16"/3" ID
- (iv) **Stabilizers for 6" Hole section :** 1 no of each 5.3/4" and 5.1/2" string stabilizer with 3.1/2 " IF pin and box connection, 4¾" OD fishing neck X 2.1/4 " ID

NOTE:

- a) All the above stabilizers must be 3/4 slight spirals or straight integral and sufficient blade length of double tapered at both leading and trailing ends. Stabilizers should have sufficient

opening / annular clearance / sufficient Junk slot area with taper blade on stabilizer body.

- b) Above stabilizers may be used independently for making rotary assemblies for drilling/ cleanout trips if required.
- c) No additional payment will be made for stabilizers provided by the service provider.

9.4.2 TOOLS AND EQUIPMENT

List of tools/Equipment and Services under each package (**i.e. Package-1 and Package-2**) as per contract are tabulated below:

Table 7: List of tools/Equipment and Services as per contract for each package

Sl. No.	Description of Tools & Equipment	No of Tools per Set		No of Set	Total no of Tools & Equip	No of Tools per Set		No of Set	Total no of Tools & Equip
		Main	Backup						
		Package-1				Package-2			
1.0	17½ " Hole Section Tools & Equipment-Regular basis			1	--			1	
1.1	SDMM with Stabilizers & Accessories	1	1	1	2	1	1	1	2
1.2	MWD with Directional and Gamma Ray	1	1	1	2	1	1	1	2
1.3	Drilling Jar (8" size)	1	1	1	2	1	1	1	2
1.4	Drilling Jar Intensifier (8" size)	1	1	1	2	1	1	1	2
1.5	MWD/LWD Surface Unit	1	0	1	1	1	0	1	1
2.0	12¼" Hole Section Tools & Equipment-Regular basis			1	-			1	
2.1	RSS	1	1	1	2	1	1	1	2
2.2	SDMM with Stabilizers & Accessories	1	1	1	2	1	1	1	2
2.3	MWD with Directional and Gamma Ray	1	1	1	2	1	1	1	2

Sl. No.	Description of Tools & Equipment	No of Tools per Set		No of Set	Total no of Tools & Equip	No of Tools per Set		No of Set	Total no of Tools & Equip
		Main	Backup			Main	Backup		
2.4	Annulus Pressure & Temperature while drilling	1	1	1	2	1	1	1	2
2.5	Resistivity (Induction Type)	1	1	1	2	1	1	1	2
2.6	Drilling Jar (6.1/4" or 6.1/2" or 6.3/4" sizes) (Common for both 12.25" & 8.5" section)	1	1	1	2	1	1	1	2
2.7	Drilling Jar Intensifier (6.1/4" or 6.1/2" or 6.3/4" sizes) (Common for both 12.25" & 8.5" section)	1	1	1	2	1	1	1	2
3.0	8½" Hole Section Tools & Equipment-Regular basis			1	--	1			
3.1	RSS	1	1	1	2	1	1	1	2
3.2	SDMM with Stabilizers & Accessories	1	1	1	2	1	1	1	2
3.3	MWD with Directional and Gamma ray	1	1	1	2	1	1	1	2
3.4	Annulus Pressure & Temperature while drilling	1	1	1	2	1	1	1	2
3.5	Resistivity (Induction Type)	1	1	1	2	1	1	1	2
3.6	Neutron Porosity - Azimuthal Density with imaging and calliper	1	1	1	2	1	1	1	2
3.7	Drilling Jar (6.1/4" or 6.1/2" or 6.3/4" sizes) (Common for both 12.25" & 8.5" section)	0	0	0	0	0	0	0	0
3.8	Drilling Jar Intensifier (6.1/4" or 6.1/2" or 6.3/4"	0	0	0	0	0	0	0	0

Sl. No.	Description of Tools & Equipment	No of Tools per Set		No of Set	Total no of Tools & Equip	No of Tools per Set		No of Set	Total no of Tools & Equip
		Main	Backup			Main	Backup		
	sizes) (Common for both 12.25" & 8.5" section)								

Table-7-A: List of tools/Equipment and Services as per contract for each package (Call Out)

4.	6" Hole Section Tools & Equipment-Call Out basis (Common for both Package 1 & 2)				
4.1	RSS	1	1	1	2
4.2	SDMM with Stabilizers & Accessories	1	1	1	2
4.3	MWD with Directional and Gamma Ray	1	1	1	2
4.4	Annulus Pressure & Temperature while drilling	1	1	1	2
4.5	Resistivity (Induction Type)	1	1	1	2
4.6	Neutron Porosity, Azimuthal Density with imaging and calliper	1	1	1	2
4.7	Sonic While Drilling	1	1	1	2
4.8	Drilling Jar (4.3/4" size)	1	1	1	2
4.9	Drilling Jar Intensifier (4.3/4" size)	1	1	1	2
3.10	FPWD	1	1	1	2
3.11	Nuclear Magnetic Resonance	1	1	1	2

9.4.3 SPECIFICATION OF RSS FOR 12¼" HOLE

As per Annexure: O

Table-8: Specification of RSS suitable for drilling 12¼" hole

Sl. No.	FEATURES	OIL'S REQUIREMENT
1	Flow Range in GPM	Min. Flow Rate: 600 GPM
2		Max. Flow Rate: 1000 GPM or more.
3	Nominal OD	8.0" to 9.625"
4	Near Bit Inclination	5 M or less
5	Azimuthal Gamma measurement from bit	6 M or less

6	Max Operating Temp.	120° C or more
7	Max Operating Pressure (Psi)	18000 PSI or more
8	Type of Connection	6 ⁵ / ₈ " API Regular Box down and 6 ⁵ / ₈ " API Reg. Box Up. Or any other proprietary connection of the bidder for their entire BHA.
9	Lifting Sub	6 ⁵ / ₈ " API Reg.
10	DLS Maximum Achievable	5° / 30M or more.
11	Min. Circulating Hrs.	150 or more.
12	Lost Circulation Material (Max Size & Concentration)	40 ppb or more of medium to fine nut.
13	Manufacturer / Model	From the manufacturers as specified in NIT. Model Quoted Should be Latest and Best in Class

NOTE TO SPECIFICATION OF RSS SUITABLE FOR DRILLING 12¼" HOLE

- (a) Should be capable of kick up from vertical well
- (b) System should be capable of building, holding, and dropping well angle and should be capable of simultaneously changing azimuth in continuously rotating for optimum drilling performance and have capability for back reaming, if required.
- (c) System should have features of automated close loop deviation control system (i.e. it should have automated directional and inclinational hold control)
- (d) System should have two-way communication system i.e. real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- (e) Type of down linking facility to be provided by bidder either by a separate skid mounted unit or by flow rate change of mud pumps.
- (f) 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.
- (g) In case of proprietary connection, all cross over sub have to be provided by the bidder to match OIL's string.
- (h) All stabilizers must be 3/4 slight spirals/straight slight spirals integral and sufficient bladed length of double tapered at both leading and trailing ends and should have sufficient opening / annular clearance with taper blade on stabilizer body.
- (i) System should be able to drill cement, float collar, float shoe and formation.
- (j) Additional features/information (if any) is to be provided by the bidder.

9.4.4 SPECIFICATION OF RSS FOR 8½" HOLE

As per Annexure: O

Table 9: Specification of RSS suitable for drilling 8½" hole

Sl. No.	FEATURES	OIL'S REQUIREMENT
1	Flow Range in GPM	Min. Flow Rate: 350 GPM
2		Max. Flow Rate: 600 GPM or more.
3	Nominal OD	6-3/4" / 6-1/2"
4	Near Bit Inclination	4 M or less
5	Azimuthal Gamma measurement from bit	6 M or less
6	Max Operating Temp.	120° C or more
7	Max Operating Pressure (Psi)	18000 PSI or more
8	Type of Connection	4 ½" API Reg Box down and 4 ½" API IF Box Up Or any other proprietary connection of the bidder for their entire BHA.
9	Lifting Sub	4 ½" API IF
10	DLS Maximum Achievable	5° / 30M or more.
11	Minimum Circulating Hrs.	150 or more.
12	Lost Circulation Material (Max Size & Concentration)	40 ppb or more of medium to fine nut.
13	Manufacturer / Model	From the manufacturers specified in NIT.

NOTE TO SPECIFICATION OF RSS SUITABLE FOR DRILLING 12¼" HOLE

- (a) Should capable of kick up from vertical well
- (b) System should be capable of building, holding, and dropping well angle and should be capable of simultaneously changing azimuth in continuously rotating for optimum drilling performance and have capability for back reaming, if required.
- (c) System should have features of automated close loop deviation control system (i.e. it should have automated directional and inclinational hold control)
- (d) System should have two way communication system i.e. real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- (e) Type of down linking facility to be provided by bidder either by a separate skid mounted unit or by flow rate change of mud pumps.
- (f) 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.

- (g) In case of proprietary connection, all cross over sub have to be provided by the bidder to match OIL's string.
- (h) All stabilizers must be 3/4 slight spirals/straight integral and sufficient bladed length of double tapered at both leading and trailing ends and should have sufficient opening / annular clearance with taper blade on stabilizer body.
- (i) System should be able to drill cement, float collar, float shoe and formation. Additional features/information (if any) is to be provided by the bidder.

9.4.5 SPECIFICATION OF RSS FOR 6" HOLE

As per Annexure: O

Table 10: Specification of RSS suitable for drilling 6" hole

Sl. No.	Features	OIL's Requirement
1	Flow range in GPM	Min flow rate: 150 GPM
2		Max flow rate: 350 GPM or more
3	Nominal OD	5" or less
4	Near bit inclination	3 M or less
5	Gamma measurement from bit	9M or less
6	Max operating Temp	120° C or more
7	Max operating Pressure (PSI)	18000 PSI or more
8	Type of connection	3.1/2" API Reg Box down and 3.1/2" API IF Box or any other proprietary connection of the Contractor for their entire BHA.
9	Lifting Sub	3.1/2" API IF
10	DLS Maximum Achievable	8° / 30 M or more
11	Minimum Circulating Hrs.	150 or more
12	Lost Circulation Material (Max Size & Connection)	40 ppb or more of medium to fine nut
13	Manufacturer / Model	

9.4.6 SPECIFICATION OF RSS FOR 6" HOLE

- (i) Should capable of kick off from vertical well.
- (ii) System should be capable of building, holding, and dropping well angle and should be capable of simultaneously changing azimuth in continuously rotating for optimum drilling performance and have capability for back reaming, if required.
- (iii) System should have features of automated close loop deviation control system (i.e. it should have automated directional and inclinational hold control)

- (iv) System should have two-way communication system i.e., real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- (v) Type of down linking facility to be provided by Contractor either by a separate skid mounted unit or by flow rate change of mud pumps.
- (vi) Match on sub have to be provided by the Contractor in case of proprietary connection for fishing and other job along with the lifting sub. In case non-standard tubular, Contractor has to provide overshot tool for fishing job.
- (vii) In case of proprietary connection, all cross over sub have to be provided by the Contractor to match OIL's string.
- (viii) All stabilizers must be $\frac{3}{4}$ slight spirals/straight integral and sufficient bladed length of double tapered at both leading and trailing ends and should have sufficient opening / annular clearance with taper blade on stabilizer body.
- (ix) System should be able to drill cement, float collar, float shoe and formation. However, any failure on bottom within 24 Hrs from start of cement cleaning, float collar & Shoe will not be attributable to the Contractor.

9.5 GENERAL NOTE : DIRECTIONAL SERVICE (APPLICABLE FOR ALL ABOVE)

- (a) Oil at its discretion may decide to run only the directional MWD module devoid of any other LWD tools on the basis of hole complexity. In this regard, Service provider should provide independent Directional module. If the directional module of the Service provider is a combination with any other tool, OIL is not liable to pay any downhole operating rates for the other tools. Also in case of Lost in hole condition, the Service provider will not be eligible for claiming any re-imbursement with regards to any other tool apart from the directional/MWD module (Price of MWD module should be quoted separately in **(Performa-A)**)
- (b) Payment will be made only for the running set of directional tool which will be considered to be on **ACTIVE** mode and no payment will be applicable for the remaining **UNACTIVATED** sets. Once the directional service for any particular hole size is put under service at the location, standby/operating rates will be applicable only for that particular set as per T&C of the contract
- (c) Without back up of tools/equipment in working condition, under this condition – the moment any tool failure is detected in operation, immediately zero rate will be applicable as defined in **clause no. C (vi), (vii) & (viii)** under schedule of rates. Additionally, penalty @ 100% of Operating rate of the faulty tool(s) will be levied from the waiting period at surface till the replacement/back up tool(s) is available at site.

- (d) Contractor shall provide RSS, SDMM, Directional tools based on positive mud pulse telemetry with MTBF (Mean-time Between Failure) exceeding 1000 hrs (Confirm that MTBF certificate from TPI will be submitted before mobilization). However, in case of brand new (Un-used) LWD/MWD tool proposed to be deployed by the Contractor against this contract, the MTBF certificate is not required.
- (e) Contractors to note that Company (OIL) at its discretion shall have the right to use the tool/tools as per the requirement of OIL. **However, the sets within the package will not be split and use in different locations and will be moved as single entity only all the time.**
- (f) **Contractor can utilise the same set of Jars and Intensifiers mobilized under 12.25" hole section in 8.5" hole section. However, the contractor should ensure that the tools utilized are well within the requisite permissible circulating hours**

9.6

SUMMARY OF DELIVERABLE (Specifications are given in Annexure :P]

Table-11: SUMMARY OF DELIVERABLE

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
1	MWD/LWD Surface Unit			
	Delivery time	Real-Time while Drilling /Tripping	Within 24 hrs of round trip	Within 3 days of completion of Hole Section
	Deliverables	RT Log Prints in Morning and Evening to concerned OIL Representatives (1:200 & 1:500 TVD and MD) (Through mail)	Rush Print Recorded Mode Log Prints to OIL Representatives. (1:200 & 1:500 TVD and MD) (1Copy each)	Detailed Well Section report on Logging BHA design, Bit details, parameters maintained with brief section summary QC'd Recorded Mode Log Prints 2 Copies each to concerned OIL representatives .Services of: 1:1000 MD Log 1:200 & 1:500 TVD and MD LAS/ DLIS and PDS/PDF format 2 x DVD containing Section Archive
2	Data transmission system	Real time logging data transmission from Surface Unit to Client office in Town as per SOW	NIL	NIL
3	Directional, GR, Resistivity (Induction type)	Average GR-0-250 API Phase Shift resistivity- Minimum 3 Curves Attenuation Resistivity - Minimum 1 Curve (Resistivity Curves to be	Average GR - 0 -250 API Phase Shift resistivity- Minimum 4 Curves Attenuation Resistivity - Minimum 4 Curves Time after Bit Sliding	QC'd Recorded Mode Log prints Composite Log Prints Average GR - 0 -250 API Bore hole Compensated Focused button Resistivity. Minimum 2 or more depth of investigation. Bit resistivity Real

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
		transmitted after prior discussion with Company) MWD Surveys Tool Face Continuous Inclination and Azimuth while sliding and rotating. Collar RPM (can also be provided from other tool) Real-time data at 2 data points/ft or better Real time vibration log data	Indicator. All resistivity curves should be borehole compensated and environmentally corrected. Survey Report – Excel Sheet	time resistivity Image (56 sector) Time after Bit sliding indicator. Survey report Excel sheet All raw channels also required to carryout independent environment corrections on GR and Resistivity should also be provided. All datas to be submitted both in hardcopy as well as in DVD mode to concerned OIL representatives.
4	Neutron, Azimuthal Density with imaging & Caliper	Quadrant Density Minimum Top and Bottom Density transmitted in real-time("bottom" density in case of a deviated borehole) Quadrant Density Correction Caliper (Ultrasonic/Density) PEF-0- 10 Thermal Neutron Porosity-environmentally-corrected log curves on-depth 16 Sector Density Image Real-time data at 2 data points/ft or better	Field Deliverable recorded mode data consisting the following:-Quadrant Density Quadrant Density Correction Caliper (Ultrasonic/Density) PEF-0-10 Thermal Neutron Porosity-environmentally-corrected log curves on-depth Time after Bit Sliding indicator 16 Sector Static Density Image	QC'ed Recorded mode Data :- Composite report Quadrant Density Quadrant Density Correction Caliper (Ultrasonic/Density) PEF – 0- 10 Thermal Neutron Porosity - environmentally-corrected log curves on-depth Time after Bit Sliding indicator 16 Sector Static Density Image QC'ed Image Derived Density :Density of the sector where tool is in contract with the borehole, should be provided. All raw channels also required to carry out independent environmental corrections on Density and Neutron should also be provided. All raw Channels required to create Density Image independently should also be provided. Raw Near and far Counts Corrected near and far counts of neutron should also be

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
				provided One copy of LAS/DLIS is also to be provided
5	Annulus Pressure and Annulus Temperature While Drilling	ECD Annulus Pressure Annulus Temperature RT time based log of Annulus Pressure and temperature along with other drilling parameters	Drilling Mechanics Log of ECD,MW, Annulus Pressure and Temperature along with other drilling parameters	Drilling Mechanics Log of ECD,MW, Annulus Pressure and Temperature along with other drilling parameters
6	Sonic While Drilling	Compression Delta – T (DTCO) Data quality factor. Real time surface labeling to be performed Sonic data shall be borehole compensated. Real-time data at 2 data points/ ft or better	Compression Delta – T (DTCO) Data quality factor Sonic data shall be borehole compensated. Service fully-inclusive of the usage of different filters, processing "virtual transmitter arrays" for borehole compensated outputs, and "leaky-fluid" processing [also called "dispersive STC"] which might be required for shallow hole sections	QC'ed Composite Log for all hole sections: - Compression Delta – T (DTCO).Shear in fast formations ST Coherence plot. Stonely Sonic data shall be borehole compensated Service fully-inclusive of the usage of different filters, for borehole compensated outputs. "Leaky-fluid" processing [also called "dispersive STC"] is required for shallow hole sections (TVD ≤ 1000M) Youngs Modulus, Poissons ratio, vp/vs ratio.
7	Formation Pressure While Drilling	Pressure Vs Time Profile – RT Pressure vs Depth Plot – RT Pretest Results: Pressure, Mobility Excel Sheet Summary of all the tests	Pressure Vs Time Profile – Recorded Mode Pressure vs Depth Plot - Recorded Mode QC'ed Pretest Results: Pressure ,Mobility and QC components	Composite Report of all hole sections consisting of :- Pressure Vs Time Profile –Recorded Mode Pressure vs Depth Plot -Recorded Mode QC'edPretest Results: Pressure,

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
			Excel Sheet Summary of all the tests	Mobility and QC components Excel Sheet Summary of all the tests Interpretation Report with Pressure Gradient, Mobility
8	Nuclear Magnetic Resonance	Magnetic Resonance Porosity FF , BF Porosity/Volume Simultaneous Multi Wait Time- T2 distribution in real time, both while drilling, and/or in wipe mode Permeability RPM	Field processed recorded mode NMR Data consisting of :- Magnetic Resonance Porosity FF, BF Porosity/Volume T2 Log Simultaneous Multi Wait Time T2 distribution Permeability RPM	QC'ed Recorded mode NMR Data consisting of:-Magnetic Resonance Porosity FF, BF Porosity/Volume T2 Log. Simultaneous Multi Wait Time- T2 distribution Permeability RPM

9.7 HR DEPLOYMENT: PERSONNEL

- (i) All charges for personnel are included in Tool Operating & Stand by charges. No. separate charges shall be payable for the personnel being deployed.
- (ii) The Contractor 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. The following documents should accompany the Bio Data for approval:
 - a) Educational Qualification certificate
 - b) Appointment / approval letters from the last Operator.
 - c) Proof of Work experience as per contract
 - d) Valid Police Verification Certificate
- (iii) IDS Coordinator, Geo-Science personnel, MWD / LWD Engineers and Directional Driller should be an employee of the Contractor.
- (iv) Company reserves the right to instruct for removal of any Service provider's personnel who in the opinion of Company is technically not competent or not rendering the services faithfully, or due to other reasons. The replacement of such personnel will also be fully at cost of the Service provider and the Service provider shall have to replace this/these personnel within Ten (10) 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 Company for approval prior to their engagement.
- (v) In case, the personnel are newly recruited in the organization, at least 02(Two) no. of personnel reference with email id, Mobile no. etc. of the previous employer to be provided in the CV for his previous experience.
- (vi) The educational qualification & experience criteria of deployed personnel are mentioned in **Table-12 below**:

TABLE-12: HR DEPLOYMENT

Sl. No.	Name of position	Educational Qualification	Experience & Certification	Stationed	Working Hours	OFF as per Note	Total (excluding off)
1	IDS Coordinator	Graduate Engineer from AICTE/ UGC recognised institute/ Govt. recognized University	(i) Should have BE/B Tech with 15 years' experience in deep drilling oil / gas wells. (ii) Should be conversant with mud chemicals & maintenance of mud property. (iii) Should have completed at least three wells with depth more than out of which one well with 4500-meter depth.	At base office of Duliain	(24 hrs x7 days on call)	Off as per Note	01
2	MWD & LWD ENGINEERS	Graduate Engineer / M. Sc. (Geology/ Petroleum Geology) / Diploma Engineer from AICTE recognised institute / Govt. recognized University	(i) Should be of sound health and must be fluent in written and spoken English. (ii) Should have an overall experience of at least 03 years for Graduate Engineer / 04 years for M. Sc. (Geology/ Petroleum Geology) / 05 years for Diploma Engineer in relevant Field. (iii) LWD MWD engineers should have the competency for handling & supervision of radioactive tools with relevant competency certificate at the time of approval to OIL in this regard.	At respective well site	(12 hours shift duty)	Off as per Note	02

3	Directional Driller	Graduate Engineer / MSc / Diploma Engineer from AICTE recognised institute / Govt. recognized University	(i) Should be of sound health and must be fluent in written & spoken English. (ii) Should have an overall experience of at least 03 years for Graduate Engineer / 04 years for MSc / 05 years for Diploma Engineer in relevant Field (iii) Directional Drillers should be able to execute the job of high angle-high displacement/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.	At respective well site	(12 hours shift duty)	Off as per Note	02
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Note:

- (a) Particulars of all personnel deployed under the contract must be submitted in the format **Annexure-Q** to OIL for approval prior to deployment at wellsite.
- (b) "OFF & ON" pattern of personnel deployed at well site shall be guided as per DGMS Circular SO1658 (E) date 30th June, 2014 with fulfilling all its conditions.

9.7.1 COMPETENT OFFICIALS AND COMPETENT PERSON

All the officials and employees) deployed as per "TABLE (4): HR DEPLOYMENT" shall be treated as competent officials and persons as per Regulations (21) Appointment of officials and competent persons and shall perform duty as Regulation (26) Duty of persons employed in mine and Regulation (33) Duty of competent person of OMR, 2017 in addition to other assigned jobs as per the contract.

9.7.2 JOB SPECIFICATION AND JOB RESPONSIBILITY

The basic Job specification and responsibility are defined as below but not limited, additional responsibilities may be assigned if it is warrant for the safety of personnel/equipment and smooth functioning of the operations under the contract.

9.7.2.1 IDS Co-coordinator:

IDS coordinator shall be nominated before commencement of contract and subsequent replacement shall be informed in advance. Suitable replacement should be provided prior to his any planned leave. He has to register his attendance everyday morning at OIL's office for ensuring day rate claims.

CATEGORY

Competent official as described in regulation (21), i.e. Appointment of officials and competent persons.

JOB SPECIFICATION

The IDS Coordinator shall be responsible for delivering the commitment under directional services segment of the contract on behalf of Service provider, work in close coordination with IDS Coordinator and stationed at company's base for the entire contract period.

JOB RESPONSIBILITY

He shall be responsible for

- a) Managing effectively all base operations and logistics, ensuring that personnel, resources as per contractual commitment and vehicles are allocated in order to deliver operational and service requirements, proactively foreseeing and taking ownership of issues which arise during the execution of the contract.
- b) Visiting Company's office regularly and as & when advise to report. Contact point between Service provider and Clients.
- c) Informed about status of Service provider's equipment and any other subject relevant to agreement of the contract.
- d) Keeping Service provider's equipment and tool in good working condition including inventory for smooth running of the service with the help of other offices/ repair facilities.
- e) Managing all equipment inventory under directional services and supervise equipment transport to and from work site or during Interlocation Movement.
- f) Providing interpretation/arrange the interpretation of LWD/MWD data to OIL as advice.
- g) Evaluating LWD/MWD equipment and recommend necessary repairs or maintenances.
- h) Preparing written Logging plan and program, timely delivery of quality data as per SOW.
- i) Maintaining database for recording all activities of ongoing work.
- j) Developing job tickets and daily work reports.
- k) Pre-job planning and Post job closing
- l) Preparing and delivering end-of-well reports and client's final product delivery report.

9.7.2.2 MWD & LWD ENGINEERS

CATEGORY

Competent official as described in regulation (21), i.e. Appointment of officials and competent persons.

JOB SPECIFICATION

He makes use of the Logging while drilling tools as well as the Measurement while drilling system. LWD/MWD Engineer must be able to lift the MWD tool, safely rig in and operate the equipment, perform day-to-day inspections, servicing and maintenance of equipment, and complete all required paperwork accurately and on time as per contractual commitment. Under general supervision, provides on-site supervision of the Logging- While-Drilling (LWD) process, including tool preparations, data acquisition, log generation and Quality Control (QC) and delivery of the services to the customer. Serves as the lead engineer on most jobs. Ensures that all data presented to the customer is accurate, timely and meets the highest service quality standard possible

JOB RESPONSIBILITY

He shall be responsible to

- a) Prepare written Logging plan and program, timely delivery of quality data as per SOW.
- b) Ensure timely rig up/rig down of the LWD/MWD surface unit and other relevant sensors.
- c) Run, maintain and manage the LWD/MWD tools and unit, prepare daily morning reports of all the major operations related to drilling, real time observations and annotation of markers as defined by Company Geologist.
- d) Evaluate LWD/MWD to be used for the different drilling processes as advice by OIL.
- e) Provide support in terms of the technical details of the materials to be used in the system.
- f) Prepare documents for transportation of LWD/MWD equipment on vehicles in accordance with applicable statute.
- g) Assemble LWD/MWD tools as part of the bottom hole assembly (BHA) and Ensures BHA's are assembled as planned, including correct make-up torque, doping and handling.
- h) Interface with the Directional Driller (DD) to ensure BHA compatibility, planned operating parameters are within specification and correct tool face references are applied.
- i) Identify, prevent and report potential hazards and take par all HSE related activities organise in site including Mock drills, Toolbox Talk and Job Safety Analysis.

- j) Conduct post-operations tests once equipment is pulled out of the wellbore and pre operations test before run-in.
- k) Exercise judgment to determine the appropriate action at the well site when performing well site surveys, monitoring well sensors, identifies, and corrects operational problems to prevent or minimize service impact.
- l) Recognize& plans the operational status of field equipment at the well site and maintaining it when appropriate.
- m) Prepare of LWD/MWD tools, assembling testing and calibration of the LWD/MWD Tools and verification of OIL's requirements.
- n) Analyses and interpretation of well site data; and disassembles of tools in safe manner; record operational data and complete job relevant documentation to include field ticket; daily report and equipment performance report.
- o) Manage the LWD/MWD equipment inventory and supervise equipment transport to and from work site.
- p) Comply with all safety rules and company policies.
- q) Evaluate LWD/MWD equipment and recommend necessary repairs or maintenances.
- r) Maintain database for recording all activities of on-going work.
- s) Responsible for safe handling of radioactive materials inside the well site.
- t) Develop daily work reports/ service tickets and accurately completes all required forms, databases and reports

9.7.2.3 DIRECTIONAL DRILLER

CATEGORY

Competent official as described in regulation (21), i.e. Appointment of officials and competent persons.

JOB SPECIFICATION

Directional Drillers should be involved in planning, execution, and management of all phases of any directional drilling job to assist in delivering services under the contract.

JOB RESPONSIBILITY

He is responsible for

- a) Close liaison with OIL Engineers on the Rig/base.
- b) Assisting OIL technically during round trip and clean out trips after completion of sectional TD.
- c) Implement all directional drilling plans and procedures according to company plan and ensure compliance to its objectives.
- d) Manage all well bore path and perform survey to compute and monitor all rate of penetration and maintain an efficient list of all directional tools and perform survey on all equipment.

- e) Administer all directional operations and analyze performance of all drilling procedures and assist all client representatives to resolve all issues and monitor job progress and maintain records of all data and prepare required documentation.
- f) Adherence to company policies with respect to the conduct of directional drilling and surveying operations
- g) Becoming thoroughly familiar with the Well Programme and the requirements relating to the directional operations contained therein
- h) Checking the accuracy and completeness of the prognosed well plots prior to the commencement of drilling operations.
- i) Ensuring the rig site inventory meets the programme requirements and liaising with the Drilling Supervisor to ensure future requirements are available in good time.
- j) Providing standard daily reports to the Rig In-charge, Shift In-charge, company representative, OIL's directional team and as advise by OIL comprising a summary of drilling activity, the drilling assembly in use, drilling parameters, survey data, equipment requirements, proposed BHA's and recommendations for operations optimization.
- k) Directly supervising the Driller in the application of drilling parameters and practice to ensure smooth directional control over the well.
- l) Maintaining up-to-date survey calculations and projections and working to maintain the well path within the tolerances as specified in the Drilling Programme.
- m) Providing BHA design, supervision and maintenance expertise and ensuring that all recommended BHA designs are suitable with respect to Survey Programme requirements
- n) Maintaining records of drilling parameters and BHA performance during drilling operations to facilitate analysis at the well review stage
- o) Supervising hole opening, reaming and tripping operations to monitor hole conditions and prevent unintended sidetracking of the well
- p) Maintaining up-to-date records on all directional equipment on-board to ensure timely return for re-inspections, redress or over-haul.

9.8 ELECTRICAL REQUIREMENT: POWER FOR THE UNIT:

OIL's Responsibility:

- i) OIL shall supply electrical power to the unit.

Service provider's Responsibility:

- i) All arrangements, including cables, suitable plug & sockets etc. suitable electrical earthing stripe to receive the power from OIL's supply point are the responsibility of Service provider. Service provider shall match this power receiving equipment to OIL's existing equipment.

- ii) One commissioning record register should be maintained to record the details of commissioning report.
- iii) Electrical test certificate for both work station and accommodation bunk house should be provided at the time of power up at the well site.

9.9 CIVIL ENGINEERING REQUIREMENT:

Civil Engineering of OIL will provide necessary support to place the units and bunks.

9.10 TRANSPORTATION:

OIL'S RESPONSIBILITY

Requirements of crane(s), during installation/dismantling & inter-location movements shall be provided by the Company. Any additional requirement of crane(s) arising out of operational requirement under the contract, as decided by Company, shall also be provided by the Company.

SERVICE PROVIDERS RESPONSIBILITY

Transportation of Service provider's personnel & spares from camp site/ base to drill site and vice-versa shall be the responsibility of the Service provider.

9.11 PAINTING AND LABEL

- (a) The entire unit/bunks shall be painted with superior quality anti-corrosive good quality paint at the time of mobilisation.
- (b) Surface equipment/ instrument and bunk houses are to be labelled legible indicating item name, manufacturer name, minimum technical specification etc. for easy identification.

9.12 INSPECTION/AUDIT

Service provider shall cooperate during any inspection/audit conducted by external agency and OIL's officials. Preferably, Base Manager/Base Coordinator should be present during such inspection/audit.

9.13 HIRING OF ADDITIONAL SETS OF TOOLS/EQUIPMENT & SERVICES:

During the currency of the contract OIL may decide to hire additional two IDS-2 packages of tool(s), surface unit(s) & personnel as per requirement under the same terms and conditions stipulated in this tender/ contract with mutually agreed rates, terms and condition, but with a rate not higher than the originally quoted rate. For mobilization of Tool / Equipment/ Consumable/Personnel will be as per "Special Conditions of the Contract" in Section-II, Clause No. 2.0.

9.14 SUBMISSION OF DOCUMENTS

Documents as described in GCC/SoW/SOR/SCC shall be submitted by the Service provider as indicated.

9.15 ORGANISATIONAL STRUCTURE

Service provider shall provide the organizational structure for executing the project. Composition of the team & number of personnel will be reviewed by OIL and modified as per requirement.

9.16 COMMUNICATION PLAN:

- (i)** All the competent personnel including officials are answerable to Manager of Mines Manager as per Regulations 21 of OMR, 2017.
- (ii)** Reporting in case of rigs operated by OIL's manpower is to Directional Section of OIL, shift in-charge or Installation Manager or as advised by OIL.
- (iii)** Reporting in case of rigs operated by Man Management Crew is to Directional Section of OIL, Tool pusher or Installation Manager or as advised by OIL.
- (iv)** For emergency situation/incident reporting OIL's Emergency Response Plan (ERP) and Incident reporting guideline to be followed.
- (v)** Personnel deployed under the contract shall be in constant touch with SIC / Tool pusher /NTP for proper communication and information flow irrespective of day shift/holidays/night shift and as advised by OIL.

9.17 PROGRESS REPORTS

The Service provider should provide daily progress report as per the format approved by OIL along with real time log as per the data deliverables mentioned in the scope of work.

9.18 END OF WELL REPORT

After completion of each well two no. of end of well report to be submitted in both soft and hard form. Sample of the format shall be approved by OIL. The end of well should consist of following in details with tables/ graphs/images as applicable:

- (a) General Information of well and GTO information
- (b) Standard Plan and Anti-collision summary report
- (c) Job Summary
- (d) Directional Drilling Record
- (e) BHA Report
- (f) Torque and Drag Analysis report
- (g) Bit Performance Report with analysis including images of new bit and pulled out of bit legibly depicting the conditions
- (h) Definitive Survey
- (i) MWD Data
- (j) LWD Data
- (k) Problem encountered and action taken
- (l) Lesson learned

9.19 ACCOMMODATION/LODGING/TRAVEL:

Accommodation of the Service provider's crew at Base/ well site along with day-to-day fooding and travelling will have to be arranged by the Service provider with no additional cost to the company.

C.0 MUD ENGINEERING SERVICES

The Contractor is required to provide mud engineering service in totality. Under the contract the contractor shall have to provide the following services with their tools & equipment under each package (**i.e., Package-1 and Package-2**).

10. SCOPE OF WORK FOR MUD SERVICES:

Providing Mud Engineering Services in different phase of Drilling, e.g., 12¼" and 8 ½", 6" including borehole enlargement in any sections in the above-mentioned hole sizes or arising due to well design. However, Contractors to note that Company (OIL) at its discretion shall have the right to use the mud system as per the requirement of OIL of the service for a particular section independently at any point of time during the course of the contract using different tool/tools under different contract hired by company, depending on its requirement as decided by Company.

10.1. BIDDERS' EXPERIENCE

- (a) (In case any Prime bidder who does not have Mud services on their own and brings in a partner with tie up, the Mud engineering partner should individually have experience of providing Mud engineering services to any E & P company for minimum 02(Two) year under a single contract in the last 05(Five) years and additionally should have completed minimum Mud service in 03(Three) wells of minimum 3000m or more as on original bid closing date).
- (b) Bidder should have experience in providing service in Vertical and J, S wells.

10.2. SERVICE REQUIRMENT

- (a) The Wells in this contract shall be drilled using stated drilling fluids system.
- (b) Bidder shall provide all the required mud testing equipment for testing of drilling fluid as per requirement of the well.
- (c) Bidder shall provide round the clock the Mud Engineering services by employing two site Mud Engineers at a time one each of 12 hours shift.
- (d) Recording, documentation, mud program, complication report and drilling fluid recap 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 at the rig site, software of daily mud report, mud recaps, hydraulic and hole cleaning optimization in real time.
- (g) Bidder may be required to collect various HSE related drilling fluid samples, drill Cuttings, effluent drill and wastewater samples as per requirement of the Environment Regulations of OIL.
- (h) Depending upon the given Geological data, Bidder shall design phase-wise mud program, including mud weights, detailed mud formulation, chemical used and recommended doses, total volume usage for each hole section.
- (i) Bidder shall submit detailed mud program for each section of hole, well in advance.
- (j) Bidder shall also plan for treatment of cement contamination, caving, hole pack off, differential sticking, Mud loss, H₂S, hole erosion/ or any other bore hole problems.
- (k) Bidder shall ensure that the mud system is environment friendly as per existing environmental laws including environmentally friendly spotting fluids.
- (l) Bidder should have requisite facilities in India or abroad to provide necessary technical back up support for designing and troubleshooting of quoted mud system. The bidder should have requisite facilities for designing and optimizing rheological properties for the proposed drilling fluid systems at high pressure and high temperature. The bidder shall submit the documentary evidence for the same.
- (m) Selected bidder has to submit a toxicity (LC₅₀>30000 mg/L) test report of all chemical additives/Proposed mud system prior to transfer of chemicals, or before commencement of operation. Contractor shall also perform the QC tests on mud samples and all mud related products on request.
- (n) The bidder should have requisite facilities for designing and optimizing rheological properties for the proposed drilling fluid systems at high pressure and high temperature. The bidder shall submit the documentary evidence for the same. (To remove from this place and to incorporate under Service Requirement)
- (o) Successful bidder shall carry out advanced laboratory studies for design and optimization of the mud systems by performing some tests including wellbore stabilization evaluation by Clay recovery in Clay dispersion test, Linear swell meter test etc. to optimize mud systems for

progressive refinements as perceived from time to time. The successful bidder shall perform these tests of the mud system with the offered chemicals in accredited laboratory at their own cost and submit a report prior to the commencement of operation. The test results must be within the acceptable limit as indicated in the table. The contractor must perform these advanced tests once in a year with the samples collected from either well site or their warehouse and submit test report to OIL.

TABLE-13: ACCEPTABLE LIMITS OF CLAY DISPERSION TEST, LINEAR SWELL METER TEST FOR WELLBORE STABILIZATION EVALUATION

SL NO	PARAMETERS	PERMISSIBLE RANGE
A	CLAY DISPERSION TEST	
1	Clay recovery in Clay dispersion test (after hot rolling at 120 deg± 2deg C for 15hrs), test to be conducted on 2% (w/v) compressed Bentonite pellets	80% (minimum) with 60 ASTM sieve after drying temperature 100deg ± 2deg C for 12hrs
B	LINEAR SWELL METER TEST (TEST TIME 07HRS)	
1	Swelling (%) in water of Bentonite pellets (20 gm of dry pre dehydrated Bentonite at 100deg ± 2deg C in oven is to be taken in to compactor dish and apply pressure of 10000 psi for 30 min for making pallet	Disperse 100%
2	Swelling (%) of Bentonite pellet in sample mud	12% maximum

10.3. DELIVERABLES

- (i) Supply of Chemicals, additives and mud testing equipment as indicated in the tender High Performance Mud as applicable except those provided by OIL
- (ii) Providing Mud Engineer and lab equipment
- (iii) Tentative designing of mud program.
- (iv) Relevant technical back-up support of software and laboratory studies.
- (v) Provision for mud chemical storage, logistical arrangement for transfer of chemicals & equipment

Note:

- a) Mud engineering services will be required from contractor in drilling the well from Kick-off point or as per the requirement of well design.

- b) Company reserve the right to use the OIL's own mud engineering services drilling the top vertical section. However, the contractor shall be capable of providing Mud Engineering services in totality during the drilling of the wells in all sections on advice of OIL or as deemed fit by the design requirement.
- c) The Contractor should be able to provide Mud Engineering Services in two Drilling wells simultaneously as per the requirement of OIL under each package of the Contract within this Integrated Drilling Services hiring for 21 wells.

10.4. SUPPLY OF ALL MUD CHEMICALS AND ADDITIVES EXCEPT THOSE PROVIDED BY OIL:

The bidder is required to supply the complete list of chemicals as per the following table (table-14).

TABLE-14: CHEMICALS TO BE SUPPLIED BY THE BIDDER

SL NO	NAME OF CHEMICAL
1	Caustic Soda
2	CP Glycol
3	ROP enhancer
4	Encapsulating polymer
5	PAC-R
6	HP Fluid loss reducer
7	XCD
8	Biocide
9	CaCO ₃ (M)
10	CaCO ₃ (F)
11	Defoamer
12	Polyamine-Chloride free
13	Polymeric Sealing agent
14	HP Lubricant
15	Oxygen Scavenger
16	NIF (500psi)
17	Potassium Sulphate
18	H ₂ S scavenger

Note:

- a) CP Glycol should have cloud point in the temperature range of (75-87) deg C.
- b) ROP enhancer must be a premium lubricant to reduce torque & drag significantly in highly deviated wells with total horizontal displacement of around 1000-2500+m.
- c) Encapsulating polymer must be of low molecular weight.
- d) High Performance Fluid loss reducer must be polymeric in nature.
- e) Sealing Agent must be polymeric and non-ionic liquid.
- f) HP Lubricant must be a premium lubricant to reduce torque & drag significantly in highly deviated wells. It must be superior to Linseed Oil and Extreme Pressure Lube.

- g) The bidder must submit the Certificate of Analysis of each chemical along with their offer.
- h) Without prior approval of OIL, contractor cannot bring / add any additional chemicals during the currency of the contract.
- i) Contractor has to maintain a healthy stock of all chemicals to support the uninterrupted drilling operation.
- j) Chemicals offered by the bidder must conform to API/OIL/BIS specifications for each chemical. Bidder must submit an undertaking stating that their supplied chemicals will meet the specifications along with the offer. However, the selected bidder must submit 1 kg/ 1 L sample of each chemical for laboratory testing prior to commencement of operation. Specifications of some of the chemicals are given in the tender. Contractor must replace the chemical not conforming to the specifications. It is to be noted that performance evaluation of the samples will take minimum 30 days.
- k) The selected bidder shall furnish to Company the test reports as per specifications prior to the delivery of the Chemicals. All the test reports must reflect the brand name and manufacturer's name as quoted in the bid. The chemicals to be used in the wells shall be of the same brand and manufacturer and shall be in no way inferior to the quality indicated in the test reports.
- l) All chemicals should be free of any hazardous components. An undertaking in this regard clearly stating that the chemicals are non-hazardous in nature must be submitted by the bidder along with the offer.
- m) Random joint sampling shall be carried out during the course of operation. These samples will be tested at Central laboratory, Chemical Department, Duliajan. If during the operations, any chemical is found to be substandard and / or not conforming to the specifications, Contractor shall replace the materials immediately without any extra cost to the Company. All expenditure including transportation of rejected materials will be borne by the Contractor.
- n) Top two sections will be drilled by in-house mud systems.
- o) It is to be noted that Bidders should quote their brand name for all the chemicals mentioned in the price format. Additionally, Bidders to provide one (01) case history of successful field use of such chemicals along with the bid.

10.5. SUPPLY OF BASIC CHEMICALS BY OIL

The following basic chemicals will be supplied by oil:

TABLE-15: CHEMICALS TO BE SUPPLIED OIL

SL No	Chemicals
1	Bentonite
2	Baryte
3	Loss circulation materials (mica, saw dust, walnut shell & gel flake)

4	Spotting fluid (Low wax crude, High speed diesel & Pipelax)
5	Sodium Bicarbonate
6	Soda Ash
7	Completion fluid (KCl & Sodium format)

10.6. MUD TESTING EQUIPMENT | LABORATORY AND EQUIPMENT | SOFTWARE AND TECHNICAL SUPPORT:

- (a) Bidder shall provide technical support including the software package and literature back up whenever required by field personnel for smooth drilling fluid management.
- (b) The bidder shall provide complete drilling fluid testing equipment, Chemical reagents and consumable for testing of mud system as indicated in the bid as per API standards. List of the Laboratory equipment & Chemicals are indicated in the tender.
- (c) All the necessary drilling fluid testing equipment/ glass wares, chemicals/ reagents and consumables for testing of mud as per API / AIDC standards including any special tests for estimation of glycol, amine, PHPA, potassium ion, sulphate ion, salinity, fluid loss, lubricity coefficient etc. shall be provided by the contractor as **per table (18)**.
- (d) No separate payment shall be made for mud lab equipment.
- (e) OIL will provide a skid mounted laboratory bunk house at rig site with the facilities like water connection and electrical power supply for running the laboratory.

TABLE-16: LIST OF LABORATORY EQUIPMENT

Sl. No.	Equipment	No of sets to be supplied
1	6/8 speed Visco Meter	1
2	API Filter Press	1
3	Marsh Funnel with cup	1
4	API Mud Balance	1
5	Pycnometer (Pressurised mud balance)	1
6	API Sand Content Apparatus	1
7	Hamilton Beach Mixer	1
8	Mud Retort Kit	1
9	pH Meter	1
10	Methylene blue Test Kit	1
11	Thermometer	1

12	Lubricity Tester	1
13	Hot Plate	1
14	Magnetic Stirrer with Hot Plate	1
15	Equipment for Estimation of PHPA	1
16	Equipment for Amine test	1
17	Equipment for Potassium ion test	1
18	Equipment for estimation of glycol	1
19	Any Other necessary equipment for testing of mud.	1

10.7. HR DEPLOYMENT: PERSONNEL

10.7.1. GENERAL:

- (i) Contractor will provide two on-site mud engineers on 12-hour shift basis. The engineers will be required to work on a suitable ON/OFF-day rotation. OIL reserves the right to modify its requirement of on-site mud engineers anytime.
- (ii) Bio data to be submitted as per the **Annexure: Q**. The personnel deployed under the contract to be approved with 'no objection" from OIL
- (iii) Movement of the contractor personnel to & from well site will be under contractor's responsibility. Contractor to arrange for fooding and lodging bunk house for its personnel at well site with no extra cost to the company.
- (iv) OIL reserves the right to release Mud Engineers, with a short notice, from the well site, in case of suspension of operation for a reasonable length of time. This is in addition to the normal on-off pattern as well as the ILM.
- (v) After issue of release notice, no charges will be payable
- (vi) The educational qualification & experience criteria of Mud Engineers are mentioned in **Table-17**

TABLE-17: HR DEPLOYMENT

Sl. No.	Name of position	Educational Qualification	Experience & Certification	Stationed	Working Hours	OFF as per Note	Total (excluding off)
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1	MUD ENGINEER	Bachelor degree in Engineering /Science or equivalent	<p>(i) Mud Engineers should be proficient in English (written & verbal). Besides English, fluency in Hindi and local language will be an added advantage.</p> <p>(ii) The Mud Engineers should have minimum five (05) years' experience in Mud Engineering Service and should have completed at least five (05) nos. of deep wells with HPWBM or similar system independently as a mud engineer / mud consultant. The Mud Engineers should be competent in solving down hole complications including but not limited to hole instability, mud loss, torque/drag, stuck pipe, carvings, high pressure kicks etc. All the Mud Engineers should have adequate knowledge in working with the contractor's materials, equipment and procedures for the services provided by the contractor.</p> <p>(iii) The Mud Engineers should be in sound health and fit to work in different environment. The age of the Mud Engineers should not be more than 65 years as on the original bid closing date of this Tender.</p>	Wellsite	12 hours	Off as per Note	02 per day per package
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Note: "OFF & ON" pattern of personnel deployed at well site shall be guided as per DGMS Circular SO1658 (E) date 30th June 2014 with fulfilling all its conditions.

10.7.2. COMPETENT OFFICIALS AND COMPETENT PERSON

All the officials and employees) deployed as per "TABLE (19): HR DEPLOYMENT" shall be treated as competent officials and persons as per Regulations (21) Appointment of officials and competent persons and shall perform duty as Regulation (26) Duty of persons employed in mine and Regulation (33) Duty of competent person of OMR, 2017 in addition to other assigned jobs as per the contract.

10.7.3. JOB SPECIFICATION AND JOB RESPONSIBILITY

The basic Job specification and responsibility are defined as below but not limited, additional responsibility may be assigned if it is warrant for the safety of personnel/equipment and smooth functioning operations against the contract.

10.7.4. MUD ENGINEER:

CATEGORY

Competent official as described in regulation (21), i.e. Appointment of officials and competent persons.

JOB SPECIFICATION

A mud engineer (also called a Drilling Fluids Engineer, but most often referred to as the "Mud Man") is responsible for creating 'mud', or a mixture of fluids, clay and other chemicals, that's used in the process of drilling for oil or gas and for managing the chemical team under him. He ensures the properties of the drilling fluid/drilling mud are within designed specifications by testing the mud at a rig and prescribes the mud treatments to maintain mud weight, properties, and chemistry within recommended limits. The mud engineer works closely with the Rig Manager/Tool pusher/Night Tool Pusher/Driller to disseminate information about mud properties and expected treatments and any changes that might be needed. They typically have a background in engineering or drilling or chemistry and may have either specialized education or training in mud.

JOB RESPONSIBILITY: OPERATIONS

He shall be responsible for

- (a) Maintaining mud parameters as per detailed mud policy.
- (b) Testing all required mud parameters as specified at least once per shift.
- (c) Monitoring at hourly interval the important parameters of drilling fluid viz density, M/F viscosity etc. to-keep records.
- (d) Monitoring and ensure chemical treatment required for proper maintenance of mud parameters.
- (e) Monitoring mud loss and / or mud gain, indication of gas cut or any other unusual changes in the mud system during drilling / circulation and to take corrective measures.
- (f) Maintaining all adequate stock of mud volume (circulating + reserve) as required.

- (g) Maintaining and recording hole fill up volume and displacement volume of drilling fluid during round trips and during running in of drilling string / casing.
- (h) Maintaining and record keeping of stock and consumption of mud/mud chemicals for uninterrupted drilling fluid services.
- (i) Taking circulation test and to calculate hydraulics during drilling operation.
- (j) Preparing and spot spotting fluid/OBM etc. in case of stuck pipe as required. In case of loss circulation to prepare and spot LCM pill etc. as required.
- (k) Measuring and recording cement slurry weight and viscosity during cementation.
- (l) Carry out any other mud/cement related jobs as required.
- (m) Preparing a shift report.
- (n) All Mud Engineer's report should be submitted to Service Provider's Supervisor who in turn shall keep the Company representative aware.

JOB RESPONSIBILITY: REPORTING

- (a) **GENERAL:** The Contractor shall comply with the following minimum reporting requirements under the contract. Contractor shall also provide additional reports to the Company Representative as may reasonably be asked for during the execution.
- (b) **MATERIALS INVENTORY REPORT:** At all times, the Mud Engineers must maintain an up to date inventory of all the chemicals/additives held at well site and the same shall be reported on daily basis as part of the daily mud report. Additionally, a daily/weekly report on materials inventory at site and at Contractor's warehouse shall be submitted to the Company's representative based at Duliajan.
- (c) **DAILY MUD REPORT:** Daily mud report in prescribed format shall be submitted to the Company Representative at site and to OIL's Chemical Dept. Duliajan.
- (d) **END OF WELL REPORT:** The Contractor shall provide within fifteen (15) days of completion of the well a Final Well Recap, containing but not limited to the following:
 - A detailed recap of each hole section;
 - An evaluation of the mud properties, their performance;
 - An analysis and recommendation of the optimum parameters required based on experience gained while drilling the well;
 - A detailed list on chemical consumption for each section;
 - A comparison of planned Vs actual mud properties for each hole section.
 - A comparison of planned versus actual mud cost for each hole section;
 - A detailed study on the hole problems encountered and mitigation methods and strategies followed;
 - Suggestion for improvement in future wells.

- (e) **COMPLICATION REPORT:** In case of any complication such as stuck pipe, lost circulation, unusual caving, undesirable cutting bed formations, the Contractor shall notify the Company Representative immediately. A detailed draft report shall be submitted by the Contractor, within 24 hours of the incident (operations permitting), with full details and the reasons for the same and remedial measures/recommendations that shall be followed in the present well as well as in future wells to ensure safe and complication free drilling.

JOB RESPONSIBILITY: HSE

- (a) He shall have the **overall responsibility** to ensure the safety of man and equipment in operation directly under him through his subordinate(s) and by effective implementation of Safety Management System.
- (b) Responsible to ensure use of proper personal protective equipment by all employee while at work and He shall not allow any body at well site to work without proper PPE as PPE matrix issued by Drilling-HSE.
- (c) Responsible to ensure that good housekeeping is maintained.
- (d) Responsible to ensure Job Analysis before start-up of non-routine operation or job and ensure completion of risk assessments where required and Toolbox Talk for routine job;
- (e) Responsible for compliance of all safety rule(s)/ regulation(s)/ circular(s) and submitting the legal compliance in the format subscribed by OIL.
- (f) Responsible to ensure for adhering the SOP and other safety standards at well site.
- (g) Responsible for implementation of Emergency Response Plan as per bridging documents.
- (h) Responsible to implement as required all tests (e.g. equipment in operation directly under him) as per the drilling program and statutory requirement.
- (i) Responsible to ensure participation in all required drills (Accumulator, BOP, Fire etc. or any other drill as per directives of OIL) at the well-site.
- (j) Responsible to ensure prompt report of all accidents, near-miss accidents and non-conformance through the proper channels;

10.8. MUD AND MATERIAL MANAGEMENT SERVICES

OIL will not buyback any leftover chemicals after the completion of the contract. Contractor will provide the following services but not limited to:

- (a) The Contractor shall supply all special chemicals/additives conforming to relevant API / BIS specifications required for drilling of 12 ¼" & 8 ½"

and 6" hole section. The contractor shall maintain adequate stock of all chemicals and ensure timely supply as per operational requirement of the well. However, the payment will be made on actual consumption basis duly certified by OIL chemist/company representative. OIL will provide storage space at site to store chemicals brought in by the contractor. Housekeeping / maintenance of the storage space at well site is solely contractor's responsibility.

- (b)** However, contractor shall have to arrange warehouse / storage facility at their base in Duliajan (or in around Duliajan) for bulk storage of their chemicals/additives etc.
- (c)** During the preparation / maintenance of the mud system, addition of their chemicals to the mud system is to be done under the supervision of the contractor.
- (d)** The contractor shall provide product datasheet for each chemical including but not limited to brand name, unit of packing, country of origin, specification and Material Safety Data Sheet (MSDS). The contractor shall provide information on complete list of chemicals as per Table-I. Bidders are requested to submit an undertaking clearly stating that they will supply Chemicals as per the specification mentioned in the tender. This undertaking has to be submitted along with the techno-commercial bid.
- (e)** All the chemicals should be in their original packing. The chemicals should conform to API/BIS-specifications whichever is applicable to the particular chemical. Contractor shall provide the test report from a recognized laboratory for quality of supplied chemicals / tolerable toxicity limit along with the bid. However, OIL reserves the right to inspect the chemicals OIL's well site and draw samples for testing. 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.
- (f)** Contractor has to take back the left over chemicals, if any after completion of the project/ after issuing final demobilization notice within one month of time.
- (g)** Since the mud system will be used in environmentally sensitive areas, the chemicals supplied by the contractor shall be biodegradable, eco-friendly and within tolerable toxicity limit.
- (h)** During the Mud Engineering service, if any foul smell emanates in the mud system or in effluent pit due to addition of any of the additives, contractors will be solely responsible for immediate replacement of the chemicals / additives and additionally necessary corrective measures should be taken by the Contractor to control the smell as per standard practices. Service provider has to ensure that the replaced chemicals supplied are of equivalent / better make or quality and this should be done without any operational interruption.

10.9. LOGISTICAL ARRANGEMENT FOR TRANSFER OF CHEMICALS & EQUIPMENT:

- (a) The contractor has to establish a central warehouse in and around Duliajan for storage of their Chemicals.
- (b) Contractor has to maintain a healthy stock of chemicals at wellsite for uninterrupted drilling operation.
- (c) Transfer of Chemicals from their central warehouse to wellsite and back will be under contractor's responsibility.
- (d) During ILM, transfer of lab equipment & left over chemicals from one location to the next location will be under contractor's responsibility.
- (e) OIL will provide necessary crane services at the wellsite for loading & unloading of Chemicals & equipment.

10.10. DESIGNING OF MUD PROGRAM:

Expected Mud parameters at $45^{\circ} \pm 2^{\circ}$ C after hot rolling at $120^{\circ} \pm 2^{\circ}$ C for 24 hrs:

TABLE-17: Mud Properties

SL NO	PROPERTIES	12 ¼"	8 ½"	6"
1	Density (ppg)	80	100	100
2	Yield Point (lbs/100 ft2)	15-25	25-40	30-40
3	pH	9.0-9.5	9.0-9.5	9.0-9.5
4	API Filtrate (cc)	8.0-6.0	6.0-4.0	5.0-4.0
5	HTHP Filtrate (cc) at 200°F/500 psi	<30.0	<20.0	<20
6	Sand % by vol	<0.3	<0.2	<0.2
7	Lubricity coefficient	0.1-0.18	0.1-0.15	0.1-0.15
8	Plastic viscosity (lbs/100 ft2)	25 (max)	40 (max)	40 (max)
9	Gel Strengths 0'/10' (lbs/100 ft2)	6-12 / 10-30	6-10/ 10-25	6-10 /10-25

Based on geological data provided by OIL and well engineering, contractor shall design/formulate suitable mud and hydraulic system for each phase. Contractor will provide the mud engineering services for the mud system approved by OIL.

- (i) Contractor should submit a detailed mud program for each proposed well in advance. The designed mud/hydraulics program should be supported by software for analysis and to make reports.
- (ii) Contractor will also plan for contingency treatment for problems like cement contamination, carvings, hole pack off, differential sticking, mud loss, hole erosion and /or any other down hole problems.
- (iii) Contractor will prepare contingency plan to meet any unexpected problems, anticipated contaminations etc.

- (iv) Contractor should ensure that entire composite mud system fulfils regulatory requirements of environment/safety etc.

10.11. MUD HYDRAULICS FOR 6", 8 ½", 12 ¼" & 17 ½" HOLE [INDICATIVE ONLY]

Table -18: Mud Properties

SL NO	Type of bit	Size of hole	GPM (US)	Jet Velocity (ft/sec)	Annular Velocity (ft/min) OH vs DC	Annular Velocity (ft/min) OH vs DP
1	TCR	6"	250-280	100-130	110-120	100-110
2	PDC	8 ½"	430-480	200-350	300-400	200-250
3	TCR	8 ½"	350-450	150-250	400-500	180-300
4	PDC	12 ¼"	550-700	320-400	190-240	130-160
5	TCR	12 ¼"	500-600	180-280	170-205	120-140
6	TCR	17 ½"	550-620	200-300	70-80	50-

10.12. GENERAL REMARKS:

- The estimated quantities of Chemicals are for the purpose of evaluation only. Payment will be made on the basis of actual consumption duly certified by OIL's representative. Without prior approval of OIL, Contractor shall not be allowed to add any additional chemicals or cross the quantity mentioned in the tender.
- Enough care has been taken to estimate the chemical quantities as realistically as possible. All estimations are done following the industry standard doses.
- Contractor has to follow Duty roster for personnel as per statutory guidelines
- Chemical mixing labours will be provided by OIL or through Rig Contractor.
- Contractor must comply the statutory guidelines pertaining to the engagement of labours other than chemical mixing labours.
- Maintaining and repairing mud testing equipment and Laboratory.

10.13. SPECIFICATION OF SOME CHEMICALS

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 in **Appendix: Specification of Some Chemicals**. Samples of chemicals supplied by the selected Bidder and the samples collected from the well site must conform to these specifications. Contractor must provide the test report of their special chemicals from a recognized laboratory for quality of supplied chemicals.

10.14. CENTRIFUGE

The successful bidder shall supply the centrifuge along with the centrifuge operator as per **Appendix: CENTRIFUGE**. There will be no separate charges for the manpower.

D.0 SUPPLY OF DRILLING BITS

The successful bidder shall supply the drill bits indicated below on consignment basis as per **Appendix: DRILL BITS SELECTION AND SUPPLY**

11. SERVICE REQUIRMENT

Service of supplying the bits to be used under the contract will be carried out by IDS service provider. However, the supplied bits shall be from the enlisted suppliers approved by competent authority as shown below:

Table-19: ENLISTED SUPPLIERS APPROVED BY COMPETENT AUTHORITY

Sl No	PDC BITS		ROCK BITS FRO DRILLING BELOW 3000 MTRS DEPTHS	ROCK BITS FRO DRILLING BELOW 3000 MTRS DEPTHS
	8½	12¼		
	CATEGORY-I		CATEGORY-II	CATEGORY-III
1	M/s SIMI Oilfield Technology and Products FZE		M/s SIMI Oilfield Technology and Products FZE	M/s SIMI Oilfield Technology and Products FZE
2	M/s Baker Hughes		M/s Baker Hughes	M/s Baker Hughes
3	M/s NOV Downhole Eurasia Ltd		M/s NOV Downhole Eurasia Ltd	M/s NOV Downhole Eurasia Ltd
4	M/s Haliburton		M/s Haliburton	M/s Haliburton
5	M/s Ulterra Drilling Technologies, LP		M/s TIX-TSK Corporation	M/s Drillbits International
6	-		-	M/s TIX-TSK Corporation
7	-		-	M/s Varel

END OF SECTION-II

Part-3
SECTION-III
SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) shall supplement and/or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

1.0 DEFINITIONS: Following terms and expressions shall have the meaning hereby assigned to them unless the context otherwise requires:

- a. **"Services"** means the services to be provided by the Contractor for carrying out logging while drilling operations in accordance with the approved well plan including but not limited to
 - (i) All tools, equipment, consumables from Contractor required for OIL's operation and
 - (ii) All tools, equipment, spares required for servicing / maintenance of Contractor's Tool & Equipment, as stipulated in the Terms of Reference/Technical Specification at Section-II of Part-3 in this bid document.
- b. **"Operating Area"** means those areas in onshore India in which company or its affiliated company may from time to time be entitled to conduct drilling operations.
- c. **"Site"** means the land and other places, on/under/in or through which the works are to be executed by the Contractor and any other land and places provided by the company for working space or any other purpose as designated hereinafter as forming part of the Site approved by OIL for the purposes of the CONTRACT together with any other places designated in the CONTRACT as forming part of the site.
- d. **"Company's items"** means the equipment, materials and services, which are to be provided by company at the expense of company and listed in the Contract.
- e. **"Contractor's items"** means the equipment; materials and services, which are to be provided by Contractor or company at the expense of the Contractor which, are listed in section under terms of reference and technical specifications.
- f. **"Contractor's personnel"** mean the personnel as mentioned under section terms of reference and technical specification, to be provided by Contractor from time to time to conduct operations hereunder.
- g. **"The work"** means each and every activity required for the successful performance of the services described in Scope of work of the tender document as set out hereof.
- h. **"Contractor"** means 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.

- i. **"Client"** means to whom the service is rendered against a written agreement like Letter of Intent (LOI)/Letter of Award (LOA), or Work Order(s).
- j. **"Day"** means a calendar day of twenty-four consecutive hours beginning at 06.00 hrs and ending at 06.00 hrs on the next day.
- k. **"Approval of Manpower"** means no objection against the deployment under the contract.
- l. **"Facility"** means and includes all property of company owned or hired, to be made available for services under this contract which is or will be a part of the company.
- m. **"Inter-Location-Movement"** of Contractor's item(s) means transfer of Contractor's item(s) (a) from one location to another location (irrespective of the status of location), (b) from one OIL designated area to another OIL designated area.
- n. **"Company's Base"** means Duliajan/or subsequently changed place from where the operation will be controlled.
- o. **"Base camp"** or **Contractor's Operational base camp** means the camp / hired accommodation where the Contractor's personnel shall reside for carrying out the operations. OIL shall not assume any responsibility towards selection of land, operation, maintenance etc. of camp/Accommodation. It will be contractor's responsibility to maintain adequate space and utilities at their designated base in and around Duliajan for storage of their Equipment, Tools etc. and workshop needs. All costs associated with establishing and running such facility will be to the Contractor's account.
- p. **"Certificate of completion"** means certificate issued by the company to the contractor stating that he has successfully completed the works/jobs assigned to him and submitted all necessary reports as required by company. **SCC clause 27.7)**
- q. **ABBREVIATIONS**
 - (i) "OMR" is Oil Mines Regulations
 - (ii) "MVT" is Mines Vocational Training
 - (iii) "NABL" is National Accreditation Board for Testing and Calibration Laboratories
 - (iv) "ILM" is Inter-Location Movement
 - (v) "WBM" Water based Mud
 - (vi) "SOBM" Synthetic Oil based Mud
 - (vii) "OEM" Original Equipment Manufacturer
 - (viii) "OIL" Oil India Limited

- (ix) "LTIF" Loss Time Injury Frequency.

2. MOBILISATION

(i) MOBILISATION TIME:

- (a) The mobilization of the individual package (**refer Part 3, Section II ,Clause 9.0 B.0**) shall commence on the date of receipt of the mobilization notice from Drilling department against the Contract for each regular package individually and continue till the completion of mobilization of the respective package.
- (b) The mobilization of equipment, personnel etc. of each individual set(s) (main items) and mud engineering services should be completed by **Contractor within 120 days** from the individual Mobilization notice for each individual set(s) issued by Drilling Services Department. This notice will be issued depending on the availability and readiness of drilling location. Mobilization of each individual package shall be deemed to be completed when Contractor's particular set(s) is complete with all equipment/tools(including minimum required back up tools) and manpower are placed at the nominated location in readiness to commence work as envisaged under the Contract, duly certified by the Company's authorized representative.
- (c) The mobilization against callout issued by Drilling department for each individual callout tools should be completed by **Contractor within 60 days** from the individual Mobilization notice for each individual callout items. Mobilization of each individual Callout tool within the 6" set shall be deemed to be completed when all the Callout tools along with the minimum required back up tools are placed at the nominated location in readiness to commence work as envisaged under the Contract, duly certified by the Company's authorized representative.
- (d) For supply of bit an assorted of all consignment and 10% of total bits to ready for use in Duliajan within **45 days** from the date of 1st mobilization notice.

- (ii) **EFFECTIVE DATE:** The contract shall become effective as of the date Company notifies Contractor in writing (through Letter of Award) that it has been awarded the contract.

- (iii) **COMMENCEMENT OF OPERATION** The date on which the Contractor completes initial mobilization of his crew and equipment for the first package along with consumables in all respects shall be treated as date of Commencement of operation.

3. DURATION OF CONTRACT

The contract shall be initially for a period of 03 (three) years from the date of commencement of operation with an option to extend the contract period for another 1 (one) year at the discretion of Company at the mutually agreed rates,

terms and condition, but with a rate not higher than the originally quoted rate. The terms and conditions shall continue until the completion/ abandonment of the last well is in operation at the time of the end of the Contract.

Note: The successful bidder is required to sign a formal detailed contract with OIL within a maximum period of 45 days of date of issue of Letter of Award (LOA) subject to submission of necessary Performance bank Guarantee as per the T & C of the tender. Until the contract is signed, LOA shall remain binding amongst the two parties.

4. INSPECTION

Inspection will be carried out jointly by OIL team and the contractor after completion of the initial mobilization and OIL will certify the completion.

- 5. PERFORMANCE SECURITY:** The Contractor shall furnish to Company a Bank Guarantee amounting to 3% of estimated annualized total Contract Price with validity of 3(three) months beyond the contract period towards performance security. The performance security shall be payable to Company as compensation for any loss resulting from Contractor's failure to fulfil their obligations under the Contract. In the event of extension of the Contract period, the validity of the bank guarantee shall be suitably extended by the Contractor.

6. TERMS OF PAYMENT

On account, payment may be made, not often than monthly, up to the amount of 100% of the value of work done. Final payment will be made only after satisfactory completion of the work. Such final payment shall be based on the work actually done allowing for deviations and any deductions and the measurement shall be checked and certified correct by the Company's Engineer before any such final payment is made.

7. SUBMISSION OF INVOICE: Monthly

All Invoices are to be sent to the following address:

CGM (Drilling Services) I/C

Oil India Limited,
P.O. Duliajan-786602
Dist. Dibrugarh, Assam

Note: If the designation of HoD changes, same will be addressed his/her new designation.

8. AGENT COMMISSION: Not Applicable.

- 9. INSURANCE:** As per GCC. Sum assured should not be less than Estimated Contract Value as per the LOA/Contract in case of Projects/Works Contracts. In case of annualized contract One year Estimated Contract Value

- 10. ARBITRATION:** The place for arbitration against this contract shall be Guwahati, Assam
- 11. DE-MOBILIZATION:** Individual packages including Personnel as per the scope of work as indicated by OIL shall have to be de-mobilized (removed from OIL's site) by the Contractor within 03 (Three) weeks from the date of issuance of final de-mobilization letter for each set. However, no charges will be payable from the date of issue of the final de-mobilization notice.
- 12. INTERIM DE-MOBILIZATION:** Individual Package(s) and Personnel as per the scope of work as indicated by OIL shall have to be de-mobilized on interim basis (removed from OIL's site) by the Contractor within 03 (three) days' notice period from the date of issuance of interim demobilization notice. However, no charges will be payable from the date of issue of the final de-mobilization notice.
- 13. INTERIM RE-MOBILIZATION:** Individual Package(s) and Personnel as per the scope of work as indicated by OIL shall have to be re-mobilized on interim basis by the Contractor within **45 (Forty five)** days from the date of issuance of interim remobilization notice.

Note:

- (i) Mobilization charges will be payable after the commencement date as certified by the company.
- (ii) The succeeding day of issue of mobilization/demobilization notice shall be counted as day 1 for the purpose of Mobilization/Demobilization period.
- (iii) OIL will certify within 03 working days for the initial mobilization after receipt of intimation. For successive re-mobilization, contractor must intimate OIL about arrival of the tools and OIL will inspect the tools/equipment for each re-mobilization within 03 working days of receipt of intimation from the contractor. Date of mobilization / re-mobilization will be considered from the date of successful inspection carried out by OIL representative.

14. ASSOCIATION OF COMPANY'S PERSONNEL

- (i) Company may depute one or more than one representative (s) / engineer (s) to act on its behalf for overall co-ordination and operational management at location. Company's representative will be vested with the authority to order any changes in the scope of work to the extent so authorized and notified by the Company in writing. He shall liaise with the Contractor and monitor progress to ensure timely completion of the jobs. He shall also have the authority to oversee the execution of jobs by the Contractor and to ensure compliance of provisions of the contract.
- (ii) Company's representatives shall have free access to all the equipment of the Contractor during operations as well as idle time for the purpose of

observing /inspecting the operations performed by the Contractor in order to judge whether, in Company's opinion, the Contractor is complying with the provisions of the contract.

- (iii) The monitoring and overseeing of the jobs under the Contract by the Company's personnel/representative shall not absolve or reduce the obligations of the Contractor

15. LIQUIDATED DAMAGE FOR DELAY IN MOBILIZATION/COMPLETION OF WORKS AND SERVICES

- (i) Time is the essence of this Contract. In the event of the Contractor's default in timely mobilization for commencement of operations within the stipulated period, the Contractor shall be liable to pay liquidated damages @ 0.5% of contract value for each Regular package (as defined in the SOW) including mobilization cost, per week or part thereof of delay subject to maximum of 7.5%. Liquidated Damages will be reckoned from the expiry date of the scheduled mobilization period as defined under **Clause No. 2.0** above. The above LD will be calculated for each package separately.
- (ii) If the Contractor fails to mobilize within 15 weeks after the stipulated date, then the Company reserves the right to cancel the Contract without any compensation whatsoever.
- (iii) 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/breach on the part of the Contractor and the said amount will be payable without proof of actual loss or damage caused by such delay/breach and without any demur and shall not be open for any dispute whatsoever.
- (iv) **However, Callout tools rates (including mobilization/ de-mobilization cost) will not be considered for the calculation of LD against regular package.**
- (v) With regards to delay in mobilization of callout tools within the stipulated period, the Contractor shall be liable to pay liquidated damages @ 0.5% of total contract value of each tool including mobilization cost, per week or part thereof of delay subject to maximum of 7.5%. Liquidated Damages will be reckoned from the expiry date of the scheduled mobilization period as defined under **Clause No. 2.0** above. The above LD will be calculated for each tool separately.]

Note: For interim mobilization, LD will be applicable @ 0.5% of the one-year Contract value [each package].

16. ACCOMMODATIONS [WELL-SITE ACCOMMODATION AND BASE CAMP:

- (i) Contractor will be allowed to arrange accommodation at their own cost at well site for their personnel. If contractor is permitted to arrange accommodation for their personnel at any well site, selection of site shall be done with the agreement of Company representative.
- (ii) Contractor has to provide accommodation bunk house(s) for their personnel. All electrical apparatus and accessories including Air Conditioner of all bunk houses to be deployed in the well site/location, must be of FLP type. The electrical apparatus and accessories need to be DGMS approved for placement of the same in DGMS classified hazardous area. Should be suitable for use in hazardous area of zone-I and gas group IIA & IIB in oil mine and shall conform to IS/IEC/EN: 60079-0:2011 & IS/IEC/EN: 60079-1:2007 as per clause No.: 107 of OMR-2017. The bunk house should come with 150 m 3-Phase Power cable. However, OIL may provide 01(one) No. 4 (four) bedded accommodation bunk house for contractor's personnel at well site subjected to availability, only in case of work exigency.
- (iii) The base camp for contractor personnel in Assam & NE States shall be entirely Contractor's responsibility. Safety and security of the contractor's personnel at any camp(s) including compliance of fire hazard & regulation will be contractor's sole responsibility.

17. WARRANTY AND REMEDY OF DEFECTS:

Contractor has to perform all its services under this Agreement with all reasonable skill, diligence and care in accordance with sound industry practice to the satisfaction of Company and accepts full responsibility for the satisfactory delivery of quality of such services performed by it. Any defect/deficiencies noticed, Contractor within 15 (fifteen) days upon the receipt of written notice from the Company(OIL), shall improve their performance/ correct such deficiencies failing which the Company (OIL) will have right to terminate the Contract by giving the Contractor written notice with immediate effect.

The defect liability period against this contract shall be 3 (three) months after final demobilization notice.

18. WORK CULTURE

Contractor personnel shall carry out operations hereunder with due diligence and in safe and workman like manner according to good international oilfield practice. They shall maintain strict discipline and good conduct among themselves at workplace

19. APPROVAL OF MANPOWER:

- (1)** Contractor shall have to obtain prior approval from the Company before deployment of personnel in the rig. Applications seeking approval shall have to be submitted by the contractor ahead of proposed date of deployment. All applications shall be submitted to HOD of Drilling Services and shall be forwarded to concerned section/ department for scrutiny. Contractor shall not deploy manpower in the mine without formal approval/No Objection Comment from OIL
- (2)** The following documents shall have to be submitted along with the letter seeking approval.
 - (i) Bio data of the candidate with photograph.
 - (ii) Photocopy of relevant pass certificates and other proficiency certificates as required under Scope of work (original to be produced on demand).
 - (iii) Copy of experience certificates (original to be produced on demand).
 - (iv) Undertaking from Contractor's personnel for not claiming employment or any service benefit available to Company's employee as per **Proforma Y**.

Note:

- (i) Once the manpower for the Service is approved/NOC by OIL, the Contractor has to issue appointment letters to all the personnel as per the Contract labour act.**
- (ii) Company reserves the right to instruct for removal of any 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 replacement of such personnel will also be fully at cost of the Contractor and the Contractor shall have to replace this/these personnel within Ten (10) 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 Company for approval prior to their engagement.
- (iii) During the currency of the contract, if any of the key personnel is to be replaced; the incumbent must be approved ones under the same contract or must get approved fulfilling all the criteria of contract agreement. As soon as the term or period of the contract expires, accordingly the approval of personnel will also get expired or terminated.
- (iv) All charges for personnel are included in Tool Operating & Stand by charges. No. separate charges shall be payable for the personnel being deployed. All charges for personnel are included in Tool Operating & Stand by charges. No. separate charges shall be payable for the personnel being deployed.

- (3) The Contractor shall be responsible for arranging relief of personnel during vacations, statutory off days, sickness etc. entirely at their cost. The relief personnel also must have the similar experience and the Contractor will have to obtain prior approval from the Company for the relief personnel of the Contractor.
- (4) The Contractor will have to ensure that the statutory off days are given to Contractor's personnel and that the personnel are not engaged continuously for a prolonged period which amounts to violation of Mines Act, 1952.
- (5) Company shall assist contractor in obtaining all security/entry passes into the Company's Industrial and operational Area, whenever required by the Contractor's personnel in connection with the contract. However, Contractor shall fulfil all necessary formalities including liaising with Company/CISF in this regard as per norms of the Company/CISF.
- (6) It will be the responsibility of the Contractor to obtain restricted area permit/Assam entry permit/Inner line permit for Contractor's personnel (the Company will assist to the extent possible) for entering into NE states of India.
- (7) Contractor shall give or provide all necessary supervision during the performance of the services and as long thereafter as Company may consider necessary for the proper fulfilling of Contractor's obligations under the contract.
- (8) Contractor shall deploy local people, wherever possible, for un-skilled personnel under the contract.
- (9) Company reserves the right to instruct Contractor for removal of any Contractor's personnel for:
- a) Misbehaviour, indiscipline and for misdemeanor And/Or,
 - b) For technical incompetence and for not rendering the services faithfully And/Or,
 - c) For indulging in canvassing against Company in press/other media And/Or,
 - d) For leaking information about Company operations to outside parties.
- (10) The Contractor shall replace undisciplined personnel within of 10 Days. However, 3 days' notice shall be served by Company to replace undisciplined personnel.
- (11) Further, the replacement for these personnel shall be completed as per specified time period as mentioned in above para from the date of receipt of instruction from the Company and at the cost of the Contractor. However, the Deficiency Clause of the Agreement shall be applicable.

- (12) The Contractor will be responsible for all transportation of his personnel from their place of origin to their base at Duliajan and back. However, the Contractor will also be responsible for all transportation facilities of his personnel including movement to work site from wherever they stay. The Company shall not render any type of transportation to Contractor's personnel at any time except any emergency.
- (13) Contractor shall provide own identity cards for their personnel engaged under the contract and also shall possess identity card/pass of the Company. Person(s) not having identity cards shall be treated as unauthorized person(s) and shall not be allowed to perform duty.
- (14) In the event of the rig or its components, ancillaries, equipment etc. supplied /owned by the Company are damaged/ lost due to the carelessness/ negligent handling by the Contractor's personnel, the Contractor will be liable for such damages on the basis of the Company's estimated cost of replacement as reduced by any insurance claim which may occur to the Company plus 7% towards handling charges on the cost of such replacement.
- (15) If the Contractor fails to provide manpower as per the 'Scope of Work' of the contract, the Company reserves the right not to pay for the affected day(s). Moreover, the Contractor shall be liable to pay penalty for the same number of non-working hours/days) as per deficiency clause & sub clauses.

20. CONTRACTOR'S PERSONNEL:

- (1) Except as otherwise hereinafter provided, the selection, replacement, and Contractor shall determine remuneration of contractor's personnel. Such employees shall be employees solely of Contractor. Contractor shall ensure that its personnel will be competent and efficient. However, the contractor shall provide details of experience, qualification and other relevant data of the personnel to be deployed for scrutiny and clearance by the company before the actual deployment. The contractor shall not deploy its personnel unless cleared by the company.
- (2) The Contractor shall appoint a IDS Co-Coordinator as the Contractor's representative who shall be in charge of Contractor's personnel /equipment and who shall have full authority to resolve all day-to-day matters including any issues of site –if any arises at the site.
- (3) The Contractor will provide on regular basis, all category of their employee competent, suitably qualified and adequately experienced personnel for necessary supervision and execution in carrying out the requisite operations correctly and efficiently throughout the Contract period in a professional manner. Personnel provided by the Contractor must observe all safety and statutory norms applicable to the Company. Their performance must be to the satisfaction of the Company and the Contractor must be willing and ready to

replace, at their own expenses, any of their personnel who are not found suitable by the Company.

- (4) The detailed bio data of the service engineer/specialist and other operators and the number of additional personnel planned to be deployed must be submitted to Company with necessary documents before engaging them for Company's approval. (As per **ANNEXURE-Q**)

Note: Any replacement with equivalent qualification/experience needs OIL's prior written approval.

- (5) All the personnel deployed should be fluent either in English or Hindi or Assamese language.
- (6) The Contractor shall be solely responsible for and shall provide for all requirements of his personnel, and of their Sub-Contractor(s), if any. These provisions will include but not be limited to their insurance, housing, medical services, messing, transportation (both air and land transportation), vacation, salaries and all amenities, termination payments, all immigration requirements and taxes, if any, payable in India or outside at no extra charges to the Company. Boarding and local transportation of Contractor's personnel during the entire duration of the contract shall be arranged by Contractor at their cost.
- (7) The Contractor's representative shall have the entire power requisite for performance of the work. He shall liaise with the Company's representative for the proper co-ordination and timely completion of the job and on any other matters pertaining to the job.
- (8) In case Contractors deploying foreign nationals required for execution of all work under the Service are required to have all necessary clearances as per the Govt. of India regulations.
- (9) Foreign Nationals in case deployed under the service should have proper work Visa as per the Govt. of India regulations.
- (10) Transportation of Contractor's personnel shall be the responsibility of Contractor.
- (11) All charges for personnel are included in Tool Operating & Stand by charges. No. separate charges shall be payable for the personnel being deployed.

21. SUBCONTRACTING: Sub-contracting is not allowed **except petty services and JAR/Intensifier** under this contract with prior approval of OIL.

22. SCHEDULE OF PENALTY

(1) PERSONNEL

Provision of adequate manpower of required technical skill for carrying out all services in accordance with accepted terms and conditions is the essence to the contract. In case of Contractor's failure to deploy the personnel as per the standard deployment pattern as set out in scope of work, penalty shall be levied to contractor at the following rates:

Table-20: SCHEDULE OF PENALTY [MANPOWER]

Sl. No.	Deficiency of Competent Official	Penalty
1	IDS Coordinator	10% of the Total ODR rate of Directional Drilling Services and Mud Engineering Service both packages.
2	LWD/MWD Engineer	10% of the ODR rate of the particular string till suitable replacement duly approved by Oil India Ltd arrives.
3	Directional Driller	10% of the ODR rate of the particular string till suitable replacement duly approved by Oil India Ltd arrives.
4	Mud Engineer	10% of the ODR rate of the particular string till suitable replacement duly approved by Oil India Ltd arrives.
5	Bit Runner	10% of the ODR rate of the particular string till suitable replacement duly approved by Oil India Ltd arrives.

(2) PPE:

In the event of non-compliance of statutory provisions and safety appliances, the company will have the right to ask the contractor to suspend the service immediately and **no payment shall be made by the Company till such time the contractor comply with the same.**

Table-21: SCHEDULE OF PENALTY [PPE]

Sl. No.	Deficiency of PPE	Penalty
1	Safety Helmet	In the event of the contractor failure to adhere in providing the minimum PPE requirements of the personnel as set in SCC (Clause 4.1 of SCC) , penalty on the Contractor shall be levied at the rate equivalent to the latest purchase rate by OIL.
2	Raincoat	
3	Windcheater	
4	Safety Boot	
5	Overall	

(3) DATA TRA

Note:

- (i) Above are indicative only.
- (ii) All the PPE are PPE shall be as per OMR,2017
- (iii) If PPE are not described in OMR, 2017 shall be guided by OISD/IS applicable for Oil and Gas Industry.
- (iv) If PPE are not described in above two, it will be guided by EN or equivalent and to the satisfaction of company.

23. HR DEPLOYMENT PATTERN AND WORKING HOURS:

- (i) Contractor shall engage crew as defined in Scope of work of the contract. The working hours for the deployed personnel shall as per SoW.
- (ii) Contractor shall issue PPE and dungarees to the contractor's personnel and a register shall be maintained at well site with endorsement by personnel and indicating date of issue/ replacement etc.
- (iii) The Minimum PPE schedule to be followed for the personnel employed under the contract as follows:

Table-22: MINIMUM PPE SCHEDULE

Sl No	PPE	Quantity per person	Periodicity
1	Safety Helmet (DGMS approved)	01 No	03 Year
2	Raincoat	01 No	03 year
3	Windcheater	01 No	03 year
4	Safety Boot	02 Pair	01 year
5	Overall	02 (One half sleeve & one full sleeve)	01 year
6	Hand gloves	01 pair at time	As and when required
7	Safety Goggles	01 pair at time	As and when required
8	Ear plug /Earmuff	01 pair at time	As and when required
9	Other PPE	As required	As and when required

- (iv) However, when a PPE is damaged during its legitimate use, it shall be immediately replaced free of cost by the contractor.
- (v) The above is the minimum requirement, however depending upon the risk, suitable protective equipment including respiratory protective equipment, eye protectors, ear protection gloves and aprons.
- (vi) Contractor shall at all times maintain a sufficient stock of PPE in order to ensure immediate supply as and when need for the same arises.

24. GENERAL OBLIGATIONS OF CONTRACTOR:

Contractor shall perform the work described under scope of work under Independent 8½"LWD Service and prepare the 24-hour comprehensive report on Directional survey data (Actual Vs Plan), detailed log reports of all the downhole LWD tools as per data deliverables mentioned under the scope of the contract. Contractor is required to submit this daily report to Company Representative/ geological in-house team based at Duliajan in the form of soft copy and hard format (if sought).

25. WELL SITE COMMUNICATION FACILITY:

- (i) The Contractor should arrange for state-of-the-art portable VSAT & Antenna at the wellsite (wherever service is deployed) for real time data transmission to OIL's base for uninterrupted data transmission.
- (ii) In the event of fault and failure of equipment & software hired (pertaining to data transmission) from the CONTRACTOR, their personnel should be available for attending rectification of the problem within 24 hours of detection of the problem.

26. REAL TIME DATA MONITORING SERVICES:

Real time data Monitoring Services at rig site as well as at Company's base office in Duliajan for 24x7 monitoring of Drilling Operation to be provided both in desktop version and in mobile app. All logs of MWD/LWD tools along with drilling parameters i.e. ROP, Temp, ECD, Survey, SPP, Flow, Hook load curve etc. should be available in the system. No additional charges will be payable for this.

27. GENERAL OBLIGATIONS OF COMPANY:

27.1 ENTRY PERMITS: Company shall assist Contractor for arranging necessary entry permits, if required, for personnel belonging to Contractor and their subcontractors engaged with the consent of Company, provided Contractor gives full particulars of such personnel in advance. However, the primary obligation in this regard shall be on Contractor and Company shall provide necessary documents only.

27.2 SECURITY:

Company shall organize all possible help from local government/ administration to Contractor personnel and equipment in case of natural disasters, civil disturbances and epidemics. The security of the Base Camp including Contractor's equipment and personnel and deployment of security personnel etc. at the Base Camp, shall however, be the responsibility of the Contractor.

27.3 CRANE SERVICE/TRANSPORT VEHICLES:

- (i) OIL will provide crane and transportation (for Inter-location movement) of the Contractor's equipment and also for transfer/handling of Contractor's material, equipment at well site "free of charge". The loading, unloading and transportation shall be done at Contractor's supervision and risk. OIL shall not be responsible for any damage during handling & transit.
- (ii) E-way bill for inter-state movements of materials including tools and equipment for services to be processed by the contractor on advice of OIL.

27.4 WORKSHOP FACILITY:

Company will extend the in-house workshop facility for Contractor's Tools & Equipment without hampering Company's own work schedule. The workshop facility will be chargeable depending on quantum of job involving man/material/time.

27.5 INGRESS AND EGRESS AT LOCATION

Company shall provide contractor requisite certificates for obtaining rights of ingress to egress from the locations, where wells are to be drilled, including any certificate required for permits or licenses for the movement of contractor's personnel. Should such permits/ licenses be delayed because of objections of appropriate authorities in respect of specific Contractor's personnel, such personnel should be promptly removed from the list by the Contractor and replaced by acceptable personnel. For any stoppage of operations for such delays, no day rate shall be payable.

27.6 MEDICAL FACILITIES

OIL may provide services of OIL Hospital to Contractor's personnel on payment basis subject to availability.

27.7 COMPLETION CERTIFICATE

- i) A successful completion certificate will be issued by OIL on completion of contract-by-contract department. The certificate will carry the following information:
 - a) Gross value of job done
 - b) Nature of job done and Work Order No. /Contract No.
 - c) Contract period and date of completion
 - d) Name of services under the contract with brief description indicating the services rendered.
 - e) Number of wells/depth/profiles, where contractor provides service.
- ii) User department will provide the information on point no (d) and (e). However, in any cases the, the certificate shall not be more than two pages.

28. PERFORMANCE OF WORK

The Contractor shall submit daily reports to Company detailing progress of different operations as per the scope of the work at 6:00 AM every day. The Company, at its option may change the periodicity of such reports. In addition, Contractor shall submit the complete job report (covering analysis of NPT, daily progress report of all the events along with comparative parameters like plan surveys vs actual, log details, drilling parameters maintained vs ROP attained, downhole complications encountered etc.) within 15 (fifteen) days from the date of completion of each individual job. The structure of the Well Completion report will be finalized before the commencement of the first job in consultation with the representatives of OIL and the contractor and may be reviewed time to time for any future modifications. The manner and the speed of execution and maintenance of the operations are to be conducted in accordance with the Contract. Contractor to submit tangible KPI's in consultation with OIL in the kick-off meeting prior to start of each Job under the contract. Same shall be used for performance benchmarking during execution. Should the rate of progress of the operations or any part of them be at any time too slow in the opinion of the Company's representative, (to ensure completion of the operations within schedule) Company's representative may so notify the Contractor in writing. The Contractor shall reply to the written notice giving details of the measures, which he proposes to take to expedite the operations. If no satisfactory reply to Company's notice is received in seven days, Company shall be free to take necessary actions as deemed fit.

29. LABOUR:

The recruitment of the labour, if required, shall be met from the areas of operation and wages to be paid in accordance with the Minimum Wages Act, 1948. The engagement of the labours shall be governed by the provisions of labour laws as per Contract Labour (Regulation and Abolition) Act, 1970.

30. PROTECTION OF PROPERTY AND EXISTING FACILITIES:

The Contractor shall perform each work in such a manner as will prevent damage to the Company's property and conform to and be consistent with, and not to interfere in any way with continuous and safe operational practices for the well.

31. CUSTOMS DUTY

- 31.1** 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. 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.

- 31.2** Bidder should provide the list of items to be imported by them under the Contract in the format specified in Proforma-A 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, along with the Invoices and all shipping documents (with clear 15 working days' notice) requesting Company for issuance of the Recommendatory Letter. OIL 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. 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. Contractor shall indemnify OIL from all liabilities of Customs Duty.
- 31.3** All imports and import clearances under the contract shall be done by the contractor and OIL shall not provide any assistance in this regard.
- 31.4** However, in the event customs duty becomes leviable during the course of contract arising out of a change in the policy of the Government, Company shall be liable for payment of the customs duties leviable in India on Contractor's items as provided in Proforma-A or the actuals whichever is less, 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-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.
- 31.5** 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
- 31.6** 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 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.

32 DEMOBILISATION & RE-EXPORT:

- 32.1** The Contractor shall arrange for and execute demobilization of the set of Tools/Equipment/Spare/ Accessories/Manpower etc. upon receipt of notice for demobilization from Company. Demobilization shall include dismantling of its accessories/equipment, including the manpower. In case of final demobilization, re-export of its accessories/equipment, unutilized spares and consumables at the cost of the contractor. Final demobilization (Removal of contractor's items from the OIL site) shall be completed by Contractor within 21 days (3 weeks) of issue of final demobilization notice by Company. Immediately after re-exporting its accessories, equipment and the unused spares and consumables, Contractor shall submit the detail re-export documents to Company as documentary proof of re-exporting its accessories, equipment and the unused spares and consumables. In case of failure to re-export any of the items as above within the allotted time period of 60 days except under circumstances relating to Force Majeure, Company reserves the right to 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 and Performance Security.
- 32.2** In the event all/part of the equipment etc. are transferred by Contractor within the country to an area where nil Customs Duty is not applicable and/or sold to a third party after obtaining permission from Company and other appropriate government clearances in India, then Contractor shall be fully liable for payment of the Customs Duty.
- 32.3** Contractor must furnish an undertaking that "the equipment imported and also spares & accessories which remained unutilized after the expiry of the contract, would be re-exported at their own cost after completion of contractual obligation after observing all the formalities/rules as per Customs Act or any other relevant Act of Govt. of India applicable on the subject". In case of non-observance of formalities of any provisions of the Customs Act or any other Act of Govt. of India, the Contractor shall be held responsible for all the liabilities including the payment of Customs Duty and penalties to the Govt. on each issue. Non-compliance of these provisions will be treated as breach of contract and their Performance Bank Guarantee will be forfeited.
- 32.4** 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, 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.

33 LOSS OF SUB-SURFACE EQUIPMENT:

- 33.1** 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.
- 33.2** 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.
- 33.3** 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
- 33.4** 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.

- 33.5** 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:

- i) No Mobilization cost would be payable towards replacement of LIH tools
- ii) GST, if applicable on LIH, will be reimbursed by OIL.

34 DOCUMENTATION OF LOSS:

Whenever any loss to any of the Contractor's Equipment occurs, as stated in **Clause – 33 as above**, the Contractor shall immediately notify the same to OIL describing the loss. 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,
- b) Particulars of import, Customs assessed Bill of entry & invoices,
- c) Vouchers, invoices or any other documents indicating the date of first use of the Equipment in India,
- d) Documentary/ Self Declaration/Undertaking stating that the particular equipment/ tool in question is not covered by contractor's insurance

35 DATA INTERPRETATION:

Since all data interpretations are based on inference from electrical or other measurements, Contractor cannot and does not guarantee the accuracy or correctness of any interpretation and Company agrees that Contractor shall not be liable or responsible except for the case of Gross Negligence on Contractor or his sub-contractors part, for any loss, cost, damage or expense incurred or sustained by Company resulting directly or indirectly from any interpretation made by Contractor or any of its agents, servants, officers or employees. Should any such interpretation or recommendation be relied upon as the sole basis for any drilling, completion, well treatment or production decision or any procedure involving any risk to the safety of any drilling ventures, drilling rig, or its crew or any other individual, Company agrees that under no circumstances shall Contractor be liable for any consequential loss or damages on this account except in case of wilful negligence.

36 DATA HANDLING AND LIABILITY:

Company warrants and represents that it is the owner or licensee of any data that will be provided to Contractor and that it has the right to disclose data to

Contractor. Company expressly agrees that Contractor shall only be provided with copies of data and agrees that Company shall retain all originals and/or backup copies of any data provided to Contractor. Contractor shall have no liability whatsoever for any loss or damage to the data.

37 CONFIDENTIALITY:

- (i) During this 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 shall 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.
- (ii) However, the above obligation shall not extend to information which:
 - a) Is, at the time of disclosure, known to the public;
 - b) Lawfully becomes at a later date known to the public through no fault of Contractor;
 - c) Is lawfully possessed by Contractor before receipt thereof from Company;
 - d) Is disclosed to Contractor in good faith by a third party who has an independent right to such information;
 - e) Is developed by Contractor independently of the information disclosed by Company; or Contractor is required to produce before competent authorities or by court order.
 - f) Is required to be disclosed on the direction of Court or any statutory authority.

38 FISHING:

In the event of any of the Contractor's Equipment is lost / stuck in the well bore, then the Company shall, at its expenses, attempt to recover or retrieve the same, irrespective of cause. 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. 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 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. The contractor would be required to provide retrieving fishing tools for their non-standard size tubular if any apart from the list of tubular available with OIL as furnished in **ANNEXURE-C**.

39 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 wilful 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 operation, action will be initiated as per AERB guidelines.

40 POLLUTION & CONTAMINATION:

Notwithstanding anything to the contrary contained herein, it is understood and agreed by and in between the Contractor and Company that the responsibility for pollution or contamination shall be as follows:

- (i) The Contractor shall assume all responsibility and liability for cleaning, removal 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.

41 LIABILITY FOR THE WELL OR RESERVOIR:

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 there from), or any surface loss or damage or injury or death arising out of a sub-surface damage; and/or
- (ii) Blowout, fire, explosion or any other uncontrolled well condition; and/or
- (iii) Damage to, or loss of oil or gas from any pipelines, vessels or storage or production facilities; and/or
- (iv) 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;
- (v) third party liabilities arising out of the above irrespective of the cause and the Company agrees that it shall absolve the Contractor and protect, defend, indemnify and hold the Contractor and 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 judgments 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, including costs incurred by Company in this respect. -Provided that such loss, damage etc. as stated in (i) to (iv) above is not caused on account of wilful misconduct or gross negligence of the Contractor or its personnel or any third party.

42 INTELLECTUAL PROPERTY:

While performing the Work for the Company, Contractor may utilize expertise, know-how and other intellectual capital (including intellectual property) and develop additional expertise, know-how and other intellectual capital (including intellectual property) which are Contractor's exclusive property and which Contractor may freely utilize in providing services for its other customers. Except where expressly and specifically indicated in writing, and in exchange for appropriate agreed payment, Contractor does not develop any intellectual property for ownership by Company, Contractor retains sole ownership of any such intellectual capital (including intellectual property) created by Contractor during the course of providing the Services.

43 IP INFRINGEMENT:

Contractor shall indemnify and hold the Company harmless from any third party claims arising on account of intellectual property infringement with respect to its services or products except where such infringement is caused due to:

- (i) Specific modification or design of Contractor equipment or Services to meet Company's specifications,
- (ii) Combination of Contractor's equipment or Services in combination of other equipment and/ or services not recommended by Contractor,
- (iii) Out of unauthorized additions or modifications of Contractor's equipment or services by Company, or
- (iv) Company's use of Contractor's equipment or Services that does not correspond to Contractor's published standards or specifications; in which case, the Company shall indemnify and hold the Contractor harmless.

44 CONFIDENTIALITY:

- (i) Contractor agrees to be bound by professional secrecy and undertake to keep confidential any information obtained during the conduct of drilling operations, including, but not limited to, formations penetrated, results of coring, testing and surveying of the well and to take all-reasonable steps to ensure the contractor's personnel likewise keep such information confidential.
- (ii) This obligation shall keep in force even after the termination date and until such information will be disclosed by company.
- (iii) Contractor shall handover to company all company's documents or drafts concerning operations carried out and which are still in its possession before transferring the Unit to another sphere.

45 HEALTH, SAFETY AND ENVIRONMENT SPECIFICATION: The contractor shall forward HSE policy to the Company along with the bid. On award of contract, the contractor shall submit comprehensive HSE manual & procedure and HSE plan for approval of OIL.

- (i) The Contractor shall take all measures necessary to protect the personnel, work and facilities and shall observe safety rules and regulations as per the Mines Act, 1952 and Oil Mines Regulation, 2017. No smoking or open flame shall be permitted on the operation site and nearby, except in areas marked by and approved in writing by the Company.
- (ii) The Contractor shall report, as soon as possible, any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and then immediately take the first emergency control steps conforming to good operation practice and safety regulations.

- (iii) The Contractor shall have a complete Safety Manual that will be available in the work site at all points of time and readily accessible.

46 GENERAL HSE POINTS

- 46.1** 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 subcontractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance all HSE laws by the sub or sub subcontractors.
- 46.2 Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor.** The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective footwear, Safety Helmet and Full Body harness has to be DGMS approved. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available. But 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. All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.
- 46.3** The Contractor shall prepare written **Safe Operating Procedure (SOP)** for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/them. The SOP should clearly state the risk arising to men, machineries & material from the mining operation / operations to be done by the contractor and how it is to be managed.
- 46.4** The contractor shall **provide a copy of the SOP** to the person designated by the mine owner who shall be supervising the contractor's work.
- 46.5** Keep an **up-to-date SOP** and provide a copy of changes to a person designated by the Mine Owner/Agent/Manager
- 46.6** Contractor has to ensure that all **work is carried out in accordance with the Statute and 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 work of a specified scope/nature, he should develop and provide to the mine owner a site-specific code of practice in line.
- 46.7** All persons deployed by the contractor for working in a mine must undergo **Mines Vocational Training, initial medical examination, PME**. They should

be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME & PME.

- 46.8** 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 of work persons, Number of work persons deployed, how many work persons hold MVT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.
- 46.9** 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.
- 46.10** 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.
- 46.11 Any compensation arising out of the job carried out by the Contractor** whether related to pollution (attributable to the Contractor), Safety or Health will be paid by the contractor only.
- 46.12 Any compensation arising due to accident** of the Contractor's personnel while carrying out the job, will be payable by the contractor.
- 46.13** The **contractor shall have to report** all incidents including near miss to Installation Manager / departmental representative of the concerned department of OIL.
- 46.14** 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.
- 46.15** If the company arranges any **safety class / training** for the working personnel at site (company employee, contractor worker, etc.) the contractor will not have any objection to any such training.
- 46.16** The health check-up of contractor's personnel is to be done by the contractor **in authorized Health Centers** as per OIL's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.
- 46.17** To arrange daily **toolbox meeting** and regular site safety meetings and maintain records.

46.18 Records of to be maintained in Form A (Part A, B), B, D & E (as per Ease of Compliance Gazette Notification No 126 dated 21.02.2017) by the contractor.

46.19 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 act or omissions at work.

46.20 A contractor employee must, while at work, cooperate with his or her employer or other persons so far as is necessary to enable **compliance with any requirement under the act** or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.

46.21 Contractor's arrangements for **health and safety management** shall be consistent with those for the mine owner.

46.22 In case Contractor is found **non-compliant of HSE laws** as required 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 prevailing relevant Acts/Rules/Regulations.

46.23 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.

46.24 The contractor should **prevent the frequent change** of his contractual employees as far as practicable.

46.25 The contractor should frame a **mutually agreed bridging document** between OIL & the contractor with roles and responsibilities clearly defined.

46.26 For any **HSE matters not specified in the contract document**, the contractor will abide the relevant and prevailing Acts/rules/regulations/ pertaining to Health, Safety and Environment.

47 GOODS AND SERVICES TAX:

47.1 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.

47.2 Bidders are required to submit copy of the GST Registration Certificate while submitting the bids wherever GST (CGST & SGST/UTGST or IGST) is applicable.

47.3 "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.

47.4 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.

47.5 Bidder should also mention the Harmonised System of Nomenclature (HSN) and Service Accounting Codes (SAC) at the designated place in SOR.

47.6 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.

47.7 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.

47.8 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.

- 47.9** 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
- 47.10** 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.
- 47.11** 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.
- 47.12** 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.
- 47.13** 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.
- 47.14** 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.
- 47.15** 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.
- 47.16** 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.

- 47.17** 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.
- 47.18** 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.
- 47.19** 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.
- 47.20** GST liability, if any on account of supply of free samples against any tender shall be to bidder's account.
- 47.21** 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.
- 47.22** 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.
- 47.23** 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.
- 47.24** 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.
- 47.25** The base date for the purpose of applying statutory variation shall be the Bid Opening Date.
- 47.26** 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.
- 47.27** 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.

47.28 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.

47.29 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.

47.30 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;

Note: OIL GSTIN numbers are as follows:

Assam	: 18AAACO2352C1ZW
Arunachal Pradesh	: 12AAACO2352C1Z8

- 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 authorised 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 TRIPPLICATE 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.

47.31 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.

47.32 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.

48 NOTICES:

46.1 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

a) **For contractual matters**

GM (Contracts)
OIL INDIA LIMITED
PO DULIAJAN - 786602
ASSAM, INDIA
Fax No. 91-374-2803549
Email: contracts@oilindia.in

b) **For technical matters**

CGM (Drilling Services)
OIL INDIA LIMITED
PO Duliajan - 786602,
Assam, India
Fax No. 91-374-28084254
Email: drilling@oilindia.in

c) **Contractor**

Fax No. :

46.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

END OF SECTION-III

Part-3
SECTION-IV
SCHEDULE OF RATES (SOR)

The bidders must quote the rates in their price bids as per the attached Price-Bid Format. The payment shall be made for the actual work done. All Day Rate Charges shall be pro-rated to nearest hour.

(A) MOBILIZATION/INTERIM-MOBILIZATION CHARGES OF TOOLS / EQUIPMENT:

- i)** Mobilization charges as lump sum amount against each individual Package (Regular) including manpower will be payable when all equipment/tools (free of defects/ encumbrances) and OIL approved operating personnel for that particular Set are positioned at Company's designated site with the Chemicals and duly certified by the Company representative which shall be no later than 03 working days from the date of arrival/intimation by the contractor. The date of inspection (On hire survey) will be considered as the date of mobilization subjected to all tools and equipment are found to be in order.

Note-1: OIL will certify within 03 working days for first mobilization. For successive re mobilization, contractor must intimate OIL about arrival of the tools and OIL will inspect the tools/equipment for each re-mobilization within 03 working days of receipt of intimation from the contractor.

Note-2: A Regular Package will cover all the regular items/equipment of 17.5", 12.25" & 8.5" set

- ii)** 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-A**), except customs duty, which will be to OIL's account, if applicable.
- iii)** The Company will issue necessary recommendatory letter for EC as required for custom clearance as the service will be used in PEL/ML area, only on receipt of request from the Contractor and 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.
- iv)** Mobilization charge will not be released 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 Spec. & quantity wise) arrive at OIL's designated site, unless specified by OIL.

- b) All tools & equipment pertaining to all the 03 nos of directional sets (17.5", 12.25" & 8.5") along with chemicals are present for inspection as per T&C of the contract.
- c) Tool/Equipment arrives at OIL's designated site as per "SOW" for commencing directional drilling activity..
- d) All relevant documents are found to be technically acceptable by OIL on scrutiny.
- e) Company issues acceptance of tools & equipment in writing. This "acceptance/clearance" certificate will be provisional in nature till performances of tools / equipment are established in operation.

Note-2: Mobilization charges for each package shall not exceed 1% of the total quoted value of each respective package in the Price Bid format. However, Mobilization charges if quoted in excess of 1% of the total quoted contract value for the package, the excess amount shall be paid at the end of the contract.

Interim Mobilization charges of each package should not exceed 0.5 % of total quoted value of each respective package in the Price Bid format. However, Interim Mobilization charges if quoted in excess of 0.5 % of the total quoted contract value for the package, the excess amount shall be paid at the end of the contract. Each down hole tool / equipment should have minimum number of back- up tool / equipment (as per SOW).

However, contractor to ensure sufficient backup tools/spares/consumables over and above the minimum quantity specified in the SOW for ensuring uninterrupted directional drilling and LWD/MWD activities.

(B) DE-MOBILIZATION/INTERIM DE-MOBILIZATION CHARGES OF TOOLS/EQUIPMENT:

- i) The Contractor shall arrange for and execute demobilization of their Tools/Equipment / Spare/Accessories (one or more) etc. upon receipt of notice from the Company. For de-Mobilization, Contractor shall bear all such costs/charges, if any towards the same from drilling location to Contractor's base and the same will be guided by as per "**Special Conditions of Contract in Section-II, Clause No. 11, 12 and 13.**"
- ii) 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 to demobilization.
- iii) 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 final demobilization the contractor will ensure that demobilization is completed and Company's work-site is cleared-off Contractor's property within 03 (three) weeks of notice from the Company, failing which, demobilization charge may be held up.
- iv) 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 unit/equipment, if on completion of Contract/termination, Contractor does not remove its tools from the area of last operation 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/re-export outside India will be to Contractor's account.

- v) 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
- vi) In case of need for lean period/temporary suspension of Company's activity due to operational reasons, the Company retains the right to De-Mobilize Contractor's Equipment & Tools (any packages) on interim basis and Re-Mobilize the consignment when well operations recommence. **45 (Forty-Five) Days period for Interim Re- Mobilization shall be provided from date of Re-Mobilization Notice of each package of Tools & Equipment.**
- vii) Upon completion of mobilization of the Package, OIL at its discretion and as per operational requirement will decide on utilization of the particular set, which will be made **ACTIVE** with due intimation to contractor. However, all other sets within the package along with any Callout items will be under **PASSIVE** mode and payments will only be made to the **ACTIVE** set. No other payment in this regard will be made to other **PASSIVE** sets. The set will be kept **ACTIVE** till Casing and Cementation is successfully done for that particular section. Upon completion of cementation, the existing **ACTIVE** set will be made **PASSIVE** and the next section will be made **ACTIVE**. All payments in this regard will also be billed accordingly. Since, shifting between sets are the responsibility of IDS coordinator, Company may or may not intimate any Interim notice for shifting between sets
- viii) No other Charges on any account will be payable from the time the De-Mobilization notice is issued till Re-Mobilization is completed under Company's advice.

NOTE: 3

- De- Mobilization charges for each Package should not be less than 1% of the total quoted value of each respective Package of Tools & Equipment in the Price Bid format. If De-mobilization is quoted in deficit or less than 1% of the total quoted value for the Package, the deficit amount shall be withheld from the first invoice and the same will be paid at the end of the contract along with Demobilization charges.
- Interim De-mobilization charges of each Package of Tools & Equipment should not exceed 0.5 % of total quoted value of each respective Package in the Price Bid format. If Interim De-mobilization is quoted in deficit or less than 0.5% of the total quoted value for the Package, the deficit amount shall be withheld from the invoice and the same will be paid at the end of the contract.

(C) OPERATIONAL CHARGES OF (TOOLS & EQUIPMENT INCLUDING MANPOWER):

- i)** Under the contract, Contractor shall be entitled to a day rate as detailed below. These rates are inclusive of spares and consumables etc. if required (including spares for running repairs and maintenance of RSS-SDMM-MWD- LWD and Jars/Jar Intensifiers) for the successful completion of the work.
- ii)** During tripping in, Operating Charges shall be payable for all tools/equipment including manpower provided the tools are **100 m below the rotary table** in the well including surface testing as defined below and will be pro-rated to the nearest hour.
- iii)** Surface Testing is defined as function testing of all tools/equipment of BHA below rotary table

During tripping out operation, operating charges for all tools/equipment including manpower will be payable only up to 150 m below the rotary table

- iv)** **DURING APPLICABLE OPERATING PERIOD MENTIONED ABOVE, ONLY OPERATING CHARGES SHALL BE PAYABLE AND NO OTHER CHARGES SHALL BE APPLICABLE FOR THE ACTIVE SET. DURING NON-OPERATING PERIOD ONLY STANBY CHARGES SHALL BE PAYABLE FOR THE ACTIVE SET. BIDDER SHOULD TAKE THIS INTO CONSIDERATION AND QUOTE ACCORDINGLY.**
- v)** Operating Charges shall also be paid during stuck up / fishing operation for the **first 36 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.
- vi)** **However, during the stuck situation, operating rates will continue to be paid for Jar and intensifier pertaining to the fact that it is well established to the satisfaction of OIL that the Jar is firing. If the jar fails to operate due to any reasons, Clause (iv) above will also be applicable to both Jar as well as Intensifier.**
- vii)** **Operating Charges shall be payable with Tool in hole for first 36 hours, per occurrence, in case drilling is stopped due to well activity or mud loss conditions. Standby Charges shall only be payable beyond 36 hours, till normal operation is resumed.**
- viii)** Operating Charges shall be payable with Tool in hole for first 36 hours, per occurrence, in case drilling is stopped due to major rig maintenance. Standby Charges shall only be payable beyond 36 hours, till normal drilling operation is resumed.
- ix)** 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.
- x)** Operating Charges shall not be payable for any tool/equipment of BHA if it fails to function below R/Table after "Surface Testing".

- xi)** 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 of BHA. Operating rate for entire Bottom Hole Assembly will cease to be paid under this circumstance.
- xii)** Under above circumstances, Zero rate will continue for entire Bottom Hole Assembly for the period starting from suspension of normal operation (drilling and roundtrip) 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.
- xiii)** 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 as per the consent of OIL representative. 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.
- xiv)** However, under above circumstances if OIL decides to pull out the BHA for changing the malfunctioned component owing to operational requirement which may lead to operational downtime, zero rate for entire downhole components will be applicable from the time of **stoppage of drilling operations till** normal (identical) operation is resumed at the same depth as per **(C) point no. (x)** mentioned above.
- xv)** Without back up of tools/equipment in working condition, under this condition – the moment any tool failure is detected in operation, immediately zero rate will be applicable as defined in clause no. **(C) (x), (xi) & (xii)** under schedule of rates. Additionally, penalty @ 100% of Operating rate of the faulty tool(s) will be levied from the waiting period at surface till the replacement/back up tool(s) is available at site

D) STAND BY CHARGES OF TOOLS/EQUIPMENT INCLUDING MANPOWER:

- i)** Stand by charges for tools & equipment including manpower will be applicable for non-operating period of tools & equipment.
- ii)** Once the operating day rate is applicable no Standby charges will be payable for tools/equipment and manpower.
- iii)** During Stand by period, the equipment has to be in fully operating condition. Prior permission from OIL will be required for repair and preventive maintenance.
- iv)** Stand by charges shall not be payable once the de- mobilization notice is issued by OIL for any Package (Regular items) or Callout tools.

- v) Stand by charges shall be applicable for any tool/equipment of BHA including manpower during the period it lies on surface and during surface testing of the same to about 100 meter below rotary table.
- vi) If the Contractor withdraws the whole or part of the equipment or any manpower resulting in breakdown of operation, zero Rate will be paid.
- vii) **Stand by charges for the tools and equipment under the ACTIVE SET 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".**
- viii) 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 minimum stock of any such regularly required items at the drilling site under their possession to ensure uninterrupted service.
- ix) All other necessary equipment, tools and accessories etc. will be provided by the Contractor for due performance of the intended services without any additional rental charges to Company.
- x) Stand by charges will be payable for full day or part thereof on prorata basis up to the nearest hour.
- xi) If a particular tool / equipment within a particular set under Regular items is found to be non-functional during operation in first well after successful initial mobilization, in that case 33% of the operating as well as standby charges including mobilization cost made against the particular tool will be recovered from the date of mobilization of entire consignment of the package at OIL designated site subjected to utilization of the Backup tool.
- xii) If OIL decide to continue the operation using the Backup tool, 50% payment will be made against operating and standby charges for the particular tool till replacement of the malfunctioned tool arrives at site.
- xiii) If a particular tool / equipment within the Callout set is found to be non-functional during operation in first well after successful initial mobilization, in that case 100% of the standby charges along with mobilization cost for the particular tool will be recovered from the date of mobilization of entire consignment of the package at OIL designated site subjected to utilization of the Backup tool.
- xiv) If OIL decide to continue the operation using the Backup tool, 50% payment will be made against operating and standby charges for the particular tool till replacement of the malfunctioned tool arrives at site.
- xv) **Contractor can withdraw their manpower during non-operating period at their own cost, subjected to ensuring their availability once operation starts. OIL will not issue any separate communications for manpower mobilization.**

NOTE: Standby charges of each tools/ equipment (including call out services) should not exceed 50% of the quoted operating Unit rate for the respective tools/ equipment in the Price Bid.

(E) FORCE MAJEURE RATE:

- (i) Force majeure conditions are defined in **Clause 31.0 of Section-I**, "General Conditions of Contract".
- (ii) All rates shown in Schedule of Rates shall be restricted to 50% of Stand by charges for the service being provided by Contractor at the time of occurrence of force majeure situation. This will be considered as FORCE MAJEURE RATE under all conditions.
- (iii) The Force Majeure Rate shall be payable during the first 15 days period of force majeure situation. No payment would apply after expiry of Fifteen (15) days force majeure period, unless otherwise agreed to.

(F) ZERO RATES:

Notwithstanding any provision in the contract, no charges (Stand by charges, operating for tools/equipment including personnel) shall be payable for the period, the job or activity assigned to the Contractor is halted due to breakdown of Contractor's tools/equipment, non-availability of personnel, spares or any other reasons whatsoever attributable to the Contractor.

Zero rate will be applicable for the entire IDS package in case service provider fail to provide any of the service among directional drilling and mud service simultaneously. However, in case company decides to use any of the service independently, then operating rate shall be applicable for that particular service.

(G) GENERAL NOTE:

- i) Bidders should indicate name and address of their Indian agent if any and also should specify the percentage of commission if any involved and it should be included in the quoted rates. In case no Indian agent commission is involved then should be shown as "NIL".
- 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-A**.
- 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-A**, 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).
- v) Directional BHA making including surface testing time should be limited to 6 hrs max. Beyond 6hrs, zero rate will applicable. However, in case of the delay beyond 6hrs on account of rig will not be on the service provider.
- vi) For all call out services, all terms viz, operating, standby and zero rate etc. will be guided by the above SCHEDULE OF RATES

H) PAYMENT FOR BIT:

- (i) Price of the bit must be all inclusive and ready for use with all respect at designated location including all applicable taxes.
- (ii) The cost of transportation back or maintaining in inventory of unused bit is the responsibility of bidder and no additional payment will be made.
- (iii) Payment shall be made on actual consumption during drilling.
- (iv) Payment to the Contractor shall be released by OIL against submission of monthly bill /invoice towards the cost of Bit(s) consumed during the month and Service charges, payable if any
- (v) If bit(s) of any bidder fail to maintain the minimum performance criteria as SoW and claimed by the bidder in any hole size, then payment for those bit(s) will be made as follows

Table-23: MINIMUM PERFORMANCE CRITERIA

Sl. No	Field	METERAGE (Hrs.)	PAYMENT TERMS
	17½" Hole (TCR)		
1	Baghjan, Balimara and Lakwagaon	1000 meters or more	100% of the price mentioned in the contract
	Kumchai	700 meters or more	
2	Kumchai, Baghjan, Balimara and Lakwagaon	500 meters to 699 meters	75% of the price mentioned in the contract
3		400 meters to 499 meters	50% of the price mentioned in the contract
4		Less than 400 meters	25% of the price mentioned in the contract
	12¼" Hole (TCR)		
5	Baghjan, Balimara and Lakwagaon	1000 meters or more	100% of the price mentioned in the contract
	Kumchai	700 meters or more	
6	Kumchai, Baghjan, Balimara & Lakwagaon	500 meters to 699 meters	75% of the price mentioned in the contract
7		400 meters to 499 meters	50% of the price mentioned in the contract
8		Less than 400 meters	25% of the price mentioned in the contract

	12¼" Hole (PDC)		
9	Baghjan, Balimara and Lakwagaon	2500 meters or more	100% of the price mentioned in the contract
10	Kumchai	2000 meters or more	
11	Kumchai, Baghjan, Balimara and Lakwagaon	Less than 2000 meters	25% of the price mentioned in the contract
	8½" Hole (TCR)		
12	Baghjan, Balimara and Lakwagaon	700 meters or more	100% of the price mentioned in the contract
13	Kumchai	600 meters or more	
14	Baghjan, Balimara and Lakwagaon	Less than 600 meters	25% of the price mentioned in the contract
15	Kumchai	Less than 600 meters	25% of the price mentioned in the contract
	8½" Hole (PDC)		
16	Baghjan, Balimara and Lakwagaon	2500 meters or more	100% of the price mentioned in the contract
17	Kumchai	2000 meters or more	100% of the price mentioned in the contract
18	Kumchai, Baghjan, Balimara and Lakwagaon	Less than 2000 meters	25% of the price mentioned in the contract
	8½" Hole (Insert)		
19	Baghjan, Balimara and Lakwagaon	300 meters or more	100% of the price mentioned in the contract
20	Kumchai	250 meters or more	100% of the price mentioned in the contract
21	Kumchai, Baghjan, Balimara and Lakwagaon	Less than 250 meters	25% of the price mentioned in the contract
	6" Hole (TCR)		
22	Baghjan, Balimara and Lakwagaon	700 meters or more	100% of the price mentioned in the contract
23	Kumchai	600 meters or more	

24	Baghjan, Balimara and Lakwagaon	Less than 700 meters	25% of the price mentioned in the contract
25	Kumchai	Less than 600 meters	25% of the price mentioned in the contract
6" Hole (PDC)			
26	Baghjan, Balimara and Lakwagaon	2500 meters or more	100% of the price mentioned in the contract
27	Kumchai	2000 meters or more	100% of the price mentioned in the contract
28	Kumchai, Baghjan, Balimara and Lakwagaon	Less than 2000 meters	25% of the price mentioned in the contract
6" Hole (Insert)			
29	Baghjan, Balimara and Lakwagaon	300 meters or more	100% of the price mentioned in the contract
30	Kumchai	250 meters or more	100% of the price mentioned in the contract
31	Kumchai, Baghjan, Balimara and Lakwagaon	Less than 250 meters	25% of the price mentioned in the contract

Note:

- i. In addition to drilling all bits must be capable of using in hole probing tripping and reaming/wash-down if encountered tight spots/held-up/squeeze etc. but not limited.
- ii. If the PDC/Insert/TCR bits could not be used in a particular well as per the performance criteria due to shorter section length, same bit must be capable reusing in another well for remaining length and payment shall be made proportionately as meter drilled and as claimed in the bid by the bidder if more than if it drills one well.
- iii. In case of a loss of cone/roller of supplied bit during operation no payment shall be made against the bit and subsequently no charges will be made against entire IDS package till the resumption of original operation.

END OF SECTION-IV

END OF PART-3

&&&&

ANNEXURE-A**DETAILS OF CONTRACTS EXECUTED BY THE BIDDER FOR PROVIDING LWD SERVICES IN DIRECTIONAL WELLS**

Sl. No.	Client Contact Details	Contract No. & Date	Duration of Contract	Scope of work	Documents Provided in Bid (*)
(*)	Bidder should submit copy of relevant portion of the Contract containing "Client Name, Contractor Name, Contract No. & date, scope of work etc. along with performance certificates.				

Authorised Person's Signature: _____

Name: _____

Seal of the Bidder:

ANNEXURE-B**Details in support of Bidder's experience in providing MWD/LWD services solely or in combination with RSS, Mud Motor, Turbine, Rotary BHA and Others**

Well Name	Type of well	Date of Completion	Location	Client Name	Client Contact Details	End Depth (M)	Horizontal Dis-placement	LWD Services Offered Type of	Support Document Provided in Bid						
									Pre-Drilling - Well planning documents				Post Drilling Document s		Authen tication
									Well Plans	Directional Proposal	BHA Analysis	Torque & Drag Analysis	Well Plots	Surveys	BHA diagram
1															
2															
3															
4															
5															
6															
7															

Authorised Person's Signature: _____

Name: _____

Seal of the Bidder:

ANNEXURE-C**DRILL STRING AVAILABLE WITH "OIL"**

SL. NO.	ITEM	OD	ID	WEIGHT (PPF)	CONNECTION
1	Drill Pipe (G-Grade)	5"	3.2 5"	19.5	4 1/2"IF
2	Heavy Weight Drill Pipe	5"	3.2 5"	49.3	4 1/2"IF
3	Drill Collar	6.5"	2.13/16"	92.5	4"IF
4	Drill Collar	8.25"	2.13/16"	150.5	6. 5/8" Reg
5	Drill Collar	9. 1/2"	3.0"	216.6	7. 5/8" Reg
6	Stabilizer(6.5 " Mandrel)	8.5	2.13/16"	92	4"IF
7	Stabilizer(8 " Mandrel)	12. 1/4"	2.13/16"		6. 5/8" Reg
8	Stabilizer(9.5 " Mandrel)	17.5"	3.0"		7. 5/8" Reg
9	Cross Over For Above				
10	Bit Sub	6.5"	2.13/16"		4.1/2" R X 4. 1/2" IF
		8.0"	2.13/16"		6. 5/8" Reg
		9. 1/2"	3.0"		7. 5/8" Reg
11	Drill Pipe	3.1/2"	2.7 /16 "		3.1/2" IF
12	Heavy Weight Drill Pipe	3.1/2"	2.1 /16 "		3.1/2" IF
13	Drill Collar	4 3/4"	2 1/4"		NC-35
14	Drill Collar	3.1/2"	1.9 /16 "		2.3/8" IF (NC 26)
15	Cross Over For Above				
16	Bit Sub	3.1/2"			3.1/2" R

ANNEXURE-D**Details of collar based MWD tool for 17½", 12¼", 8 ½" and 6" hole section**

SL. NO.	TOOL FEATURES		OIL Requirement	Bidder's offer	REF: FILE & PAGE NO. BY BIDDER
1	Telemetry Type		Positive mud pulse		
2	Collar Sizes		4¾", 6½" or 6¾", 7¾" or 8" – 9. 5/8"		
3	DLS (PER 100')		17. ½" Section: 2 ° - 4 ° / 100'		
			12. ¼" Section: 2 ° - 6° / 100' 8. ½" Section: 2.5 ° - 7° / 100' 6" Section: 3 ° - 7° / 100		
4	FLOW RANGE (GPM)		As per Note below		
5	MAX OPERATING TEMP.		130° C		
6	MAX OPERATING PRESSURE (PSI)		15000 - 20000		
7	REAL TIME UPDATE PERIOD		<= 20 Secs		
8	SURVEY TIME		<= 120 Secs		
9	DIRECTIONAL MEASUREMENT POINT FROM BIT	WITH GAMMA	Minimum possible		
10	MEASUREMENT ACCURACY	TOOL FACE	± 1.5°		
11		AZIMUTH	± 1.5°		
12		INCLINATION	± 0.2°		
13	MEASUREMENT RANGE:		0-100 deg or more		
14	LOST CIRCULATION MATERIAL (MAX SIZE & CONCENTRATION)				
15	POWER SOURCE (OPERATING TIME, HRS)		Life >300 Hrs		
16	DATA TRANSMISSION RATE (BITS/SEC)		Min. 5 bits/sec. or more and should be suitable to transmit data of various tools		

		quoted in different segments of the tender		
17	MANUFACTURER / MODEL	Model Quoted Should be Latest and Best in Class		
18	DATA RECORDING	The system to complete with pulsar, electronic sensors, power source etc. for transmitting and recording down-hole data in real time with tool face update every 20 seconds or less. Data also is to be recorded while pulling out by back reaming / with pumps-on.		
19	DATA DENSITY	Data Density should be minimum 2data/ft in real time and minimum 6 data/ft in memory mode		
20	Additional features/information (if any) is to be provided by the bidder.			

Note:

- (i) The system to complete with pulsar, electronic sensors, power source etc. for transmitting and recording down-hole data in real time.
- (ii) Min. Flow Rate: 400 GPM & Max. Flow Rate: 900GPM or more for 17½” hole section;
- (iii) Min. Flow Rate: 400 GPM & Max. Flow Rate: 750 GPM or more for 12 ¼” hole section;
- (iv) Min. Flow Rate: 400 GPM & Max. Flow Rate: 600 GPM or more for 8 ½” hole section.
- (v) Min. Flow Rate: 200 GPM & Max. Flow Rate: 350 GPM or more for 6” hole section;

NOTE: The Work station should come with minimum 150 m of 3- Phase power cables for cluster locations. Contractors are required to give an Electrical Test Certificate for the Surface unit & Bunks prior to powering of the unit by OIL. Contractors to confirm provide the same.

1.1 SPECIFICATION OF 4¾ " DRILLING JARS (HYDRO-MECH/HYDRAULIC)

	JAR FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
4¾" OD Drilling Jar	Length (Maximum)	30 feet (± 3 feet)		
	ID (Minimum)	2" - 2½" ID		
	Tool Joint	3½" API IF Box x Pin		
	Torsional Yield	Not less than 18,000 ft-lbs		
	Jar Up-stroke minimum	80000 pounds		
	Jar Down-stroke minimum	22000 pounds		
	Stroke Length (Up & Down)	12" Minimum		
	Tensile Yield	362,000 lbs.		
	Max Operating Temp.	120° C or more		
	Max Operating Pressure (Psi)	12000 PSI or more		
	Manufacturer / Model	From the manufacturers specified in NIT.		

1.2. SPECIFICATION OF DRILLING JARS of 6.1/4”/6.1/2”/6.3/4 (HYDRO-MECH/HYDRAULIC)

3.0	JAR FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
OD Drilling Jar 6.1/4”/6.1/2”/6.3/4	Length (Maximum)	30 feet (± 3 feet)		
	ID (Minimum)	2½” / 2.¾” ID (2” for 4.3/4” jar)		
	Tool Joint	6.5/8” Reg, 4.1/2” IF & 3½” IF		
	Torsional Yield	Not less than 50,000 ft-lbs		
	Jar Up-stroke minimum	160000- 175000 pounds		
	Jar Down-stroke minimum	37600-175000 pounds		
	Stroke Length (Up & Down)	12” Minimum		
	Tensile Yield	730,000 lbs.		
	Max Operating Temp.	375-degree F or more		
	Max Operating Pressure (Psi)	20000 PSI or more		
	Manufacturer / Model	From the manufacturers specified in NIT.		

1.3. **SPECIFICATION OF DRILLING JARS – 7¾/8” (Hydro-Mech/Hydraulic)**

1.3 SPECIFICATION OF DRILLING JARS of 6.1/4”/6.1/2”/6.3/4 (HYDRO-MECH/HYDRAULIC)

	JAR FEATURES	OIL’S REQUIREMENT	BIDDER’S OFFER	REF: FILE & PAGE NO. BY BIDDER
7¾/8” OD Drilling Jar	Length (Maximum)	30 feet (± 3 feet)		
	ID (Minimum)	2½” / 2.¾” / 3” ID		
	Tool Joint	6⅝” API Reg. Box x Pin		
	Torsional Yield	Not less than 95,000 ft-lbs		
	Jar Up-stroke minimum	260,000 – 300000 pounds		
	Jar Down-stroke minimum	42,000 – 300000 pounds		
	Stroke Length (Up & Down)	12” Minimum		
	Tensile Yield	10, 00,000 lbs.		
	Max Operating Temp.	120° C or more		
	Max Operating Pressure (Psi)	20000 PSI or more		
	Manufacturer / Model	From the manufacturers specified in NIT.		

SPECIFICATION OF DRILLING JAR INTENSIFIERS

Sl No		JAR INTENSIFIER FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
1	8", 6.1/4"/6.1/2"/6.3/4" & 4.3/4"OD Drilling Jar Intensifier	Length (Maximum)	30 feet (± 3 feet)		
2		ID (Minimum)	2¾" / 2. ½"ID		
3		Tool Joint	6.5/8" Reg, 4.1/2" IF & 3½" IF		
4		Torsional Yield (Minimum)	41,000 - 56200 ft-lbs		
5		Jar Up-stroke minimum	175,000 - 180,000 Lbs.		
6		Jar Down-stroke minimum	150,000 - 175000 Lbs.		
7		Stroke Length (Up & Down)	12" Minimum		
8		Tensile Yield (Minimum)	700,000 Lbs.		
9		Manufacturer / Model	Manufactured /Model from Approved list		

Note:

1. Additional features/information (if any) is to be provided by the bidder.

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**SPECIFICATION OF LWD TOOLS FOR 17½ (GAMMA ONLY), 12¼"8 ½ and 6" (CALL OUT) HOLE
SECTION**

GAMMA TOOL/ RESISTIVITY (INDUCTION TYPE)

Sl No	Service Description	Tool Features	OIL's Requirement	Bidder's Offer	REF: FILE & PAGE NO. BY BIDDER
1	Gamma Tool	Temperature rating:	300 deg F or more		
2		Pressure rating:	18000 PSI or more		
3		Sampling Rate:	Minimum 6 sample/feet in memory mode		
4		Gamma Ray Range	0-250 API or more		
5		Gamma ray logging should be compatible and combinable with other LWD tools			
6	Resistivity (Induction Type)	Temp rating:	300 deg F or more		
7		Pressure rating	18000 PSI or more		
8		Sampling Rate	Minimum 6 sample/feet in memory mode		
9		Resistivity measurement	0.2 to 2000 Ohm-m		
10		Frequency/ Depth of Investigation	To be recorded in Multiple frequencies and in multiple depth of investigations		
11		<ul style="list-style-type: none"> Invasion Profile from curve separations Resistivity logging should be compatible and combinable with other LWD tools Bore-hole compensated phase & attenuation measurement systems 			

**SPECIFICATION OF ANNULUS PRESSURE AND ANNULUS TEMPERATURE TOOL
FOR 12¼, "8 ½ and 6" (CALL OUT)" HOLE SIZE**

SI No	TOOL FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
1	ECD and ESD CAPABILITY	Pressure sensor to identify ECD(Equivalent Circulating Density) and ESD(Equivalent Static Density)		
2	ACCURACY	APWD pressure and temperature resolution should be 5 psi or less and 1.2 deg. C or less respectively		
3	MEASUREMENT CAPABILITY	Should be able to provide measurements in both OFF and ON conditions of the pumps.		
4	LOT CAPABILITY	Should be able to take min and max pressure measurements during LOT.		
5	MAX OPERATING TEMP.	300 deg F or more		
6	MAX OPERATING PRESSURE (PSI)	18000 PSI or more		
7	MANUFACTURER / MODEL	Model Quoted Should be Latest and Best in Class		

Note: Additional features/information (if any) is to be provided by the bidder.

SPECIFICATION OF NEUTRON, AZIMUTHAL DENSITY WITH IMAGING & CALIPER FOR 8 ½
and 6" (CALL OUT) HOLE SECTION

Sl No	Service Description	Required Specifications	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
1	Neutron, Azimuthal Density with imaging & Calliper hole size, 8.5" and 6"	Temperature rating: 300 deg F or more		
2		Pressure rating: 18000 PSI or more		
3		Azimuthal Density Range = 1.0 to 3.10 gm/ cc		
4		Pe = 1 to 20 units		
5		Neutron porosity = 0 to 60 P.U.		
6		Azimuthal density from four quadrant and images are to be provided as per the operational requirement with 16 BINS/ 16 Sectors measurement and real time transmission at a rate of 4 BINS/ 4 Sectors or more.		
7		Ultrasonic/ Density derived calliper log to be provided		

The following minimum features of Formation Pressure while Drilling (FPWD) Tool For hole size 6" Hole-Call Out should be made available on call out basis:

Sl No	Service Description	Required Specifications	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
1	Formation Pressure while Drilling (FPWD) Tool For hole size 6" should be made available on call out basis	The formation pressure measurement to be transmitted on real time basis.		
2		Tool should be battery powered with sufficient power back up to deploy the probe for at least 100 tests or more.		
3		The tool should be able to perform test by orienting probe to high / low side of the hole in vertical / deviated wells as per operational requirement.		
4		Tool should have the ability to perform the test in Pumps On/Off mode.		
5		Tool stabilizer must be an integral i.e. no clamps on stabilizer		
6		Tool should have smart pre-test & have ability to change the test parameters by down linking in real-time.		
7		Tool should be able to provide tool status and battery status in RT. Alternative power from MWD.		
8		Combinable with all quoted LWD tools		
9		Pressure rating: 18000 PSI or more		
10		Temp rating: 300 deg F or more		
11		Tool must be able to transmit both tool measurement quality indices and tool status along with fluid mobility measurements following each Pre-test.		
12		Tool must be able to transmit the measured pressure trace following each Pre-test.		

Details of Measurement While Drilling/ Logging while Drilling Surface Unit
(One Workstation compatible for all sections/tools/equipment under the contract)

Sl No	OIL Requirement	Bidder's Offer	REF: FILE & PAGE NO. BY BIDDER
1	Online surface recording system for running MWD / LWD services in 17 ½", 12 ¼", 8 ½", 6" holes with all accessories like signal pressure transducers, precision depth assembly and MWD logs including TVD logs in real time.		
2	MWD /LWD workstation should be capable of recording stand pipe pressure, drill string weight, RPM along with MWD/ LWD 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.		

SONIC WHILE DRILLING (6" Hole-Call Out)

Sl No	OIL Requirement	Bidder's Offer	REF: FILE & PAGE NO. BY BIDDER
1	Temp rating: 300 deg F or more		
2	Pressure rating: 18000 PSI or more		
3	Sampling Rate: minimum 6 sample/feet in memory mode		
4	Tool should be capable of monopole/multipole excitation mode to deliver real-time delta-T compressional and interval transit time.		
5	Tool should be able to provide formation shear slowness (delta-T) where mud velocities are slower than formation shear arrival.		
6	Tool should be able to record complete waveform in memory mode for post logging processing and interpretation to extract Delta-t compressional, shear, stoneley, maximum and minimum stress direction etc		
7	Tool should be able to transmit a quality factor in real-time (coherence)		
8	Tool should be able to detect top of cement in real/memory processed data		
9	Multiple modes of acquisition: monopole, dipole, quadruplets for comprehensive acoustic interpretation. Programmable at surface.		
10	Wide Band receivers to minimize drilling noise		

**1.1 SPECIFICATION OF 4¾" STEERABLE DOWNHOLE MUD MOTOR (SDMM) For
6" Hole Size - Call Out**

MOTOR FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
Flow Range in GPM	Min. Flow Rate: 150 GPM		
	Max. Flow Rate: 250 GPM or more.		
AKO/ABH Range (Min. Achievable)	0° - 3° or more		
Bit speed (Free Running / No Load)	Not less than 100 RPM to 260 RPM or more.		
Type	Steerable with Adjustable Kick off sub/Adjustable Bend Housing		
Bearing type	Mud Lube or Oil sealed		
Length (Maximum)	26 – 35 feet		
Type of Connection	3½" API regular Box down and 3½" API IF Box up. Or any other proprietary connection of the bidder for their entire BHA.		
Lifting Sub	3½" API IF		
Max Operating Differential Pressure (Psi)	700 PSI or more		
Power Output	90 HP minimum		
Torque Operating	2500 NM minimum		
DLS Maximum Achievable	4° / 100' or more		
Pass Through DLS:			
Sliding	4° / 100' or more		
Rotary	4° / 100' or more		
Stabilization	5⅞" screwed-on/built-in		

**1.2. SPECIFICATION OF 6½"/6¾" STEERABLE DOWNHOLE MUD MOTOR
(SDMM) FOR 8½" HOLE**

Sl. No.	SDMM Features	OIL's Requirement	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
1	Type	High Torque, Low to Medium Speed, Stabilized, Multi-lobe, Multi stage 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 Contractor.		
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 Contractor's SDMM		
11	Operating Differential Pressure (Psi)	650 PSI or more.		
12	Power Output	160 HP or more		

13	Torque Operating	8000 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 manufacturers as specified in SOW		

Notes:

- a) Match on sub have to be provided by the Contractor in case of proprietary connection for fishing and other jobs along with the lifting sub. In case of non-standard tubular, Contractor has to provide overshoot tool for fishing job.
- b) In case of proprietary connection, all cross over sub have to be provided by the Contractor to match OIL's string.
- c) System should be able to drill cement, float collar, float shoe and formation.

**1.3 SPECIFICATION OF 7¾"/8"/8¼" STEERABLE DOWNHOLE MUD MOTOR
(SDMM) FOR 12¼" HOLE**

Sl. No.	SDMM Features	OIL's Requirement	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
1	Type	High Torque, Low to Medium Speed, Stabilized, Multi-lobe, Multi stage 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 Contractor		
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	6⅝" API Reg. Pin or matching proprietary connection pin for the Contractor's SDMM		
11	Operating Differential Pressure	600 PSI or more		
12	Power Output	220 HP or more		
13	Torque Operating	11,500 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	12 ¹ / ₈ "screwed-on/built-in			
17	Manufacturer / Model	From the manufacturers as specified in SOW			

Notes:

- a) Match on sub have to be provided by the Contractor in case of proprietary connection for fishing and other jobs along with the lifting sub. In case of non-standard tubular, Contractor has to provide overshoot tool for fishing job.
- b) In case of proprietary connection, all cross over sub have to be provided by the Contractor to match OIL's string.
- c) System should be able to drill cement, float collar, float shoe and formation.

**1.4 SPECIFICATION OF 9. ½” / 9⅝” STEERABLE DOWNHOLE MUD MOTOR (SDMM)
FOR 17.1/2" HOLE**

MOTOR FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
Type	High Torque, Low to Medium Speed, Stabilized, Multi-lobe, Multistage Positive displacement Mud Motor		
Flow Range in GPM	Min. Flow Rate: 600 GPM.		
	Max. Flow Rate: 1150 GPM or more.		
AKO/ABH Range (Min. Achievable)	0° - 2° or more		
Bit speed (Free Running/ No Load)	Not less than 65 to 135 RPM or more.		
Type	Steerable with Adjustable Kick off sub/Adjustable Bend Housing		
Bearing type	Mud Lube or Oil sealed		
Length (Maximum)	25 - 37 feet		
Type of Connection	6⅝” / 7⅝” API Regular Box down and 6⅝” / 7⅝” API Reg. Box Up. Or any other proprietary connection of the bidder for their entire BHA.		
Lifting Sub	6⅝” / 7⅝” API Reg.		
Max Operating Differential Pressure (Psi)	600 PSI or more		
Power Output	280 HP minimum		
Torque Operating	15000 NM minimum		

DLS Maximum Achievable	4° / 100' or more		
Pass Through DLS:			
Sliding	4° / 100' or more		
Rotary	4° / 100' or more		
Stabilization	17 ³ / ₈ " screwed-on/built-in		
Manufacturer / Model	From the manufacturers as specified in Clause 7 under Section – II.		

Note

- 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.

NUCLEAR MAGNETIC RESONANCE (6 " CALLOUT)

Sl No	OIL Requirement	Bidder's Offer	REF: FILE & PAGE NO. BY BIDDER
1	Temp rating: 300 deg F or more		
2	Pressure rating: 18000 PSI or more		
3	Tool should provide <ul style="list-style-type: none"> • Mineral independent porosity • Lithology independent porosity • Permeability Analysis • Bound fluid volume and free fluid volume in real time and in recorded mode 		
4	Identification of moveable fluid type <ul style="list-style-type: none"> • Shell diameter 12 inches or more • Vertical resolution: 4 ft or less at 100ft/hr ROP • Porosity accuracy +/- 1pu or ± 5% whichever is greater • Tool should be combinable with other 8 ½" hole size LWD Tools. • Also after post-processed should be able to combine with other LWD/wireline information for complete petro physical analysis 		

**1.1. SPECIFICATION OF ROTARY STEERABLE SYSTEM SUITABLE FOR
DRILLING 12 ¼" HOLE**

FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
Flow Range in GPM	Min. Flow Rate: 600 GPM		
	Max. Flow Rate: 1000 GPM or more.		
Nominal OD	8.0" to 9.625"		
Near Bit Inclination	5 M or less		
Azimuthal Gamma measurement from bit	6 M or less		
Max Operating Temp.	120° C or more		
Max Operating Pressure (Psi)	18000 PSI or more		
Type of Connection	6 ⁵ / ₈ " API Regular Box down and 6 ⁵ / ₈ " API Reg. Box Up. Or any other proprietary connection of the bidder for their entire BHA.		
Lifting Sub	6 ⁵ / ₈ " API Reg.		
DLS Maximum Achievable	5° / 30M or more.		
Min. Circulating Hrs.	150 or more.		
Lost Circulation Material (Max Size & Concentration)	40 ppb or more of medium to fine nut.		

Manufacturer / Model	From the Manufacturers as specified in NIT. Model Quoted Should be Latest and Best in Class		
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- Should be capable of kick off from vertical well
- System should be capable of building, holding, and dropping well angle and should be capable of simultaneously changing azimuth in continuously rotating for optimum drilling performance and have capability for back reaming, if required.
- System should have features of automated close loop deviation control system (i.e. it should have automated directional and inclinational hold control)
- System should have two way communication system i.e. real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- Type of down linking facility to be provided by bidder either by a separate skid mounted unit or by flow rate change of mud pumps.
- 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.
- In case of proprietary connection, all cross over sub have to be provided by the bidder to match OIL's string.
- All stabilizers must be 4 slight spirals integral and sufficient bladed length of double tapered at both leading and trailing ends and should have sufficient opening / annular clearance with taper blade on stabilizer body.
- System should be able to drill cement, float collar, float shoe and formation.

Additional features/information (if any) is to be provided by the bidder.

**1.2. SPECIFICATION OF ROTARY STEERABLE SYSTEM SUITABLE FOR
DRILLING 8½" HOLE**

FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
Flow Range in GPM	Min. Flow Rate: 350 GPM		
	Max. Flow Rate: 600 GPM or more.		
Nominal OD	6-3/4" / 6-1/2"		
Near Bit Inclination	4 M or less		
Azimuthal Gamma measurement from bit	6 M or less		
Max Operating Temp.	120° C or more		
Max Operating Pressure (Psi)	18000 PSI or more		
Type of Connection	4 ½" API Reg Box down and 4 ½" API IF Box Up Or any other proprietary connection of the bidder for their entire BHA.		
Lifting Sub	4 ½" API IF		
DLS Maximum Achievable	5° / 30M or more.		
Minimum Circulating Hrs.	150 or more.		
Lost Circulation Material (Max Size & Concentration)	40 ppb or more of medium to fine nut.		
Manufacturer / Model	From the manufacturers specified in NIT.		

- Should be capable of kick off from vertical well
- System should be capable of building, holding, and dropping well angle and should be capable of simultaneously changing azimuth in continuously rotating for optimum drilling performance and have capability for back reaming, if required.
- System should have features of automated close loop deviation control system (i.e. it should have automated directional and inclinational hold control)
- System should have two way communication system i.e. real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- Type of down linking facility to be provided by bidder either by a separate skid mounted unit or by flow rate change of mud pumps.
- 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.
- In case of proprietary connection, all cross over sub have to be provided by the bidder to match OIL's string.
- All stabilizers must be 4 slight spirals integral and sufficient bladed length of double tapered at both leading and trailing ends and should have sufficient opening / annular clearance with taper blade on stabilizer body.
- System should be able to drill cement, float collar, float shoe and formation.

Additional features/information (if any) is to be provided by the bidder.

1.3. SPECIFICATION OF ROTARY STEERABLE SYSTEM SUITABLE FOR DRILLING 6” HOLE

Features	OIL's Requirement	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
Flow range in GPM	Min flow rate: 150 GPM		
	Max flow rate: 350 GPM or more		
Nominal OD	5” or less		
Near bit inclination	3 M or less		
Gamma measurement from bit	9M or less		
Max operating Temp	120° C or more		
Max operating Pressure (PSI)	18000 PSI or more		
Type of connection	3.1/2” API Reg Box down and 3.1/2” API IF Box or any other proprietary connection of the Contractor for their entire BHA.		
Lifting Sub	3.1/2” API IF		
DLS Maximum Achievable	8° / 30 M or more		
Minimum Circulating Hrs.	150 or more		
Lost Circulation Material (Max Size & Connection)	40 ppb or more of medium to fine nut		
Manufacturer / Model	From the manufacturers specified in NIT.		

- Should capable of kick off from vertical well.
- System should be capable of building, holding, and dropping well angle and should be capable of simultaneously changing azimuth in continuously rotating for optimum drilling performance and have capability for back reaming, if required.
- System should have features of automated close loop deviation control system (i.e. it should have automated directional and inclinational hold control)

- System should have two way communication system i.e. real time up link and down link facility for data transmission and for sending command to the bottom hole tools with mud pulse telemetry.
- Type of down linking facility to be provided by Contractor either by a separate skid mounted unit or by flow rate change of mud pumps.
- Match on sub have to be provided by the Contractor in case of proprietary connection for fishing and other job along with the lifting sub. In case non-standard tubular, Contractor has to provide overshot tool for fishing job.
- In case of proprietary connection, all cross over sub have to be provided by the Contractor to match OIL's string.
- All stabilizers must be 4/3 slight spirals integral and sufficient bladed length of double tapered at both leading and trailing ends and should have sufficient opening / annular clearance with taper blade on stabilizer body.
- System should be able to drill cement, float collar, float shoe and formation. However, any failure on bottom within 24 Hrs from start of cement cleaning, float collar & Shoe will not be attributable to the Contractor.

DELIVERABLES FOR TOOLS MENTIONED ABOVE

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
1	MWD/LWD Surface Unit			
1.1	Delivery Time	Real-Time while Drilling/Tripping	Within 24 hrs of round trip	Within 3 days of completion of Hole Section
1.2	Deliverables	<ul style="list-style-type: none"> RT Log Prints in Morning and Evening to concerned OIL Representatives (1:200 & 1:500 TVD and MD) (Through mail) 	<ul style="list-style-type: none"> Rush Print Recorded Mode Log Prints to OIL Representatives.(1:200 & 1:500 TVD and MD) (1Copy each) 	<ul style="list-style-type: none"> Detailed Well Section report on Logging BHA design, Bit details, parameters maintained with brief section summary QC'd Recorded Mode Log Prints 02 Copies each to concerned OIL representatives. Services of: 1:1000 MD Log 1:200 & 1:500 TVD and MD LAS/DLIS and PDS/ PDF format 2 x DVD containing Section Archive
2	Data Transmission system	Real time logging data transmission from Surface Unit to Client office in Town as per SOW	NIL	NIL
3	Directional, GR, Resistivity (Induction type)	<ul style="list-style-type: none"> Average GR – 0 -250 API Phase Shift resistivity – Minimum 3 	<ul style="list-style-type: none"> Average GR – 0 -250 API Phase Shift resistivity- 	<ul style="list-style-type: none"> QC'd Recorded Mode Log prints

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
		<p>Curves</p> <ul style="list-style-type: none"> Attenuation Resistivity – Minimum 1 Curve (Resistivity Curves to be transmitted after prior discussion with Company) MWD Surveys Tool Face Continuous Inclination and Azimuth while sliding and rotating. Collar RPM (can also be provided from other tool) Real-time data at 2 data points/ft or better Real time vibration log data 	<p>Minimum 4 Curves</p> <ul style="list-style-type: none"> Attenuation Resistivity – Minimum 4 Curves Time after Bit Sliding Indicator All resistivity curves should be borehole compensated and environmentally corrected. Survey Report – Excel Sheet 	<ul style="list-style-type: none"> Composite Log Prints Average GR – 0 -250 API Bore hole Compensated Focused button Resistivity. Minimum 2 or more depth of investigation. Bit resistivity Real time resistivity Image(56 sector) Time after Bit sliding indicator. Survey report in Excel sheet All raw channels also required to carryout independent environment corrections on GR and Resistivity should also be provided. All data to be submitted both in hardcopy as well as in DVD mode to concerned OIL representatives

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
4	Neutron, Azimuthal Density with imaging & Caliper	<ul style="list-style-type: none"> Quadrant Density- Minimum Top and Bottom Density transmitted in real-time ("bottom" density in case of a deviated borehole) Quadrant Density Correction Caliper (Ultrasonic/Density) PEF – 0- 10 Thermal Neutron Porosity - environmentally-corrected log curves on-depth 16 Sector Density Image Real-time data at 2 data points/ft or better 	<p>Field Deliverable recorded mode data consisting of the following :-</p> <ul style="list-style-type: none"> Quadrant Density Quadrant Density Correction Caliper (Ultrasonic/Density) PEF – 0- 10 Thermal Neutron Porosity - environmentally-corrected log curves on-depth Time after Bit Sliding indicator 16 Sector Static Density Image 	<p>QC'ed Recorded mode Data :-</p> <ul style="list-style-type: none"> Composite report Quadrant Density Quadrant Density Correction Caliper (Ultrasonic/Density) PEF – 0- 10 Thermal Neutron Porosity - environmentally-corrected log curves on-depth Time after Bit Sliding indicator 16 Sector Static Density Image QC'ed Image Derived Density :Density of the sector where tool is in contactwith the borehole, should be provided. All raw channels also required to carryout independent environmental corrections on Density and Neutron

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
				<p>should also be provided.</p> <ul style="list-style-type: none"> • All raw Channels required to create Density Image independently should also be provided. • Raw Near and far Counts Corrected near and far counts of neutron should also be provided • One copy of LAS/DLIS is also to be provided
5	Annulus Pressure and Annulus Temperature While Drilling	<ul style="list-style-type: none"> • ECD • Annulus Pressure • Annulus Temperature • RT time based log of Annulus Pressure and temperature along with other drilling parameters 	<ul style="list-style-type: none"> • Drilling Mechanics Log of ECD,MW, Annulus Pressure and Temperature along with other drilling parameters 	<ul style="list-style-type: none"> • Drilling Mechanics Log of ECD,MW, Annulus Pressure and Temperature along with other drilling parameters

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
6	Sonic While Drilling	<ul style="list-style-type: none"> • Compression Delta – T (DTCO) Data quality factor • Real time surface labeling to be performed • Sonic data shall be borehole compensated • Real-time data at 2 data points/ft or better 	<ul style="list-style-type: none"> • Compression Delta – T (DTCO) Data quality factor • Sonic data shall be borehole compensated • Service fully-inclusive of the usage of different filters, processing "virtual transmitter arrays" for borehole compensated outputs, and "leaky-fluid" processing [also called "dispersive STC"] which might be required for shallow hole sections 	<p>QC'ed Composite Log for 8½" sections:-</p> <ul style="list-style-type: none"> • Compression Delta – T (DTCO) • Shear in fast formations ST Coherence plot. • Stonely Sonic data shall be borehole compensated Service fully-inclusive of the usage of different filters, for borehole compensated outputs. "Leaky-fluid" processing [also called "dispersive STC"] is required for shallow hole sections (TVD ≤ 1000M) Youngs Modulus, Poisson's ratio, vp/vs ratio
7	Formation Pressure While Drilling	<ul style="list-style-type: none"> • Pressure Vs Time Profile – RT • Pressure vs Depth Plot – RT • Pre-test Results: Pressure, Mobility • Summary of all the tests in Excel Sheet 	<ul style="list-style-type: none"> • Pressure Vs Time Profile – Recorded Mode • Pressure vs Depth Plot - Recorded Mode • QC'ed Pretest Results: • Pressure ,Mobility and QC 	<p>Composite Report of all hole sections consisting of :-</p> <ul style="list-style-type: none"> • Pressure Vs Time Profile – Recorded Mode • Pressure vs Depth Plot - Recorded Mode

Sl No.	Equipment Services	Real Time Output	Recorded mode Output after each round trip	Processed Output (after completion of a hole section)
			components <ul style="list-style-type: none"> Excel Sheet Summary of all the tests 	<ul style="list-style-type: none"> QC'd Pre-test Results: Pressure Mobility and QC components Excel Sheet Summary of all the tests Interpretation Report with Pressure Gradient, Mobility
8	Nuclear Magnetic Resonance	<ul style="list-style-type: none"> Magnetic Resonance Porosity FF , BF Porosity/Volume Simultaneous Multi Wait Time- T2 distribution in real time, both while drilling, and/or in wipe mode Permeability RPM 	Field processed recorded mode NMR Data consisting of :- <ul style="list-style-type: none"> Magnetic Resonance Porosity FF , BF Porosity/Volume T2 Log Simultaneous Multi Wait Time T2 distribution Permeability RPM 	QC'd Recorded mode NMR Data consisting of :- <ul style="list-style-type: none"> Magnetic Resonance Porosity FF , BF Porosity/Volume T2 Log Simultaneous Multi Wait Time- T2 distribution Permeability RPM

Note:

1. All x-over subs required for connection contractor's string to operator's drill string is to be provided and furnished by the CONTRACTOR.
2. In case the contractor provides retrievable RA sources, assembly should have the suitable ID to retrieve the sources if any.
3. Additional features/information (if any) is to be provided by the bidder.

PROFORMA FOR CURRICULUM VITAE OF COMPETENT OFFICIALS

1. NAME :
2. PRESENT ADDRESS :
3. PERMANENT ADDRESS
4. FATHER'S NAME :
5. NATIONALITY :
6. PASSPORT NO. AND VALIDITY :
(IN CASE OF NRI/FOREIGNER) :
7. DATE OF BIRTH :
8. DESIGNATED POST :
9. NAME OF THE REPLACED OFFICIAL (IF APPLICABLE):
10. EDUCATIONAL QUALIFICATION :

Affix a
Passport Size
Photograph

Sl. No.	Exam Passed	Institute	Board	University	Council	O	Grade
				thers			%

11. HSE TRAININGS (If any) :
12. SEPCIFIC EXPERIENCE (If any) :
13. EXPERIENCE IN REVERSE ORDER: EXPERIENCE IN LAST THREE YEARS

Sl. No.	Year	Name of the Company (Employer)	Name of Client Company	Name of Project and Service Provided	Job Description	Key Job Responsibility	Period of Service	Type of wells drilled	Well Depth (MWD)	No. of wells drilled

SIGNATURE OF THE BIDDER**SIGNATURE OF THE CANDIDATE****N.B:**

1. To add row if necessary
2. To be submitted in "A-4" or Executive Bond Paper, duly typed and signed
3. All supporting documents to be enclosed and Annexure shall be attached where necessary
4. If Company desires, original certificate to be furnished at the time of 1st deployment
5. Attach copies of following documents:
 - Identity Proof
 - Date of Birth Proof

- Proof of educational qualification
- Proof of Experience
- Medical Fitness Certificate in Form 'O' (as per the Mines Act 1952).

Documentary Evidence for HSE Criteria**1. LTIF for last Three years**

Sl. No.	Contract No	Name & Contact details of client	Place of Operation	Contract Period		LTIF		
				Commencement	Completion	1 st	2 nd	3 rd
1								
2								
3								

2. Details of HSE Policy :

- a) _____
b) _____
c) _____

[N.B: Please add rows as required]

Signature of Authorized Signatory Name:

Designation :

Phone No :

Place :

Date :

Note: A lost time injury (LTI) will occur when a person is injured in the execution of his/her duties and as a result of this injury is unable to perform his/her regular duties for one full shift or more on the day following day which the injury was incurred. Note: Regular duties are those duties associated with the job description of the injured. Lost time injury frequency rate shall be calculated as illustrated below:

Required Data:

- (i) No of accident for the year of calculation
(ii) No of injury for the above accidents
(iii) Total Mandays loss due to accident= X
(iv) Total Sick leave/unproductive Mandays= Y
A = Million Man-hrs worked
= No of employees * No of days * duty hour per day * 10^{-6}
B = Million Man-hrs loss due to sick leave and accident (non-productive hrs)
= (total sick leave + total Mandays loss due to accident) * duty hour per day * 10^{-6}
= (X + Y) * duty hour per day * 10^{-6}

Actual man-hour worked (C)

C = [Total Million Man-hrs worked] – [Million Man-hrs Loss due to sick leave and accident (non-productive hrs)]
=A - B

LTIF Rate = $\frac{\text{No of Injury}}{\text{Actual MMH worked}}$

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable)
TO BE IMPORTED INCONNECTION WITH EXECUTION
OF THE CONTRACT SHOWING CIF VALUE

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:

PROFORMA-B, B1 (Imported), B1 (Indigenous) & B2 (Call out)

PRICED BID FORMAT

**THE PRICE BID FORMAT IS ATTACHED UNDER “NOTES AND ATTACHMENTS” TAB
IN OIL’s E-TENDER PORTAL**

BIDFORM

To
M/s. Oil India Limited,
P.O. Duliajan, Assam, India

Sub: IFB No. CDG8856P22

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 of _____ (Total Bid Amount in words and figures) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this 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:

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.

Bid Security Declaration

(To be submitted on Bidder's letter head)

M/s. Oil India Limited

.....,
.....

Tender No.: CDG8856P22

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

FORM OF PERFORMANCE BANK GUARANTEE

To:
M/s. OIL INDIA LIMITED,
CONTRACTS DEPARTMENT
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.

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 require;

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. **CDG8856P22**.

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 LETTER OF AUTHORITY

To:
GM (CONTRACTS)
Oil India Ltd.,
P.O. Duliajan - 786602
Assam, India

Sir,

Sub: OIL's IFB No. CDG8856P22

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.

AUTHORISATION FOR ATTENDING BID OPENING

TO,
GM (CONTRACTS)
Oil India Ltd.,
P.O. Duliajan - 786 602
Assam, India

Date: _____

Sir,

Sub: OIL's IFB No. CDG8856P22

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.

&&&&&&&&

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 Crores)	NET WORTH (in INR Crores)

Place:

Date:

Seal:

Membership Code:

Registration No. :

Signature

**To
GM-CONTRACTS
OIL INDIA LIMITED
DULIAJAN-786602**

SUB: SAFETY MEASURES FOR TENDER NO. CDG8856P22

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 of Bank Guarantee towards Purchase Preference-Local Content

Ref. No. _____ Bank Guarantee No.

Dated _____

To
Oil India Limited

India

Dear Sirs,

1. In consideration of _____ (hereinafter referred to as OIL, which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and assignees) having entered into a CONTRACT No. _____ dated _____ (hereinafter called 'the CONTRACT' which expression shall include all the amendments thereto) with M/s _____ having its registered/head office at _____ (hereinafter referred to as the 'CONTRACTOR') which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) and OIL having agreed that the CONTRACTOR shall furnish to OIL a Bank guarantee for India Rupees/US\$ _____ for the faithful fulfillment of conditions pertaining to Local Content in accordance with the value mentioned in the certificate of Local Content submitted by the contractor for claiming purchase preference under the Purchase Preference Policy (linked with Local Content).

2. We (name of the bank) _____ registered under the laws of _____ having head/registered office at _____ (hereinafter referred to as "the Bank", which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and permitted assignees) do hereby guarantee and undertake to pay to OIL immediately on first demand in writing any / all money to the extent of Indian Rs./US\$ (in figures) _____ (Indian Rupees/US Dollars (in _____ words) _____) without any demur, reservation, contest or protest and/or without any reference to the CONTRACTOR. Any such demand made by OIL on the Bank by serving a written notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute(s) pending before any Court, Tribunal, Arbitrator or any other authority and/or any other matter or thin whatsoever, as liability under these presents being absolute and unequivocal. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by OIL in writing. This guarantee shall not be determined, discharged or affected by the liquidation, winding up, dissolution or insolvency of the CONTRACTOR and shall remain valid, binding and operating against the bank.

3. The Bank also agrees that OIL at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the CONTRACTOR and notwithstanding any security or other guarantee that OIL may have in relation to the CONTRACTOR's liabilities.

4. The Bank further agrees the OIL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said CONTRACT or to extend time of performance by the said CONTRACTOR(s) from time to time or to postpone for any time or from time to time exercise of any of the powers vested in OIL against the said CONTRACTOR(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said CONTRACTOR(s) or for any forbearance, act or omission on the part of OIL or any indulgence by OIL to the said CONTRACTOR(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

5. The Bank further agrees that the Guarantee herein contained shall remain in full force during the period that is taken for the performance of the CONTRACT and all dues of OIL under or by virtue of this CONTRACT have been fully paid and its claim satisfied or discharged or till OIL discharges this guarantee in writing, whichever is earlier.

6. This Guarantee shall not be discharged by any change in our constitution, in the constitution of OIL or that of the CONTRACTOR.

7. The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.

8. The Bank also agrees that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Courts of the place from where the purchase CONTRACT has been placed.

9. Notwithstanding anything contained herein above, our liability under this Guarantee is limited to Indian Rs./US\$(in figures) _____ (Indian Rupees/US Dollars (in words) _____) and our guarantee shall remain in force until _____ (indicate the date of expiry of bank guarantee).

Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of OIL under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the rights of OIL under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

In witness whereof, the Bank through its authorized officer has set its hand and stamp on this _____ date of _____ 20__ at _____

WITNESS NO.1

(Signature)
Full name and official address
address
(In legible letters)
Stamp

(Signature)
Full name, designation and
(In legible letters)
with Bank

WITNESS NO.2

(Signature)
Full name and official address
(in legible letters)
Stamp

Attorney as power of
Attorney no._____
Dated_____

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. CDG8856P22**. 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 its Vigilance Office 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 he/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/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor 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 shall 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 Indian Rupees only.

(vii) Bidders shall not 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 subcontracting, 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 intentions.

5. Issues like warranty/guarantee, etc. shall be outside the purview of IEMs.

For the Principal

Place: Duliajan

Date: 23.11.2021

For the Bidder/Contractor

Witness1:

Witness 2:

(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).

&&&&

FORMAT OF AGREEMENT BETWEEN BIDDER AND THEIR 100% SUBSIDIARY COMPANY (As the case may be)

(INDIAN BIDDERS ARE REQUIRED TO EXECUTE ON STAMP PAPER OF REQUISITE VALUE AND NOTORISED)

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 severally 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)

(INDIAN BIDDERS ARE REQUIRED TO EXECUTE ON STAMP PAPER OF REQUISITE VALUE AND NOTORISED)

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))

Witness:

1. Signature _____
Full Name _____
Address _____

M/s _____
Signature _____
Name _____
Designation _____

Common seal of the
Company_____

Witness:

2. Signature _____
Full Name _____
Address _____

PARENT/ULTIMATE PARENT/HOLDING COMPANY'S CORPORATE GUARANTEE
TOWARDS FINANCIAL STANDING
(Delete whichever not applicable)

(TO BE EXECUTED ON COMPANY'S LETTER HEAD)

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 (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 Financial support of M/s _____ [Parent/Ultimate Parent/Holding Company (Delete whichever not applicable)] and whereas Parent/Ultimate Parent/Holding 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 Financial support as required by the bidder for qualifying and successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed by the Guarantor to give this Guarantee and undertakes as follows:

1. The Guarantor confirms that the Bidder is a 100% subsidiary of the Guarantor.
2. The Guarantor agrees and confirms to provide the Audited Annual Reports of any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
3. The Guarantor have an annual financial turnover of minimum **INR**(or equivalent **USD**) during any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
4. **Net worth** of the Guarantor is positive for preceding financial/ accounting year.
5. The Guarantor undertakes to provide financial support to the Bidder for executing the project/job, in case the same is awarded to the Bidder.

The Guarantor represents that:

- (a) This 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 Bidder.
- (b) The liability of the Guarantor, under the Guarantee, is limited to the 50% of the annualized contract price entered between the Bidder and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Bidder.

- (c) This Guarantee has been issued after due observance of the appropriate laws in force in India.
- (d) 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 New Delhi, India.
- (e) This Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.
- (f) 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 and on behalf of
(Bidder)

Witness:

- 1.
- 2.

For and on behalf of
(Parent/Ultimate Parent/Holding
Company)(Delete whichever not
applicable)

Witness:

- 1.
- 2.

FORMAT OF AGREEMENT BETWEEN BIDDER, THEIR SISTER SUBSIDIARY/CO-SUBSIDIARY COMPANY AND THE ULTIMATE PARENT/HOLDING COMPANY OF BOTH THE BIDDER AND THE SISTER SUBSIDIARY/CO-SUBSIDIARY (Strike out whichever is not applicable between Ultimate Parent and Holding Company. Similarly strike out whichever is not applicable between Sister Subsidiary and Co-subsidiary Company)

(IN CASE OF INDIAN BIDDER TO BE EXECUTED ON STAMP PAPER OF REQUISITE VALUE AND NOTORISED)

This agreement made this ____ day of ____ month ____ year by and between M/s. _____ (Fill in Bidder's full name, constitution and registered office address) _____ hereinafter referred to as "Bidder" of the first part and M/s. _____ (Fill in full name, constitution and registered office address of Sister Subsidiary/Co-subsidiary Company of the Bidder) herein after referred to as "Sister Subsidiary/ Co-subsidiary" of the second part and M/s. _____ (Fill in the full name, constitution and registered office address of the Ultimate Parent/Holding Company's of both the subsidiaries) hereinafter referred to as "Ultimate Parent/ Holding Company" of the third 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 a technical support of M/s. _____ (Sister Subsidiary/Co-subsidiary Company) and Sister Subsidiary/Co-subsidiary Company 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 all the three 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.
2. M/s. _____ (Sister Subsidiary/Co-subsidiary Company) undertakes to provide technical support and expertise and expert manpower, material, if any, 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 bidder.
3. This agreement will remain valid till validity of bidder's offer to OIL including extension if any and also till satisfactory performance of the contract in the event the bid is accepted and contract is awarded by OIL to the bidder.
4. Sister Subsidiary/ Co-subsidiary Company unconditionally agrees that in case of award of contract to the Bidder, if the Bidder is unable to execute the contract, they shall, immediately on receipt of notice by OIL, take up the job without any demur or objection, in continuation without loss of time and without any extra cost to OIL and duly perform the obligations of the Bidder/Contractor to the satisfaction of OIL.
5. The Ultimate Parent/Holding Company also confirms and undertakes that the commitment made by the Sister Subsidiary/ Co-subsidiary company in providing

the technical support and technical expertise and expert manpower to support the bidder for execution of the contract are honoured.

6. The Ultimate Parent/Holding Company also takes full responsibility in getting the contract executed through the Sister subsidiary/ Co-subsidiary company in case the Bidder/Contractor is unable to execute the contract.
7. 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 (Sister Subsidiary/ Co- subsidiary)	For and on behalf of (Ultimate Parent / Holding Company)
M/s. Witness	M/s. Witness	M/s. Witness
1)	1)	1)
2)	2)	2)

Note: In case of contracts involving - (a) manufacture/supply (b) installation and commissioning (c) servicing and maintenance of any equipment, as the bidding company can draw on the experience of their multiple subsidiary sister/Co-subsidiary company (ies) specializing in each sphere of activity, i.e. (a) manufacture/supply (b) installation and commissioning (c) servicing and maintenance, therefore, in that case, the above format shall be signed by all the sister/Co-subsidiary company(ies) and necessary modifications may be made in the above format to include all sister subsidiaries.

**FORM OF PERFORMANCE BANK GUARANTEE FOR SUPPORTING
COMPANY**

To
M/s OIL INDIA LIMITED (OIL)
CONTRACTS DEPARTMENT
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:

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:

- iii) "MT 760 / MT 760 COV for issuance of bank guarantee.
- iv) "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 – HDFCINBBAL; 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.

**To,
GM-CONTRACTS
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)

**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. B. 5.0 of the Bid Evaluation Criteria

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: 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.

**UNDERTAKING BY VENDOR ON SUBMISSION OF PERFORMANCE BANK
GUARANTEE**

**To,
The Oil India Limited
Contracts Department
Duliajan – 786 602
Assam**

We M/sare 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

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. CDG8856P22

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: _____

UNDERTAKING FOR LOCAL CONTENT

(To be submitted on the letter head of the bidder)

We, _____ (Name of the bidder) have submitted Bid No. _____ against Tender No. _____ dated _____ for _____

(description of the service).

We hereby undertake that, we meet the mandatory minimum local content requirement as mandated by Ministry of Petroleum and Natural Gas, Government of India vide **Notification No. FP-20013/2/2017-FP-PNG dated 17th November, 2020 of MoPNG** (or any subsequent amendment thereof). The percentage of Local Content in the bid is _____ %.

For and on behalf of _____

Authorized signatory _____

Name _____

Designation _____

Contact No. _____

COMMERCIAL CHECKLIST**Bidder's Name:** _____**TENDER NO. CDG8856P22**

This Questionnaire duly filled in should be returned along with each copy of Unpriced 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: Whether Bid Securing Declaration has been submitted.	
7.	Confirm to Submit PBG as per Tender requirement	
8.	Confirm that the offer shall remain valid for acceptance up to 120 (One hundred and twenty) days from final Bid Closing Date/Date of opening of bids.	
9.	Whether Mobilization and Completion period of contract is complied?	

10.	Whether Integrity Pact Submitted?	
11.	Confirm the 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 the certificate of Incorporation has been submitted.	
14.	Confirm whether you want to avail/claim Purchase Preference. If yes, specify under which category: PP-LC or MSE?	
15.	Confirm whether Udyam Registration Certificate has been submitted, in case availing MSE benefit.	
16.	If availing benefit under PP-LC Policy, confirm that, percentage of Local Content has been mentioned in the bid and Undertaking (as per format given) towards compliance of Local Content requirement along with certificate from Statutory Auditor/Chartered Accountant has been submitted.	
17.	Confirm that you have submitted all documents as mentioned in the Tender.	
18.	Confirm whether, the bid documents required towards compliance of Bid Evaluation Criteria have been verified & certified by Independent TPI agencies as mentioned in Clause No. E.7.0 of Part-2 (BEC) of the tender document.	
19.	Confirm acceptance to all terms & conditions of the Tender.	
20.	Confirm that all correspondence must be in English Language only.	

21.	Indicate Name & Contact No. (Telephone/Fax/E-mail) of person signing the bid.	Name: Contact No.: Fax: Email:
22.	Confirm that all Bank charges associated with Bidder's Bank shall be borne by Bidder.	
23.	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 overriding and final and any other deviation indicated elsewhere shall be treated as redundant.

Signature _____

Name _____

Designation _____

Office Stamp _____

PROFORMA UNDERTAKING FROM CONTRACTORS' PERSONNEL

I _____ S/o _____
having permanent residence at _____
Dist. _____ am working with M/s _____
_____ as their employee. Now, I have been transferred
by M/s _____ for carrying out the contract job under
Contract No. _____ which has been awarded in favour of
my employer M/s. _____.

I hereby declare that I will not have any claim for employment or any service
benefit from OIL by virtue of my deployment for carrying out contract job in OIL
by M/s _____.

I am an employee of _____ for all practical
purposes and there is no privity of Contract between OIL and me.

(Signature of Contractor's Personnel)
Place:
Date:

(1) NAME:

DESIGNATION

DATE:

(2) NAME :

DESIGNATION

DATE:

EXHIBIT-I

No. FP-20013/2/2017-FP-PNG
Government of India
Ministry of Petroleum and Natural Gas

Shastri Bhawan, New Delhi
Dated 17th November, 2020

To,

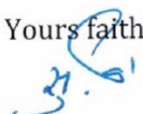
1. Chairman, IOCL
2. C&MD, BPCL/ HPCL/ ONGC/ OIL/ GAIL/ EIL/ Balmer Lawrie
3. Managing Director, CPCL/ NRL/ MRPL/ OVL
4. DG, DGH
5. DG, PPAC
6. Secretary, OIDB
7. ED, PCRA
8. ED, OISD
9. ED, CHT
10. Director, RGIPT
11. Member (BM), PNGRB
12. CEO & MD, ISPRL

Subject: Policy to Provide Purchase Preference (linked with local content) (PP-LC) in all Public Sector Undertakings under the M/o P&NG - Amended regarding

Sir/ Madam,

I am directed to refer to this Ministry's letter of even number dated 7.10.2019 on the subject mentioned above. It is stated that several provisions of the Policy have been amended as per the recommendations of the Steering Committee constituted under PP-LC Policy by MoPNG. Amended PP-LC Policy is enclosed herewith for necessary compliance which shall continue for a further period of one year w.e.f. 01.10.2020..

Yours faithfully


सुशील टी. विलियम्स
(Sushil T. Williams)

उप सचिव, भारत सरकार
(Deputy Secretary to the Govt. of India)

दूरभाष (Tel.): 23387467

Email: sushilt.williams@gov.in

Copy to:

- a) PS to Minister, PNG & Steel
- b) PPS/ PS to Secretary/ Sr. Economic Advisor/ AS&FA, MoPNG
- c) PPS/ PS to JS (E)/ JS (GP)/ JS (IC)/ JS(R)/ JS (M)/ JS (G)/ EA/ DDG, MoPNG
- d) US (Admin.), MoPNG
- e) Ms. Neelam Naval, Technical Director (NIC) - with request to upload the letter alongwith enclosure on website of MoPNG.

Subject: Policy to provide Purchase preference (linked with local content) (PP – LC) in all Public Sector Undertakings under Ministry of Petroleum and Natural Gas- Amended

1 Preamble

- 1.1 In tune with Make in India (MII) campaign in oil and gas sector, the Government has decided to incentivise the growth in local content in goods and services while implementing oil and gas projects in India, and
- 1.2 Whereas the Public procurement policy rests upon the core principles of competitiveness, adhering to sound procurement practices and execution of orders for supply of goods or services in accordance with a system which is fair, equitable, transparent, competitive and cost effective, and
- 1.3 Whereas, the local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them etc.
- 1.4 Whereas incentivising enhanced local content in the procurement of goods and/or services in oil and gas business activities would lead to increased local industry content;
- 1.5 Therefore, the Ministry of Petroleum and Natural Gas (MoPNG) has decided to stipulate the following policy for providing Purchase Preference to the manufacturers/ service providers having the capability of meeting/ exceeding the local content targets in oil and gas business activities;
- 1.6 This policy considers the Local Content (LC) as the added value brought to India through the activities of the oil and gas industry. This may be measured (by project, affiliate, and/or country aggregate) and undertaken through Workforce development and investments in supplier development through developing and procuring supplies and services locally.

2 Definitions

- 2.1 **Oil and Gas Business Activity** shall comprise of Upstream, Midstream and Downstream business activities.

- 2.2 **Domestic products** shall be goods and/or service (including design and engineering), produced by companies, investing and producing in India.
- 2.3 **Local Content** hereinafter abbreviated to LC means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- 2.4 **Domestic Manufacturer** shall be business entity or individual having business activity established under Indian law and producing products domestically.
- 2.5 **Supplier** of goods and/or provider of service shall be a business entity having capability of providing goods and/or service in accordance with the business line and qualification thereof and classified as under:
- ‘Class-I local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50% as defined under this Policy.
- ‘Class-II local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this Policy.
- ‘Non-local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than or equal to 20%, as defined under this Policy.
- 2.6 **Steering Committee** means the committee to be constituted by MoPNG to provide effective guidance and to oversee the implementation of the Policy on a regular and continuing basis.
- 2.7 **Verification** shall be an activity to verify the accomplishment of LC by domestic manufacturers and/or suppliers of goods and/or providers of service with the data obtained or collected from respective business activities.
- 2.8 **Purchase preference:** Where the quoted price is within the margin of purchase preference of the lowest price, other things being equal, purchase preference may be granted to the bidder concerned, at the lowest valid price bid.

- 2.9 **Local Content (LC)** in Goods shall be the use of raw materials, design and engineering towards manufacturing, fabrication and finishing of work carried out within the country.
- 2.10 **Local Content (LC)** in Services shall be the use of services up to the final delivery by utilizing manpower (including specialist), working appliance (including software) and supporting facilities carried out within in the country.
- 2.11 **Local Content (LC)** in EPC contracts shall be the use of materials, design and engineering comprising of manufacturing, fabrication, assembly and finishing as well as the use of services by utilizing manpower (including specialist), working appliance (including software) and supporting facility up to the final delivery, carried out within the country.
- 2.12 **Factory overhead cost** shall be indirect costs of manpower, machine/working appliance/facility and the whole other fabrication costs needed to produce a unit of product with the cost not chargeable directly to specified product.
- 2.13 **Company overhead cost** shall be costs related to the marketing, administration and general affairs cost of the company.
- 2.14 **Indian Company** means a company formed and registered under the Companies Act, 2013.
- 2.15 **Foreign company** means any company or body corporate incorporated outside India which— (a) has a place of business in India whether by itself or through an agent, physically or through electronic mode; and (b) conducts any business activity in India in any other manner.

3. Scope

- 3.1 The regulation shall be intended to:
- 3.1.1 Support and boost the growth of domestic manufacturing sector so as to be able to support oil and natural gas business activities and contribute added value to economy, absorb manpower as well as have national, regional and international competitiveness;

- 3.1.2 Support and boost the growth of innovation/technology of domestic manufacturing sector.
- 3.2 This policy shall apply to all the Public Sector Undertakings and their wholly owned subsidiaries under the Ministry of Petroleum and Natural Gas; Joint Ventures that have 51% or more equity by one or more Public Sector Undertakings under the Ministry of Petroleum and Natural Gas; attached and subordinate offices of MoPNG.
- 3.3 This policy shall not include goods/ services falling under Micro Small and Medium Enterprises (MSME) or Domestically Manufactured Electronic Products (DMEP), as those products/ services are already covered under specific policy. However, an option would be given in the tender for the bidder to declare preference for seeking benefit under PP-LC/MSME or DMEP.
- 3.4 The policy is not applicable for HP-HT operations for the time being. The Charter Hiring of offshore vessels shall continue to be governed by DG, Shipping Guidelines. Indian Flag Vessels shall be considered as having 100% LC.
- 3.5 The prescribed local content in the Policy shall be applicable on the date of Notice inviting Tender.

4. Procurement

- 4.1 The procuring companies shall follow their own procurement procedures. Aggregation of annual requirements and such other procurement practices, which facilitate the implementation of this policy, may be adopted by procuring companies.
- 4.2 In respect of Global Tender Enquiry (GTE) the guidelines as issued by Government of India from time to time shall be applicable on the procuring entities.
- 4.3 **Margin of Purchase preference:** The margin of purchase preference shall be 20%.
- 4.4 (a) In respect of all goods, services or works in respect of which the Nodal Ministry/ Department under DPIIT's Public Procurement (Preference to Make in India) Order, 2017 has communicated that there is sufficient local capacity and local competition, only Class-I local supplier shall be eligible to bid irrespective of purchase value.

- 4.4 (b) For all other local tenders, Class-I local supplier and Class-II local supplier shall be eligible to bid irrespective of purchase value, but preference to be given as per PP-LC to the Class-I local supplier.
- 4.4 (c) Only Class-I local supplier and Class-II local supplier, as defined under the Order, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, Non-local suppliers shall also be eligible to bid along with Class-I local suppliers and Class-II local suppliers.
- 4.4 (d) Class-II local supplier will not get purchase preference in any procurement, undertaken by procuring entities.
- 4.5 In National Competitive Bid procurements of all items not covered by para 4.4 (a) and where the estimated value to be procured i.e. total value of enquiry/ tender, is less than Rs. 1 Crore shall be exempt from this Policy. In case of International Competitive Bids, the policy shall be applicable irrespective of the tender estimate. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Policy.
- 4.6 The producers of goods and/or providers of services shall be obliged to fulfil the requirements of quality and delivery time in accordance with the provisions of the respective contracts of goods and services.
- 4.7 If the Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/or other items relating to the Ministry.
- 4.8 For the purpose of para 4.7 above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or (ii) a majority of its shareholding or effective control of the entity is exercised from that country, or (iii) more than 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India.

5. Purchase Preference- Linked with Local Content (LC)

- 5.1 In procurement of all items not covered by para 4.4 (a), the following provisions may be considered for LC linked Purchase Preference:

- 5.1.1 The manufacturers/ service providers having the capability of meeting/ exceeding the local content targets shall be eligible for purchase preference under the policy, i.e. LC manufacturers/ LC service providers respectively as described below.
- 5.1.2 Wherever the goods/ services are procured under this policy, eligible (techno-commercially qualified) Class I Local supplier may be granted a purchase preference where the quoted price is within the margin of purchase preference of the lowest price, other things being equal, purchase preference may be granted to the eligible (techno-commercially qualified) Class I Local supplier concerned, at the lowest valid price bid.
- 5.1.3 Goods:** The tender for procuring goods would specify that the contract for 50% of the procured quantity would be awarded to the lowest techno-commercially qualified Class I Local supplier, subject to matching with L1, if such bidders are available. The remaining will be awarded to L1.
- 5.1.3.1 However, if L1 bidder happens to be a Class I Local supplier, the entire procurement value shall be awarded to such bidder;
- 5.1.3.2 If in the opinion of the procuring company, the tenders (procured quantity) cannot be divided in the prescribed ratio of 50:50, then they shall have the right to award contract to the eligible Class I Local supplier for quantity not less than 50%, as may be divisible.
- 5.1.3.3 In continuation to 5.1.3.2 above, if the tendered item is non divisible, (to be included in the tender document by procuring company) the contract can be awarded to the eligible Class I Local supplier for the entire quantity.
- 5.1.4 Services/ EPC Contracts:** The tender for oil and gas services/ EPC contracts shall not normally be split. For such procurement the tender would specify that the entire contract would be awarded to the lowest techno-commercially qualified Class I Local supplier, subject to matching with L1, if such bidders are available. However, tender for certain oil & gas services can normally be split, in such cases, splitting shall be allowed and specified in tender document. Such services shall follow the procedure outlined for goods as described in para 5.1.3. The procuring company should clearly specify in the tender document whether the tender shall be split or not.

5.1.5 For para 5.1.3 and 5.1.4 above, only those LC manufacturers/ service providers whose bids are within the margin of purchase preference would be allowed an opportunity to match L1 bid.

5.1.6 The tender conditions would ensure that local content in oil & gas products is encouraged. However, the procuring company may incorporate such stipulations as may be considered necessary to satisfy themselves of the production capability and product quality of the manufacturer.

5.1.7 The procedure for award under the policy is at **Enclosure-I**.

6. Determination of LC

6.1 LC of goods

6.1.1 LC of goods shall be computed on the basis of the cost of domestic components in goods, compared to the whole cost of product.

6.1.2 The criteria for determination of the local content cost in the goods shall be as follows:

- a) in the case of direct component (material), based on country of origin;
- b) in the case of manpower, based on INR component.

6.1.3 The calculation of LC of the combination of several kinds of goods shall be based on the ratio of the sum of the multiplication of LC of each of the goods with the acquisition price of each goods to the acquisition price of the combination of goods.

6.2 LC of service

6.2.1 LC of Service shall be calculated on the basis of the ratio of service cost of domestic component in service to the total cost of service.

6.2.2 The total cost of service shall be constituted of the cost spent for rendering of service, covering:

- a) cost of component (material) which is used;
- b) manpower and consultant cost; cost of working equipment/ facility; and
- c) general service cost.

6.2.3 The criteria for determination of cost of local content in the service shall be as follows:

- a) in the case of material being used to help the provision of service, based on country of origin;
- b) in the case of manpower and consultant based on INR component of the services contract;
- c) in the case of working equipment/facility, based on country of origin; and
- d) in the case of general service cost, based on the criteria as mentioned in clauses a, b, and c above.
- e) Indian flag vessels in operation as on date.

6.3 LC of the EPC Contracts:

6.3.1 LC of EPC contracts shall be the ratio of the whole cost of domestic components in the combination of goods and services to the whole combined cost of goods and services.

6.3.2 The whole combined cost of goods and services shall be the cost spent to produce the combination of goods and services, which is incurred on work site. LC of the combination of goods and services shall be counted in every activity of the combination work of goods and services.

6.3.3 The spent cost as mentioned in paragraph 6.3.2 shall include production cost in the calculation of LC of goods as mentioned in clause 6.1.1 and service cost in the calculation of LC of services as mentioned in clause 6.2.2.

6.4 Calculation of LC and Reporting

LC shall be calculated on the basis of verifiable data. In the case of data used in the calculation of LC being not verifiable, the value of LC of the said component shall be treated as nil.

7 Certification and Verification

7.1 Class I/Class II Local suppliers are eligible to bid only if they meet the local content norms, therefore whether or not they want to avail PP-LC benefit, it will still be mandatory for them to give adequate documentation as follows to establish their status as class-I or class-II local supplier:

7.1.2 At bidding stage:

- a) Price Break-up:
 - The bidder shall provide the percentage of local content in the bid.

b)

- The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
- In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall 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 practising chartered accountant (in respect of other than companies) giving the percentage of local content.
- However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practising cost accountant or practising chartered accountant giving the percentage of local content is also acceptable.

1.1.3 After Contract Award:

- The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
- In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall 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 practising chartered accountant (in respect of other than companies) giving the percentage of local content.
- However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practising cost accountant or practising chartered accountant giving the percentage of local content is also acceptable.

- 7.2 Each supplier shall provide the necessary local-content documentation to the statutory auditor, which shall review and determine that local content requirements have been met, and issue a local content certificate to that effect on behalf of procuring company, stating the percentage of local content in the good or service measured. The Auditor shall keep all necessary information obtained from suppliers for measurement of Local Content confidential.
- 7.3 The Local Content certificate shall be submitted along with each invoice raised. However, the % of local content may vary with each invoice while maintaining the overall % of local content for the total work/purchase of the pro-rata local content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.
- 7.4 As regards cases where currency quoted by the bidder is other than Indian Rupee, exchange rate prevailing on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content.
- 7.5 The Procuring Company shall also have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

8 Governance and Supervision

- 8.1 A Steering Committee will be constituted by MoPNG to provide effective guidance and to oversee the effective implementation of the Policy including review and amendments required therein. The Steering Committee may consider representations on target Local Content in goods, services and EPC and modify the policy accordingly.
- 8.2 The Steering Committee shall annually conduct a review of the policy implementation which shall specifically cover the issue of whether there has been adequate competition, and whether the policy has resulted in any reduction in competition/ exclusion of non-local bidders or any cost increase to the purchasing PSU, particularly in respect of services & works contracts.

9 Sanctions

- 9.1 The Procuring companies shall impose sanction on manufacturers/ service providers not fulfilling LC of goods/ services in accordance with the value mentioned in certificate of LC.

- 9.2 The sanctions may be in the form of written warning, financial penalty and blacklisting.
- 9.3 In the event that a manufacturer or supplier of goods and/or provider of services does not fulfil his obligation after the expiration of the period specified in such warning, the procuring company can initiate action for blacklisting such manufacturer/supplier/service provider.
- 9.4 A manufacturer and/or supplier of goods and/or provider of services who has been awarded the contract after availing Purchase Preference is found to have violated the LC provision, in the execution of the procurement contract of goods and/or services shall be subject to financial penalty specified in clause 9.4.1.
- 9.4.1 The financial penalty shall be over and above the PBG value prescribed in the contract and shall not be more than an amount equal to 10% of the Contract Price.
10. **Clarification on Goods/ Services:** Any issue regarding the coverage of a particular good/ service under the proposed policy would be referred to the Steering Committee for clarification.
11. **Powers to grant exemption and to reduce minimum local content:** Wherever proper justification exists, Ministry of Petroleum and Natural Gas may by written order, for reasons to be recorded in writing,
a) Reduce the minimum local content below the prescribed level; or
b) Reduce the margin of purchase preference below 20%; or
c) Exempt any particular item or supplying entities from the operation of this Order or any part of the Order.
12. **Time Period:** The Policy shall be applicable for 5 years. Except for 2017-18, the Policy shall not be continued unless, the Steering Committee by September 30th of each year, concludes a review as per para 8.2 of the Policy and recommends continuation of the Purchase Preference.

PROCEDURE FOR AWARD OF CONTRACTS

Procedure for award of contracts under this policy shall be as follows:

1.1. In procurement of all items which are divisible in nature, the 'Class I local supplier' shall get purchase preference over 'Class II local supplier' as well as 'Non Local Supplier' as per following procedure:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class I local supplier', the contract for full quantity will be awarded to L1.
- ii. If L1 bid is not a 'Class I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, lowest bidder among the 'Class I Local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

1.2. In the procurement of all items which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
- ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
- iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

UNDERTAKING FOR WORKS INVOLVING POSSIBILITY OF SUB-CONTRACTING
(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)

**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)

APPENDIX-I-BIT

DRILL BITS SELECTION AND SUPPLY [SUPPLY OF DRILLING BITS ON CONSIGNMENT BASIS]

The successful bidder shall supply the drill bits indicated as below on consignment basis under the following terms and conditions.

1.1 SERVICE REQUIREMENT

- 1.1.1 Supplied bit shall be from enlisted suppliers approved by competent authority of OIL as shown below:

Sl No	PDC BITS		ROCK BITS FRO DRILLING BELOW 3000 MTRS DEPTHS	ROCK BITS FRO DRILLING BELOW 3000 MTRS DEPTHS
	8½	12¼		
	CATEGORY-I		CATEGORY-II	CATEGORY-III
1	M/s SIMI Oilfield Technology and Products FZE		M/s SIMI Oilfield Technology and Products FZE	M/s SIMI Oilfield Technology and Products FZE
2	M/s Baker Hughes		M/s Baker Hughes	M/s Baker Hughes
3	M/s NOV Downhole Eurasia Ltd		M/s NOV Downhole Eurasia Ltd	M/s NOV Downhole Eurasia Ltd
4	M/s Haliburton		M/s Haliburton	M/s Haliburton
5	M/s Ulterra Drilling Technologies, LP		M/s TIX-TSK Corporation	M/s Drillbits International
6	-		-	M/s TIX-TSK Corporation
7	-		-	M/s Varel

- 1.1.2 Bidder must supply 6", 8½", 12¼ "and 17½" size (s) TCR, Insert and PDC Bits on Annualised and Assorted Consignment Basis. Detail break up of assorted types will be decided by OIL in consultation with IDS co-ordinator. Subsequent quantities of drill bits are to be delivered at Duliajan within **45 (forty-five) days of issue of order for replenishment quantity of drill bits.**

In case of unavailability of requisite bit, OIL may provide bit. However, a penalty shall be levied equal to 1.5 time of the price of the bit as decided by OIL considering all other cost.

- 1.1.3 The bits are to be kept under custody of the service provider at Duliajan and shall keep proper stock records of the bits i.e. record of movement; inventory at base (Duliajan), on transit to & from the Rig & inventory at Rig etc. IDS coordinator shall be responsible for aforesaid job and Bit runner will provide all support in this regard.
- 1.1.4 Required quantities of each type of bit shall be drawn from the stock maintained by bidder. Selection of suitable bit of any size from the available lot of bits will be recommended and approved by the company.
- 1.1.5 OIL at its discretion may decide to use its own bits during any phase of operation for cement cleaning.

- 1.1.6 Proper look ahead to be prepared for bit requirement in weekly/fortnightly/monthly/quarterly/half yearly/annually for ensuring availability of bits with all respect for drilling in all sections without any shortage, however, the stock must be optimised to avoid cost overrun. IDS coordinator shall be responsible for aforesaid job and Bit runner will provide all support in this regards.
- 1.1.7 Each bit must be supplied with following accessories as per the drilling requirement without any upper limit:
- a) Extra nozzles complete with required 'O' rings, circlips etc.
 - b) Nozzles Replacement Kit
 - c) Bit Breaker, wherever required.
 - d) Bit Box for proper storage and carry.
 - e) Any other accessories required to make the bit ready for use.
- 1.1.8 Bit cost shall be inclusive of the set of nozzles.
- 1.1.9 Minimum indicative nozzles including centre nozzles to be provided within the range of 11/32 inch and 24/32 inch, but not limited.
- 1.1.10 Nozzles (numbers and size) are to be provided by the contractor as per hydraulics requirement for the respective bit size and hole section.
- 1.1.11 **Equivalent IADC Codes against each quoted bit (TCR, Insert as well as PDC) are to be categorically mentioned in the offer. All the information including special feature (if any) are to be provided against each type of bit offered. Bit catalogue & Spec Sheet of each type of quoted bit are to be provided along with the bid, which must include bit specific operating parameters and characteristics.**
- 1.1.12 **Manufacture must have valid API Spec 7-1 Certificate and the same is to be forwarded with the offer.**
- 1.1.13 **Literature / Catalogue of the products offered to be submitted with the offer.** Bid should be complete in all respects covering entire scope of job / supply and should meet the technical specifications indicated in the bid document, duly supported with technical catalogue / literatures, wherever applicable. Incomplete and non-conforming bids will be rejected outright.
- 1.1.14 Bidder should identify/select two types of their best TCR, Insert and PDC Bits for drilling each section of 17½", 12¼", 8½" and 6 " hole size as applicable and quote accordingly in order of their preference in price bid format provided in the tender separately for each hole size.
- 1.1.15 The offered bits should be compatible with the formation(s) to be drilled and for rotary as well as SDMM-MWD-LWD and Mud Services provided under the services.
- 1.1.16 The compressive strength of four fields where the bits to be used is provided in **APPENDIX-BIT: COMPRESSIVE STRENGTH** in order to select and optimize the design of the offered bits during bidding, the bidder may ask for additional data viz offset bit records, mud logs, etc.

- 1.1.17** OIL (Oil India Limited, Operator) will use the bits from the lot/ consignment as required and the remaining **unused bits** shall be taken back by the service provider at their own cost.
- 1.1.18** As bit is a part of service and disposed of all used bit shall be responsibility of the bidders at their own cost.
- 1.1.19** Bidder should also note that there shall be no minimum guaranteed off-take by OIL. Payment shall be released by OIL only for the actual quantity consumed.
- 1.1.20** IDS coordinator shall be responsible for return of unused bit.
- 1.1.21** No Mobilisation and/or Demobilisation for the Bit-consignment is applicable.

1.2 INDICATIVE TECHNICALS OF BIT

1.2.1 POLY CRYSTALLINE DIAMOND COMPACT BIT

A very indicative requirement, but not limited are given below.:

- a) Bit Size : 311.15 mm (12¹/₄")
- b) Pin Size : 168.275 mm (6⁵/₈") API Regular
- c) Feature : MATRIX Body, Replaceable nozzles, PDC cutter with high thermal mechanical integrity, Gauge protection features (Thermally Stable Diamond inserts on the gauge), Low torque feature (Depth of Cut control elements at every blade), Low Exposure Cutter, impact arrestors, back reaming cutters on gauge pads on each blade and spiral gauze pad.
- d) Total cutter count : 35 or more
- e) Number of cutter Blades : 05 or more
- f) Cutter Size : 19 mm
- g) Cutter Type : New Generation Premium cutters like Rockstorm / Onyx-II / Stay Sharp / Select TMI / Helios Inferno/ ReflektorTM
- h) Gauge Length : Around 3 inches
- i) Junk Slot Area, in square inch : Minimum 29
- j) Number of nozzles : 8 or more for efficient hole cleaning
- k) Replaceable Nozzles Size : As per manufacturer's standard to meet the drilling parameters stated below for optimum hydraulics.
- l) Bit should be suitable to drill formations whose compressive rock strength varies from **2000 to 9000 psi in depth range from 1500 meters to 3500 meters** and should be compatible to following Drilling Parameters: (Bidder to provide documentary evidence in the form of minimum 20 bit runs)
 - Rotational Speed: 50-300 RPM (i.e., suitable for rotary, SDMM and RSS)
 - Flow Rate : 500-1200 GPM.
 - WOB : 3-18 Ton.
 - Hydraulic Horsepower : 1 to 6 (indicative figure)

1.2.2 MILLED TOOTH ROLLER CONE BIT

8¼ inches High Performance Milled Tooth Roller Cone Bit (IADC Code: 1-3-7) beyond 3000 m+

- a) Maker's Type Designation: Similar or equivalent to Model-GFDHCPS of Smith Bits/Model-EQHC3GRC of Halliburton Drill Bits.
- b) IADC:1-3-7 or 1-3-7W (Suitable for both Rotary and motor application with minimum **Krev of around 750**)- Bidder to provide documentary evidence in the form of minimum 20 bit run records, out of which at least five such records should be from wells drilled in Indian sub-continent, for supplementing the Krev.
- c) Rotary Speed, RPM: 50-300
- d) WOB: 15,000-45,000 lbf (7-20 tonnes)
- e) Flow Rate: 350 GPM-600 GMP
- f) Bit Size: 8.1/2" (215.9mm)
- g) Pin Size: 4.1/2" API Regular (114.3mm)
- h) The Bit should be designed with the following minimum features:
 - Directed nozzles for engineered hydraulic (For optimal cleaning efficiency).
 - Centre Jet feature to avoid balling.
 - Twin seals or metal seals bearing package (Preferably dual compensation system).
 - Oxy-Acetylene Premium full tooth hardfacing on each tooth (Cutting structure and gauge).
 - Tungsten carbide inserts on Heel/Surf area of the bit.
 - Raised tungsten carbide inserts on shirrtail/arm for providing protection in directional drilling application and abrasive environment. Semi round top tungsten carbide inserts leg back protection.

1.3 **12¼" inches High Performance Milled Tooth Roller Cone Bit (IADC Code: 1-3-7) beyond 3000 m+**

Maker's Type Designation: Similar or equivalent to Model-GFDHCPS of Smith Bits/Model-EQHC3GRC of Halliburton.

- a) Drill Bits IADC:1-3-7 or 1-3-7W (Suitable for both Rotary and motor application with minimum Krev of around 1000)- Bidder to provide documentary evidence in the form of minimum 20 bit run records, out of which at least five such records should be from wells drilled in Indian sub-continent, for supplementing the Krev.
- b) Rotary Speed, RPM: 50-300
- c) WOB: 15,000-45,000 lbf (7-20 tonnes)
- d) Flow Rate: 500 GPM-850 GMP
- e) Bit Size: 12.1/4" (311.15mm)
- f) Pin Size: 6.5/8" API Regular (168.28mm)
- g) The Bit should be designed with the following minimum features:

- Directed nozzles for engineered hydraulic (For optimal cleaning efficiency).
- Centre Jet feature to avoid balling.
- Twin seals or metal seals bearing package (Preferably dual compensation system).
- Oxy-Acetylene Premium full tooth hardfacing on each tooth (Cutting structure and gauge).
- Tungsten carbide inserts on Heel/Surf area of the bit.
- Raised tungsten carbide inserts on shirrtail/arm for providing protection in directional drilling application and abrasive environment. Semi round top tungsten carbide inserts leg back protection.

1.4 12¼ inches High Performance Milled Tooth Roller Cone Bit (IADC Code: 1-1-7)

- a) Maker's Type Designation: Similar or equivalent to Model - XR+CPS of Smith Bits / Model - EQHC1GRC of Halliburton Drill Bits
- b) IADC: 1-1-7 or 1-1-7W (Suitable for both Rotary and motor application with minimum Krev of around 850)
- c) Rotary speed, rpm : 55 - 250
- d) WOB : 16 Klbs - 65 Klbs
- e) Flow Rate : 500 gpm - 850 gpm :
- f) Bit Size : 12.1/4" (311.15 mm)
- g) Pin Size: 6.5/8" API Regular (168.28 mm)
- h) The bit should be designed with the following minimum features:
 - Directed nozzles for engineered hydraulic (For optimal cleaning efficiency)
 - Centre jet feature to avoid bit balling
 - Premium bearing package
 - Premium full tooth hard facing on each tooth (cutting structure and gauge)
 - Tungsten carbide inserts on Heel / Surf area of the bit
 - Raised tungsten carbide inserts on shirrtail / arm for providing protection in directional drilling application and abrasive environment. Semi round top tungsten carbide inserts leg back protection.

1.5 DRILL BIT FIELD ENGINEER OR FIELD SERVICE SPECIALIST OR BIT RUNNER

i) CATEGORY

Competent official as described in regulation (21), i.e. Appointment of officials and competent persons.

ii) JOB SPECIFICATION

He shall monitor the bit performance and assist to select best to optimize the drilling performance as per contract.

iii) **ESSENTIAL QUALIFICATIONS/REQUIREMENTS**

- a) Degree/ diploma/science graduate from any recognised university/Board
- b) Should have 3 - 10 years of field/engineering experience in Drilling, Bit Applications, MWD, or Field Engineering and will have an engineering degree.
- c) Excellent communication and presentation skills.

iv) **JOB RESPONSIBILITY**

- a) He will supervise make up/break of bit and nozzles as per the advice of Company or IDS coordinator.
- b) Plan and optimize bit hydraulics.
- c) Identify drill-ability issues and root cause analyses with respect of the bit(s).
- d) Investigate unusual or unsatisfactory product performance to determine root cause and preventative action, prepare and present solutions as per the advice of OIL
- e) He will assist IDS coordinator to monitor bit inventory and plan look ahead.
- f) He will record bit performance in drilling in a standard format prepared by the contractor and approved by OIL.
- g) He shall prepare documents for transportation of Bits on vehicles in accordance with applicable statute/government guideline/OILs requirement.
- h) He interfaces with the Directional Driller (DD) to ensure BHA compatibility, planned operating parameters to optimise the bit performance.
- i) He shall comply with all safety rules and company policies.
- j) He shall submit comprehensive bit report in hard and soft form with all drilling performance data depth and formation wise (using pictorial graph), bit condition and nozzle condition along with image of used bit to demonstrate its conditions counter signed by IDS coordinator against each used bit in a standard format prepared by the contractor and approved by OIL.

1.6 Details and Documents to be submitted:

1.6.1 SALES VOLUME

Number of bits supplied globally in proposed bit types (Basic Configuration- Bit Technology, Blade Count and Cutter Size) in last three years (2018, 2019 and 2020) Purchase / Invoice Reference with serial numbers and customer name in PDF Format

1.6.2 Annual report or any Published document indicating the type of bit and its sale volume.

1.6.3 Following information is to be provided against each size of TCR/INSERT/PDC bits (viz. 17½", 12¼", 8½" and 6"). The information required is for the last three years.

Sl No	Bits	Performance of Bits	Any published authentic document	Supporting Documents enclosed	Bit records
1	Best Five Performances of proposed 17½" TCR bits in last three years ((2018, 2019 and 2020) (Basic Configuration- Bit Technology, Blade Count and Cutter Size				
2 (a)	Best Five Performances of proposed 12¼" TCR and PDC bits in last three years ((2018, 2019 and 2020) (Basic Configuration- Bit Technology, Blade Count and Cutter Size)				
2(b)					
3(a)	Best Five Performances of proposed 8½" TCR/PDC/Insert bits in last three years (2018, 2019 and 2020)) (Basic Configuration- Bit Technology, Blade Count and Cutter Size)				
3(b)					
3(c)					
4(a)	Best Five Performances of proposed 6" PDC bits in last three years ((2018, 2019 and 2020) (Basic Configuration- Bit Technology, Blade Count and Cutter Size				
4(b)					
4(c)					

Note:

- (i) Bidder has to supply bit at drilling location without any additional cost other than the quoted rate in SOR.
- (ii) OIL may outright purchase suitable left-over bits at the end of contract period, at the sole discretion of OIL in a mutually agreed price but not more than the quoted price. Quantity of bits retained at the end of contract period shall not exceed the initially ordered quantity against the contract.

SPECIFICATION OF SOME CHEMICALS FOR INTEGRATED DRILLING SERVICE-2

1. BARYTES:

- 1.1.** Physical Properties: The material as received shall be white/light greyish white/light pinkish white free flowing powder, free from dirt and foreign matter.
- 1.2.** Specific Gravity of material: 4.15 as received, at 26 +/- 2 deg C minimum.
- 1.3.** 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
- 1.4.** Insoluble Minus Silica % by mass, minimum. : 90.00
- 1.5.** Water Soluble Content: 0.02% by mass, maximum.
- 1.6.** 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 deg C. 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 deg C. This should be as follows.
 - (a) Apparent Viscosity, cp, maximum: 60. [Apparent viscosity to be measured by a Fann VG meter.]
- 1.7.** Packing: The material should be packed in brand new Double-Walled (DW) jute bags with single polythene lining or brand-new HDPE bags strong enough to with stand rigorous of transit and storage. Capacity: 50 Kilogram (new) per bag.
- 1.8.** Markings: Each bag should have clear legible markings as given below:
 - (a) Name of the product.
 - (b) Name of the supplier/manufacturer.
 - (c) Date/Month/Year of manufacture.

2. SODIUM HYDROXIDE (CAUSTIC SODA)

- 2.1.** Physical properties: The material, as received, should be in the form of flakes and should be free from dirt and foreign matter.
- 2.2.** Purity as NaOH, as received, 95.00 % by mass, minimum.
- 2.3.** 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 rigors of transit and storage.
- 2.4.** The material should be supplied in the original packing of manufacturer. Capacity 25 kgs / 50 kgs net per bag.

2.5. Marking: Each bag should have clear legible markings as given below:

- (a) Name of the product.
- (b) Name of the supplier.
- (c) Date/month/year of manufacture.
- (d) Supply order number against which the supply is made.

3. **CLAY ENCAPSULATING/VISCOSIFYING AGENT :**

PHPA (PARTIALLY HYDROLYSED POLYACRYL AMIDE)

3.1. Physical Properties: The material, as received, should be a free-flowing white powder free from lumps and other impurities.

3.2. Moisture Content, measured by drying at 105 +/- 2 deg C, % by mass, maximum: 7.00

3.3. Ionic character: Anionic

3.4. Relative CST value (capillary suction test)

- (a) At 0.1% (w/v) polymer conc., min: 100
- (b) At 0.2% (w/v) polymer conc., min: 200

3.5. Relative dispersibility at 0.2% (w/v) polymer conc. at 60 +/- 5 deg C., max. : 175

3.6. Degree of hydrolysis: 20-40% (electrometric titration)

3.7. Apparent viscosity of 0.2% (w/v) polymer solution in distilled water.

- (a) At 26 +/- 2 deg C, cp, and minimum: 9
- (b) After aging at 110 deg C for 18 hrs.: Should not decrease more than 20% of (i)

3.8. Effect on 4 cp bentonite suspension: Prepare a 7.5% (w/v) bentonite suspension in distilled water and stir in a multimixer for 15 minutes so that no lumps are left after the stirring period. Age the suspension at 26 +/- 2 deg C 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 deg C.

- (a) Apparent viscosity should be 15 cp minimum Age the suspension at 110 deg C for 24 hrs in rolling condition. After the ageing period cool and stir for 15 minutes in multimixer. Measure apparent viscosity of the suspension at 26 +/- 2 deg C.
- (b) Decrease of apparent viscosity 20% max. of 8(i).

3.9. Calcium tolerance: Prepare a 0.4% (w/v) suspension of the PHPA sample in distilled water by stirring in a multimixer for 15 min.

- (a) Record apparent viscosity of the PHPA solution. Prepare again a 0.4% (w/v) suspension of the PHPA sample in 100 ppm Calcium solution by mixing in a multimixer. Measure apparent viscosity of the solution.
- (b) Apparent viscosity should be 60% minimum of 9(i)

3.10. Packing:

- (a) The material should be packed in multiwall paper bags with at least two innermost layers suitably waterproofed, strong enough to withstand rigours of transit and storage. Capacity 25 Kgs net per bag.
 - (b) PELLETIZATION:-If supply is from foreign source, the supply should be in suitably pelletized forms.
- 3.11. Markings** - Each bag should have clear legible markings as given below :
- (a) Name of the product
 - (b) Name of the supplier
 - (c) Date/month/year of manufacture
 - (d) Supply order number against which the supply is made.

4. FLUID LOSS CONTROL / VISCOSIFIER / ENCAPSULATING AGENT

"POLYANIONIC CELLULOSE REGULAR GRADE (PAC-R)"

- 4.1. Physical Properties:** The material, as received, should be a free flowing white to creamish / brownish white powder free from foreign matter and visible impurities.
- 4.2. Moisture Content** at 105 +/- 2 Deg C, % by mass, maximum: 15.00.
- 4.3. 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 gms of LR grade NaCl in 100 ml distilled water) and measure apparent viscosity at 26 +/- 2 Deg C by Fann VG meter.
 - (a) Apparent viscosity in fresh water, cp : 75-100
 - (b) Apparent viscosity in salt water, cp : 65-85
- 4.4. 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 % salt water (prepared by dissolving 4 gms of LR grade NaCl in 100ml distilled water) and calculate the yield of the sample which should be as follows:
 - (a) Yield in distilled water, KL/MT, min.: 250
 - (b) Yield in 4 % saltwater KL/MT, min.: 200
- 4.5. Sodium Carboxy Methyl Cellulose Content**, % by mass (dry basis) min: 85.00.
- 4.6. Degree of Substitution**, minimum: 1.00
- 4.7. Performance Test:**
 - (A) IN FRESH WATER MUD**
 - (a) PREPARATION OF BASE MUD:**

Prepare a 10 % (w/v) suspension of OIL 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 Deg C. 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 Deg C which should be as follows:

- (i) Apparent viscosity, cp: 15 - 20 cp.
- (ii) Yield value, lbs/100 ftsq: To determine
- (iii) API fluid loss, ml: To determine

(b) **PREPARATION OF TREATED MUD:**

Treat the base 4.7(A)(a) with 0.5% polyanionic cellulose (R) 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 Deg C which should be as follows.

- (i) Apparent viscosity, cp minimum. : 4 times of 4.7A (a.i)
- (ii) Yield value, lb/100 ftsq. minimum : 4 times of 4.7A (b,i)
- (iii) API fluid loss, ml maximum. : 40 % of 4.7A (c,i)

Performance at 120 +/- 2 Deg C :

Age second part of treated mud 4.7(A)(a) at 120 +/- 2 Deg C 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 Deg C which should be as follows:

- (i) Apparent viscosity, cp minimum. : 3 times of 4.7A (a.i)
- (ii) Yield value, lb/100 sq.ft minimum. : 3 times of 4.7A (b.i)
- (iii) API fluid loss, ml, maximum. : 40 % of 4.7A (c.i)

(B) IN SALT- WATER MUD:

(a) **PREPARATION OF BASE MUD:**

Prepare 10 % (w/v) bentonite suspension of OIL 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 Deg C After the lapse of aging period, cool and add 4% (w/v) NaCl (LR grade) and age for 24 hrs. at 26 +/- 2 Deg C. 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 Deg C which should be as follows:

- (i) Apparent viscosity, cp: 15 - 20
- (ii) Yield value, lbs/100 ftsq. : To determine
- (iii) API fluid loss, ml: To determine

Treat the base mud prepared as per the B(a) with 0.5%(w/v) polyanionic cellulose (R) sample and stir in a multi-mixer for 30 minutes.

Performance at 26 +/- 2 Deg C.

Determine apparent viscosity, yield value and API fluid loss of mud 4.7B
(a) above at 26 +/- 2 Deg C which should be as follows:

- (i) Apparent viscosity, cp minimum. : 2 times of 4.7B (a.i)
- (ii) Yield value, lb/100 ftsq minimum. : 1.5 times of 4.7B(b.i)
- (iii) API fluid loss, ml maximum: 15 % of 4.7B(c.i)

4.8. Packing:

- (a) The material should be packed in multi-walled paper bags with at least two innermost layers suitably water-proofed, strong enough to withstand rigours of transit and storage. The material should be supplied in the original packing of the manufacture. Capacity 25 Kg net per bag.
- (b) PELLETIZATION:-If supply is from foreign source, the supply should be in suitably pelletized forms.

4.9. Marking: Each bag should have clearly legible markings as given below:

- (a) Name of the product.
- (b) Name of the supplier / manufacturer.
- (c) Date/Month/Year of manufacture.
- (d) Supply order number against the supply made.

Note

- (i) Apparent viscosity and yield point shall be determined in a Fann VG meter and fluid loss by standard API low pressure fluid loss apparatus using compressed air or nitrogen as the pressure source.
- (ii) The Supplied Materials must meet OIL's specifications in all respect.

5. FLUID LOSS CONTROL AGENT

POLYANIONIC CELLULOSE - SUPERLO GRADE (PAC-SL)

5.1. Physical Properties: The material, as received, should be a free flowing white to creamish/brownish white powder free from foreign matter and visible impurities.

5.2. Moisture content, measured by drying deg C, % by mass, maximum. : 15.00 at 105+/- 2

5.3. 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 deg C by a Fann VG meter.

- (a) Apparent viscosity in fresh water, cp, max.: 20
- (b) Apparent viscosity in salt water, cp, max.: 16

5.4. 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% salt water

(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 :

- (a) Yield in distilled water, KL/MT, minimum: 100
- (b) Yield in 4% salt water, KL/MT, minimum : 80
- 5.5. Sodium carboxymethyl cellulose content, on dry basis, % by mass, (on dry basis), minimum: 85.00
- 5.6. Degree of substitution, minimum: 1.00
- 5.7. Performance test:

(A) IN FRESH WATER MUD

(a) PREPARATION OF BASE MUD:

Prepare a 10.0% (w/v) suspension of OIL 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 deg C. 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% 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 deg C which should be as follows.

- (i) Apparent viscosity, cp : 15-20
- (ii) Yield value, lbs/100 ftsq : To determine
- (iii) API fluid loss, ml : To determine

(b) PREPARATION OF TREATED MUD:

Treat the base mud 5.7.A(a) 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 deg C

Measure apparent viscosity, yield value and API fluid loss of one part of the treated mud 7A(ii) at 26+/-2 deg C which should be as follows.

- (i) Apparent viscosity, cp, max. : 2.5 times of 5.7A (a.i)
- (ii) Yield value, lbs/100ftsq, max. : 1.5 times of 5.7A (b.i)
- (iii) API fluid loss, ml, max. : 50% of 5.7A (c.i)

Performance at 120+/-2 deg C

Age second part of the treated mud A (a) 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 deg C which should be as follows:

- (i) Apparent viscosity, cp, max. : 1.5 times of 5.7A (a.i)
- (ii) Yield value, lbs/100ftsq, max : 1.5 times of 5.7A (b.i)

- (iii) API fluid loss, ml, max. : 35% of 5.7A (c.i)

(B) IN SALT-WATER MUD

(a) PREPARATION OF BASE MUD:

Prepare a 105% (w/v) suspension of OIL 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 deg C. After the lapse of the aging period, cool and add 4% NaCl (w/v) (LR grade) and age for 24 hrs. at 26+/-2 deg C. 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 deg C which should be as follows.

- (i) Apparent viscosity, cp: 15 - 20
- (ii) Yield value, lbs/100 ftsq: To determine
- (iii) API fluid loss, ml: To determine

Treat the base mud prepared as per 5.7B(a) with 0.5% (w/v) of polyanionic cellulose (superlo grade) sample and stir for 30 minutes in a multimixer.

Performance at 26+/-2 deg C

Determine apparent viscosity, yield value and API fluid loss of the treated mud B(ii) at 26+/-2 degC which should be as follows:

- (i) Apparent viscosity, cp, min. : 2 times of 7B,ia
- (ii) Yield value, lbs/100ftsq, min : 1.5 times of 7B,ib
- (iii) API fluid loss, ml, max. : 15% of 7B, ic

5.8. Packing:

- (a) The material should be packed in multiwalled paper bags with at least two innermost layers suitably waterproofed, strong enough to with stand rigours of transit and storage.
- (b) PELLETIZATION:-If supply is from foreign source, the supply should be in suitably pelletized forms.

5.9. Each bag should have clear legible marking as given below :

- (a) Name of the product
- (b) Name of the supplier
- (c) Date/month/year of manufacture
- (d) Supply order number against which the supply is made.

Note

- (i) Apparent viscosity will be measure by a Fan VG meter and API fluid loss will be measured in standard API fluid loss apparatus using compressed air or nitrogen as pressure source.

- (ii) The Supplied Materials must meet OIL's specifications in all respect.

6. XC POLYMER- DISPERSIBLE (XCD)

- 6.1.** Physical Properties: The material, as received, should be a free flowing white to creamish / brownish white powder free from foreign matter and visible impurities.
- 6.2.** Moisture Content, measured by drying at 105 +/- 2 degC, % by mass, maximum: 15.00.
- 6.3.** Dispersibility / Solubility Test: The material should be quickly and easily dispersible in water when sprayed in water taken in a 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.
- 6.4.** 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 for 30 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 deg C which should be as follows:
- 6.5.** Apparent viscosity, cp : 15 - 25
- 6.6.** "0" minute gel, lbs/100 ftsq, minimum: 8
- 6.7.** "N" value at 200 & 100 rpm of Fann VG meter or equivalent, maximum.: 0.40
- 6.8.** 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 at 26 +/- 2 deg C which should be as under: Apparent viscosity, cp, minimum: 40
- (a) Yield value, lbs/100 ftsq, minimum: 40
- (b) "0" minute gel, lbs/100ftsq, minimum : 20
- (c) "15" minute gel, lbs/100 ftsq, minimum : 100
- 6.9.** 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 with 1N NaOH solution. Add to it 3% of the OIL approved bentonite powder and stir for 30 minutes. Determine apparent viscosity; yield value and API fluid loss of the mud at 26 +/- 2 deg C.
Age the treated mud at 100 +/- 2 deg C 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 deg C which should be as under:
- (a) Apparent viscosity, cp : should not decrease
- (b) Yield value, lbs/100 ftsq : should not decrease

(c) API fluid loss, ml : should not increase

6.10. 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 1N NaOH solution. Record apparent viscosity and yield value of suspension at 26 +/- 2 deg C.

Age the solution in a roller oven in rolling condition at 120 +/- 2 deg C for 18 hrs. Cool and stir for 5 minutes. Measure apparent viscosity and yield value of the solution at 26 +/- 2 deg C which should be as under:

(a) Apparent viscosity, cp : should not decrease

(b) Yield value, lbs/100 ftsq : should not decrease

6.11. 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.

6.12. Packing:

(a) The material should be packed in multiwalled paper bags with at least two innermost layers are suitably waterproofed strong enough to withstand rigours of transit and storage. Pack Size: 25KG net per bag.

(b) PELLETISATION:-If supply is from foreign source, the supply should be in suitably pelletized forms.

6.13. Markings:

Each bag should have clear legible markings as given below:

(a) Name of the product/brand name

(b) Name of the supplier/manufacture (Name of manufacturer must be marked on the bags in case the product is not branded).

(c) Date/month/year of manufacture

(d) Supply order number against which the supply is made.

Note

(i) Apparent viscosity and yield value will be measured by a Fann VG meter or equivalent and API fluid loss will be measured in standard API fluid loss apparatus using compressed air or nitrogen as pressure source.

(ii) The Supplied Materials must meet OIL's specifications in all respect.

7. MICRONIZED CALCIUM CARBONATE

7.1. Physical State-Fine Powder free from dirt & foreign matter.

7.2. Water soluble content-0.35 % (by weight) max.

7.3. Specific gravity at 24 +/- 2 deg C -2.6(min).

7.4. Purity as Calcium Carbonate-96% by weight min.

7.5. Solubility in 15% wt/wt HCl-96% by weight min.

- 7.6. Particle size distribution % by volume as measured by light scattering technology- D10- < 4 micron; D50- 4-15 micron; D90-15-60 micron. Particle retain on 200 meshes ASTM- 2% by weight max.
- 7.7. Packing: Moisture proof HDPE/Jute bag with polythene inner lining (100 gauge) strong enough to withstand rigours of transit and storage, capacity 50 kg net per bag.
- 7.8. 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
 - (d) Supply order number against which supplies are made

8. **POLYAMINE**

- 8.1. Physical Properties: The material as received shall be in the form of colourless/pale yellow liquid and shall be free from visible impurities. Should be determined visually.
- 8.2. Miscibility with Water at 24 ± 2 Deg C: Prepare a 2% (v/v) of the sample solution in distilled water, which gives a clear single-phase solution.
Miscibility with Water at 24 ± 2 Deg C should be completely miscible.
- 8.3. Miscibility with 3% KCL solution at 24 ± 2 Deg C:
Prepare a 2% (v/v) of the sample solution in 3%kcl solution, which gives a clear single-phase solution.
Miscibility with 3% KCL solution at 24 ± 2 Deg C should be completely miscible.
- 8.4. Specific Gravity at 24 ± 2 Deg C: It should be between 1.01-1.1.
- 8.5. Qualitatively determine Na^+ , K^+ and Ca^{++} in 2%
CHS/Polyamine in distilled water: All three elements absent.
- 8.6. Chemical assay (Reinecke salt gravimetric method): ≤ 20.0 % By mass.
- 8.7. Swelling test: 2% (w/v) solution of the sample by Linear Swell Meter against Bentonite pellets compressed to 10,000 psi in a 2 hrs test: ≤ 24.0 %.

8.8. **CLAY HYDRATION SUPPRESSION**

(a) **BASE MUD**

Take 450ml of distilled water and add 45 g of bentonite powder and stir the mixture in silverson High Shear mixture for 30 minutes at medium speed. Determine apparent viscosity at 24 ± 2 degC which should be as follows.

Specification: Apparent Viscosity, cp: To determine.

(b) **TREATED MUD:**

Take 450ml of distilled water and add 45 g of bentonite powder, and stir the mixture in silverson High Shear mixture, and add 2% (w/v) of the sample and stir for 30 minutes at medium speed. Determine apparent viscosity at 24 ± 2 degC which should be as follows.

Specification: Apparent Viscosity, cp: Should not be more than 15% of the base mud.

8.9. METHYLENE BLUE CAPACITY

(a) BASE MUD

Hydrate 20g/350ml bentonite in distilled water for 24 hours at room temperature. Take 2 ml of the slurry add 5ml of Distilled water and stir in mixer for 30 min. Record the methylene blue capacity with the help of methylene blue solution.

Specification: Methylene blue Capacity, ml: to determine

(b) TREATED MUD

Hydrate 20g/350ml bentonite in distilled water for 24 hours at room temperature. Take 2 ml of the slurry add 5ml of Distilled water, add 5ml of 2% amine solution in distilled water and stir in mixer for 30 min. Record the methylene blue capacity with the help of methylene blue solution (as mentioned in sub procedure Chem Lab/Mud/sub/MBC/06.

Specification: Methylene blue Capacity, ml: 65% (max) of bentonite slurry.

8.10. PACKING: The material should be packed in 200 Kg plastic Jar/Drum strong enough to withstand rigors of transportation and storage.

8.11. MARKING:

Each drum shall have clear legible marking as given below:

- (a) Name of the product:
- (b) Name of the supplier:
- (c) Date/Month/ year of manufacture.
- (d) Supply order number against which supplies are made

9. POLYOL

POLYOL (LOW TEMPERATURE) HAVING FOLLOWING SPECIFICATIONS:

- 9.1. Physical State: The material shall be in the form of liquid at 24 ± 2 °C, free from visible impurities.
- 9.2. pH of 3% (v/v) Sample in 10% (w/v) KCl Solution in Distilled water : 6.0 - 7.5
- 9.3. Surface Tension of 3% (v/v) Sample in 10% (w/v) KCl Solution in Distilled Water, dynes / cm³. 40 ± 5
- 9.4. Hydroxyl Value, mg KOH / g of Sample: 170 – 210
- 9.5. Iodoform Test for Confirmation of Presence of alpha carbon in Sample: Should be Positive.
- 9.6. Performance Test:

(a) 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 (10% 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.
- (b) 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.
 - (c) **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.
 - (d) Apparent Viscosity of the treated hot rolled base mud should not be less than the value obtained for hot rolled base mud 6 (ii). Yield Point of the treated hot rolled base mud should not be less than the value obtained for hot rolled base mud 6 (ii). 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). 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). Cloud Point of 3% (v/v) Sample in 10% (w/v) KCl in Distilled Water, °C: 75-87.

10. **POTASSIUM SULPHATE:**

- 10.1. Physical Properties: The material shall be in the form of crystalline solid or powder, free from visible impurities.
- 10.2. Moisture Content at 105 +/-2 deg C, % by mass: 2.00(Maximum)
- 10.3. Matter Insoluble in Water on Dry Basis, percent by mass: 0.5(Maximum)
- 10.4. Calcium as Ca++ on Dry Basis, ppm: 2000 (Maximum) 5. Purity as Potassium Sulphate on Dry Basis, percent by mass: 96.0 (Minimum)
- 10.5. Packing: The material should be packed in polythene bag (100 gauge) which in turn should be packed in HDPE bag strong enough to withstand rigorous of transit and storage. The material should be supplied in the original packing of the manufacturer Capacity 50 kg net per bag.
- 10.6. Marking: Each bag shall have clear legible markings as given below:
 - (a) Name of the product
 - (b) Name of the supplier
 - (c) Date/Month/Year of manufacture
 - (d) Supply order number against which the present supply is made

11. **POTASSIUM CHLORIDE:**

To use in water base drilling fluids to make potassium-based mud.

- 11.1. Physical Properties: The material as received should be a crystalline solid/powder and white in colour, free from dirt and foreign matter.
- 11.2. Moisture Content at 105 +/-2 DegC, % by mass, maximum: 2.00
- 11.3. Matter Insoluble in water, (on dry basis), % by mass maximum: 0.50
- 11.4. Calcium Content,(on dry basis) ppm, maximum. : 2000.00
- 11.5. Purity as Potassium Chloride,(on dry basis), % by mass, min. :97.00
- 11.6. Packing :
 - (a) 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.
 - (b) **PELLETIZATION**:-If supply is from foreign source, the supply should be in suitably pelletized forms.
- 11.7. Marking : Each bag shall have clear legible markings as given below :
 - (a) Name of the product.
 - (b) Name of the supplier.
 - (c) Date/Month/Year of manufacture.
 - (d) Supply order number against which the present supply is made.

12. **NIF (500 PSI):**

- 12.1. Physical Properties: The material shall be a free flowing powder, free from visible impurities
- 12.2. Moisture Content at 105 +/-2 DegC, % by mass, maximum.: 10.0 (Maximum)
- 12.3. pH of 5% (w/v) Solution of the Material in Distilled Water at 24 ± 2 degC: 7.0 ±1.0
- 12.4. Sieve Analysis: Residue on 100 mesh(ASTM) screen after sieving @3000 vibrations/minute for 10 mins, *Percent by mass*: 15 (maximum)
- 12.5. Loss on ignition: Residue left in Silica crucible after heating in muffle furnace for 2 hours at 600°C , percent by mass: 10 (maximum)
- 12.6. Yield point of base mud, lbs/100 sq ft: To be recorded
- 12.7. Yield point of hot rolled (100° C for 16 hours) base mud, lbs/100 sq ft: Not more than Sl. No 6
- 12.8. API filter loss of hot rolled (100° C for 16 hours) base mud, ml: To be recorded
- 12.9. Invasion test of hot rolled (100° C for 16 hours) base mud in sand bed test cell at 500 psi for 30 minutes, cm: To be recorded

13. **HP LUBRICANT:**

- 13.1. Physical Properties: The material shall be a free-flowing liquid at 24±2 °C, free from visible impurities.
- 13.2. Lubricity coefficient of the treated NDDF (Composition: Distilled water + KCl 5% (mixing time 5 min.) + Biocide-1000 ppm (mixing time 5 min.) + Xanthan Gum 0.45% w/v (mixing time 20 Min.) + Pre gelatinised Starch

3% w/v (mixing time 10 min); MCC 6% w/v (mixing time 10 min); pH: 8.5-9.0 + add 2.0% w/v of the material, Stir in a Hamilton Beach Mixer for 10 mins.) by using a lubricity tester: 0.10 (Maximum)

- 13.3.** Extreme Pressure film strength at 300 in-lb load and 1000 RPM of treated NDDF, psi: 12000 (Minimum)
- 13.4.** Lubricity coefficient after hot rolled (100 ± 2 °C, 16 hrs) treated 2.0 % (w/v) NDDF: Should not be more than 0.02 unit of the value at Sl no. 2
- 13.5.** Film strength of the hot rolled (100 ± 2 °C, 16 hrs) treated 2.0 % (w/v) NDDF, psi: Film strength of treated NDDF should not be less than 25000 psi
- 13.6.** Foam test: Specific Gravity of the treated freshwater mud: 0.80 (minimum)

APPENDIX-III: COMPRESSIVE STRENGTH

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
0.00	0.00	-127.88		Sandstone	Alluvium
10.00	10.00	-117.88		Sandstone	
20.00	20.00	-107.88		Sandstone	
30.00	30.00	-97.88		Sandstone	
40.00	40.00	-87.88		Sandstone	
50.00	50.00	-77.88		Sandstone	
60.00	60.00	-67.88		Sandstone	
70.00	70.00	-57.88		Sandstone	
80.00	80.00	-47.88		Sandstone	
90.00	90.00	-37.88		Sandstone	
100.00	100.00	-27.88		Sandstone	
110.00	110.00	-17.88		Sandstone	
120.00	120.00	-7.88		Sandstone	
130.00	130.00	2.12		Sandstone	
140.00	140.00	12.12		Sandstone	
150.00	150.00	22.12		Sandstone	
160.00	160.00	32.12	412.51	Sandstone	
170.00	170.00	42.12	425.27	Shale	
180.00	180.00	52.12	419.61	Shale	
190.00	190.00	62.12	417.59	Sandstone	
200.00	200.00	72.12	415.26	Shale	
210.00	210.00	82.12	440.09	Shale	
220.00	220.00	92.12	418.40	Shale	
230.00	229.99	102.11	451.54	Shale	
240.00	239.99	112.11	449.87	Shale	
250.00	249.98	122.10	442.68	Shale	
260.00	259.96	132.08	469.32	Shale	
270.00	269.94	142.06	433.59	Sandstone	
280.00	279.91	152.03	429.14	Sandstone	
290.00	289.88	162.00	652.15	Sandstone	
300.00	299.83	171.95	710.01	Sandstone	
310.00	309.77	181.89	536.37	Shale	
320.00	319.71	191.83	414.11	Sandstone	
330.00	329.63	201.75	412.92	Shale	
340.00	339.53	211.65	453.39	Shale	
350.00	349.40	221.52	416.16	Shale	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
360.00	359.24	231.36	420.61	Sandstone	
370.00	369.04	241.16	489.00	Shale	
380.00	378.80	250.92	460.94	Shale	
390.00	388.52	260.64	1112.28	Shale	
400.00	398.21	270.33	972.15	Sandstone	
410.00	407.86	279.98	872.91	Shale	
420.00	417.48	289.60	957.22	Shale	
430.00	427.06	299.18	879.73	Shale	
440.00	436.59	308.71	915.77	Shale	
450.00	446.08	318.20	897.84	Shale	
460.00	455.51	327.63	874.27	Shale	
470.00	464.89	337.01	803.70	Shale	
480.00	474.22	346.34	950.47	Shale	
490.00	483.49	355.61	951.20	Shale	
500.00	492.70	364.82	888.36	Shale	
510.00	501.85	373.97	834.68	Shale	
520.00	510.93	383.05	985.90	Shale	
530.00	519.96	392.08	978.36	Shale	
540.00	528.97	401.09	918.94	Shale	
550.00	537.98	410.10	1026.88	Sandstone	
560.00	546.98	419.10	1021.08	Shale	
570.00	556.00	428.12	966.25	Shale	
580.00	565.00	437.12	989.50	Shale	
590.00	574.01	446.13	1067.70	Shale	
600.00	583.02	455.14	952.30	Shale	
610.00	592.03	464.15	1021.81	Sandstone	
620.00	601.08	473.20	968.73	Sandstone	
630.00	610.14	482.26	946.61	Sandstone	
640.00	619.19	491.31	1158.96	Sandstone	
650.00	628.24	500.36	989.80	Shale	
660.00	637.29	509.41	1000.35	Shale	
670.00	646.37	518.49	937.78	Shale	
680.00	655.45	527.57	993.80	Sandstone	
690.00	664.53	536.65	1063.90	Shale	
700.00	673.62	545.74	1054.58	Shale	
710.00	682.74	554.86	1032.14	Shale	
720.00	691.87	563.99	1110.04	Sandstone	
730.00	701.01	573.13	1015.56	Shale	
740.00	710.16	582.28	1088.15	Shale	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
750.00	719.31	591.43	1288.41	Shale	
760.00	728.50	600.62	1313.43	Shale	
770.00	737.69	609.81	1095.64	Shale	
780.00	746.89	619.01	1207.18	Shale	
790.00	756.10	628.22	1273.86	Sandstone	
800.00	765.33	637.45	1155.79	Shale	
810.00	774.57	646.69	960.66	Shale	
820.00	783.80	655.92	1236.47	Shale	
830.00	793.05	665.17	1535.25	Sandstone	
840.00	802.31	674.43	1312.15	Shale	
850.00	811.57	683.69	1403.58	Shale	
860.00	820.87	692.99	1059.89	Shale	
870.00	830.16	702.28	1346.51	Shale	
880.00	839.47	711.59	1324.29	Shale	
890.00	848.79	720.91	1358.84	Shale	
900.00	858.12	730.24	1350.81	Sandstone	
910.00	867.46	739.58	1352.25	Shale	
920.00	876.81	748.93	1619.42	Sandstone	
930.00	886.15	758.27	1303.35	Shale	
940.00	895.51	767.63	1299.81	Sandstone	
950.00	904.88	777.00	1368.10	Sandstone	
960.00	914.27	786.39	1503.45	Sandstone	
970.00	923.66	795.78	1599.34	Shale	
980.00	933.07	805.19	1595.81	Shale	
990.00	942.46	814.58	1850.62	Sandstone	
1000.00	951.87	823.99	1435.69	Shale	
1010.00	961.27	833.39	1355.31	Sandstone	
1020.00	970.67	842.79	1493.32	Sandstone	
1030.00	980.08	852.20	1322.18	Sandstone	
1040.00	989.48	861.60	1699.19	Sandstone	
1050.00	998.89	871.01	1364.60	Shale	
1060.00	1008.30	880.42	1325.61	Sandstone	
1070.00	1017.72	889.84	1599.19	Sandstone	
1080.00	1027.14	899.26	1337.53	Sandstone	
1090.00	1036.57	908.69	1444.97	Shale	
1100.00	1046.01	918.13	1350.73	Shale	
1110.00	1055.44	927.56	1368.91	Shale	
1120.00	1064.89	937.01	1627.06	Sandstone	
1130.00	1074.36	946.48	1692.41	Sandstone	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1140.00	1083.84	955.96	1617.00	Shale	
1150.00	1093.33	965.45	2088.74	Sandstone	
1160.00	1102.83	974.95	1480.88	Shale	
1170.00	1112.33	984.45	1483.73	Shale	
1180.00	1121.84	993.96	1601.23	Sandstone	
1190.00	1131.36	1003.48	1373.05	Sandstone	
1200.00	1140.90	1013.02	1692.54	Shale	
1210.00	1150.43	1022.55	2296.56	Sandstone	
1220.00	1159.97	1032.09	2730.04	Sandstone	
1230.00	1169.52	1041.64	3176.64	Sandstone	
1240.00	1179.09	1051.21	1620.60	Shale	
1250.00	1188.65	1060.77	2091.18	Sandstone	
1260.00	1198.22	1070.34	1570.43	Shale	
1270.00	1207.80	1079.92	2289.67	Sandstone	
1280.00	1217.38	1089.50	1747.57	Sandstone	
1290.00	1226.96	1099.08	1650.91	Shale	
1300.00	1236.54	1108.66	2153.44	Sandstone	
1310.00	1246.11	1118.23	1689.29	Shale	
1320.00	1255.70	1127.82	1856.40	Sandstone	
1330.00	1265.30	1137.42	2410.96	Sandstone	
1340.00	1274.89	1147.01	3124.97	Sandstone	
1350.00	1284.50	1156.62	2038.10	Shale	
1360.00	1294.10	1166.22	1706.89	Sandstone	
1370.00	1303.74	1175.86	1547.22	Shale	
1380.00	1313.37	1185.49	1846.32	Shale	
1390.00	1322.98	1195.10	1950.72	Sandstone	
1400.00	1332.61	1204.73	1863.42	Shale	
1410.00	1342.26	1214.38	1747.96	Shale	
1420.00	1351.93	1224.05	3573.02	Sandstone	
1430.00	1361.65	1233.77	1569.61	Shale	
1440.00	1371.40	1243.52	2137.84	Shale	
1450.00	1381.19	1253.31	2366.59	Shale	
1460.00	1391.01	1263.13	2917.31	Sandstone	
1470.00	1400.84	1272.96	3485.63	Shale	
1480.00	1410.68	1282.80	3686.56	Sandstone	
1490.00	1420.54	1292.66	3192.11	Sandstone	
1500.00	1430.42	1302.54	2510.23	Shale	
1510.00	1440.32	1312.44	1779.79	Sandstone	
1520.00	1450.23	1322.35	1794.32	Sandstone	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1530.00	1460.16	1332.28	1731.86	Sandstone	
1540.00	1470.09	1342.21	1952.44	Shale	
1550.00	1480.03	1352.15	1652.00	Sandstone	
1560.00	1489.99	1362.11	2095.04	Shale	
1570.00	1499.95	1372.07	2304.20	Sandstone	
1580.00	1509.92	1382.04	2085.86	Sandstone	
1590.00	1519.89	1392.01	1805.55	Sandstone	
1600.00	1529.86	1401.98	2290.64	Shale	
1610.00	1539.84	1411.96	2502.52	Shale	
1620.00	1549.82	1421.94	1756.51	Sandstone	
1630.00	1559.80	1431.92	1955.83	Sandstone	
1640.00	1569.78	1441.90	1999.54	Sandstone	
1650.00	1579.78	1451.90	1849.34	Sandstone	
1660.00	1589.77	1461.89	2007.67	Shale	
1670.00	1599.76	1471.88	2085.53	Shale	
1680.00	1609.75	1481.87	2025.28	Sandstone	
1690.00	1619.74	1491.86	2072.23	Shale	
1700.00	1629.74	1501.86	1936.07	Shale	
1710.00	1639.73	1511.85	1882.55	Sandstone	
1720.00	1649.73	1521.85	1786.74	Sandstone	
1730.00	1659.72	1531.84	2102.65	Sandstone	
1740.00	1669.72	1541.84	2332.27	Shale	
1750.00	1679.71	1551.83	1885.83	Sandstone	
1760.00	1689.71	1561.83	2051.14	Sandstone	
1770.00	1699.70	1571.82	2068.02	Shale	
1780.00	1709.70	1581.82	1799.91	Sandstone	
1790.00	1719.70	1591.82	1861.82	Sandstone	
1800.00	1729.70	1601.82	2208.95	Shale	
1810.00	1739.70	1611.82	1876.09	Sandstone	
1820.00	1749.69	1621.81	2115.48	Shale	
1830.00	1759.69	1631.81	2242.43	Sandstone	
1840.00	1769.69	1641.81	1881.40	Sandstone	
1850.00	1779.69	1651.81	3054.83	Shale	
1860.00	1789.69	1661.81	2831.65	Shale	
1870.00	1799.69	1671.81	2296.74	Sandstone	
1880.00	1809.69	1681.81	2747.39	Shale	Girujan
1890.00	1819.69	1691.81	2898.65	Shale	
1900.00	1829.69	1701.81	2615.77	Shale	
1910.00	1839.69	1711.81	2634.29	Shale	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1920.00	1849.69	1721.81	2684.27	Shale	
1930.00	1859.69	1731.81	2845.71	Shale	
1940.00	1869.68	1741.80	3896.20	Sandstone	
1950.00	1879.68	1751.80	3002.84	Sandstone	
1960.00	1889.68	1761.80	2329.78	Sandstone	
1970.00	1899.68	1771.80	3251.30	Sandstone	
1980.00	1909.68	1781.80	2688.39	Sandstone	
1990.00	1919.68	1791.80	2646.98	Sandstone	
2000.00	1929.68	1801.80	3010.45	Sandstone	
2010.00	1939.68	1811.80	2372.41	Sandstone	
2020.00	1949.68	1821.80	2344.38	Sandstone	
2030.00	1959.68	1831.80	2323.39	Sandstone	
2040.00	1969.68	1841.80	2265.36	Sandstone	
2050.00	1979.68	1851.80	2412.47	Sandstone	
2060.00	1989.68	1861.80	2712.68	Sandstone	
2070.00	1999.68	1871.80	2939.41	Shale	
2080.00	2009.68	1881.80	2587.11	Sandstone	
2090.00	2019.68	1891.80	3149.76	Shale	
2100.00	2029.68	1901.80	2423.96	Sandstone	
2110.00	2039.68	1911.80	3093.61	Shale	
2120.00	2049.68	1921.80	3329.15	Shale	
2130.00	2059.67	1931.79	2764.33	Sandstone	
2140.00	2069.67	1941.79	2908.07	Sandstone	
2150.00	2079.67	1951.79	2960.52	Shale	
2160.00	2089.67	1961.79	2901.42	Shale	
2170.00	2099.67	1971.79	2926.50	Shale	
2180.00	2109.67	1981.79	2508.08	Sandstone	
2190.00	2119.67	1991.79	3066.69	Shale	
2200.00	2129.67	2001.79	2920.26	Sandstone	
2210.00	2139.67	2011.79	2845.81	Shale	
2220.00	2149.67	2021.79	3159.25	Shale	
2230.00	2159.67	2031.79	3255.24	Shale	
2240.00	2169.67	2041.79	2952.64	Shale	
2250.00	2179.67	2051.79	3302.51	Sandstone	
2260.00	2189.67	2061.79	3485.60	Shale	
2270.00	2199.67	2071.79	2992.52	Shale	
2280.00	2209.67	2081.79	3128.72	Sandstone	
2290.00	2219.67	2091.79	3452.22	Shale	
2300.00	2229.67	2101.79	3703.21	Sandstone	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2310.00	2239.67	2111.79	3347.52	Shale	
2320.00	2249.67	2121.79	3459.12	Shale	
2330.00	2259.67	2131.79	3941.72	Sandstone	
2340.00	2269.67	2141.79	3269.12	Shale	
2350.00	2279.67	2151.79	3593.22	Shale	
2360.00	2289.67	2161.79	3899.54	Shale	
2370.00	2299.67	2171.79	3265.26	Sandstone	
2380.00	2309.67	2181.79	3165.17	Sandstone	
2390.00	2319.67	2191.79	3300.06	Sandstone	
2400.00	2329.67	2201.79	3101.14	Sandstone	
2410.00	2339.67	2211.79	3368.85	Shale	
2420.00	2349.67	2221.79	3132.66	Sandstone	
2430.00	2359.67	2231.79	3900.20	Shale	
2440.00	2369.67	2241.79	3866.63	Shale	
2450.00	2379.67	2251.79	3176.66	Shale	
2460.00	2389.67	2261.79	3558.21	Sandstone	
2470.00	2399.67	2271.79	3629.94	Sandstone	
2480.00	2409.67	2281.79	3823.46	Shale	
2490.00	2419.67	2291.79	3328.68	Sandstone	
2500.00	2429.67	2301.79	3242.16	Sandstone	
2510.00	2439.67	2311.79	4122.15	Shale	
2520.00	2449.67	2321.79	4397.06	Shale	
2530.00	2459.66	2331.78	4715.39	Sandstone	
2540.00	2469.66	2341.78	4849.04	Shale	
2550.00	2479.66	2351.78	3211.51	Sandstone	
2560.00	2489.66	2361.78	3502.11	Sandstone	
2570.00	2499.66	2371.78	4445.60	Shale	
2580.00	2509.66	2381.78	3566.54	Shale	
2590.00	2519.66	2391.78	3432.21	Sandstone	
2600.00	2529.66	2401.78	4292.61	Shale	
2610.00	2539.66	2411.78	4556.54	Shale	
2620.00	2549.66	2421.78	3929.55	Sandstone	
2630.00	2559.66	2431.78	4158.21	Shale	
2640.00	2569.66	2441.78	4567.59	Shale	
2650.00	2579.66	2451.78	4753.44	Shale	
2660.00	2589.66	2461.78	4353.47	Shale	
2670.00	2599.66	2471.78	4677.78	Shale	
2680.00	2609.66	2481.78	3868.11	Sandstone	
2690.00	2619.65	2491.77	4178.43	Sandstone	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2700.00	2629.65	2501.77	4242.25	Shale	
2710.00	2639.65	2511.77	4485.30	Shale	
2720.00	2649.65	2521.77	3957.51	Sandstone	
2730.00	2659.65	2531.77	4929.83	Shale	
2740.00	2669.65	2541.77	5240.80	Shale	
2750.00	2679.65	2551.77	4072.22	Shale	
2760.00	2689.65	2561.77	4786.14	Shale	
2770.00	2699.65	2571.77	4948.69	Shale	
2780.00	2709.65	2581.77	5467.00	Shale	
2790.00	2719.65	2591.77	3964.96	Sandstone	
2800.00	2729.65	2601.77	4976.23	Shale	
2810.00	2739.65	2611.77	4651.47	Shale	
2820.00	2749.65	2621.77	5019.32	Shale	
2830.00	2759.65	2631.77	4638.31	Shale	
2840.00	2769.65	2641.77	4368.06	Shale	
2850.00	2779.65	2651.77	4776.17	Shale	
2860.00	2789.65	2661.77	4619.93	Sandstone	
2870.00	2799.64	2671.76	4497.01	Shale	
2880.00	2809.64	2681.76	5034.32	Shale	
2890.00	2819.64	2691.76	5231.40	Sandstone	
2900.00	2829.64	2701.76	4152.31	Shale	
2910.00	2839.64	2711.76	4885.08	Shale	
2920.00	2849.64	2721.76	4128.07	Sandstone	
2930.00	2859.64	2731.76	4151.61	Shale	
2940.00	2869.64	2741.76	3921.48	Sandstone	
2950.00	2879.64	2751.76	4403.18	Sandstone	
2960.00	2889.64	2761.76	4589.57	Shale	Tipam
2970.00	2899.64	2771.76	4265.84	Sandstone	
2980.00	2909.63	2781.75	4852.66	Shale	
2990.00	2919.63	2791.75	4168.90	Shale	
3000.00	2929.63	2801.75	4478.71	Sandstone	
3010.00	2939.63	2811.75	4560.08	Shale	
3020.00	2949.62	2821.74	5048.24	Shale	
3030.00	2959.62	2831.74	4880.25	Sandstone	
3040.00	2969.62	2841.74	5711.99	Shale	
3050.00	2979.61	2851.73	5179.02	Shale	
3060.00	2989.61	2861.73	4763.05	Shale	
3070.00	2999.61	2871.73	5296.99	Sandstone	
3080.00	3009.61	2881.73	5557.62	Shale	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
3090.00	3019.60	2891.72	5563.29	Sandstone	
3100.00	3029.60	2901.72	5539.49	Shale	
3110.00	3039.60	2911.72	5683.62	Sandstone	
3120.00	3049.59	2921.71	6111.20	Sandstone	
3130.00	3059.59	2931.71	5578.35	Sandstone	
3140.00	3069.58	2941.70	5729.59	Shale	
3150.00	3079.58	2951.70	5631.79	Sandstone	
3160.00	3089.57	2961.69	5802.02	Sandstone	
3170.00	3099.57	2971.69	5760.62	Sandstone	
3180.00	3109.56	2981.68	5723.84	Sandstone	
3190.00	3119.56	2991.68	5729.83	Shale	
3200.00	3129.56	3001.68	5937.86	Sandstone	
3210.00	3139.55	3011.67	5828.96	Sandstone	
3220.00	3149.54	3021.66	5912.48	Sandstone	
3230.00	3159.54	3031.66	4392.74	Sandstone	
3240.00	3169.53	3041.65	5704.87	Sandstone	
3250.00	3179.53	3051.65	6221.75	Sandstone	
3260.00	3189.52	3061.64	6433.44	Sandstone	
3270.00	3199.51	3071.63	6272.09	Sandstone	
3280.00	3209.51	3081.63	4993.94	Shale	
3290.00	3219.50	3091.62	5036.00	Sandstone	
3300.00	3229.49	3101.61	5906.05	Sandstone	
3310.00	3239.49	3111.61	5999.94	Sandstone	
3320.00	3249.48	3121.60	5972.21	Sandstone	
3330.00	3259.47	3131.59	5662.25	Sandstone	
3340.00	3269.47	3141.59	6074.97	Shale	
3350.00	3279.47	3151.59	6221.45	Sandstone	
3360.00	3289.46	3161.58	4778.97	Shale	
3370.00	3299.46	3171.58	4965.28	Shale	
3380.00	3309.45	3181.57	4992.81	Shale	
3390.00	3319.45	3191.57	5960.03	Shale	
3400.00	3329.44	3201.56	5736.51	Shale	
3410.00	3339.44	3211.56	4723.07	Shale	
3420.00	3349.43	3221.55	6117.26	Sandstone	
3430.00	3359.43	3231.55	6136.35	Sandstone	
3440.00	3369.42	3241.54	4970.69	Shale	
3450.00	3379.42	3251.54	6335.53	Sandstone	
3460.00	3389.41	3261.53	6754.54	Shale	
3470.00	3399.41	3271.53	5957.80	Shale	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
3480.00	3409.40	3281.52	7129.49	Sandstone	
3490.00	3419.40	3291.52	7113.06	Shale	
3500.00	3429.40	3301.52	6159.40	Shale	
3510.00	3439.39	3311.51	6098.13	Shale	
3520.00	3449.39	3321.51	7730.84	Shale	
3530.00	3459.38	3331.50	5905.14	Sandstone	
3540.00	3469.38	3341.50	6360.97	Shale	
3550.00	3479.37	3351.49	6182.56	Shale	
3560.00	3489.37	3361.49	6395.22	Sandstone	
3570.00	3499.37	3371.49	6416.93	Shale	
3580.00	3509.36	3381.48	6792.36	Sandstone	
3590.00	3519.36	3391.48	6772.70	Sandstone	
3600.00	3529.35	3401.47	6362.50	Sandstone	
3610.00	3539.34	3411.46	6824.44	Shale	
3620.00	3549.34	3421.46	7167.15	Shale	
3630.00	3559.33	3431.45	7953.17	Sandstone	
3640.00	3569.33	3441.45	6036.79	Sandstone	
3650.00	3579.32	3451.44	6817.79	Sandstone	
3660.00	3589.32	3461.44	7560.52	Shale	
3670.00	3599.31	3471.43	6558.95	Sandstone	
3680.00	3609.31	3481.43	6869.38	Sandstone	
3690.00	3619.30	3491.42	7727.65	Sandstone	
3700.00	3629.30	3501.42	7391.03	Sandstone	
3710.00	3639.29	3511.41	6568.19	Sandstone	
3720.00	3649.29	3521.41	5141.91	Shale	
3730.00	3659.29	3531.41	7516.46	Shale	
3740.00	3669.29	3541.41	6452.09	Shale	
3750.00	3679.28	3551.40	6890.38	Shale	
3760.00	3689.28	3561.40	7294.85	Sandstone	
3770.00	3699.28	3571.40	7997.34	Shale	
3780.00	3709.28	3581.40	8277.11	Shale	
3790.00	3719.28	3591.40	5438.49	Shale	
3800.00	3729.28	3601.40	7384.82	Sandstone	Barail_Arg
3810.00	3739.28	3611.40	3814.48	Shale	
3820.00	3749.27	3621.39	5906.07	Shale	
3830.00	3759.27	3631.39	5995.08	Sandstone	
3840.00	3769.27	3641.39	4612.52	Sandstone	
3850.00	3779.27	3651.39	5515.69	Sandstone	
3860.00	3789.27	3661.39	5245.85	Shale	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
3870.00	3799.27	3671.39	6397.89	Sandstone	
3880.00	3809.27	3681.39	4742.12	Sandstone	
3890.00	3819.27	3691.39	5734.51	Sandstone	
3900.00	3829.26	3701.38	5955.82	Shale	
3910.00	3839.26	3711.38	3941.95	Shale	
3920.00	3849.26	3721.38	4925.51	Sandstone	
3930.00	3859.26	3731.38	3310.06	Sandstone	
3940.00	3869.26	3741.38	5084.51	Sandstone	
3950.00	3879.26	3751.38	5742.58	Sandstone	
3960.00	3889.26	3761.38	4486.53	Shale	
3970.00	3899.25	3771.37	5336.61	Shale	
3980.00	3909.25	3781.37	5158.52	Shale	
3990.00	3919.25	3791.37	5936.38	Sandstone	
4000.00	3929.25	3801.37	5502.52	Shale	
4010.00	3939.25	3811.37	5124.37	Shale	
4020.00	3949.25	3821.37	8234.22	Shale	
4030.00	3959.25	3831.37	4267.30	Shale	
4040.00	3969.24	3841.36	7198.79	Shale	
4050.00	3979.24	3851.36	3732.14	Sandstone	
4060.00	3989.24	3861.36	5419.18	Shale	
4070.00	3999.24	3871.36	5730.31	Shale	
4080.00	4009.24	3881.36	7224.20	Shale	
4090.00	4019.23	3891.35	6668.42	Sandstone	
4100.00	4029.23	3901.35	5225.87	Sandstone	
4110.00	4039.23	3911.35	4616.02	Shale	
4120.00	4049.23	3921.35	5581.03	Shale	
4130.00	4059.23	3931.35	8733.67	Shale	
4140.00	4069.23	3941.35	8354.50	Shale	
4150.00	4079.23	3951.35	7425.88	Sandstone	Barail_Arn
4160.00	4089.22	3961.34	8979.32	Shale	
4170.00	4099.22	3971.34	9808.61	Shale	
4180.00	4109.22	3981.34	6622.20	Sandstone	
4190.00	4119.22	3991.34	7672.08	Sandstone	
4200.00	4129.22	4001.34	6662.18	Shale	
4210.00	4139.21	4011.33	7537.57	Shale	
4220.00	4149.21	4021.33	5235.55	Shale	
4230.00	4159.21	4031.33	9241.79	Shale	
4240.00	4169.21	4041.33	8725.50	Sandstone	
4250.00	4179.21	4051.33	8782.43	Shale	

COMPRESSIVE STRENGTH (1)					
Unconfined Compressive Strength (UCS) : Well Balimara-02					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
4260.00	4189.21	4061.33	8428.36	Shale	
4270.00	4199.21	4071.33	8259.13	Sandstone	
4280.00	4209.20	4081.32	9134.60	Shale	
4290.00	4219.20	4091.32	9421.25	Shale	
4300.00	4229.20	4101.32	9426.84	Shale	
4310.00	4239.20	4111.32	9136.17	Shale	
4320.00	4249.20	4121.32	8326.96	Sandstone	
4330.00	4259.20	4131.32	8037.80	Sandstone	
4340.00	4269.20	4141.32	8309.84	Sandstone	
4350.00	4279.20	4151.32	9916.14	Sandstone	
4360.00	4289.19	4161.31	9684.59	Sandstone	
4370.00	4299.19	4171.31	8923.61	Sandstone	
4380.00	4309.19	4181.31	9860.30	Shale	
4390.00	4319.19	4191.31	8253.47	Sandstone	

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
0.00	0.00	-131.95			All+Dhek
10.00	10.00	-121.95			
20.00	20.00	-111.95			
30.00	30.00	-101.95			
40.00	40.00	-91.95			
50.00	50.00	-81.95			
60.00	60.00	-71.95			
70.00	70.00	-61.95			
80.00	80.00	-51.95			
90.00	90.00	-41.95			
100.00	100.00	-31.95			
110.00	110.00	-21.95			
120.00	120.00	-11.95			
130.00	130.00	-1.95			
140.00	140.00	8.05			
150.00	150.00	18.05			

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
160.00	160.00	28.05			
170.00	170.00	38.05			
180.00	180.00	48.05			
190.00	190.00	58.05			
200.00	199.99	68.04			
210.00	209.98	78.03			
220.00	219.97	88.02			
230.00	229.95	98.00			
240.00	239.92	107.97			
250.00	249.89	117.94			
260.00	259.84	127.89			
270.00	269.79	137.84			
280.00	279.72	147.77			
290.00	289.63	157.68			
300.00	299.54	167.59			
310.00	309.45	177.50			
320.00	319.33	187.38			
330.00	329.19	197.24			
340.00	339.02	207.07			
350.00	348.83	216.88			
360.00	358.62	226.67			
370.00	368.38	236.43			
380.00	378.14	246.19			
390.00	387.88	255.93			
400.00	397.60	265.65			
410.00	407.29	275.34			
420.00	416.97	285.02			
430.00	426.61	294.66			
440.00	436.24	304.29			
450.00	445.83	313.88			
460.00	455.39	323.44			
470.00	464.92	332.97			
480.00	474.40	342.45			
490.00	483.84	351.89			
500.00	493.24	361.29			
510.00	502.64	370.69			
520.00	512.04	380.09			
530.00	521.43	389.48			
540.00	530.83	398.88			

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
550.00	540.23	408.28			
560.00	549.63	417.68			
570.00	559.02	427.07			
580.00	568.42	436.47			
590.00	577.82	445.87			
600.00	587.22	455.27			
610.00	596.63	464.68			
620.00	606.05	474.10			
630.00	615.49	483.54			
640.00	624.94	492.99			
650.00	634.41	502.46			
660.00	643.91	511.96			
670.00	653.43	521.48			
680.00	662.99	531.04			
690.00	672.57	540.62			
700.00	682.17	550.22			
710.00	691.79	559.84			
720.00	701.43	569.48			
730.00	711.09	579.14			
740.00	720.77	588.82			
750.00	730.46	598.51			
760.00	740.18	608.23			
770.00	749.91	617.96			
780.00	759.65	627.70			
790.00	769.42	637.47			
800.00	779.19	647.24			
810.00	788.97	657.02			
820.00	798.77	666.82			
830.00	808.59	676.64			
840.00	818.43	686.48			
850.00	828.28	696.33			
860.00	838.15	706.20			
870.00	848.03	716.08			
880.00	857.93	725.98			
890.00	867.84	735.89			
900.00	877.76	745.81			
910.00	887.69	755.74			
920.00	897.63	765.68			
930.00	907.58	775.63			

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
940.00	917.54	785.59			
950.00	927.51	795.56			
960.00	937.48	805.53			
970.00	947.46	815.51			
980.00	957.44	825.49			
990.00	967.43	835.48			
1000.00	977.42	845.47			
1010.00	987.41	855.46			
1020.00	997.41	865.46			
1030.00	1007.41	875.46			
1040.00	1017.40	885.45			
1050.00	1027.40	895.45			
1060.00	1037.40	905.44			
1070.00	1047.39	915.44			
1080.00	1057.39	925.44			
1090.00	1067.38	935.43			
1100.00	1077.38	945.43			
1110.00	1087.38	955.43			
1120.00	1097.37	965.42			
1130.00	1107.37	975.42			
1140.00	1117.37	985.42			
1150.00	1127.36	995.41			
1160.00	1137.36	1005.41			
1170.00	1147.36	1015.41			
1180.00	1157.35	1025.40			
1190.00	1167.35	1035.40			
1200.00	1177.35	1045.40			
1210.00	1187.34	1055.39			
1220.00	1197.34	1065.39			
1230.00	1207.33	1075.38			
1240.00	1217.33	1085.38			
1250.00	1227.33	1095.38			
1260.00	1237.32	1105.37			
1270.00	1247.32	1115.37			
1280.00	1257.32	1125.37			
1290.00	1267.31	1135.36			
1300.00	1277.31	1145.36			
1310.00	1287.30	1155.35			
1320.00	1297.30	1165.35			

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1330.00	1307.30	1175.35			
1340.00	1317.29	1185.34			
1350.00	1327.29	1195.34			
1360.00	1337.29	1205.34			
1370.00	1347.28	1215.33			
1380.00	1357.28	1225.33			
1390.00	1367.27	1235.32			
1400.00	1377.27	1245.32			
1410.00	1387.27	1255.32			
1420.00	1397.26	1265.31			
1430.00	1407.26	1275.31			
1440.00	1417.25	1285.30			
1450.00	1427.25	1295.30			
1460.00	1437.25	1305.30			
1470.00	1447.24	1315.29		Sandstone	
1480.00	1457.24	1325.29		Sandstone	
1490.00	1467.24	1335.29		Sandstone	
1500.00	1477.23	1345.28	1841.77	Sandstone	
1510.00	1487.23	1355.28	1985.77	Shale	
1520.00	1497.22	1365.27	1819.19	Sandstone	
1530.00	1507.22	1375.27	1813.21	Shale	
1540.00	1517.22	1385.27	1911.06	Shale	
1550.00	1527.21	1395.26	1954.19	Shale	
1560.00	1537.21	1405.26	1991.55	Sandstone	
1570.00	1547.20	1415.25	2127.48	Sandstone	
1580.00	1557.20	1425.25	1987.45	Shale	
1590.00	1567.19	1435.24	2101.48	Sandstone	
1600.00	1577.19	1445.24	2026.60	Shale	
1610.00	1587.19	1455.24	1993.89	Sandstone	
1620.00	1597.18	1465.23	1936.52	Sandstone	
1630.00	1607.18	1475.23	2078.81	Sandstone	
1640.00	1617.17	1485.22	2166.98	Shale	
1650.00	1627.17	1495.22	2084.25	Sandstone	
1660.00	1637.17	1505.22	2356.32	Sandstone	
1670.00	1647.16	1515.21	2404.45	Shale	
1680.00	1657.16	1525.21	2138.38	Shale	
1690.00	1667.15	1535.20	2172.76	Sandstone	
1700.00	1677.15	1545.20	2535.63	Shale	
1710.00	1687.14	1555.19	1934.61	Shale	

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1720.00	1697.14	1565.19	2258.71	Sandstone	
1730.00	1707.14	1575.19	2338.59	Sandstone	
1740.00	1717.13	1585.18	2562.28	Shale	
1750.00	1727.13	1595.18	2399.46	Shale	
1760.00	1737.12	1605.17	2340.52	Shale	
1770.00	1747.12	1615.17	2221.23	Sandstone	
1780.00	1757.11	1625.16	2408.23	Sandstone	
1790.00	1767.11	1635.16	2327.56	Shale	
1800.00	1777.11	1645.16	2332.28	Shale	
1810.00	1787.10	1655.15	2409.72	Shale	
1820.00	1797.10	1665.15	2382.40	Shale	
1830.00	1807.09	1675.14	2541.52	Shale	
1840.00	1817.09	1685.14	2328.61	Shale	
1850.00	1827.08	1695.13	2456.65	Sandstone	
1860.00	1837.08	1705.13	2364.76	Sandstone	
1870.00	1847.07	1715.12	2353.83	Sandstone	
1880.00	1857.07	1725.12	2424.75	Sandstone	
1890.00	1867.07	1735.12	2578.72	Sandstone	
1900.00	1877.06	1745.11	2494.87	Sandstone	
1910.00	1887.06	1755.11	2610.16	Shale	
1920.00	1897.05	1765.10	2539.84	Sandstone	
1930.00	1907.05	1775.10	2619.67	Sandstone	
1940.00	1917.04	1785.09	2504.85	Shale	
1950.00	1927.04	1795.09	2520.71	Shale	
1960.00	1937.03	1805.08	2329.52	Sandstone	
1970.00	1947.03	1815.08	2569.25	Shale	
1980.00	1957.02	1825.07	2556.70	Shale	
1990.00	1967.02	1835.07	2570.55	Sandstone	
2000.00	1977.02	1845.07	2491.55	Sandstone	
2010.00	1987.01	1855.06	2623.22	Sandstone	
2020.00	1997.01	1865.06	2572.04	Shale	
2030.00	2007.00	1875.05	2559.89	Sandstone	
2040.00	2017.00	1885.05	2622.55	Shale	
2050.00	2026.99	1895.04	2643.95	Shale	
2060.00	2036.99	1905.04	2335.72	Sandstone	
2070.00	2046.98	1915.03	2956.62	Sandstone	
2080.00	2056.98	1925.03	2789.26	Shale	
2090.00	2066.97	1935.02	2376.02	Shale	Tipam
2100.00	2076.97	1945.02	2860.14	Shale	

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2110.00	2086.96	1955.01	2395.63	Sandstone	
2120.00	2096.96	1965.01	2440.26	Sandstone	
2130.00	2106.95	1975.00	2579.91	Sandstone	
2140.00	2116.95	1985.00	2425.58	Shale	
2150.00	2126.94	1994.99	2688.94	Shale	
2160.00	2136.94	2004.99	2593.60	Sandstone	
2170.00	2146.93	2014.98	2608.14	Sandstone	
2180.00	2156.93	2024.98	2453.32	Sandstone	
2190.00	2166.92	2034.97	2621.68	Shale	
2200.00	2176.92	2044.97	2282.10	Sandstone	
2210.00	2186.92	2054.97	2450.94	Shale	
2220.00	2196.91	2064.96	2287.99	Sandstone	
2230.00	2206.91	2074.96	2474.69	Sandstone	
2240.00	2216.90	2084.95	2522.41	Sandstone	
2250.00	2226.90	2094.95	2482.24	Sandstone	
2260.00	2236.89	2104.94	2484.90	Shale	
2270.00	2246.89	2114.94	2530.30	Shale	
2280.00	2256.88	2124.93	2445.23	Sandstone	
2290.00	2266.88	2134.93	2473.49	Sandstone	
2300.00	2276.87	2144.92	2354.00	Sandstone	
2310.00	2286.87	2154.92	2264.82	Sandstone	
2320.00	2296.86	2164.91	2393.69	Sandstone	
2330.00	2306.86	2174.91	2473.95	Sandstone	
2340.00	2316.85	2184.90	2461.70	Shale	
2350.00	2326.84	2194.89	2163.75	Sandstone	
2360.00	2336.84	2204.89	1621.86	Shale	
2370.00	2346.83	2214.88	2790.37	Sandstone	
2380.00	2356.83	2224.88	2741.34	Sandstone	
2390.00	2366.82	2234.87	3241.51	Sandstone	
2400.00	2376.82	2244.87	2841.28	Shale	
2410.00	2386.81	2254.86	2012.18	Sandstone	
2420.00	2396.81	2264.86	2610.80	Sandstone	Barail
2430.00	2406.80	2274.85	2175.62	Sandstone	
2440.00	2416.80	2284.85	2160.17	Shale	
2450.00	2426.79	2294.84	2196.17	Shale	
2460.00	2436.79	2304.84	3015.81	Sandstone	
2470.00	2446.78	2314.83	2780.46	Sandstone	
2480.00	2456.78	2324.83	3169.83	Sandstone	
2490.00	2466.77	2334.82	2406.24	Sandstone	

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2500.00	2476.77	2344.82	2481.03	Shale	
2510.00	2486.76	2354.81	1625.39	Shale	
2520.00	2496.76	2364.81	2643.22	Shale	
2530.00	2506.75	2374.80	2511.86	Shale	
2540.00	2516.74	2384.79	2622.97	Shale	
2550.00	2526.74	2394.79	2470.55	Shale	
2560.00	2536.73	2404.78	2311.60	Shale	
2570.00	2546.73	2414.78	2570.45	Shale	
2580.00	2556.72	2424.77	2599.53	Shale	
2590.00	2566.72	2434.77	2511.78	Sandstone	
2600.00	2576.71	2444.76	2799.10	Shale	
2610.00	2586.71	2454.76	3322.78	Shale	
2620.00	2596.70	2464.75	2783.68	Shale	
2630.00	2606.70	2474.75	2706.91	Shale	
2640.00	2616.69	2484.74	2828.16	Shale	
2650.00	2626.68	2494.73	2202.43	Sandstone	
2660.00	2636.68	2504.73	2641.31	Sandstone	
2670.00	2646.67	2514.72	2799.80	Sandstone	
2680.00	2656.67	2524.72	2810.30	Sandstone	
2690.00	2666.66	2534.71	2226.57	Shale	
2700.00	2676.66	2544.71	2997.66	Shale	
2710.00	2686.65	2554.70	2818.82	Sandstone	
2720.00	2696.65	2564.70	3135.85	Sandstone	
2730.00	2706.64	2574.69	2514.70	Sandstone	
2740.00	2716.63	2584.68	2827.27	Sandstone	
2750.00	2726.63	2594.68	2721.25	Sandstone	
2760.00	2736.62	2604.67	2726.57	Sandstone	
2770.00	2746.62	2614.67	2659.34	Sandstone	
2780.00	2756.61	2624.66	2792.97	Sandstone	
2790.00	2766.61	2634.66	3012.21	Shale	
2800.00	2776.60	2644.65	2923.03	Sandstone	
2810.00	2786.59	2654.64	2880.24	Sandstone	
2820.00	2796.59	2664.64	2859.24	Sandstone	
2830.00	2806.58	2674.63	2811.65	Sandstone	
2840.00	2816.58	2684.63	2914.45	Sandstone	
2850.00	2826.57	2694.62	2874.92	Sandstone	
2860.00	2836.57	2704.62	3116.28	Sandstone	
2870.00	2846.56	2714.61	2928.65	Sandstone	
2880.00	2856.55	2724.60	3022.87	Sandstone	

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2890.00	2866.55	2734.60	3190.61	Sandstone	
2900.00	2876.54	2744.59	3227.22	Sandstone	
2910.00	2886.54	2754.59	3344.35	Sandstone	
2920.00	2896.53	2764.58	3488.91	Shale	
2930.00	2906.52	2774.57	3212.39	Sandstone	
2940.00	2916.52	2784.57	3484.25	Sandstone	
2950.00	2926.51	2794.56	3081.26	Shale	
2960.00	2936.51	2804.56	3550.19	Shale	
2970.00	2946.50	2814.55	3595.07	Shale	
2980.00	2956.49	2824.54	3783.32	Sandstone	
2990.00	2966.49	2834.54	3700.01	Shale	
3000.00	2976.48	2844.53	3581.02	Shale	
3010.00	2986.48	2854.53	3511.55	Sandstone	
3020.00	2996.47	2864.52	3415.30	Sandstone	
3030.00	3006.46	2874.51	3399.74	Sandstone	
3040.00	3016.46	2884.51	3343.22	Sandstone	
3050.00	3026.45	2894.50	3875.01	Shale	
3060.00	3036.44	2904.49	3490.10	Shale	
3070.00	3046.44	2914.49	3817.39	Sandstone	
3080.00	3056.43	2924.48	3703.40	Sandstone	
3090.00	3066.43	2934.48	3088.90	Sandstone	
3100.00	3076.42	2944.47	3942.39	Sandstone	
3110.00	3086.41	2954.46	3899.87	Sandstone	
3120.00	3096.41	2964.46	3125.03	Shale	
3130.00	3106.40	2974.45	3729.91	Sandstone	
3140.00	3116.39	2984.44	3507.16	Shale	
3150.00	3126.39	2994.44	3245.88	Shale	
3160.00	3136.38	3004.43	3695.78	Sandstone	
3170.00	3146.38	3014.43	3423.62	Sandstone	
3180.00	3156.37	3024.42	3804.61	Sandstone	
3190.00	3166.36	3034.41	2503.28	Shale	Kopili
3200.00	3176.36	3044.41	2876.20	Shale	
3210.00	3186.35	3054.40	3101.82	Sandstone	
3220.00	3196.34	3064.39	3171.00	Sandstone	
3230.00	3206.34	3074.39	3504.64	Sandstone	
3240.00	3216.33	3084.38	3247.23	Shale	
3250.00	3226.32	3094.37	3112.73	Shale	
3260.00	3236.32	3104.37	4030.14	Sandstone	
3270.00	3246.31	3114.36	2979.11	Sandstone	

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
3280.00	3256.31	3124.36	3125.72	Shale	
3290.00	3266.30	3134.35	3664.85	Shale	
3300.00	3276.29	3144.34	3270.19	Shale	
3310.00	3286.29	3154.34	2822.23	Shale	
3320.00	3296.28	3164.33	3425.14	Shale	
3330.00	3306.27	3174.32	4191.78	Sandstone	
3340.00	3316.27	3184.32	3671.74	Shale	
3350.00	3326.26	3194.31	3434.68	Shale	
3360.00	3336.25	3204.30	3208.86	Shale	
3370.00	3346.25	3214.30	2851.70	Shale	
3380.00	3356.24	3224.29	2308.28	Shale	
3390.00	3366.23	3234.28	3030.60	Shale	
3400.00	3376.23	3244.28	3016.44	Shale	
3410.00	3386.22	3254.27	2464.38	Shale	
3420.00	3396.21	3264.26	2839.14	Shale	
3430.00	3406.21	3274.26	3658.55	Shale	
3440.00	3416.20	3284.25	2942.47	Shale	
3450.00	3426.19	3294.24	3162.22	Shale	
3460.00	3436.19	3304.24	3437.88	Shale	
3470.00	3446.18	3314.23	3804.62	Shale	
3480.00	3456.17	3324.22	3776.00	Shale	
3490.00	3466.17	3334.22	3692.38	Shale	
3500.00	3476.16	3344.21	3375.84	Shale	
3510.00	3486.15	3354.20	3886.97	Shale	
3520.00	3496.14	3364.19	3148.57	Shale	
3530.00	3506.14	3374.19	3332.89	Shale	
3540.00	3516.13	3384.18	3891.93	Shale	Prang
3550.00	3526.12	3394.17	3581.74	Shale	
3560.00	3536.12	3404.17	3471.58	Shale	
3570.00	3546.11	3414.16	4241.93	Shale	
3580.00	3556.10	3424.15	4080.85	Shale	
3590.00	3566.10	3434.15	3491.98	Shale	
3600.00	3576.09	3444.14	3289.05	Shale	
3610.00	3586.08	3454.13	5290.00	Shale	
3620.00	3596.07	3464.12	4311.82	Shale	Narpuh
3630.00	3606.07	3474.12	4249.02	Shale	
3640.00	3616.06	3484.11	3081.48	Shale	
3650.00	3626.05	3494.10	3803.29	Sandstone	
3660.00	3636.05	3504.10	4054.24	Sandstone	

COMPRESSIVE STRENGTH (2)					
Unconfined Compressive Strength (UCS) : Well Baghjan-08					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
3670.00	3646.04	3514.09	4118.99	Sandstone	
3680.00	3656.03	3524.08	4341.07	Sandstone	
3690.00	3666.02	3534.07	4001.26	Sandstone	
3700.00	3676.02	3544.07	4780.68	Sandstone	
3710.00	3686.01	3554.06	4619.71	Sandstone	
3720.00	3696.00	3564.05	4505.25	Shale	
3730.00	3706.00	3574.05	3020.44	Shale	LK+TH
3740.00	3715.99	3584.04	3684.64	Sandstone	
3750.00	3725.98	3594.03	2971.40	Shale	
3760.00	3735.97	3604.02	3757.25	Sandstone	
3770.00	3745.97	3614.02	2831.31	Shale	
3780.00	3755.96	3624.01	3020.35	Shale	
3790.00	3765.95	3634.00	4792.59	Shale	
3800.00	3775.95	3644.00	5440.73	Shale	
3810.00	3785.94	3653.99	6660.66	Sandstone	
3820.00	3795.93	3663.98	4506.09	Shale	
3830.00	3805.92	3673.97	5112.96	Shale	
3840.00	3815.92	3683.97	5110.15	Shale	
3850.00	3825.91	3693.96	2239.59	Shale	Langpar
3860.00	3835.90	3703.95	8171.30	Shale	
3870.00	3845.89	3713.94	7069.08	Sandstone	
3880.00	3855.89	3723.94	5547.16	Sandstone	
3890.00	3865.88	3733.93		Sandstone	Basement
3900.00	3875.87	3743.92		Basement Rock	
3910.00	3885.86	3753.91		Basement Rock	
3920.00	3895.86	3763.91		Basement Rock	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
30	30	-166	6854.037	Sandstone	Alluvium
40	40	-156	374.2042	Sandstone	
50	50	-146	422.5975	Sandstone	
60	60	-136	958.7415	Sandstone	
70	70	-126	572.3217	Sandstone	
80	80	-116	966.0693	Sandstone	
90	90	-106	1152.904	Shale	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
100	100	-96	322.7357	Sandstone	
110	110	-86	435.0444	Sandstone	
120	120	-76	720.6932	Shale	
130	130	-66	866.6284	Sandstone	
140	140	-56	2032.25	Shale	
150	150	-46	1378.643	Shale	
160	160	-36	442.5644	Shale	
170	170	-26	844.4375	Sandstone	
180	180	-16	2821.529	Shale	
190	190	-6	1681.19	Shale	
200	200	4	1982.883	Shale	
210	210	14	1567.401	Shale	
220	220	24	869.736	Sandstone	
230	230	34	1895.556	Sandstone	
240	240	44	2002.856	Shale	
250	250	54	2503.038	Shale	
260	260	64	2297.539	Shale	
270	270	74	1224.326	Sandstone	
280	280	84	2416.192	Shale	
290	290	94	1777.201	Shale	
300	300	104	1361.826	Shale	
310	310	114	1593.49	Sandstone	
320	320	124	1103.826	Shale	
330	330	134	2160.482	Sandstone	
340	340	144	3212.563	Sandstone	
350	350	154	3535.679	Sandstone	
360	360	164	1907.989	Sandstone	
370	370	174	2307.379	Sandstone	
380	380	184	2763.888	Sandstone	
390	390	194	1350.002	Shale	
400	400	204	1756.789	Shale	
410	410	214	3226.259	Shale	
420	420	224	1660.484	Shale	
430	430	234	1749.15	Shale	
440	440	244	2965.442	Shale	
450	450	254	2105.036	Shale	
460	460	264	2908.318	Shale	
470	470	274	2060.869	Shale	
480	480	284	3080.766	Sandstone	
490	490	294	2845.637	Shale	
500	500	304	2330.62	Shale	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
510	510	314	2209.729	Shale	
520	520	324	2696.577	Shale	
530	530	334	3164.868	Shale	
540	540	344	2356.381	Shale	
550	550	354	2496.174	Shale	
560	560	364	1771.63	Sandstone	
570	570	374	3371.106	Shale	
580	580	384	2457.204	Shale	
590	590	394	1368.792	Sandstone	
600	600	404	1487.877	Sandstone	
610	610	414	1131.303	Sandstone	
620	620	424	4182.923	Shale	
630	630	434	3908.927	Shale	
640	640	444	3604.295	Shale	
650	650	454	2211.799	Shale	
660	660	464	1971.992	Sandstone	
670	670	474	1733.65	Sandstone	
680	680	484	1679.733	Sandstone	
690	690	494	2122.813	Sandstone	
700	700	504	1890.746	Sandstone	
710	710	514	1445.151	Sandstone	
720	720	524	1698.93	Shale	
730	730	534	1243.74	Sandstone	
740	740	544	1441.971	Shale	
750	750	554	1528.519	Sandstone	
760	760	564	1601.303	Sandstone	
770	770	574	1657.157	Sandstone	
780	780	584	1661.827	Shale	
790	790	594	1568.051	Sandstone	
800	800	604	1872.156	Sandstone	
810	810	614	1566.803	Sandstone	
820	820	624	1416.687	Shale	
830	830	634	1876.006	Sandstone	
840	840	644	1764.596	Sandstone	
850	850	654	1584.384	Sandstone	
860	860	664	1644.197	Sandstone	
870	870	674	2382.958	Sandstone	
880	880	684	1670.99	Sandstone	
890	890	694	2243.19	Sandstone	
900	900	704	1895.463	Sandstone	
910	910	714	2234.48	Sandstone	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
920	920	724	2014.976	Sandstone	
930	930	734	1701.488	Sandstone	
940	940	744	1947.869	Sandstone	
950	950	754	2721.678	Shale	
960	960	764	1863.485	Sandstone	
970	970	774	1902.813	Sandstone	
980	980	784	1215.924	Shale	
990	990	794	1432.493	Shale	
1000	1000	804	1541.046	Sandstone	
1010	1010	814	1651.097	Sandstone	
1020	1020	824	1701.825	Shale	
1030	1030	834	2145.983	Shale	
1040	1040	844	2055.103	Sandstone	
1050	1050	854	1257.949	Shale	
1060	1060	864	1861.223	Shale	
1070	1070	874	2074.649	Sandstone	
1080	1080	884	2358.254	Sandstone	
1090	1090	894	1656.897	Sandstone	
1100	1100	904	1679.849	Sandstone	
1110	1110	914	1451.532	Shale	
1120	1120	924	1736.254	Sandstone	
1130	1130	934	1936.869	Sandstone	
1140	1140	944	1990.325	Shale	
1150	1150	954	2027.299	Shale	
1160	1160	964	2192.824	Sandstone	
1170	1170	974	3477.297	Sandstone	
1180	1180	984	2480.47	Sandstone	
1190	1190	994	2242.6	Shale	
1200	1200	1004	2475.883	Sandstone	
1210	1210	1014	2457.7	Shale	
1220	1220	1024	3293.177	Shale	
1230	1230	1034	2232.871	Shale	
1240	1240	1044	2385.603	Shale	
1250	1250	1054	2253.312	Shale	
1260	1260	1064	2272.174	Sandstone	
1270	1270	1074	2258.251	Sandstone	
1280	1280	1084	2093.777	Shale	
1290	1290	1094	2100.496	Shale	
1300	1300	1104	1952.143	Sandstone	
1310	1310	1114	2087.431	Shale	
1320	1320	1124	2109.901	Sandstone	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1330	1330	1134	2111.367	Shale	
1340	1340	1144	2275.383	Sandstone	
1350	1350	1154	2048.555	Shale	
1360	1360	1164	2125.698	Sandstone	
1370	1370	1174	2121.998	Shale	
1380	1380	1184	2019.317	Sandstone	
1390	1390	1194	2347.295	Shale	
1400	1400	1204	2532.955	Shale	
1410	1410	1214	2826.041	Sandstone	
1420	1420	1224	2199.967	Shale	
1430	1430	1234	3995.04	Shale	
1440	1440	1244	2265.953	Shale	
1450	1450	1254	1344.736	Shale	
1460	1460	1264	2335.717	Shale	
1470	1470	1274	2272.497	Shale	
1480	1480	1284	1955.177	Shale	
1490	1490	1294	2149.729	Sandstone	
1500	1500	1304	2147.135	Shale	
1510	1510	1314	2177.039	Shale	
1520	1520	1324	2149.358	Shale	
1530	1530	1334	2278.735	Shale	
1540	1540	1344	2213.652	Shale	
1550	1550	1354	2295.599	Shale	
1560	1560	1364	2508.386	Sandstone	
1570	1570	1374	2316.772	Shale	
1580	1580	1384	2273.061	Sandstone	
1590	1590	1394	2224.997	Shale	
1600	1600	1404	2216.189	Shale	
1610	1610	1414	2240.431	Shale	
1620	1620	1424	2108.291	Shale	
1630	1630	1434	3785.745	Sandstone	
1640	1640	1444	2579.956	Sandstone	
1650	1650	1454	2605.111	Sandstone	
1660	1660	1464	2425.919	Shale	
1670	1670	1474	2726.249	Shale	
1680	1680	1484	2499.501	Sandstone	
1690	1690	1494	2193.918	Shale	
1700	1700	1504	2318.204	Shale	
1710	1710	1514	2327.667	Sandstone	
1720	1720	1524	2381.031	Sandstone	
1730	1730	1534	1069.603	Sandstone	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1740	1740	1544	2889.185	Shale	
1750	1750	1554	2991.003	Sandstone	
1760	1760	1564	1975.479	Sandstone	
1770	1770	1574	2428.545	Shale	
1780	1780	1584	2301.837	Sandstone	
1790	1790	1594	2509.386	Shale	
1800	1800	1604	2530.076	Sandstone	
1810	1810	1614	2454.401	Shale	
1820	1820	1624	2444.007	Sandstone	
1830	1830	1634	2662.615	Shale	
1840	1840	1644	2472.733	Sandstone	
1850	1850	1654	2362.355	Sandstone	
1860	1860	1664	2430.923	Sandstone	
1870	1870	1674	2293.78	Sandstone	
1880	1880	1684	2392.405	Sandstone	
1890	1890	1694	2573.788	Sandstone	
1900	1900	1704	2218.275	Shale	
1910	1910	1714	2378.499	Sandstone	
1920	1920	1724	2390.546	Sandstone	
1930	1930	1734	2645.686	Sandstone	
1940	1940	1744	2539.76	Sandstone	
1950	1950	1754	2569.604	Sandstone	
1960	1960	1764	2438.288	Sandstone	
1970	1970	1774	2523.906	Sandstone	
1980	1980	1784	2520.219	Sandstone	
1990	1990	1794	2452.215	Sandstone	
2000	2000	1804	2475.503	Sandstone	
2010	2010	1814	2617.637	Shale	Namsang
2020	2020	1824	2498.539	Shale	
2030	2030	1834	2658.204	Shale	
2040	2040	1844	2467.785	Shale	
2050	2050	1854	2507.942	Shale	
2060	2060	1864	2601.187	Shale	
2070	2070	1874	2728.226	Shale	
2080	2080	1884	2655.943	Shale	
2090	2090	1894	2523.736	Shale	
2100	2100	1904	2705.057	Shale	
2110	2110	1914	2921.409	Shale	
2120	2120	1924	2898.854	Shale	
2130	2130	1934	2760.524	Shale	
2140	2140	1944	2720.582	Shale	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2150	2150	1954	2823.882	Shale	
2160	2160	1964	2792.58	Shale	
2170	2170	1974	2884.208	Shale	
2180	2180	1984	3050.249	Shale	
2190	2190	1994	3215.238	Shale	
2200	2200	2004	2781.052	Shale	
2210	2210	2014	3030.992	Shale	
2220	2220	2024	3121.157	Shale	
2230	2230	2034	3275.91	Shale	
2240	2240	2044	3119.208	Shale	
2250	2250	2054	3053.463	Shale	
2260	2260	2064	3444.135	Shale	
2270	2270	2074	3029.897	Shale	
2280	2280	2084	3263.262	Shale	
2290	2290	2094	3188.26	Shale	
2300	2300	2104	3224.014	Shale	
2310	2310	2114	3116.655	Shale	
2320	2320	2124	3241.08	Shale	
2330	2330	2134	3214.416	Shale	
2340	2340	2144	3253.126	Shale	
2350	2350	2154	3455.117	Shale	
2360	2360	2164	3387.741	Shale	
2370	2370	2174	3191.635	Shale	
2380	2380	2184	3527.762	Shale	
2390	2390	2194	3332.384	Shale	
2400	2400	2204	3515.683	Shale	
2410	2410	2214	3328.146	Shale	
2420	2420	2224	3437.054	Shale	
2430	2430	2234	3638.017	Shale	
2440	2440	2244	3529.715	Shale	
2450	2450	2254	3516.95	Shale	
2460	2460	2264	3533.542	Shale	
2470	2470	2274	3537.095	Shale	
2480	2480	2284	3572.543	Sandstone	
2490	2490	2294	3730.587	Shale	
2500	2500	2304	3673.168	Shale	
2510	2510	2314	3519.987	Sandstone	
2520	2520	2324	3670.314	Shale	
2530	2530	2334	3661.656	Shale	
2540	2540	2344	3723.759	Shale	
2550	2550	2354	3812.74	Shale	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2560	2560	2364	3768.181	Sandstone	
2570	2570	2374	3790.775	Sandstone	
2580	2580	2384	3851.279	Sandstone	
2590	2590	2394	3994.465	Shale	
2600	2600	2404	3817.563	Sandstone	
2610	2610	2414	3830.66	Sandstone	
2620	2620	2424	3940.631	Shale	
2630	2630	2434	4089.882	Shale	
2640	2640	2444	3969.691	Sandstone	
2650	2650	2454	4003.988	Shale	
2660	2660	2464	3995.097	Sandstone	
2670	2670	2474	4213.345	Sandstone	
2680	2680	2484	4081.688	Sandstone	
2690	2690	2494	3820.679	Sandstone	
2700	2700	2504	3938.684	Shale	
2710	2710	2514	2985.642	Shale	
2720	2720	2524	4203.917	Shale	
2730	2730	2534	4220.04	Shale	
2740	2740	2544	3912.894	Shale	
2750	2750	2554	4113.676	Sandstone	
2760	2760	2564	3887.047	Shale	
2770	2770	2574	3982.911	Sandstone	
2780	2780	2584	3731.239	Shale	
2790	2790	2594	4249.401	Shale	
2800	2800	2604	3860.583	Shale	
2810	2810	2614	4015.534	Shale	
2820	2820	2624	4043.207	Sandstone	
2830	2830	2634	4615.917	Shale	
2840	2840	2644	4539.67	Shale	
2850	2850	2654	4197.444	Sandstone	
2860	2860	2664	4092.724	Shale	
2870	2870	2674	4588.021	Shale	
2880	2880	2684	4316.816	Shale	
2890	2890	2694	3693.164	Shale	
2900	2900	2704	3868.643	Sandstone	
2910	2910	2714	3773.924	Shale	
2920	2920	2724	3733.847	Shale	
2930	2930	2734	4501.759	Shale	
2940	2940	2744	4955.441	Shale	
2950	2950	2754	5781.241	Shale	
2960	2960	2764	5794.472	Shale	

COMPRESSIVE STRENGTH (3)					
Unconfined Compressive Strength (UCS) : Well Kumchai-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2970	2970	2774	5056.18	Sandstone	
2980	2980	2784	4802.69	Shale	
2990	2990	2794	4763.487	Shale	
3000	3000	2804	4736.202	Shale	

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
0.00	0.00	-103.21			All+Dhek
10.00	10.00	-93.21			
20.00	20.00	-83.21			
30.00	30.00	-73.21			
40.00	40.00	-63.21			
50.00	50.00	-53.21			
60.00	60.00	-43.21			
70.00	70.00	-33.21			
80.00	80.00	-23.21			
90.00	90.00	-13.21			
100.00	100.00	-3.21			
110.00	110.00	6.79			
120.00	120.00	16.79			
130.00	130.00	26.79			
140.00	140.00	36.79			
150.00	150.00	46.79			
160.00	160.00	56.79			
170.00	170.00	66.79			
180.00	180.00	76.79			
190.00	190.00	86.79			
200.00	200.00	96.79			
210.00	210.00	106.79			
220.00	220.00	116.79			
230.00	230.00	126.79			
240.00	240.00	136.79			
250.00	250.00	146.79			
260.00	260.00	156.79			
270.00	270.00	166.79			
280.00	280.00	176.79			

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
290.00	290.00	186.79			
300.00	300.00	196.79			
310.00	310.00	206.79			
320.00	320.00	216.79			
330.00	330.00	226.79			
340.00	340.00	236.79			
350.00	350.00	246.79			
360.00	360.00	256.79			
370.00	370.00	266.79			
380.00	380.00	276.79			
390.00	390.00	286.79			
400.00	400.00	296.79			
410.00	410.00	306.79			
420.00	420.00	316.79			
430.00	430.00	326.79			
440.00	440.00	336.79			
450.00	450.00	346.79			
460.00	460.00	356.79			
470.00	470.00	366.79			
480.00	480.00	376.79			
490.00	490.00	386.79			
500.00	500.00	396.79			
510.00	510.00	406.79			
520.00	520.00	416.79			
530.00	530.00	426.79			
540.00	539.99	436.79			
550.00	549.99	446.78			
560.00	559.99	456.78			
570.00	569.99	466.78			
580.00	579.99	476.78			
590.00	589.99	486.78			
600.00	599.99	496.78			
610.00	609.99	506.78			
620.00	619.99	516.78			
630.00	629.99	526.78			
640.00	639.98	536.77			
650.00	649.97	546.76			
660.00	659.95	556.74			
670.00	669.93	566.72			

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
680.00	679.89	576.68			
690.00	689.84	586.63			
700.00	699.77	596.56			
710.00	709.68	606.47			
720.00	719.57	616.36			
730.00	729.43	626.22			
740.00	739.27	636.06			
750.00	749.10	645.89			
760.00	758.93	655.72			
770.00	768.74	665.53			
780.00	778.53	675.32			
790.00	788.30	685.09			
800.00	798.05	694.84			
810.00	807.76	704.55			
820.00	817.45	714.24			
830.00	827.11	723.90			
840.00	836.75	733.54			
850.00	846.36	743.15			
860.00	855.94	752.73			
870.00	865.49	762.28			
880.00	874.99	771.79			
890.00	884.44	781.23			
900.00	893.81	790.60			
910.00	903.09	799.88			
920.00	912.30	809.09			
930.00	921.50	818.29			
940.00	930.66	827.45			
950.00	939.81	836.60			
960.00	948.96	845.75			
970.00	958.11	854.90			
980.00	967.25	864.04			
990.00	976.40	873.19			
1000.00	985.54	882.33			
1010.00	994.68	891.47			
1020.00	1003.81	900.60			
1030.00	1012.93	909.72			
1040.00	1022.06	918.85			
1050.00	1031.18	927.97			
1060.00	1040.30	937.09			

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1070.00	1049.42	946.21			
1080.00	1058.54	955.33			
1090.00	1067.66	964.45			
1100.00	1076.77	973.56			
1110.00	1085.90	982.69			
1120.00	1095.03	991.82			
1130.00	1104.17	1000.96			
1140.00	1113.32	1010.11			
1150.00	1122.47	1019.26			
1160.00	1131.63	1028.42			
1170.00	1140.80	1037.59			
1180.00	1149.97	1046.76			
1190.00	1159.14	1055.93			
1200.00	1168.30	1065.09			
1210.00	1177.47	1074.26			
1220.00	1186.63	1083.42			
1230.00	1195.79	1092.58			
1240.00	1204.95	1101.74			
1250.00	1214.11	1110.90			
1260.00	1223.28	1120.07			
1270.00	1232.45	1129.24			
1280.00	1241.63	1138.42			
1290.00	1250.83	1147.62			
1300.00	1260.05	1156.84			
1310.00	1269.28	1166.07			
1320.00	1278.51	1175.30			
1330.00	1287.75	1184.54			
1340.00	1296.99	1193.78			
1350.00	1306.21	1203.00			
1360.00	1315.42	1212.21			
1370.00	1324.63	1221.42			
1380.00	1333.84	1230.63			
1390.00	1343.05	1239.84			
1400.00	1352.26	1249.05			
1410.00	1361.45	1258.24			
1420.00	1370.64	1267.43			
1430.00	1379.83	1276.62			
1440.00	1389.02	1285.81			
1450.00	1398.22	1295.01			

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1460.00	1407.41	1304.20			
1470.00	1416.61	1313.40			
1480.00	1425.80	1322.59			
1490.00	1434.99	1331.78			
1500.00	1444.19	1340.98			
1510.00	1453.38	1350.17			
1520.00	1462.58	1359.37			
1530.00	1471.78	1368.57			
1540.00	1481.00	1377.79			Namsang
1550.00	1490.22	1387.01			
1560.00	1499.44	1396.23			
1570.00	1508.67	1405.46			
1580.00	1517.90	1414.69			
1590.00	1527.12	1423.91			
1600.00	1536.32	1433.11			
1610.00	1545.52	1442.31			
1620.00	1554.70	1451.49			
1630.00	1563.88	1460.67			
1640.00	1573.06	1469.85			
1650.00	1582.23	1479.02			
1660.00	1591.41	1488.20			
1670.00	1600.58	1497.37			
1680.00	1609.74	1506.53			
1690.00	1618.90	1515.69			
1700.00	1628.05	1524.84			
1710.00	1637.20	1533.99			
1720.00	1646.35	1543.14			
1730.00	1655.50	1552.29			
1740.00	1664.64	1561.43			
1750.00	1673.78	1570.57			
1760.00	1682.93	1579.72			
1770.00	1692.09	1588.88			
1780.00	1701.25	1598.04			
1790.00	1710.41	1607.20			
1800.00	1719.58	1616.37			
1810.00	1728.75	1625.54			
1820.00	1737.93	1634.72			
1830.00	1747.10	1643.89			
1840.00	1756.28	1653.07			

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
1850.00	1765.45	1662.24			
1860.00	1774.62	1671.41			
1870.00	1783.78	1680.57			
1880.00	1792.94	1689.73			
1890.00	1802.10	1698.89			
1900.00	1811.26	1708.05			
1910.00	1820.41	1717.20			
1920.00	1829.55	1726.34			
1930.00	1838.68	1735.47			
1940.00	1847.82	1744.61			
1950.00	1856.99	1753.78			
1960.00	1866.18	1762.97			
1970.00	1875.40	1772.19			
1980.00	1884.65	1781.44			
1990.00	1893.92	1790.71			
2000.00	1903.21	1800.00			
2010.00	1912.51	1809.30			
2020.00	1921.82	1818.62			
2030.00	1931.15	1827.94			
2040.00	1940.47	1837.26			
2050.00	1949.80	1846.59			
2060.00	1959.13	1855.92			
2070.00	1968.45	1865.24			
2080.00	1977.77	1874.56			
2090.00	1987.05	1883.84			
2100.00	1996.24	1893.03			
2110.00	2005.33	1902.12			
2120.00	2014.39	1911.18			
2130.00	2023.46	1920.25			
2140.00	2032.54	1929.33			
2150.00	2041.65	1938.44			
2160.00	2050.77	1947.56			
2170.00	2059.92	1956.71			
2180.00	2069.08	1965.87			
2190.00	2078.24	1975.03			
2200.00	2087.41	1984.20			
2210.00	2096.57	1993.36			
2220.00	2105.72	2002.51			
2230.00	2114.86	2011.65			

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2240.00	2123.99	2020.78			
2250.00	2133.13	2029.92			
2260.00	2142.28	2039.07			
2270.00	2151.43	2048.22			
2280.00	2160.60	2057.39			
2290.00	2169.77	2066.56			
2300.00	2178.96	2075.75			
2310.00	2188.17	2084.96			
2320.00	2197.39	2094.18			
2330.00	2206.63	2103.42			
2340.00	2215.87	2112.66			
2350.00	2225.10	2121.89			
2360.00	2234.34	2131.13			
2370.00	2243.57	2140.36			
2380.00	2252.81	2149.60			
2390.00	2262.04	2158.83			
2400.00	2271.26	2168.05			
2410.00	2280.47	2177.26			
2420.00	2289.68	2186.47			
2430.00	2298.90	2195.69			
2440.00	2308.15	2204.94			
2450.00	2317.39	2214.18			
2460.00	2326.60	2223.39			
2470.00	2335.79	2232.58			
2480.00	2344.96	2241.75			
2490.00	2354.13	2250.92			
2500.00	2363.31	2260.10		Sandstone	Girujan
2510.00	2372.48	2269.27		Sandstone	
2520.00	2381.64	2278.43		Sandstone	
2530.00	2390.79	2287.58		Sandstone	
2540.00	2399.96	2296.75		Sandstone	
2550.00	2409.15	2305.94		Sandstone	
2560.00	2418.37	2315.16		Sandstone	
2570.00	2427.62	2324.41		Sandstone	
2580.00	2436.92	2333.71		Sandstone	
2590.00	2446.25	2343.04		Sandstone	
2600.00	2455.62	2352.41		Sandstone	
2610.00	2465.02	2361.81		Sandstone	
2620.00	2474.43	2371.22		Sandstone	

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
2630.00	2483.83	2380.62		Sandstone	
2640.00	2493.18	2389.97		Sandstone	
2650.00	2502.45	2399.24		Shale	
2660.00	2511.70	2408.49		Sandstone	
2670.00	2520.93	2417.72		Shale	
2680.00	2530.15	2426.94		Shale	
2690.00	2539.35	2436.14	2734.16	Sandstone	
2700.00	2548.52	2445.31	2690.83	Shale	
2710.00	2557.65	2454.44	2977.08	Shale	
2720.00	2566.75	2463.54	2436.75	Shale	
2730.00	2575.84	2472.63	2536.53	Shale	Tipam
2740.00	2584.91	2481.70	2494.69	Shale	
2750.00	2593.98	2490.77	2550.62	Sandstone	
2760.00	2603.06	2499.85	3795.27	Sandstone	
2770.00	2612.15	2508.94	2374.13	Sandstone	
2780.00	2621.26	2518.05	2946.64	Shale	
2790.00	2630.39	2527.18	2390.42	Shale	
2800.00	2639.53	2536.32	2352.52	Shale	
2810.00	2648.68	2545.47	2329.47	Sandstone	
2820.00	2657.82	2554.61	2419.49	Sandstone	
2830.00	2666.95	2563.74	2381.05	Sandstone	
2840.00	2676.06	2572.85	2336.86	Sandstone	
2850.00	2685.16	2581.95	2465.69	Sandstone	
2860.00	2694.26	2591.05	2487.20	Sandstone	
2870.00	2703.37	2600.16	2480.39	Sandstone	
2880.00	2712.53	2609.32	2571.93	Sandstone	
2890.00	2721.73	2618.52	2595.70	Sandstone	
2900.00	2730.96	2627.75	2766.00	Sandstone	
2910.00	2740.19	2636.98	2947.30	Shale	
2920.00	2749.43	2646.22	3001.92	Sandstone	
2930.00	2758.68	2655.47	2774.60	Sandstone	
2940.00	2767.93	2664.72	2883.85	Sandstone	
2950.00	2777.17	2673.96	2826.21	Sandstone	
2960.00	2786.42	2683.21	3047.55	Sandstone	
2970.00	2795.66	2692.45	3241.62	Sandstone	
2980.00	2804.90	2701.69	3086.30	Sandstone	
2990.00	2814.13	2710.92	5402.91	Shale	
3000.00	2823.35	2720.14	3007.17	Sandstone	
3010.00	2832.56	2729.36	3187.95	Sandstone	

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
3020.00	2841.77	2738.56	3223.56	Sandstone	
3030.00	2850.98	2747.77	3151.22	Sandstone	
3040.00	2860.20	2756.99	3185.71	Shale	
3050.00	2869.41	2766.20	4380.82	Sandstone	
3060.00	2878.61	2775.40	3598.94	Sandstone	
3070.00	2887.81	2784.60	3171.03	Sandstone	
3080.00	2897.00	2793.79	2575.82	Shale	
3090.00	2906.18	2802.97	2183.93	Shale	
3100.00	2915.34	2812.13	3418.73	Shale	
3110.00	2924.50	2821.29	2764.82	Shale	
3120.00	2933.65	2830.44	2743.73	Shale	
3130.00	2942.79	2839.58	3380.29	Shale	
3140.00	2951.92	2848.71	4343.35	Sandstone	
3150.00	2961.04	2857.83	2766.65	Sandstone	
3160.00	2970.15	2866.94	2708.66	Shale	
3170.00	2979.26	2876.05	3963.80	Shale	
3180.00	2988.39	2885.18	3079.74	Shale	
3190.00	2997.53	2894.32	3312.52	Shale	
3200.00	3006.68	2903.47	3221.88	Sandstone	
3210.00	3015.83	2912.62	3032.81	Shale	
3220.00	3024.98	2921.77	3272.47	Shale	
3230.00	3034.13	2930.92	3701.34	Shale	
3240.00	3043.30	2940.09	3354.64	Sandstone	
3250.00	3052.49	2949.28	4069.57	Sandstone	
3260.00	3061.69	2958.48	4131.63	Shale	
3270.00	3070.90	2967.69	3539.94	Shale	
3280.00	3080.11	2976.90	4046.66	Sandstone	
3290.00	3089.33	2986.12	5063.66	Shale	
3300.00	3098.52	2995.31	3290.60	Shale	
3310.00	3107.71	3004.50	4303.38	Shale	
3320.00	3116.88	3013.67	3209.34	Shale	
3330.00	3126.06	3022.85	3351.77	Shale	
3340.00	3135.24	3032.03	3234.12	Shale	
3350.00	3144.42	3041.21	3406.72	Shale	
3360.00	3153.57	3050.36	3526.70	Sandstone	
3370.00	3162.72	3059.51	3463.14	Shale	
3380.00	3171.86	3068.65	3597.19	Sandstone	
3390.00	3181.02	3077.81	3525.35	Sandstone	
3400.00	3190.20	3086.99	3666.89	Shale	

Compressive Strength (4)					
Unconfined Compressive Strength (UCS) : Well Lakwagaon-03					
MD (m)	TVD (m)	TVDSS (m)	UCS (psi)	MECH_STRATIGRAPHY	Formation
3410.00	3199.37	3096.16	5689.79	Shale	
3420.00	3208.55	3105.34	3866.97	Shale	
3430.00	3217.71	3114.50	5390.68	Sandstone	
3440.00	3226.88	3123.67	3424.93	Sandstone	
3450.00	3236.05	3132.84	4114.83	Sandstone	
3460.00	3245.22	3142.01	3054.98	Shale	Barail
3470.00	3254.38	3151.17	4335.00	Shale	
3480.00	3263.52	3160.31	1894.27	Shale	
3490.00	3272.63	3169.42	3284.91	Sandstone	
3500.00	3281.72	3178.51	3861.09	Shale	
3510.00	3290.77	3187.56	3711.17	Shale	
3520.00	3299.79	3196.58	5798.42	Shale	
3530.00	3308.81	3205.60	3839.22	Sandstone	
3540.00	3317.83	3214.62	3136.93	Sandstone	
3550.00	3326.88	3223.67	2699.94	Sandstone	
3560.00	3335.92	3232.71	5258.32	Shale	
3570.00	3344.96	3241.75	5048.51	Shale	
3580.00	3354.00	3250.79	5411.15	Shale	
3590.00	3363.04	3259.83	4805.68	Sandstone	
3600.00	3372.07	3268.86	3928.00	Sandstone	
3610.00	3381.08	3277.87	4988.65	Shale	Barail Arn.
3620.00	3390.09	3286.88	4574.79	Sandstone	
3630.00	3399.08	3295.87	4299.55	Sandstone	
3640.00	3408.06	3304.85	4953.18	Shale	
3650.00	3417.03	3313.82	4542.49	Shale	
3660.00	3426.01	3322.80	4480.53	Shale	
3670.00	3434.98	3331.77	3967.84	Sandstone	
3680.00	3443.97	3340.76	4907.75	Sandstone	
3690.00	3452.99	3349.78	4305.99	Sandstone	
3700.00	3462.04	3358.83	4295.60	Sandstone	
3710.00	3471.13	3367.92	4202.06	Sandstone	
3720.00	3480.25	3377.04	4502.82	Sandstone	

APPENDIX-IV: CENTRIFUGE

The successful bidder shall supply the centrifuge along with the manpower as below:

- 1.1.** Two centrifuge to be supplied by the contractor to be used in both the package as per instruction of OIL on call basis individually.
- 1.2.** Operating / maintenance manual of Centrifuge shall be provided by the Contractor along with the power requirement and motor HP for running this facility. OIL will provide electrical power having specification of 415 V, 3 Phase, 50 Hz. The Electrical equipment must have Test Report of flame-proofness conforming to the relevant standards as per OMR, 2017 and subsequent guidelines from DGMS from an Indian Government Laboratory or NABL accredited laboratory or IECEX accredited laboratory or ATEX notified body, which is not a part of manufacturer's facility for use in Drilling well. OIL will only provide necessary assistance of Crane Services for installation (rig-up) of Centrifuge and Dismantling (rig-down) of same in each location. However, the Contractor will have sole responsibility for operation & maintenance of Centrifuge.
- 1.3.** The Contractor shall provide/ bring necessary platform for mounting the Centrifuge along with all required piping.
- 1.4.** Rig-up, Rig-down and ILM shall be the responsibility of service provider.
- 1.5.** Centrifuge must be compatible with supplied mud system and as per its requirement.

1.6. SPECIFICATION OF CENTRIFUGE

Make: Brandt - NOV / MI- Swaco / CSI(Centrisys) / Halliburton / Derrick / Kemtron Model

As per the above manufacturer Description:

- (i) High Speed Decanter with Variable Speed Hydraulic Drive With Feed Pump / Charge Pump /Progressive Cavity Pump.
- (ii) The centrifuge package should include all control and accessories including working platform.
- (iii) Motor H.P for running Centrifuge: 60 HP
- (iv) Motor H.P for running Feed Pump: Should be capable of meeting 185 gpm flow rate criteria
- (v) Centrifugal "G" force : 2000 or higher

Note: Any other additional or higher technical requirement other than above (point 1.6) as per the bidder's prospective for their mud system and solid control point of view must be consider at time of bidding without additional cost to OIL.

1.7. CENTRIFUGE OPERATOR:

Contractor will provide two experienced on-site Centrifuge operators on 12-hour shift basis. The operators will be required to work on a suitable ON/OFF-day rotation as per OMR'2017 or rules, regulations and circular thereunder. The deployed manpower must have minimum two years' experience in operating centrifuge in Drilling Rig. OIL reserves the right to modify its requirement of on-site Centrifuge operators anytime during the currency of the Contract. There will be no separate charges for the manpower.

APPENDIX-V**CHECKLIST FOR BEC/BRC**

Bidders to mark (√) **Provided/Complied** or **Not Provided/Not complied** along with the **Reference File No. and page No.** whichever is applicable

Clause No.	Description	Reference File No. and Page No. of Bidder's Quote	Complied/ Provided	Not complied/ Not Provided
1.0.	VITAL CRITERIA FOR BID ACCEPTANCE: The bid shall conform generally to the specifications and terms and conditions given in the Bid Documents. Bidders are advised not to take any exception/deviation to the Bid Documents. Exceptions/ Deviations, if any, should be brought out during the Pre-Bid Conference as scheduled against this Tender. After processing such suggestions, Company may communicate the changes, if any, through an addendum to the tender document in this regard to the prospective bidders who purchased the tender document. Still, if any exceptions/ deviations are maintained in the bid, such conditional/nonconforming bids shall not be considered, but shall be rejected outright.			
1.1	GENERAL CONFORMITY Bids will be rejected in case the equipment and services offered do not confirm to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bid 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.			
A.	<u>TECHNICAL EVALUATION CRITERIA</u>			
1.0	The following minimum criteria should be met by the Bidder failing which their bid/offer will be rejected: d) Bidder should be a Directional Drilling and Logging while drilling Service Provider Company engaged in providing Rotary Steerable System (RSS) integrated with collar based MWD & LWD tools to E & P Industry (company involved in exploration			

	<p>& production of Oil & Gas) since last 7 years to be reckoned from the original bid closing date. Bidder should have also successfully completed at least 01(One) Contract of minimum 01(One) year duration using RSS with MWD/LWD in last 05(Five) years as on original bid closing date.</p> <p>e) The bidder should have also successfully completed minimum 6 (Six) directional wells using RSS – MWD/LWD tools in combination. Each well should have a minimum drift displacement of 2000 m.</p> <p>f) In case any Prime bidder who does not have Mud services on their own and brings in a partner with tie up, the Mud engineering partner should individually have experience of providing Mud engineering services to any E & P company for minimum 02(Two) year under a single contract in the last 05(Five) years and additionally should have completed minimum Mud service in 03(Three) wells of minimum 3000m or more as on original bid closing date.</p>			
2.0	<p>a. The Bidder shall confirm to provide two identical package each having all of the following services:</p> <p>v) One set of SDMM + MWD with Directional and Gamma Ray + Jar for 17½” hole section along with MWD/LWD surface Unit.</p> <p>vi) One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling and Resistivity (Induction Type) tool along with MWD/LWD surface Unit for 12¼” hole section.</p> <p>vii) One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray + Jar/Intensifier, Annulus Pressure & Temperature while drilling, Resistivity (Induction Type) tool, Neutron-Azimuthal Density with imaging & calliper along with MWD/LWD surface Unit for 8½” hole section.</p> <p>iii) Mud Engineering Service.</p>			
2.0	<p>b. 6” Callout Set (Common for both Package-1 & Package-2): One set of SDMM + Rotary Steerable Systems + MWD with Directional and Gamma Ray +</p>			

	Jar/Intensifier, Annulus Pressure & Temperature while drilling, Resistivity (Induction Type) tool, Neutron-Azimuthal Density with imaging & calliper, Sonic While Drilling, FPWD, Nuclear Magnetic Resonance along with MWD/LWD surface Unit for 6" hole section on call out basis.			
3.0	In case the bidder does not have all the services of their own, they can have pre-tender tie-up only for the Mud Engineering & Jar/Intensifier. However, the prime bidder has to have the Directional Drilling services of its own.			
3.1	In case of pre-tender tie-up, the bidder should execute a legally enforceable MOU/ Agreement valid for entire duration of the contract including extension, if any. Copies of the pre - tender tie-up for each third-party service mentioned under clause 3.0 above, should be furnished along with the Technical Bid clearly referring to OIL's tender document number & indicating the scope of work for technical partner of the bidder. Notwithstanding the MOU, bidder shall clearly undertake the single point responsibility of completing the project as offered by the bidder.			
4.0	<p>Mobilization: Bidder has to confirm mobilization of all the tools, equipment and personnel within 120 (One Hundred Twenty) days from date of issue of the 1st mobilization notice under each package (refer Clause A 2.0). However, OIL reserves the right to mobilize each of the packages in a phased manner and in that case, the separate call out notice will be issued. Offers indicating mobilization time more than 120 days from the date of issuance of mobilization notice for the set of tools(s) will be rejected.</p> <p>For Mud Engineering Services, Bidder has to confirm mobilization of Mud Engineering services along with personnel within 120 (One Hundred Twenty) days from date of issue of the 1st mobilization notice.</p> <p>In case of call out service, 60 days mobilization notice will be issued.</p>			

5.0	<p>For proof of requisite Experience (refer Clause No.A.1.0); the following documents/ photocopy (self-attested/attested) must be submitted along with the un-priced Techno-commercial bid:</p> <p>(e) Documentary evidence(s) in the form of relevant pages of the contract(s) executed showing detailed address(es) of client(s), scope of work and work order(s) along with completion certificate(s)/payment certificate(s) issued by the client(s) or any other document(s) which substantiate the 07 (Seven) years' experience and also details of documents for 01(One) completed Contract of drilling Directional Wells using RSS/SDMM along with MWD/LWD. The same should also be submitted as per Annexure-A.</p> <p>(f) Documentary evidence(s) in the form of relevant pages of the contract(s) executed showing detailed address(es) of client(s), scope of work and work order(s) along with completion certificate(s)/payment certificate(s) issued by the client(s) or any other document(s) which substantiate the 01(One) completed Contract of Mud Engineering Service to any E & P Company. For 03(Three) wells of minimum 3000 m or more, bidder has to submit the DMR of the particular wells.</p> <p>(g) Documentary evidence(s) in the form of work order(s)/end of well report(s)/well completion report(s)/directional survey reports/ completion certificate(s) or any other document(s) in support of the successful completion of the 06 (Six) nos. of High-Displacement Directional Wells shall have to be submitted in support of the Technical experience criteria (A.1.0.b). The same should also be submitted as per Annexure-B.</p> <p>(h) Bidder can also provide self-certified documents duly signed by the authorized signatory of the bid/CEO of the firm confirming execution of required number of High Displacement directional wells with drift displacement of minimum 2000 meters, clearly indicating Contract no., well name and operator's details. However, for Mud engineering Service, the declaration has to be signed by the authorized signatories of the bid/CEO of both the partners of the bid confirming execution of Mud service in 03(Three) wells of minimum 3000m or more.</p> <p>NOTE: Oil India Limited (OIL) reserves the right to contact the Client(s) referred by the Bidder</p>			
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	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.			
6.0	A job executed by a bidder for its own organization / subsidiary will not be considered as experience for the purpose of meeting BEC.			
7.0	<p><u>Bids from 100% subsidiary:</u></p> <p>Bids of those bidders, who themselves do not meet the experience criteria as stipulated in the tender, can also be considered provided the bidder is a 100% subsidiary company of the parent company which itself meets the experience criteria. In such case, as the subsidiary company is dependent upon the experience of the parent company with a view to ensure commitment and involvement of the parent company for successful execution of the contract, the participating bidder should enclose an agreement (as per format furnished vide Proforma-N) between the parent company and the subsidiary company and Corporate Guarantee (as per format furnished vide Proforma-O) from the parent company to OIL for fulfilling the obligation under the contract, along with the technical bid.</p>			
8	<p><u>In case Bid is submitted on the basis of the Technical Experience of Sister Subsidiary/Co-Subsidiary Company:</u> Offers of those bidders who themselves do not meet the technical experience criteria stipulated in A.1.0 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 following conditions:</p> <p>(d) Provided that the sister subsidiary/co-subsidiary company and the bidding company are both 100% subsidiaries of an ultimate parent/holding company</p>			

	<p>either directly or through intermediate 100% subsidiaries of the ultimate parent/holding company or through any other 100% subsidiary company within the ultimate parent/holding company. Documentary evidence to this effect to be submitted by the ultimate parent/holding company along with the technical bid.</p> <p>(e) Provided that the sister subsidiary/co-subsidiary company on its own meets the technical experience criteria laid down in Clause A.1.0 above and not through any other arrangement like technical collaboration etc.</p> <p>(f) Provided that 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 vide Proforma-Q, between them, their ultimate parent/holding company, along with the technical bid.</p>			
9	<p><u>BIDS FROM CONSORTIUM:</u></p> <p>In case the Bidder is a Consortium of Companies, the following requirements must be satisfied by the Bidder:</p> <p>(xv) Acceptable Memorandum of Understanding (MOU) has to be made between the consortium partners, which should be duly signed by the authorized executives of the consortium members clearly defining the role/scope of work of each partner/ member, binding the members jointly and severally to any & all responsibilities and obligations under the contract, if awarded, and identifying the Leader of the Consortium.</p> <p>(xvi) The leader of the consortium must satisfy the minimum experience requirement as per clause A.1.0 above.</p> <p>(xvii) The leader of the consortium must confirm unconditional acceptance of full responsibility of executing the “Scope of</p>			

	<p>Work” of this tender. This confirmation must be submitted along with the technical bid.</p> <p>(xviii) MOU/Agreement concluded by the bidder with consortium partners, should be addressed to the Company, clearly stating that the MOU/ Agreement is applicable to this Tender and shall be binding on them for the entire contract period, including extension, if any. The MOU must unconditionally and unequivocally declare that the MOU shall remain valid during the validity of the Contract. The MOU/Agreement should be submitted along with the Technical bid.</p> <p>(xix) Only the Leader of the consortium shall register against the tender on e-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.</p> <p>(xx) The Bid Security shall be in the name of the Leader of the consortium on behalf of consortium with specific reference to consortium bid and with name(s) & address(es) of Consortium members. Similarly, the Performance Security shall be in the name of the Leader on behalf of the Consortium.</p> <p>(xxi) 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 shall also be responsible for resolving dispute/ misunderstanding/ undefined activities, if any, amongst all the Consortium members.</p> <p>(xxii) Any correspondence exchanged with the leader of consortium shall be binding on all the consortium members.</p>			
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	<p>(xxiii) Payment shall be made by OIL only to the leader of the consortium towards fulfilment of contract obligations. OIL may consider direct payment to individual consortium members within the same vertical, provided the consortium, so formed is complied with the terms of the Circular No. 07/2016 dated 07th March, 2016 issued by the Central Board of Direct Taxes (CBDT). Besides, for direct payment required for their part of scope of works, the same should be clearly indicated in the bid as well as MoU along with member-wise details of price break-up</p> <p>(xxiv) In case of Consortium bids, the bid shall be digitally signed by the leader of Consortium. The Power of Attorney from each member authorizing the leader for signing and submission of Bid on behalf of individual member must accompany the Bid.</p> <p>(xxv) Documents/details pertaining to qualification of the BIDDER 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.</p> <p>(xxvi) 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.</p> <p>(xxvii) 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.</p> <p>(xxviii) Members of the consortium are not allowed to quote separately/ independently</p>			
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	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.			
B.	<u>FINANCIAL EVALUATION CRITERIA:</u>			
1.0	The bidder must have minimum annual financial turnover of at least INR 152.82 Crores or USD 20.24 Million in any of the preceding three (3) financial/accounting years reckoned from the original bid closing date as per the Audited Annual Reports			
2.0	In case of Consortium of companies, any member of the Consortium shall have an annual financial turnover of minimum INR 152.82 Crores or USD 20.24 Million during any of the preceding 03 (Three) financial/ accounting years reckoned from the original bid closing date and other member(s) of the consortium shall have an annual financial turnover of minimum INR 76.41 Crores or USD 10.12 Million during any of the preceding 03 (Three) financial/ accounting years reckoned from the original bid closing date. Borrowing support from parent/supporting company is not allowed to meet the financial criteria.			
3.0	"Net Worth" of the bidder should be positive for the financial/accounting year preceding the Original Bid Closing date. Similarly, in case of consortium bidding, the Net Worth of all the consortium partners individually should be positive for the accounting year preceding the original bid closing date. [Net worth shall mean: "Share capital + Reserves created out of profits and securities Premium – Aggregate value of accumulated losses (excluding revaluation reserves) – deferred expenditure – Miscellaneous Expenditure to the extent not written off and carried forward Loss – Reserves created out of write back of depreciation and amalgamation".			

4.0	<p>In case the bidder is a subsidiary company (should be a 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 following documents need to be submitted along with the technical bid:</p> <p>(vi) Annual Turnover of the parent/ultimate parent/holding company in any of preceding three (3) financial /accounting years reckoned from the original bid closing date as per the Audited Annual Reports shall be minimum INR 152.82 Crores or USD 20.24 Million.</p> <p>(vii) Net Worth of the parent/ ultimate parent / holding company should be positive for the financial/accounting year preceding the original bid closing date.</p> <p>(viii) Corporate Guarantee (as per Proforma-P) 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, and</p> <p>(ix) The bidder is a subsidiary company of the parent/ultimate parent /holding parent company.</p> <p>(x) <i>Notwithstanding to the existing provision in the tender, Bidders who wish to submit the latest audited financial statements of the just concluded FY in support of meeting Turnover and Net worth (Financial BEC) shall also be considered against this tender.</i></p>			
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5.0	<p>6.0 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 /within the due date for furnishing of audit report as per Section 139(1) of IT Act, 1961 (read along with latest circulars/notifications issued by CBDT from time to time) 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 will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 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 as per format.</p> <p><u>Notes:</u></p> <p>(iv) For proof of Annual Turnover & Net worth, Working Capital, Bid Capacity & Debt Equity Ratio any one of the following documents must be submitted along with the bid:</p> <p>(c) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover, Net worth, Working Capital, Bid Capacity & Debt Equity Ratio as per format prescribed in Proforma-J. Please note that mentioning of UDIN (Unique Document Identification Number) is mandatory for all Certificates issued by Chartered Accountant w.e.f. 1st February 2019.</p> <p style="text-align: center;">OR</p> <p>(d) Audited Balance Sheet along with Profit & Loss account. In case of foreign bidders, self-attested/digitally signed printed published accounts are also acceptable.</p>			
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	<p>(v) 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.</p> <p>(vi) In case the Audited Balance sheet and Profit Loss Account submitted along with the bid are in currencies other than INR or US\$, the bidder shall have to convert the figures in equivalent INR or US\$ considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA Certificate (with Valid UDIN) is to be submitted by the bidder regarding converted figures in equivalent INR or US\$. 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.</p> <p><u>NOTE:</u> OIL reserves the right to ask for any Original or other relevant document to verify the certification.</p>			
C.	<u>COMMERCIAL EVALUATION CRITERIA:</u>			
1.0	<p>Bids shall be submitted under single stage two Bid system i.e. Un-priced Techno-Commercial Bid and Priced Bid separately in the OIL's e-Tender portal. The Un-priced techno-commercial bid (or Technical bid) is to be uploaded as per Scope of Work & Technical Specification of the tender in "Technical RFx Response" Tab and Priced Bid as per Proforma-B ,B1(Imported) B1(Indigenous) & B2(Call out) uploaded in the "Notes & Attachments" Tab. Bids shall be rejected outright if the prices are indicated in the</p>			

	technical bids. Bids not conforming to this two-bid system shall be rejected outright.			
2.0	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. Bids with adjustable price terms will be rejected			
3.0	Bid received with validity of offer less than 120 (One twenty) days from Original Bid Closing Date will be rejected			
4.0	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 a period of two years. This suspension of two years shall be automatic without conducting any enquiry			
5.0	The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide “Proforma-M” of the tender document. The proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial 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 with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid will be rejected			
6.0	Physical Bids, if any received from the bidders, shall not be considered and will be rejected.			
7.0	Bids submitted after the Bid Closing Date and Time will be rejected.			
8.0	Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.			
9.0	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.			

10.0	Bids documents shall be typed or written in indelible ink and shall be digitally signed by the bidder or his authorised representative.			
11.0	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 initialled by the person or persons who has/have digitally signed the Bid.			
12.0	Any Bid containing false statement will be rejected.			
13.0	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.			
14.0	Bidders shall quote directly and not through their Agent/ Representative/Retainer/Associate in India. Bids submitted by Indian Agent/ Representative/Retainer/Associate on behalf of their foreign principals will not be considered and will be rejected straightway. One Indian Agent/Representative/Retainer/Associate cannot represent more than one foreign principal.			
15.0	<p>Bidder must accept and comply with the following clauses as given in the Bid Document in toto failing which bid will be rejected –</p> <ul style="list-style-type: none"> i) Performance Guarantee Clause ii) Force Majeure Clause iii) Tax Liabilities Clause iv) Arbitration Clause v) Acceptance of Jurisdiction and Applicable Law vi) Liquidated damage and penalty clause vii) Safety, Environment & Labour Law viii) Termination Clause ix) Integrity Pact 			
16.0	The Bids and all uploaded documents must be digitally signed using “Class 3” digital certificate [e-commerce application (Certificate with personal verification and Organization name)] as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.			

D.	PRICE EVALUATION CRITERIA: The bids conforming to the technical specifications, terms and conditions stipulated in the bidding document and considered to be responsive after subjecting to Bid Evaluation Criteria mentioned above will be considered for further evaluation as per the Price Evaluation Criteria given below:			
1.0	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.			
2.0	For conversion of foreign currency into Indian currency for evaluation of Bids, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of priced bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceeds 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.			
3.0	The bidders must quote their charges/rates in the manner as called for vide "Schedule of Rates" under Section-IV and the summarized price schedule format vide enclosed Proforma-B,B1(Imported),B1(Indigenous)& B2(callout),			
4.0	The quantities shown against each item in the "Price Bid Format" shall be considered for the purpose of Price 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.			

5.0	<p>Bidders to note the following:</p> <ul style="list-style-type: none"> vi) Mobilization charges for each Package shall not exceed 1% of the total quoted value of each respective Package in the Price Bid format. However, Mobilization charges if quoted in excess of 1% total quoted value for the Package, the excess amount shall be paid at the end of the contract. vii) De- Mobilization charges for each Package should not be less than 1% of the total quoted value of each respective Package in the Price Bid format. If De-mobilization is quoted in deficit or less than 1% of total quoted value for the Package, the deficit amount shall be withheld from the first invoice and the same will be paid at the end of the contract along with Demobilization charges. viii) Interim Mobilization charges of each Package should not exceed 0.5 % of total quoted value for each respective Package in the Price Bid format. ix) Interim De-mobilization charges of each Package should not exceed 0.5 % of total quoted value of each respective package in the Price Bid format. x) Standby charges of each tools/ equipment (applicable for all sizes) shall not exceed 50% of the quoted operating Unit rate for the respective tools/ equipment in the Price Bid. 			
6.0	<p>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, B1 for (Imported) ,B1 (Indigenous) & B2 (Call out).</p> <p>Total Estimated Contract Cost for 3 (three) years including all Taxes & Duties except GST and Basic Customs Duty which shall be extra to OIL's account:</p> <p>$T = T1 + T2 + GST$</p> <p>Where,</p> <p>T = Total contract cost for 03 (Three) years</p>			

	T1 = Total Cost of Regular Service T2 = Total Cost of Call Out Service			
E.	GENERAL:			
1.0	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.			
2.0	To ascertain the substantial responsiveness of the Bid the Company reserves the right to ask the bidder for clarification in respect of clauses covered 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.			
3.0	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.			
4.0	CUSTOMS DUTY: In terms of Sl. No. 404 of the Customs Notification No.50/2017-Cusdated 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. 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. 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.			
5.0	<u>PURCHASE PREFERENCE TO MICRO AND SMALL ENTERPRISES:</u> 5.1 Categorisation 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			

	<p>ENTERPRISES. The existing enterprises registered under EM-Part-II or UAM till 30th June 2020 shall continue to be valid only for period up to the 31st day of March, 2021.</p> <p>5.2 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 a MSE.</p> <p>5.3 In case of more than one such MSE qualifying for 15% purchase preference, the contract shall be awarded to lowest eligible MSE amongst the MSEs qualifying for 15% purchase preference.</p> <p>5.4 In case any part of the work is sub-contracted to a Micro or Small Enterprise as per contract conditions then the contractor shall provide complete details (i.e. name of the subcontractor, value of sub-contacted work, copy of valid registration certificate etc.) of the sub-contractor to OIL.</p> <p>5.5 <u>DOCUMENTATION REQUIRED TO BE SUBMITTED BY MSEs:</u></p> <p>The bidder claiming as MSE status (MSE-General, MSE-SC/ST, MSE-Woman) against this tender has to submit the following documents for availing the benefits applicable to MSEs:</p> <ol style="list-style-type: none"> i. Udyam Registration Number with Udyam Registration Certificate. <li style="text-align: center;">Or ii. Proof of registration with District Industry Centres 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 Adhaar registration or registration with any other body specified by Ministry of MSME. <p><u>Note:</u> In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur or Woman Entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur/Woman Entrepreneurs should also be enclosed.</p> <p>5.6 Provisions such as seeking support from another company by way of technical collaboration, submission of JV/ consortium bid, etc., wherever allowed in the tender</p>			
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	<p>document shall be available to all interested bidders including MSEs. In those scenarios, MSEs quoting on the strength of technical collaborators will be eligible for the benefits reserved for MSEs (i.e. exemption from payment of EMD and purchase preference). However, in case of submission of Consortium bids by MSEs, in order to avail the benefits reserved for MSEs (i.e. exemption from payment of EMD and 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 requirements including technical and financial evaluation criteria. In that case, all the members of the Consortium including the leader of the Consortium should be eligible MSEs. Further, in case of bid from incorporated JVC, in order to avail the above MSE benefits, the bidder i.e. JVC shall have to be MSE unit</p>			
6.0	<p><u>PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT) (PP-LC)</u></p> <p>Purchase preference policy linked with Local Content (PP-LC) - notified vide letter no. FP-20013/2/2017-FPPNG dated 17th November, 2020 of MoPNG shall be applicable in this tender. [Copy of the notification is enclosed as Exhibit-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.</p> <p>6.1 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. FP20013/2/2017-FP-PNG dated 17th November 2020 or subsequent amendments, if any.</p> <p>6.2 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.</p> <p>6.3 Where MSE is already L-1 in the tender evaluation, contract for L-1 portion shall be</p>			

	<p>straightway awarded to MSE, without considering any Purchase Preference for PPLC bidder.</p> <p>6.4 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'.</p> <p>6.5 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.</p>			
7.0	<p><u>VERIFICATION AND CERTIFICATION OF DOCUMENTS BY INDEPENDENT THIRD PARTY INSPECTION AGENCIES</u></p> <p>7.1 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:</p> <ul style="list-style-type: none"> i. M/s. RINA India Pvt. Ltd. ii. M/s. Dr. Amin Controller Pvt. Ltd. iii. M/s. Germanischer Lloyd Industrial Services GmbH (DNV GL - Oil & Gas) iv. M/s. TÜV SÜD South Asia Pvt. Ltd. v. M/s. IRCLASS Systems and Solutions Private Limited vi. M/s. Gulf Llyods Industrial Services (India) Pvt. Ltd. vii. M/s. TUV India Private Limited viii. M/s. TÜV Rheinland (India) Pvt. Ltd. ix. M/s. Bureau Veritas (India) Private Limited <p>7.2 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</p>			

	<p>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.</p> <p>7.3 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 normally considered. However, in case a bidder submits its bid along with 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 seven (7) days of actual 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 seven (7) days of actual bid opening at its own risk and responsibility. If a bidder does not submit the undertaking towards submission of third party certification within 7 days from date of Bid Closing date, but certified document reaches us within the cut-off date of above seven (7) days, then such bids shall be considered.</p> <p>7.4 The methodology of inspection/verification of documents followed by the agencies is broadly as under but not limited to:</p> <p>(a) The prospective bidder will contact any of the empanelled inspection agencies against such tender. When prospective bidders approach any of the OIL's empanelled Inspection Agency, the agency will ask for the tender document and should go through the Tender Document, especially the requirements of BEC/BRC and list the documents to be verified. The inspection Agency 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</p>			
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	<p>at no extra cost to OIL. A copy of the Inspection Certificate shall be directly sent to the Concerned Tendering officer of OIL INDIA LIMITED, mentioned in the respective tender.</p> <p>(b) Verification of documents are normally categorized as under:</p> <p>i. General Requirement:</p> <ul style="list-style-type: none"> • Check Bidder's PAN Card • Check Bidder's GST Certificate • Check ITR of company – last three years (minimum) • Check Bidder's Certificate of Incorporation – Domestic Bidder. <p>ii. Additional Documents : (If applicable against the tender)</p> <ul style="list-style-type: none"> • Joint Ventures Agreements – To Double-check with JV Partners • Consortium Agreements – To Double-check with Consortium Partners • Holding/Parent/Subsidiary Company – To check the notarized Share Holding pattern <p>iii. Technical Criteria</p> <ul style="list-style-type: none"> • Experience Proof – To check Original Work Order as per BEC /criteria • To check Company Name • To check Similar Work Definition against Work Order, Scope of work (JV or Consortium too) • To check the Execution period • To Check the Completion Certificates – Letter of Appreciations of proper Execution • Reference contact verification and true copy verification • Match Original Work Order/Contract Copy with Soft Copies or notarized scan copies <p>iv. Financial Criteria</p> <ul style="list-style-type: none"> • Check and verify Audited Balance Sheet/CA certificate • To check the Line of Credit, if incorporated in the tender <p><u>Notes:</u></p> <p>(i) If any documents LOI/LOA/ Contracts etc. are submitted towards BEC/BRC experience criteria issued by Oil India Limited,</p>			
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	<p>such documents need not be verified by TPI agency.</p> <p>(ii) Undertaking from TPI Agency as per format (Proforma-V) enclosed should be submitted along with the Bid</p>			
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--End of Tender Document--