



TENDER DOCUMENT

FOR

HIRING OF INTEGRATED DRILLING SERVICES-IDS

**FOR PROPOSED DRILLING OF DEVELOPMENT / EXPLORATORY WELLS
IN GEL OPERATED BLOCKS, GUJARAT**

For

[CB-ONN-2000/1 & RFPSC Block, CB-ON/2 & RFPSC Block, CB-ONN-2003/2 Block and CB-ONN-2002/3 Block located in Gujarat, India]

TENDER NO.: GEL/Onshore Blocks/IDS/2026-27/645

Tender ID On (n)Procure: 332898

GUJARAT ENERGY LIMITED

Gujarat Energy Bhavan, Sector-11, Gandhinagar - 382 010, Gujarat, India

August 2026

Bid Issue Date : 08th August 2026

Bid Closing Date : 31st August 2026 (16:00 hrs IST)

DISCLAIMER

1. All information contained in this Tender Document and all annexures, appendix, schedules, forms thereof (the “**Tender Document**”), or which information is subsequently provided, by or on behalf of GUJARAT ENERGY LIMITED (the “**Company**” or “**GEL**”) is being provided to the Bidder(s) for the purpose of inviting Bids and does not constitute nor should be interpreted as an offer.
2. This Tender Document is meant to provide information only and is issued upon an express understanding and agreement that the Bidders will use it only for the purpose of preparing and submitting the Bid and for the purpose necessarily associated herewith and for no other purpose whatsoever.
3. The purpose of this Tender Document is to provide the Bidders with basic and preliminary information to assist them in the preparation of their Bids for provision of **Hiring of Integrated Drilling Services (IDS)** for wells mentioned herewith in the tender for different blocks located in Gujarat and for no other purpose, and is not intended to form the basis of any decision on part of the Bidder(s) to proceed with the Bid.
4. The Company makes no representation or warranty, express or implied, as to the accuracy, correctness and completeness of the information contained in the Tender Document. Each Bidder must conduct its own investigation and analysis and should check the accuracy, reliability and completeness of the information and obtain independent advice in relation to the same from appropriate sources.
5. While this Tender Document has been prepared in good faith, neither the Company nor its consultants, officers or employees make any representation or warranty or shall have any responsibility or liability whatsoever in respect of any statements or omissions here from. Nothing in this Tender Document shall be construed as legal, financial or tax advice. Any liability is accordingly expressly disclaimed by the Company, its consultants, partners, Affiliates, their respective officers, agents and employees even if any loss or damage is caused by any act or omission on the part of the Company, its consultants, partners, Affiliates, their respective officers, agents or employees, whether negligent or otherwise.
6. By acceptance of this Tender Document, the Bidders agree that information contained herein supersedes document(s) or earlier information, if any, in relation to the Scope of Work. This Tender Document and any information herewith will be superseded by any later written information on the same subject made available to the recipient by or on behalf of the Company.
7. Each Bidder agrees, understands and accepts that the information contained in this Tender Document is subject to change without notice. Further, in no event, may it be assumed that there shall be no deviation or change in any of the information mentioned herein. The Company, at its own discretion, without any obligation to do so, may, update, amend or supplement any information contained in this Tender Document, including the evaluation methodology, at any time prior to the submission of the Bids.
8. Each Bidder unconditionally agrees, understands and accepts that the Company reserves the right to accept or reject any or all Bids without giving any reason. Neither the Company nor its employees or advisers shall entertain any claim of any nature, whatsoever, including without limitation, any claim seeking expenses in relation to the preparation of Bids.
9. This Tender Document has not been filed, registered or approved in any jurisdiction. Recipients of this Tender Document resident in jurisdictions outside India should inform themselves of and observe any applicable legal requirements.
10. Each prospective Bidder must conduct its own analysis of the information contained in this Tender Document, to correct any inaccuracies therein and is advised to carry out its own investigation into the proposed opportunity, the regulatory regime which applies thereto and all matters pertinent to the proposed opportunity and to seek its own professional advice on the legal, financial, regulatory and taxation consequences of entering into any agreement or arrangement relating to the proposed opportunity.
11. The Company is not bound to accept any or all the offers. The Company reserves the right to reject any or all the offers without assigning any reason. The Company further reserves the



right to negotiate with any or all Bidders in relation to their offers. No Bidder shall have any cause of action or claim against the Company or its officers, employees, consultants, agents, successors or assignees for rejection of its offer.

12. All Bids, including any and all supporting documents submitted therewith, pursuant to this Tender Document, once submitted, shall become the property of the Company. Provided however, any intellectual property rights existing in the information contained in such Bid will remain the property of the Bidder (or other persons, as appropriate) submitting that Bid. Provided further that the Bidder shall have deemed to have licensed and authorised the Company, its officers, employees, advisers, consultants and agents to copy, adapt, disclose or to use, as the Company may deem fit, all information and material contained in the Bid for the purposes of the Bid process including, without limitation, evaluation of the Bids. For abundant caution it is hereby expressly clarified that the Company and/or its employees, officers, consultants, advisers or other representative may make such copies of the Bids as they, in their sole discretion, may require.
13. Any extension of time to be granted to any Bidder for submission of its Bid shall be at the sole discretion of the Company. Each Bidder should satisfy itself that the Tender Documents are complete in all respects. In the event that the Tender Document or any part thereof is mutilated or missing, the Bidder shall notify the Company immediately at the following address:

SVP(C&P)/AGM(C&P)

5th Floor, North wing, Gujarat Energy Bhavan,
Behind Udyog Bhavan, Sector-11,
Gandhinagar - 382 010, Gujarat, India

Phone No: +91-79-6670 1505

Fax No: +91-79-2323 6375

In the event such written notice is not received at the aforementioned office within 3 days from the date of issue of the Tender Documents to the Bidder, the Tender Documents received by the Bidder shall be deemed to be complete in all respects.

14. The laws of the Republic of India are applicable to this Tender Document. Courts in [Gandhinagar, Gujarat, India] shall have exclusive jurisdiction in relation to any disputes arising from this Tender Document.
15. Each interested person's acceptance of delivery of this Tender Document constitutes its agreement to, and acceptance of, the terms set forth in this Tender Document.

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SECTION 1: INVITATION TO BIDDERS

GUJARAT ENERGY LIMITED

GEL Bhavan, 5th Floor, Behind Udyog Bhavan, Sector-11, Gandhinagar - 382 010, Gujarat, India
Phone No: +91-79-66701005/ 66701505; Fax No: +91-79-23236375

1.1. REQUEST FOR QUOTATION ("TENDER DOCUMENT" or "BID")

ISSUE DATE: 08th August 2026

BID DUE DATE: 31st August 2026 (16.00 hrs IST)

THE TECHNICAL BIDS SHALL BE OPENED 30 MINUTES AFTER THE BID CLOSING TIME ON BID CLOSING DATE. THE BIDDER MAY DEPUTE ITS REPRESENTATIVE WITH THE AUTHORIZATION LETTER TO WITNESS THE TECHNICAL BID OPENING.

Gentlemen:

GUJARAT ENERGY Ltd. (hereinafter referred to as "GEL") acting as Operator for Ahmedabad (CB-ONN-2000/1 including RFPSC), Ankleshwar (CB-ONN-2003/2), Sanand-Miroli (CB-ONN-2002/3) & Tarapur (CB-ON2 including RFPSC) Blocks under Production Sharing Contract (PSC) with Government of India. Company on behalf of consortium members of the above referred blocks respectfully solicits your Bid for hiring of Integrated Drilling Services (IDS) for drilling operations in above mentioned Blocks as per Scope of Work (SOW).

Gujarat Energy Limited ("GEL"/"Company"), acting as Operator/on behalf of the consortium members of its operated blocks in Gujarat, invites Bids from reputed and experienced Bidders for this single combined Tender:

- Integrated Drilling Services (IDS): Supply of drilling rig together with Drilling Fluids Services, Cementing Services, Directional Drilling Services and other allied services on an integrated package basis as per tender document, , for drilling of onshore Wells in GEL operated blocks.

1.1 Tender Fee & Bid Bond

No Tender Fee is payable. Bid Bond / EMD is payable strictly as specified in the Bidder Qualification Criteria (BQC) at Section 10.

1.2 Bid Due Date & Mode of Submission

Bids shall be submitted online through GEL's designated e-procurement (n-procure) portal by the Bid Due Date and Time specified on the cover page, in a two-bid system (Technical/Unpriced Bid and Commercial/Priced Bid) as elaborated in Section 2. No physical or emailed bids shall be accepted except where explicitly permitted for Bid Bond instruments in original.

1.3 Clarifications

Bidders may seek clarifications on this Tender only in writing by e-mail addressed to GEL's nominated contact(s) on or before the last date for clarification specified in the tender calendar in Attachment-2. GEL's decision on providing clarification, corrigendum or extension of the Bid Due Date shall be final and binding. No clarification shall be entertained within the 4 days of tender closing date.

Your quotations (Bid) must be in compliance with the requirements, specifications, attachments, including Company's terms and conditions mentioned in this tender document. Exceptions/deviations pertaining to any of the above must be clearly stated in the applicable section and must be in the prescribed format provided during pre-bid stage, failing which it will be assumed no exceptions/deviations were taken/ made. Bidders are required to note that the estimates provided herein are for the purpose of evaluation. Payments will be made for actual work carried out at site.



Evaluation of Bids for awarding the contract, while weighting price substantially, will be based on the most advantageous offer reflecting a combination of price, quality of equipment and personnel, acceptable delivery, warranty, service, and a commitment to ensure on-time delivery and quality service along with confirmation of no exceptions/deviation taken by Bidder. Company shall have a right to disqualify any bidder, whose services have been terminated on account of lack of performance/breach of contract or if any litigation is pending with any bidder as it may deem fit.

Company reserves the right to reject or accept, in whole or in part, any Bid; waive formalities in the bidding process, or to negotiate contract terms with any bidder when such is deemed by Company to be in its best interest. Company will be under no obligations to provide reasons for accepting or rejecting a Bid.

Tender, pre-bid clarifications/corrigendum and other Tender related information shall be uploaded on the website as well as on n-procure portal on regular basis. Bidders are required to refer our website <https://gujarat-energy.com/> on regular basis for this tender.

For Gujarat Energy Limited

Amitabh Ranjan -SVP (C&P)

SECTION 2: INSTRUCTION TO BIDDERS

This Section 2 governs bidding for Integrated Drilling Services (IDS).

2.1 General Instructions

- The Bidder shall prepare and submit separate Technical and Commercial Bids (with the Bid Bond),
- The Bidder shall review the Scope of Work (Section 7), the General Terms & Conditions (Section 4), the Special Conditions of Contract (Section 5) and the Bidder Qualification Criteria (Section 10) and ensure that the equipment, materials and personnel offered meet the specifications prescribed.
- The Bidder shall be deemed to have understood and accepted all terms and conditions of the General Terms & Conditions and the Special Conditions of Contract, price schedule and other requirement mentioned in the tender document after GEL's response on the exceptions/deviations taken by bidder in pre bid stage (Attachment 2). Where no exceptions/ deviations are clarified by GEL, the GTC and SCC shall be deemed unconditionally accepted. Bidder is required to submit no exception deviation form through Attachment -13.
- Bids from agents/representatives shall not be accepted unless backed by a valid Letter of Authorization; the Bid Bond must nonetheless be furnished by the principal bidding entity.
- The Bidder shall bear all costs of preparation and submission of its Bid. GEL shall not be liable for any such costs under any circumstances, regardless of the outcome of the tender process.
- Consortium, Joint Venture (JV) or Association of Persons (AoP) bids are not permitted. The Bid shall be submitted by a single legal entity that shall bear sole responsibility for performance, including work performed through permitted Technical Partners/sub-contractors (see Clause 2.6 below).
- Transfer of Bidding Document: The Bidding document is not transferable.
- Bidders should indicate in their proposal the legal entity which will be executing the Contract. The Bid shall be duly signed and sealed by the Executive Officer / or the Authorized Representative of the Bidder's Organization/Company.

2.2 Two-Bid System

A two-bid system — "Technical/Unpriced Bid" and "Commercial/Priced Bid" — shall be followed. The Technical Bid shall not contain any price information; the Price Schedule shall be uploaded in the Technical Bid only with the remark "QUOTED" against every applicable line item and without figures. The corresponding priced Price Schedule shall be submitted only in the Commercial Bid.

2.2.1 Technical Bid — Contents

- Bid Bond in the prescribed format (Attachment 3).
- Forwarding Letter / Bidder's Response Acknowledgement (Attachment 1).
- Documentary evidence in support of the applicable Bidder Qualification Criteria (Section 10) — Rig ownership/operatorship, Experience Criteria, Financial Criteria, and Other Requirements.
- No exceptions deviations form as Attachment -13
- Un-priced Price Schedule marked "QUOTED" against each line item.
- Mobilization Confirmation Undertaking (Attachment 6).
- Undertaking for Acceptance of Liquidated Damages/ Deduction Clauses (Attachment 7).
- Declaration of No Deviations / Unconditional Acceptance of terms of the Tender Document.



- Self-Declaration regarding non-blacklisting/holiday-listing and absence of pending litigation against GEL (Attachment 10).
- Self-Declaration regarding no liquidation/insolvency/receivership proceedings and adequate financial capability.
- Vendor Registration Form with supporting statutory registration copies (Attachment 8).
- No Gifts Representation (Attachment 9).
- For Bidders relying on Technical Partners/ Sub-Contractors: copies of MoUs/Technical Collaboration Agreements/ Sub -Contracting Agreements as required under BQC Clause A-6/A-7.
- Checklist (Attachment 11) duly filled, cross-referencing page numbers of the Bid where each requirement is met.
- All attachments from Attachment list

2.2.2 Commercial Bid — Contents

- Priced Price Schedule in the exact format prescribed (Section 9), with all rates, GST/IGST rate and HSN/SAC code indicated separately.
- Price bid is required to be uploaded on (n)Procure portal with break up as per given format. No physical Bids to be submitted
- The price quoted shall be an all-inclusive price for completing the SOW in its entirety and that only GST would be extra

2.3 Language, Currency & Validity

- All correspondence, documentation and drawings shall be in the English language.
- Indian Bidders shall quote prices only in Indian Rupees (INR); Foreign Bidders shall quote only in United States Dollars (USD). No other currency shall be accepted.
- The Bid (both Parts) shall remain valid for acceptance for a minimum of One Hundred Eighty (180) days from the Bid Due Date. GEL reserves the right to seek extension of validity, subject to a maximum further period of three (3) months, and the Bidder shall extend the Bid Bond validity correspondingly. Failure by the Bidder to extend the validity of its Bid and/or Bid Bond within the time specified in GEL's request shall entitle GEL, without prejudice to its other rights under this Tender Document, to forfeit the Bid Bond and treat the Bid as withdrawn.

2.4 Deadline, Amendment & Right to Accept/Reject

- Bids must be uploaded on the portal before the prescribed Bid Due Date and Time. Late Bids shall not be considered.
- GEL may, at its discretion, amend the Tender Document (including this ITB, the GTC, the SCC, the SOW, BQC or Price Schedule) at any time prior to the Bid Due Date, by issuing a written corrigendum, and may correspondingly extend the Bid Due Date.
- GEL reserves the right to accept or reject any or all Bids, in whole or in part, to negotiate with any Bidder(s), and to annul the tender process at any stage, without assigning any reason and without incurring any liability to the affected Bidder(s).

2.5 Bid Bond, Performance Bank Guarantee & Taxes

Bid Bond amount is prescribed in the BQC (Section 10). There is no exemption of submission of bid bond. Performance Bank Guarantee (PBG) of 10% of the Total Contract Value shall be furnished by the successful Bidder within 21 days of issue of the Letter of Intent/Award (LOI/LOA), in the PBG format at Attachment 5, and shall remain valid until 90 days after completion/termination of the Contract, as more particularly set out in the GTC (Section 4). Prices



quoted shall be inclusive of all taxes and duties except Goods and Services Tax (GST), which shall be paid extra by GEL at applicable rates against the invoice, as elaborated in the GTC.

If the successful bidder does not submit the Performance Bank Guarantee as stipulated above, GEL reserves the right to cancel/terminate the award of Contract. The successful Bidder, by furnishing the Performance Guarantee, shall guarantee the performance of the Contract throughout its currency and extension thereto and shall also guarantee that the services so provided under the Contract shall be in strict conformity with the specification and scope of work. GEL reserve the right to invoke the performance bank guarantee for any of the following reasons including but without limitation to:

- Failure of contractor to start/commence the work as per LOI/LOA/Contract
- If Contractor fails to perform as per the terms and conditions of the contract.
- If Contractor fails to perform as per prescribed scope of work.
- If Contractor fails to work in work man like manner
- If tools, machines, parts for the providing services are not fit for the performance of work.
- For breach of the Contract.

2.6 Technical Partners / Sub-Contracting — Applicable to IDS

Where a Bidder does not possess in-house capability for one or more of Drilling Fluids Services, Cementing Services, Directional Drilling Services, Mobile ETP, Drill Bit supply or Casing Accessories supply, it may engage Technical Partner(s) under a legal MoU/ Technical Collaboration Agreement/Sub-Contracting agreement strictly as permitted under BQC, provided that: (a) the Bidder remains the single point of responsibility and sole legal counterparty to GEL for the entire scope; (b) such arrangement is not construed as a Consortium, JV or AoP; and (c) each Technical Partner independently satisfies the minimum experience criteria at BQC

2.7 Inspection of Contractor's IDS Equipment

- The bidder shall furnish a TPI certificate, issued within one (01) year of last date of bid submission, from any one of the internationally reputed third party inspection agencies from DNV, BV, Lloyds, SGS India Pvt. Ltd, Modu SPEC and ABS , regarding the condition and the status of the Rig and the equipments. Refer clause 4.7 for detail. Award of Contract shall be subject to satisfactory rig/equipment inspection to GEL's satisfaction and as per industry standards (TPI). The Bidder shall submit valid Third-Party Inspection (TPI) certificates (not older than six months prior to Bid submission) for the offered rig and major equipment, or an undertaking to furnish such TPI certificates from an internationally reputed agency (ABS, BV, DNV, Lloyd's, OFAS, SGS, Tube-star or equivalent) within two (2) weeks of issue of the mobilization notice, at the Bidder's cost, as further detailed in the GTC and SCC.

2.8 Mobilization Time & Bid Clarification Meeting

The Bidder shall confirm, on its letterhead, that it shall mobilize the IDS (in fit for purpose condition as per the SOW) within the stipulated time mentioned in the Tender Document as per Attachment 6. GEL intends to spud the first Well by the date indicated in the Scope of Work GEL call all Bidders for a Pre Bid clarification meeting at Gandhinagar or any other place it designates.

2.9 No Claim for Compensation & Fraud/Corruption

Submission of a Bid shall constitute the Bidder's agreement that it shall have no cause of action or claim against GEL for rejection or non-acceptance of its Bid, in whole or in part. GEL requires the highest standards of ethics from Bidders/Contractors during the tender process and shall reject any Bid, or terminate any Contract, where corrupt or fraudulent practice is established, with forfeiture of Bid Bond/PBG as applicable.



2.10 Other Conditions:

- Bidders will submit the Bid in its entirety including all the attachments mentioned in the Tender Document and no alterations will be made to the wording therein. The Bid will be signed by a duly Authorized Officer from the bidder.
- Bidders must seek any clarifications with respect to the TENDER documents before the Bid Due Date. Any clarifications required to be sent to following email ID alpeshshah@gujenergy.com; kamleshthakur@gujenergy.com; durgadatta@gujenergy.com with tender number “TENDER NO.: GEL/Onshore Blocks/IDS/2026-27/645” in subject matter. All communication must be bearing this tender number in subject.
- Bidder shall keep himself fully informed of all local conditions and factors which may have any effect on the execution of the Contract as described in the Bidding Documents. GEL shall provide access to site(s) and necessary assistance upon request from the Bidder.

2.11 Submission of Bids

- **SUBMISSION OF BIDS MUST BE ONLY ONLINE THROUGH THE PORTAL OF - (n) CODE SOLUTIONS A Division of Gujarat Narmada Valley Fertilizer Company Ltd.**

Email: marketing@ncodesolutions.com

Web: www.ncodesolutions.com; <https://www.nprocure.com>
; <https://tender.nprocure.com/>

- You may also contact Representative of: **(n) Code Solutions: Toll Free No.1-800-233-7944 Ext: 501,512,516,517,525 for any assistance for online submission of the Bid.**

- Bidders who are not registered with (n) code solutions must immediately visit their website <https://tender.nprocure.com/> and understand the process & time required to register and immediately proceed to register to enable them to timely submit their bids.
- A two-bid system, i.e. “**Technical Unpriced Bid**” and “**Commercial Price Bid**” shall be followed. The bid **must be submitted online on (n) code solutions portal** as per clause-2.3.1 of ‘Instructions to Bidders’. **It is to be noted by the bidder, that GEL shall accept bids through (n)-code solutions portal only. No physical bid shall be accepted.** Only Bid Bond in the form of Demand Draft/Bank Guarantee and Authorization letter shall be submitted in sealed envelope in original on or before the due date.

- **Submission of Bid Bond:**

(a) Bidder can exercise an option to submit the Bid Bond to GEL’s account by RTGS as per below details:

(b) GEL Bank Details:

Account Name : GEL CB ONN 2003/2 ANKLESHWAR JV ACCOUNT

Account No. 57500001061328

IFSC Code : HDFC0000006 (for INR payments only)

Bank Name : HDFC Bank Ltd

Account type : Current

Address : Ground Floor Astral Tower, Near Mithakali Six Road, Navrangpura, Ahmedabad, GUJARAT

- Bank charges or any other charges if any shall be payable and borne by Bidder only.
- Bidder to submit Bid Bond and the details of the transactions to be submitted by mail to Emails ID: durgadatta@gujenergy.com manoj@gujenergy.com and copy to alpeshshah@gujenergy.com. Bidder is also required to upload the copies of transactions on (n)Procure portal while submitting their technical bids.

OR



(b) If bidder opts to submit Bid Bond in form of Demand Draft/Bank Guarantee then physical original of the same to be couriered to the GEL office address before the due date & time and the copies of same with details is also required to be uploaded in the Technical Bid on (N) Code Solutions portal. Bidder is required to inform through email about the details of Bid Bond.

- As per Govt. of Gujarat GR, Company will accept Bid Bond (EMD) in the form of Bank guarantee issued from any one of the banks provided at Attachment- (List of approved banks) as per the format provided in this tender.
- Alternatively, the bidder may submit Bid Bond/Security amount in the form of Demand Draft in favor of “GUJARAT ENERGY Ltd.,” payable at Ahmedabad/Gandhinagar.
- Any Bid without Bid Bond/Security or with short Bid Bond/Security or Bid Bond/Security in the form other than specified herein above shall be liable for rejection as being non-responsive. The Bid Security shall be forfeited if:
 - The Bid is revoked during its validity period or;
 - The prices are changed unilaterally by the Bidder after the Bid opening and during validity of the Bid or,
 - The Bidder do not follow the instruction given in this tender document or,
 - GEL accepts the Bidder's Bid and the Bidder refuses to accept the Work Order / Letter of Award (LOA) or fails to enter into the Contract after the Work Order / LOA is issued to such Bidder or,
 - The successful Bidder fails to submit Performance Bank Guarantee within the specified period in accordance with the format provided in the Tender document; or
 - Seeks Variation or modification to the agreed terms and conditions or,
 - Tries to influence GEL on bid evaluation, bid comparison or decision to award the contract.
- GEL shall return the Bid Bond/Security to all unsuccessful Bidders, whose Bid Bond/Security is not forfeited in accordance with the Tender Document, within one (1) month after completion of the tendering process and execution of the Contract with the successful Bidder. The Bid Bond/Security of the Contractor will be returned when the Contractor has signed the Contract Agreement and has furnished the required Performance Bank Guarantee as per the terms of the Contract.
- The technical un-priced offer of the Bidder will be opened on the portal of (n) code solutions and evaluated first. If the offer is technically acceptable; has provision for acceptable alternatives to the requirements specified in the Tender; and conforms to other non-commercial requirement as may be decided by GEL, then the commercial priced offer will be opened and evaluated.

2.12 No physical documents to be submitted except for Bid Bond if submitted in the form of DD & Bank Guarantee and authorization letter. GEL may at its discretion extend the deadline for the submission of Bids by amending the bidding documents in which case all rights and obligations of GEL & bidders previously subject to the deadline will thereafter be subject to the deadline as extended

2.13 Bidder is required to submit their pre bid query or any exceptions deviation in attachment -2 format in pre bid meeting only.

2.14 No exceptions/deviations, including those pertaining to Clauses affecting prices shall be entertained. Bidders must submit the “No Exceptions Deviation Form (Attachment-13) duly stamped and signed. In case of non-submission of Attachment-13, it is understood that bidder has not proposed any exception/deviation and has unconditionally accepted and agreed to comply with all terms and conditions of the tender without variation or modification.

2.15 Confidentiality of Bidding Document

The bidding document is and shall remain the exclusive property of the GEL without any right to bidders to use them for any purpose except for the purpose of bidding. Further, it should be understood that the information therein is confidential, and that the bidding documents are therefore being furnished in the strictest confidence.



2.16 Notwithstanding any information and data, which may be contained in this Tender Document, the Bidder has to make independent inquiries and generally obtain its own information on all matters that may in any way affect prices, risks and obligations of the Contractor under the Contract. It will be imperative on each Bidder to, at its cost and responsibility, fully inform itself of all local conditions and factors, which may have any effect on the execution of the Works, covered under these Specifications and Tender Documents. In their own interest, the Bidders are requested to familiarize themselves with the Income-Tax Act, 1961; The Companies Act, 1956; Customs Act, 1962; Indian Boiler Regulations, Electricity Laws, Labour Laws, Goods and Service Tax Regulations, Works Contract Tax and other related acts, rules, regulations and laws prevalent in India read in conjunction with the amendments issued, if any.

2.17 Modifications and Withdrawal of Bids

1. A Bidder may not modify a Bid subsequent to its submission. No Bidder shall submit any modified price Bid subsequent to the submission of the Bid, except in circumstances specified by GEL in this regard in the Bid Document.
2. The bidder is expected to examine the bidding document including all instructions, forms, terms, specifications and drawings in the bidding document. Failure to furnish all information required as per the bidding document or submission of a bid not substantially responsive to the bidding document in every respect would result in rejection of the bid.
3. No Bid shall be withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder in the Bid form.

2.18 Amendment of Bidding Document

- a) At any time prior to the deadline for submission of the bids as well as up to bid opening, GEL may, for any reason whether at its own initiative or in response to a clarification requested by the bidders, modify the bidding document by amendment duly notified in writing.
- b) The amendment shall be part of the bidding document and will be notified to all bidders who have received the bidding documents. The bidders will be required to acknowledge receipt of any such amendment to GEL within the stipulated time in writing. The Bidders shall be required to submit the Bid in relation to this Tender Document as so amended.

2.19 Throughout these bidding documents, the terms bid and tender and their derivatives (bidder/tenderer, bid/tendered, bidding/tendering, bid documents/ tender document etc.) are synonymous.

2.20 One Bid per Bidder

A Bidder shall submit only one bid in the same bidding process. A Bidder who submits or participates in more than one bid, directly or indirectly, will result in disqualification of all the proposals in which the Bidder has participated. Alternative bids are not acceptable. By way of abundant caution, it is clarified that bids submitted by the partnership firm/proprietary firm having one or more common partner/same proprietor would be treated as submission of multiple bids by the same bidder resulting in disqualification of all such bids.



SECTION 3: BID EVALUATION METHODOLOGY

The detailed Bidder Qualification Criteria (BQC) — covering Technical Criteria, Financial Criteria and Other Requirements, is annexed at Section 10 of this Tender Document and forms an integral part hereof. This Section 3 summarizes the evaluation methodology.

3.1 Two-Stage Evaluation

- Stage 1 — Technical/Eligibility Evaluation: The Technical Bid of each Bidder shall be evaluated against the BQC at Section 10 and Instructions to Bidders at Section 2. Only Bids meeting all mandatory eligibility and technical qualification criteria shall be declared technically responsive.
- Stage 2 — Commercial Evaluation: Only technically responsive and qualified Bids shall have their Commercial Bids opened and evaluated. Evaluation shall be on Total Evaluated Basic Price (excluding GST/IGST) computed as per the Price Schedule format at Section 9, applying the estimated/indicative quantities stated therein purely for evaluation purposes.

3.2 Deleted

3.3 Currency Normalization

For evaluation purposes, Bids quoted in USD shall be converted to INR using the RBI reference exchange rate prevailing on the Bid Due Date. This converted value is used solely for evaluation/comparison and does not alter the currency of eventual invoicing/payment, which shall remain as quoted and contracted. Indian bidder should quote in Indian rupees only.

3.4 Mobilization & Demobilization Charge Bracketing

- Mobilization charges quoted in excess of 2% of the Total Quoted Contract Value shall be capped at 2% for payment purposes; the excess quoted amount shall be withheld and settled at the end of the Contract.
- De-mobilization charges quoted at less than 2% of the Total Quoted Contract Value shall be treated as a deficit; the deficit shall be withheld from the first invoice(s) and settled along with actual demobilization charges at Contract close-out.

The Total Quoted Contract Value shall be computed as the cost of four (4) Wells where the contingent Well (PNE1-D1) is taken up in the same campaign on ILM basis, and as the cost of three (3) Wells, where the contingent Well is not taken up back-to-back under ILM in the same campaign.

3.5 deleted

3.6 Verification & Disqualification

GEL reserves the right to verify, directly with the Bidder's clients or through a third party, any credential, certificate or declaration submitted. Submission of false, misleading, forged or materially incomplete documents shall render the Bid liable for rejection, forfeiture of Bid Bond, and debarment, in addition to any other remedy available to GEL under law or under this Tender.

3.7 Pre-bid meeting

GEL may, at its discretion, conduct a Pre-Bid Meeting on the date, time and venue specified in the Tender or as subsequently notified through a corrigendum. The purpose of the Pre-Bid Meeting shall be to clarify the provisions of the Tender Document, including the Scope of Work, Bid



Qualification Criteria (BQC), General Terms & Conditions (GTC), Special Conditions of Contract (SCC), Price Schedule and other tender requirements.

Participation in the Pre-Bid Meeting is optional. However, Bidders are encouraged to attend the meeting to obtain clarifications on the Tender requirements.

Bidders shall submit their queries, if any, in writing by e-mail in the prescribed format to the designated contact person(s) of GEL on or before the date specified in the Tender. Queries received after the prescribed date may not be considered.

Clarifications, responses to queries and any amendments to the Tender Document arising out of the Pre-Bid Meeting shall be issued only through a written Corrigendum/Addendum uploaded on the designated e-procurement portal and/or GEL's website. No verbal clarification, discussion or interpretation during the Pre-Bid Meeting shall modify or supersede the provisions of the Tender Document or be binding on GEL unless specifically incorporated through such Corrigendum/Addendum.

Bidders shall be solely responsible for regularly visiting the e-procurement portal and GEL's website to ascertain whether any Corrigendum, Addendum or clarification has been issued. Submission of a Bid shall be deemed to constitute the Bidder's acceptance of all Corrigenda/Addenda issued by GEL.

A pre-bid meeting shall be held on 11:30 hrs IST on 18th August 2026. Please provide all your queries in the Attachment -2 on or before 16th August 2026. The pre bid meeting shall be held electronically through Webex.



SECTION 4: GENERAL TERMS & CONDITIONS (GTC) / MODEL CONTRACT — INTEGRATED DRILLING SERVICES (IDS)

This Contract (hereinafter referred to as "Contract") is made and entered into this __ day of __ 2026 between:

GUJARAT ENERGY LIMITED (GEL), a company incorporated under the provisions of the Companies Act, 2013 and having its registered office at Gujarat Energy Bhavan, Sector-11, Gandhinagar – 382010, Gujarat, India, as an operator of Ankleshwar (CB-ONN-2003/2), Ahmedabad (CB-ONN-2000/1 including RFPSC) and Tarapur Block (CB-ON2 including RFPSC), hereinafter referred to as "Company" (which expression shall include all its legal successors, executors and assignees), of the one part;

AND

ABC LIMITED, a company incorporated under the laws of ____ and having its registered office at _____ (hereinafter referred to as "Contractor", which expression shall include all its legal successors, executors and assignees), of the other part.

WHEREAS, COMPANY, as an Operator of CB-ONN-2000/1 (Ahmedabad- Old & RFPSC) Block, CB-ON/2 (Tarapur-Old & RFPSC) Block, CB-ONN-2002/3 (Sanand-Miroli) & CB-ONN-2003/2 (Ankleshwar) Block, located in Gujarat intends to avail **INTEGRATED DRILLING SERVICES (IDS)** for drilling of Wells in said Blocks, located in Gujarat, India and desires that the Contractor provide IDS including the Drilling Rig and associated services (fit for purpose for performance of work as described in the scope of work in the Contract) for drilling of Wells in accordance with the terms of this Contract.

and

WHEREAS Contractor is engaged in such specialized operations and represents that it has adequate resources and IDS capability and personnel in accordance with Good International Petroleum Industry Practices and is willing to provide the IDS along with all auxiliary equipment, materials, chemicals, personnel and services for drilling and completion of exploration/development Wells set forth in Scope of Work of this Contract and deliver the Work, Services, equipment and personnel as detailed in the Scope of Work attached hereto.

AND WHEREAS the Contractor had submitted their Offer vide no. _____ dated _____ against above referred Tender.

Whereas GEL, pursuant to the aforesaid offer, has awarded the work to the Contractor and has placed Letter of Award no _____ dated _____ for IDS as per the scope envisaged in the Tender Document.

NOW THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the parties hereto agree as follows:

1. The Contractor agrees to provide Integrated Drilling Services ("IDS") (fit for purpose for performance of work as described in the scope of work in the Contract) in accordance with the terms and conditions of this Contract and, in consideration of its due performance and completion of the said services, the Company agrees to pay the Contractor according to the terms and conditions herein contained.
2. The Contract shall comprise of the Tender Documents including the Invitation to Bidders, Instructions to Bidders, General Conditions of Contract, Scope of Work, Technical



Specifications, Price Schedule, Drawings, Plans, Time Schedule for completion of Services, Letter of Acceptance of Tender, along with its enclosures, annexures, and appendixes, copies of which are hereto annexed form part of this Contract though separately set out herein and are included in the expression "Contract" wherever herein used and shall include all attachments and appendixes thereto and all documents incorporated by reference therein along with any amendments, change orders agreed and issued subsequently;

3. The Contract shall be deemed to be effective from LoA /Mobilization notice issued by Company or signing of Contract, whichever is earlier ("Effective Date") and the same rates, terms and conditions will remain effective till the term of contract, including extensions (if any).
4. The Contractor shall, subject to the terms and conditions of this Contract, perform the Services so as to achieve Completion of the whole of the Integrated Drilling Services in accordance with Contract to fulfill the requirement of GEL.

In WITNESS WHEREOF, the Parties hereunder have caused this Contract to be executed in duplicate, originals in their respective corporate names by their respective officers thereunto duly authorized as of the date and year stated above.

Executed for and on behalf of
GUJARAT ENERGY LIMITED

Executed for and on behalf of
ABC Ltd.

Name:
Title:

(_____)

Date:

Date:

Witness:

Witness

1. _____

1. _____



GENERAL CONDITIONS OF CONTRACT

This Section 4 reproduces the General Conditions of Contract (GCC) of Gujarat Energy Limited's standard Model Contract for Integrated Drilling Services hiring and is to be read together with the Scope of Work (Section 7) and the Special Conditions of Contract (SCC) at Section 5. Wherever this GCC refers to "Drilling Rig"/"Rig"/"Contractor's Equipment", such term shall be read to include the Drilling Rig together with all allied Integrated-Services equipment (Drilling Fluids, Cementing, Directional Drilling, Mobile ETP, and other equipment/materials forming part of the Scope of Work at Section 7).

NOW THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the parties hereto agree as follows:

Definitions and Interpretations

In this Contract, including the attached Schedules, unless the context otherwise stipulates, the following words and phrases shall have the following meanings:

1. **"Affiliate"** shall mean with respect to any Person, any other Person directly or indirectly through one or more intermediaries controlling, controlled by, or under common control such Person:
Here "Control" means: (a) the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person whether through the ownership of voting securities, by agreement or otherwise or the power to elect more than one-half of the directors, partners or other individuals exercising similar authority with respect to such person, or (b) the possession, directly or indirectly, of a voting interest of more than 50%. For the purpose of this definition, "subsidiary" and "holding Company" shall have the meaning assigned to it under Companies Act.
2. **"Applicable Law"** means any Indian law, regulation, byelaw, rule, directive, ordinance, judicial or quasi-judicial decree, order or notification enacted, issued or modified by any Government Agency.
3. **"Approved"** and **"Approval"** mean approved or approval in writing by Company.
4. **"Associated equipment and services"** means all allied equipment's and services required for IDS including but not limited to Drilling Fluids, Cementing, Directional Drilling, Mobile ETP, camp/catering/medical services, communication, safety & fire- fighting services, well control services etc and other equipment/materials forming part of the Scope of Work.
5. **"Bid"** means the Bid submitted by the Contractor pursuant to this Tender.
6. **"Company"** means Gujarat Energy Limited ("GEL"), being an Operator/party to this Contract, and includes other members of the consortium owning an interest in the concerned Block(s) named in the Scope of Work, and their respective officers, directors, agents and employees.
7. **"Company Group"** means the Company, its Affiliates, co-venturers, clients, partners and their respective directors, officers, employees and agents.
8. **"Contract Administrator"** means the contract administrator appointed by Company ("Company's Contract Administrator") or by the Contractor ("Contractor's Contract Administrator"), as the case may be, in accordance with this Contract.
9. **"Contract Area"** means the Block(s) awarded to GEL as Operator by the Government of India, as identified in the Scope of Work at Section 7, namely: CB-ONN-2000/1 (Ahmedabad-Old and RFPSC), CB-ON/2 (Tarapur-Old & RFPSC), CB-ONN-2002/3 (Sanand-Miroli) and CB-ONN-2003/2 (Ankleshwar) Blocks, as awarded to GEL as Operator by the Government of India.
10. **"Contract Price"** means the total amount payable by the Company to the Contractor for the satisfactory performance of the IDS in accordance with the Contract.
11. **"Contract Value"** shall mean, for the purpose of calculation of the Performance Bank Guarantee Amount, levy of liquidated damages and for the purpose of indemnities, the estimated value



calculated based on amount to be incurred by GEL for the entire duration of the Contract as per the Schedule of Rates (price quoted multiplied by tendered quantities if applicable) including but not limited to the Mobilization Charges, Demobilization Charges, ILM charges Standby Charges, Operating Charges, Lumpsum Charges, Redress Charges, inspection charges, certification etc. as applicable and shall also include GST if applicable. It is clarified that the actual amount of payment to the Contractor is likely to differ from the Contract Value calculated as per this definition.

12. **"Contract"/"Agreement"/"Contract Document"** means this Contract shall mean this Contract for IDS entered into between Company and Contractor, comprising of the Tender Documents including the Invitation to Bidders, Instructions to Bidders, General Conditions of Contract, Scope of Work, Technical Specifications, Price Schedule, Drawings, Plans, Time Schedule for completion of Services, Letter of Acceptance of Tender, along with its enclosures, annexures, and appendixes, copies of which are hereto annexed form part of this Contract though separately set out herein and are included in the expression "Contract" wherever herein used and shall include all attachments and appendices thereto and all documents incorporated by reference therein along with any amendments, change orders agreed and issued subsequently;
13. **"Contractor"** shall mean the person or the persons, firm or company whose bid has been accepted by the GEL having its registered office/head office at _____ and includes the CONTRACTOR's legal representatives, his successors and permitted assignees.
14. **"Contractor Group"** means Contractor, its Affiliates, their contractors, sub-contractors and equipment vendors of any tier, their personnel, officers, directors, employees and agents, but excluding Company Group.
15. **"Contractor's Equipment"** means the Drilling Rig alongwith all the Integrated Package, together with all auxiliary equipment, drilling tools, instruments, vehicles, plant, spares, facilities, miscellaneous materials and consumables and associated items provided by Contractor or its Sub-contractors/Technical Partners for providing IDS under the contract in accordance with the Scope of Work.
16. **"Contractor's Personnel"** means all employees, consultants, subcontractors and its employees/consultants/personnel, and./or temporary workers, other personnel engaged by the Contractor in connection with the performance of work under this Contract in accordance with the scope of work.
17. **"Commencement Date"** means the date on which the Drilling Rig with Integrated Package (fit for purpose) is tested by the Company's representatives and is rigged/set up and ready to commence drilling operations on the first designated Well, as intimated by Company to Contractor.
18. **"Completion Date"** means the time and date when the last Well to be drilled under this Contract, as per the Scope of Work, is completed.
19. **"Co-venturers"** means the consortium members who, together with Company, are parties to the JOA and PSC for the relevant Block(s).
20. **"Daily Drilling/Progress Report (DPR)"** means the report submitted by Contractor to Company as per prescribed format, duly signed by both Company's and Contractor's authorized signatories.
21. **"Days"** means consecutive calendar days per the Gregorian calendar; a "Day" is a calendar day of 24 consecutive hours from 00:00 to 24:00 local time at the Site.
22. **"Deviated/Directional Well"** means a Well drilled with the intention of being inclined from the vertical.
23. **"Drilling Rig"/"Rig"** means the Land Drilling Rig (fit for purpose) engaged at the Work Site for drilling under this Contract, as more particularly specified in the Scope of Work.
24. **"Demobilization"** shall mean the actual demobilization of contractor's equipment and contractor's personnel including disassembly, rig down, removal, and site cleanup as



per the instructions of the Company, upon issuance of the de-mobilization letter/notice by the Company.

25. **"Designated Base"** shall mean well site as informed by Company. However, the contractor shall store/warehouse its equipment and materials at its own costs & risks.
26. **"Effective Date"** means the date of issue of the LOA /Mobilization notice issued by the Company or signing of the Contract, whichever is earlier.
27. **"Good International Petroleum Industry Practice"** or **"Good Oilfield Practices"** means good international petroleum industry practices exercised with the degree of skill, diligence, prudence, foresight and judgment reasonably and ordinarily expected and exercised by experienced Contractor engaged in similar activity under similar circumstances in the international petroleum industry.
28. **"Government Agency"** means the Government of India, any State Government or division/sub-division thereof, local authority, municipality or regulatory authority, or the government of the jurisdiction of the Contractor's incorporation.
29. **"Gross Negligence"** means (i) intentional failure to perform a manifest duty in reckless disregard of or wanton indifference to consequences to life, health, safety or property of another; or (ii) any act/omission which, in addition to constituting negligence, is in reckless disregard of or wanton indifference to such consequences.
30. **"GEL Supply Item"** shall mean a supply item, which is expressly identified in the Contract as being for supply by GEL or its contractors.
31. **"Intellectual Property Rights"** means patents, utility models, registered designs, trademarks, service marks, applications for any of the foregoing and the right to apply for any of the foregoing, design rights, copyright, ownership of inventions, confidential information, proprietary information and know-how and any similar rights.
32. **"JOA"** means the joint operating agreement between GEL and its consortium partners for the relevant Block(s).
33. **"LOI/LOA"** means the Letter of Intent/Award issued by Company to the Contractor.
34. **"Mobilization"** means actual mobilization of the Drilling Rig with Integrated Service Package as per the schedule in the LOA/Mobilization Notice, together with auxiliary equipment and Contractor's personnel, is ready and rigged/set up and ready to commence drilling operations on the designated well, as intimated by Company to Contractor and includes demurrage incurred up to and including commencement of Work at the Work Site, except where caused by Company's acts/omissions.
35. **"Non-Productive Time"** means any period during which planned drilling operations cannot proceed due to equipment failure, operational inefficiencies or other causes attributable to the Contractor under this Contract.
36. **"Operator"** means Gujarat Energy Limited, or any JV partner assigned this Contract under the assignment provisions hereof.
37. **"PSC"** means the production-sharing contract between the Government of India and the Company consortium for the relevant Block(s).
38. **"Performance Bank Guarantee"** means the bank guarantee that is to be furnished by the Contractor from a Bank of repute specified in the Attachment hereto and acceptable to GEL for percentage (%) as specified in Performance Bank Guarantee Clause to guarantee performance in accordance with the terms and conditions under the Contract.
39. **"Services"** means all work, obligations, deliverables, equipments, materials and ancillary services along with required personnel to be provided by Contractor under this Contract, as described in the Scope of Work (Section 7 for IDS) and such further services as may be agreed in writing.
40. **"Sub-Contractors"** means persons/companies engaged by Contractor for performance of work under the Integrated Drilling Services (including approved Technical Partners).
41. **"Term of Contract"** means the period required to complete the Contract, as specified in Clause 4.2.



42. **"Termination Date"** shall mean the time of day and date when the Term defined in contract hereof expires or when this Contract is terminated by GEL, in accordance with its terms, whichever occurs first.
43. **"Vertical Well"** means a Well drilled with the intention of maintaining the wellbore as close as possible to 90° to the earth's surface with a tolerance of 3 degrees.
44. **"Well"** means either a Vertical or a Deviated Well, as identified in the Scope of Work.
45. **"Well Depth"** means the depth of each Well (TVD/MD) as specified in Company's Drilling and Completion Programme, as amended from time to time.
46. **"Well Locations"** shall mean the Well Site within the Contract Area at which Contractor shall carry out operations and such other locations as may be specified by GEL..
47. **"Wilful Misconduct"** means intentional disregard of Good Oilfield Practice or proper conduct under this Contract, with knowledge that it is likely to result in injury to any person or loss/damage to property.
48. **"Work"** shall mean the all work, services, duties, obligations (including their related operations and their physical products) performed by the Contractor which includes provision of all auxiliary equipment, spares, materials, personnel and technical services & support and any other activity necessary for the performance of Services on the Work Site / Work Location or base in accordance with the scope of the work (including mobilization before the Commencement Date and demobilization after any termination or completion of the Contract) as defined in the Contract.
49. **"Work Site"/"Work Location"** means the onshore site/area of land in the Contract Area where Contractor provides the Services, including places/installations within which the Well location and camp are located, as designated by Company.

4.1 Interpretation of Contract Documents

- i) Notwithstanding the sub-division of the contract documents into separate sections and volumes every part of each Contract document shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.
- ii) Unless otherwise stated specifically, the singular shall include the plural and vice versa wherever the context so requires.
- iii) Any work order (s) issued pursuant to this document shall be deemed to be an integral part of this contract and governed by the terms & conditions of this contract document unless specifically provided otherwise.
- iv) In case of any discrepancy with respect to interpretation of any of the clauses in this document, the interpretation of GEL shall be final and binding.
- v) The Contract Documents forming part of the Contract are to be read together as a whole and are to be taken as complimentary to each other.
- vi) **Headings:** The headings and sub-headings in the Contract are for convenience only and do not form part of the Contract and shall not govern or affect the interpretation of the Contract.
- vii) **Instructions:** All instructions, notices, agreements, authorizations, approvals, and acknowledgements shall be in writing and in English language. Verbal instructions will not be considered authentic, unless confirmed in writing. Any verbal instruction shall be confirmed in writing at the earliest, provided that, if the Contractor confirms in writing any such verbal instruction, which is not contradicted in writing by GEL in reasonable time, it shall be deemed to be an instruction in writing by GEL. Vice versa shall also apply.
- viii) **Statutes:** Any reference to statute, statutory provision shall include any re-enactment or amendment thereof for the time being in force.
- ix) The Contract shall consist of the following:
- a) The Model Contract
 - b) The General Conditions of Contract (GCC)
 - c) Special Conditions of Contract (SCC)

- d) The Scope of Work (SOW)
- e) The Schedule of Price / Rate- Price Schedule
- f) All other Annexures / Appendices to the Tender Document including the Bank Guarantee, LOA/Work Order etc
- x) It is clarified that ***in the event of any inconsistency between this GCC and the Scope of Work, this GCC shall prevail on general contractual matters, and the Scope of Work shall prevail on technical/scope matters. Further,*** with respect to interpretation of any of the clauses in this document, the interpretation of GEL shall be final and binding. ***Further reference to Contract would mean and include any amendments made in writing from time to time.***

4.2 The Term of Contract

- Gujarat Energy Limited (GEL) plans to drill three (03) Firm Wells and One (1) Contingent Well, from November 2026 to March 2027. Company shall inform the Contractor in writing about the drilling of the Contingent Well upon finalization of the said well._____.
- The term of the Contract shall commence on the Effective Date and continue until valid until the completion of the planned drilling program of, (whether three (3) or four (4) Wells, as applicable) in accordance with the Scope of Work.
- If the planned drilling program is not completed due to operational requirements of GEL or for reasons not attributable to the Contractor, the Contract shall automatically extended and remain valid until completion of the planned drilling program at the same rates, prices, terms and conditions, unless and until terminated by GEL. No escalation or additional compensation on any account whatsoever shall be payable.
For the avoidance of doubt, the contractual rates quoted shall remain valid and firm for the entire duration of the Contract, including any period beyond one (1) year from the Effective Date during which the Contract remains valid under this Clause 4.2 for reasons not attributable to the Contractor, and no escalation, rate revision or additional compensation shall be payable on account of the Contract extending beyond such one (1) year period.

4.3 Compensation

Contractor shall be paid for satisfactory performance of the Work, materials, supplies, equipment and services in accordance with the terms of this Contract. Quoted/negotiated rates shall be valid and firm for the Contract period. Company shall pay Contractor the rates specified in the Price Schedule (Section 9) for the actual work done and in accordance with the procedure prescribed in this Contract.

The Contractor warrants that it has reviewed the Scope of Work, inspected available site information, satisfied itself regarding risks and conditions affecting the Services, included all forceable costs in the Contract Price and no price escalation/ additional compensation shall be allowed for matters on this account.

4.3.1 Mobilization

Company shall pay the Contractor a lump-sum amount, as specified in the Price Schedule, for mobilization of the Drilling Rig/Integrated Package (fit for purpose), which shall be payable upon completion of mobilization from the point of origin to the respective Well Location/Site and upon complete readiness to spud the Well. Company shall issue a mobilization notice specifying the first Well Location/Designated location. If Contractor fails to commence the Work on time as specified, Liquidated Damages under Clause 4.28 shall apply.

4.3.2 Inter-Location Move (ILM)

Where Company decides to drill more than one Well under one mobilization, Company shall pay Contractor the ILM rate as per the Price Schedule for movement between Well Locations, after



release of the Rig/Package at from one location until it is reached and ready to spud (including spud-mud preparation) at the next Well Location, duly certified by the Company representative (i.e. the time and date). The Contractor shall be solely responsible for movement of the Contractor's Equipment & Personnel between the wells including timely and adequate arrangement of transportation & insurance, fuel and lubricants and costs relating to rigging down and rigging up. No other charges shall apply during the ILM period from the time of issuance of the ILM notice. If Contractor fails to commence the Work on time as specified, Liquidated Damages under Clause 4.28 shall apply.

4.3.3 Demobilization

Contractor shall demobilize the entire IDS package upon issuance of the Demobilization Letter/notice by Company. Demobilization charges are payable from the point of the last Well Location under a campaign, as per the Price Schedule, and shall include all costs of trailers, cranes, personnel, permits, approvals and consumables for demobilization. No other charges (except Demobilization charge) shall apply from the time of issuance of the demobilization notice.

4.3.4 Well Drilling Cost (Lumpsum & extra meterage cost)

The lumpsum Price per Well (2CP & 3CP) shall include cost for planning & drilling the Well as per Scope of Work and shall Include (without limitation) all costs, expenses and Taxes in relation to:

(a) the Rig and other Contractor Items & Personnel, associated drilling Services, Integrated service coordination management, logistics and transportation, communication, Security, documentation and all other costs, expenses and overheads arising out of the performance of the Work;

(b) all necessary allowances for standby of the Rig and other Contractor Items & Personnel during Inter location Movement or during operations;

(c) drilling and completion tangibles including BOP and completion items etc. as per scope of work;

Extra/reduced meterage Cost:

- There shall be separate rates per meter for additional/decreased drilling depth beyond well depth mentioned in price schedule for both 2 CP Wells and 3 CP Wells which shall be applicable on a pro-rata basis for any increase or decrease in the actual well depth from the planned depth specified by the Company.
- In the event the actual depth exceeds the planned depth, payment for the additional meterage shall be made at the quoted extra meterage rates.
- Conversely, in the event the actual depth is less than the planned depth, a corresponding deduction shall be applicable at the same quoted rates for the reduced meterage.

4.3.5 Loss-in-Hole (LIH) Charges

Company shall reimburse Contractor for loss of or damage to Contractor's down-hole equipment (drill string, including Directional Drilling downhole tools), provided such loss/damage is not occasioned by normal wear and tear or Contractor negligence and is certified as such by Company's Representative. Where equipment is damaged, Company shall reimburse repair cost, not exceeding the amount that would have been due had the equipment been lost (calculated on the replacement-cost-less-depreciation basis below). Where equipment is lost/destroyed in hole for reasons not attributable to the contractor or due to uncontrolled well condition and not recovered, Company shall reimburse the replacement cost CIF at location (on documentary evidence) less depreciation at 2% per month from the date of purchase, capped at 50% depreciation. Contractor shall maintain adequate back-up equipment; where rig operation is held up due to unavailability of back-up equipment to replace



LIH/damaged equipment and shall not be entitled to any Standby Rate, Operating Rate or other charge for the resulting downtime, which shall be at Zero Rate

In case of Stuck up and LIH, the contractor has to complete the drilling including side track of well at their own cost.

4.3.6 General

All rates in the Price Schedule are inclusive of all applicable taxes and duties (including marine transport/insurance where relevant) except Goods and Services Tax (GST), which shall be paid extra by Company at prevailing statutory rates against the invoice. Contractor shall be responsible, at its own cost, for obtaining all Permits/Consents/Essentiality Certificates required for performance of its obligations, save that Company shall provide reasonable assistance including for Essentiality Certificates for Zero Customs Duty under the PSC. The work/ services under this tender are for PEL/ ML areas and Company is eligible to avail nil/ concessional rate of custom duty/ GST upon submission of Essentiality Certificate (if applicable) in terms of various GST Notifications and GST shall be applicable accordingly. Any new tax imposed after the Effective Date shall be payable by Company in addition to the Price Schedule rates; conversely, benefit of any tax reduction shall be passed on by Contractor to Company, per the Change-in-Law provisions of Clause 4.15. Rates at Section 9 shall be firm and fixed throughout the Term, with no escalation on any ground.

4.3.7 Day Rates (applicable only in special case)

- **Operating Day Rate (R-1): As mentioned in SCC.** Operating day rate will be applicable in case of any additional operation beyond scope of work is required to be performed by the Contractor, where travelling block is running along with engines and DG, like fishing operations attributable to services to be provided by the company.
- **Standby Day Rate (R-2): As mentioned in SCC.** Standby rate is payable when Contractor's Rig/Package is ready for operations but is on awaiting beyond reasonable time period for Company's materials/services which Company is obligated to furnish, or for waiting on required civil works, or stoppage for non-availability of land/permits. No standby rate is payable for suspension under Clause 4.18.

For the avoidance of doubt and notwithstanding anything to the contrary in this clause 4.3.7 or elsewhere in the Contract (i) Operating Rate (R-1) and Standby Rate (R-2) under this Clause apply only in respect of additional work beyond the tendered Scope of Work or remedial work not attributable to Contractor's fault as more particularly set out in SCC Clause 5.4.3 and the Rate Entitlement Chart at SCC Clause 5.10 and (ii) no Standby Rate, Operating Rate or any other day-rate charge of any kind shall be payable for any waiting time, delay or interruption occurring during the normal, planned drilling/completion operations of a Well within its tendered Scope of Work, such time being fully compensated within, and deemed included in, the firm lump-sum Well-drilling rate under SCC Clause 5.4.1. This restriction applies equally to any Standby Rate payable under Clause 4.18 (Temporary Suspension) in respect of a Company-initiated suspension occurring within a Well's tendered Scope of Work.

4.3.8 HSD Variation and Contingency Chemicals

- Any increase or decrease in the retail selling price of HSD after the Original Unpriced Bid Due Date shall be reimbursed to or recovered from the Contractor as per SCC clause 5.11.
- There shall be separate payment of contingency chemicals as per price schedule Table B for drilling complications not attributable to contractor's fault.

4.4 Company and Contractor Representative

Company's Contract Administrator shall be responsible for administering this Contract on Company's behalf and issuing instructions relating to the Work; Company may change its Contract Administrator from time to time. Company shall appoint a Company Representative at the Company base/Rig/Work Site, authorized to receive information on operations, records and reports, and entitled to inspect all operations and witness/check all measurements and tests; the Company Representative may delegate all or part of his responsibilities to a nominated deputy, of which Contractor shall be informed in writing. Within five (5) days of commencement of Services or Contract signing (whichever is earlier), Contractor shall nominate its own Contract Administrator, knowledgeable about drilling operations and rate applicability, authorized to represent Contractor and to receive/act on Company's requests (including emergency instructions), subject to Company's approval. Any change in Contractor's Representative (Drilling Superintendent/Project Co-ordinator) requires Company's prior written approval (not to be unreasonably withheld). Company shall be entitled to rely on all decisions of Contractor's Contract Administrator as those of Contractor. All correspondence shall be addressed to the respective Contract Administrator unless otherwise provided.

The Contractor Representative (Drilling Superintendent/Project Co-ordinator) shall be responsible for planning, coordinating and controlling all activities under the Contract and shall possess full authority to make decisions on behalf of the Contractor regarding operational, technical and commercial matters associated with the Services. The Contractor Representative shall remain the Contractor's single point of contact with the Company.

4.5 Performance of Services

4.5.1 Contractor's Qualification to do Business

- a. Contractor represents that it is lawfully registered, domiciled and fully qualified to do business in India, and has all permits/licenses required by the Government to perform the Work, and shall maintain such registration/permits/licenses in full force throughout the Contract Term.
- b. The Contractor shall provide Integrated Drilling Services for the drilling, testing, completion of wells, as specified in the Contract, in accordance with Good International Petroleum Industry Practice (GIPIP), applicable laws, the Contract Documents and the Company's instructions.
- c. The Contractor shall furnish all personnel, supervision, engineering, equipment, tools, software, consumables, spare parts, transportation, logistics, documentation and other resources



necessary for the safe and efficient execution of the Services, except those expressly identified as being within the Company's responsibility.

- d. The Contractor shall act as the single point of responsibility for the coordination, integration and management of all services provided under the Contract, irrespective of whether such services are performed directly by the Contractor or through approved Subcontractors.
- e. The Contractor shall ensure that all integrated services function as a unified operation to achieve the Company's drilling objectives.
- f. Contractor shall perform the Services at the times and places provided in the Contract and shall be deemed to have full understanding of the nature and extent of the Services, having satisfied itself as to all conditions affecting performance (access, labour/material supply, security, fire/safety regulations, local import/export rules, and all other relevant matters). Contractor warrants awareness of the Well Locations' environment, zoning and applicable regulations and shall obtain, at its own cost, all requisite permits/approvals for performance of the Scope of Work, including for services, transportation and personnel movement.
- g. The Contractor shall have sole responsibility for planning, organizing, managing, supervising and executing the Services in accordance with the Contract. The Contractor shall be fully responsible for the acts, omissions, defaults and negligence of its employees, subcontractors, consultants, suppliers, and any other persons engaged by the Contractor for performance of work under this Contract. Any approval by the Company of any personnel, equipment or subcontractor shall not relieve the Contractor of its contractual responsibilities.

4.5.2 Standard of Performance

- a. Contractor shall diligently perform the Services in a skillful and workmanlike manner in accordance with established good and safe international oil-industry practices as reasonably expected from a competent and experienced contractor engaged in providing integrated drilling services and shall comply with Company's instructions consistent with the Contract. Company may, at its sole option, decline any of Contractor's personnel or faulty equipment for any reason, and Contractor shall replace the same at its cost as soon as possible.
- b. Contractor warrants that the Contractor's Equipment used for performance shall be fully certified, meet all relevant government and international oil & gas standards, be tested, in full working order, free of workmanship defects, and shall perform efficiently and continuously, with a sufficient stock of spare parts available at the Work Site. The Contractor shall maintain sufficient/adequate inventories of critical spare parts and consumables to avoid interruption of operations and ensure uninterrupted drilling operations i.e. items necessary to minimize Non-Productive Time (NPT).
- c. Contractor shall regularly, and no less frequently than per manufacturer's specifications, inspect, service and maintain each item of Contractor's Equipment throughout the Term, and shall maintain records evidencing such planned and actual compliance.
- d. Contractor shall perform the Services as an independent contractor and is not, and shall not represent itself as, a co-venturer, partner, employee or agent of Company; all personnel engaged by Contractor shall remain under Contractor's complete control and shall not be deemed Company's employees.
- e. Contractor shall keep detailed records of Services performed, present them to Company on request, and produce a final job report on completion of the Services.
- f. Contractor shall observe all statutory provisions and Company's HSE policies/procedures, standing orders and international/Indian codes relating to health, safety and environment and shall attend formal meetings called by Company's Representative on HSE matters. Where the Contractor fails to comply with HSE requirements, the Company may issue corrective action notices, suspend the affected work, remove personnel from the Site and recover costs



- incurred due to the Contractor's non-compliance. Repeated or serious non-compliance shall be construed as a material breach of the Contract.
- g. Contractor shall furnish an accurate daily record of Work performed via the Daily Drilling Report/DPR in IADC-prescribed format, Daily Mud Report (DMR) and Daily report of Directional services (in case of directional well) etc.
 - h. Contractor shall maintain, at its own cost, adequate stock levels for repair of its items and adequate spares and shall make records of such stock available to Company on request.
 - i. Contractor shall be responsible for transportation of its own equipment and personnel, and shall be responsible for supplying all fuel, electricity, water, petrol, oils and lubricants used for the Services (same as otherwise expressly provided in the Responsibility Matrix).
 - j. Contractor shall provide suitable potable and industrial water for the Rig and drill-site operations (same as otherwise expressly provided in the Responsibility Matrix).
 - k. Company shall have the right to inspect Contractor's Equipment at any time (directly or through a third party) and to notify Contractor of apparent defects; Contractor shall rectify defects immediately at its cost. Such inspection shall not imply acceptance of the Equipment's condition or relieve Contractor of its obligations.
 - l. Contractor shall take out its drilling rig including all service equipment, and clear all debris from the Work Site within one (1) week of completion of the Well, or as directed by Company. If the contractor fails to do so, the company reserves the right to hold 0.25% of contract value per well.
 - m. The Contractor shall perform the Services in accordance with Good International Petroleum Industry Practice (GIPIP), applicable laws and regulations, IADC Recommended Practices and any Company-specific instructions under the Contract.
 - n. The Contractor shall ensure that all equipment required for the Services:
 - is available when required;
 - complies with applicable API, ISO and OEM standards;
 - possesses valid inspection and certification;
 - is maintained in safe working condition;
 - is fit for the intended purpose.
 - o. Company shall have a right to claim liquidated damages and/or enforce other contractual remedies in the event of failure to meet the contractual obligations.

4.5.3 Reports

Contractor shall furnish immediate reports of Well developments of significance (blowout, discovery) and immediate notice of special events (fire, accident, sabotage, force-majeure events involving loss of life or serious property damage, strikes, riots, significant competitor activity, or adverse Government action), by the fastest available means, confirmed in writing; and such other data/information/reports as Company may require to satisfy its obligations to Co-venturers or the Government of India under the JOA/PSC. Company may, as a condition precedent to payment, require satisfactory evidence that Contractor's labour, material, tax, contractual and other statutory obligations have been fully discharged; Contractor shall indemnify Company for any failure in this regard. Repeated non-performance, lack of service, or equipment/parts failure may result in immediate Contract termination by Company on notice.

4.6 Contractor-Furnished Equipment, Materials and Supplies

- a. Contractor shall furnish the Contractor's Equipment complete, conforming to the standards in the Scope of Work, and shall furnish and maintain, at its sole cost, all items specified therein.
- b. Contractor shall conform to Well hole specifications and undertake all due diligence to maintain a straight hole for vertical Wells and maintain the directional profile in directional well.



- c. Contractor shall carry out all operations with due diligence in a safe, workmanlike manner, complying with all approvals, permits, instructions and Company policies including Drilling, Well control, safety and environmental protection.
- d. Contractor shall take all measures necessary to protect personnel, the Work Site and facilities, observe Company's safety rules (to the extent not conflicting with applicable Government regulations), use reasonable means to prevent/control fire and blowouts, and protect the hole/reservoir/underground formations from loss or damage; smoking/open flames are prohibited except in areas designated and approved by Company.
- e. Contractor shall keep the hole and casing strings filled with drilling mud at all times and shall promptly report evidence of abnormal/dangerous conditions (mud loss, overflow, gasification, kick, caving, heaving, shale complications), initiating emergency control steps per Good International Petroleum Industry Practice and safety regulations.
- f. Contractor shall be responsible for operation of the Contractor's Equipment, including drilling, movement between Wells and positioning at the Work Site, as required by Company and per Good International Petroleum Industry Practice.
- g. Contractor shall test blow-out prevention devices by pressure test at least once every twenty-one (21) days or per IADC recommendation (whichever is earlier), or at such other intervals as Company's Representative directs, and shall promptly enter results in the Daily Drilling Report.
- h. Contractor shall, at its own expense, have the drill string NDT-inspected (as per API) every six months of usage (or post occurrence of any severe working on string) by an internationally reputable inspection agency acceptable to Company, and shall make records available to Company. Drill String to be deployed to first well must have valid NDT-certificate.
- i. Contractor shall measure the total length of drill pipe in service with a steel tape before setting casing/liner, before logging after reaching final depth, and whenever requested by Company's Representative, entering all measurements in the Daily Drilling Report.

4.7 Inspections, Tests and Certification

- Contractor shall maintain, at its sole cost, test certification on all Contractor's Equipment (Drilling Mast, Draw-works, BOP & Accumulator unit, Mud Pumps, Sub-Structure, solids-control equipment, cementing Pump and other vital allied-services equipment) and vital spare parts, ensuring structural and operational integrity, particularly of load-bearing or pressure-containing equipment. Company or its authorized representative shall be entitled to inspect and/or test the Equipment at Contractor's premises or at the Work Site, and Company reserves the right to reject any Equipment not conforming to the Contract specifications. Acceptance of Equipment's and/or Services shall not affect Contractor's obligation to repair/maintain.
- The bidder shall furnish a TPI certificate for drilling rig and cement pumping unit along with the technical bid, issued within one (01) year of last date of bid submission, from any one of the internationally reputed third party inspection agencies like DNV, BV, Lloyds, SGS India Pvt. Ltd, Modu SPEC and ABS bringing out the condition and the status of the Rig and the equipment.
- Bidder to submit along with the unpriced bid an undertaking that TPI certificates from internationally reputed Inspection agencies as mentioned above shall be provided by the Bidder Post LoA at Bidder's cost within 2 weeks from issuance of mobilization notice. Rig mobilization shall be accepted by the company for mobilization subject to satisfactory verification of TPI certificates by Company representative and function test shall be carried out at wellsite before commencement of rig operations.
- Along with TPI report, bidder to also submit the residual life certificate confirming minimum 3 years residual life. The certificate should clearly indicate the residual life broadly of the mast,



all engines, draw-works, rotating system, hoisting system, mud pumps, tackle system, BOPs, service engine and pump, motors, cementing unit & equipments etc. In case offer is made for a brand new rig the certificate for residual life is not necessary

4.8 Mobilization / Delivery / Performance

- a. Contractor shall provide personnel and Contractor's Equipment (fit for purpose) at Company's designated location/time as specified in the mobilization notice for performance of work in accordance with the Scope of Work. The mobilization date for first well shall be intimated 30 days prior to actual requirement.
- b. For ILM between two wells, the permissible days for completion of ILM (i.e. duration from issuance of ILM notice from one well to rig and services ready for Spud at next well) shall be as mentioned below:

Description	Permissible days (for completion of ILM i.e. issuance of ILM notice from one well to rig and services ready for Spud at next well)
ILM upto 50 km	9 Days
ILM 50.01 to 100 km	11 Days
ILM 100.0 to 150 km	13 Days
ILM 150.01 to 200 km	15 Days
ILM beyond 200 km	15 Days + 2 additional day for each 50 km slab above 200 km

- c. The Contractor shall be solely responsible for the mobilisation/ILM, transportation, customs clearance (where applicable), installation, commissioning, operation and maintenance, Equipment, Materials and Consumables necessary for the execution of the Services, unless expressly stated otherwise in the Contract.
- d. The Contractor shall complete mobilisation/ILM within the period specified in the Contract as time is of the essence of the Contract. Failure to achieve the contractual mobilisation date, except where excused under the Contract, shall constitute a Contractor default and shall entitle the Company to recover Liquidated Damages or other remedies.
- e. Mobilisation/ILM shall not be deemed complete until all Contractor Personnel have arrived at the Site, all Equipment has been delivered, installed and commissioned and the Contractor is in complete readiness to commence/start the drilling operations/spud the well.
- f. If mobilisation/ILM is delayed due to causes not attributable to the Company, the Contractor shall immediately notify the Company and take all measures to minimise delay. In such event, Contractor shall bear all additional costs arising from such delay. LD shall be applicable as per clause 4.28 for delay in mobilization/ILM.
- g. All packaging materials supplied by Contractor shall be considered non-returnable, their cost included in the quoted rates unless otherwise stated. On completion of Services, Contractor shall be responsible for repacking Equipment for transportation at its sole cost.
- h. If Contractor fails, for reasons other than Force Majeure or matters within Company's control, to mobilize/deliver personnel or Contractor's Equipment within the time specified in the LOA/Contract/ mobilization notice or agreed extension, Company shall, without prejudice to its other rights, be entitled (after reasonable notice) to terminate the Contract or cancel any part thereof.
- i. On completion or earlier termination of the Services, Contractor shall demobilize its Equipment and Personnel forthwith. The applicable rate shall cease immediately upon issue of the Demobilization/De-hire notice or handover of tools/equipment to Contractor. Contractor shall not charge Company any rate while re-exporting equipment to its base outside India or returning it to its Indian base and shall be responsible for such re-export as per applicable law.



- j. Should Contractor's Equipment performance become unsatisfactory due to defective equipment, incompetence or negligence or any reason whatsoever, Company shall give written notice, specifying the deficiency to correct the faulty equipment within 15 days from issue of notice, failing which Company may have the option to terminate the Contract by giving on 15 days' written notice, which shall be without prejudice to Company's other rights available under the Contract including but not limited to invoking the Performance Bank Guarantee.

4.9 Company's Obligations / Equipment

- a. Company shall ensure Contractor's right of ingress/egress for its personnel and equipment to/from the Work Site, subject to Contractor obtaining all requisite permits under Applicable Law. Company shall provide reasonable assistance in securing necessary Government permits, without relieving Contractor of its own obligation to secure the same at its cost if Company's assistance is unsuccessful. Contractor shall visually inspect any material/equipment received from Company and notify Company of apparent damage/defects and shall maintain cleanliness/housekeeping of the work environment, conducting down-hole operations with extreme care.
- b. The Company reserves the right to stop any unsafe work, suspend operations, remove Contractor personnel from the Site for safety or security reasons, require replacement of equipment, audit Contractor performance, engage other contractors for services. Such exercise of Companies rights shall not relieve the Contractor of its obligations under the Contract.

4.10 Warranties and Remedies

- a. Contractor represents that it is engaged in specialized drilling/integrated-services operations with adequate resources, capability and personnel per Good International Petroleum Industry Practice, and shall perform the Work strictly per this Contract, complying with Company's instructions and directives. Contractor agrees, and shall ensure its Personnel comply, with all Applicable Laws, codes, rules, regulations and specifications applicable to the Contractor's Equipment and Services. Contractor warrants that all items rented to Company shall meet the Contract specifications and be in good working condition throughout the rental period (ordinary wear and tear excepted), and that all materials/equipment/machinery/goods supplied shall be of good quality and workmanship, safe and free from defects. Time is of the essence.
- b. The service warranty applies to all Services; Contractor warrants performance in a Good and Workmanlike Manner, and that its Personnel are skilled, experienced, competent and fit for duty, complying with Company's HSE/training regulations as communicated/displayed at the Work Site. The Contractor shall ensure that all personnel possess the qualifications, relevant experience in oi & gas drilling operations and are familiar with integrated drilling service operations and Good International Petroleum Industry Practice (GIPIP). The Contractor shall be solely responsible for the recruitment, employment, supervision, discipline and remuneration of its personnel.
- c. If performance fails to comply with warranties, Contractor shall, at its own cost, within a reasonable time, re-perform the Services or correct the failure or furnish an acceptable alternative, without prejudice to Company's other rights. Defects are not waived by Company's failure to notify Contractor on receipt of Services or by payment of invoice.
- d. Contractor shall provide competent, skilled personnel at its sole risk and cost, and shall be solely responsible for all requirements of its personnel (accommodation, transportation, meals, medical attention, permits, leave, benefits) with no liability to Company in this regard.



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- e. Day-rates of any nature shall not apply during any period Contractor's Equipment is unable to perform per the Contract, for any reason.
 - f. If Contractor fails in its obligations and does not remedy such default after written notice, Company may arrange alternative performance at Contractor's cost plus 10% administrative charge, with the defaulting tool/service placed at Zero Rate for the default period.
 - g. Company may require removal of any Contractor personnel considered incompetent, negligent, or otherwise undesirable; Contractor shall forthwith replace such personnel at its own cost with a suitably qualified person satisfactory to Company, without affecting drilling operations.
 - h. Contractor shall not take any action on Company's behalf that would subject either Party to liability/ under any law and shall indemnify Company for losses arising from such action. Contractor has no authority to bind Company except as expressly provided or authorized in writing.
 - i. Contractor shall notify Company promptly (within 24 hours) upon discovery of any non-compliance with this Clause 4.10.
 - j. The Contractor warrants that all Services shall conform to the Contract, comply with applicable standards, be free from defects, be performed by competent personnel and be fit for their intended purpose. Where any Service fails to meet these requirements, the Contractor shall promptly rectify the deficiency at its own cost, failing which Company shall be entitled to enforce its rights under this Contract for non-performance.
 - k. Contractor shall take full responsibility for the protection and security of materials and equipment while such materials and equipment are temporarily stored in Contractor's facility awaiting for transportation or otherwise in Contractor's custody.
 - l. Contractor shall advise Company immediately in writing of any labour dispute or anticipated labour dispute, which may be expected to affect the performance of the Work.
 - m. Contractor shall use all reasonable care to ensure that the equipment is delivered and maintained in a fit condition for the intended Work and shall at its cost and expense man operate replace supply, repair and maintain the equipment.

4.11 Liens

Contractor shall immediately pay and discharge any lien, claim or encumbrance, of any nature, (or shall provide security for payment thereof), attributable to Contractor and that may arise from Contractor's performance of the Work, including, without limitation, any claims, liens or encumbrances from its Subcontractor or Contractor's/ Sub-Contractor's Personnel, or from laborers or creditors of same (including tax claims of the Government), and Contractor shall indemnify and hold Company harmless from and shall keep Company's equipment and property free and clear of all liens, claims, assessments, fines and levies incurred, created, caused or committed by Contractor. If Contractor fails to pay and discharge any such lien, claim or encumbrance, then Company may do so and charge Contractor for all costs and may be deducted and set off against any monies owed to Contractor by Company pursuant to the Contract. Company shall have the right to retain out of any payment to be made to, or to be reimbursed to, Contractor, an amount sufficient to indemnify it completely against any such lien, claim, assessment, fine or levy exercised or made and all associated costs.



4.12 Invoicing and Payment

- 4.12.1** Contractor will raise invoice for each mobilization, demobilization & ILM for the rig move separately and well wise separate invoice after completion of each well as per price schedule. Company will pay Contractor within thirty (30) working days after receipt of the duly certified and undisputed invoices along with all supported documents duly signed and stamped by Company and Contractor representative..
- 4.12.2** Company shall make payment of the correct/undisputed invoices certified by User Department within thirty (30) working days following the receipt of the certified invoices by Company. Agreed prices in the Contract shall be firm and binding for the agreed Contract period. No interest shall be payable on delayed payments by the Company for any reason whatsoever.
- 4.12.3.** Invoices shall be itemized with a full break down of the Service performed and shall be complete with all back-up details, IADC reports and other operational reports for integrated services including but not limited to cementing, DMRs, Directional reports etc duly signed & stamped, etc. and shall set forth the facts relating to all activities and transactions handled for Company's account and shall be verified and signed by an authorized signatory designated by the Contractor to show the basis for Contractor's application of the Contract payments and the resultant value of the invoice. All invoices, financial settlements, reports and billings by Contractor to Company shall set forth the facts relating to all activities and transactions handled for Company's account and shall be verified and signed by an authorized signatory designated by Contractor. In case of any consumables supplied by third party are provided and charged by the Contractor, then the payment shall be released only upon furnishing of the supporting invoices raised by the third party. In case of invoices raised for ILM & Demobilization, the invoices must accompany the well site & Cellar pit cleanliness report signed by the company representative.
- 4.12.4.** The payment of any invoices shall not be deemed acceptance of the Services or any part thereof and shall not prejudice the right of Company to question the propriety of any such charge at any time thereafter.
- 4.12.5.** A written response to Company's claim for omission corrections or errors in charges and credits for Company's account shall be made by Contractor as soon as practicable by the Company.
- 4.12.6.** The Company and its authorized representatives shall have access to, and the right to audit and obtain copies, any of Contractor's and its subcontractors' or agents' documents of whatsoever nature relating to or in connection with the performance of the Work, including books, vouchers, receipts, invoices, correspondence, government correspondence, contracts, representations before statutory authorities, tribunals, courts and any other records. The Contractor will preserve and will cause its subcontractors and agents to preserve all such records for a period of three (3) years from the end of the calendar year in which this Contract terminates and will, upon written request, make them available to Company and its representatives. The Contractor shall provide photocopies of any documents within a reasonable period whenever demanded by the Company. Audits referred in this Clause will be made during Contractor's normal working hours. Any payment made by the Company shall not imply acceptance of liability on the part of the Company. Company shall have the right to notify Contractor of any matters arising in an audit which necessitate making an adjustment; and such adjustment, whether by reimbursement to Company or otherwise, shall then promptly be made. Company shall also have the right to obtain assistance and statements from any of Contractor Personnel to the extent it deems necessary, and Contractor and its subcontractors shall make such personnel available at their assigned locations if still under employment with Contractor or its subcontractors. Company shall have the right to reproduce any such documents



which have been inspected.

- 4.12.7.** Invoices shall be endorsed with the Contract number and title and shall be submitted in duplicate with one original and one copy (clearly marked “Original” or “Copy”) and shall be marked to:

GUJARAT ENERGY LIMITED

5th Floor, Gujarat Energy Bhavan, Sector-11, Gandhinagar – 382 010, Gujarat, India

Kind Aten: Mr. Kamlesh Thakur, SM (Drilling)

Invoices shall be submitted to: Central Invoice Desk, F&A Department, GUJARAT ENERGY LIMITED, GEL Bhavan, Behind Udyog Bhavan, Sector – 11, Gandhinagar – 382 010, Gujarat, India in full respect.

Each invoice shall carry GST number of both Company and Contractor. No invoices shall be processed for payment unless the GST number is captured in the invoices.

- 4.12.8.** All payments to the Contractor under this Contract shall be made in Indian Rupees to the Indian Bidders or United States Dollars to the Foreign Bidders. The currency of price schedule shall not be allowed to be changed for the term of the Contract except as otherwise mutually agreed between Company & Contractor.
- 4.12.9.** The Contract Price shall constitute the full and complete consideration payable by the Company to the Contractor for the satisfactory performance of the Services in accordance with the Contract. Except where expressly provided otherwise in the Contract, the Contractor shall be deemed to have included in the Contract Price all costs, expenses, overheads, risks and obligations necessary for the proper execution of the IDS as per the Scope of Work.
- 4.12.10.** Unless expressly stated otherwise in the Special Conditions of Contract or the Pricing Schedule, all rates and prices shall remain firm and fixed throughout the Contract Period and shall not be subject to escalation for any reason including but not limited to for reasons related to increase in labour costs, material costs, exchange rate fluctuations, Inflation, transportation costs, insurance premiums, taxes allocated to the Contractor, increases in overhead or administrative costs.
- 4.12.11.** The Contractor shall not claim any charges under any head during the period the equipment or tools are damaged, damaged beyond repair, unoperational, or declared dangerous for operation and cannot be operated / used for the said services. No payment shall be made for either the Standby rate or under any other head till the tools / equipments are redressed, replaced or declared safe for operation. No payment for either standby rate or operational rate shall be made for the personnel associated with the operation of the said tools/equipment.
- i. Contractor warrants that it has obtained all necessary information relating to the Work, whether such information was supplied in whole or part by Company.
 - ii. CONTRACTOR warrants that it has made adequate provision in the lump sum fees/ prices, unit rates and day rates for meeting all the terms, conditions and obligations arising under this Contract.
 - iii. CONTRACTOR shall not vary the lump sum fees/ prices, unit rates and day rates or any part thereof or the Contract Schedule or any date therein for the duration of the Contract and extension thereof.
 - iv. All Lump sum fees/prices, unit rates and day rates are fixed for the duration of the Contract and any extensions thereof and are not subject to escalation. Payment of respective Lump sum fees/prices, unit rates and day rates shall constitute full payment for performance of the respective items of Work or line item and covers all costs of whatever nature incurred by CONTRACTOR for accomplishing the respective items of the Work or line item and performing all its obligations under the Contract.
 - v. Quantities set forth herein are an indicative estimate and are given for information only. Company is not responsible for the accuracy of these quantities and the quantities are



subject to change depending on the drilling program. CONTRACTOR confirms that the Lump sum fees/prices, unit rates and day rates specified hereunder shall not be subject to variation due to change in quantities. CONTRACTOR agrees that only the actual quantities are payable by Company as per actual utilization.

- vi. The description of the items of Work or line item is general and not exhaustive. Any Work or obligation not included or described shall be deemed to be included in one or more items described herein.

4.12.12. The Contractor shall comply with the applicable laws including but not limited to the PF Act, ESI Act, Labour laws for the term of the Contract as stated hereunder. A self-declaration/undertaking showing compliance of these shall be submitted by the Contractor to the Company Head Office (GEL Bhavan) at the beginning of each month for the payments made against the previous month, provided the Contractor will indemnify the Company at all times for the damages caused or losses incurred by the Company due to non-compliance with the existing laws and regulations by the Contractor. The invoice should be submitted to COMPANY only after having submitted the following documents to COMPANY.

Provident Fund Act:

- a. Self certificate by the employer certified by Chartered Accountant that no dues are pending towards Payment of PF Contribution from the Employer & Employee in respect of all the employees of Service Organisations.

ESI Act:

- b. Self certificate by the employer certified by Chartered Accountant that no dues of payment of ESI contribution from the Employer & Employee in respect of all the employees of Service Organizations.

As per the Labour enactments:

- c. Regular compliance to Minimum Wages Act, no Dues to the Employees who have resigned or whose services are terminated, engaged by the contractors regarding payment of Wages, service compensation, Bonus, Gratuity, Unavailed Leave salary, Notice pay & etc. Submission of the above documents shall not relieve the Contractor of any liability to comply with the Applicable Laws.

4.12.13. The Company may withhold or deduct amounts otherwise due to the Contractor and inform the Contractor about such withholding where;

- Services are incomplete and/or defective work.
- Unsupported invoice amount/required documentation has not been provided.
- Contractual deductions such as applicability of PBG/LD.
- Taxes are required to be withheld under Applicable Laws.
- For other reasons as may be permitted under the Contract.
- Breach of Contract.

Any payment of invoice by the Company shall not be constituted as an acceptance of the Services or be considered as any waiver of company's rights under this Contract.

4.12.14. All rates in the Price Schedule are inclusive of all applicable taxes and duties (including marine transport/insurance where relevant) except Goods and Services Tax (GST), which shall be paid extra by Company at prevailing statutory rates against the invoice. Contractor shall be responsible, at its own cost, for obtaining all Permits/Consents/Essentiality Certificates required for performance of its obligations, save that Company shall provide reasonable assistance including for Essentiality Certificates for Zero Customs Duty under the PSC. The work/ services under this tender are for PEL/ ML areas and Company is eligible to avail nil/ concessional rate of custom duty/ GST upon submission of Essentiality Certificate (if applicable) in terms of various GST Notifications and GST shall be applicable



accordingly. Any new tax imposed after the Effective Date shall be payable by Company in addition to the Price Schedule rates; conversely, benefit of any tax reduction shall be passed on by Contractor to Company, per the Change-in-Law provisions of Clause 4.15. Rates at Section 9 shall be firm and fixed throughout the Term, with no escalation on any ground.

4.13. Indemnity and Liabilities

4.13.1. Indemnity by Contractor:

Contractor shall be responsible at all times, including time in storage, in transit or at work site and shall indemnify and keep GEL Group indemnified and harmless under the Contract for performance of obligations by the Contractor hereunder save as is otherwise herein specifically provided, and indemnify and hold harmless GEL Group from any and all claims, actions, proceedings, suits, demands, charges, liabilities, costs, damages and expenses of every kind and nature or other obligations hereunder directly or indirectly associated herewith, judgments and fines arising out of or in the course of execution of work, including but not limited to Claim with respect to sickness, injury or death of any Contractor's Personnel and to damage or destruction to any property owned, hired or supplied by Contractor arising directly or indirectly during or as a result of the performance of this order from any cause whatsoever, (except if directly caused by the Gross Negligence or Willful Misconduct of GEL).

4.13.2. Indemnity by GEL:

GEL shall indemnify and keep the Contractor Group indemnified and harmless from all actions, proceedings, suits, claims, demands, liabilities, damages, losses, costs, charges, expenses and fines arising from:

- i) personal injury, illness or death of any GEL Group's personnel (except if directly caused by the Gross Negligence or Willful Misconduct of Contractor Group);
- ii) Any loss or damage to any property owned, hired or supplied by GEL Group (except if directly caused by the Gross Negligence or Willful Misconduct of Contractor Group)

4.13.3. Patent Indemnity: Contractor shall indemnify and hold harmless GEL, its successors and assigns and agents from and against any and all claims, losses, damages, liability, suits and demands arising from actual or alleged infringements of any patent or patent right, copy right or similar protection in connection with the Work, except where such claims arise out of work and material furnished in accordance with drawings and specifications provided by GEL.

4.13.4. Third Party Indemnity:

Notwithstanding anything above, the Contractor shall defend, indemnify and hold harmless GEL along with its Co-Ventures and their owned, controlled, affiliated and subsidiary companies and the stockholders, directors, agents, employees and representatives of each, from and against any and all claims or losses of whatever kind and nature, including all related costs and expenses incurred in connection therewith in respect of (i) personal injury, illness or death of a third party; and/or (ii) loss of or damage of any kind to any facilities, tools, equipment and/or personal belongings of a third party; to the extent the same arises out of breach of the obligations hereunder or, negligence and/or breach of the duty (statutory or otherwise) of Contractor or its subcontractors or invitees.

4.13.5. Contractor shall be responsible at all times, including time in storage, in transit or at work site and shall indemnify and keep GEL Group indemnified and harmless under the Contract for performance of obligations by the Contractor and indemnify and hold harmless GEL Group from any and all claims, actions, proceedings, suits, demands, charges, liabilities, costs, damages and expenses of every kind and nature or other obligations hereunder directly or indirectly associated herewith, judgments and fines arising out of or in the course of execution



of work, including but not limited for the following:

- Failure of Contractor to start/commence the work as per LOA/Work Order/Contract
- If Contractor fails to perform as per prescribed scope of work.
- If Contractor fails to work in work man like manner.
- If Contractor is in breach of Contract i.e. Non-compliance with the terms and conditions of this Contract.
- Breakdown/Malfunction of equipment and/or there is a delay on account of such breakdown
- Delay due to waiting for replacement of Contractor's Equipment or personnel.
- Breach of any other applicable laws, including but not limited to the laws pertaining to Handling and Lifting equipment.

4.13.6. Liability for the Well or Reservoir

Contractor Group shall not be liable for and shall be indemnified by Company for and in respect of any and all claims brought by any member of Company Group or any Third Party except to the extent of claims that are direct result of Gross Negligence or Willful Misconduct of the Contractor Group, for personal injury or loss of property resulting from:

- a. blowout, fire, cratering, explosion or other uncontrolled well condition including loss of oil or gas from the well, or loss of well;
- b. sub surface pollution due to blowout, cratering or uncontrolled well conditions;
- c. any sub-surface damage to productive formations and similar sub surface damage including without limitation, any reservoir, geological formation or underground strata and loss of any oil or gas there from regardless of cause.

4.13.7. Contractor's Responsibility for Pollution

- (a) Contractor undertakes that substances or rubbish in any form originating from Contractor's Equipment shall not be dumped or discharged at, or around the well location. However, in the event of such dumping or discharge by Contractor, Contractor shall immediately assume all responsibility for the cost of removal of items, substances or rubbish so dumped or discharged and for any resulting pollution or contamination of any form, the well location and the surrounding area and shall take necessary and adequate steps to prevent environmental damage and, where some adverse impact on the environment is unavoidable, to minimize such damage to extent possible and consequential effects thereof to the property and people.
- (b) If Company has, reasons to believe that any Work by the Contractor or any operations conducted by the Contractor are endangering or may endanger persons, or are causing avoidable pollution, or are harming fauna and flora or the environment, Company may instruct the Contractor to remedy the same within reasonable time period and if pursuant to such applicable period as may be determined by Company and if the Contractor fails to take any remedial action, if appropriate, Company may at its sole discretion repair such damage or remedy such loss at the cost of the Contractor, Company may, pursuant to Applicable Law, require the Contractor to discontinue operation/ work in whole or in part without any cost to Company until the Contractor has taken such action to rectify the above events.
- (c) The Contractor shall ensure that:
 - (i) The Work is conducted in an environmentally acceptable and safe manner consistent with Good International Petroleum Industry Practice and that such Work is professionally monitored.
 - (ii) Any contract entered into between the Contractor and its Sub-contractors relating to the Work shall include the provisions stipulated herein and any established measures and methods for the implementation of the Contractors obligations in relation to the environment under the Contract.
 - (iii) Subsurface Pollution: Notwithstanding anything else contained herein to the contrary and Subject to clause 4.13.1, Contractor Group shall not be liable for and shall be



indemnified by Company for and in respect of any and all claims, for any loss or damage or injury or death whatsoever, direct or consequential, in respect of liability arising from pollution and / or environmental damage originating below the surface from the well or reservoir and/or contamination including debris and cost of cleanup and disposal.

4.13.8. Contractor's Material, Equipment and Property

The Unit / equipments / tools (herein referred to as Equipments) to be deployed by the Contractor under the Contract shall continue to remain Contractor's property and shall always remain in the possession/ control of the Contractor with the exclusive right to use of such equipments by the Contractor for providing services under the Contract. Contractor shall be responsible at all times, including time in storage, in transit, on the rig or at Company's well location, for damage to or destruction of Equipment and any other property of Contractor or any of its subcontractors and their respective employees or agents, unless such loss, damage or destruction is caused by the Gross Negligence of Company Group.

Notwithstanding the foregoing, Company shall defend, indemnify and hold Contractor Group harmless from any and all claims relating to any Material, Equipment and any of the property of Contractor Group, while lost or damaged in the hole, or as a result of uncontrolled well conditions. Provided such loss or damage is not due to normal wear and tear, in which cases, Company shall (i) exert its best efforts to recover such property or Material, Equipment for Contractor at Company's sole risk and expense, or (ii) reimburse Contractor LIH replacement cost less depreciation @ 2% per month from the date of purchase of such property or Equipment if destroyed and not recovered, or, (iii) reimburse Contractor for the cost of repair of such property or Equipment, if repairable. Depreciation will be capped at 50% of the equipment value which will be the lower of (i) the value mentioned in the Bill of Lading (ii) the value mentioned in the Purchase Order / invoice of the equipment (iii) value mentioned in the Price List as LIH. "In the event Contractor's tools/equipment that are in the possession and control of Company pursuant to this Contract, are not returned or are damaged beyond repair, Company will reimburse Contractor as per point (ii) and (iii) above. Company shall not be responsible if Contractor's tools/equipment incur damage as a result of Contractor's negligent acts and/or omissions". In case of Stuck up and LIH, the contractor has to complete the drilling including side track of well at their own cost.

4.13.9. Intellectual Property Liability

If any the Contractor Group's Property/materials used in the Contract is/are covered by a patent in respect of which Contractor is not licensed, the Contractor shall, before using the property/material, obtain such license(s) and pay such royalty(ies) and license fee(s) as may be necessary. The Contractor shall keep the Company indemnified from / against any and all damages, demands, losses, costs and expenses that Company suffers/ may suffer as a result of any infringement or alleged infringement of any patent, registered design, trademark, copy right or any other intellectual property right or otherwise by reason of claims, actions, demands and proceedings whatsoever brought or made against the Company on the basis of any patent infringement thereof. The Contractor shall, at his own risk and expenses, defend any suit for infringement of patent or like suit brought against the Company (whether with or without the Contractor being a party thereto) and shall pay any damages and costs awarded in such suit and keep the Company indemnified from and against all costs and other consequences thereof.

Any tool developed or technology developed and tried / tested in the wells drilled under this Contract with Company can be published in journals only with the prior written approval of the Company.

**4.13.10. Limitation of Liability**

Notwithstanding anything contained in the Contract to the contrary, the Contractor Group's total/aggregate liability to Company under this Contract, tort or otherwise shall be limited to a sum equal to One hundred percent (100%) of the Contract Value. Contractor Group's total/aggregate liability to Company under this Contract, tort or otherwise shall be limited to a sum equal to three hundred percent (300%) of the Contract value in case of Gross Negligence or Willful Misconduct, provided that aforesaid cap for limitation of liability shall not apply and the Contractor shall continue to remain responsible for all liabilities which arise on account of:

- Breach of Applicable Laws by the Contractor Group.
- Liability for payment or non-payment of taxes and other statutory duties/ fees of any nature.
- Liability for breach of Intellectual Property Rights of any person.
- Breach of Confidentiality obligations.
- Any indemnity given by Contractor under Clause 4.13 (Indemnity and Liabilities),
- Any breach by Contractor of any of its representations, warranties, covenants, or obligations pursuant to this Contract;
- the negligent or wrongful acts of a Contractor;

4.13.11. Company shall assume the entire responsibility for operations in which Company or its representatives attempt to fish for Equipment or perform any salvage operation or any other operation involving equipment, life or property of the Company and the Contractor will take initiative and render all possible assistance for recovery of such equipment.

4.13.12. Consequential Damage

Notwithstanding anything else contained herein to the contrary and subject to clause 4.26 (v), neither party shall be liable to the other for indirect and consequential damage resulting from, or arising out of this Contract including but not limited to, loss of profit, loss of revenue, anticipated profits, loss of business opportunity or business interruption, suffered by such Party or its Group and each Party shall defend, indemnify and hold the other party harmless in respect thereof. By way of abundant caution, it is clarified that the above shall not apply in relation to Contractor's obligation to pay liquidated damages to the Company under the Contract.

4.13.13. Certain Restrictions on Indemnities:

Unless otherwise expressly admitted elsewhere herein the Contract, no indemnity or hold harmless provision of this Contract shall apply in favor of a Party who shall have caused loss or damage through Gross Negligence or Willful Misconduct.

4.14 Insurance

For its risks and liabilities assumed hereunder, the CONTRACTOR shall, at its own expense procure and maintain as a minimum, the insurances set out in this Clause and ensure that they are in full force and effect throughout the life of the CONTRACT. All such insurances (including insurances provided by SUBCONTRACTORS) other than Employers Liability Insurance/Workmen's Compensation to the extent of the liabilities assumed by the CONTRACTOR under the CONTRACT, include the COMPANY, CO-VENTURERS, its and their respective AFFILIATES and the Government of India as additional insured and, shall be endorsed to provide that underwriters waive any rights of subrogation against the COMPANY, CO-VENTURERS, its and their respective AFFILIATES and the Government of India in relation to the CONTRACT.



The provisions of this Clause shall in no way limit the liability of the CONTRACTOR under the CONTRACT. All such insurances shall be placed with reputable and substantial insurers acceptable to the COMPANY.

Contractors insurances shall be primary to, and receive no contribution from COMPANY insurances. If the Contractors neglects, fails, or refuses to obtain or maintain insurances required to be effected, or fails to provide certification etc., the COMPANY has the right to procure and maintain policies at Contractors expense.

The CONTRACTOR shall be responsible for and shall save, indemnify, defend and hold harmless Company, GUJARAT ENERGY LIMITED, Joint Venture partners of GEL, the Government of India, their respective officers, directors employees, agents and other persons with whom Company may be associated (the COMPANY) from and against all claims, losses, damages, costs (including legal costs) expenses and liabilities in respect of:

a) loss of or damage to property and/or tools and equipment of the CONTRACTOR whether owned, hired, leased or otherwise provided by the CONTRACTOR arising from or relating to the performance of the CONTRACT,

b) personal injury including death or disease to any person employed by the CONTRACTOR arising from or relating to the performance of the CONTRACT,

Prior to commencement of services hereunder or within 7 days of signing of contract, whichever is later, Contractor shall deliver to Company certificate(s) (A) evidencing the issuance of insurance containing the coverage required herein and (B) providing that insurance shall not be cancelled or materially change without thirty (30) days prior written notice to the Company. Commencement or performance of services without delivering the certificates of insurance shall not constitute a waiver of Contractor's obligation to provide the required coverage.

1. All consequences of occupational accidents or illness Employer's Liability Insurance, in such amounts as may be required by the laws of India or any other country or political subdivision thereof applicable to any employee engaged in performance of the work; as per regulations, extended to cover benefits provided under maritime law, if applicable. Contractor has the obligation to comply with Indian Social Security laws and regulations.
2. Commercial or comprehensive General Liability Insurance, including coverage for contractual liability to cover liability under this Contract and cross liability Sudden and Accidental pollution, in the amount of US\$ 5,000,000 combined single limit each occurrence with an aggregate limit of US\$ 10,000,000 for bodily injury and property damage. (including blow out within well). The coverage should provide insurance for any incident or series of incidents covering the operations of the CONTRACTOR in the performance of the CONTRACT. If Contractor's Liability Insurance is written on a "claims made" form it must provide for (I) a retroactive date prior to, or coincident with, the commencement of service under this Contract and (ii) a minimum extended claims reporting period of one (1) year. This policy shall include Company and its directors, officers, employees and agents as additional insured.
3. Comprehensive Automobile Liability Insurance, covering owned, non-owned and hired motor vehicles, with a limit of liability as per regulations/ laws including passenger liability.
4. Unless otherwise specified elsewhere in the Contract, Contractor shall carry or cause to be carried insurance covering all Contractor's Equipment against loss or damage in the well during drilling operations or at surface at all times including during transportation to/from the rig. However, Contractor reserves the right to self insure its own assets.
5. Deleted
6. The CONTRACTOR shall be responsible for the removal and when appropriate the marking or lighting of any wreck or debris of the CONTRACTOR property or equipment or any part thereof provided by the CONTRACTOR in relation to the CONTRACT, where required by law, or government authority or where such wreck or debris is interfering with the COMPANY's operations is a hazard to fishing or navigation and shall, save, indemnify, defend and hold



harmless the COMPANY in respect of all claims, liabilities, costs (including legal costs), damages and expenses arising out of or in connection with such wreck or debris

7. The CONTRACTOR shall save, indemnify, defend and hold harmless the COMPANY from and against any claim of whatever nature arising from pollution originating from the DRILLING UNIT and/or the other property and equipment of the CONTRACTOR.

GENERAL CONDITIONS FOR INSURANCE

- A. Contractor hereby waives its right of subrogation against the additional insured and shall cause its insurers to waive their rights of subrogation against the additional insured.
- B. With respect to insurance coverage maintained hereunder by Contractor and insurance coverage separately obtained by the additional insured, all insurance coverage afforded by policies of insurance maintained by Contractor shall be primary insurance as such coverage apply to the additional insured to the extent of liabilities assumed under this Contract, and such insurance coverage separately maintained by the additional insured shall be excess insurance.
- C. Where use of subcontractors has been approved by the Company, Contractor shall require all such subcontractors to obtain, maintain, and keep in force during the time in which they are engaged, adequate insurance coverage and furnish Company acceptable evidence of such insurance upon request. Any deficiencies in such coverage shall be the sole responsibility of Contractor.
- D. No form of contractor liability self insurance, including but not limited to insuring with a parent, subsidiary, or affiliate organisation, is acceptable or allowable under the terms of this Contract, unless agreed to by Company prior to commencement of services hereunder.
- E. Contractor assumes full responsibility for the insurance or self insurance over his personnel, assets, machinery and equipment, including third party to be used in the performance of this Contract. Therefore, except as otherwise provided herein, any damage or injury suffered due to a total or partial loss to such assets, machinery and equipment will be at Contractor's expense. Contractor must insure for full replacement value of any and all equipment used in performing the Work.
- F. All exclusions and indemnities given under this Section shall apply irrespective of cause and notwithstanding the negligence, breach of duty (whether statutory or otherwise) or other failure of any nature of the indemnified party or any other entity or party and shall apply irrespective of any claim in tort, under contract or otherwise at law.

4.15 Taxes

All rates and the Contract Price are inclusive of any or all taxes and duties excluding Goods and Service Tax (GST) and to be mentioned in the price schedule that are applicable and such other payments as may be payable under any Applicable Laws.. Only GST shall be charged separately on the face of the invoice. Prices shall reflect delivery inclusive of all applicable fiscal charges including but not limited to other taxes, fees, duties, cess, licenses, import duties, personal income tax, corporate tax, excise duty, and similar rates and fees, freight, insurance, and similar expenses. Goods and Service Tax, if applicable, will be paid separately with the Invoice. GEL will issue road permit / way bill for procurement of goods in Gujarat.

4.15.1. Corporate Taxes:

- a) Except as stated in clause 4.15.3, Contractor shall bear all income, corporate, property, and all other taxes, duties, levies, surcharges, imports and similar taxes and duties duly levied or imposed on Contractor on account of the payments received by Contractor from Company for the Services as may be payable under the Applicable Laws and any amendments thereto. Contractor shall provide declaration confirming payment of such Goods and Service Tax to the Government Treasury and reporting of the supply & services provided to the Company correctly by Contractor in GST Returns.



- b) Contractor shall be responsible for correct assessment of liability taxes and duties on scope of work covered under the contract and shall be responsible for payment thereof. Where, Contractor does not have place of business in India and therefore Company is responsible for payment of taxes and duties as a recipient of services under the Contract, the same shall be deducted from payments made by the Company to the Contractor pursuant to this Contract in accordance with the prevailing taxation laws.
- c) Company shall withhold from the payments to Contractor such amounts as determined by the prevailing taxation laws in respect of Contractor's Services. Company shall deposit these tax withholdings at source with the Indian revenue authorities and provide Contractor all appropriate tax receipts and forms evidencing the deposit of these tax withholdings. Contractor shall be responsible for filing returns of income to Indian revenue authorities for payments made by the Company pursuant to this Contract in accordance with the prevailing taxation laws.
- d) Contractor is responsible and liable for taxes and duties, if any applicable, for providing services and sale of goods to the Company. Contractor warrants that it is based in India and registered under applicable Tax regulations.
- e) In accordance with the provisions of the Income Tax Act, 1961 and its subsequent amendments, Company shall withhold from the payments to Contractor such amounts as determined by the prevailing taxation laws in respect of Contractor's Services. Company shall deposit these tax withholdings at source with the Indian revenue authorities and provide Contractor all appropriate tax receipts and forms evidencing the deposit of these tax withholdings. Contractor shall be responsible for filing returns of income to Indian revenue authorities for payments made by the Company pursuant to this Contract in accordance with the prevailing taxation laws.
- f) Price quoted shall be inclusive of all applicable taxes/ duties and all other charges for delivering the materials at site including GST. However, the Contractor shall provide breakup of assessable value and GST / taxes charged.

4.15.2. Personnel Taxes:

All employment taxes and contributions imposed by any law, regulations or by trade unions with respect to or measured by the compensation, wages, salaries or other compensation paid to employees of the Contractor, including without limitation, taxes and contribution or unemployment compensation insurance, medical and health insurance, welfare funds, pensions and annuities and disability insurance. In the event that Contractor fails to do so and Company is liable to any interest or any penalty arising out of such personnel taxes, Company shall have the right to recover all such amounts from Contractor.

4.15.3. Custom Duty, Entry taxes, etc.:

The Rates do not include Goods and Service Tax, customs duty, export duties, or other statutory charges on the import and re-export of Equipment. Contractor acknowledges that the Government of India have issued various notifications (and subsequent clarifications/ circulars) relating to the exemption of Customs duties in relation to machinery, plant, Equipment, materials and supplies imported for use solely and exclusively on matters (inter alia) related to petroleum operations. Company and Contractor agree to cooperate and to use all reasonable endeavors to obtain any exemption to which Company and/or Contractor is entitled in accordance with such notifications. Contractor expressly agrees to furnish necessary documentation, bonds or undertakings to Government authorities and/ or to Company, which may be required for availing such exemption. It is expressly understood that Contractor shall be required to re-export any of its Equipment (unless consumed during performance of Services) imported under this Contract to enable Company to avail exemption of custom duties. Contractor undertakes to re-export Equipment at the earliest but not later than within SIXTY (60) days of completion or termination of Services and shall



be solely responsible for all customs formalities for importation and exportation of Contractors Equipment and materials at the port of entry or the port of exportation as the case may be. The charges towards custom clearance of equipment, agency charges or any other charges related to custom clearance of the equipment shall be borne by the Contractor. In the event that, notwithstanding the notifications referred to above, Contractor is prevented through no fault on the part of Contractor from importing any items subject of the exemption notifications without payment of customs duties thereon, Contractor shall immediately inform Company. Company and Contractor shall co-operate and liaise to ensure that the items are imported (if the Company elects to do so at its sole discretion) as quickly as possible provided always that in the event that any customs duties are required to be paid to enable such items to be imported expeditiously, such expenses shall be borne by the Company.

4.15.4. Contractor shall protect, indemnify and hold harmless Company, its Co-venturers, their directors, officers, and employees from any and all claims or liability for incorrect or under valuation of tax payable on income excess profits, customs duties, royalty or other taxes assessed or levied by any government agency including any tax assessed or levied on account of property or equipment of contractor, wages salaries or other benefits paid to Contractors employees or employees of sub contractors, on Company its Co-venturers, their directors, officers and employees including from any and all claims or on account of any payment made to or earned by Contractor.

4.15.5. Change in law:

In the event of any change or amendment of any Act or law, Rules or Regulations of Government of India or Public Body, which becomes effective after the effective date of this Contract and which results in increased cost of the works under the Contract though increased liability of taxes, (other than personnel and Corporate taxes), duties, the Contractor shall be indemnified for any such increased cost by the Company subject to the production of documentation proof. Contractor shall have to provide the applicable taxes considered alongwith its documentary proof. The same sheet might be referred for any increased in taxation in future.

Similarly, any change or amendment of any Act or law, including Indian Income Tax Act, Rules or Regulations of any Government becomes effective after the effective date of this Contract and which results in any decrease in the cost of the project through reduced liability of taxes, (other than personnel and Corporate taxes) duties, the Contractor shall pass on the benefits of such reduced cost, taxes or duties to the Company.

4.16 Force Majeure

4.16.1. "Force Majeure" shall mean any act which is insurmountable and outside the reasonable control of the parties, such as, but not limited to, act of God, epidemic, flood, tidal waves, explosion, lightning, earthquake, hurricane/ cyclone, tsunami, war (whether declared or not), riots (otherwise than amongst Contractor's personnel), civil and military disturbance and acts of Government or Governmental authority or of a representative thereof (whether legally or not legally valid). Strikes shall only be considered as Force Majeure if they are officially declared/ accepted strikes except to the extent excluded hereunder.

Notwithstanding the foregoing, the following shall NOT constitute Force Majeure and shall not excuse Contractor's performance:

- a) Late delivery of materials caused by congestion at supplier's plant or elsewhere, an oversold condition of the market, inefficiencies, or similar occurrences
- b) Late performance by Contractor and/or a sub-contractor caused by unavailability of equipment, supervisors or labor, inefficiencies or similar occurrences;
- c) Mechanical breakdown of any item of Contractor's or its Sub-contractor's equipment,



- plant or machinery; or
- d) Delays due to ordinary storm, inclement weather, seasonal rains or monsoon; or
 - e) Non-conformance by Sub-contractors;
 - f) Financial distress/ hardship of or inability to make profit by Contractor or any Sub-contractor
 - g) Failure to carry out drilling operations in accordance with the instructions of the Company on account of any accident, breakdown or non-performance or unsatisfactory performance of the Rig or any rig equipment(s) or on account of any reason within the control of the Contractor.
 - h) Shortage of manpower

4.16.2. Neither Party shall be liable to the other Party, except for obligations relating to indemnities and payment of amounts already due under this Contract, for any failure or delay in performing its obligations to the extent such failure or delay is caused by Force Majeure.

The Party claiming Force Majeure ("Affected Party") shall:

- notify the other Party in writing within forty-eight (48) hours from the occurrence of the Force Majeure event or from the time it becomes aware, or ought reasonably to have become aware, of such event;
- provide complete particulars of the Force Majeure event, the obligations affected, the expected duration and the impact on Contract performance;
- submit, within seven (7) days of such notice or within such extended period as may be approved by the Company, documentary evidence issued by the appropriate competent authority or other independent and reliable source supporting the occurrence, nature and duration of the Force Majeure event. Such documentary evidence may include, as applicable, Government notifications, orders of statutory authorities, reports of the India Meteorological Department or other recognised weather agencies, notifications of officially recognised strikes, disaster management authority reports, or other documentary evidence acceptable to the Company;
- take all reasonable steps and exercise due diligence to minimise the effects of the Force Majeure event and to resume performance of its obligations at the earliest possible opportunity; and
- promptly notify the other Party in writing upon cessation of the Force Majeure event and immediately resume performance of its obligations under the Contract.

Failure to provide the notice or supporting documentary evidence within the above stipulated time, unless prevented by the Force Majeure event itself and accepted by the Company, shall disentitle the Affected Party from claiming relief under this Clause to the extent the other Party is prejudiced by such failure.

4.16.3. If any Force Majeure event results in suspension or substantial interruption of the Services for a cumulative period of fifteen (15) days or more, the Company shall have the right to terminate this Contract by giving two (2) days' written notice, without any liability for compensation to the Contractor, except for payment for Services satisfactorily performed up to the effective date of termination in accordance with the terms of the Contract.

4.17 Assignment and Sub-Contracting

1. Contractor shall not assign this Contract, in whole or in part, to any third party without the prior written consent of Company, which consent may be granted or withheld by Company in its sole and absolute discretion. Any assignment of this Contract or of any rights hereunder or hypothecation, or creation of any lien or charge thereof in any manner, in whole or in part, by operation of law or otherwise, without the prior written consent of



- Company shall be void.
2. Company shall be entitled to freely assign its rights, obligations and duties under this Contract to its Affiliate, JV partner or other Participant by giving written notice. Company shall be entitled to assign by novation its rights and obligations under this Contract to any third party with prior written consent of the Contractor, which shall not be unreasonably withheld.
 3. Contractor shall not sublet or subcontract any part of the Services to any third party without prior consent of Company. If the Contractor sub contracts part of the Contract to a sub-contractor, Contractor shall ensure that sub orders reflect the requirements under this Contract and the Contractor shall furnish to the Company within one month from the dated of signing of the Agreement, a signed copy of the complete Agreement. Further in case of any change in the Agreement with the Sub Contractors, the same shall be notified to the Company within a period of one (1) month. However, no such approval for sub-contracting shall relieve Contractor from any obligation or liability under the Contract and Contractor shall be responsible for acts and omissions of any sub-contractor or supplier and its employees and agents as though they were the acts and omissions of Contractor or its employees or agents. Also in no case sub-Contractors shall pass on any claim/ liability to Company. In case any Claim/ liability of whatsoever nature is passed over to the Company, the Contractor shall indemnify the Company for all costs of any kind/ nature incurred by the Company, along with interest, compounded on a monthly basis at the 9% plus two (2) per cent. If the aforesaid rate of interest exceeds the maximum rate permitted by the governing law, the rate of interest to be charged shall be the maximum rate permitted by such Applicable Laws.
 4. Where approved Subcontractors are engaged, the Contractor shall:
 - a. coordinate all subcontracted activities;
 - b. ensure compatibility of equipment and procedures;
 - c. manage interfaces between subcontractors;
 - d. resolve operational conflicts;
 - e. monitor subcontractor performance;
 - f. remain fully responsible for the acts and omissions of subcontractors.
 - g. It is clarified that any approval of a Subcontractor by the Company shall not relieve the Contractor of any contractual responsibility under this Contract.
 5. Contractor shall give preference to the purchase and use of local goods manufactured, produced or supplied in India, provided that such goods are available on terms equal to or better than imported goods with respect to timing of delivery, quality and quantity required, price and other terms.
 6. Contractor shall employ Indian subcontractors of any tier having the required skills or expertise, to the maximum extent possible, in so far as their services are available on comparable standards with those obtained elsewhere and at competitive prices and on competitive terms.
 7. In the conduct of the work, the Contractor shall cooperate to the extent possible and without financial obligation, with domestic companies in India to enable them to develop skills and technology to service the petroleum industry and ensure that provisions of terms in Clauses 15.4 through to 15.6 above are contained in all agreements between the Contractor and its Sub-contractors
 8. The Contractor shall establish appropriate procedures, including tender procedures, for the acquisition of goods and services, which shall ensure that suppliers and Sub-contractors in



India are given adequate opportunity to compete for the supply of goods and services. Such procedure shall include, inter-alia, the submission of financial amounts or value of agreements, which will be awarded on the basis of selective bidding or open competitive bidding and the exceptions to bidding in cases of emergency.

9. Within 30 days after the end of each calendar year, the Contractor shall provide Company with a report outlining its achievements in utilizing Indian resources during that calendar year.
10. In this Clause, "goods" means equipment (fit to purpose), materials and supplies.

4.18. Temporary Suspension

Company may suspend the Services in the event of Contractor's default/failure to perform its obligations, until remedied, or in an emergency endangering life or property; the IDS Package shall be at Zero Rate and no charges payable during such suspension, without compensation to Contractor for any additional costs incurred as a result. Company may also suspend Services for its own reasons (including awaiting mobilization of other services/materials), during which Standby Rate shall be payable, such Company-initiated suspension not to exceed seven (7) days. Company also reserves the right to terminate the Contract for such non-performance.

4.19. Termination by Company

Unless otherwise provided, the Contract shall terminate upon expiry of the Term of the Contract. The Contractor shall be paid for the Work successfully completed and certified by Company Representative along with demobilization charges, if any. Save as specified elsewhere in the Contract, Company shall have the right to terminate the Contract in the following circumstances:

A. Termination for Non- Mobilization or Non-commencement of Work

If the Contractor fails to timely mobilize the ENTIRE INTEGRATED DRILLING SERVICES PACKAGE (fit for purpose) along with Materials or Equipments required to perform the work or having mobilized, fails to timely commence the work in accordance with the terms of the Contract, it would amount to material breach under the Contract and in such event, the Company shall have right to terminate the Contract immediately upon expiry of such specified time, unless otherwise provided or agreed by the Company.

Consequences of Termination:

Upon termination of Contract by Company under this sub-clause A, the Contractor shall not be entitled to any payment whatsoever. The Contractor shall immediately refund any sum including but not limited to the mobilization charges, which the Company might have paid in advance to the Contractor under this Contract. Unless, otherwise provided in the Contract, the Contractor shall compensate the Company for all losses, expenses etc. which the Company shall sustain on account of such breach by the Contractor.

In such events as above:

- a) The whole or part of the Performance Bank Guarantee furnished by the Contractor is liable to be forfeited without prejudice to the other rights of GEL to recover from the Contractor the losses/damages occurred in event of such default.
- b) For the avoidance of doubt, no amount shall become due or payable to the Contractor under this sub-clause A.

B. Termination for events specified below:

Occurrence of any of events as specified below shall be construed as Event of Default. The Company shall inform the Contractor of the same by issuing a notice of default (hereinafter



referred to as "Notice of Default"). If the Contractor, upon receipt of such notice, fails to remedy such default with Seven (7) days, then the Company shall have the right to terminate this Contract forthwith. Provided that in the case of an Event of Default under items (a), (b) or (h) below, Company may terminate the Contract immediately upon such Event of Default occurring, without the requirement of a Notice of Default or any cure period. Event of default shall occur if the Contractor:

- a) Commences a voluntary proceeding, or an involuntary proceeding is commenced against the Contractor seeking liquidation, reorganization or other relief with respect to the Contract or its debts under any bankruptcy, insolvency or other similar laws now or hereafter in effect, or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of the Contractor for a substantial part of its property, or if the Contractor shall consent to any such relief or to the appointment of or taking possession by any such official in any such proceeding commenced by or against a Contractor; or
- b) Makes a general assignment for the benefit of its creditors; or
- c) Refuses or fails to supply enough properly skilled workmen or proper equipment, or materials or services to accomplish the Work in accordance with the original work schedule and the Contract; or
- d) Fails to make prompt payment to Sub-contractors or materials, equipment or labour; or
- e) Is in breach of Applicable Law; or
- f) Otherwise breaches the provisions of the Contract or part thereof; or
- g) Suspends or abandons activities in the Work site; or
- h) Is wound up (not being a member's winding up for the purpose of reconstruction or amalgamation only) or if a receiver or manager on behalf of a creditor shall be appointed or if any deed or action substantially equivalent to any of the foregoing deeds or actions either in Indian law or applicable law shall occur; or
- i) Fails to provide uninterrupted services/perform work.

Consequences of Termination:

Upon termination of Contract by Company under this sub-clause B, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination after set-off from the amount due to the Company on account of breach of the Contractor. Further, the Company shall be entitled to take possession of the Work (excluding the equipments and personnel) and finish the Work at the risk and cost of the Contractor by whatever method Company deems just and expedient. Unless otherwise provided in the Contract, the Contractor shall compensate the Company for all losses, expenses etc. additional expenses which the Company shall sustain, to get the work executed, on account of such breach by the Contractor.

In such events as above:

- a) The whole or part of the Performance Bank Guarantee furnished by the Contractor is liable to be forfeited without prejudice to the other rights of GEL to recover from the Contractor the losses/damages occurred in event of such default.
- b) The amount that may have become due to the Contractor on account of Work already executed by it shall not be payable to it until after the expiry of six (6) calendar months reckoned from the Termination Date of Contract or from the taking over of the Work or part thereof by GEL as the case may be.

C. Termination in the event of Force Majeure

In the event that a condition of Force Majeure exists at the Site for a period of fifteen (15) consecutive days, Company shall have the right to terminate this Contract by giving two (2) days advance notice to Contractor.



Consequences of Termination:

Upon termination of Contract by Company under this sub-clause C, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination and 50% of the demob charges, if applicable as per Contract. No Party shall be obligated to pay the other Party for losses, expenses, damages etc. sustained on account of event of Force Majeure.

D. Termination for Convenience

Notwithstanding anything to the contrary under this contract, Company, at its option, shall have a right to terminate the Contract in whole or in part, at any time with fifteen (15) days prior written notice thereof to the Contractor. Upon any such termination the Contractor irrevocably agrees to waive any and all claims for damages, compensations, including loss of anticipated profits, on account thereof, and as the sole right and remedy of the Contractor, Company shall pay the Contractor in accordance with Price Schedule mentioned in the Contract.

Consequences of Termination:

Upon termination of Contract by Company under this sub-clause D, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination as well as demobilization charges.

E. Termination for non-performance or non-satisfactory performance of the Work

The Contractor shall perform the work in accordance with Good Oilfield Practices and the terms and conditions of the Contract. If the Contractor does not perform the Work or any part thereof or its performance is non-satisfactory, then Company shall issue a notice ("Remedy Notice") to the Contractor to remedy such non-performance or non-satisfactory performance. Upon receipt of such Remedy Notice, the Contractor shall remedy such default within Seven (7) days. The Company may ask the Contractor to re-perform any of such services, at sole risk and cost of Contractor. In the event, the Contractor fails to remedy such default within the specified period or the performance of the Contractor is non-satisfactory on two (2) or more separate occasions during the Contract Term (whether or not the subject matter of the non-satisfactory performance is the same in each instance); the Company shall have a right to terminate the Contract immediately without any further notice.

Consequences of Termination:

Upon termination of Contract by Company under this sub-clause E, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination, after set-off from the amount due to the Company on account of breach of the Contractor. Further, the Company shall be entitled to take possession of the Work (excluding the equipments and personnel) and finish the Work at the risk and cost of the Contractor by whatever method Company deems just and expedient. Unless otherwise provided in the Contract, the Contractor shall compensate the Company for all losses, expenses etc. the additional expenses which the Company shall sustain on account of such breach by the Contractor.

In such events as above:

- a) The whole or part of the Performance Bank Guarantee furnished by the Contractor is liable to be forfeited without prejudice to the other rights of GEL to recover from the Contractor the losses/damages occurred in event of such default.
- b) The amount that may have become due to the Contractor on account of Work already executed by it shall not be payable to it until after the expiry of six (6) calendar months



reckoned from the Termination Date of Contract or from the taking over of the Work or part thereof by GEL as the case may be.

F. Termination for Breach of any Undertaking

In the event after the award of Contract, it is discovered/found by GEL that any of the conditions stated in the Undertakings furnished by the Contractor under this Contract at the time of bidding is found to be false or any event mentioned in such undertaking occurs after the award of the Contract, GEL shall have a right to terminate the Contract immediately at its sole discretion by giving notice of termination to the Contractor. This shall be without prejudice to company's rights and obligations under the Contract or under the law, including right to recover damages from the Contractor.

Consequences of Termination: Upon termination of Contract by Company under this sub-clause F, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination, after set-off from the amount due to the Company on account of the false Undertaking or breach giving rise to termination. In such event: a) the whole or part of the Performance Bank Guarantee furnished by the Contractor is liable to be forfeited, without prejudice to the other rights of GEL to recover from the Contractor the losses/damages occasioned by such false Undertaking or breach; and b) the amount that may have become due to the Contractor on account of Work already executed by it shall not be payable until after the expiry of six (6) calendar months reckoned from the Termination Date

Upon termination of Contract, the obligation of the Contractor shall continue as to portions of the work already performed and as to obligations assumed by the Contractor prior to the date of termination.

In the event of termination of the Contract under sub-clauses A, B, E or F above (and, for the avoidance of doubt, not under sub-clause C (Termination in the event of Force Majeure) or sub-clause D (Termination for Convenience), whose respective Consequences of Termination provisions set out above shall exclusively govern in each such case:

a) The whole or part of the Performance Bank Guarantee furnished by the Contractor is liable to be forfeited without prejudice to the other rights of GEL to recover from the Contractor the losses/damages occurred in event of such default.

b) The amount that may have become due to the Contractor on account of Work already executed by it shall not be payable to it until after the expiry of six (6) calendar months reckoned from the Termination Date of Contract or from the taking over of the Work or part thereof by GEL as the case may be.

Upon receipt of Notice of Termination, the Contractor shall, unless a notice directs otherwise:

- a) Immediately discontinue the work on that date and to the extent specified in the notice;
- b) Place no further orders or agreements for materials, equipment, services or facilities except as may be necessary for the completion of such portion of the work which is directed to be continued;
- c) Promptly make every reasonable effort to procure cancellation upon terms satisfactory to Company all orders and sub-contracts to the extent they relate to the performance of the discontinued portion of work; and
- d) Do only such work as may be necessary to preserve and protect Work already in progress and protect materials, facilities and equipment on the work site or in transit thereto.



- e) The contractor shall take immediate action to dismantle its rig and equipments and remove them from the company premises or work site in 2-3 days time so that the company's premises are available and vacant for further plan and action as deemed fit by the company.
- The exercise of any of the rights granted to Company hereunder shall not prejudice or affect any other rights of action or remedy, which have accrued or shall accrue thereafter to Company.

4.20. -Delivery, Loss, Title and Shipment

Delivery:

a) Contractor shall be responsible for all activities in connection with and make all arrangements for and bear all costs of shipping and unloading until the materials are delivered and landed at Work Site or as otherwise directed by Company.

b) Delivery and shipment shall be deemed to be completed when equipment and materials are delivered and landed at Work Site or Company base as otherwise directed by Company as evidenced by packing lists or as may be specified in the LOA/ Contract.

Title:

a) All materials, raw data, field logs and documents covered by this Contract in respect of the Work and any part thereof and everything intended for incorporation therein shall, as soon as they are dedicated to the Work, be the sole and unencumbered property of Company. All such materials, raw data, field logs and documents shall, when at Work Site, be deemed to be exclusively intended for and dedicated to the Work. Contractor shall ensure that no lien or encumbrance shall be created on any of Company's property.

b) When, under this Clause, title to the raw data, field logs, documents and materials or part thereof passes to Company, Contractor shall, where practicable, clearly mark or identify the same in a manner approved by the Company Representative stating that the raw data, field logs, documents and materials or part thereof are the property of Company. Company's Representative shall be entitled at all reasonable times to inspect the raw data, field logs, documents and materials or part thereof at all areas where the Work is being or has been performed to ensure that this Clause has been observed and, if it has not been observed, to clearly mark or identify as aforesaid on the raw data, field logs, documents and materials at Contractor's cost.

Shipment:

a) Packing for the materials shall be seaworthy or airworthy as the case may be and should be able to withstand rough handling at the port of entry and Work Site.

b) For ocean shipment of materials, Contractor shall furnish documentation including, but not limited to:

1. Originals of certificate of origin and commercial invoice for customs purposes;
2. Originals of clean on-board ocean bills of lading;
3. Originals of non-negotiable copies of bills of lading;
4. Originals of packing lists.

c) All shipment documents must be couriered/ mailed/ emailed to Company immediately upon shipment and Contractor shall notify Company by facsimile about the same. If Contractor shall do any delay in sending the required documents for customs/ EC procedures, then the Company shall be compensated accordingly for such delay by the Contractor which causes the project /work schedule to be delayed.



- d) All materials shall be prepared for shipment and stored to prevent damage or deterioration as may be provided in this Contract. Upon making material dispatches to Company, the Contractor shall notify Company of the time and date of such dispatch immediately.

4.21. Survival of Termination

Notwithstanding anything to the contrary written in this Contract the liabilities and obligations of Company and Contractor under ~~24~~the Clauses of this Contract relating to Confidentiality & Data Security, Indemnity, Liability, Damages including Liquidated Damages, Intellectual Property, Limitation of Liability, Taxes, Governing Law, and Dispute Resolution/Arbitration, and any other Clause which by its nature is intended to survive shall survive termination or completion of this Contract.

4.22. Variations – Deleted

4.23. Confidentiality and Data Security

- i) All information and other materials disclosed, furnished, communicated or supplied by a party; hereinafter the Disclosing Party to the other Party; hereinafter the Receiving Party, including the Receiving Party's directors, officers, employees, Affiliates, or its expressly authorized representatives or agents are strictly confidential and shall be considered as Confidential Information. The Parties agree that Confidential Information shall not be divulged by Receiving party to any third party during the Term of this Contract or thereafter for a period of five (5) years from such disclosure or the determination of the 5-year period, whichever is later, without the Disclosing Party's prior written consent.
- ii) For avoidance of doubt, "Confidential Information" shall be deemed to include all information including but not limited to any technical, commercial and financial information, improvement, inventions, know how, innovations, technology, trade secrets, professional secrets, copyrights and any other intellectual property, discoveries, ideas, concepts, papers, software in various stages of development, techniques, models, data, source code, object code, documentation, manuals, flow charts, research, process, procedures, functions, customer names and other information related to customers, price lists and pricing policies. However, the Parties hereto acknowledge that Confidential Information shall not include any information that:
- a) is now or subsequently becomes publicly known or available without breach of this Contract by the Receiving Party;
 - b) was previously in the possession of the Receiving Party without any obligation of confidentiality and which was not acquired from, provided, given, sold or otherwise disclosed (directly or indirectly) by the Disclosing Party not through this Contract.
 - c) is to be shared by GEL with its JV partners, to regulatory authorities, Government, Courts or other authorities required by law or in the course of legal proceedings
- iii) The Contractor shall obtain written approval from GEL prior to making any publicity release or announcement regarding the Contract, the Works or Contractor's activities related to its participation in the Work or any other Confidential Information. If so requested by GEL, Contractor further agrees to require the Contractor's Personnel, its Sub- Contractors, and their employees to execute appropriate undertakings of confidentiality similar to that imposed on the Contractor under this Clause, prior to performing any Work under this Contract.
- iv) The Contractor shall hold the Confidential Information confidential and shall not divulge or disclose the Confidential Information, or make the Confidential Information available to any person or entity, other than its authorized representatives and ensure that only such authorized representatives who are expressly authorized by it to and whose duties require them to possess the Confidential Information shall have access to the Confidential Information on a need-to-know basis. In case of any breach of these terms or any act or omission by the Contractor, Contractor's Personnel, Sub-Contractors or any of their authorized



representatives, the Contractor agrees to indemnify GEL for any losses or damages suffered on account of breach by the Contractor.

- v) Without prejudice to the foregoing, all operational data generated or collected during execution of the Contract, including but not limited to real-time drilling data, MWD/LWD data, directional survey data, Daily Drilling Reports, well data, CCTV surveillance recordings, reports, logs and other operational information ("Company Data"), shall remain the exclusive property of the Company. The Contractor shall implement appropriate administrative, physical and technical safeguards, including industry-accepted security measures and access controls, to protect Company Data against unauthorized access, disclosure, alteration, loss or misuse. The Contractor shall not copy, transfer, disclose or use Company Data for any purpose other than performance of the Contract without the prior written approval of the Company.
- vi) The Contractor shall notify the Company in writing of any actual or suspected cyber security incident, data breach or unauthorized access affecting Company Data within twelve (12) hours of becoming aware of such incident and shall take all necessary actions to contain, investigate and remedy the incident at its own cost. Upon expiry or termination of the Contract, the Contractor shall hand over all Company Data to the Company and, within thirty (30) days, permanently delete all copies of such data from its systems, except where retention is required under Applicable Law, and shall furnish a certificate of deletion if so requested by the Company.

4.24. Applicable Law

All questions, disputes or differences arising under, out of, or in connection with this Contract, and the relationship of the Parties, shall be governed by and interpreted per the laws of India (procedural and substantive), and the Parties submit to the exclusive jurisdiction of the Courts at Gandhinagar.

4.25. Compliance with applicable Laws, Rules and Regulations:

Contractor represents that it has knowledge of and shall comply with & shall cause Contractor's Personnel as well as Sub-contractor (if any) to comply with the all laws, rules, ordinances and regulations applicable in India that may govern the performance of the obligations contained in this Contract and ensure compliance with all the applicable laws. Contractor agrees to obtain, at his own expense, all authorizations, licenses and permits that may be required for the operation of its equipment in the performance of the Work. All costs and expenses incidental to such compliance will be paid by Contractor. Contractor shall defend, protect, hold and indemnify GEL Group harmless from and against any action, cause of action, damages, claims, penalty, demands whatsoever, either at law or in equity, judgments including costs and legal fees which may be rendered against GEL Group in the event of non-compliance with the provisions of this Clause. The Contractor shall be solely responsible for any damage to environment and shall also indemnify GEL for any losses/damages that GEL has suffered or is likely to suffer.

4.26. Settlement of Dispute / Arbitration

- i. GEL and the Contractor undertake that all disputes, differences or questions at any time between the parties arising under this Contract ("Disputes") shall be resolved between the parties in good faith.
- ii. If any Dispute cannot be resolved between the parties within sixty (60) days or any agreed extension thereof, any Party may be settled by way of arbitration in accordance with the provisions of The Indian Arbitration and Conciliation Act, 1996, (including any statutory modifications or re-enactments thereof) and rules there under excluding any laws, opinions, or regulations that would require application of the laws of any other jurisdiction). The Arbitral



- Tribunal shall consist of three arbitrators. The Party raising the Dispute shall give a Notice to that effect to the other party and shall nominate the first Arbitrator in such Notice. The other Party shall respond to such Notice within 30 days of receipt thereof and nominate the Second Arbitrator. The two arbitrators so nominated shall appoint the third arbitrator within 30 days of appointment of the Second arbitrator. The Third Arbitrator so appointed shall be the Presiding Arbitrator. The arbitrators to be appointed shall be retired Judge of any of the High Courts or Supreme Court of India. Unless otherwise agreed in writing, the seat of arbitration shall be Gandhinagar, Gujarat, India.
- iii. The English language shall be used in the arbitral proceedings. Unless otherwise agreed in writing, each party shall equally bear the cost of arbitration.
 - iv. It is also a term of the Contract that the Contractor shall not stop the Work under this Contract, and the Work shall continue as expected regardless of whether the arbitration proceeding have commenced or not.
 - v. Notwithstanding any disagreement, dispute, protest, request for arbitration or court proceedings relating directly or indirectly to the Work, at all times, Contractor shall proceed with the Work in accordance with the determinations, instructions and clarifications of GEL. If the Contractor fails to proceed with the Work, he shall be considered to be in default and shall be held liable for any for any direct, indirect or consequential costs and expenses arising from such default. During the period Contractor is proceeding with the Work, he shall be paid the undisputed portion of his claims which are due under the Contract.
 - vi. The right to arbitrate disputes and claims under this Contract shall survive the termination or invalidity of this Contract or any term hereof.
 - vii. Any award rendered by the arbitrator shall be final and binding upon the parties.
 - viii. The Parties agree to submit to the exclusive jurisdiction of the Courts at Gandhinagar, Gujarat, India.

4.27. Entire Agreement / Waivers

None of the provisions of this Contract shall be considered waived by GEL unless GEL gives such waiver in writing. No such waiver shall be of any past or future default, breach or modification of any terms, provisions or conditions of this Contract unless expressly set forth in such waiver. None of the following shall release Contractor from any of the warranties or obligations of this Contract or be deemed a waiver of any right or remedies as to any prior or subsequent default in accordance with the Contract:

- Failure by GEL to insist upon strict performance of any terms or conditions of this Contract, or
- Failure or delay to exercise any rights or remedies provided herein or by law, or
- Failure to properly notify Contractor in the event of breach, except for any breach which according to provisions of Contract has to be notified, or
- Acceptance of or payment for any Service of Contractor

4.28. Liquidated Damages (LD)

- a. If the Contractor, for any reason other than Force Majeure, fails to timely mobilize the complete drilling package required to perform the work i.e Integrated Drilling Package (with required equipment's fit for purpose, personnel, spares and consumables) as specified in the Scope of Work at the designated location/Well Site as per the LoA/Contract schedule or extended date, or fails to timely commence Work, Company may, without prejudice to any other right or remedy, levy Liquidated Damages (being a genuine pre-estimate of loss and not by way of penalty) as follows):
 - **For delay in mobilization at first well:** LD at One percent (1%) of the entire Contract Value for each week of such delay. For LD on mobilization delay calculation, contract value shall be 4 well cost in case contingent well is taken in same campaign on ILM.



Contract value (for LD calculation) shall be 3 well cost if contingent well is not taken back to back under ILM.

- **For delay in ILM between two wells (Interlocation movement):** In case of delay in ILM beyond permissible days (to commence operation) for any particular well, LD will be applicable at One percent (1%) of the Contract Value of that particular well for each week of such delay. Permissible ILM Days:

Description	Permissible days (for completion of ILM i.e. issuance of ILM notice from one well to rig and services ready for Spud at next well)
ILM upto 50 km	9 Days
ILM 50.01 to 100 km	11 Days
ILM 100.0 to 150 km	13 Days
ILM 150.01 to 200 km	15 Days
ILM beyond 200 km	15 Days + 2 additional day for each 50 km slab above 200 km

- Total LD for mobilization delay as well as ILM delay shall be capped at 10% of contract value.
- b. LD for NPT during Drilling: In addition to sub-clause (a) above, where the actual time taken to drill and complete a Well exceeds the Contractor's quoted estimated time duration for that Well, Company may levy Liquidated Damages (being a genuine pre-estimate of the standby charges payable by Company to third-party support services and the cost of project delay, and not by way of penalty), calculated by reference to the rate specified in Annexure III, and continuing until Company issues a notice of termination under the Termination clause, which Company may issue at its option at any time after Day 21.
- c. The cap under sub-clause (a) above does not apply to this sub-clause (b), and vice versa.
- d. GST (if applicable) on the said liquidated damages will be charged extra and the Contractor shall be liable to pay the same along with amount of liquidated damages. The Parties agree that the liquidated damages ascertained above are genuine pre-estimate of losses / damages likely to be suffered by GEL in the aforesaid circumstances.
- e. Notwithstanding anything to the contrary, the payment of liquidated damages pursuant to this section shall not affect the rights of Company as per Contract or Applicable laws including the following rights:
- Terminate the Contract or a portion or part of the Work thereof at any time during the term of the Contract and/or,
 - Recover damages resulting from Contractor's breach of any of the provisions hereof and/or,
 - Seek Specific performance and/or,
 - Get the Work done by any other contractor at the risk and cost of the Contractor and/or,
 - Invoke Performance bank guarantee or any other security provided by the Contractor and/or,
- f. By way of abundant caution, it is clarified that in addition to recovering liquidated damages, Company may exercise any one or more of its rights mentioned above as per the Contract and the Applicable Laws.
- g. COMPANY may without prejudice to its right to effect recovery by any other method, deduct



and withhold the amount of liquidated damages from any money belonging to the Contractor in its hands (which includes Company's right to claim such amount against Contractor's bank guarantee) or which may become due to the Contractor. Any such recovery of liquidated damages shall not relieve the Contractor from any of its obligations/ liabilities under the Contract.

- h. The Parties agree that the liquidated damages indicated hereinabove including under Clauses 4.28 (a) and 4.28 (b) are genuine pre-estimate of the minimum loss/ damage which COMPANY can suffer on account of delay/ breach on the part of the Contractor and the said amount shall be payable without any requirement of proof of the actual loss or damage caused by such delay/ breach.

By way of abundant caution, it is clarified that during this period of delay, Contractor will not be eligible for any payment, whatsoever.

- i. Where Company is required to wait for any reason for a Contractor Equipment which is not made available on the site as per the schedule, contractor shall be liable to pay Company, 10% administrative cost in addition to all losses and expenditures incurred by Company or its Co- Venturers due to non availability of such equipment/ manpower, a sum as derived in Clause 4.28.a until such time the said equipment is made available to Company.

4.29. Notices

All notices and communications under this Contract shall be in writing and delivered to the addresses specified in the Contract; a Party may notify the other of address changes from time to time. E-mails and facsimile transmissions shall be deemed received at the time shown on the transmission report.

4.30. Performance Bank Guarantee

Within twenty-one (21) days of issue of the LOI/LOA, Contractor shall furnish Company an irrevocable, unconditional Performance Bank Guarantee, payable on first demand, of 10% of the Contract Value, in the format at Attachment 5, from an approved bank. Failure to comply shall constitute grounds for termination of the award/Contract. The PBG shall be valid and retained until ninety (90) days after completion/termination of the Contract (or, if claims are outstanding, until thirty (30) days after final settlement or ninety (90) days, whichever is later). No bank charges/commission/interest on the PBG amount shall be payable by Company. The PBG is not a penalty but security for amounts payable by Contractor under the Contract

GEL shall not be liable to pay any Bank Charges, Commissions, or Interest on the amount of Performance Bank Guarantee. The Performance Bank Guarantee provided by the Contractor is intended to operate as security for amounts (including damages where applicable) which becomes payable by the Contractor by virtue of this Contract and are not intended to be used as a penalty. Without prejudice to its other rights under the Contract or at law, GEL shall be entitled to invoke the performance bond, in the event of breach of the provisions of the WO/Contract. The Performance Bank Guarantee shall remain at the entire disposal of GEL as Security for the satisfactory commencement, performance and completion of the Scope of Work under the conditions of the Contract including recovery of amounts due to GEL from the Contractor arising out of this Contract under whatever head.

The Performance Bank Guarantee shall be replenished to its original level every time any withdrawal is made on them by GEL.



Without prejudice to GEL's other rights under this Contract or under applicable laws, GEL reserve the right to invoke the performance bank guarantee for any of the following reasons including but without limitation to:

- Failure of Contractor to start/commence or continue uninterrupted work as per LOA/Work Order/Contract
- If Contractor fails to perform as per the terms and conditions of the contract.
- If Contractor fails to perform as per prescribed scope of work.
- If Contractor fails to work in work man like manner.
- If equipments and/or Personnel providing services are not fit for the performance of work.
- If the Contractor fails to protect GEL for which GEL is indemnified by the Contractor under this Contract.
- If Contractor is in breach of Contract.
- Breakdown/Malfunction of equipment and/or there is a delay on account of such breakdown.
- Delay due to waiting for replacement of Contractor's Equipment or personnel.
- Breach of Contract – Non-compliance with the terms and conditions of this Contract.
- Breach of any other applicable laws.

4.31. Severability

If any portion of this Contract is determined illegal, invalid or unenforceable for any reason, the remaining portions shall, insofar as practical, remain in full force and effect as if the invalid portion were not contained herein.

4.32. Captions

Captions of Articles are for convenience only and shall not confine, limit or describe the scope of this Contract or the intent of any provision.

4.33. Data

All survey notes, drawings, invoices, permits, specifications, blueprints, reports, calculations and other material prepared by Contractor in connection with the Work (excluding data relating to Contractor's own personnel, materials or equipment performance) shall be Company's property and shall be transferred to Company on completion of each Well and/or on Contract termination/completion. Contractor may retain a single file copy, subject to the Confidentiality obligations. All tracings, drawings, prints, literature, reports, proposals and other material furnished to Contractor in connection with the Work remain Company's property and must be returned on completion/termination; Contractor shall not retain any reproductions without Company's prior written consent.

4.34. Binding Effect / Contract Documents / Non-Exclusive Contract

This Contract binds and inures to the benefit of Company and Contractor and their respective successors, assigns and personal representatives. Attached as part of this Contract are all documents, exhibits, schedules, attachments, annexures, GCC and SCC. This Contract is non-exclusive; Company reserves the right to engage other contractors for similar/identical work, and Contractor shall afford such other contractors adequate opportunity to carry out their agreements, cooperating with them and with Company.

4.35. Changes/ Variations

Company may, after mutual agreement, before completion of the Services, instruct Contractor to alter, amend, omit, add to or otherwise vary any part of the Services by issuing a variation/amendment order.

Company may, at any time, require changes to the Work described in the Scope of Work (unless such changes impair/invalidate the Contract), including additions, deletions, substitutions, alterations, changes in quantity/form/kind/positioning/dimension/level/line, and changes in



sequence, method or timing, effected by 24 hours' written notice prior to completion of the current Well's drilling activities. Contractor shall follow Company's instructions, including use of motor/drill-bits/instruments supplied by Company, and shall provide additional personnel/equipment on a reimbursable basis as required to complete the Work within the specified time (not extended unless approved in writing by Company), supported by relevant documents (supplier invoices, packing lists); Company shall pay Contractor a maximum handling charge of 5% on supplier invoices (2.5% for diesel).

Any item supply/ services requested by Company as per contract to complete the work shall be provided by Contractor. If additional items/ manpower is required to complete the work as per SoW, the contractor shall deploy such additional item/ manpower as specified by the Company at Contractor's own cost.

The proof of item prices shall be submitted in original by the contractor to the Company. It is expected from the Contractor that it will make sincere attempts to provide most economical cost of such additional services/materials and will not add any additional amount in excess of handling charges mentioned above. In Case, the Company is of the opinion that the market rate of the provided services/materials is lower than rates submitted by the contractor, the Company shall compensate the Contractor only on the market rate plus handling charges along with written proof of cost estimation. In such a case, the Company shall make reasonable judgment with regard to urgency or nature of specialized application for cost estimation but will not be liable to pay in any manner with regard to the cost submitted by the contractor.

4.36. Deleted

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4.37. Conflict of Interest

Contractor shall exercise reasonable care and diligence to prevent any actions/conditions arising that could conflict with Company's best interest. Neither Contractor nor any of its officers/directors/employees/beneficial owners/shareholders shall make, or cause to be made, in connection with this Contract, any payment, loan, gift or promise thereof that would violate the laws of India or of the relevant country.

4.38. Export Controls

Company confirms that the Contractor's Equipment/Services provided under this Contract are for use in India solely for exploration/production of hydrocarbons. If the end-use/end-user is required to change, or if the items are to be used outside India in connection with this Contract, Company shall request Contractor to obtain consent from the relevant authority in Contractor's country, at Contractor's sole risk and cost. Contractor shall not use the Equipment/Services for any purpose other than exploration and production and/or beyond India, and shall indemnify Company against all claims/losses/expenses arising from breach of this Clause. Contractor confirms it cannot participate in transactions involving Cuba, Iran, Sudan, Syria or North Korea, or any entity organized in or controlled by a national of such countries.

4.39 Cybersecurity and Information Technology Requirements

- a. The Contractor shall establish, implement and maintain an effective cybersecurity management system appropriate to the nature of the Services.
- b. The Contractor shall implement appropriate administrative, technical and physical safeguards to protect Confidential Information against unauthorised access; alteration; destruction; loss; theft or cyberattack. Such safeguards shall be proportionate to the sensitivity of the information and consistent with recognised information security standards. The Contractor shall also



comply with the cybersecurity requirements specified by the Company throughout the Contract period.

- c. The Contractor shall notify the Company immediately, and in any event within twelve (12) hours, after becoming aware of any actual or suspected cybersecurity incident that affects Company systems or data; may affect Contract performance; involves unauthorised access or results in data loss.
- d. The Contractor shall ensure that any Subcontractor or third-party service provider with access to Company systems or Company Data complies with cybersecurity obligations no less stringent than those contained in this Contract. The Contractor shall remain responsible for the acts and omissions of such parties.

4.40 COMPANY'S WORK PROGRAMME

- The Work Programme shall be specified by the Company for each work/services/supplies.
- Contractor to Comply with Company's Work / supply Programme. Contractor shall use all reasonable care and attention to ensure all aspects of the requirements set forth in Company's Work / Completion / supply programme which are to be provided by Contractor are complied with and to ensure that Company's other contractors are afforded all reasonable facilities to similarly comply as appropriate. Contractor shall carry out checks on any of the requirements of the Work / Completion / supply programme, as directed by Company and record and report the results of such checks to Company.

IN WITNESS WHEREOF, the Parties hereto have each caused this Contract to be executed by its officer, thereinto duly authorized, to be effective on the day and year set forth hereinabove.

COMPANY
GUJARAT ENERGY LIMITED

CONTRACTOR

Name:
Title:
In presence of

Name:
Title:

WITNESS: _____
Name:
Title:



SECTION 5: SPECIAL CONDITIONS OF CONTRACT (SCC): INTEGRATED DRILLING SERVICES (IDS)

This SCC sets out terms specific to (Integrated Drilling Services) and applies IN ADDITION TO, and shall be read together with, the common General Conditions of Contract (GCC) at Section 4. Clause numbers below are self-contained to this SCC. In the event of any inconsistency between this GCC and the Scope of Work, this GCC shall prevail on general contractual matters, and the Scope of Work shall prevail on technical/scope matters.

5.1 Scope Coverage & Integrated Package

5.1.1 The Contractor shall provide, as a single integrated drilling package, the following services in respect of each Well: Drilling Rig Services (including fishing tools, need-based); Drilling Fluids Services with supply of chemicals; Cementing Services with supply of cement and additives; Directional Drilling Services; Mobile ETP Services; Fuel and Water supply; Drill Bits; Casing Accessories; Boarding, Lodging, Meals and Office facilities for Company personnel; CCTV-based surveillance; and all Deliverables/reports, each as detailed in the Scope of Work at Section 7.

5.1.2 "Contractor's Equipment" for the purpose of GCC Clause 4.6 (Contractor-Furnished Equipment) and GCC Clause 4.14 (Insurance) shall, for this Contract, mean the Drilling Rig together with all the equipment listed in Clause 5.1.1 above, collectively the "Integrated Package".

5.2 Single-Point Responsibility & Technical Partners

5.2.1 The Contractor bears single-point responsibility for the entire integrated scope, including any portion executed through a Technical Partner approved under BQC Clause. GEL's sole contractual counterparty is the Contractor; GEL shall have no privity of contract with, and no liability to, any Technical Partner or sub-contractor of the Contractor.

5.2.2 Where a Technical Partner is engaged for Drilling Fluids, Cementing, Directional Drilling or any other allied service as per tender scope, the underlying MoU/agreement between the Contractor and such Technical Partner shall: (a) be co-terminus with, or exceed, the full Contract Term for all four (4) Wells (or as extended under GCC Clause 4.2); (b) be produced to GEL for its record prior to issue of LOA; and (c) be kept current and enforceable for the entire duration during which the Technical Partner's services are utilized. Any change of Technical Partner during the Contract Term requires GEL's prior written approval, which shall not be unreasonably withheld provided the replacement Technical Partner independently meets BQC Clause.

5.2.3 The Contractor shall remain fully liable to GEL for the acts, omissions, negligence and defaults of every Technical Partner and sub-contractor engaged by it, as if such acts/omissions/negligence/defaults were the Contractor's own, per GCC Clause 4.17.3.

5.3 Contract Term & Wells Covered

5.3.1 The term of the IDS Contract shall per GCC Clause 4.2, and shall automatically extend to complete the last Well in progress.

5.3.2 The Contract covers drilling of four (4) Wells (3 firm + 01 contingent) identified in the Scope of Work (Ank-21-D1, TA6-D1, PNE1-D1 and GSAH5-D5) — two (2) 2-CP Vertical Wells and two (2) 3-CP Directional Wells. GEL reserves the right to change the sequence, number, exact location, depth or type (Vertical/Directional) of Wells within the Contract Area at its discretion, such change to be communicated through the Mobilization Notice or ILM Notice, without any change to the quoted rates.

PNE1#D1 well is kept as contingent wells which is subject to statutory approval and may or may not come.



5.4 Rate Structure

5.4.1 Firm lump-sum job rates (Price Schedule) shall apply for: (a) Mobilization of the Integrated Package to each of the Ankleshwar, Tarapur (incl. RFPSC) and Ahmedabad (incl. RFPSC) Blocks; (b) Demobilization from each such Block; (c) Drilling of each 2-CP Vertical Well up to 1500m depth; (d) Drilling of each 3-CP Directional Well up to 1800m depth; and (e) Inter-Location Movement (ILM) between Well Locations, on the distance-slab basis set out in the Price Schedule.

5.4.2 Extra/Reduced Meterage: where the actual drilled depth of a Well varies (increases or decreases) from the planned depth of 1500m (2-CP) or 1800m (3-CP), the quoted per-meter Extra Meterage Rate shall apply on a pro-rata basis to the Contract Price, both for additional meterage (added to the well cost) and reduced meterage (deducted from the well cost), and such rate shall remain firm for the Contract Term.

5.4.3 Day Rates (in special case only)— Operating (R-1) and Standby (R-2)— under IDS Contract apply ONLY for (a) additional work beyond the tendered Scope of Work, or (b) remedial work not attributable to the Contractor's fault, and shall NOT apply to normal drilling/completion operations within a Well's planned scope, which are covered by the firm lump-sum Well-drilling rate at Clause 5.4.1(c)/(d) above. The GCC Clause 4.3.7 definitions of R-1/R-2 shall apply mutatis mutandis to determine entitlement for such additional/remedial work.

5.4.4 Contingency Chemicals (Price Schedule), are quoted strictly for bid-evaluation purposes; payment shall be made only on actual consumption/usage basis, duly certified by the Company Representative, and the estimated quantities in the Price Schedule shall not be construed as a guaranteed minimum order.

5.4.5 Wireline logging days are deemed included within the applicable Well-drilling lump-sum rate for the durations specified in the Price Schedule Notes at Section 9 (varying by Well — Ank21-D1: 2.5 days; GSAH5-D5: 4.5 days incl. VSP; TA6-D1: 2.5 days; PNE1-D1: 4.5 days incl. VSP). Usage beyond such duration shall be payable at the applicable Day Rate (R-1/R-2, as the case may be) under Clause 5.4.3.

5.4.6 Mobilization/Demobilization Charge Bracketing: as set out at Section 3.4, IDS Contract Mobilization charges in excess of 2% of the Total Quoted Contract Value shall be capped for interim payment purposes (excess withheld and settled at Contract close-out); Demobilization charges quoted below 2% of such Total Quoted Contract Value shall have the deficit withheld from early invoices and settled at Contract close-out along with the actual demobilization charges. The Total Quoted Contract Value shall be computed as the cost of four (4) Wells where the contingent Well (PNE1-D1) is taken up in the same campaign on ILM, and as the cost of three (3) Wells where the contingent Well is not taken up back-to-back under ILM in the same campaign.

5.5 Personnel — Minimum Deployment for Integrated Package

In addition to the standard Rig Crew (per the qualification/experience table at Section 9.1.2, SOW), the Contractor shall deploy, at minimum:

Service	Minimum Personnel	Minimum Experience
Drilling Fluids	2 Mud Engineers + adequate Mud Labour per 12-hr shift	As per Drilling Fluid Scope section 9.2
Cementing	1 Cementing Operator/Supervisor + Cementing Crew	As per Cementing Scope section 9.3
Integrated Services Base Co-ordinator	One well qualified and experienced Base Co-ordinator at company's office for daily co-ordination and operational requirements.	Minimum 10 Years experience in managing well drilling operations.

Directional Drilling (in case of directional well)	2 Directional Drillers + 2 MWD Operators (12-hr shifts)	As per DD Scope section 9.4
DD Coordination (in case of directional well)	1 DD Coordinator at Contractor's base for Company's operational discussion and decisions.	As per DD Scope section 9.4
Mobile ETP	Adequate trained operator/supervisor & assistant if required.	As per METP Scope section 9.5

5.5.1 Key personnel (Day/Night Tool Pusher, Drilling Superintendent, Shift In-charge/Driller shall hold valid IWCF certification as applicable to their role; Assistant Driller and Derrickman shall hold valid IWCF or IADC WellSharp certification as per BQC. Replacement of any key personnel requires GEL's prior written approval, per BQC.

5.6 Materials, Consumables & Inventory

5.6.1 The Contractor shall supply and maintain, at its own cost and risk, all mud chemicals, cement and cementing additives, drill bits, casing accessories (float equipment, centralizers, cementing plugs) and fishing tools (basic set), meeting API/ONGC specifications, with MSDS sheets (for chemicals) furnished with the Technical Bid as per the Scope of Work at Section 7.

5.6.2 Minimum stock levels — including a one-Well back-up of critical/long-lead-time chemicals and a minimum 50 MT Barite stock at the drill site — shall be maintained at all times and reconciled by physical count at least weekly as per the Scope of Work.

5.6.3 Drill Bits, Casing Accessories- Float Equipment, Top & Bottom Plugs and Centralizers shall be sourced strictly from the manufacturers as mentioned in scope of work and the Contractor shall submit the corresponding undertaking with its Technical Bid.

5.7 Well Acceptance Criteria

5.7.1 End Of Well report (EOWR) for each Well's drilling shall be subject to GEL's approval when submitted along with the Well Acceptance Form (Section 7 Scope of Work, Annexure II format), which requires, for 3-CP Wells: section wise Drilling, drilling fluid & casing cementation reports for 13-3/8", 9-5/8" and 5-1/2" casings; Hermetical Test Report; Wellhead/X-mas Tree pressure test report; and GEL's acceptance of all Deliverables. For 2-CP Wells, section wise Drilling, drilling fluid & the corresponding 9-5/8" and 5-1/2" casing reports, Hermetical Test Report, Wellhead/X-mas Tree pressure test report and Deliverables acceptance shall apply.

5.7.2 Non-adherence to the Well Acceptance Checklist may result in withholding of the relevant payment (in whole or part) until compliance, without prejudice to GEL's other rights under the GCC.

5.8 Quality Assurance for Chemicals/Equipment (including Technical Partner-supplied)

GEL, directly or through an independent Third-Party Inspection agency, may test any chemical, cement batch or equipment item supplied by the Contractor (or its Technical Partner). Substandard material may be rejected without GEL being obliged to provide reasons, and the Contractor shall replace such material without delay to operations or additional cost to GEL as per the Scope of Work quality-assurance provisions at Section 7.



5.9 Responsibility Matrix

The general allocation of responsibilities between Company and Contractor are set out in responsibility matrix and other clauses mentioned in this documents.

The Responsibility Matrix at Annexure I of the Scope of Work (Section 7) — allocating each item of equipment, material, service and cost between Contractor and Company — is incorporated into, and forms an integral part of, this SCC and shall prevail over any general allocation implied elsewhere in the GCC or this Tender, specifically for IDS package.

5.10 Rate Entitlement —IDS for Additional/Remedial Work

For additional work beyond tendered scope or remedial work not attributable to Contractor's fault (Clause 5.4.3), the Rate Entitlement Chart set out at the end of this Clause 5.10 shall apply mutatis mutandis to determine whether Operating Rate (R-1) or Standby Rate (R-2) is payable for the relevant operation, adapted to reflect that Drilling Fluids/Cementing/Directional Drilling equipment (not only the Rig) may be the subject of the additional/remedial work under IDS.

Rate Entitlement Chart (Annexure to Clause 5.10)

The chart below governs applicability of Operating Rate (R-1), Standby Rate (R-2), Repair Rate (R-3), Lump Sum or Zero Rate for additional work beyond the tendered Scope of Work, or remedial work not attributable to the Contractor's fault, under Clause 5.10. No charge shall be payable under any head except the column marked with a check mark. References to “the Rig” below shall, as the context requires, include Drilling Fluids, Cementing and/or Directional Drilling equipment where such equipment (rather than only the Rig) is the subject of the additional/remedial work.

Sr. No.	Operation	R-1	R-2	Zero
1A	Downhole string failure/complication			√
2A	Other operations (beyond tender scope) using Contractor's draw-works/mud pumps	√		
2B	Extended Wireline logging & Other operations (beyond tender scope) without use of Contractor's draw-works/mud pumps & other associated services		√	
4	Down-time waiting for Company/Third-Party equipment/materials		√	
5A	Mud loss control — induced by poor Contractor workmanship (contractor's fault)			√
5B	Mud loss control — due to abnormal downhole /geological condition (not attributable to contractor fault)	√		
6A	Kick control — due to Contractor negligence/equipments malfunction			√
6B	Kick control — due to abnormal downhole/geological conditions: A. First 48 hrs B. After 48 hrs	√		√
7	Sidetrack of well up to planned target including completion in case of stuck up/LIH			√

5.11 High Speed Diesel (HSD) Price Variation

IDS Prices quoted based on the prevailing retail selling price of High Speed Diesel (HSD) applicable on the **Original Unpriced Bid Due Date**, as published by any Government Oil Marketing Company (Indian Oil Corporation Limited, Bharat Petroleum Corporation Limited or Hindustan Petroleum Corporation Limited) for the location nearest to the Well Site or Contractor's Operating Base.



Any increase or decrease in the retail selling price of HSD after the Original Unpriced Bid Due Date shall be reimbursed to or recovered from the Contractor, as the case may be, with effect from the date such price revision becomes effective.

For the purpose of HSD price adjustment, the actual HSD consumption on daily basis to be maintained in the DPR. Maximum HSD consumption per day for payment of variation shall be capped at 3500 litres/Day.

The HSD price adjustment shall be calculated as follows:

$$\text{HSD Price Adjustment} = (\text{Increase/Decrease in HSD Price per Litre}) \times (\text{HSD consumed in litres}).$$

HSD variation shall not be considered during Zero Rate / Force Majeure / Suspension.

The adjustment shall be reflected separately in the monthly invoice and shall apply only for the period during which the revised HSD price remains effective.

The Contractor shall maintain daily records of the HSD consumption in the Daily Drilling Report (DDR)/IADC Report, duly verified by the Company's Representative. Such records shall form the basis for calculation of HSD price adjustment.

No reimbursement shall be made on the basis of actual HSD consumption, purchase invoices or any claim for consumption in excess of the above mentioned daily limit.

5.12: bidder is required to furnish following attachments duly filled and along with all supporting documents.

Attachment 13	Declaration of No Deviations / Unconditional Acceptance of Tender Terms
Attachment 14	Comprehensive Bidder's Undertaking and Declaration
Attachment 15	Bidder, Drilling Rig & Technical Partner Information Sheet
Attachment 15-A	Letter Of Commitment by Technical Partner

5.13 End of Well Report: Contractor/Bidder shall submit within fourteen (14) days of well completion, the end of well report (EWR) consisting of the following:

- End of Section report shall be submitted to the Company Representative and Drilling dept. GEL Gandhinagar within 7 days of completion of that section.
- Section wise Drilling, drilling fluid & casing cementation reports for 13-3/8", 9-5/8" and 5-1/2" casings; Hermetical Test Report; Wellhead/X-mas Tree pressure test report
- A detailed list of chemical consumption (mud chemicals & cement additives) for each section;
- A detailed volume analysis and mud usage for the section;
- A detailed study on the hole problems encountered and mitigation methods and strategies followed;
- A detailed recap of the cementing operations in each hole section;
- An evaluation of the cement additive properties and their performance;
- An analysis and recommendation of the optimum cementing parameters required based on experience gained in the well;
- An evaluation of all the other operations including pumping services related to completion, Leak off test, formation integrity test etc;
- An evaluation of any squeeze/plug or remedial cement jobs carried out in the well;
- A comparison of planned Vs actual mud properties & cementing properties for each hole section and or any cementation job;
- A detailed recommendation for future wells. Special mention of "Lessons Learned" during operation of the well.



SECTION 6 — DELETED



SECTION 7: SCOPE OF WORK — IDS (INTEGRATED DRILLING SERVICES)

SCOPE OF WORK & TECHNICAL SPECIFICATION

1. Introduction

Gujarat Energy Ltd. (hereinafter referred to as “**GEL/Company**”) is an Operator for CB-ON-2 Old PSC & RFPSC, CB-ONN-2000/1 Old PSC & RFPSC and CB-ONN-2003/2 onshore blocks under Production Sharing Contract (PSC) with Government of India.

The Company, on behalf of the consortium members of the above referred exploration blocks respectfully solicits your Bid for Integrated Drilling Services for upcoming drilling campaign in different blocks in Gujarat from experienced and reputed perspective bidders.

2. Key Details

S. No.	Item	Particulars
1.	Tentative Contract Commencement Date	Oct - Nov 2026
2.	Number of Wells	Drilling of 04 Wells (3 firm + 1 contingency)
3.	Services & Materials	A. Drilling Services 1. Drilling Rig Services (including fishing tools required for drill string/roller cone retrieval, washover pipes & overshot with grapple assembly to mitigate stuck pipe, junk baskets, fishing jar/flat mill and peripheral mill etc.) 2. Drilling Fluids Services along with supply of chemicals 3. Cementing Services along with supply of cement & additives 4. Directional Drilling Services 5. Mobile ETP services 6. Fuel and Water 7. Supply of Drill Bits 8. Supply of Casing accessories 9. Boarding, Lodging, Meals & Offices for Company's Personnel 10. Deliverables 11. CCTV-based surveillance monitoring systems
4.	Well Names, Block, Well Depth, Well Type & Location	• 1 Well Ank-21-D1 in CB-ONN-2003/2 Block: tentative depth +/- 1550m MD, Vertical, Ankleshwar • 1 Well TA6-D1 in CB-ON/2 Block: tentative depth +/- 1825m MD, Directional, Tarapur • 1 Well PNE1-D1 in CB-ON/2 RFPSC Block: tentative depth +/- 1830m MD, Directional, Tarapur - Contingency • 1 Well in GSAH5-D5 in CB-ONN-2000/1 RFPSC Block: tentative depth +/- 1500m MD, Vertical, Balpura (Dholka, Ahmedabad)
5.	Distance between well locations (ILM km)	• Ank21- D1 to TA6-D1: approx. 190 KM • TA6-D1 to PNE1-D1: approx. 40 KM • PNE1-D1 to GSAH5-D5: approx. 40 KM



6.	Estimated Timelines to drill the well to TD and production casing & cementation as per Drilling/Well Program	<u>To be quoted by the bidder in the technical bid in Attachment -15</u> 1. Well No.1: Ank#21-D1 (2 CP well): Days (Not more than 23 days) 2. Well No.2: TA#6-D1: (3 CP well): Days (Not more than 33 days) 3. Well No.3: PNE#1-D1: (3 CP well): Days (Not more than 35 days) 4. Well No.4: GSAH#5-D5: (2 CP well): Days (Not more than 25 days)
		Note: 1. In Ank#21D1 well (2 CP) of maximum depth 1550 mtrs, 2.5 days for wireline logging in 8 ½" hole section has been considered. 2. In GSAH#5-D5 well (2 CP) of maximum depth 1550 mtrs, 4.5 days for wireline logging in 8 ½" hole section along with VSP has been considered. 3. In TA#6-D1 well (3 CP) of maximum depth 1900 mtrs, 2.5 days for wireline logging for 12 ¼" and 8 ½" hole section has been considered. 4. In PNE#1-D1 well (3 CP) of maximum depth 1900 mtrs, 4.5 days for wireline logging for 12 ¼" and 8 ½" hole section along with VSP has been considered.



3. **General Well Design:**

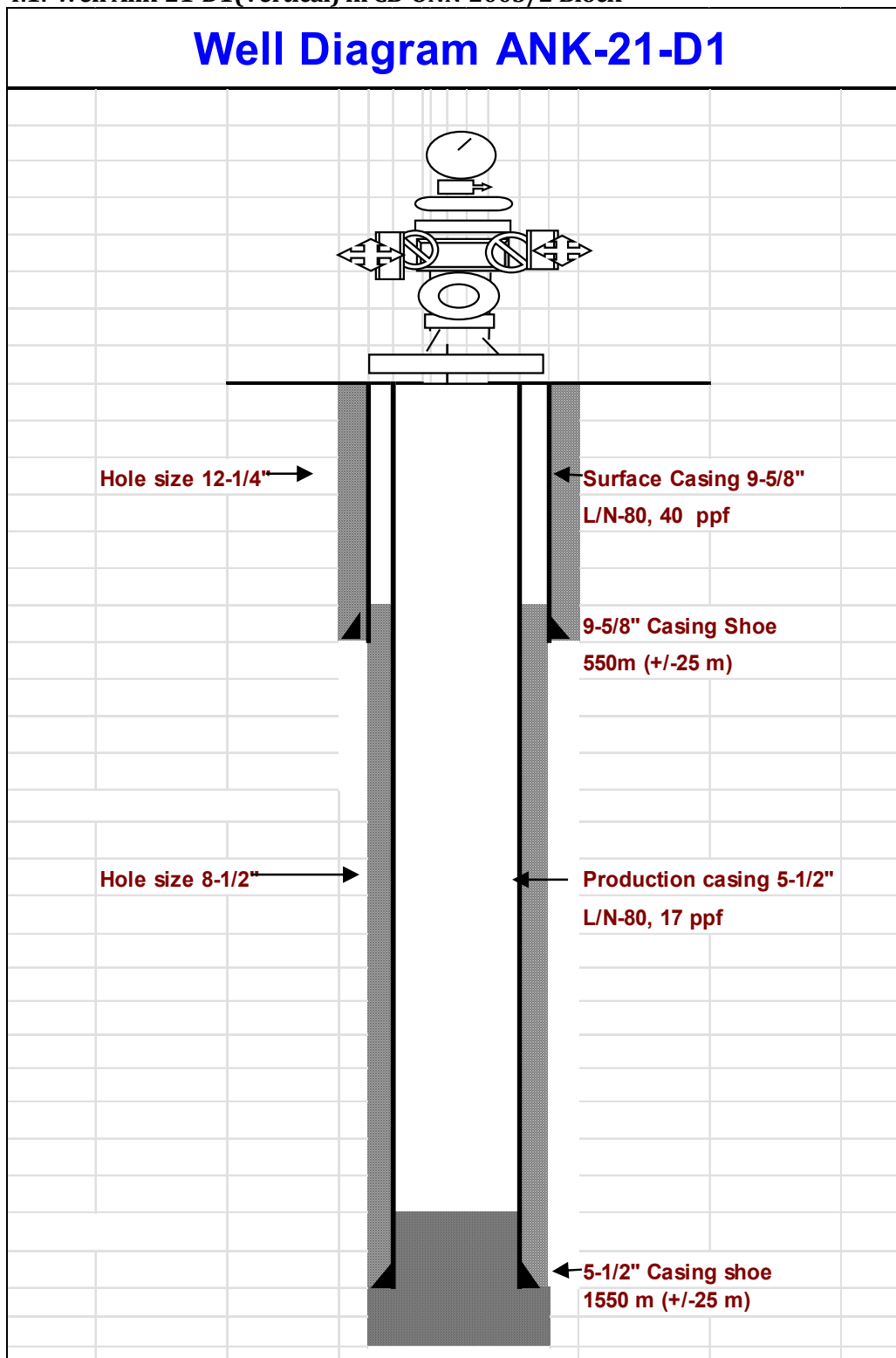
2 wells are planned to be drilled vertically (2CP) and 2 wells are planned to be drilled directionally (3CP). The actual setting depths for all the casings shall be finalized by the Company Well-site geologist. Provisional details are provided in Table 1.

Table 1: Provisional Well Casing Design:

Table 2.1. Provisional Well Casing Design						
Well Ank-21-D1 (CB-ONN-2003/2 Block): 2CP, Vertical, 1550m						
Hole Size (Inch)	Casing Size (Inch)	Casing Weight (ppf)	Grade	Coupling	MD BRT(m)	
12-1/4"	9-5/8"	40 ppf	N-80/L-80	BTC	550 (+/-25 m)	
8-1/2"	5-1/2"	17 ppf	N-80/L-80	BTC	1550 (+/-25 m)	
Well TA6-D1 (CB-ON/2 Block): 3CP, Directional, 1825m						
Hole Size (Inch)	Casing Size (Inch)	Casing Weight (ppf)	Grade	Coupling	MD BRT(m)	
17-1/2"	13-3/8"	54.5 ppf	J-55/K-55	BTC	400 (+/-25 m)	
12-1/4"	9-5/8"	43.5 ppf	N-80/L-80	BTC	1450 (+/-25 m)	
8-1/2"	5-1/2"	17 ppf	N-80/L-80	BTC	1825 (+/-25 m)	
Well PNE1-D1 (CB-ON/2 RFPSC Block): 3CP, Directional, 1830m						
Hole Size (Inch)	Casing Size (Inch)	Casing Weight (ppf)	Grade	Coupling	MD BRT(m)	
17-1/2"	13-3/8"	54.5 ppf	J-55/K-55	BTC	400 (+/-25 m)	
12-1/4"	9-5/8"	43.5 ppf	N-80/L-80	BTC	1400 (+/-25 m)	
8-1/2"	5-1/2"	17 ppf	N-80/L-80	BTC	1830 (+/-25 m)	
Well GSAH5-D5 (CB-ONN-2000/1 RFPSC Block): 2 CP, Vertical, 1500m						
Hole Size (Inch)	Casing Size (Inch)	Casing Weight (ppf)	Grade	Coupling	MD BRT(m)	
12-1/4"	9-5/8"	40 ppf	N-80/L-80	BTC	550 (+/-25 m)	
8-1/2"	5-1/2"	17 ppf	N-80/L-80	BTC	1500 (+/-25 m)	

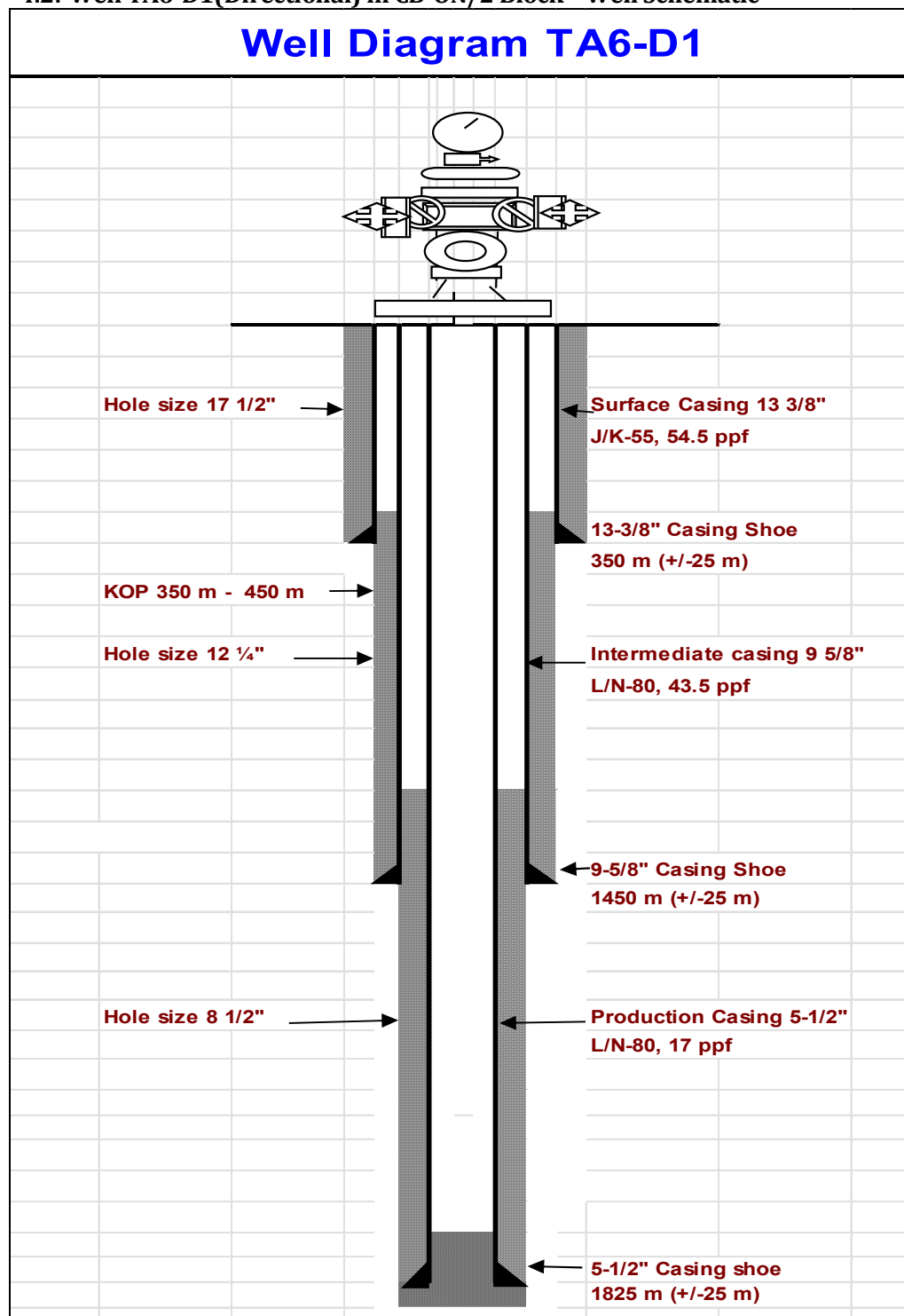
4. General Well Schematic

4.1. Well Ank-21-D1(Vertical) in CB-ONN-2003/2 Block



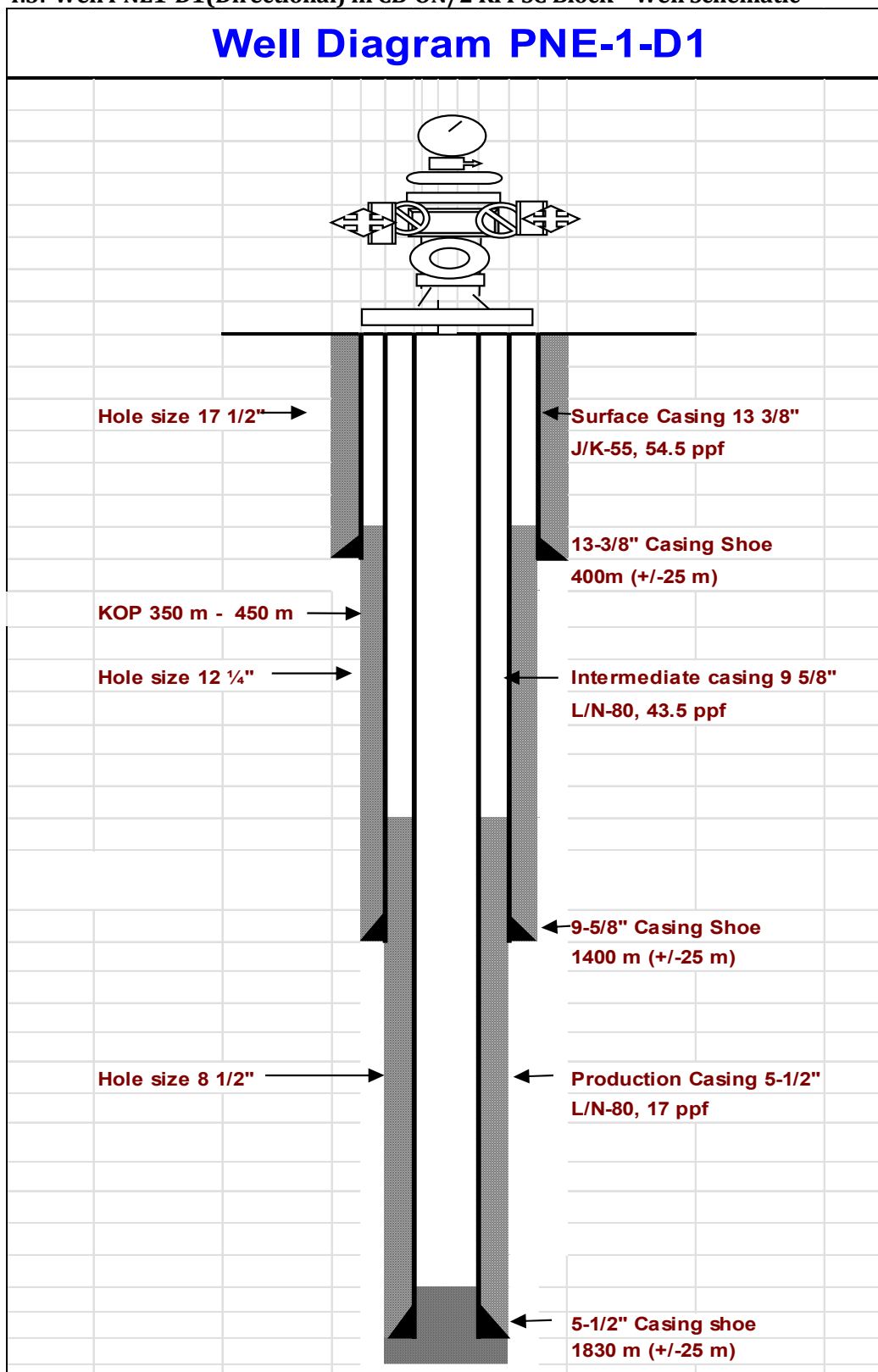


4.2. Well TA6-D1(Directional) in CB-ON/2 Block - Well Schematic



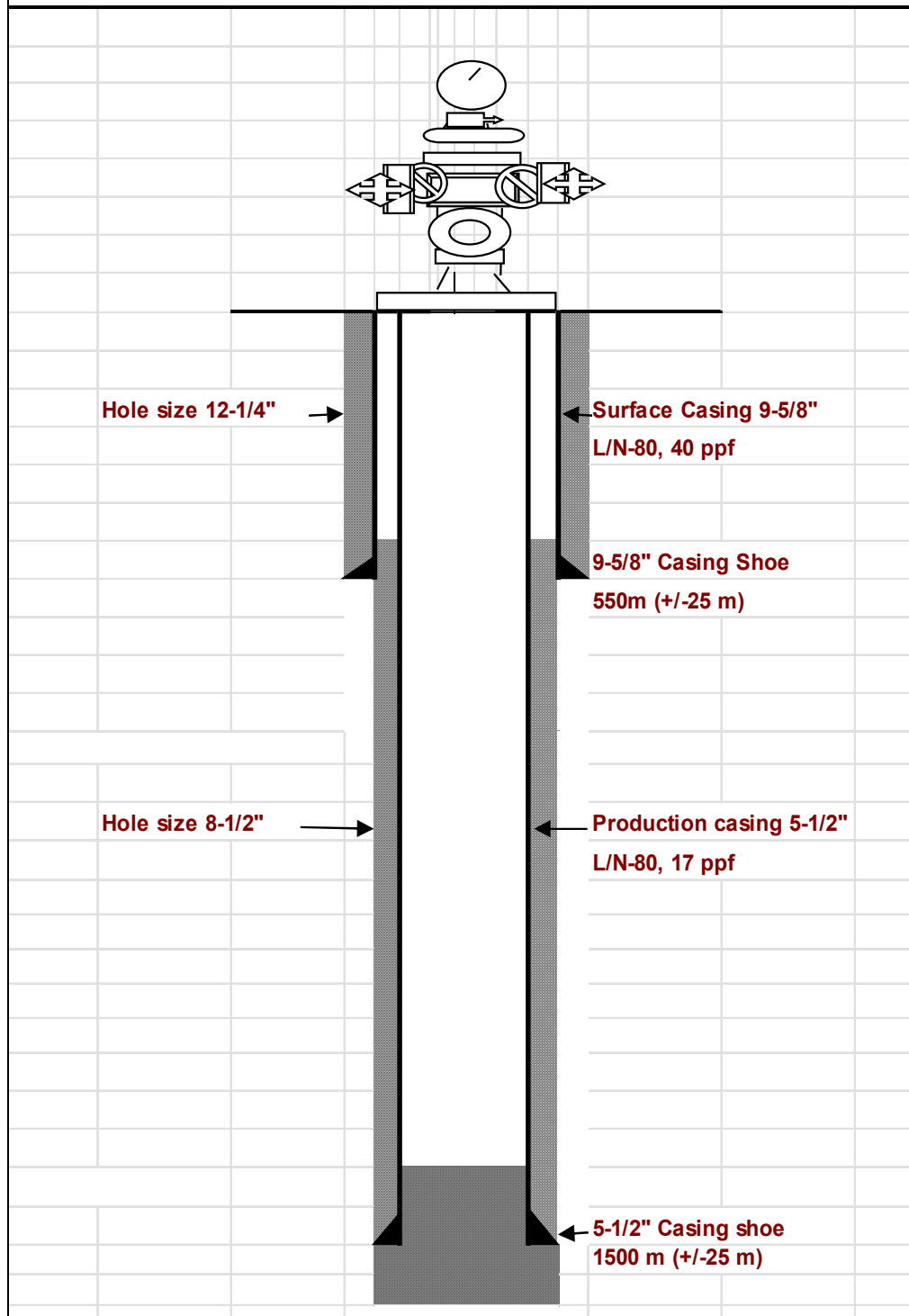


4.3. Well PNE1-D1(Directional) in CB-ON/2 RFPSC Block – Well Schematic





4.4. Well GSAH5-D5 (Vertical) in CB-ONN-2000/1 RFPSC Block- Well Schematic

Well Diagram GSAH5-D5

**5. Drilling Program**

GEL has plans to carry out drilling in 4 blocks (3 firm + 1 contingent).

- (a.) 1 Well (Ank-21-D1) in CB-ONN-2003/2 Block
- (b.) 1 Well (TA6-D1) in CB-ON/2 Block
- (c.) 1 Well (PNE1-D1) in CB-ON/2 RFPSC Block (Contingent)
- (d.) 1 Well (GSAH5-D5) in CB-ONN-2000/1 RFPSC Block

Note:

- The well sequence is subject to change depending on the site preparedness or any other reason. The change in sequence shall be mentioned in the Mobilization notice or ILM.
- Well PNE#1 D1 is contingent and subject to statutory approval, it may or may not come.

The Bidder shall provide Integrated Drilling Services as mentioned in tender document with equipment and personnel which are fit for purpose in all respects to carry out the Company's operation in a bidder's quoted time-bound manner with utmost safety, all confirming the mentioned specifications and operations.

6. Well Operations Description:

6.1 Well Details:

(A) Well Ank21-D1, 2CP, Vertical, 1550m MD

Casing Size (in)	Hole Size (in)	Schematic	Shoe Depth MD/TVD (m)	Cement Rise (m)	Mud System	Mud Weight (SG)
9-5/8" N-80/L-80, 40 ppf, BTC	12-1/4"		550 m MD (+/-25 m)	Up to Surface	Bentonite Gel Mud	1.05 -1.15
5-1/2" N-80/L-80, 17 ppf, BTC	8-1/2"		1550 m MD (+/-25 m)	Up to 500 m depth	KCl Polymer Mud	1.15 - 1.40

(B) Well TA6-D1, 3CP, Directional, 1825m MD

Casing Size (in)	Hole Size (in)	Schematic	Shoe Depth MD/TVD (m)	Cement Rise (m)	Mud System	Mud Weight (SG)
13-3/8" J-55/K-55, 54.5 ppf BTC	17-1/2"		400 m MD (+/-25 m)	Up to Surface	Bentonite Gel Mud	1.05 -1.15
9-5/8" N-80/L-80, 43.5 ppf BTC	12-1/4"		1450 m MD (+/-25 m)	Up to 350 m depth from surface	KCl Polymer Mud	1.15 -1.40
5-1/2" N-80/L-80 17 ppf BTC	8-1/2"		1825 m MD (+/-25 m)	Up to 1400 m MD from surface	KCl Polymer Mud	1.40 -1.45

(C) Well PNE1-D1, 3CP, Directional, 1830m

Casing Size (in)	Hole Size (in)	Schematic	Shoe Depth MD/TVD (m)	Cement Rise (m)	Mud System	Mud Weight (SG)
13-3/8" J-55/K-55, 54.5 ppf BTC	17-1/2"		400 m MD (+/-25 m)	Up to Surface	Bentonite Gel Mud	1.05 -1.15
9-5/8" N-80/L-80, 43.5 ppf BTC	12-1/4"		1400 m MD (+/-25 m)	Up to 350 m depth	KCl Polymer Mud	1.15 -1.40
5-1/2" N-80/L-80, 17 ppf BTC	8-1/2"		1830 m MD (+/-25 m)	Up to 1350 m MD	KCl Polymer Mud	1.40 – 1.45

(D) Well GSAH-5-D5, 2 CP, Vertical, 1500m

Casing Size (in)	Hole Size (in)	Schematic	Shoe Depth MD/TVD (m)	Cement Rise (m)	Mud System	Mud Weight (SG)
9-5/8" N-80/L-80, 43.5 ppf, BTC	12-1/4"		550 m MD (+/-25 m)	Up to Surface	Bentonite Gel Mud	1.05 -1.15
5-1/2" N-80/L-80, 17 ppf, BTC	8-1/2"		1500 m MD (+/-25 m)	Up to 500 m depth	KCl Polymer Mud	1.15 -1.40

Note: The above hole section depths for each well are indicative and may vary (increase or decrease) slightly depending on the actual well condition.

6.2 Formation Geology:

Tentative Geological prognosis for each well mentioned below:

(i) Well Prognosis - GSAH5#D5

Formation	Depth (m, TVDSS)	Lithology
Babaguru	790	Thick alterations of sandstone and silt and claystone
Tarapur	820	Grey to dark grey shales, splintery and laminated.
Kalol	890	Carbonaceous shales, oolitic siltstones with occasional coal bands.
Cambay	960	Mostly shales and occasionally coal streaks, also encountered are the deltaic sediments mainly siltstones.
Olpad	1080	Consists of reworked volcanics (termed "Trapwash in the literature), conglomerates, sandstones, siltstones, claystones and marl.
Trap	1150	Mostly altered basaltic layers with thin inter trappean

(ii) Well Prognosis - TA6-D1

Formation	Depth (m, TVDSS)	Lithology
Babaguru	1100	Thick alterations of sandstone and silt and claystone
Tarapur	1340	Mostly shales and claystone
Kalol	1520	Shale, silty claystone, Siltstone
EPIV	1616	siltstone. Coal and shale
Cambay	1650	Shale, silty claystone, Siltstone, lithic wacke, minor limestone

(iii) Well Prognosis - PNE1-D1

Formation	Depth (m, TVDSS)	Lithology
Babaguru	935	Thick alterations of sandstone and silt and claystone
Tarapur	1240	Mostly shales and claystone
Kalol	1545	Shale, silty claystone, Siltstone, sandstone
EPIV	1640	siltstone. Coal and shale
Cambay	1965	Shale, silty claystone, Siltstone, lithic wacke, minor limestone

(iv) Well Prognosis - Ank#21-D1

Formation	Depth (m, TVDSS)	Lithology
Babaguru	790	Alterations of claystone, sandstone and siltstone
Tarakeswar	980	Silty clay & Claystone
Dadhar	1000	Siltstone & Claystone
Telwa	1050	Shale & Claystone
Ardol	1105	Sandstone & Siltstone
Kanwa	1265	Shale & Claystone
Hazad	1295	Sandstone & Siltstone, minor claystone
Cambay Shale	1395	Shale & Silty claystone

**6.3 DRILLING OPERATIONS:****Detailed drilling Operations/Sequence phase-wise:**

6.3.1. 3CP Well (Vertical / Directional) - for well PNE1#D1 & TA6#D1	
Activity	Detail Operations Description
A. Pre-spud Activities	
Rig Inspection & PHB Mud Preparation	– On completion of rig building, conduct spudding conference to ensure that the rig is complete in all respects including safety measures and all services are geared up. In the meantime, prepare the spud mud (PHB mud) as per mud program. – Ensure all safety measures, rig checks, and equipment are tested before starting the operation.
	– Company installed False conductor grouted and cemented at least 10m below cellar pit bottom at the time of cellar pit construction itself to prevent seepage loss.
B. Drilling Operations 3 CP Well (TA6-D1, PNE1-D1)	
B.1 Top Hole Section (17-1/2" Hole Section)	



Drilling Phase	– Spud the well with 17-1/2” TCR IADC 115/117 bit. – Drill initial 50-60 m at very slow GPM to avoid any surface seepage loss and then gradually increase GPM
	– Drill down up to section TD with the bottom hole assembly as mentioned with regular short trips. – Treating the gel mud with thinner to maintain the thixotropic properties and prevent choking/overflowing from Riser as and when required as per well condition.
	– C&C mud and make a round trip to gauge the hole. POOH for lowering casing. <u>During POOH and casing running in, find the window to clean the mud pump suction & discharge lines from mud tanks thoroughly so that the mud pumps efficiency is maintained properly for proper discharge per stroke during cement displacement.</u>
Casing & Cementation	– M/U and RIH surface Casing (13-3/8”) as per the following program • Guide Shoe • One Casing Joint • Float Collar • Remaining casing upto surface <u>Important: The SOW wellhead (Casing Bowl) must be welded with short nipple on ground and pressure tested to 1000 psi before installing on topmost casing joint. Use landing joint on topmost casing pipe to ensure proper landing of casing in the cellar pit with Slip-on weld (SOW) wellhead (Casing Bowl) at predefined height.</u>
	Rig up cementing head with plugs loaded. Circulate a minimum of one cycle while reciprocating the casing at least 1-2 mtrs. Off bottom
	– Follow the Cementing program for surface casing cementation job. – Bump the plug 500 psi above the pumping pressure and check return, if floats fail, hold the pressure in the well from both sides up to WOC. Check mud pump efficiency to ensure calculated strokes for calculated displacement. <u>Displacement to be done very carefully so that the cement in the shoe track is not washed off. In case plug is not bumped, stop displacement after pumping half shoe track volume.</u> – Immediately after cementation drain the cement slurry from the false conductor by opening the drain valve installed at the bottom of conductor pipe. – WOC as per Cementation program and slurry lab report. (see the surface sample also)
BOP & Wellhead	Note: Cut false conductor and remove landing joint. Install 13-5/8” 3M SOW well head and tighten properly. <u>Test the short nipple joint connection by cup tester. Test Pressure to be decided at the site.</u>
	– Install complete BOP stack (Annular BOP, Double RAM BOP, Spacer spool, Drilling Spool, Riser, Flowline, Choke line, Choke Manifold, Kill line etc) and carry out function test & pressure test (company provided test plug) Complete preparations to drill ahead next hole section
B.2 Intermediate Section (12-1/4” Hole Section)	



Drilling Phase	- R/I 12-1/4" TCR Bit and tag float collar. - Clean out cement to float collar and pressure test casing upto 90% of Well Head rated pressure or 80% of Casing burst pressure whichever is lower - Drill out F/C, Shoe track, F/S and 0.5 mts., Carry out shoe integrity test. Drill further 2 m of fresh formation and carry out LOT as per standard practice. <u>Note- In the meantime, prepare KCL-Polymer mud In Reserve tanks to changeover after drilling 1000 mtrs MD.</u>
	Drill down up to 1000 mtrs MD with PHB mud and then changeover to KCL-Polymer mud. Drill down up to section TD (Target Depth) with bit changes as per requirement and regular short trips. <u>Note: In case of directional well,</u> • <u>clean out the float collar, shoe track, float shoe, and at least 30 meter fresh formation using conventional BHA</u> • <u>Then round trip for directional BHA run, kick off and continue directional hole drilling.</u> • <u>Directional Survey to be taken after every single drilling.</u>
	During drilling, gradually increase mud wt. while drilling up to TD (Target Depth) as per mud plan.
	Hole conditioning, wiper trip & POOH for open hole logging. During tight pull or held up while tripping, clear the tight spots with reciprocation and circulation as per the well condition. Contractor shall ensure all the preventive measures to be followed so as to avoid any Mechanical Stuck-up related complication during pull-out/running-in hole.
	Carry out open hole logging from casing shoe to target depth as per logging Program
	Carry out Round Trip prior to 9-5/8" Casing lowering
Casing & Cementation	- Run In Hole Intermediate 9-5/8" Casing in the following order • Float Shoe • 01 Casing Joint • Float Collar • Remaining casing up to surface
	- Rig up cementing head on casing string, Circulate minimum one cycle prior to cementation. Casing string to be reciprocated minimum 1-2 m during circulation - Bump the plug 500 psi above the pumping pressure and check return, if floats fail, hold the pressure in the well from both sides up to WOC. Check mud pump efficiency to ensure calculated strokes for calculated displacement. <u>Displacement to be done very carefully so that the cement in the shoe track is not washed off. In case plug is not bumped, stop displacement after pumping half shoe track volume.</u>
BOP & Wellhead	- Release the casing after WOC and Set the casing string in tension on casing slip (surface sample also to be checked before setting the casing on slips.) - Cut the Intermediate casing at the measured point, N/D BOP stack, N/U Intermediate Wellhead section -B and carry out Pressure test of Wellhead seals
	- Install BOP stack and carry out pressure test as per API Std 53 guidelines. - Complete preparations to drill ahead next hole section (Production Hole)



B.3 Production Section (8-1/2" Hole Section)	
Drilling Phase	– R/I 8-1/2" TCR Bit and tag float collar. – Clean out cement to float collar and pressure test casing upto 80% of Well Head rated pressure or 80% of Casing burst pressure whichever is lower – Drill out F/C, Shoe track, F/S and 0.5 mts., Carry out shoe integrity test. Drill further 2 m of fresh formation and carry out LOT as per standard practice.
	Drill down up to well TD (Target Depth) with bit changes as per requirement and regular short trips.
	During drilling, gradually increase mud wt. upto TD as per mud plan
	Hole conditioning, wiper trip & POOH for open hole logging
	Carry out open hole logging from casing shoe to target depth as per logging Program
	Carry out Round Trip prior to 5-1/2" Casing lowering
Casing & Cementation	– Run In Hole Production Casing 5-1/2" in the following order • Float Shoe • 02 Casing Joints • Float Collar • Remaining casing up to surface
	– Rig up cementing head on casing string, Circulate minimum one cycle. Casing string to be reciprocated minimum 1-2 m during circulation - Bump the plug 500 psi above the pumping pressure and check return, if floats fail, hold the pressure in the well from both sides up to WOC. Check mud pump efficiency to ensure calculated strokes for calculated displacement. <u>Displacement to be done very carefully so that the cement in the shoe track is not washed off. In case plug is not bumped, stop displacement after pumping half shoe track volume.</u>
BOP & Wellhead	– Release the casing after WOC and Set the casing string in tension on casing slip (surface sample also to be checked before setting the casing on slips.) – Cut the production casing at the measured point, N/D BOP stack, N/U Wellhead section-C (Tubing Head) and carry out Pressure test of Wellhead seals. – Install X-Mas Tree and test the RX-46 ring gasket
	– Release the rig for next location – The cellar pit must be clean and dry, and the drillsite must be clean with all the garbage, cotton waste, left-over bags/drums etc. removed properly.

6.3.2. 2CP Well- for well Ank#21D1 & GSAH#5D5

Activity	Detail Operations Description
A. Pre-spud Activities	
Rig Inspection & PHB Mud Preparation	– On completion of rig building, conduct spudding conference to ensure that the rig is complete in all respects including safety measures and all services are geared up. In the meantime, prepare the spud mud (PHB mud) as per mud program. – Ensure all safety measures, rig checks, and equipment are tested before starting the operation.
	– Company installed False conductor grouted and cemented at least 10m below cellar pit bottom at the time of cellar pit construction itself to prevent seepage loss.
B. Drilling Operations 2 CP Well (Ank21-D1, GSAH-5-D5)	
B.1 Top Hole Section (12-1/4" Hole Section)	

Drilling Phase	– Spud the well with 12 ¼” TCR IADC 117 bit. – Drill initial 50-60 m at very slow GPM to prevent any surface seepage loss and then gradually increase GPM
	– Drill down up to section TD with the bottom hole assembly as mentioned with regular short trips. – treating the gel mud with thinner/defloculant to maintain the thixotropic properties and prevent choking/overflowing from Riser as and when required as per well condition. – Hole conditioning, wiper trip & POOH for open hole logging. During tight pull or held up while tripping, clear the tight spots with reciprocation and circulation as per the well condition. Contractor shall ensure all the preventive measures to be followed so as to avoid any Mechanical Stuck-up related complication during pull-out/running-in hole.
	– C&C mud and make a round trip to gauge the hole. POOH for lowering casing. <u>During POOH and casing running in, find the window to clean the mud pump suction & discharge lines from mud tanks thoroughly so that the mud pumps efficiency is maintained properly for proper discharge per stroke during cement displacement.</u>
Casing & Cementation	– M/U and RIH surface Casing (9-5/8”) as per the following program • Guide Shoe • One Casing Joint • Float Collar • Remaining casing upto surface
	<u>Important: The SOW wellhead (Casing Bowl) must be welded with short nipple on ground and pressure tested to 1000 psi before installing on topmost casing joint. Use landing joint on topmost casing pipe to ensure proper landing of casing in the cellar pit with Slip-on weld (SOW) wellhead (Casing Bowl) at predefined height.</u>
	– Rig up cementing head with plugs loaded. Circulate a minimum of one cycle while reciprocating the casing at least 1-2 mtrs. off bottom – Follow the Cementing program for surface casing cementation job – Bump the plug 500 psi above the pumping pressure and check return, if floats fail, hold the pressure in the well from both sides up to WOC. Check mud pump efficiency to ensure calculated strokes for calculated displacement. <u>Displacement to be done very carefully so that the cement in the shoe track is not washed off. In case plug is not bumped, stop displacement after pumping half shoe track volume.</u> – Immediately after cementation drain the cement slurry from the false conductor by opening the drain valve installed at the bottom of conductor pipe. – WOC as per Cementation program and slurry lab report. (see the surface sample also)
BOP & Wellhead	Note: Cut false conductor and remove landing joint. Install 9-5/8” 3M SOW well head and tighten properly. <u>Test the short nipple joint connection by cup tester. Test Pressure to be decided at the site.</u>
	– Install complete BOP stack (Annular BOP, Double RAM BOP, Spacer spool, Drilling Spool, Riser, Flowline, Choke line, Choke Manifold, Kill line etc) and carry out function test & pressure test (using cup tester /test plug) – Complete preparations to drill ahead next hole section
B.2 Production Section (8-1/2” Hole Section)	



Drilling Phase	– R/I 8-1/2” TCR Bit and tag float collar. – Clean out cement to float collar and pressure test casing upto 90% of Well Head rated pressure or 80% of Casing burst pressure whichever is lower – Drill out F/C, Shoe track, F/S and 0.5 mts., Carry out shoe integrity test. Drill further 2 m of fresh formation and carry out LOT as per standard practice. <u>Note- In the meantime, prepare KCL-Polymer mud In Reserve tanks to changeover after drilling 700 mtrs MD.</u> Drill down up to 700 mtrs MD with PHB mud and then changeover to KCL-Polymer mud. Drill down up to section TD (Target Depth) with bit changes as per requirement and regular short trips. <u>Note: In case of directional well,</u> • <u>clean out the float collar, shoe track, float shoe, and at least 30 meter fresh formation using conventional BHA</u> • <u>Then round trip for directional BHA run, kick off and continue directional hole</u> • <u>Survey to be taken every single</u> During drilling, gradually increase mud wt. up to TD as per mud plan Hole conditioning, wiper trip & POOH for open hole logging. During tight pull or held up while tripping, clear the tight spots with reciprocation and circulation as per the well condition. Contractor shall ensure all the preventive measures to be followed so as to avoid any Mechanical Stuck-up related complication during pull-out/running-in hole. Carry out open hole logging from casing shoe to target depth as per logging Program Carry out Round Trip prior to 5-1/2” Casing lowering
Casing & Cementation	– Run In Hole 5-1/2” Production Casing in the following order • Float Shoe • 02 Casing Joint • Float Collar • Remaining casing up to surface – Rig up cementing head on casing string, Circulate minimum one cycle. Casing string to be reciprocated minimum 1-2 m during circulation – Carry out cementation job as per plan and bump the plug 500 psi above the pumping pressure and check return, if floats fail, hold the pressure in the well from both sides up to WOC. Check mud pump efficiency to ensure calculated strokes for calculated displacement. <u>Displacement to be done very carefully so that the cement in the shoe track is not washed off. In case plug is not bumped, stop displacement after pumping half shoe track volume.</u>
BOP & Wellhead	– Release the casing after WOC and Set the casing string in tension on casing slip (surface sample also to be checked before setting the casing on slips.) – Cut the production casing at the measured point, N/D BOP stack, N/U Wellhead section-C (Tubing Head) and carry out Pressure test of Wellhead seals. Install X-Mas Tree and test the RX-46 ring gasket. – Release the rig for next location The cellar pit must be clean and dry, and the drillsite must be clean with all the garbage, left-over bags etc. removed.

**6.4. General Guidelines:****Drilling Phase:**

- ✓ After drilling every single pipe length, reaming must be done at a moderate speed for proper hole gauge and adequate lifting of cuttings off bottom.
- ✓ Short Trip must be carried out after drilling every 300m or 2 days drilling whichever comes earlier.
- ✓ Before casing lowering:
 - Round Trip must be carried out prior to final POOH for casing lowering in case of surface casing.
 - Round Trip must be carried out prior to casing lowering in case of intermediate and production casing
- ✓ Perform SIT/LOT/PIT by cementing unit and generate pressure and volumes chart.
- ✓ Treat the mud properly to control the mud parameters to desired level. Make the complete system homogeneous prior to start drilling.
- ✓ Round trip for Bit changes as per their life hours or premature failure or any other non-performance indications
- ✓ **Proper hole cleaning and conditioning must be ensured and any indication of tight pull/held-up interval must be smoothen out with circulation and reaming to avoid any tight spots and key seat formation resulting into Mechanical Stuck-up. Any downhole complication arising due to contractor's operational faults shall be remedied by the contractor at its own cost.**
- ✓ Drilling Jar must be used in Intermediate and production hole section.
- ✓ Proper trip sheet must be prepared during every trip.
- ✓ Slow pump rate (SPR) / Kill rate pressure (KRP) should be recorded in every shift and kill sheet should be maintained as per contractor's well control manual.

Casing & Cementation Job:

- ✓ Ensure that the casing tally has been obtained and the Drilling Supervisor is satisfied that the pipe has been measured correctly.
- ✓ Drift all casing pipes using API standard drift gauge.
- ✓ Check float equipment prior to making up to the casing and prior to running in hole with water.
- ✓ M/up Guide shoe and Float collar on respective joints on the pipe rack using thread lock compound.
- ✓ Thread-lock the shoe track and 2 joints above the float collar. Use API modified thread compound on all other connections.
- ✓ Confirm the circulating head is on the rig floor.
- ✓ Caliper log (if taken) to be referred for cement slurry volume calculation
- ✓ Centralizer Position: Refer to the casing tally and casing stand-off plan by the cementing engineer.
- ✓ Do not over displace more than ½ volume of shoe track during cement displacement.
- ✓ **Calculate the pump efficiency and discharge per stroke properly for proper displacement of cement in the open hole. In case of any complication arising due to under-displacement/miscalculation of displacement volume, the contractor shall promptly take corrective steps and remedial measures to mitigate the problem at its own cost.**
- ✓ **Check the mud pump stroke manually as well as through mud logging unit.**

BOP & Wellhead:

- ✓ Top up cement job to be carried out in casing annulus if required after surface casing cementation job.
- ✓ During cement top up job, Mouse hole to be secured properly to prevent any cement filling.
- ✓ Short Nipple to be welded in SOW at Surface before installation and weld joints to be pressure tested @1000 psi.



- ✓ After N/Up BOP Stack, pressure test annular BOP and Double RAM BOP using Cup tester /Test Plug and record in pressure chart recorder.
- ✓ All the BOP, HCR valves and Choke line-kill line valves to be tested @ 90% of its rated working pressure.
- ✓ All Wellhead gate valves and X-mas tree valves to be tested at surface on test stump @ 90% of rated working pressure using test pump. If any leakage observed, the valve to be replaced and tested.



6.5. Tentative cementing Program														
Well Name	Description	13-3/8" Casing Cementation			9-5/8" Casing Cementation				5-1/2" Casing Cementation					
		Lead Slurry	Tail Slurry	Pre-flush	Lead Slurry	Tail Slurry	Pre-flush	Spacer	Lead Slurry	Tail Slurry	Pre-flush	Spacer		
Ank21 #D1 (2CP)	PPG				12.0 -12.5	15.5	40 bbl		13.0-13.5	15.5-15.8 (gas tight with bonding agent)	40 bbl	60-80 bbl		
	Column Length (m)				0 - 275	275 -550			500 - 1000	1000 - 1550				
	Open Hole Excess				30%				20% (Refer Caliper log also)					
	Compressive Strength - 24HRS @BHST (PSI)				500	1500			800	2000				
	TOC				Up to Surface				(50-100m inside previous casing shoe)					
	Free Water (%)				<3%	<1%				<2%			Nil	
	Fluid Loss (ml/30 min)				<150	<100				<100			<50	
TA6 #D1 (3CP)	PPG	12.0-12.5	15.5	40 bbl	13.0-13.5	15.5	40 bbl	60-80 bbl	15.5-15.8 (gas tight with bonding agent)		40 bbl	60-80 bbl		
	Column Length (m)	0 - 200	200 - 400		350 - 900	900 - 1450			single slurry					
	Open Hole Excess	30%				20% (Refer Caliper log also)								
	Compressive Strength - 24HRS @BHST (PSI)	500	1500		800	1500			2000					
	Free Water (%)	<3%	<1%		<2%	Nil			Nil					
	Fluid Loss (ml/30 min)	<150	<100		<100	<50			<50					



	TOC	Up to Surface			350 m (50-100 m inside previous casing shoe)				1400 m from surface (50-100 m inside previous casing shoe)			
PNE1 #D1 (3CP)	PPG	12.0-12.5	15.5	40 bbl	13.0-13.5	15.5	40 bbl	60-80 bbl	15.5-15.8 (gas tight with bonding agent)	40 bbl	60-80 bbl	
	Column Length (m)	0 - 200	200 - 400		350 - 875	875 - 1400			1350 - 1830			
	Open Hole Excess	30%	30%		20% (Refer Caliper log also)				20% (Refer Caliper log also)			
	Compressive Strength - 24HRS @BHST (PSI)	500	1500		800	1500			2000			
	Free Water (%)	<3%	<1%		<2%	Nil			Nil			
	Fluid Loss (ml/30 min)	<150	<100		<100	<50			<50			
	TOC	Up to Surface			350 m (50 m inside previous casing shoe)				1350 m (50-100 m inside previous casing shoe)			
GSAH 5 #D5 (2CP)	PPG				12.0-12.5	15.5	40 bbl		13.0-13.5	15.5-15.8 (gas tight with bonding agent)	40 bbl	60-80 bbl
	Column Length (m)				0 - 275	275 -550			500 - 1000	1000 - 1500		
	Open Hole Excess				30%				20% (Refer Caliper log also)			
	Compressive Strength - 24HRS @BHST (PSI)				500	1500			800	2000		
	Free Water (%)				<2	<1			<1	Nil		
	Fluid Loss (ml/30 min)				<150	<100			<100	<50		
	TOC				Up to Surface				500 m (50 m inside previous casing shoe)			

Note-

- Temperature Gradient to be considered as 2.2 – 2.3 deg F /100 ft with surface temperature as 80 deg F.
- Excess cement percentage (open hole excess) is tentative and will be decided prior to the actual job. In case of caliper logs available, minimum 10% excess over the caliper volume for 12-1/4" and 8-1/2" hole section will be considered.
- Cement slurry weights and heights are tentative and shall be reviewed and finalized depending upon the geological findings and actual mud weight used to drill the section. There may be slight variation as per actual well condition.
- Gas tight slurry to be considered for production section cement slurry with gas block additive.
- Bonding agent additive to be used in intermediate and production casing cement slurry.
- Slurry testing shall be performed using representative samples of cement, additives and mix water from rig site prior to all cement jobs. Test reports shall include thickening time, free water, compressive strength and rheology.
- Spacer shall be pumped ahead of the cement slurry to minimize cement contamination by the drilling fluid and contribute to effective displacement of the drilling fluid from the cemented portion of the annulus so that a competent cement sheath can form an effective hydraulic seal. Minimum 60 bbls of spacer volume in the mud x 1.1 times weight or as per industry practice to be considered.
- Displacement rates will be controlled to ensure ECD does not exceed the fracture gradient.
- **During cement slurry design, caution must be exercised in keeping the thickening time (70BC) sufficiently enough so that cement can be circulated out of the well if necessary.**

Indicative Thickening Time:

- Lead Slurry: 5.30 – 6.30 hrs
- Tail Slurry: 4.30 – 5.30 hrs

6.6. Mud Program

6.6.1. 2 CP Wells				
Phase	Phase -1 (12-1/4")		Phase -2 (8-1/2")	
Wells	Ank21-D1	GSAH5-D5	Ank21-D1	GSAH5-D5
	The drilling shall commence with PHB mud with frequent pumping of viscous pill during drilling and trip out. The solids control system should be in place and in good working condition.		Mud system will be replaced with freshly mixed KCl-PHPA Polymer Inhibitive Mud system after drilling 700 mtrs MD. 8 1/2" section drilling will be completed with KCl-PHPA polymer mud system. The solids control system should be in place and in good working condition.	
Mud Type	Bentonite Mud		KCL-PHPA Polymer Inhibitive Mud	
Hole Size	12 1/4"		8 1/2"	
Interval section (m MD)	0 - 550	0 - 550	550 - 1550	550 - 1500
Fluid Properties				
Mud Weight (Sp. Gr.)	1.05-1.15	1.05-1.15	1.15 -1.40	1.15 - 1.40
	(Change if necessary)		(Change if necessary)	
Funnel Viscosity	38-50 sec/quart		42-60 sec/quart	
PV (cp)	ALAP		ALAP	
YP (lb/100ft ²)	15 - 25		15 - 25	
6 rpm	>10		8 - 15	
Gel 0 / G10 / G30			5 - 10 / 10 - 25 / 15 - 35	
pH	9.5 -10		9.5-10	
API F/L (ml/30min)	No Control up to 550 m. Thereafter 10 - 12 ml/30min		From 550 m - 900 m = 8 - 6 ml/30min 900 m - TD =6 ml/30min (MAX.)	
Total Hardness (mg/l)	<400		<400	
LGS (%)	No Control		6 (max.)	
MBT (ppb)	No Control		15 (max.)	
Sand (% by vol.)	<1%		<1%	

6.6.2. 3 CP Wells						
Phase	Phase - 1 (17-1/2")		Phase - 2 (12-1/4")		Phase - 3 (8-1/2")	
Wells	TA6-D1	PNE1-D1	TA6-D1	PNE1-D1	TA6-D1	PNE1-D1
	The drilling shall commence with PHB mud with frequent pumping of viscous pill during drilling and trip out. The solids control system should be in place and in good working condition.		PHB Mud system will be replaced with freshly mixed KCl-PHPA Polymer Inhibitive Mud system after drilling to 1000 mtrs MD. 12-1/4" section drilling will be completed with KCl-PHPA polymer mud system. The solids control system should be in place and in good working condition.		The previous section Phase II left over KCl-PHPA mud shall be subjected to surface conditioning with solids control systems to remove LGS and Barite (using Mud Cleaner) and further to be diluted with drill water, treated with required chemicals to start drilling of this section.	
Mud Type	Bentonite Mud		KCL-PHPA Polymer Inhibitive Mud system		KCL-PHPA Polymer Inhibitive Mud system	

Hole Size	17 ½"		12 ¼"		8 ½"	
Interval section (m MD)	0 - 400	0 - 400	400 - 1450	400 - 1400	1450 - 1825	1400 - 1830
Fluid Properties						
Mud Weight (Sp. Gr.)	1.05 - 1.15	1.05 - 1.15	1.15 - 1.40	1.15 - 1.40	1.40 - 1.45	1.40 - 1.45
	(Change if necessary)		(Change if necessary)		(Change if necessary)	
Funnel Viscosity (sec/quart)	38 - 50		45 - 50		45 - 55	
PV (cp)	ALAP		ALAP		ALAP	
YP (lb/100 ft²)	20 - 25		15 - 25		20 - 30	
6 rpm	>10		8 - 15		8 - 20	
Gel 0 / G10 / G30			5 - 10 / 10 - 25 / 15 - 35		5 - 10 / 10 - 25 / 15 - 35	
pH	8.5 - 9.0		9.0 - 9.5		9.0 - 9.5	
API F/L (ml/30min)	No Control up to 500 m. Thereafter 10 - 12 ml/30min		8 - 6 ml/30min		6 ml/30min (Max.)	
Total Hardness (mg/l)	<400		<400		<400	
LGS (%)	No Control		6 (max.)		6 (max.)	
MBT (ppb)	No Control		15 (max.)		12 (max.)	
Sand (% by vol)	<1%		<1%		<1%	

NOTE:

- Mud parameters are subject to change based on actual drilling conditions and drilling complications. The recommendations from the Company GEL appointed Drilling Fluid Consultant shall be honoured and in case of bacterial growth/degradation of KCL PHPA mud, immediate remedial measures as suggested by company appointed Drilling Fluid Consultant shall be implemented by the Integrated Drilling Services contractor.
- Lubricity in Mud shall be maintained at 3% or more throughout during drilling in the 8 1/2" section of 2 CP well and 12 ¼" and 8 ½" sections of 3 CP well.
- Deflocculant while drilling the Top hole section must be appropriately maintained to avoid high gelation in PHB mud.
- All the Mud parameters required to be maintained and measured on daily basis shall be recorded in the DMR
- Hole Cleaning Recommendations:**
 - 6 rpm reading should be monitored closely as it has more impact on hole cleaning than YP.
 - Circulation should be made at an adequate rate to maintain good hole cleaning.
 - High MW & Hi-vis/Low-Vis sweeps should be pumped intermittently as per requirement for good hole cleaning.
- Bit / BHA Balling Recommendations:**
 - In case of bit balling, Drilling Detergent (DD at 0.2 ppb or more concentration) may be used along with 4 ppb Caustic. The SAPP also may be used to prevent / minimize bit balling.

7. Bidder has to keep sufficient quantity of stuck-up releasing material, lubricant, DD & Deflocculant, Loss control material for use in case of any exigency.
8. Minimum 50T Barytes must be maintained at the drill site to meet the requirement during well control situation.

Fluid Properties Maintenance

- The integrated drilling services contractor has to arrange technical water from the nearby industrial water source at their own cost whereby the indicative Salinity range is expected to be 800-1400 ppm.
- Treat water with Soda Ash for reducing water hardness.
- Hi-vis shall be prepared by using running mud. Required YP should be minimum 1.5 times of running mud.
- Dump sand traps as needed and run desander, de-silter continuously to maintain mud weight as per program and sand content.

6.7. LIST OF MATERIALS

(A) Materials to be provided by Company					
S. No.	Description	Quantity			
		Ank21-D1	TA6-D1	PNE1-D1	GSAH5-D5
1.	20/24" False Conductor	Approx. 15-20 m as per requirement			
2.	13 3/8" Casing, 54.5 ppf, K-55, BTC	NA (2CP Well)	400 m	400 m	NA (2CP Well)
3.	13-3/8" Landing Joint	NA (2CP Well)	01 joint of suitable length as per BOP stack and WH adjustment	01 joint of suitable length as per BOP stack and WH adjustment	NA (2CP Well)
4.	13 3/8" K-55, 54.5# BTC Short nipple	NA (2CP Well)	1 No.	1 No.	NA (2CP Well)
5.	9 5/8" Casing, 43.5 ppf, N-80, BTC	---	1450 m	1400 m	----
6.	9-5/8" Casing, 40 ppf, N-80, BTC	550 m	---	---	550 m
7.	9-5/8" Landing Joint	01 joint of suitable length as per BOP stack and WH adjustment	NA (3CP well)	NA (3CP well)	01 joint of suitable length as per BOP stack and WH adjustment
8.	5 1/2" Casing 17 ppf, N-80 BTC	1550 m	1825 m	1830 m	1500 m
9.	5 1/2" Short Casing N-80 BTC	1 joint	1 joint	1 joint	1 joint
10.	Complete 3 CP Well head with X-mas tree	NA	1 Set	1 Set	NA
11.	Complete 2 CP Well head with X-Mas tree	1 Set	NA	NA	1 Set

(B) Material to be provided by Contractor					
S. No.	Description	Quantity			
		Ank21-D1	TA6-D1	PNE1-D1	GSAH5-D5

1.	17 ½" TCR 1-1-5 Bit	NA (2CP Well)	As per requirement	As per requirement	NA (2CP Well)
2.	12 ¼" TCR 1-1-7 Bit	1-2 no. (As per requirement)	2-3 no. (As per requirement)	2-3 no. (As per requirement)	1-2 no. (As per requirement)
3.	8 ½" TCR 437/117 bit	3-4 Nos. (As per requirement)	3-4 Nos. (As per requirement)	3-4 Nos. (As per requirement)	3-4 Nos. (As per requirement)
4.	Casing Thread Dope	2-3 Pails (As per requirement)	1-2 Pails (As per requirement)	1-2 Pails (As per requirement)	2-3 Pails (As per requirement)
5.	Thread Lock compound	As per requirement	As per requirement	As per requirement	As per requirement
6.	Casing Centralizers (with stop rings etc.)				
	a) 13 3/8" x 17 ½"	NA	10-15 Nos.	10-15 Nos.	NA
	b) 9 5/8" x 12 ¼"	10-15 Nos.	25-30 Nos.	25-30 Nos.	10-15 Nos.
	c) 5 1/2" x 8 ½"	25-30 Nos.	30-35 Nos.	30-35 Nos.	25-30 Nos.
7.	Float Shoe	1 for 5 ½"	1 each for 5 ½" & 9-5/8"	1 each for 5 ½" & 9-5/8"	1 for 5 ½"
8.	Guide Shoe for Casing	1 for 9 5/8"	1 for 13 3/8"	1 for 13 3/8"	1 for 9 5/8"
9.	Float Collar for Casing	1 each for 9 5/8" & 5 ½"	1 each for 13-3/8", 9-5/8" & 5 ½"	1 each for 13-3/8", 9-5/8" & 5 ½"	1 each for 9 5/8" & 5 ½"
10.	Top rubber cementing plug	1 each for 9 5/8" & 5 ½"	1 each for 13-3/8", 9-5/8" & 5 ½"	1 each for 13-3/8", 9-5/8" & 5 ½"	1 each for 9 5/8" & 5 ½"
11.	Bottom rubber cementing plug	1 each for 9 5/8" & 5 ½"	1 each for 13-3/8", 9-5/8" & 5 ½"	1 each for 13-3/8", 9-5/8" & 5 ½"	1 each for 9 5/8" & 5 ½"

Note:

- Bit requirement of above table are indicative only based on GEL's previous experience. However, it is at IDS contractor's discretion to use TCR or PDC drill bits as per their understanding and practice.
- Drill bits to be used for drilling the wells must be supplied by API spec 7-1 licensed/authorized manufacturers like NOV / Schlumberger / Halliburton / Baker Hughes / Drill Bit International (DBI) etc.
- Float Equipments, Cementing Plugs and Centralizers to be consumed in the well must be supplied by API certified suppliers/manufacturers.

7. SAFETY GUIDELINES, RULES & REGULATIONS

7.1. Drilling Guidelines

- Keep a drill pipe stabbing valve on the rig floor at all times.
- FOSV (or with crossover) to match tool joint at Rotary should be always available on the Rig Floor.

- III. Minimum 5 minutes flow check should be carried out prior to pull out from bottom and at Casing Shoe.
- IV. Trip Sheet should be filled on every trip.
- V. Take SCR (slow circulation rate) in each shift from intermediate section and mention in IADC DPR.
- VI. Double Check master tally and make corrections.
- VII. Derrick floor should always be clean & tidy.

7.2. Safety Guidelines

- (i) All API, Indian Petroleum Act and Indian Mines Act are to be strictly adhered to. Reference is to be made on a regular basis to the Well Control aspect of the well plan and program.
- (ii) All Drilling Contractor's safety guidelines & personal safety guidelines are to be strictly adhered. The well site Supervisor is required to be present at all Contractor and Service Company on-site safety meetings.
- (iii) The well site Tool Pusher shall carry out regular safety checks. All crew members should be reminded frequently of working in a safe manner. Should unsafe equipment or procedures be observed, operations are to cease immediately, and the hazard duly corrected
- (iv) The well site Tool Pusher shall ensure that the Driller and above should have a valid IWCF Certificate. Driller and above should have a sound knowledge of the API specification relevant to Well Control Practices (API RP53 and those prescribed in it) and practice the same in all aspects of the job.
- (v) The well site supervisor is to maintain a separate mud material inventory and ensure accurate amounts of material used are entered in the Contractor's daily drilling reports.
 - [a] Ensure that a document is posted in the doghouse showing "maximum back pressure to be held on casing" vs. "various mud densities".
 - [b] Supply daily and weekly rig inspection reports to the company representative and the drilling consultant. A detailed inspection must be carried out prior to drilling out the surface casing. Ensure that all inspections are recorded in the tour book.
 - [c] Ensure both engines running in the open hole.
- (vi) All activities shall be planned and executed to ensure proper regard is given to conserving the environment as well as the health and safety of all personnel.
- (vii) The GEL's HSE policies and procedures will be used as the governing document during well operations. Response plans for various emergencies have been developed separately with consideration of local operating conditions. A bridging document shall be prepared, linking the safety management systems of GEL with the drilling contractor.
- (viii) The Emergency Response Plan (ERP) will be available on the rig and should be followed during emergency situations.

The following Policy and Procedures will be followed:

- GEL HSE Policy
- Drilling Contractor Well Control Manual
- GEL – Rig contractor bridging document



- (ix) It is the Company's explicit requirement and expectation that Contractors providing Services for the Company perform their activities in a manner consistent with the Company's Safety, Health and Environmental policies as required by GEL. These requirements include:
- ✓ Conduct business in a manner that protects the safety of employees and other agencies involved in its operations, Customers, and the public. Safety is our core value and no business objective is so important that it will be pursued at the sacrifice of safety. The result we aim to achieve each day is "Nobody Gets Hurt."
 - ✓ Identify and evaluate health risks related to operations that potentially affect employees, Contractors, or the public. Contractor has to tie up with recognized local hospital for any emergency purpose regarding health of its personnel.
 - ✓ Conduct business in a manner that is compatible with the balanced environmental and economic needs to the communities in which it operates. Our goal is to drive injuries, illnesses, releases and operational incidents to ZERO.
 - ✓ The work should be conducted in strict conformance to the API Specifications and Recommended Practices.
- (x) DGMS Technical circular no. 05 of 2020 dtd 24.02.2020, circular no. 6 of 2024 dtd 23.08.2024, circular no. 10 of 2020 dtd 23.06.2020 and other relevant circular issued for safe conduct of drilling operations in Oil & Gas mines shall be complied as applicable.
- (xi) All machinery and equipments deployed at site shall be inspected at least once in a week to ensure its safe working and also to ensure that machinery being maintained as per OEM guidelines and stature of Oil Mines Regulation 2017. Record of all such examination shall be kept at the site.
- (xii) In an area where flammable gas concentration is found or likely to contain in excess of limit as specified in OMR 2017, the area shall be cordoned/fenced off and no person shall enter such area. Provided that only competent person with all provisions of life saving rescue apparatus and equipment may be allowed to enter into such area (s) for the purpose of detection and control, subject to condition that the flammable gas concentration does not exceed the lower limit of explosion.
- (xiii) Any vehicle/Internal combustion engine without air intake shutoff valve, spark arrestor and without proper insulation of exhaust pipe, catalytic convertor & such other hot components of the equipments shall not be allowed in such area.
- (xiv) Where compressed air operated started of IC engine is not provided, the starter and the battery shall be housed in the flameproof enclosures.
- (xv) It shall be ensured that suitable protective systems, such as automatic fire detection and suppression system (AFDSS), engine coolant temperature sensor, engine oil pressure gauge, over heating tripping system and exhaust manifold and turbo charged guards, are provided and maintained on every IC engine. It shall also be ensured that the exhaust of every IC engine including exhaust pipe, muffler/silencer are adequately insulated/protected to prevent contact with inflammable fluids.
- (xvi) Diesel Engine of fixed/mobile vehicle used in hazardous area shall be provided with a readily accessible air intake shut off valve, in addition to the remote controlled provided



where a diesel engine is located within 30 M of a well as per regulation 97(3)(a) of OMR 2017.

- (xvii) Rig transportation, rigging up and rig dismantling operations shall be carried out under the constant and close supervision of official authorized by the rig manager/in charge.
- (xviii) During rigging-up and rig dismantling operation, a suitable arrangement for anchoring of safety belt and/or other suitable fall prevention devices, like mobile elevating work platform, shall be provided.
- (xix) Tubular tongs with proper locking arrangement shall be provided for making and breaking of tubular connections.
- (xx) Pressure gauges of hydraulic power tongs shall be provided at driller's stand for monitoring.
- (xxi) It shall be ensured that draw works is provided with fail safe braking system, so as to get automatically applied in case of any pneumatic/hydraulic component failure.
- (xxii) Care shall be taken for ensuring that various SOP's made in connection with drilling operation shall be in accordance with OMR 2017 and relevant OISD standards and guidelines issued time to time.
- (xxiii) It shall be ensured that persons deployed within 30 m of oil well in the installation including Zone-2 hazardous area (s), do not carry/possess mobile phones and electronic devices, cigar, cigarette, biri/other smoking apparatus or any match or kind which is capable of producing a light, flame or spark, except intrinsically safe apparatus or such device which are housed in a flame proof enclosures.
- (xxiv) It shall be ensured that the entire drilling area is kept under intrinsically safe effective CCTV surveillance to monitor all operations closely. Recording of all such surveillance shall be stored for at least 30 days. Before deleting the data, it shall be examined for unsafe act/practice and if any abnormality is observed, the same shall be rectified.
- (xxv) At every new location, before commencement of drilling activity, a pre commissioned audit of all the equipments shall be carried out by a HSE team and the deficiencies, so observed shall be rectified before commencement of drilling activities. A record of same shall be kept at rig site.
- (xxvi) Bidder shall provide certificates for but not limited to Lifting Equipment like Crane, Slings, D-Shackles, Chain pulley Blocks. The Bidder shall ensure the periodical inspection and testing of the equipment as per defined timelines. Any equipment failing the test shall not be used and the bidder shall take immediate steps to remove and replace the equipment at bidder's cost.
- (xxvii) In case an item or activity is not covered by any HSE standard, or if the standard is considered to be inadequate, Contractor shall immediately notify the Company of such absence or inadequacy of defined standards. Company & Contractor shall then jointly develop & agree on additional standards to cover the item or activity and reduce the associated risk to as low as reasonably practical(ALARP) before the item or the activity is included or continued in the performance of the Work.
- (xxviii) If during performance of the Services, Company's Representative is of the opinion that the Contractor is not conducting the Services in compliance with the Safety



Case and/or Safety Management System or is conducting the work in such a way as to endanger the safety of Contractor's Personnel or Company's personnel, Company Equipment or any of Company's other contractors' plant, equipment or materials, then Company's Representative shall notify Contractor of the breach of safety involved and suspend operations, and the related provisions of the contract shall apply as if the operations had been suspended due to breakdown of equipment.

(xxix) Incompetent person shall be at RISK to carry out critical operation. Hence all contractor personnel need to be competent & trained to carry out assigned job. Training need for all contractor's Employee shall be identified & accordingly shall be trained by the contractor.

(xxx) Bidder shall maintain following Records:

- Employee detail
- Pre medical check-up record
- Competency Record
- Training & awareness Record
- PPE record
- Accident / Incident Record
- Mock drill Record
- Audit Observation & compliance record.
- Accident / Near miss Report

7.3.HSE RULES & REGULATIONS:

All the Acts, rules, regulations, bye-laws, industry standards and its subsequent amendments as applicable to the GEL (mine owner) are also applicable to the Bidder. Following is the indicative list of statutory Acts, Laws, Bye-laws etc. and Guidelines of DGMS, Health, Safety and Environment etc. to be followed by the Bidders.

(a) Legal and other requirement

- Mines Act -1952, OMR-2017, Mines Rule 1955, MVT Rule 1966 (for all jobs carried out at oil mines and related sites)
- OIL MINES REGULATIONS, 1984 and all their amendments issued including requirements of Good International Petroleum Industry Practice (GIPIP) for all services are to be followed till validity of contract
- Air (Prevention and Control of Pollution) Act, 1981
- Hazardous Wastes (Management and Handling) Rules, 2003
- Noise Pollution (Regulation and Control) Rules, 2000
- Emission regulations for DG Sets & Stack.
- Indian electricity Act 1952 and Electricity Rule 2003.
- Central Electricity Authority Regulations -2023
- Vehicular exhaust emission standard.
- Battery (M&H) rule 2003.

Other requirement:

- GEL's safe operating practices (SOP) and its amendments.
- OISD & IS standards relevant to Bidder's works.

However, the above list is only indicative and Bidder has to comply with all relevant Statutory Acts, Rule & Regulations, Bye- Laws etc.

Bidder is required to acquire such relevant copies of the statute (Acts, Rules etc.), health and safety management system/ SOP / OISD standard(s) and familiarize with it prior to commencing work.

**(b) Health, Safety and Environment guidelines:
(As per the recommendation of DGMS 10th Conference on Safety in Mines.)**

Besides above, some essential safety requirements other than above, are given here under, but not limited to following:

- The Bidder is responsible for the safety of his equipment and workers. It is the responsibility of the Bidder to inform and educate his staff, employees of sub-Bidders, about any particular hazard present in the area and associated measures to deal with such hazards.
- The Bidder must not interfere in any way or render inoperative, whether temporarily or otherwise, any safety device, without the permission of the competent authority.
- Details of the Bidders' workmen should be maintained in the owner's Form -B Register.
- All persons deployed by the Bidder for working in a mine must undergo Mines vocational training, initial medical examination and PME as per Mines Rule. They should be issued cards stating the name of the Bidder and the work and its validity period, indicating status of Vocational Training (VT) & initial medical examination (IME).
- Bidder to 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. And provide a copy of the SOP to the person designated by the mine owner who shall be supervising the Bidder's work
- GEL will monitor all activities of the Bidders to ensure that Bidders are complying with all the requirements of statute and the system related to safety. If found noncompliant of safety laws directing the Bidder to take action to comply with the requirements, and for further non-compliance, the Bidder will be suitably penalized.
- Bidder to issue authorization of competent persons for all the persons engaged by the Bidder as per the requirement of technical specifications.
- Bidder's personnel shall wear Personnel protective equipments as per activity such as coveralls with Company's name, individual name, safety shoes, helmet, hand gloves, safety belt etc. while on duty.
- The Bidder 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 VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons. 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.
- The Bidder should prepare written operational risk register with significant risks and provide the control to reduce the risk level as a part of safety management system.
- Smoking or naked flame is strictly prohibited at GEL's mines. Bidder shall ensure strict compliance on this. All vehicles provided for the job shall be suitably equipped with spark arrestors, safe distance exhaust etc.



- All material handling equipments and accessories like crane, slings, shackles, U bolts etc. should be load tested and certified by third party. Proper crimping of the slings should be ensured. Slings with suitable length and load bearing capacity should be available as per the capacity of the crane and to suit scope of work.
- Electrician posted should have competency certificate to work in oil mines.
- Crane operator shall be trained and competent.

(c) Duties of Persons Employed in Mines (As per Mines Act – 1952):

- (1) The Bidder and every person shall strictly adhere to the provisions of the Mines Act and of the regulations and orders made there under and to any order or direction issued by the manager or an official with a view to the safety or convenience of persons, not being inconsistent with the Act and these regulations nor shall he neglect or refuse to obey such orders or directions.
- (1A) Every person shall be conversant with safety instructions being issued and shall be responsible to follow safety directives issued from time to time.
- (2) Before beginning work every person shall examine his place of work and the equipment that he is to use and shall forthwith report to his superior any dangerous defect that he may discover.
- (3) Every person shall make use of all safeguards, safety devices and other appliances provided for his protection or the protection of others.
- (4) Except in an emergency, no person unless duly authorized shall interfere with, remove, alter or displace any safety device or other appliance provided for his protection or the protection of others or interfere with any method or process adopted with a view to avoiding accidents and injuries to health.
- (5) No person shall sleep or rest in a dangerous place such as scaffolds, derrick floor, or cranes or in the vicinity of dangerous or toxic substances, machinery, boilers, vehicles and heavy equipment's.
- (6) Every person shall wear protective equipment and clothing suited to his duties and to the weather conditions.
- (7) Every person receiving any injury in the course of his duty shall, as soon as possible, report the same to an official or to the competent person in charge of a first-aid station, who shall arrange for the necessary first-aid to the injured person.

(d) Personal Protective equipment (PPE);

Every person engaged in the operations and every other person who may be exposed to the hazard, poisoning or disease arising from the operations shall be provided with:

1. Depending upon the hazard, suitable protective equipment including respiratory protective equipment, eye protectors, gloves, rubber glove (shock proof) for Electrical personnel, safety shoes, helmet, coverall, safety belts, aprons etc.
 2. Suitable protective outer clothing for use in rain and extreme weather conditions.
- Every person provided with protective equipment shall use the same while at work.

(e) Safety while working at height:

Where any person cannot be protected against falls by other means, for more than 1.8m height, the Bidder shall provide an approved **safety harness with fall arrestor** suitable for the hazard exposure which shall be attached by means of a lifeline to a fixed anchor. Bidder should ensure compliance in this regard.

(f) Health & training:

- (i) Initial & periodical medical examination (IME & PME) of all the workers and its record to be done as per the mines rule 1995 (clause 29F).
- (ii) IME/ PME records of the contract workers to this effect are required to be submitted to GEL prior to commencement of job.

(g) Work Permit System:

Work permit system as per OISD-105 standard to be followed on all jobs like Hot Work Permit, Cold Work Permit, confined space entry, Electrical / any potential energy isolation and Energisation permit, working at height permit, vehicle entry permit, excavations permit etc.

7.4. GEL SAFETY RULES

The following rules outline some of the basic safety requirements for all GEL worksites. These rules will be reviewed with all employees and Contractors and will be a topic of regular safety meetings.

- 1.0 The use of alcohol or illegal drugs while on company business, whether on client property, or in company vehicles or privately owned vehicles hired temporarily or permanently by the company will **NOT** be tolerated and will lead to dismissal.
- 2.0 Hard Hats approved by GEL will be worn at all times on worksites. Contractors are to provide their own PPE, however, in certain circumstances, GEL **may** provide PPE on a temporary or cost recovery basis.
- 3.0 GEL approved safety boots are required on all worksites.
- 4.0 Clean protective clothing suitable to the job being done and weather conditions must be worn. Appropriate gloves shall be worn as required by the task at hand.
- 5.0 Appropriate hearing protection and/or GEL approved eye protection will be worn as dictated by the work being performed.
- 6.0 Appropriate fire-retardant clothing will be worn on worksites by all of our personnel as dictated by the work being performed.
- 7.0 Smoking is permitted only in designated areas. Designated smoking areas may need to be changed from time to time as new fire/explosion hazards are identified.
- 8.0 GEL Ground Disturbance Procedures will be adhered to when performing any excavations.
- 9.0 Company vehicles/equipment will be operated as per posted speed limits, regulations and operating manuals. Seat belts where available must be worn at all times. Always walk around the vehicle/equipment before starting out. Non-essential vehicles are not allowed within 30 meters of well, separator, storage tank. Vehicles entering well site are required to be equipped with spark arrestors and may be subject to inspection and/or work permit. Spotters for heavy equipment and vehicles will be provided where necessary. Spotter shall wear reflective vests.
- 10.0 Non-essential persons shall be kept out of well site and construction areas.
- 11.0 No electrical appliance, equipment or machinery including lighting apparatus, mobile phones, or non-intrinsically safe radios shall be used in Zone '0' hazardous area, or in Zone 1 areas without utilizing the Permit to Work System (hot work).
- 12.0 Riders are not permitted on heavy equipment. Operators shall ensure the equipment is fully stopped and secured prior to dismounting.
- 13.0 Appropriate fall protection equipment is required when working above 2 meters. This includes full body harness, lanyards, and climbing devices where required.



- 14.0 Only TPI approved slings shall be used for lifting operations and tag lines will be provided for suspended loads. Site safety officers shall inspect lifting equipment and lifting operations on a routine basis.
- 15.0 Hazards are to be immediately reported to a supervisor or the GEL Safety Officer.
- 16.0 Keep the work site clean and organized.
- 17.0 GEL management may exempt certain visitors from Rules 4, 5, and 6 provided that the visitor will not be unduly exposed to any hazard, and will be accompanied by competent GEL staff at all times.

Compliance with these rules is mandatory – non-compliance will lead to dismissal. These rules shall be posted at all company worksites

8. List of Services & materials to be Mobilized/deployed by IDS Contractor

- 8.1. Drilling Rig Services (including fishing tools required for drill string/roller cone retrieval, washover pipes & overshot with grapple assembly to mitigate stuck pipe, junk baskets, fishing jar/flat mill and peripheral mill etc.)
- 8.2. Drilling Fluids Services along with supply of chemicals
- 8.3. Cementing Services along with supply of cement & additives
- 8.4. Directional Drilling Services
- 8.5. Mobile ETP Services
- 8.6. Fuel and Water
- 8.7. Drill Bits Supply
- 8.8. Supply of Casing Accessories
- 8.9. Boarding, Lodging, Meals & Offices for Company's Personnel
- 8.10. Deliverables

9. DETAILED SCOPE FOR THE INTEGRATED DRILLING SERVICES PACKAGE (IDS):

9.1. Drilling Rig Service:

- The broad scope of work shall include but not limited to any or all of the following:
- The well depths will be approx. 1500-1900 m (2CP/3CP). CONTRACTOR has to provide (One) no. Self-propelled or trailer mounted minimum 900 HP rig, with prime mover rig package equipped with Top Drive or without Top Drive, at least two mud pumps, 2 No's linear motion shale shaker with min 5000 Psi, BOP stack and other well control equipment along with all necessary equipment and personnel and carryout drilling operations (Oil and gas wells) including but not limited to drilling, round tripping, lowering & setting of casings, cementation, completion etc. and all other associated operations including, rig up, rig down, inter-location movement etc. in accordance with the well drilling programme provided by contractor before commencement of the operation, which may be amended from time to time by reasonable modification as deemed fit by the Company.
- Apart from this, the Contractor shall also provide spares for the entire rig package, tools and equipment, drilling operation services required for vertical and deviation drilling operations, fuel (HSD), Lubricant, Water, for running the operations, and shall carry out drilling with tools & expert supplied by the Contractor. The Contractor shall keep adequate stock of spares at all times for uninterrupted drilling operation and make available all items listed in this document ready for use.
- CONTRACTOR will be responsible for developing detailed drilling program and to be approved by GEL/Company.

- CONTRACTOR has to recommend best suitable directional/ vertical profile based on the G&G/ Well data provided by GEL.
- The final responsibility for successful drilling, lowering of casings and completion is the sole responsibility of the Contractor including well complications such mud loss, well activity etc.
- The Contractor shall keep adequate stock of consumables at all times for uninterrupted drilling operation and make available all items listed in this document ready for use.
- The Contractor shall mobilize all necessary equipment and tools for successful and cost effective completion of the jobs mentioned.
- The rig shall be offered with complete package including but not limited to rig mast, sub-structure, well control system, mud system, solid control equipments, fuel system, air system and water system etc as per tender.
- The detailed well planning and well engineering of each well has to be provided by Contractor and has to be submitted to GEL for approval. However, the final responsibility for successful drilling, stimulation, testing and completion is the sole responsibility of the Contractor only.
- Materials drill bits and casing accessories are to be provided by Contractor. (as per relevant API Standard as per tender). All Bits (TCR & PDC) required for drilling have to be provided by the Contractor. The bits are to be selected to optimize the drilling operation (as per relevant API Standard).
- All required casings and wellhead-X-mas Tree materials shall be provided by the Company/GEL.
- Required directional drilling tools (PDM, MWD, Monel etc.) & side tracking services have to be provided by contractor.
- In case of any complication in the well during drilling/fishing, Contractor shall rectify the problem which includes side tracking with or without whip stock & window milling and drilling to ensure achieving of target depth in each well. Contractor is also required for side track the well from a suitable place to relocate the well at a new subsurface position, if need arises.
- All types of fishing tools and fishing services have to be provided by the Contractor.
- For all casings, cement slurry design and cementation job including cementing units, bunkers etc is to be provided and carried out by the Contractor. Cementing units shall also be required to carry out LOT/ PIT, & other related jobs as per industry practice.
- All required cementing materials such as cements, additives float collars, float shoes, top & bottom plugs, centralizers, Cementing heads, cementing equipment etc. and cementing service has to be provided by the Contractor.
- Secondary cementation jobs and plug jobs, if required, have to be carried out by the Contractor.
- All cement testing should be done as per relevant API standards.



- The contractor should be competent to handle all high pressure mud loss activities along with well killing procedure in a crisis situations. The decisions on such matters, however, shall be taken in consultation with GEL.
- All aspects of warehouse and logistics support should be provided by Contractor. GEL will not take any surplus material supplied by IDS contractor and contractor has to take it back.

9.1.1 **Rig Equipments details and Technical Specifications**

INTRODUCTION

- The Contractor shall mobilize all necessary equipment and tools for successful and cost effective completion of the jobs mentioned. The Contract includes supply of one self-propelled/trailer mounted drilling rig package including haulage and transportation equipment and its services. HP rating of the rig offered shall be 900 HP (minimum) rig having compatible Telescoping mast and sub-structure (as per relevant API Standard) and capable of effectively drilling oil/gas wells.
- The drilling rig should be rated for minimum nominal drilling depth range of (2200 m) with 4.5" or 5" OD DP.
- The rig shall be offered with complete package including mud system, fuel system, air system and water system etc. The offered drilling unit should have a residual life of 3 years (minimum). Bidder shall submit rig registration certificate and the latest TPI inspection certificates in support of this.
- The CONTRACTOR shall be in possession of the Drilling Rig offered as per SOW.
- All the Bidders are required to submit an undertaking confirming availability of the Rig for this contract along with technical specification of the rig meeting the Scope of Work along with technical Bid.

RIG CONDITION & INSPECTION:

- The bidder shall offer serviceable/new rig fulfilling scope of work and confirming to the Technical specifications laid down in the Scope of Work. The complete details of the last contract taken up, last operator and the period during which the Rig was last in operation shall be submitted with documentary evidence in the unpriced bid.
- Bidder to provide the TPI report as per clause 4.7 of GCC.

9.1.1.1. **Type of Rig**

A self-propelled or truck/trailer mounted Mobile Drilling Rig (01 no.) with easy placement at the well, equipped with single drum draw-works with the provision for power system catering the full load requirement and rotary drive (Minimum 1000 HP Rig with/without Top Drive) for drilling of the wells of depth up to 2200 Mts. +/-200 mtrs with 4.5"/5" drill pipes is to be provided as per API 4E/4F (Standard Specifications).

The rig should be equipped with suitable racking arrangements and complete tackling system to handle required load.

9.1.1.2. **MAST**

Mast should have static hook load capacity of 190-220 MT having sufficient clear height to handle 130 stands (doubles) of 4.5"/5" drill pipe with a provision for setback for 15 stands of 6-1/2" or 8" OD drill collars.

Dynamic wind load capacity with full pipe set back and all wind guy lines properly installed should be sufficient to withstand monsoon rains and heavy winds.

Mast to be equipped with the following:

- Two number of tong counterweight one on each side of the mast complete with sheaves and cables.

- One set of Crown Bumper Blocks.
- One set of Travelling Block suspension line assembly for slipping wire line.
- Mast shall be complete with necessary & compatible single/dual high pressure standpipes with clamp/supports.

9.1.1.3. **MAST RAISING SYSTEM:**

Hydraulic cylinder telescopic system, complete with automatic safety stop system to prevent fall of top section. **Safety stops to be operated on each leg.** For erection, hydraulic cylinders with safety system of check valves to control descent of mast in event of hydraulic failures and control over centre travel. Multiple control valves, valves safety lock and hydraulic lines are to be provided from control to cylinders. It should be complete with following:

- Ladders from rig floor to racking platform and to Crown Block in one set complete with safety rails & Safety climbing device with fall arrestor.
- Self-erecting, fixed/folding type racking platform, which is automatically positioned while raising the upper section of mast and complete with necessary Emergency Escape Device (EED) from racking board to ground for top/derrick men
- Stand pipe clamps provided with mast for proper clamping of standpipe.

9.1.1.4. **SUB-STRUCTURE:**

- Sub-structure should have suitable clear height below beams to accommodate BOP stack with other drilling equipment beneath the floor.

Note: Clear height below rotary table lower than that specified will be accepted provided the offered rig accommodates the required BOP stacks and Bell nipple etc. with sufficient clearance for flow line slope.

- The substructure should have sufficient casing capacity and setback capacity to handle 2CP/3CP well.
- V-door ramp and stairs to sub-structure floor with stair handrails.
- Two sets of tong back up posts to be provided for makeup and break up tongs.
- Rat hole & mouse hole – one each designed with flip up hole covers.
- Deadline Anchor support to be located on carrier at base of the mast / located on Sub structure as per rig design and as per API spec 8c. Deadline Anchor as per rig design to be grooved for 1-1/8" or 1-1/4" casing (drilling) line and provision for tension type load sensor complete with wire line snub.
- One set of catwalk steel plate top with arrangement to block sliding of pipe at both ends.
- Air winch installed on Rig floor with air fitting, air filters, lubricators and wire line etc.
- The derrick floor shall be complete in all respect and provided with suitable toe boards and safety railings.
- Three (3) sets of stairs from working floor, two (2) to the ground and one (1) to the Mud Tank/trip tank, landing complete with handrails.

9.1.1.5. **DRAW-WORKS:**

Draw-works should be single drum draw-works equipped with adequate capacity auxiliary brake for safe running in of the string. Draw works drum grooved should be suitable for 1-1/8"/1 1/4" wire line/casing line. The draw-works should also have reverse rotation facilities.

Minimum horsepower rating should be 900-1000 HP. Hydraulic make-up & break-out cylinders / Catheads as part of draw-works to be provided. Alternately Hydraulic make-up & break-out cylinders fitted in the mast.

9.1.1.6. **DRUM AND BRAKING SYSTEM:**

The drum should have two band type braking system (or as per rig design) and it should be with grooves to facilitate reeving. drum lebus grooved for 1-1/8"/1 1/4" casing (drilling) lines. Regenerative type braking system to be provided in case of VFD Type rigs.

9.1.1.7. AUXILIARY BRAKE:

Eddy Current Brake / Dynamic Disk brake / Hydromatic brake is to be provided with brake cooling system.

9.1.1.8. CONTROLS:

Controls are to be located in Driller's console and to be installed at Derrick floor

- Controls (hydraulic system) for raising and telescoping mast are to be located at rear of the carrier.
- Emergency shutdown control.
- Air operated transmission shift control to be located in Driller's console.
- Hydraulic cylinders control (for make-up and break-out tongs) to be located in Driller's console itself.
- Engine start and kill switches desirable.
- Slush pumps and DRAW-WORKS throttle controls are to be located in Driller's console.

9.1.1.9. DRAW WORKS COOLING SYSTEM:

Suitable closed-circuit system with water tank and centrifugal pump driven by three phase flame proof DGMS Approved motor.

9.1.1.10. TWIN STOP DEVICE (CROWN-O-MATIC & FLOOR-O-MATIC):

- Twin stop device should be installed with draw works.
- Crown Saver to prevent collision between travelling block assembly and crown block assembly.
- Floor Saver to prevent collision between travelling block assembly and drill / derrick floor.
- The device should be complete with override & reset buttons at driller's console.
Crown -o-matic/floor-o-matic devices should be tested every day and after each casing line slip/cutting operations and recorded in IADC report.

9.1.1.11. CROWN BLOCK:

Static Hook Load Capacity matching with the Mast. The Crown Block should have required no. of sheaves for 1 1/4" / 1 1/8" casing line and one sheave to be grooved for 9/16" for air winch / hydraulic winch.

Capacity: 190-220 MT

9.1.1.12. TRAVELLING BLOCK AND HOOK (AS PER API SPEC 8A/8C STANDARD):

Traveling Block Assembly should have following features: -

- Rated static load Capacity-Minimum 190-220MT.
- Required sheaves grooved for 1 1/4" / 1 1/8" drilling line.
- Hook should have built-in hydraulic snubber, convenient rotation lock etc

9.1.1.13. ELEVATOR LINKS:

Suitable weld-less elevator links having load capacity of 190-220 tons.

One set of long links to facilitate installation of double plug cementing head during 13-3/8" and 9-5/8" casing cementing operations.

9.1.1.14. DRILLING LINE SPOOL:

To be located at rear or as per rig design of the carrier with 1 1/4" / 1 1/8" drilling line.

9.1.1.15. ROTARY TABLE & DRIVE (AS PER API SPEC 7K STANDARD):

Shall be designed as per API 7K standard.

Rotary Table with 27-1/2" opening and matching load capacity of Mast.

Capacity: minimum 220 MT

Pin Drive Kelly Bushing completes with roller assembly for 5 1/4" Hexagonal Kelly.
 Pin Drive Master Bushing, Split type 27 1/2"
 API Insert Bowl no.1, 2 & 3 Bit Breaker Adaptor Plate in case of Pin drive bushing

9.1.1.16. MASTER BUSHING:

Solid Pin drive Master Bushing compatible with offered 27 1/2" Rotary Table, complete with bit breaker plate and one split type master bushing.

9.1.1.17. CASING BUSHING:

One set of split type Bushing should be available for use with 27 1/2" Rotary Table for different size of Casings (13 3/8", 9 5/8", 7" & 5 1/2").

9.1.1.18. INSERT BOWL:

One set of split type insert bowl compatible with master bushing (Bowl-1, 2 & 3).

9.1.1.19. SWIVEL:

Swivel should be fitted with standard bail, wash pipe packing assembly, goose neck hose, connection union for API rotary hose, having 190-220 MT rated static load capacity and with compatible rotating capacity (182 T API bearing rating at 100 RPM).

9.1.1.20. KELLY & KELLY BUSHING:

One no. Hexagonal/Square Kelly of 5 1/4" sizes (OD) having 40' length along with pin insert Kelly bushing compatible with master bushing- one no. along with Kelly scabbard.

9.1.1.21. KELLY SPINNER:

One Kelly spinner, air operated with all standard rig up accessories for installation. The spinner is to be compatible for left and right rotation.

9.1.1.22. KELLY COCK:

Upper Kelly Cock, 5000 psi WP, having LH regular thread connections compatible with swivel and Kelly. -1 / 2 Nos.

Lower Kelly Cock, 5000 psi WP, having 4 1/2" IF Box RH x 4 1/2" IF Pin RH. (connection 4" or 4-1" IF RH as per Drill pipe thread 5"/4-1/2") -Two Nos.

9.1.1.23. KELLY SAVER SUB:

Kelly Saver Sub for 5 1/4" Kelly along with rubber protector compatible to Kelly and drill pipe connections to be provided.

9.1.1.24. BOP Handling System:

Suitable BOP handling system with chain & pulley block and platform or BOP trolley to be provided to handle BOP for installing Well Heads.

9.1.1.25. DOG HOUSE:

Doghouse is to be mounted on three-runner skid. Doghouse to include standard fittings and arrangements for installation of drilling recorder, other instrumentation and toolbox. Depending upon location of Doghouse at Derrick floor and implication of the hazardous zone in the area at derrick floor, all the Electrical fittings equipment shall be installed accordingly inside/outside doghouse having required approvals.

9.1.1.26. MUD PUMPS:

Two numbers of Triplex, single acting mud pumps of rated 1000 input HP each, driven by suitably rated independent drive diesel engines / electrical motors with single skid, having spark arrestors and remote shut-off (from driller console)/ pump control (Pump start & stop) at driller's console, complete with cooling system are to be equipped with following :



- Each pump should be capable of giving minimum discharge of 500 GPM. Fluid end designed capacity should be 5000 PSI and both the pumps should be of similar make and capacity.
- Pumps should be equipped with easily changeable piston and liner assy. (from 5" up to 7") to meet varied requirement of drilling operation. Adequate numbers of various sizes of spare liners to meet operational requirement must be available
- Suitable Super Charging system mounted on a separate skid / same skid, connected to the suction tank. Suction and discharge lines are to be equipped with butterfly valves.
- Suitable lubricating oil pump system.
- Liner flushing / cooling system.
- Pulsation dampener with proper charging kit to be provided.
- Full flow shear / reset type pressure relief valve.
- Jib crane with trolley and hand hoist or suitable crane available round the clock.
- 5000 psi Pressure Gauge preferably Martin Decker on discharge line. The calibration certificate shall be provided by the contractor.
- Hydraulic valve seat puller assembly.

9.1.1.27. MUD DISCHARGE SYSTEM:

One discharge manifold of 5000 psi WP, two parallel mud lines / single mud line between mud pump discharge manifold and mud stand pipe manifold complete with all necessary piping, unions and connections.

- Pump delivery manifold shall have arrangements for hole filling line and kill line connections of suitable sizes with flex seal gate valves.
- From each pump delivery manifold, suitable bleed line with flex seal valve should be provided
- Necessary anchoring arrangement of all high-pressure delivery lines to be provided

9.1.1.28. MUD STANDPIPE MANIFOLD:

4" Nominal Bore Suitable standpipe manifold with valves & pressure gauges having pressure rating 5000 psi WP and 1000 GPM is to be provided.

9.1.1.29. ROTARY AND VIBRATING HOSES:

- Adequate nos. (minimum 2) rotary hoses 3 ½" / 4" ID of suitable length each, 5000 psi WP and
- Adequate nos. (minimum 2) vibrating hoses 3 ½" / 4" ID of suitable length each, 5000 psi WP with hammer union connections and safety clamps.

9.1.1.30. MUD HANDLING SYSTEM:

- **Active Mud Tanks:** - Three mud tank system (Shaker tank, intermediate tank and suction tank, each with suitable compartment and with integrated safe walk way) with about 40 cubic meters capacity each with mud ditches and weir gates for control of mud flow. Tanks are to be mounted on runner skid with pipe ends to facilitate tailboard loading. **Slug tank** and **Pill tank** of pumpable capacity 6-8 cubic meter each should be available in the compartment form to enable pumping of slug / mud pills etc. All the tanks are to be equipped with adequate mud agitators and mud guns and should be with suitable clean out gates.
- **Reserve Mud Tanks:** **Two nos. of reserve mud tanks** each having capacity of 40 cubic meters or more with provision of mud ditch with gates, and suction valves with all necessary piping and dresser couplings, suction valves and connection for mud and water service. Each reserve tank should have two compartments along with provision of transfer mud from active to reserve tank and vice versa and direct connectivity with hopper and delivery.
- **Trip Tank:** - One Trip tank complete with flame proof electric motors powered Centrifugal pump of suitable ratings and with flow line and valves & Mud Level indicator readable from Driller's station, suitably calibrated. (Capacity- minimum 10 M3). Trip tank should have suitable calibration of preferably 0.5 bbl sensitivity.

- **Treatment tank** having capacity of minimum 6 M3.

Note:

- All mud tanks are to be provided with Drill water & Diesel supply lines.
- Shale Shaker should be equipped with high pressure low volume water spray system for screen washing.
- All the tanks are to be equipped with adequate mud agitators and mud guns and should be with suitable clean out gates.

9.1.1.31. MUD MIXING SYSTEM:

- Two nos. of low-pressure **hoppers** with necessary pipelines, valves of pumps suction and discharges from / to suction and treatment tank with suitable DGMS approved FLP Electric motor driven centrifugal pumps.
- **Jet shearing device**
System should be complete with the capability of mixing polymer mud of up to 20 ppg. Both the hoppers should be used independently.

9.1.1.32. SOLID CONTROL EQUIPMENTS:

(a) Shale Shaker: -

2/3 nos. Linear Motion / Balanced Elliptical Motion Shale Shakers of Brandt / Derrick / Kemtron (Elgin) / MI Swaco or equivalent make only with scalping arrangement having minimum total capacity of 1000 GPM mud fluid handling capacity and with minimum specification of 6.0 G are to be provided with the rig with suitable motor and screen sizes.

Note: The above shale shakers should be provided with replacement screens with 40 - 250 mesh Size.

(b) Screen Washer:

High pressure low volume water spray system for shale shaker cutting cleaning

(c) Linear Motion Mud Cleaner:

Capacity 1000 GPM of Brandt / Derrick / Kemtron/ MI Swaco or equivalent make only.

(d) Desilter:

Brandt make/Swaco make or equivalent Desilter (hydrocyclone type), capacity 1000 GPM,

(e) Degasser (Horizontal / Vertical Type):

One vacuum type degasser (Horizontal/Vertical Type) of Brandt / Derrick / Kemtron/MI Swaco/or equivalent only for handling 1000 GPM gas cut mud.

(f) Mud Gas Separator (Poor boy degasser) (Vertical Type):

One mud gas separator Multi inner baffles system complete with perforated plates.

(g) Desander:

Brandt / Derrick / Kemtron (Elgin)/ MI Swaco or equivalent make only. Two (2) / Three (3) cones unit with minimum 1000 GPM with suitable feed pump driven by electric motor with sufficient spare cones

(h) Polymer shearing device

9.1.1.33. PRIME MOVER & TRANSMISSION:

The rig should be equipped with suitable prime movers & transmission.

9.1.1.34. LIGHTING FIXTURES AND SYSTEM:

Appropriate lighting fixtures and provision of adequate light in all areas like mast and racking system, catwalk, substructure, mud tanks, mud pump, etc. to be provided with the rig.

* Power supply to the lighting feeder shall be 220v Phase to Phase.

* All lighting fixtures installed in Zone -I & Zone -II shall be as per hazardous area classification & DGMS approved along with a valid certificate.

1. Appropriate AC Power, Control and Cable wiring to be provided to meet the requirement of rig equipment.

All cable entry shall be protected by DC cable gland.

All cables shall be EPR insulated trailing copper cables.

2. Rig Floor Control Panel:

In dog House & at Rig Floor all distribution control panel, plug and socket, lighting fixtures, communication instrument etc shall be FLP & DGMS approved

Emergency shut-off system at driller console in functional condition (A statutory requirement).

3. Earthing for all electrical equipment's and gadgets to be provided as per standard practices.

* All equipment's, motors, PBS, DOL, DB, bunk houses, & metallic structures installed in mines shall be earthed as per IS: 3043 & OISD-216 with suitable size earth conductors.

4. Rig Aviation Light to be provided at the top of the rig mast as per standard practices.

5. All rig Electrical crew members including chief electrician shall have Supervisory Certificate for mines issued by state licensing board, (A statutory requirement).

6. Following tools shall be available at site for electrical job:

- 6.1 Multi-meter
- 6.2 Earth Tester
- 6.3 Tong Tester
- 6.4 Electrical tool box
- 6.5 Insulated Hand Glows
- 6.6 Lux-meter
- 6.7 Tacho-meter
- 6.8 FLP Torch
- 6.9 Fuse Puller

7. Bidder to Ensure:

- Bidder to ensure filing of Mines log sheet as IE Rule-131
- Lock-out Tag-out & work permit system.

8. Display of following

- SLD
- Cable lay-out & earthing drawing
- Hazardous area classification
- Electrical Shock-treatment chart.

9. NGR (Neutral Grounding Resistors) System: NGR system shall be provided as per the DGMS & other applicable regulation/standard.

9.1.1.35. **UTILITY ITEMS:**

Cold start portable compressor package or equivalent which should include: -
Compressor with constant speed control, inlet filters / silencer, intercooler and relief valve with the following features:
Actual delivery - 90-120 CFM or matching with requirement of rig equipments.
Rated Pressure – 120-150 psi or matching with requirement of rig equipments.

(i) Minimum two nos. of electrical motor driven compressor as per specification given below:
Air Delivery: Minimum 90-120 CFM
Working Pressure: 120-150 psi or matching with requirement of rig equipments.

(ii) **MCC / AIR COMPRESSOR / AIR RECEIVER HOUSE:** Utility house mounted on two runner skid with sufficient room for electric air compressor, mechanical air compressor & MCC.

(iii) **Air Receiver Tanks:** of sufficient capacity as per rig design with valid calibration/testing certificate.

(iv) **AIR DRIER:** Regeneration type air drier unit

9.1.1.36. **HYDRAULIC SUPPLY PACKAGE:**

Pump to have sufficient capacity to operate complete rig hydraulic system, to be mounted on carrier complete with oil level gauge, oil temperature gauge, filter cap, breather and dip stick.

9.1.1.37. **WATER SYSTEM:**

- Water tank of minimum 50 cubic meter capacity, with open top, mounted on a heavy-duty skid with porch extension for mounting centrifugal water pump.
- Centrifugal pumps driven by 10/15 HP explosion proof electric motor complete with all valves, piping fittings etc. for supplying water to all required points.
- Drill water filter system along with complete accessories & fittings, pumps, motors etc.

9.1.1.38. **FUEL SYSTEM:**

Fuel tank of sufficient capacity as per rig consumption and third party requirement mainly for cementing operations and company's mud treatment requirement. Saddle mounted on heavy duty skid. It should have four feet porch extension for mounting two (2) fuel pumps with suitable pre-filters and coalescers. HSD lines for Power-packs should be fitted with a separate flow-meter to measure HSD consumption in power-packs.

9.1.1.39. **DRILLING EQUIPMENT / TOOLS (SERVICEABLE):**

All tubular should be as per API Specification 7

i) Drill Pipe & pup joints: With internal coating, No hard banding

- 5" D/pipe, range-II, G grade, 19.5 ppf, 4 ½" IF Conn. **OR** 4 ½" D/pipe, range-II, 'G' grade, 16.6 ppf, 4" IF or 4 ½" IF, internal external upset with 18 degree tapered shoulder, Premium class – 2000 mtrs.
- pup joints for drill pipes of 5" **or** 4.1/2" OD as indicated above (grade G-105) of following sizes & quantities:
 - a) 1.5m length- 2 nos.
 - b) 3.0 m length- 2 nos.
 - c) 4.5 m length- 2nos.

ii) Drill collar:

- 8" D/Collar, 2-13/16" ID, 6-5/8" Reg. Conn., Range-II, having bore-back box and stress relief pin, Spiral grooved with recess for Elevator and Slip and complete with suitable lifting plugs (222.7 kg/m) – 6 singles



- 6 1/2" D/Collar, 2-13/16" ID, Range-II, having bore-back box and stress relief pin, Spiral grooved, 4 1/2" IF / 4" IF Conn. with recess for Elevator and Slip and complete with suitable lifting plugs (136 kg/m) – 18 singles.

Note: 1. All the above Drill Collars shall be Premium Class.
2. Adequate nos. of lifting subs/plugs for each size of drill collars as per operational requirement

iii) Heavy Weight D/Pipe:

- 5" OD, 50 PPF, 3" ID, 30 ft long Drillco or equivalent "heavy-weight" drill pipes with 4.1/2" IF (NC-50) **OR** 4.1/2" OD, 2.3/4" ID, 41 PPF, 30 ft. long with 4" IF (NC-46) Drillco or equivalent box-up & pin down connection with stress relief – 18 singles.
- All the above HWDP shall be Premium Class.

iv) Cross Overs & Bit Subs:

All the required substitutes for 17 1/2", 12 1/4", 8 1/2" & 4 1/2" size bits and for drill String members shall be provided with the Rig – 2 nos. each.

Bit Subs:

- 2 Nos. 8" OD x 6.5/8" API regular double box bit sub with provision for back pressure valve insert.
- 2 Nos. 9.1/2" OD x 7.5/8" API regular box down x 8" OD x 6.5/8" API regular box up bit sub with provision for back pressure valve insert
- 2 Nos. 6.1/2" OD x 4.1/2" API regular box down x 6.1/2" OD x 4" IF (NC 46) box up bit subs

v) Stabilizers: One near bit and two string stabilizers (Integral blade type) for 17 1/2", 12 1/4" and 8 1/2" size.

9.1.1.40. RIG FLOOR HANDLING EQUIPMENT (SERVICEABLE):

i) Elevator (Drill String) :

- 5" / 4 1/2" D/Pipe center latch Elevator, - 2 nos. Each
- 8" D/collar center latch Elevator, 100 T- 2 nos.
- 6 1/2" D/Collar center latch Elevator, 100 T- 2 nos.

ii) Elevator (Casing & Tubing)

- 13 3/8" Casing Side Door Elevator, 150T - 2 nos.
- 9 5/8" Casing Side Door Elevator, 150T- 2 nos.
- 7" Casing Side Door Elevator, 150T- 2 nos.
- 5 1/2" Casing Side Door Elevator, 150T- 2 nos.
- 2 7/8" OD EUE and VAM and 3 1/2" OD Vam-top tubing center latch elevator, - 2Nos. each

iii) One number single joint elevator each for 13 3/8", 9 5/8", and 5 1/2" Casing.

iv) Rotary Slip:

Rotary Slip suitable for offered 27 1/2" Rotary table and master bushing for all Tubular sizes – 2 nos. each of:

- 5" / 4 1/2" D/Pipe Slip.
- 6 1/2" Drill collar Slip
- 8" Drill collar Slip

v) Casing Slip:

Casing Slips suitable for offered 27 1/2" Rotary table and master bushing for all casing sizes – two nos. each of:

- 13 3/8" Casing Slip.

- b) 9 5/8" Casing Slip.
d) 5 1/2" Casing Slip.

vi) Safety Clamp for D/Collar:

Safety Clamp for D/Collar:

- Safety Clamp for 8" D/C - 01 no.
- Safety Clamp for 6 1/2" D/C - 01 no.

vii) Power Tong:

Rotary Tong type DB for D/Pipe, D/Collar and Casing pipes of 13 3/8", 9 5/8" and 5 1/2" sizes, complete with jaws for each size, along with lug jaw assembly.

Rotary Tong for 2 3/8" – 3 1/2" for EUE tubing -1 set

viii) Casing Tong:

Hydraulic casing tong complete with hydraulic power unit with suitable prime mover & standard accessories (5" – 13.3/8") with sets of jaws for 5 1/2", 9 5/8", 13 3/8" – 1 set.

ix) Bit Breaker:

Bit Breaker for 17 1/2", 12 1/4", 8 1/2" Bit -1 no. each.

Bit Breaker adapter plate - 1 no.

x) Bit Gauge /Nozzle gauge/ Stabilizer gauge:

- Bit gauge for 17 1/2", 12 1/4", 8 1/2"-1 no. each
- Stabilizer gauge for 17 1/2", 12 1/4" & 8 1/2" stabilizers- 1 no. each
- Nozzle gauges for various sizes of nozzles (10/32" – 24/32")

xi) Circulating Head:

Circulating heads for 5"/4 1/2" D/Pipe, 13-3/8" Casing, 9-5/8" Casing & 5 1/2" Casing (casing thread BTC) – 1no. each

xii) Mud Saver Basket:

Mud Saver Basket for 5" /4 1/2" D/Pipes – 1 no. each

Or

Mud Saver Basket with different rubber sizes for 5"/ 4 1/2" D/Pipes.

xiii) Spinning Wrench:

Pneumatic / Hydraulic Pipe Spinning Wrench for 5" / 4 1/2" Pipes with right & left hand rotation, complete with all accessories – 1 set.

xiv) Casing drift Gauge:

Casing drift gauges as per API Standards for 13-3/8", 9-5/8", 5 1/2" Casing size of commonly used weight would be provided.

xv) Lifting sub: For contractor's tubular where it is required.

xvi) One (1) no. pneumatic pipe spinner for handling drill pipes complete with all necessary fittings

xvii) Thread Protectors : 1 set consisting of 2 nos. each size clamp-on or equivalent casing thread protectors for 13.3/8", 9.5/8" & 5.1/2" sizes. .

xviii) Nozzle pliers: Nozzle plier for changing bit nozzles.

9.1.1.41. **BOP EQUIPMENT:**

BOPs must be of HYDRIL, CAMERON OR NOV (SHAFFER) / WOM / T3 make only. BOPs of any other make will not be acceptable. All the BOPs offered should be conforming to API 16A & 6A.

Note: Well Control Equipment like BOP, Choke manifold & its accessories and BOP Control Unit should be certified as per OISD 174 Clause 6.1.2(iv)

- **Annular Blow Out Preventer:** Annular BOP 13 5/8" X 5000 PSI working pressure including all standard accessories.
- **Ram Type Blow out Preventer:** Double Ram type BOP, 13 5/8" x 5000 PSI working pressure, hydraulically operated with manual locking systems, fitted with 1 set of 5"/4-1/2" pipe rams and 1 set of blind cum shear ram, two 5000 PSI working pressure top and two 5000 PSI working pressure bottom side outlets (4 1/16", 5000 psi WP including all standards accessories. Ram assemblies for casing size 9 5/8, 7" and 5 1/2". One set Ram assembly for 5"/4 1/2" drill pipe size.
- **Kill Valves at BOP stack & Kill manifold:** 3-1/8" / 2-1/16" x 5M Working Pressure, hydraulically operated gate complete with manual override (HCR) – 1 no.
 - 4-1/16" / 3-1/8" / 2-1/16" – 5M WP, manually operated gate valve– 1 no.
 - 2-1/6" 5000 psi WP Valve junction inclusive of one 2 1/16"-5M WP Check valve for kill manifold - 1 No.
- **Choke valves at BOP Stack:**
 - 4-1/16"/ 3- 1/8" – 5M WP, hydraulically operated gate valve – (HCR Valve) 1 No.
 - 4-1/16" / 3-1/8" – 5M WP, manually operated gate valve – 1 No.
- **Drilling Spool:**
 - 13-5/8" flanged with two flange side outlets of 5000 psi WP for Choke & Kill manifolds – 1 No.
- **Spacer spool** – as per requirement
- **Adapter Spool:**
 - a) Double studded adapter flange 13-5/8" – 3000 to 13 5/8" – 5000 PSI WP, complete with nuts to match BOP stack & well head – 1 No.
 - b) Double studded adapter flange 11" – 5000 PSI to 13 5/8" – 5000 PSI WP, complete with nuts to match BOP stack & well head – 1 No.
 - c) Double studded adapter flange 11" – 5000 PSI to 7 1/16" – 5000 PSI WP, complete with nuts to match BOP stack & well head – 1 No

Note: Bidder shall also provide:

- Kill lines and choke lines, articulated or flexible (Co-flexi preferred) of sufficient lengths to match drilling spool side outlet connections and kill/choke manifold connections
- New and unused steel ring joint gaskets for all flanges with sufficient quantity as spares.
- Adequate no. of studs & nuts for all flanges/spools and wrenches to suit all nuts.
- Operational spares for Contractor's BOPs - both annular and ram, including ram sub-assemblies of sizes to suit various tubular sizes including blind ram.
- Ram BOP bonnet gasket.
- Maintenance / overhauling / repair services for above BOPs including 5 yrs duration OEM certificate as per OISD RP 174. BOPs must be certified/refurbished by any API authorized shop.
- The Contractor shall bring adequate quantity of studs, and ring joint gaskets and damaged ones. Contractor should maintain sufficient no. of spare rubber elements for the BOP Rams.
- The installation of well head complete lies with the Contractor.
- Bidder should provide a schematic diagram with the dimensions of BOP stacks for different sizes and stages of completion.
- Adequate number of 5000 psi chikan joints for hooking up well killing pump, test lines, emergency kill line etc.



- **BOP Accumulator Unit (As Per API 16D):** 6 station BOP Accumulator unit of Koomey, CPC, Cameron, Shaffer / Stewart Stevenson / ABB / NOV / Sara or equivalent make skid mounted, 3000 PSI WP, consisting of following
 - sufficient number of accumulator bottles as per API / IWCF recommendation.
 - One (1) triplex plunger pump, driven by electric motor, pump capacity will meet API requirement and standard industry practice with hydro-electric pressure switch for automatic cut-off.
 - Air operated pumps (3 nos.) to operate with maximum air supply capacity air will meet API requirements and standard industry practice with hydro-pneumatic pressure switch.
 - Two nos. of Remote air operated control panel for operating the unit one from the drill floor and one near tool pusher office complete with the all standard accessories, air hose, handle, junction boxes etc.
 - BOP fluid reservoir
 - Pressure relief valve – 2 nos.
 - Manifold for operating the following BOP stack functions complete in assembly:
 - Annular BOP
 - Upper Ram BOP
 - Lower Ram BOP
 - Hydraulically operated valves
 - Accumulator bladders charging and gauging assembly.
 - Spares for BOPs
 - Necessary high pressure hoses and adequate length of Chiksan piping to connect accumulator unit to the BOP stack.
- **Choke & Kill Manifold:** Must be of HYDRIL, CAMERON, NOV (SHAFFER), WOM or T3 make only. All the offered Choke & Kill Manifold should be conforming to API 16C. Choke & Kill manifold assembly 4-1/16" / 3-1/8" X 5M WP, with:
 - One remotely operated hydraulic choke with position indicator, 5M WP or above
 - Remote Choke panel at Rig Floor
 - One manually adjustable choke 5M WP
 - Gate valve, block crosses, tees, pressure gauges & Transmitters as necessary other accessories.
 - Other Accessories.
 - Note: 2-1/16" X 5M kill manifold is acceptable with necessary changeovers and all accessories
- **BOP Test Stump:** One number Test Stump of 5M rating.
- **BOP Testing Unit:** 5M working pressure with chart recorder/record-o-graph.
- **Inside BOP/ Drop in Check Valve:** One number GRAY or Equivalent make 5" / 4½" inside BOP/Drop In Check Valve with 5M W.P for 5" / 4½" OD D/P.- One no.
- **FOSV:** 5M rating to connect with Contractor's drill string – 2 no
- **Cup testers** for testing 13 3/8" [54.5 ppf], 9-5/8" [40-47 ppf], 5.1/2" [17-23ppf] OD casing with facility of interchangeability of cup to suit different weight of aforesaid casings should be provided by the Contractor. Suitable test plugs for various casing head housings as indicated in section BOP stack & well control equipment sub-section "BOP stacks & spools" shall be provided by the Company.
- **Ring Gaskets & Studs:** All ring gaskets & studs (sufficient numbers) for above mentioned BOP equipment

Note: All the well control equipment's (BOP, choke and kill lines/valves, choke manifold, BOP accumulator unit etc) shall be API standard and their maintenance/OEM inspection & certification / testing should be as per OISD RP-174 from OEM /API authorized shops.

9.1.1.42. **DRILLING INSTRUMENTS:**

- i **Weight Indicator System:** Martin Decker type “E” or equivalent for rig’s maximum load handling capacity complete with sensor and hose long enough to run from deadline anchor to Driller’s console – 1 No.
 - ii **Pump Pressure Gauge System:** Console mounted gauge, 0-350 kg/cm² (5,000 psi) complete with diaphragm protector and high pressure hose to run between stand pipe manifold and driller’s console – 1 No.
 - iii **Tong torque indicator system:** Console mounted gauge, indicating tong line pull in kg or lbs, complete with load cylinder sensor and high pressure hose to run between sensor and the mounted gauge on driller’s console – 1 No.
 - iv **Rotary RPM tachometer / proximity switch system:** Console mounted gauge, electric cable to run between the rotary and driller’s console – 1 No.
 - v. **Mud pump SPM system for two mud pumps:** Console mounted gauges 0-200 SPM. Electric cable to run between mud pumps and driller’s console– 1 No.
 - vi. **Driller’s Instrumentation Console:** Martin Decker or equivalent instrumentation system capable of displaying and recording
 - Hook load (Tons)
 - Weight on Bit (Tons)
 - Penetration rate (Minutes/Meter)
 - Rotary/ Top Drive Speed (RPM)
 - Rotary/Top Drive Torque (Kg-m)
 - Pump / Standpipe Pressure (Kg/cm²)
 - Mud pump No.1 SPM
 - Mud pump No.2 SPM
 - Total SPM
 - Total Stroke Counter
 - Tone Mile Indication
 - Tong line pull indication (kgf)
 - Trip Tank Level/Volume
 - Active Mud Pit Volume (M3)
 - Mud Gain / Loss (M3)
 - Depth of Hole (Meters)
 - Bit Position (Meters)
 - Return Mud Flow
 - Drilling Parameter Recorder (Minimum 7 Channel) to be provided for continuous recording of the above mentioned parameters.
- ✓ Contractor may provide the Advanced integrated drilling instrumentation system like DS-2000 or Mud watch or equivalent which are computer based with digital reading and recording.
- ✓ One Monitor along with Printer to be provided at Company-man Bunk House
- ✓ for continuous monitoring of the above mentioned drilling parameters and taking record-o-graph printouts.
- vii. Audio Visual General Alarm System to be provided along with Page / PA System to communicate to the rig crew at different work stations.
 - viii. Hand held Radios / Walkie talkie (Intrinsically Safe), adequate number (minimum 4) of hand held devices to be provided.
 - ix. Calibrated Pressure Gauges are to be provided at Stand pipe manifold, Choke manifold, Discharge of individual mud pumps.
 - x. Two number of calibrated Portable Multi Gas Detector capable of detecting Hydrocarbon and H₂S gas.

9.1.1.43. **Fishing tools:** Bidders to keep basic fishing tools like overshot, junk basket, junk sub, fishing jar, LIB etc at rig site as per the hole section. Bidder to provide other fishing tools if required from their base within the notice of 24 hours.

9.1.1.44. **FIRE FIGHTING & SAFETY EQUIPMENT**

The Rig equipment, wherever applicable, must meet the requirements of API, Directorate General of Mines and safety (DGMS) and Oil Industry Safety Directorate (OISD) and guidelines issued by State and Central pollution control board.

The Rig should be equipped with following fire-fighting & safety equipment: -

- i. Fire-fighting system as per OISD standard -189: - Para 6.0
 - i) Fire water storage facilities with fire pump.
 - ii) Portable Fire extinguishers (Refer Annexure B: OISD – STD -189)
 1. Material specification of Fire water system.
 2. Fire alarm system.
 - ii. Explosion proof Rig lighting at all hazardous locations as per Indian Oil Mines Regulation in force.
 - iii. Flame proof portable lamps (minimum 2 nos.)
 - iv. Emergency Kill system for derrick engine (control from driller's panel).
 - v. 24 Hours Ambulance at site as Emergency vehicle. (Refer Annexure B: OISD-GDN-182 & OISD-STD-190)
 - Emergency vehicle (Ambulance) should not be used for other purposes.
 - The age of the emergency vehicle as on date should not be more than 5 years.
 - Emergency vehicle should be road worthy as per RTO norms.
 - Sufficient fuel must be available in emergency vehicle to reach nearby hospital.
 - Full oxygen cylinder should be available with mask.
 - Siren should be in working condition all the time.
 - Emergency vehicle driver should be available at site during working hours and he should have a valid license.
 - Required first aid box must be available in the emergency vehicle.
 - vi. Portable gas detectors – 02 nos. for H₂S (CMRI approved) & Hydrocarbons (DGMS approved) suitable for Oilfield of reputed make.
 - vii. Eye Wash Station: International standards, to be immediately provided, at all chemical mixing stations, on mud tank, on rig floor.
 - viii. Electrical system should have suitable ELR (Earth Leakage relay)
 - ix. Neutral Ground Resistance (NGR) should be installed and made in functional condition as per CEAR-2010
 - x. First aid box with stretcher facilities as per OISD standards with one trained person in giving First Aid to the injured person. Training Competency Certificate must be provided along with the bid.
 - xi. Safety kits & liveries (as per standard statutory body) to be provided for operating personnel. Top man safety belt also to be provided.
 - xii. Portable Fire Extinguishers – (Refer Annexure B: OISD – STD -189) should be maintained as per IS 2190:2010 and record shall be made available at site.
 - xiii. All the rotating parts must have proper safety Guards.
 - xiv. Copy of valid HSE training certificates shall be made available at site.
Valid third party certificates of crane, lifting tools tackles, slings, pressure vessel, PRV etc. shall be available at site at all times.
- **Safety Equipment:** Necessary and adequate fire-fighting and safety equipments (as per Mines Act, 1952 & 100 of OMR-2017 / 6.1 & Annexure-III of OISD-STD-189 wherever applicable) to comply with requirements of DGMS & OISD for land drilling rigs and shall include a minimum of the following:

Type of Area	Portable extinguisher
Derrick Floor	2 nos. 10 Kg. DCP Extinguisher
Main Engine area	1 no. 10 Kg. DCP Extinguisher for each Engine
Electric motor / Pump For water circulation For mud preparation	1 no. 10 Kg. DCP Extinguisher
Mud gunning pump Area	1 no. 10 Kg. DCP Extinguisher for each Mud gunning pumps.
Electric Control Room (PCR).	• 21 nos. 6.8 Kg CO2 Extinguisher for each Unit. • 1 no. 10 Kg. DCP Extinguisher for each unit
Mud mixing tank Area/chemical lab	1 no. 10 Kg. DCP Extinguisher
Diesel storage area	• 1 no. 50 ltrs Mechanical Foam extinguisher • 1 /2 nos. 50/ 25 Kg. trolley mounted DCP Extinguisher • 2 nos. 10 Kg. DCP Extinguisher • 1/2 nos. sand bucket or 1/2 sand drum with Spade
Lube storage area	1 no. 10 Kg. DCP Extinguisher 1/2 sand drum with scoop no. sand bucket stand
Air compressor area	1 no. 10 Kg. DCP Extinguisher per compressor
Fire pump area	1 no. 10 Kg. DCP Extinguisher
Near DIC office	1 no. Fire Extinguisher Shed with 3 nos 10 Kg. DCP Extinguisher and 3 nos. 6.8 kg CO2 extinguisher and 2 nos. sand bucket.
Fire Bell near bunk House	1 no.
Diesel Generator House	2 nos. 10 kg DCP and 1 no. 6.8 kg CO2 extinguishers and 1/2 sand drum with scoop

- Bidder shall provide the following fire-fighting equipment/items as required for oil/gas well drilling as per the provisions of OISD- STD- 189 & Mines Act of India.
- i) One no. trailer/ skid mounted diesel engine driven fire water pump of capacity 1800 lit/min at 7 kg/cm² pressure.
- ii) One (1) no. 53 M3 capacity (minimum) water storage tank with connection provision to fire trailer pump.
- iii) Fire water distribution line with minimum two (2) nos. hydrants & one no. monitor with all accessories (suction hose, delivery hose, nozzles, tools etc.) for any fire emergencies shall be installed at well-site as per OISD-189
 - Fixed fire-fighting system as per OISD Standard 189
- **Derrickman's safety equipment:** As follows:
 - **Derrickman's escape device** complete with inertia brake, wireline, anchor, clamps and of chair type suitable for use for two persons one by one (DGMS Approved) – 1 set
 - **Derrickman's safety belt** – 2 sets
 - Fall prevention device counter weight type for climbing assistance for 2 persons.
 - **Fall Protection Device:** An anti-fall coupled with safety harness/ belt shall be provided for personnel working on mast while exposed to a fall of 3 meters or greater or climbing unprotected vertical ladder with same exposure.
- **Portable Gas Detectors:** 2 Nos. calibrated portable gas detector capable of determining/ monitoring level of combustible gases in air should be made available at site by the Contractor.

- **Noise Level Meter:** One portable noise level meter for measuring noise pollution at drill site shall be made available by the Bidder at site.
- **Eye Wash stations:** Two eye wash stations must be kept one at rig floor and one at mud testing cabin on mud tank.
- **Following Firefighting accessory shall be readily available at site:**
 - I. Additional Fire Hose – 2 Nos.
 - II. Multipurpose Nozzle – 2 Nos.
 - III. For Foam System
 1. Inline Foam educator – 2 Nos.
 2. Foam Branch Pipe – 2 Nos.
 3. Foam Compound – Minimum 200 liters.
 - IV. Weather-proof facility for storing above items
 - V. Fire Bell of non-sparking material

9.1.2. RIG PERSONNEL AND THEIR QUALIFICATIONS

Contractor shall, as and when required by Company furnish the following personnel on a twenty-four hour (24) notice by Company for handling jobs at work-site as included in this Contract and quoted for by contractor in the Bid.

1. RIG CREW:

The following is the minimum category and number of Personnel required to be provided by the Contractor for the rig for two shift operation of 12 hours each. The Contractor may have more personnel, if considered necessary.

Bidder to submit the CV of the rig crew or to submit an undertaking that the complete rig crew as required in Exhibit C shall have qualifications and experience as mentioned in the tender document.

Sr. No.	Personnel	Nos.
1.	Drilling Superintendent	1 (For 24 hrs operation & Co-ordination)
2.	Tool Pusher	1(For 12 hrs day operation)
3.	Tour Pusher	1(For 12 hrs night operations)
4.	Chief Mechanic	1(For 12 hrs day operation)
5.	Mechanic	2 (1 for day and 1 for night operations)
6.	Chief Electrician	1 (For 12 hrs day operation)
7.	Electrician	2 (1 for day and 1 for night operations)
8.	Driller	2 (1 for day and 1 for night operations)
9.	Asst. Driller	2 (1 for day and 1 for night operations)
10.	Derrick man	4 (2 for day and 2 for night operations)
11.	Rig man / Floor man	6 (3 for day and 3 for night operations)
12.	Crane / Forklift Operator	2 (1 for day and 1 for night operations)
13.	Roustabout	6 (3 for day and 3 for night operations)
14.	Welder	1 or more as per Contractor's requirement (for 24 hrs operations)
15.	HSE Officer	2 (1 for day and 1 for night)

Sr. No.	Personnel	Nos.
		operations)
16.	Medic	1 (1 for 24 hrs operations)
17.	Drilling Engineer	1 (1 for daily operations)
18.	Unskilled Labors	4 (2 for day and 2 for night operations)

1.1. THE EXPERIENCE OF KEY PERSONNEL:

1. **DRILLING SUPERINTENDENT:** Drilling Superintendent/Project Co-ordinator is the first person responsible for all operational activities. Drilling Superintendent will interact with Tool Pusher, Company Man/ Rig Manager, Company Drilling Engineer and Company Drilling Manager for coordinating activities including material, logistics and manpower for the rig and will be stationed at the Drill site and manage drill site activities from Contractor's side. Should be engineering degree/diploma holder of sound health and have minimum work experience in drilling / work-over operation in oil / gas wells for about Twenty (20) years out of which at least three (3) years should be in respective position. The person should be well conversant with well control methods to take independent decisions and logistics support in case of well emergencies.
2. **Drilling Engineer:** Drilling Engineer with 12-15 years of drilling engineering experience shall be based at the drill site. He shall be responsible for all the Engineering calculations, Daily reporting, Casing & Drill Pipe tally and Well head & BOP testing, Well control calculations Trip sheet maintenance, update of Kill sheet with record of SRP etc for smooth drilling of well.
3. **TOOL PUSHER:** Should be of sound health and have minimum 18 yrs of work experience in drilling oil/gas wells –
 - i. Should be well conversant with working in the type of Rig offered.
 - ii. Must possess valid well control certificate (IWCF) and should be conversant with well control methods to take independent decisions in case of well emergencies.
 - iii. Should have Diploma in Engineering or B.Sc. or equivalent qualification.
 - iv. Should have minimum eighteen (18) years' experience in drilling & work-over operations out of which at least three (3) years as Tool Pusher in exploratory / development wells.
4. **TOOL PUSHER/NIGHT TOOL PUSHER:** Should be of sound health and have minimum 15 yrs of work experience in drilling oil/gas wells-
 - Should be conversant with working in the type of the Rig offered.
 - Must possess valid well control certificate (IWCF) and should be conversant with well control methods to take independent decisions in case of well emergencies.
 - Should have Diploma in Engineering or B.Sc. or equivalent qualification.
 - Should have minimum fifteen (15) years' experience in drilling & work-over operations out of which at least three (3) years as Tour Pusher of exploratory / development wells.
5. **DRILLER:** Should be of sound health and have work experience for a minimum period of twelve (12) years in drilling oil/gas wells.
 - Should be conversant with working in the type of the Rig offered.
 - Must possess valid well control certificate (IWCF) and should be conversant with well control methods to take independent decisions in case of well emergencies.
 - Should have SSC/HS/PU/Class-XII Standard or equivalent qualification.
 - Should have minimum twelve (12) years' experience in drilling operation out of which at least three (3) years as Shift in-charge/ Driller.
6. **ASSISTANT DRILLER:** Should be of sound health and have minimum 10 yrs of work experience

in drilling oil/gas wells-

- Should be conversant with working in the type of the Rig offered.
- Must possess valid well control certificate (IWCF)/IADC and should be conversant with well control methods to take independent decisions in case of well emergencies.
- Should have minimum of ten 10 years' experience in drilling & work-over operations out of which at least two (2) years at Asst. Driller. position in drilling & work-over oil/ gas wells
- Should have SSC/HS/PU/Class-XII Standard or equivalent qualification.

7. DERRICK MAN/TOPMAN: Should have minimum seven (7) years work experience as Derrick man/ Top man in a drilling rig out of which at least three (2) years as Derrick man. position on a drilling rig. Should be minimum 8th Standard (Class-VIII) passed. He must possess a valid IADC rig pass course.

8. FLOOR-MAN: Should have minimum four (4) years work experience and sufficient knowledge/ experience in working on derrick floor in a drilling/work over rig in respective position. Should be minimum 8th Standard (Class-VIII) passed.

9. ROUSTABOUT: Should have at least more than One year work experience and sufficient knowledge/ experience in working on a drilling/work over rig in respective position. Should be minimum 8th Standard (Class-VIII) passed.

10. CHIEF MECHANIC:

Should have a degree or diploma in Mechanical Engineering having overall 10 yrs experience on the rig with minimum three (3) years in the offered position in the type of the Rig offered. Should be able to work on computer and prepare daily rig maintenance reports, inventory management and have sufficient knowledge of operation and maintenance/servicing of the type of the Rig offered and its components viz. engines, slush/mud pumps, supercharger pumps, other centrifugal pumps, solids control equipment, degasser and all other mechanical items/engines operating in the Rig offered.

11. MECHANIC:

- Should have an overall six (6) years work experience with minimum three years in current position on the type of the Rig offered.
- Should have sufficient knowledge of operation and maintenance/servicing of the type of the Rig offered and its components viz. engines, slush/mud pumps, supercharger pumps, other centrifugal pumps, solids control equipment, degasser and all other mechanical items/engines operating in the Rig offered.
- Should have diploma in mechanical engineering or B.Sc. or equivalent qualification with minimum three (3) years' experience or SSC/HS/PU/I. Sc or equivalent qualification with 6 years' experience out of which at least three (3) year as Mechanic in Drilling Rig offered.

12. CHIEF ELECTRICIAN:

Should have a Diploma or Degree in Electrical Engineering with overall ten (10) years' work experience with minimum three years in current position on the type of the Rig offered. He should be confident in carrying out independently the fault-finding analysis, rectification of fault, operation and maintenance of all the electrical items of the offered Rig including the air conditioners. He must possess valid Electrical Supervisor's Certificate of Competency issued by State Licensing Board and should be conversant with Oil Mines Regulations and Electricity rules.

The Electrical Engineer must be conversant with the existing power and control system of drilling rigs offered.

13. ELECTRICIAN:

Must be diploma holder in electrical engineering with overall six (6) years' experience with

minimum three (3) years in the current position on the type of the Rig offered.

Should be conversant with the operation and maintenance of the type of the Rig offered independently in shifts. He should be able to read circuits, communicate, detect and rectify faults. He must possess valid Electrical Workman Permit (Part I & II) Certificate issued by State Licensing Board.

- 14. HSE OFFICER:** Should be Graduate with a minimum of five (5) years' experience in relevant field of operation.

Job Description of HSE Officer -

Duties & responsibilities include safety during drilling site preparation, rig up, rig down & rig move, raising & lowering mast & rig floor, operations like making & lowering of BHA, cementing job, tripping in /tripping out tubular, safety meeting during crew change, pre-job safety meetings, routine inspection of rig and equipment, Nearmiss reporting and record, & Risk Register, preparation of Job Safety Analysis, hot & cold work permit, investigation & analysis of accidents & near miss incidents. To take all necessary actions to comply with all DGMS, OISD & MoEFCC & GPCB guidelines and submit return/report at specified intervals.

- i. Should be responsible for designating 'Safe Briefing Area' and informing all personnel/crew of the same.
- ii. Responsible for issuing safety equipment to all personnel arriving at Rig and ascertain that all personnel use and maintain these equipment properly.
- iii. Responsible for designating Entrance and Exit of the location.
- iv. Responsible for keeping/ maintaining/ updating statutory records as per applicable OMR, OISD, DGMS, GPCB regulations and should be made ready prior to any audit/insepection.

Experience of HSE Officer -

Experience in E&P Company of a minimum of five (5) years as HSE officer. Experience includes implementation of HSE policies, work site inspection & hazard identification, training of employees, job risk assessments, permit to work systems, pre job safety meeting, accident & near miss incident investigation & analysis, report making & record keeping, selection of PPE suitable for work activity & work environment, well site inspections & audits, emergency response planning, taking precaution for pollution control and environmental management. Should have sufficient knowledge on ISO.

- 15. WELDER:** Should have minimum three (3) years working experience on a drilling rig and must be conversant with high pressure welding of casing, well head and accessories, carbide tips dressing / welding etc. He must possess the certificate of welding trade from any recognized institute of State Govt. (One year course).

- 16. HEAVY DUTY CRANE/Forklift OPERATOR:** Should be provided along with the crane/forklift. The operator should have a minimum of three (3) years work experience in operating a heavy crane attached to Drilling Rigs and possess appropriate license for Crane Operations.

17. UN-SKILLED LABOUR:

Rig contractor has to deploy un-skilled labours to Support rig operations. Labours to carry out the following activities but not limited to:

- Providing assistance during rig operations. Cleaning of wellsite channels
- material/equipment/tools handling and its management as directed by GEL representative.
- Perform loading / Un-loading of various materials, equipment, tools, cement, chemicals & other tangible etc pertaining to operations at well site.

- 18.** If the need arises and the Tool pusher / Driller faces any difficulty during the use of Contractor supplied fishing tools, then the Contractor shall arrange a fishing expert to operate such fishing

tools provided by the contractor at no extra cost to the company since the fishing tools rentals is covered in the firm/operating day rate of the rig.

Note:

1. All records of HSE, OISD, DGMS, Environmental and Oil Mines Regulation are to be maintained by the Contractor.
2. All type of BOP / Fire & Safety drills to be carried out as per HSE, OISD, DGMS & other guidelines.
3. All statutory forms and record as per DGMS/OMR/labour laws to be maintained at rig site.
4. Prior to crew deployment upon issuance of mobilization notice, the contractor has to submit the CV of rig crew and other associated service personnel and shall furnish the DGMS forms Form A, Form B & Form O along with IWCF/IADC Wellsharp, First Aid and Mines vocational training details for rig crew and other associated service personnel as applicable.
5. Bidder shall be solely responsible through the period of this contract for providing all requirements to his personnel including but not limited to accommodation, transportation, boarding, medical attention, vacation and time of allowances, travel, safety kits and liveries and any other benefit due to such employees by law or otherwise. GEL shall have no responsibility or liability in this regard.
6. The Bidder shall maintain the Company's well site/premises neat and clean and in good condition, carry out chemicals mixing, Company's and Bidder's material loading and unloading, cleaning & maintenance of Bidder's / Company's tools and equipments with the help of Roustabouts and unskilled labors included in the Personnel List on daily basis. However, company may help the Bidder with additional labor for the cleaning and maintenance of Company's tools and equipments if available.
7. All rig staffs shall preferably be certified in fire-fighting, lifesaving, first aid and mines vocational training procedures. Mines vocational training from DGMS approved / authorized institutes are only acceptable.

9.2. DRILLING FLUIDS SERVICES ALONG WITH SUPPLY OF CHEMICALS

The Contractor shall be responsible for mobilization and operational effectiveness of their chemicals, materials, equipment's and manpower as follows:

- a. To provide Mud Engineering Services.
- b. Necessary supply of all chemicals to GEL designated well locations as per the requirement of the well.
- c. To supply manpower for mixing of mud and for handling of mud chemicals (including Mud Labour).
- d. Equipment's (Mud Lab, Bunk house and test equipment's / accessories).

GEL will accept the chemicals and services with the required standards to fulfil the drilling objectives without any problem and the decision shall be binding on all the Bidders and no explanation shall be provided for rejecting the substandard chemicals/equipment/manpower.

The Contractor shall be required to provide recommendations for the planning, formulation and maintenance of Drilling Fluids for the Company's requirement of Drilling fluids services while drilling oil & gas wells. Work to be performed shall include, but is not limited to:

1. Engineering, design, provision, and maintenance of drilling fluid systems with proper specifications.
2. Provide Mud Engineer with minimum **five (05) year experience** in drilling fluids with relevant experience in high performance water based drilling fluids and handling severe loss situation & other complications.
3. The Contractor is to designate a Senior Technical Representative/ Manager at its head office/base office who can be contacted by the Company for mud related technical issues.



4. Senior Technical Representative/Mud Engineer shall submit the tentative mud program at least 7 days prior to spud the well for approval by Company. The Mud Engineer should be capable of making real time changes as per drilling operational requirement of the Company with prior approval of company appointed drilling fluid consultant.
5. All services shall be undertaken using current industry best practices and in compliance with any specification or recommendations outlined within the Contract.
6. Add sufficient lubricants if torque or drag increases due to swelling or hole tightness.
7. **Bidder to Supply:** The bidder shall provide all mud chemicals, materials, Mud Engineers, Mud labours, Mud lab with lab equipment's/ reagents and services specified herein. The Contractor shall be solely responsible for operation of the Contractor's equipment's, effectiveness of services and mud chemicals.

Preferred Mud Specifications As Per Tentative Well Design

The drilling fluids program should be designed for compliance with all the applicable regulations for operating in the state of Gujarat, India and must fulfil all the objectives of drilling fluids including the following:

- To effectively clean the well, remove the cuttings and carry them to the surface;
- To cool and lubricate the drill bit, string, and other accessories;
- To continuously build a wall cake and prevent excessive loss of fluid;
- To maintain effective shale inhibition and hole stability;
- Prevent rock dispersion;
- Prevent intrusion of fluid from formation during drilling;
- Prevent well collapse during drilling and tripping;
- To hold cutting in suspension when circulation is stopped;
- Avoid damage to the production zone;
- Not too expensive and easy to use;
- To act as a medium for electrical well logging;
- To prevent damage to the formation in the event of mud filtrate invasion;
- To maintain balance when drilling through hydrocarbon bearing reservoir;
- To deliver gauge hole and good hole condition;
- To eliminate bit balling and optimize ROP;
- Environment friendly. All formulations must contain environment friendly chemicals as far as possible and comply with all applicable regulations of Gujarat State Pollution Control Board (GPCB) and Central Pollution Control Board (CPCB).

The Bidder is to provide their specific description of the drilling fluids proposal that conforms to the generic properties. The formulation shall be supported by a laboratory report showing the recipe, rheological properties and other performance factors.

- The Bidder should ensure and certify that test results as shown in the reports are achievable/maintained during drilling operations. The mud proposal for each well should be based on tentative casing design of the Company.
- The drilling fluids proposal shall contain the suggested methods by Bidder for mitigating the problems of mud losses, stuck pipes, bit balling etc.
- The bidder has to ensure that nearly the same mud parameters are achieved/maintained with nearly the same recipe during the actual operations as quoted in the bid if the well conditions/parameters are within the specified limits in the tender document.
- It has been observed that normally heavy lumps of clay are encountered in top hole section drilling that results in often choking of return flow line and mud overflow due to both choking and increased thixotropy of mud. Therefore, bidder has to plan accordingly and may consider addition of some thinner for reducing the thixotropy of mud if need arises.

DRILLING FLUID PERSONNEL

The Bidder is to provide the detailed Mud program including base support for Mud Engineering, Simulation run and Design through experienced and technically skilled personnel in Drilling Fluids Engineering during planning as well as Company's operations at the well site.

Mud Engineers: The Bidder shall provide 02(Two) Mud Engineers with at least 5 years relevant experience in drilling fluid. The Mud Engineers shall be capable in preparing and maintaining the drilling fluid in the proposed mud system. The Mud engineers shall be responsible for all aspects of mud engineering including the following:

- prepare mud as per drilling and mud program;
- Run, Maintain and Manage the mud system;
- Prepare daily mud report and submit to the Company appointed Drilling fluid Representative on the Drilling Unit;
- maintain a stock of inventory on the Drilling Unit and ensure that adequate stock is available on the Drilling Unit to maintain and run the mud system;
- ensure that adequate spares for all the equipment and tools are available on the Drilling Unit to carry out any repairs without downtime;
- Responsible for conducting all mud tests in the drill site mud laboratory;
- Supervise the working of mud labours;
- Daily proper monitoring of the volume of mud along with associated losses. The opening and closing mud volumes for the day shall be maintained as per the mud logger's sensors record. In case of any discrepancy the mud logger's records shall be taken as final.
- Interact with geologists and drilling engineers to be well informed of any downhole / formation related issues;
- Logistics management of equipment, materials and personnel related to the work, transport and inspection if required;
- Shall be available for consultation at all times during the Contract period;
- Shall advice to the shift in-charge/tool pusher on operation/ running of solids control equipments at the rig;
- Shall be responsible for maintenance of mud properties and chemicals at the rig site as per the plan;
- Shall have relevant experience in handling mud loss, stuck up, bit balling situation etc.

The Mud Engineers will work in 12 hrs shift Day-Night pattern to cover one full day-night (24 hrs) operation. The Contractor shall provide adequate Mud Labours to work in each 12 hrs shift for all loading, unloading and mud mixing works at drill-site as per the contractor's need and requirement for uninterrupted operations.

Replacement of Bidder's Personnel

Bidder shall remove and replace within 48 hrs at Bidder's expense any of the Mud engineers if Company so requests in writing setting out grounds for its requirement. As per this sub article, the Contractor's obligations or liabilities under the statement of work shall not be construed as limited for any loss or problem created to the Company.

REPORTING

General:

Bidder shall comply with the following reporting requirements as a minimum. Contractor shall also provide additional reports to the Company Representative as may reasonably be requested during the Work / operation.

Daily Mud report:

Daily mud report of an acceptable standard (as per API RP 13B-1) shall be submitted on a daily basis to the Company Representative at the drill site.

Bidder's qualified Mud Engineer will carry out minimum two (2) mud checks (one in each 12 hours shift). There may be additional mud checks as required by Company prior to critical operations. At any time, the Company Representatives may ask Contractors Mud Engineer on the rig to conduct a mud check.

Pilot testing of chemicals like KCL, API fluid loss control and other chemical required for maintaining good rheological parameters will be performed as required.

The daily mud report must contain following information but not limited to:

- a. Well Details [well related information (well name, Rig name, current hole section, previous casings with details etc)],
- b. all the mud rheological properties as per mud checks carried out,
- c. Mud Treatments carried out and mud dilution with water;
- d. Solid control equipments operational details;
- e. daily inventory and consumption of chemicals at drill site;
- f. daily mud volume at drill-site including mud in hole supported by mud loggers mud volume data;
- g. Detailed volume analysis and balance;
- h. Daily and cumulative surface and downhole mud losses incurred
- i. Daily Hydraulics details.

The pH will be measured by an approved full range solid state pH meter Solids control equipment's performance will be documented as part of the daily mud check.

All test apparatus (hardware and chemicals) should have an annual calibration certificate issued by a NABL certified laboratory. V-G meters, Marsh Funnel & Mud-Balance will be tested for calibration using standard calibration fluid at least once a month at the drill site. A record of these test calibrations will be maintained and available with the test apparatus. Records will be maintained at the site office/main office of the Bidder.

Mud Engineer will analyze the solids control equipments performance on a regular basis depending on the operational requirement and monitor to optimize all solids-control equipment operating efficiencies. Tool Pusher of the Drill Unit shall ensure that all necessary and appropriate spares and consumables as required by the mud engineer are available at the Drill site to fulfil the drilling objectives.

The suspended solids in the mud are required to be minimized by the proper functioning of the solids control equipment so as to keep the rheological parameters of the mud under control.

Note: The total mud volume in hole and at surface and any losses reported in DMR should be in line with the mud logging unit's sensors records.

Materials Inventory: Maintenance of an up to date inventory of all chemicals held at the drill site. A weekly report shall be submitted to the Company Representative based at drill-site.

Drilling Fluid Engineer will discuss with the Company Representative about the chemical requirements. Company will be notified before any specialty product is mixed to the mud system. Company will make the final decision on any additive. At least once per week a complete physical count of all mud materials at drill-site shall be performed and the



inventory reconciled against the physical count. The material inventory should be maintained in sufficient quantity to avoid any operational delay in Company's operations.

TECHNICAL SPECIFICATIONS

1. The Bidder shall provide a standard small laboratory unit equipped with an air - conditioner, working tables, wash basin and with electrical panels / fittings etc.
2. The Contractor shall provide all lab chemicals, reagents, accessories, spares and consumables for testing of WBM as per API standards and as per industry practices.

SUPPLY OF MUD CHEMICALS AND INVENTORY MAINTENANCE

1. The Bidder shall provide all mud chemicals/ materials specified. The Contractor shall be solely responsible for the effectiveness of Contractor's Mud Chemicals.
2. The mud chemicals should conform to ONGC specifications/standards.
3. Quality packaging of chemicals should be according to the relevant API standards
4. The Contractor/Bidder shall ensure adequate quantity of all chemicals and materials are available during the duration of the contract along with sufficient stock.

1. **Contingent/Specialty Chemicals:** The Contractor should keep a fair stock of Contingent/Specialty Chemicals to face any contingency that may arise during well operation. Such contingencies are high mud gelation due to clay & mud overflow during top hole section drilling,
2. The Contractor shall ensure to keep enough stock of Contingency Chemicals such as LCM materials, lubricants, and stuck-up release chemicals

GENERIC NAME OF CONTINGENCY CHEMICALS

1. LCM Materials for Mud loss
 2. CaCO₃ Coarse for mud loss
 3. MICA for mud loss
 4. Spotting fluid (Non Weighted) for stuck up release 55 Gal /Drum
 5. Defoamer 55 Gal /Drum
 6. LUBE Lubricant 55 Gal /Drum
3. The bidder to provide a separate list of LCM materials that may be used in case of mud loss. LCM materials charges shall be payable as per actual usage if required.
 4. The specification and MSDS sheets of all chemicals shall be submitted by the bidder along with Technical Bid.
 5. The Contractor shall place orders for materials well in advance for mobilizing the additional required chemicals to avoid under stocking / no stocking situation at any point of time.
 6. The Contractor will be required to maintain adequate stock of mud chemicals in their own Project Warehouse. All imported or long lead-time on critical chemicals shall be stocked in sufficient quantities to cater uninterrupted drilling program. Locally available items with less lead-time can have less minimum quantities. The Contractor shall be responsible to maintain sufficient stocks.
 7. The purity of KCl should be minimum 94% as per test report.
 8. The Bidder shall ensure to keep at least 50 MT of Barite stock at the drill site for safety reasons.

INSPECTION & QUALITY ASSURANCE OF PRODUCTS

1. Company may inspect Contractor's equipment's, chemicals and materials to be supplied by the Contractor using a third party inspection company (TPI) or may be by Company's own Representative. The Contractor shall acknowledge and agree that the Company may carry out random testing of any or all chemicals/ materials by the Company Representative or by an independent third party (TPI) at contractor's cost.



2. All products shall meet ONGC specifications for quality assurance. To ensure ONGC standards for the chemicals supplied, Company may decide to have such chemical tested through any NABL certified independent lab /ONGC RGL at Vadodara on contractor's expenses.
3. The Contractor shall provide to Company with the technical bid "Specifications" and "MSDS" sheets of all the chemicals.
4. The bags / drums shall be labelled clearly with batch no., packaging date, expiry date etc. GEL will not pay the Contractor for any damaged bags / drums / containers delivered at GEL's drill site in loose packed condition.
5. All chemicals supplied should have specifications and supporting MSDS sheets delivered with them.

STORAGE AND LOGISTICS

1. The Contractor shall mobilize all its equipment's, chemicals and other materials to the Company's drill-site at its own cost.
2. The Contractor is to keep strong and enough tarpaulin to cover their chemicals and protect them from rains, sunlight and weather conditions.

TECHNICAL SUPPORT

The following schedule provides an indication of technical support:

1. The Contractor is to provide technical support as and when required by the Company or by the Contractor's own Mud Engineer working at the wellsite for Company.
2. Availability of the Contractor's base laboratory in India.
3. Provide testing report of the chemicals in use for this project and issue reports thereof.

Mud Engineering Related Software: The Bidder should have necessary software for running mud hydraulics, hole cleaning and shall provide the results to GEL as and when asked for.

EQUIPMENTS (Mud Lab, Bunk House & Test Equipments / Accessories/Reagents)

1. The Bidder shall provide a standard small laboratory unit equipped with an air - conditioner, working tables, wash basin and with electrical panels / fittings etc.
2. The Contractor shall maintain all necessary drilling fluids testing equipments as listed in table below but not limited to at the rig site to run all the necessary tests for Water Based Mud Systems.
3. The Contractor shall provide all lab chemicals, reagents, accessories, spares and consumables for testing of WBM as per API standards and as per industry practices.
4. Electricity and water connection to the laboratory and Bunk House to be arranged by the Contractor at the wellsite.

EQUIPMENT REQUIRED IN MUD LAB:

Equipment Required (Description)	Quantity
Fann VG Meter 6 speed	1
API Filter Press	1
Marsh Funnel with cup	2
API Mud Balance	2
API Sand Content Apparatus	2
Hamilton Beach Mixer	1
Oil Water Retort Kit	1
pH Meter	1
Methylene blue Test Kit	1

Thermometer	2
Hot Plate	1
HTHP Filter Press	1
Magnetic Stirrer	1
Reagent and Glassware (as required all)	
Lab Reagents	
Calcium Buffer soln.	1
Hydrogen Peroxide 3% -FANN	1
Methylene Blue Solution	1
Methyl Orange Indicator soln.	1
Phenolphthalein	1
Potassium Chromate indicator soln.	1
Sodium Perchlorate Soln.	1
Sulphuric Acid 0.1N	1
Silver Nitrate 0.282N	1
Total Hardness Titrating Soln.	1
Hardness Titrant 0.01M EDTA	1
Hardness Buffer Solution	1
Hardness Titrant 0.01M EDTA	1
Stannic chloride solution	1
Polyamine test kit	1
PHPA Testing reagents	All

SUPPLY OF MUD CHEMICALS AND INVENTORY MAINTENANCE

1. The Bidder shall provide all mud chemicals/ materials specified. The Contractor shall be solely responsible for the effectiveness of Contractor's Mud Chemicals.
2. The mud chemicals should conform to ONGC specifications/standards.
3. Quality packaging of chemicals should be according to the relevant API and OCMA specifications. The Bidder should provide a list of complying standards.
4. The Contractor/Bidder shall ensure adequate quantity of all chemicals and materials are available during the duration of the contract along with one well back up.
5. **Contingent/Specialty Chemicals:** The Contractor should keep a fair stock of Contingent/Specialty Chemicals to face any contingency that may arise during well operation. Such contingencies are high mud gelation due to clay & mud overflow during top hole section drilling.
6. The Contractor shall ensure to keep enough stock of Contingency Chemicals such as LCM materials, lubricants, Drilling Detergent and stuck-up release chemicals.
7. It is the entire responsibility of the Contractor to keep adequate stocks including back up of one well at drill site of all chemicals and additives to manage the operation even in remote location as per the drilling program.
8. The bidder to provide a separate list of LCM materials that may be used in case of mud loss. LCM materials charges shall be payable as per actual usage if required.
9. The specification and MSDS sheets of all chemicals shall be submitted by the bidder along with Technical Bid.
10. **Minimum Requirements:** The Contractor shall provide all drilling fluid chemicals necessary to carry out the jobs specified in the Scope of Work and well program. Inventory management is the sole responsibility of Contractor.
11. The Contractor shall place orders for materials well in advance for mobilizing the additional required chemicals to avoid under stocking / no stocking situation at any point of time.
12. The Contractor will be required to maintain adequate stock of mud chemicals in their own Project Warehouse. All imported or long lead-time on critical chemicals shall be stocked



- in sufficient quantities to cater uninterrupted drilling program. Locally available items with less lead-time can have less minimum quantities. The Contractor shall be responsible to maintain sufficient stocks.
13. The purity of KCl should be minimum 94% as per test report.
 14. The Bidder shall ensure to keep at least 50 MT of Barite stock at the drill site all the time for safety reasons.
 15. It is the Contractor's responsibility to confer with the Mud Engineer on the Drilling unit to ensure that adequate stocks are maintained on the Rig. The stock levels shall be reported and duly approved by GEL.
 16. Any customs clearance works related to any imported mud chemical shall be Contractor's responsibility. However, all documentation support shall be provided by GEL for exemption of any custom duty.

INSPECTION & QUALITY ASSURANCE OF PRODUCTS

1. Company may inspect Contractor's equipments, chemicals and materials to be supplied by the Contractor using a third party inspection company (TPI) or may be by Company's own Representative. The Contractor shall acknowledge and agree that the Company may carry out random testing of any or all chemicals/ materials by the Company Representative or by an independent third party (TPI).
2. All products shall meet ONGC specifications for quality assurance. If Company desires, Contractor shall get the product tested to assure it meets ONGC standards. Any such testing will be done at NABL accredited independent lab or ONGC RGL Vadodara at Contractor's cost.
3. The Contractor shall provide to Company with the technical bid "**Specifications**" and "**MSDS**" sheets of all the chemicals.
4. Products are to be packaged in accordance with international standards, e.g., API or OCMA. The Contractor may choose the standard, however the authority chosen shall be approved by GEL. The goods must be able to withstand damage by handling numerous times.
5. The bags / drums shall be labelled clearly with batch no., packaging date, expiry date etc. GEL will not pay the Contractor for any damaged bags / drums / containers with chemicals in them and delivered at GEL's drill site.
6. All chemicals supplied should have specifications and supporting MSDS sheets delivered with them.
7. All lifting and load bearing equipment of the Contractor shall be certified prior to use and all relevant certification shall be available for inspection.
8. If the Operator Company desires, the entire WBM formulations/ tests reports or part thereof, as submitted by the Bidder, may be checked by the Company in a Third Party Lab or at the laboratory of the Bidder. The Contractor has to bear such test expenses.

STORAGE AND LOGISTICS

1. The Contractor shall mobilize all its equipments, chemicals and other materials to the Company's drill-site at its own cost.
2. A reasonable space for storing chemicals shall be provided by GEL at the drill site. It's contractor's responsibility to prepare a proper chemical platform with necessary shed as per their requirement.
3. The Contractor is to keep strong and enough tarpaulin to cover their chemicals and protect them from rains, sunlight and weather conditions.
4. The Contractor should acknowledge and share with GEL that they have a main covered storage space (Project Warehouse) for its chemicals in the vicinity of the GEL operational areas, from where the chemicals will be transported to GEL drill sites.

TECHNICAL SUPPORT

The following schedule provides an indication of technical support:

1. The Contractor is to provide technical support as and when required by the Company or by the Contractor's own Mud Engineer working at the field for Company.
2. Availability of the Contractor's base laboratory in India.
3. Provide testing report of the chemicals in use for this project and issue reports thereof.
4. Pilot tests and fully test mud properties based on suggestions from GEL and the Contractor's Mud Engineer.

9.3. Cementing Services along with supply of cement & additives

9.3.1 GENERAL

The Scope of work shall include but is not limited to:

- 1.1. A trailer/Skid mounted cementing unit with twin triplex pump & auxiliary cementing equipment for cementing operations to support drilling activities.
- 1.2. Bidder shall provide under this CONTRACT, the cementing services in exploratory & development wells including vertical and deviated, by providing Engineers, Operators, technology, cement, cement additives & slurry design as per the scope of work.
- 1.3. The bidder has to perform all cementing operations including cementing engineering and design, cementing program, cement plugs and squeeze job, stage cementation job, for well control related issues (only for killing the well and not for Blow Out Control) and for any other related jobs as required. Notwithstanding anything contained hereinabove, all the jobs will have a Hazard Assessment Carried out as per GEL or Bidder's Risk Assessment Standards as applicable. The risk will be mutually addressed & reduced to acceptable levels by Company & Bidder prior to proceeding with the job.
- 1.4. The bidder shall perform pressure testing of lines, BOP, well head, tubing & casings and other pressure testing requirements as and when required. The bidder shall also perform other pumping operations including but not limited to well testing, completion and injectivity tests. The major activities to be carried out by cementing unit are:
 - Pressure testing of surface lines prior to carrying out activity as per the Scope of work.
 - Pumping of Pre flush/water/Spacer as a part of operational requirement.
 - Pumping of Cement slurry.
 - Pumping of water/mud to carry out BOP Test, wellhead/X-mas tree test, Injectivity test;
 - Pumping to carry out pressure testing of casing.
 - Other activities mentioned herewith in scope.
- 1.5. The cutting of cement sacs and filling into vertical silos / mobile silos at well site or any other GEL designated base in vicinity of well site with the help of required crew and equipment mentioned in equipment list shall be carried out by Bidder itself.
- 1.6. The bidder shall also be responsible to perform field specific analysis, carryout post job analysis of all critical cementation jobs in their simulator to develop better engineered cementing program and to suggest ways and means to improve further on quality of jobs.
- 1.7. The Bidder shall ensure the availability of the equipment, cement & additives, and technical water at drill site for the cementation jobs at the planning stage. The Bidder shall co- ordinate and ensure availability of technical water, cement & additives for all jobs prior to commencement including the contingency requirement. Unutilized additives shall be taken back by the bidder at no cost to Company. The Bidder shall collect any cement, chemicals and technical water samples from the well site and shall get it tested in their own labs to confirm the designed slurry parameters and prepare and pump the slurry in the well in line with the quoted concentration of cement additives in the bid.
- 1.8. The Bidder shall be responsible to design & plan the cement job/plug job and design the cement slurry as per the well requirement based on the data provided by GEL, with their own cement and additives and technical /mix water and to execute the job as per their own plan approved by GEL with an objective to have best engineered and designed



- cementation jobs to obtain optimum quality of CBL or plug integrity (in case of plug job) and thereby to reduce the requirement of secondary repair jobs [bond improvement]. Bidder is required to propose their slurry design keeping above in consideration. Bidder has to supply cement & additives under this CONTRACT directly.
- 1.9. Bidder has to check the technical water salinity for slurry design of the nearby area. Bidder shall use same type of slurry/spacer in the well for cement jobs as quoted depending on the well condition.
 - 1.10. Bidder bidding for Drilling Operations should have experience of cementation in loss zone with light wt slurry.
 - 1.11. The Cementing Operators deployed by the Bidder shall be responsible for operation and maintenance of Cementing Unit, Batch Mixer and their other equipment including but not limited to the rigging up, testing, running and rigging down thereof and executing the cementation operation as per the plan. All spares & equipment required for making the unit fully operational at any time lies with the bidder. The operator shall be responsible for control of slurry density during pumping.
 - 1.12. In case of job failure due to the equipment failure or gross negligence in slurry design / operations, then all cost related to the Job and Repair of the faulty job and equipment damaged shall be borne by the Bidder.
 - 1.13. The bidder shall be responsible for dismantling and packing equipment, materials etc. while moving to the next location. The bidder shall also be responsible for arranging for the transportation, loading and unloading of equipment, material at the next drill site or well location. Bidder is required to keep their loose items in closed container to avoid any misplace at site and during transportation to next well site.
 - 1.14. The Bidder shall maintain the Log of operations to include cementing operation in progress, time break up, density measurement, mixing rate, volume of fluid pumped, pumping pressure during cement pumping & displacement, displacement rate, quantity of cement, additives & mechanical aids used. All specific events occurring throughout the cementation job should be recorded along with other relevant points for post job analysis.
 - 1.15. Bidder shall furnish detailed end of well reports and any additional reports as maybe requested by GEL within 14 days of completion of the well. Bidder shall be responsible for providing a complete well report comprising of slurry design, computer aided program, job execution parameter, complications if any, complete post job analysis & material consumption report so that accordingly necessary corrective measures / improvements / precautions for future operations may be taken up so as to avoid costly secondary repair jobs. Bidder shall also familiarize GEL personal with complete understanding of software program to have meaningful interpretation of data.
 - 1.16. The bidder shall submit a detailed technical specification of all equipment offered under this bid on a rental basis. The bidder must submit valid inspection report of all the equipment as per applicable standards with the bid. The Inspection report shall not be older than 6 months from the bid submission date. In case bidder wishes to carry out inspection post issue of LOA then bidder has to submit an undertaking with the bid stating the acceptance and readiness of the bidder to provide inspection report/certificate prior to first mobilization of equipment. Bidder may suggest requirement of any additional equipment/ tools/ consumables to improve the operational efficiency and job quality in their bid.
 - 1.17. Bidder shall submit detailed technical specifications of each additive including the MSDS sheets and standards with which they comply. The minimum applicable standard is API. Bidder shall provide the details of the commercial names of their chemicals against each of the general requirement. The responsibility for maintaining the inventory of the Consumables/chemicals and for ensuring its availability at all times is the responsibility of the Bidder.
 - 1.18. Bidder shall be responsible for care and life validity of the Consumables. The bidder shall have to submit the operation wise/well wise volumes of slurry/spacer and

- concentration of cement additives used, which shall be signed by the company's drilling In-charge.
- 1.19. The bidder has to submit an undertaking with the technical bid that the consumables/chemicals to be used in the well are within its recommended shelf life.
 - 1.20. Bidder's Equipments / Vehicle to be deployed under this tendered service shall not be older than 20 years. Bidder to submit with technical bid the supporting documents for the same.
 - 1.21. Bidder to submit with technical bid the API Certification of its equipment, chemical testing facility, cement and other certificates wherever applicable as per tender document.
 - 1.22. Bidder to submit with technical bid the copies of maintenance logbooks for maintenance of bidder's pumping unit and other equipment for the period of last contract/workorder.
 - 1.23. Bidder to submit Ownership document of its Equipment/Vehicle.
 - 1.24. 17-1/2" hole x 13-3/8" casing cementing job must have returns to surface. If unable to obtain cement to surface, additional cement top up job must be conducted ensuring cement to surface.
 - 1.25. 12-1/4" hole x 9-5/8" & 8-1/2" hole X 5-1/2" casing cementing job must have a TOC (top of cement) a minimum of 50m inside previous casing shoe.

9.3.2 PERSONNEL

Cementing Operator/supervisor:

The Cementing Operator to be provided by the Bidder shall have the following qualifications, experience and responsibility as detailed hereunder.

Qualifications and experience of the Cementing Operator/supervisor:

- The Cementing Operator should have undergone basic training in Cementing from reputed cementing school, such as Halliburton / Dowell Schlumberger / BJ / IDT (ONGC) or any other reputed cementing school.
- The Cementing Operator to be deployed for the cementing services against this CONTRACT should have an experience of minimum two (2) years at the same position and shall be capable of performing cementing services independently.
- The Cementing Operator should be well conversant with all aspects of cementing and allied pumping jobs including stage cementation job. The cementing Operator should have good knowledge about the use of cement additives, their functions and factors influencing slurry design.
- Cementing Operators should also be well conversant and experienced in operation & maintenance of reputed makes / types of Cementing units. He should also have knowledge and experience of using Cement retainers, cementing heads, casing cementing plugs and other tools and equipment, generally used for cementing and allied pumping services. The Cementing Operator should also be well conversant in operation and maintenance of Batch Mixer.
- The Cementing Operator deployed should be agile and of sound health to carry out vigorous operational & maintenance job of cementing unit.
- The Cementing Operator deployed should not be more than 60 years of age.

Responsibility of Cementing Operator/ supervisor

The Cementing Operator must carry out all the cementing and allied jobs (carried out with cementing unit) during drilling and work-over jobs. He must carry out following jobs and ensures that they are done within the recommended specifications, procedures and policies including but not limited to as listed:

- a. Casing cementation of sizes 13 3/8", 9 5/8" and 5 1/2".
- b. Liner cementation of sizes 7" and 5"

- c. Cement plug, Squeeze jobs and Plug & Abandonment jobs as per OISD 175 guidelines.
- d. BOP stack/wellhead testing up to 5,000 psi or as required.
- e. Diesel pumping and other pressure pumping jobs.
- f. Assembly and disassembly of retainer stab tool and operation of cement retainer.
- g. Prepare cement slurry as per cementing program.
- h. Run, maintain and manage the cementing equipment and be always available for consultation.
- i. Maintain a stock of inventory pertaining to cementing operation at well site and ensure that adequate stock is available with unit at well site.
- j. Ensure that adequate spares for all the equipment and tools are available on the Unit.
- k. Supervise cementing crew and cementing operations.

Base Engineer:

Bidder shall designate One Base Engineer as Company's requirement under this contract & shall depute its Base Engineer to plan all cementing jobs where Bidder is providing cementing services. Bidder shall depute the Base engineer to the field as and when required to supervise any critical jobs. Bidder shall submit the CVs of the above personnel in advance who shall be associated with the CONTRACT for GEL approval at the time of award of CONTRACT. Any change of personnel may be carried out with prior intimation to/ approval of GEL.

Qualification & Experience of Base Engineer

The Bidder shall make available to the Company a qualified and skilled Cementing Engineer with minimum three years inline experience in designing and planning cement slurry and cementation job (including stage cementation job). Base Engineer should possess a bachelor's degree in engineering preferably in Mechanical / Petroleum/chemical. The Base Engineer shall be qualified and fully trained in cement engineering to perform all cementing & testing, analysis & interpretation results of tests and take corrective measures in maintaining required features of cement slurry.

Responsibility of Base Engineer

The base engineer is required to interact with Rig crew & GEL office at Gandhinagar on daily basis with the required technical inputs on Cementing engineering and project monitoring. He will be located at the Bidder's Office. The Cementing Engineer shall be responsible for including but not limited to the following:

- Perform cement engineering.
- Perform cement slurry design, prepare detailed cementing programs (including stage cementation operation with stage collar and external casing packer combined assembly) and coordinate with company for successfully carrying out all cementation jobs. Submit the detailed cementing program to GEL for approval 7 days prior to job;
- Logistics management of equipment, materials and personnel related to the Work, including customs clearance, transport and inspection if required.
- Will ensure overall supervision directly by him or through a field supervisor at site on all critical jobs.
- Maintain a stock of inventory pertaining to cementing operation at the well site and ensure that adequate stock is available with the Unit.
- Will also submit the comprehensive well completion report within 14 days of completion of the well including post job analysis and corrective measure if any for improvement of job.
- Responsible for preparing, checking and submitting the invoices to the Company.
- Shall be available for consultation at all times for the duration of the Contract.

Cementing Crew: Bidder shall provide skilled and experienced cementing crew with experience in specific cement slurry, to work on the cementing unit. The Bidder's well site cementing crew may consist of the following personnel (as a minimum):

- One cementing operator/Supervisor
- Required batch operator, technicians and helpers to perform the scope of work.

Note: Bidder has to provide no. of each crew member.

Replacement of Bidder's personnel:

The Bidder will remove and replace in a responsible time at Bidder's expense any of the Bidder's personnel if Company so requests in writing setting out grounds for its requirement. The company's failure to exercise its right under this sub article shall not be construed as limiting any of Bidder's obligations or liabilities under the statement of Work.

The Bidder shall be responsible for arranging at his cost, the transportation, lodging and boarding of Bidder's personnel deployed at the well site or the base camp.

Operator/field supervisor should be fluent in English language conversation.

Cementing crew shall work on rotation basis as per the industry practice and Mines Act.

Cementing crew member's attendance shall be maintained at the site on daily basis.

9.3.3 Reporting

General

Bidder shall comply with the following reporting requirements as a minimum. Bidder shall also provide additional reports to the Company Representative Gandhinagar as may reasonably be requested during the Work.

Material Inventory

Bidder shall maintain an up to date inventory of all cementing additives held on the Unit, supply Base or elsewhere for this project. Such an inventory can never fall below a pre-determined critical level. This report shall be maintained on a weekly basis to the Company Representative at the site and to the company's drilling dept. at Gandhinagar in addition to the daily inventory which should be the part of the daily report.

Job Evaluation Report

Bidder shall provide a detailed evaluation of each cement job, which shall include but not be limited to the following:

- Cement slurry design, cement program including chemical consumption sheets in line with company's approved cementing plan;
- Assumptions used in the Cement slurry design and program;
- Details of the operations including time break up and cost break up;
- Comparison between the plan and the actual parameters;
- List of consumable used for the cement job;
- Comparison of planned Vs actual cost;
- Analysis of the cement job including detailed evaluation of any downtime;

This report shall be submitted within 72 hrs after the job is carried out.

Report containing the above items shall be submitted, on a job basis to the Company Representative at the well site and to the Company's Drilling Department at Gandhinagar.

Maintenance

Bidder shall maintain the equipment in good operating condition and in such a manner to prevent downtime or waiting on equipment during operation. All relevant documents /

certification to be provided along with proposal and shall be made available on well sites. Air compressor, Batch mixer and cement pumping unit's maintenance report to be submitted on weekly basis.

All lifting and load bearing equipment of the Bidder shall be certified prior to use and all relevant certifications shall be available for inspection.

The Bidder shall maintain adequate stock of spares to proactively operate the equipment through the committed work program. Bidder should provide information of spares and critical parts (standby) to the Company representative from time to time.

Inspection

Bidder acknowledges that Company may inspect the equipment using a third party inspection company which is recognized worldwide in the industry and is not competitor to the Bidder. The equipment shall be delivered at site. Bidder shall ensure that the equipment provided are inspected to applicable API/ASME/OISD standards before mobilization and submit the valid inspection reports to the Company on request. The inspection report shall be latest (post completion of last job) and not be older than 6 months from bid submission date. In case bidder wishes to carry out inspection post issuance of LOA, then bidder has to submit an undertaking with the bid stating the acceptance and readiness of the bidder to provide valid inspection report/certificate prior to first mobilization of equipment. Bidder acknowledges that Company may require carrying out random API testing of any/all chemicals by a third party.

Chemicals and Additives

Bidder shall maintain adequate stocks of chemicals and additives to manage the operation of Work in Bidder's warehouse. The Company shall provide non- covered storage space on the well site to store chemicals and additives required for any upcoming job including contingency chemicals.

Logistics

Logistical Support Base/ Station: Bidder should be able to provide a logistical support base/ station preferably within the state and in the vicinity of the operations. The base should be able to cater logistical/technical/engineering requirements of the cementing services.

Technical Support

Testing Facility:

The Bidder shall preferably have required testing facility [lab] in western region of India at all times functional with experienced manpower having 5 years of experience in cement lab, conversant with testing equipment and procedures. The transportation of cement, additives and water samples for testing is to be arranged by the bidder at no extra cost. Lab should have testing facilities as per API-10A and API-10B specifications for testing of oil well cement with chemicals and additives to formulate any treatment, design that may be required in Company's field. Bidder shall also carry out tests which need not be necessarily covered in API-10A and API-10B specifications for testing, but is found to be necessary by GEL. Bidder should have sufficient numbers of below mentioned test equipment & ensure to meet the slurry design requirement.

The lab should have minimum following testing equipment for general slurry design:

Cement Slurry Consistometer	Computerized UCA
Curing Chamber	Fluid Loss Cell
Atmospheric Consistometer	Varying Blender
Fann Viscometer	Gas Migration testing cell (Gas Flow module)
Destructive Compressive Strength Tester	Slurry Stability & Settling tester

- Bidder shall obtain samples of cement and water before any cement job for testing in Bidder's laboratory so that lab testing will be completed timely to avoid any delay in operation. The final cement program shall be based on such results and shall be submitted to the Company for approval 7 days before the cement job.
- The successful Bidder will be required to nominate a contact reference in India or in the region for technical queries and issues as further support to the Cementing Engineer.
- Two cycle circulation of low rheology mud is preferred over normal drilling rheology mud for proper cement placement and bonding. All efforts to enhance cement bond to pipe must be pursued. Efforts should be made wherever possible to reciprocate casing in open hole during spacer pumping and cement placement. Spacer design should be designed to maintain well control while creating turbulent flow and maximizing the difference between spacer density and cement density.
- Slurry testing shall be performed using representative samples of cement, additives and mix water from rig site prior to the cement jobs. Test reports shall include Thickening time, free water, compressive strength, rheology, API fluid loss. Normal Slurry to be used. However, based on the actual logs, gas block may be added to stop gas migration, if any
- Spacer shall be pumped ahead of the cement slurry to minimize cement contamination by the drilling fluid and contribute to effective displacement of the drilling fluid from the cemented portion of the annulus so that a competent cement sheath can form an effective hydraulic seal. 50-80 bbls of spacer volume or as per industry practice in the mud x 1.1 times weight to be considered

9.4. DIRECTIONAL DRILLING SERVICES

The directional drilling service is required for following purpose:

1. Deviating wellbore along a planned path to a target located at a lateral distance and direction from vertical.
2. Side-track well by drilling a secondary wellbore from an original wellbore, which may be inaccessible due to irretrievable fish, junk in the hole or collapse wellbore.

9.4.1. List of Tools/Equipment required

A. For 12 ¼" Hole Section:

Sr. No.	Equipments / Tools particulars.	Nos / Set
1	8"/7 ¾" SDMM	1 Set (1 Primary + 1 back up)
2	11 ¾" /12" / 12 ¼" Integral Blade Stabilizer	1 Set (1 Primary + 1 back up each)
3	8" Drilling Jar	1 Set (1 Primary + 1 back up)
4	8" NMDC	2 Set (2 Primary + 2 back up)
5	8" Float subs with Ported flapper type valve suitable for 12 ¼" Hole	1 Set (1 Primary + 1 back up)
6	8" UBHO	1 Set (1 Primary + 1 back up)
7	MWD Down hole tool kit (with API Gamma) with accessories & Spares, Consisting Surface cabin for data recording and processing,	1 Set + 1 back up

B. For 8 ½" Hole Section:

Sr. No.	Equipments / Tools particulars.	Nos. / Set
1	6 ¾" /6 ½" SDMM	1 Set (1 Primary + 1 back up)
2	7 ¾" /8" / 8 ½" Integral Blade Stabilizer	1 Set (1 Primary + 1 back up)
3	6 ¾" /6 ½" Drilling Jar	1 Set (1 Primary + 1 back up)
4	6 ¾" /6 ½" NMDC	2 Set (2 Primary + 2 back up)
5	6 ¾" /6 ½" Float subs with Ported flapper type valve suitable for 8 ½" hole	1 Set (1 Primary + 1 back up)
6	6 ¾" /6 ½" UBHO	1 Set (1 Primary + 1 back up)

7	MWD Down hole tool kit (with API Gamma) with accessories & Spares, Consisting Surface cabin for data recording and processing.	1 Set +1 back up
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Notes:

1. The contractor shall keep the sufficient equipments at their base near to area of operation to replace any tools/ equipments as per the requirement due to damage/LIH/malfunction and supply to maintain the required quantity during the operation.
2. The transportation charges from contractor's base to GEL drilling location to replace the used tools for servicing/redressing will be in contractor's scope and shall be included in mob/demob charges.
3. Mobilization would be considered complete for the MWD/SDMM Kit and other tools only when the above mentioned quantity of primary and secondary (B/UP) tool are present at the rig site at all times during operations. One back up set of tools shall remain at the site when primary set of tools are in the hole.
4. All the tools must be of best engineering design and redressed properly and should be fit for Purpose, any tools if found premature failure will not be paid and its standby charges also not be paid.
5. Prices for All required operational personnel (DD& MWD Engineer) to be quoted by bidder.
6. Bidder shall make all the arrangements for transportation of bidder's tools/equipments including loading and unloading. Bidder shall also ensure to take all the necessary road permits/licenses/approvals from the agencies as and when required for transportation of bidder's equipments/tools to and from well site during Mob/De-mob/ILM.
7. Bidders shall maintain necessary back up SDMM, Stabilizers and Drilling Jars to meet situations like tool failure / loss of equipment down hole etc. for uninterrupted operation in GEL acquired Onshore Blocks.

Bidder must confirm that the tools and equipment supplied will be properly maintained as per internationally accepted norms and their tools/equipment will be performing to the highest standard. For performing necessary operational maintenance of tools and equipment contracted, Bidder will make arrangement and bear all transportation cost.

Bidder to note and confirm that, in case down hole equipments/tools are lost due to reasons attributable to them or broken down due to normal wear and tear or loss in hole due to abnormal down hole condition, the same shall be replaced immediately.

In addition, required tools to fish out Bidder's equipment i.e. MWD Probe shall be in bidder's Scope.

9.4.2. Technical Specification of Tools and equipments:

1. Down Hole Equipment:

A. MWD (Directional and API Gamma ray) (probe based)

Complete sets of probe based Measurement While Drilling (MWD) tool having Directional + API Gamma measuring capability based on positive mud pulse telemetry along with Non-magnetic drill collars, electronic packages, surface computers and other accessories required for continuous real time transmission and monitoring of tool face, inclination, azimuth and Gamma ray while drilling directional/Side track section in 8 ½" /12 ¼" with TCR/PDC bits.

1. Directional and Gamma ray measurement, with API quality continuous Gamma ray measurement in real time.
2. Directional survey within 3 minutes. Inclination accuracy ± 0.2 degree, Azimuth ± 2 degree and tool face accuracy ± 3 degree / Pulsar driver.



3. The system to be complete with pulsar, electronic sensors, Battery unit etc. for transmitting and recording down hole data in real time with tool face update every 45 seconds or less. + Electronics (D & I tools) + (Surface system - display, decode, Transducer)
4. System will be compatible with 6 ¾"/6 ½" NMDC for 8 ½" hole and 8" NMDC for 12 ¼" hole.
 - Tool should be able to handle 40lbs/bbl of LCM (medium size).
 - System should be of positive pulse system.
 - Spares of all the tools and equipments must be available with individual set of MWD kit.
 - MWD tools must be retrievable type with slick-line operation. The necessary connectors / quick latch tool to be provided by the contractor.

Bidder to fill up the following technical specification matrix for their offered MWD

MWD-Tools Specifications	Tool Features		GEL Generic Requirement	Bidder's Offered
	Telemetry Type			
	Tool Outer Diameter (OD)			
	Length of Tool:			
	(a) Directional Only			
	(b) Dir. + Gamma Ray			
	Flow Range (GPM)		300-1000	
	Max. Operative Temp (Circulating)		150°C	
	Max Bit Pressure (PSI)			
	Max. Operative Pressure (PSI)		UP TO 15000	
	Wireline Retrievable			
	Pressure Drop Through Tool OD For Water:	@300		
		@600		
		@1000		
	Real Time Update Period (Sec)		<=45	
	Survey Time		<= 180 Secs	
	Survey during sliding Mode			
	Directional Measurement Point	With Gamma		
		Without Gamma		
	TF:			
	AZ:			
	INCL:			
	Gamma Detector Type		API-GR	
	Lost Circulation Material (Max. Size & Concentration)			
	Power Source (Operating Time, Hrs)		Life>200 Hrs.	
	Battery Life		> 200 Hrs.	
	Gamma Real Time		Reqd.	
	Gamma Measurement Point from Bottom of tool			
	Recorded		API Gamma	
	Data Transmission Rate (Bits/Sec)			
	MTF/ GTF Switch	Selectable from Surface		
	MTBF			
	Repair Facility & Back-Up			
	Manufacturer/Model			
	Bidder should submit the latest maintenance schedules & third party inspection reports performed within the last one (1) year.			
	Bidder is required to confirm that, complete MWD Tool will fit in to one single drill collar of approx. 31' and Plotting of Gamma counts v/s TVD and MD is available in the surface			



system Software. In case of stuck-up or other down hole complication, it shall be the bidder's responsibility to provide the required Quick Latch running tool to retrieve the MWD probe based tool set from the drill string. Wireline / Slick line shall be provided by GEL.

B. Steerable Downhole Mud Motors (SDMM):

Bidders have to quote motors of National/BICO/Cavo / Schlumberger / Weatherford or of equivalent make from any international reputed company and must not be older than 10 years. SDMM shall be properly inspected/tested/serviced prior to deployment. No rental shall be paid of the motor found not working at site.

Technical Specifications of offered SDMM should be as per following table.

Technical Specification of SDMM	
1.	6 3/4"/6 1/2" OD High Torque Low to medium Speed Stabilized Positive Displacement Steerable Multi lobe Mud Motor for 8 1/2" hole with 8 3/8" screw on / built in bearing housing stabilizer and adjustable kick off sub with 4 1/2" API REG BOX (Bit box) and 4-1/2" API IF Box up connections with lifting sub and having following specifications: Flow Rate 300 - 600 GPM, RPM 60 – 200 RPM, Operating Torque 5,500 - 8200 NM, Power Output 145-250 HP, Maximum Operating Differential Pressure 600-900 psi. Bidder has to confirm that their motors will be able to provide 6° / 30 M Build Up Rate and should be able to rotate where BUR of 6° / 30 M is obtained.
2.	7 3/4"/8" OD High Torque Low to medium Speed Stabilized Positive Displacement Steerable Multi lobe Mud Motor for 12 1/4" hole with 12-1/8" screw on / built in bearing housing stabilizer and adjustable kick off sub with 6 5/8" API REG BOX (Bit box) and 6 5/8" API REG Box up connections with lifting sub and having following Specifications: Flow Rate 300 - 1000 GPM, RPM 50-200 RPM, Operating Torque 10000 – 12000 NM, Power Output 179-285 HP, Maximum Operating Differential Pressure 450-650 psi. Bidder has to confirm that their motors will be able to provide 5.5° / 30 M Build Up Rate and should be able to rotate where BUR of 5.5° / 30 M is obtained.

Note:

- SDMM should be operated within the range of their respective designated capacity.
- SDMM would be run mostly in stabilized mode to avoid clean out run.
- Motors should be fully functional with no wet pull out.
- Bidder's offered Motor Bearing should be of very high quality materials suitable for long life & rugged operations.
- Bidder's motor should come with Rotor retainer or internal capture device that provides that extra margin of safety if any of the threaded housings are disengaged.

Bidders to fill up the following technical specification matrix for offered mud motors:

Motor Features	GEL Generic Requirement		Bidder's Offered	
SDMM for	8-1/2" Hole	12-1/4" Hole	8-1/2" Hole	12-1/4" Hole
SDMM OD	6-3/4" / 6-1/2"	8" / 7-3/4"		
Flow Range in GPM	300-600	300-1000		
AKO Range (Achievable)	BUR UPTO 0°-6° / 30M	BUR UPTO 0°-5.5° / 30M		
Maximum operating temperature (circulating)	150 deg C	150 deg C		
RPM Range	60-200	50-200		
Type	Steerable with Adjustable Kick off Sub	Steerable with Adjustable Kick off Sub		
Length (Maximum)	30 feet	30 feet		
Type of Connection	Box Up - Box Down	Box Up - Box Down		
	4 1/2" API Reg (Bit) x 4 1/2" IF API	6-5/8" API Reg x 6-5/8" API Reg		
Dump Valve/Float Valve/Ported float	Required	Required		
Maximum Operating Differential Pressure (PSI)	600 - 900	450 - 650		
Power Output	145 - 250 HP	179 - 285 HP		
Torque Operating	5500 - 8200NM	10000 - 12000 NM		
DLS Maximum Achievable	0°-6° / 30M	0°-5.5° / 30M		
Pass through DLS				
Rotary	0°- 6° / 30M	0°- 5.5° / 30M		
Sliding Stabilization	0°-6° / 30M 1/8" Under gauge	0°-5.5° / 30M 1/8" Under gauge		
String Stabilizer	7 - 3/4"	11-3/4" / 12"		
SDMM Operating downhole life	120 Hrs	120 Hrs		
No of stages	5-7	5-7		
Bidder to specify minimum sustainable on-bottom differential pressure (without motor stalling)				

C. Non-Magnetic Drill Collars (NMDC) Compatible for use with above MWD assemblies must be provided in as per following connection

- 6 3/4" / 6 1/2" OD NMDC: - 4 1/2" API IF Box x pin connection.
- 8" OD NMDC: - 6 5/8" API Reg Box x pin connection.

Bidder must confirm to provide adequate number of NMDC if required for MWD Survey accuracy free from any magnetic interference.

D. Float subs with Flapper Type Float valve - Suitable to run with, 6 1/2" / 6 3/4" OD mud motor for 8 1/2" hole section and 8" / 7 3/4" mud motor for 12 1/4" hole section. Bidder should provide service kit along with float valve to service the same on site.

E. Stabilizers:

Bidders to provide string stabilizers with following technical specifications:

- 1. For 8 ½" Hole:** 7 ¾" /8" Integral Blade string stabilizers with 4" /4 ½" API IF box X pin connection, 6 ½" OD fishing neck x 2-13/16" ID for drilling 8 ½" hole, designed for efficient stabilization for the non-rotating drill string during sliding mode, as well as rotary mode with mirror smooth surface finish and hard facing of tungsten carbide blocks imbedded in tungsten carbide matrix or equivalent suitable for medium to medium hard formations, to be used in conjunction with 8 ½" Hole BHA to make the SDMM fully stabilized.
- 2. For 12 ¼" Hole:** 11¾" /12"/12 ¼" Integral Blade string stabilizers with 6-5/8" API Reg box X pin connection, 8" OD fishing neck x 2-13/16" ID for drilling 12 ¼" hole, designed for efficient stabilization for the non-rotating drill string during sliding mode, as well as rotary mode with mirror smooth surface finish and hard facing of tungsten carbide blocks imbedded in tungsten carbide matrix or equivalent suitable for medium to medium hard formations, to be used in conjunction with 12 ¼" Hole BHA to make the SDMM fully stabilized.

Bidder to fill up the following Technical Specification Matrix for their offered String Stabilizers:

TECHNICAL SPECIFICATION OF INTEGRAL BLADE STRING STABILIZER					
Hole Sizes	Stabilizer OD at blade	Pin Connection	Box Connection	OD at Fishing Neck	Internal Diameter
8-1/2"	7-3/4"				
	8"				
12-1/4"	11-3/4"				
	12"				
	12-1/4"				

Note:

1. All the string stabilizers provided will be Integral Blade.
2. All the String Stabilizers to be provided by bidder should be designed for efficient stabilization for the non-rotating drill string during steering mode of motor and straight drilling in rotary mode. Stabilizers will have mirror smooth surface finish and hard facing of Tungsten carbide blocks imbedded in Tungsten Carbide Matrix or Equivalent to use in conjunction with respective /compatible sizes of SDMM to make the SDMM fully stabilized.

F. Double Acting Hydro Mechanical Drilling Jars:

Bidders to provide Double Acting Hydro Mechanical Jars from reputed make like Dailey, National Oil well Griffith-Vector, Bowen or equivalent for running in BHA as per well plan and offered jars to be used for jarring to release stuck up strings in the hole.

Bidder's MWD tool must be retrievable through offered Drilling Jars. Jar should be periodically serviced after +/- 300 hrs of down-hole run hrs and report shall be submitted along with the tool when sent to the site.

Bidder to fill up the following technical specification matrix for their offered Drilling Jar:

Sr. No.	Size of Jars	Technical Specifications	GEL Requirement	Generic Specification of Bidder's Offered Jars
1	6-3/4" / 6-1/2" OD Drilling Jar	Length	30 ft	
		ID	2 3/4"	
		Tool Joint	4 1/2" IF	
		Type of Connection	Box × Pin	
		Torsional Yield	56000 ft.-lbs.	
		Up-Stroke	To be provided by bidder	
		Down Stroke	To be provided by bidder	
		Stroke Length (Up + Down)	12" Minimum	
		Tensile Yield	755,000 lbs.	
2	8" OD Drilling Jar	Length	30 ft	
		ID	2 13/16"	
		Tool Joint	6-5/8" API Reg	
		Type of Connection	Box × Pin	
		Torsional Yield	102,000 ft.-lbs.	
		Up-Stroke	To be provided by bidder	
		Down Stroke	To be provided by bidder	
		Stroke Length (Up + Down)	12" Minimum	
		Tensile Yield	1,000,000 lbs.	

Note:

- Bidder shall have to submit survey report immediately after tool pull out to GEL for the number of shot required at a GEL's specified interval in mts.

G. SURFACE EQUIPMENT

Surface unit with computers / printers accessories to record and print real time data with necessary transducers and connections to work with rig power supply 110 / 220 volts, 50 Hz. AC shall be provided and the system shall have following features and shall deliver:

- Record data like inclination, azimuth and tool face and transmit it to surface on rig floor display. System should have features for dynamic tool face recording when drilling with motors.
- Record and plot Real time API Gamma with Measured depth.
- Record and plot Real time API Gamma with True vertical depth.
- Rate of penetration with depth counters facility for a Kelly rig.
- The equipment shall be suitable for hazardous and non-hazardous area.

Personnel:

Bidder to provide following personnel for operation of bidder's equipment in GEL's operation in case of requirement.

The requirement of directional drilling manpower/personnel for operating bidder's equipments/tools shall be as follows:

Sr. No.	Designation	Minimum Required
1	Directional Drillers	2 persons (one in each 12 hrs. shift)
2	MWD Operators	2 persons (one in each 12 hrs. shift)

Note:

The reliever for above personnel is not included in above mentioned nos. The contractor shall provide periodical off to each crew according to the prevailing laws of India and relieve the same with equally competent crew.

Personnel Job Description

Bidder has to provide following minimum qualified and operationally competent personnel at site. **Contractor has to make arrangement for lodging, fooding and transportation of their personnel at site.** Company reserves the right to terminate any contractor's personnel if he is not found suitable/ not following company policy or incompetent in carrying out the specified duties. Bio-data of all personnel are required to be submitted to the company prior to their deployment on drill-site.

A. DD Coordinator: He should be well versed with directional drilling operations, well planning, MWD, SDMM, Jar and shall be bidder's representative for all operational issues in GEL. He should have a minimum of 5 years' relevant experience, must have Engineering degree or B.Sc. or equivalent qualification.

He shall attend the morning meeting in GEL regularly, update GEL on the operations and shall be responsible for attending to GEL's directional drilling related requirement. He must be provided with mobile contact facility and GEL shall have direct access to his contact numbers. He should be based in Gandhinagar/Ahmedabad during the operational period. Bidder shall provide his replacement with prior written notice to GEL. The Directional Drilling Coordinator shall be responsible including but not limited to the following:

- Interact with company geo-scientist and drilling engineers.
- Conceptualize subsurface objectives and issues.
- Perform detailed Directional drilling plan including Torque & Drag, Hydraulics, Hole cleaning and tripping procedures w.r.t the down-hole tools and hole profile, troubleshooting of contractor's equipments and suggest alternate ways during down-hole complications.
- Logistics management of equipment, materials and personnel related to the Work, including customs/immigration clearance, transport and inspection.
- Administration of the Contractor's day to day affairs under the Contract.
- Responsible for preparing, checking and submitting the invoices to the Company.
- Shall be available for consultation for planning and feasibility issues during the contract period.
- Conversant in Drilling Engineering and well planning areas as an effective interface with the broader drilling discipline.

B. Directional Driller: Bidder shall deploy 2 (two) numbers of Directional Drillers- (1 in each shift of 12 hrs on 28/28-day rotation basis) for 24 hours drilling operation in directional/deviated wells. They must have minimum 5 years of experience in the directional drilling field, must have Engineering degree or B.Sc. or equivalent qualification. The Directional Driller shall be responsible including but not limited to the following:

- Prepare directional drilling plan and program, projections and mid-term course correction if the need arises.
- Run, maintain and manage the Directional Drilling tools and Contractor's Inventory.



- Prepare daily actual vs. planned directional plots as per the last 24 hrs directional work progress with projections to target and mid-term course correction if the need arises.
- Submit daily directional drilling report to the Company Representative on the rig.
- Maintain adequate stock and inventory of tools and spares on the Drilling rig as per the contract and Contractor's base to perform the drilling program.
- Ensure adequate spares for all the equipment and tools are available on the Drilling rig to carry out any repairs without downtime.
- Day Directional Driller shall be the Lead and responsible for over-all performance during the 24 hrs operations.

C. MWD Operator: Bidder shall provide 2 (two) numbers of MWD operators per day of 24 hours operation- (one in each shift of 12 hrs). They shall have minimum 3 years' experience in MWD operation, reporting and maintenance and shall have experience of independently handling MWD operation, **must have Engineering degree or B.Sc. or equivalent qualification.** The MWD Engineer shall be responsible including but not limited to the following:

- Prepare MWD plan and program.
- Run, maintain and manage the MWD tools and unit.
- Prepare daily reports of major real time observations and definition of markers.
- Maintain adequate stock and inventory of tools and spares on the Drilling rig as per the contract and Contractor's base to perform the drilling program.
- Ensure adequate spares for all the equipment and tools are available on the Drilling Unit to carry out any repairs without downtime.
- Responsible for supervising night shift MWD Engineer at all times.

5) Reporting:

Contractor shall comply with the following reporting requirements as a minimum. Contractor shall also provide additional reports to the company representatives as May reasonably requested during the work.

- **Daily Report:** Daily directional report and well profile graph, plots and projections (Color print) of an acceptable standard to company shall be submitted, on a daily basis to the company representative on the drilling unit and signed by company representative and directional drilling engineer.

7) General Clauses:

- i. Contractor shall ensure that adequate quantities of tool are available for the duration of project besides service turnaround time on the tools.
- ii. All X over subs required from contractor's drill string to operator's drill string and any other x-over required for MWD assembly is to be identified and furnished by the contractor.
- iii. Contractor shall be responsible for all Interim Mobilization-demobilization of its tools/equipments (for all repair replacement etc) and personnel. Only one-time mobilization demobilization from Contractor's base to Company's site and back shall be borne by the Company.
- iv. Tools/Equipments deployed shall be of the latest version and technology. If required by company, bidder to provide the latest inspection report with the changed parts and periodic maintenance details.
- v. The contractor should propose the tentative directional drilling trajectory based on the surface location and the subsurface objectives ahead of the spud and should be able to make real time changes as per drilling requirement of the company.

- vi. Bidder is to submit documents of ownership of Equipments/tools to be deployed to perform under the tendered services or an undertaking confirming the same.
- vii. Bidder to confirm with an undertaking that they will provide QC tested & inspected equipments and tools to the wellsite for operation. Bidder shall provide the test & inspection reports of the tools to be deployed to wellsite, and the reports should not be more than six (06) months old.
- viii. Bidder to submit undertaking that, he will deploy the personnel to perform under this tender with the qualifications and experience as per the tender requirement.

9.5. MOBILE ETP (EFFLUENT TREATMENT PLANT) SERVICES (METP)

The primary purpose of METP is to process and treatment of the wastewater generated at drill sites and re-use the treated water for preparation of water base Mud and other internal uses.

9.5.1. SPECIFICATIONS & CAPACITY OF EFFLUENT TREATMENT PLANTS:

- i. The plant should be able to process/treat the drill site wastewater (effluent) generated with suspended solids up to a maximum of 5000 mg/L and Oil and Grease up to a maximum of 200 mg/L as per the following inlet & outlet characteristics.
- ii. The treated effluent shall comply with the applicable onshore disposal standards for oil and gas drilling operations and shall additionally meet the Company's requirements for reuse in water-based mud preparation.

Sl. No.	Parameters	Effluent Characteristics * (Approx. range)	Desired Characteristics of Treated Effluent (Water)
1	Suspended Solids mg/L (ppm)	100 – 5000 Water based Mud Drilling Wastewater	< 100
2	Oil & Grease mg/L (ppm)	10 - 200 Water based Mud Drilling Wastewater	NIL
3	pH	5 - 12	6.5 to 7.5
4	Color	Brownish / Yellow / Turbid Water, Water based Mud Drilling Wastewater	Clear and Must be Acceptable to GEL for reuse in water-base mud preparation during well drilling operation and for other internal uses.
5	Odor	Water based Mud Drilling Wastewater	Odorless / Acceptable to GEL
6	Residual Chlorine mg/L (ppm)	-	0.1 to 0.4 / Acceptable to GEL
7	TDS mg/L (ppm)	Water based Mud Drilling Wastewater	< 1500
8	BOD mg/L (ppm)	Water based Mud Drilling Wastewater	<30
9	COD mg/L (ppm)	Water based Mud Drilling Wastewater	<100
10	Chlorides mg/L (ppm)	Water based Mud Drilling Wastewater	<600
11	Ca ++ Hardness mg/L (ppm)	Water based Mud Drilling Wastewater	<400
12	Mg ++ Hardness mg/L (ppm)	Water based Mud Drilling Wastewater	<30

13	Fe mg/L (ppm)	Water based Mud Drilling Wastewater	<10
14	SO ₄ mg/L (ppm)	Water based Mud Drilling Wastewater	<200
15	Bicarbonates mg/L (ppm)	Water based Mud Drilling Wastewater	<500

- Above water parameters Values are indicative only, it may vary based on GEL requirement.
 - All parameters are to be tested on a daily/requirement basis at the drill site based on the company requirement
- iii. Mobile Effluent treatment plant (METP) should have processing/treatment capacity to process and deliver maximum 20 Cubic meters/KL of treated water per day (when sufficient effluent is made available by COMPANY).
 - iv. Mobile ETP should come equipped with Softener unit for reducing hardness and RO Unit for reducing TDS. Contractor shall provide a system for collection and handling of RO and Softener reject stream. Disposal/reuse methodology shall be submitted and approved by the COMPANY. Contractor should specify guaranteed outlet treated water parameters after all treatment.
 - v. The plant should be fit for purpose in all respects for operation in accordance with the latest applicable laws/ rules & regulations with regard to CPCB, SPCB, MoEFCC and others. Contractor shall deploy trained operators/technicians on round-the-clock basis as required for operation, monitoring and maintenance of the plant.
 - vi. Electrical equipment installed in hazardous areas shall comply with applicable PESO/OISD/DGMS standards and shall be suitably certified for Zone-1/Zone-2 classification as applicable.
 - vii. The plant shall be skid mounted or fully mobile type, it shall be so designed that dismantling, transportation from one location to another is done easily through truck/trailer.
 - viii. The plant shall occupy less area for its installation.
 - ix. A storage tank of minimum 05 M³ capacity for initial storage of treated water prior to its discharge/delivery is to be provided along with the mobile ETP.
 - x. The electrical components/switch Boards/Breakers in the unit should be flame proof and comply with DGMS & other applicable regulations.
 - xi. Flow meters/water meters are to be fitted on the suction line of effluent water and discharge line of treated water for monitoring final treated water quantities. Spare meters should be available for break down.
 - xii. The plant should have the arrangement and capacity to draw raw effluent 150 ft away from the plant, from the mud/drilling waste pit. All pumps, pipelines, valves and other necessary fittings are to be arranged by contractor.
 - xiii. The contractor should have a discharge pump of enough capacity to pump treated water approx. 150 feet away from the plant to water storage tank/ mud tanks for which the necessary piping, valves and other fittings are to be arranged by the contractor.
 - xiv. The treated effluent shall be chlorinated for re-circulation/re-use in drilling fluid preparation and any other rig or utility use, if required.
 - xv. Operate METP, Softener & RO Unit as per the OEM recommendations and approved operating procedures.
 - xvi. Monitor and maintain desired flow rate, recovery percentage, and treated water quality.
 - xvii. Ensure continuous and safe operation of all associated equipment including feed pumps, high-pressure pumps, dosing systems, pressure vessels, membranes, instruments, and control panels etc.
- Check and maintain pumps, motors, valves, pipelines, gauges, pressure switches, flow meters, and electrical systems including cleaning/replacement of cartridge filters, multimedia filters, activated carbon filters, and other pretreatment units as required.

- Replacement of damaged membranes and filter elements whenever necessary after approval.
- xviii. Stock of consumable chemicals required for dosing such as anti-scaling, pH correction, membrane cleaning and disinfection shall be maintained at site and storage handling as per HSE regulations.
- xix. Maintain operational logbooks for daily plant activities.
- xx. Maintain housekeeping around the Mobile ETP plant area.
- xxi. Submit monthly performance reports indicating:
- a. Plant operating hours
 - b. Water treated
 - c. Permeate and reject quantities
 - d. Chemical consumption
 - e. Maintenance activities performed
 - f. Breakdown and corrective actions taken
- xxii. Deliverables
- Continuous operation of METP plant with Softener & RO unit with optimum efficiency.
 - Compliance with environmental discharge/reuse standards.
 - Submission of periodic operation, maintenance, and water quality reports.
 - Timely preventive maintenance and breakdown rectification.
- xxiii. All waste materials, media, hazardous and non-hazardous waste, chemical safe disposal is solely contractors' responsibility as per the applicable rules & regulations.
- xxiv. Electrical power or other utility for METP plant & equipments including lighting will be provided by the contractor.

9.5.2 Volume of Operation:

- i. The plant is to be operated at a designated site to treat and deliver a minimum of 20 M³ Per day of treated water when sufficient effluent is made available. The contractor should treat and deliver effluent of any specified quantity maximum up to 20 M³ per day during the contract period if so, instructed by Drill Site Chemist/Company man/Company representative.
- ii. If the availability of raw effluent is not adequate, the effluent shall be treated and delivered to the extent made available by COMPANY. The same shall be duly certified by the Drill Site Chemist/Company man/Company representative in the logbooks/invoices for the purpose of payment, without which the period will be considered as Down time period.

9.5.3 RESPONSIBILITY OF THE CONTRACTOR:

- i. The contractor shall supply all the equipments, chemicals and other consumables that will be required to treat the effluent in conformity with the specified parameters.
- ii. The plant and other accessories will be transported by the contractor at his own cost and risk for initial installation and subsequent deployment. The company will not be in any way responsible for any damage/loss of the plant/component during transportation from one site to another and no claim whatsoever will be entertained in this respect.
- iii. Crane and trailer for loading /unloading of mobile ETP & all other equipments for transportation from one location to another location will be contractor's responsibility at their own cost. The loading/unloading, transportation will be done under the supervision of the contractor and COMPANY will not be anyway responsible for any damage/loss of the plant/component during transportation from one site to another and no claim whatsoever will be entertained in this respect.
- iv. Proper storage of chemicals / consumables for plant operation will be arranged by the contractor for which reasonable area of the site will be provided by the Company.
- v. Minor repair jobs from time to time as required and to maintain the place tidy and approachable shall be the responsibility of contractor.

- vi. Treated water line, suction line for raw effluent to ETP, sludge, reject line and water line will be arranged by the contractor.
- vii. Lodging, food, and transportation of personnel of the contractor will be the sole responsibility of the contractor at his cost.
- viii. It will be the responsibility of the contractor to provide first aid box with necessary safety kits to its crew as per Company's standard / existing rules and regulations in this context. Contractor shall provide adequate portable Fire Fighting Equipment with plant & appropriate personal protective equipment's (PPEs) to their working crew.
- ix. Number of employee/contract personnel required for smooth running of mobile ETP at the given location should be indicated in the bid by the bidder.
- x. The personnel employed by the contractor shall be medically and physically fit, professionally sound and legally competent in all respects as prescribed under relevant laws/ rules on the subject. They must have been fully trained and of minimum three years' experience in the operation & maintenance of METP.
- xi. All the personnel deployed by the contractor to operate and maintain the METP should have suitable PPE & safety items.
- xii. The contractor shall provide all the necessary documents connected with payment of salaries, bonus etc. to the personnel and honour all the labour related laws & regulations that may be demanded by any statutory authority or authorized representative of company. The contractor shall register himself with Labour Authorities as per laws applicable from time to time.
- xiii. Photo Identity cards to be provided by the contractor for their personnel working at the COMPANY installations.
- xiv. Sufficient manpower will be made available at site by the Contractor for operation of plant and these personnel should have qualification & experience as per requirement of work. During the entire contract period, the contractor shall keep/deploy a supervisor/operator or a co-ordinator at his own cost, who should be readily available at operator's base office to ensure smooth operation of the METP and execution of the contract.
- xv. The quality of treated water will be tested daily/based on the requirement by the contractor and test results should be submitted to Drill Site Chemist/RIC/company representative at site.
- xvi. In order to avoid any mishap/accident the contractor shall ensure that only skilled employees with sufficient experience in the trade are employed and adequate safety devices are installed and that the personnel observe all rules/precautions in this regard.
- xvii. Calibration of the flow meters & all other instruments is to be done by the contractor in every six months and also whenever any doubt is raised regarding its proper functioning.

9.6. Fuel and Water

The contractor shall provide fuel and water necessary for the drilling operations. This includes supply, transportation, storage and management of fuel and water to ensure continuous, efficient and safe drilling activities.

The scope of services is listed below:

- 9.6.1. Supply of required fuel (e.g., diesel or other specified fuels) for all drilling equipment, generators, and vehicles at the wellsite.
- 9.6.2. Safe and timely transportation of fuel to the drilling site, ensuring adequate quantities are always available.
- 9.6.3. Provision of fuel storage tanks and facilities to safely store fuel at the drilling site, including secondary containment for spill prevention.
- 9.6.4. Continuous monitoring of fuel usage and inventory management to ensure an uninterrupted supply.
- 9.6.5. Regular refueling of drilling equipment and power generators to maintain operations without delays.
- 9.6.6. Supply of fresh or treated water as required for drilling operations, including water for mud mixing, cooling, and other operational needs.



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- 9.6.7. Safe and timely delivery of water to the drilling site, ensuring a consistent supply.
 - 9.6.8. Provision of suitable water storage tanks and systems to store and manage the water supply at the wellsite.
 - 9.6.9. Ensure the water supplied meets the quality specifications required for drilling operations and regulatory compliance.
 - 9.6.10. Work with the operator to determine the daily fuel and water requirements based on drilling progress and equipment needs.
 - 9.6.11. Ensure timely scheduling of fuel and water deliveries to avoid operational downtime.
 - 9.6.12. Regular monitoring of fuel and water inventories, adjusting deliveries as needed based on consumption rates and operational changes.

9.7. Supply of Drill Bits (17½", 12 ¼" and 8½" Sections)

The contractor has to arrange the necessary bits at their own cost. The following are the tentatively drill bits requirement as per GEL previous well's experience:

- i. 17-1/2" bit: TCR Bit IADC – 115 (Nozzle Size: As per Requirement) Required in 3CP well only – 1 in each well
- ii. 12-1/4" bit: TCR Bit IADC – 117/437 (Nozzle Size: As per Requirement) – 3 to 4 in each 3 CP well. 1 to 2 in each 2 CP well
- iii. 8-1/2" bit: TCR Bit IADC – 117/437 (Nozzle Size: As per Requirement) – 2 to 3 in each well.

Note:

- Above figures are indicative only. Bidder may use either TCR or PDC drill bits as per their understanding and planning.
- The drill bits, including their threaded connections, shall conform to the latest edition of API Specification 7-2 (Threading and Gauging of Rotary Shouldered Thread Connections) and other applicable API specifications.
- Bidder has to take back the consumed and or unused drill bits. Company will not purchase any drill bit.
- Bidder to use drill bits of Schlumberger (Smith)/Halliburton/NOV/Baker Hughes/DBI only.

9.8. SUPPLY OF CASING ACCESSORIES (For 13-3/8", 9-5/8" & 5-1/2")

Sl. No.	Description	Required Standards
1	Guide / Float Shoe	
1.1	Guide Shoe, for Casing Size - 13-3/8", Grade- K-55, Weight- 54.5 ppf, Thread BTC Box, PDC drillable, Temp-130 Deg F	1. Manufacturer should be API licensed to apply API monogram on the tools. 2. The tools should meet all category III and C criteria of API spec RP10F. 3. All the guide/ float shoes should be PDC drillable.
1.2	Float Shoe, for Casing Size- 9-5/8", Grade- N-80, Weight- 40ppf, Thread- BTC BOX, PDC drillable, Temp-250 Deg F	
1.3	Float Shoe, Casing Size-5-1/2", Grade- N-80/L-80, Weight- 17 ppf, Thread BTC Box, PDC drillable, Temp-275 Deg F	
2	Float Collar	
2.1	Float Collar, Casing Size- 13-3/8", Grade- K-55, Weight-54.5 ppf, Thread BTC Box up x Pin Down, PDC drillable, Temp-130 Deg F	1. Manufacturer should be API licensed to apply API monogram on the tools. 2. The tools should meet all category III and C criteria of API spec RP10F. 3. A phenolic load distribution plate should be provided and installed in the float collar at the time of manufacture to provide flat, secure sealing for cement plug. 4. All the float collars should be PDC drillable. 5. All Float collars should be non-rotational type.
2.2	Float Collar, Casing Size-9-5/8", Grade- N-80/L-80, Weight- 40-47 ppf, Thread BTC Box up x Pin Down, PDC drillable, Temp-250 Deg F	
2.3	Float Collar, Casing Size-5-1/2", Grade- N-80/L-80, Weight- 17 ppf, Thread BTC Box up x Pin Down, PDC drillable, Temp-275 Deg F	
3	Top Cementing Plug (for following Casing sizes & type)	
3.1	Top Plug, Casing Size- 13-3/8", Grade- K55, Weight- 54.5 ppf, PDC drillable, Temp-130 Deg F	1. Should be 5 wiper designs. 2. Temperature rating should be mentioned. 3. All Top plugs should be PDC drillable.

3.2	Top Plug, Casing Size- 9-5/8", Grade- N80/L-80, Weight- 40 -47 ppf, PDC drillable, Temp-250 Deg F	4. These shall be standard Cement head compatible.
3.3	Top Plug, Casing Size-5-1/2", Grade- N-80/L-80, Weight- 17 ppf, PDC drillable, Temp-275 Deg F	5. Lock down type anti-rotational feature compatible with the float collar is required. 6. Maximum test pressure should be specified.
4	Bottom Cementing Plug (for following Casing sizes & type)	
4.1	Bottom Plug, Casing Size- 13-3/8", Grade- K55, Weight- 54.5 ppf, PDC drillable, Temp-130 Deg F	1. Should be 5 wiper designs. 2. Temperature rating should be mentioned. 3. All bottom plugs should be PDC drillable.
4.2	Bottom Plug, Casing Size- 9-5/8", Grade- N80/L-80, Weight- 40 -47 ppf, PDC drillable, Temp-250 Deg F	4. These shall be standard Cement head compatible. 5. Lock down type anti-rotational feature compatible with the float collar is required. 6. Maximum test pressure should be specified.
4.3	Bottom Plug, Casing Size-5-1/2", Grade- N-80/L-80, Weight- 17 ppf, PDC drillable, Temp-275 Deg F	
5	Centralizers and Stop Rings	
5.1	13-3/8" Casing Centralizers with Stop Collar	semi-rigid bow spring centralizers
5.2	9-5/8" Casing Centralizers with Stop Collar	
5.3	5-1/2" Casing Centralizers with Stop Collar	
6	Thread lock Compound and Casing Thread Dope	Standard Oilfield/API grade for each casing

Note:

- Bidder to supply and use Casing accessories (Float Equipments, Top & Bottom Plugs, Centralizers) of API authorized/licensed vendors only.
- Bidder to take back unused items if any.

9.9. BOARDING, LODGING, MEALS & OFFICES FOR COMPANY'S PERSONNEL:

Company will have Company representative(s) at the rig site. The accommodation, meals, exclusive office space & internet/ telephone facilities for 5-6 (five-six) number of Company representative(s) at the rig site shall be the responsibility of Contractor.

- a. Day Company Man
 - b. Night Company Man
 - c. Mud Supervisor
 - d. Drilling Engineer
 - e. Wellsite Geologist
- Additional accommodation for Company's representatives shall be arranged by Contractor as and when required.
 - One No. living cum office air-conditioned bunk house for company man as office cum accommodation with Table chairs, two single bed with mattress, bed sheets, pillow and blankets, Almirah, Attached toilet, Computer, Printer, Internet, UPS and other office facilities.
 - Living air-conditioned 2-3 bunk houses for other company personnel with Table chairs, two single bed with mattress, TV, bed sheets, pillow and blankets, Almirah, Attached toilet etc.
 - Good quality/hygienic food for GEL personnel.

9.10. Deliverables

A. Prior to commencement of Operations

- a) Contractor QA/QC and inspection for Rig and all equipment approved by Company
- b) Drilling program for the Well 20 days before spud of each Well
- c) Tangibles/ consumables status report

- d) All third-party study reports (if any)
- e) Weekly mobilization plan for rig and allied services from the start of mobilization date.
- f) ILM plan for rig and allied services from the date of issue of ILM notice.
- g) Before start of every well, the Senior Technical Representative of the Contractor shall visit to the Company's HO GEL Bhavan Gandhinagar / Drilling Department for discussion, designing and finalizing the drilling Program.
- h) A Senior Technical Representative/ Manager based at the Contractor's Head Office / Base Office who shall be available on phone whenever required for consultation in case of any technical problem during well in operation.

Note: GTO will be provided by Company in consultation with the contractor.

B. During Drilling/Well Operations

Following reports in the format as agreed by Company & Contractor

- a) Daily Drilling Reports in word & pdf format
- b) Daily IADC Reports
- c) Daily Mud Reports in word & pdf format
- d) Daily HSE and Process Safety Reports in word & pdf format
- e) Daily Time vs Depth Plot w.r.t. GTO Time vs Depth Plot Reports in excel & pdf format.
- f) Operation Wise Cementing Reports with Pumping schedule and pressure chart.

Note: Daily Reports means operations update from 07:00 Hrs to 24:00 Hrs and till morning 07:00 Hrs operations.

C. Post Drilling

The *objectives* for Well acceptance & closeout phase are as follows:

- a) To close out each Well formally to ensure Well is delivered as per Company's requirements
- b) To capture all the data acquired from the Well including lessons learnt
- c) Review of time for each Well in comparison to planned
- d) Contractor shall submit below details for the Well acceptance by Company.
- e) Contractor shall include, but not be limited to, the following elements:
 - 1. Contractor shall be responsible to deliver all the HSE, drilling, logistics and any other data acquired during the drilling campaign.
 - 2. Contractor shall submit an end of Well report for approval which shall comprise of all the Well data, operations, time, NPT details & lessons learnt as a minimum.
 - 3. Contractor shall submit the Well acceptance checklist immediately after drilling of a Well to Company for approval. A Well shall be considered complete only when all the technical objectives as agreed for the Well as per Company's well acceptance checklist have been met.
 - 4. Contractor shall conduct a post-Well review after each Well with Company's technical representatives.

Key deliverables for acceptance & closeout shall be:

- a.) Final coordinates of sub-surface location to be provided after conducting appropriate surveys.
- b.) Transfer of DDRs, IADC Reports, Mud reports, HSE and Process Safety Reports, Time vs Depth Plot w.r.t. GTO Time vs Depth Plot Reports, Cementing Reports and all other associated files to COMPANY's database as per proper industry standard QA/QC procedure.
- c.) Well consumption report along with Inventory reconciliation.

D. CCTV-BASED SURVEILLANCE MONITORING SYSTEMS

- i. CCTV-based surveillance monitoring systems with night-vision capabilities.
- ii. Facility to monitor from Company Man Bunk House.
- iii. Facility to monitor from GEL Base office at Gandhinagar.

E. Logistic Services

- i. For complete logistics, supply chain & base facilities required for the drilling campaign. Contractor should arrange to unload /load the material provided by Company and handle safely at site.
- ii. Contractor to ensure that various logistics and associated services which are required to support various operations are available at site on a dedicated basis.
- iii. Contractor to also mobilize adequate logistic personnel assuming 24 hours operations. This includes but is not limited to the following crane, Forklift, trailer, trucks, semi-skilled manpower, housekeeping, water transportation etc.
- iv. Mobilization of adequate logistics resources to execute this SoW is as per Contractor's discretion. Contractor to supply all the above-mentioned auxiliary services which are required for the operation as per applicable Company's standards

10. KEYNOTE

- 10.1 The Contractor shall arrange its own Bunk House for its Manpower. The Contractor shall be responsible for arranging at his own cost for the lodging, boarding, transportation and other incidental expenses / costs of Contractor's personnel deployed at the drill site. The rates quoted by the Contractor shall be deemed to have included all such costs associated with lodging, boarding, transportation and other incidental expenses of the Contractor's personnel.
- 10.2 The Bidder is required to express clearly in the bid wherever they are deviating from proposed specification in pre bid meeting
- 10.3 The bidder is required to confirm in the responsibility matrix at Annexure I with Yes / No. The bidder's agreement to this responsibility matrix shall be used to evaluate the technical bids. Please refer Annexure I to fill up the responsibility matrix.
- 10.4 Bidder to submit details of Base from where the Bidder intends to operate for this tendered Services / Supply.
- 10.5 All services shall be executed in accordance with all applicable Indian Laws and Regulations. Contractor shall work strictly in accordance with and in full compliance with all relevant municipal, state, and federal regulations, all authorities, and all standards appropriate to the Scope of Work.
- 10.6 Contractor shall be responsible for becoming fully aware of the local situation, wellsite approach road conditions & electric overhead lines in between and shall communicate to the company within 3-4 working days of the issue of mobilization notice for a joint visit.
- 10.7 The Bidder shall submit with this bid its safety manual and procedures.
- 10.8 The Contractor shall provide all the safety kits & liveries and PPE to the workers at the site as per oil industry practices. The Contractor shall be responsible to lift the leftover chemicals from the site once the operations are over and clean the site.
- 10.9 **Mobilization Time: 30 days from issuance of mobilization notice.**

12. Well Acceptance Criteria

Well Acceptance criteria form a crucial part of the contract and is mandatory for the acceptance of well, acceptance of invoices and the payments related to the contract as per the Price Schedule. The acceptance of the wells drilled and delivered to the Company as mandated by the contract

shall be subject to the submission of the Well Acceptance Form as per Annexure II, acceptance by the Company and signature of the Company Representative(s).

Contractor to refer to Well Acceptance Checklist for other details on data to be provided and reports to be submitted prior to Well acceptance by Company. It is to be noted that failure to adhere to the parameters as mentioned in the Well Acceptance Checklist may result in non-approval of any or all the payments as per Price Schedule.

Contractor must meet the following Well Acceptance Criteria:

For 3 CP Wells

1. 13-3/8" Casing cementation report as per plan.
2. 9-5/8" Casing cementation report as per plan.
3. 5-1/2" Casing cementation report as per plan.
4. Hermetical Test Report as per plan.
5. Well Head and X-Mas tree pressure test Report with pressure test chart as per plan.
6. Company acceptance of Deliverables

For 2 CP Wells

1. 9-5/8" Casing cementation report as per plan.
2. 5-1/2" Casing cementation report as per plan.
3. Hermetical Test Report as per plan.
4. Well Head and X-Mas tree pressure test Report with pressure test chart as per plan.
5. Company acceptance of Deliverables

Except where specifically listed, Contractor shall provide everything necessary to prepare for and execute the Scope of Work. To efficiently execute the Services offered, Contractor shall provide the following:

1. Transportation of all Equipment from the contractor's base and commutation of crew Personnel to wellsite from the contractor's camp area.
2. Provision of Intercom equipment to communicate with the key Contractor's representatives like Drilling Supervisor, Tool Pusher, Mud Engineer, Cementing Engineer, Chief mechanic/Electrician etc. and for Company representatives to safely communicate during the job to efficiently & timely supervise and control the operations.
3. Contractor must provide aviation light at the highest point of rig, lightening arrestor, sufficient lighting and electrical power to safely operate the rig, agitators, mud pumps etc.
4. Contractor shall provide valid NDT/MPI test certification for all drill pipes/ high pressure rated equipment / lines /cementing lines / x-overs etc. Company reserves the right to seek any such certification at any point of time.
6. Contractor shall provide a weekly maintenance report of major equipment during the operations and actions taken for continued operations/replacement if needed.
8. All the radiators of rig engines and mud pump engines should be in proper working condition without any cooling water spillage/overflow at site.

13. Applicable Standards

Any variance to Applicable Standards must be reported to Company. API/NACE/ASTM/ISO or equivalent international norms (whichever is applicable) to be followed for rendering services under the Contract. The following generic specifications / standards shall be used as guidelines to render international quality service. In all cases the most recent version shall apply.

API REF	DESCRIPTION
RP 5A3	Thread Compounds for Casing, Tubing and Line Pipe
RP 5A5	Field Inspection of New Casing, Tubing and Plain End Drill Pipe
RP 5B1	Threading Gauging and Thread Inspection of Casing, Tubing and Line Pipe Threads

RP 5C1	Care and Use of Casing and Tubing
Bull 5C2	Performance Properties of Casing, Tubing and Drill Pipe
Bull 5C3	Formulas and Calculations for Casing, Tubing, Drill Pipe, and Line Pipe Properties
RP 5C5	Evaluation Procedures for Casing and Tubing Connections
RP 5C6	Welding Connections to Pipe
RP 5C7	Coiled Tubing Operations in Oil and Gas Well Work
Spec 5CT / ISO 11960	Specification for Casing and Tubing
Spec 6A	Well Head and Christmas Tree Equipment
Bull 6AF	Capabilities of API flanges under Combination of Load
TR 6AF1	Temperature derating of API flanges under Combination Loading
TR 6AF2	Capabilities of API flanges under Combination Loading
TR 6AM	Material Toughness
Spec 6AV1	Verification Test of Wellhead Surface Safety Values and Underwater Safety Valves for Offshore Work
Spec 6D /ISO 14314	Specification for Pipeline Valves
Bull 6J	Testing of Oil field Elastomers
TR 6J1	Elastomer Life Estimation Testing procedures
Spec 7	Rotary Drill Stem Elements
RP 7A1	Testing of Thread Compound for Rotary Shouldered Connections
Spec 7F	Oil Filed Chain and Sprockets
RP 8B / ISO	13534 Inspection, Maintenance and Repair of Hoisting Equipment
Spec 8C	Drilling and Production Hoisting Equipment
Spec 9A / ISO 10425	Wire Rope
RP 9B	Application, Care and Use of Wire Rope for Oil Field Service
Spec 11D1 / ISO 14310	Petroleum and Natural Gas Industries – Down Hole Equipment – Packers and Bridge Plugs
Spec 11LW	Independent Wellhead Equipment
RP 505	Recommended Practice for classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class 1, Zone 0, Zone 1, and Zone
Spec 12B	Bolted Tanks for Storage of Production Liquids
Spec 12J	Oil and Gas Separators
Spec 12K	Indirect – type Oil Field Heaters
Spec14A/ISO 10432:1999	Specification of Subsurface Safety Valve Equipment
RP 14B	Design Installation, Repair and Operation of Subsurface Safety Valves
Spec 14 L / ISO 16070	Lock Mandrels and Landing Nipples
Spec 16C	Choke and Kill Systems
Spec 16D	Control Systems for Drilling Well Control Equipment
RP 19 B	Evaluation of Well Perforators (Formerly RP 43)
RP 31A	Standard Form of Hardcopy Presentation for Downhole Log Data
RP 33	Recommended Practice for Standard calibration and Format for Nuclear Logs
RP 49	Recommended Practice for Drilling and Well Service Operations Involving Hydrogen Sulphide

RP 53	Blow out Prevention Equipment System for Drilling Operations
RP 54	Occupational Safety for Oil and Gas Well Drilling Servicing Operations
RP 55	Conducting Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulphide
RP 67	Oilfield Explosives Safety
RP 74	Occupational Safety for Onshore Oil and Gas Production Operations
API E5	Environmental Guidance Document: Waste Management in Exploration and Production Operations
Publ 4527	Evaluation of Limiting Constituents Suggested for Land Disposal of Exploration and Production Wastes
Std 526	Flanged Steel Pressure Relief Valves
Std 527	Seat Tightness of Pressure Relief Valves
RP 576	Inspection of Pressure Relieving Devices
Std 603	Corrosion Resistant, Bolted Bonnet Gate Valves
API 600	Bolted Bonnet Steel Gate Valves for Petroleum and Natural Gas Industries

NACE STANDARDS AND DOCUMENTS

MR0175-2003	Materials Resistant to Sulphide Stress Cracking and Stress Corrosion Cracking Resistance in Sour Oilfield Environments
Nace MR0175 / ISO 15156-1	Petroleum and Natural Gas Industries – Materials for use in H ₂ S containing Environments in oil and gas production –Part1
RP0273-2001	Handling and Proper Usage of Inhibited Oilfield Acids
RP0491-2003	Worksheet for the selection of Oilfield Non-metallic Seal Systems

IEC STANDARDS

IEC 79-7	Construction and test of flameproof enclosures of electrical apparatus. Construction and test of electrical apparatus, Type protection "e".
IEC 79-8	Classification of maximum surface temperatures. Classification of hazardous area.
IEC 529	Classification of degrees of protection provided by enclosures.
IEC 5781	Specification for measurement and calibration systems, part 1&2.

OTHER APPLICABLE STANDARDS

ISO 9002/9003	Quality Management and Quality Assurance Standard Guidelines for Selection and Use.
ASNT SNT-TC-1A	Recommended Practices for Personnel Qualification and Certification non-destructive Testing
ANSI/ASME NQA-1	Non-Mandatory Guidance on the Qualifications of - App. 2A - 1 Inspection and Test Personnel

Annexure I: Responsibility Matrix

Contractor shall be responsible:

- For complete logistics, supply chain & base facilities required for the drilling campaign. Contractor should arrange to unload /load the material provided by Company and handle safely at site.
- To obtain all the necessary custom clearances & any other permits for any equipment or tangibles related to the drilling campaign.
- For any third-party inspections for rigs, tangibles etc.
- For reporting all the incidents & accidents irrespective of the degree of effect, damage or potential from the incident or accident.
- To ensure that expat personnel have valid MOHA clearances (who are required by law).
- To ensure that all key personnel of drilling contractor at rig site (assistant driller & above) have valid IWCF or IADC certification at appropriate level.
- To clear any debris at the drilling Site & restore the Site.

Responsibility Matrix					
Sr. No.	Item Description	At Expense of		Supplied By	
		Contractor	Company	Contractor	Company
1	Deployment of Drilling Rig and Drilling Services as per the contract for Integrated package with all associated equipment and manpower as mentioned in this document. Allied works for proper placement of Rig and allied equipment.	✓		✓	
2	Company man office at site. (With Desktop, Printer, and necessary amenities)	✓		✓	
3	All equipment for mud/Brine preparation.	✓		✓	
4	Handling (loading & unloading) and storage of Company's, contractor's & subcontractor's materials at drill site.	✓		✓	
5	Transportation of entire drilling Rig with Integrated Package between old location to new location (inter-location move)	✓		✓	
6	Inter-location movement of company's left-over equipment	✓		✓	
7	Fuel and lubricants etc for all Drilling unit, Drilling Services, vehicles & camp. Grease, cleaning solvent, oil for main engines, contractors third party services etc. Necessary PESO permits needs to be obtained for bunkering fuel at site.	✓		✓	
8	Provision of drilling & fishing tools & services	✓		✓	
9	Side track of well up to planned target in case of stuck-up/LIH	✓		✓	
10	Thread lubricants for D/P, Casings & tubing. Drill pipe wipers & flappers	✓		✓	
11	Installation of Conductor with 13-3/8" casing up to 20m.	✓		✓	
12	NDT inspection on contractor's drill string after completion of each 6 months/well throughout the duration of the contract.	✓		✓	
13	Equipment, personals and instruments for mud, completion fluid preparations quality surveillance and measurement at site.	✓		✓	
14	Welding materials & welding operations.	✓		✓	

Responsibility Matrix					
Sr. No.	Item Description	At Expense of		Supplied By	
		Contractor	Company	Contractor	Company
15	Consumables not designed/mentioned but required by contractor for operations or needed for the maintenance of contractors all equipment.	✓		✓	
16	Transportation of contractor's personnel from site to camp and vice-versa.	✓		✓	
17	Deleted				
18	Deleted				
29	Installation of well head and Xmas tree	✓		✓	
20	Contractors' equipment inspection required by any statutory agency.	✓		✓	
21	Periodic inspection of Contractor's equipment as per International Oilfield Practices	✓		✓	
22	Generation of End of well report, Cementing Report and Mud Report and data both in 2 nos. colour hard copies and 2 nos. soft copies in separate	✓		✓	
23	Equipment & services (Integrated Packages) not designed/mentioned but required by contractor in normal day to day operations	✓		✓	
24	Safety equipment for personal as per HSE standards of oil field	✓		✓	
25	Food and housing of Company's and contractor's personnel	✓		✓	
26	All equipment required for drilling a well under the Integrated Drilling Contract, including surface and downhole equipment, as well as Lost in Hole (LIH) items, are the Contractor's responsibility. All Lost in Hole surface and downhole equipment are included in the Contractor's scope.	✓		✓	
27	Maintenance of well site & camp site facilities including Supply of potable water and drinking water for persons working at site	✓		✓	
28	Supply & maintenance of firefighting equipment required	✓		✓	
29	Security at camp site & Rig site. Cleaning of well site after Rig released	✓		✓	
30	Disposal of empty drums, sacks, drilling waste and similar waste generated at Well Site during blending/ mixing chemical required for the job execution.	✓		✓	
31	Availability of Forklift, Hydra, Trailers and Crane at site for loading / unloading of company's equipment/ material at site till rig release.	✓		✓	
32	Provision of Class G cement, cementing chemicals, consumables, float equipment, top & bottom plugs & services or any type of material, required to carry out the cementing job successfully	✓		✓	
33	Transportation of chemicals and cement	✓		✓	

Responsibility Matrix					
Sr. No.	Item Description	At Expense of		Supplied By	
		Contractor	Company	Contractor	Company
34	Provide the Valid API certificate of cement used & chemicals.	✓		✓	
35	Provide number of people required to do cementing job successfully Mention in cementing program.	✓		✓	
36	Provide the cementing program and slurry design as per data given by Company.	✓		✓	
37	Provide all equipment required to do cementing job Viz, Cementing head, cement, high pressure lines, valves etc. At any point of time there is no delay from the side cementing contractor because of equipment non availability.	✓		✓	
38	Provide the lab test report as data given by the company.	✓		✓	
39	Provision of laboratory equipment and instruments	✓		✓	
40	The Cementing unit should be tested prior to the job as specified by Company Man available at Drill site.	✓		✓	
41	Provide the sequence of pumping schedule in program and plug bumping pressure.	✓		✓	
42	Provide the Casing standoff program based on data taken from the calliper log provided by the company.	✓		✓	✓
43	Provide the top plug and bottom plug as per drilling program	✓		✓	
44	Provision of drilling fluids & solid control equipment & services	✓		✓	
45	Deployment of Mud Engineering services package with all associated equipment and manpower per technical specifications mentioned in this document.	✓		✓	
46	Transportation of all Equipment and chemicals required for the smooth operation.	✓		✓	
47	To Design Mud Program as per data given by the company.	✓		✓	
48	All material, chemicals, equipment, water, and manpower for brine/mud preparation.	✓		✓	
49	Supply of Mud engineering lab to measure all the mud parameters at site during drilling campaign	✓		✓	
50	Food for Rig crew, Mud Engineering personnel, cementing personnel, logging personals and any other service provider working at site.	✓		✓	
51	Lodging of the Mud Engineering personnel, cementing and other contractors' services and rig crew	✓		✓	
52	Any Additional electrical connection required to install Mud lab, cementing, mud logging or any Company's or contractors third party services.	✓		✓	
53	All HSE gears required to work on the Drilling Rigs for Contractor's personal.	✓		✓	
54	Need to give us the Minimum chemicals requirement in mud program.	✓		✓	

Responsibility Matrix					
Sr. No.	Item Description	At Expense of		Supplied By	
		Contractor	Company	Contractor	Company
55	Resume of all service personnel with prior experience certificates.	✓		✓	
56	Transportation of the Mud Engineer from their base to rig site is in the scope of the contractors.	✓		✓	
57	Certificates of the chemicals need to provide, such as date of manufacturing, expiry date etc.	✓		✓	
58	If any imported chemicals need to be used contractor need to provide the required documents for the custom duty exemption.	✓		✓	
59	Data required for design of mud program.	✓		✓	✓
60	Technical water required for entire contract.	✓		✓	
61	Supply/Provision of Drill Bits, bit hydraulics report	✓		✓	
62	Provide all equipment list required for drilling well.	✓		✓	
63	Deleted				
64	All transportation required for Directional Drilling (DD) services	✓		✓	
65	Loading and unloading DD tools at site.	✓		✓	
66	RIH for DD tools & equipment's. Directional Drilling Reports, slide sheets and projections	✓		✓	
67	Provision of CTRS (casing and tubing running equipment and services) including consumables viz., casing dope, thread lock compound, etc.	✓		✓	
68	Provision of hydraulic bolt torquing and cold casing cutting	✓		✓	
70	Provision of torquing, cutting and welding services	✓		✓	
71	Supply of casing & cementing accessories including centralizers, float equipment and bottom & top plugs.	✓		✓	
72	Supply of casings		✓		✓
73	Civil work for site preparation & approach road as per equipment layout agreed with contractor		✓		✓
74	Supply of wellhead & Xmas tree assembly		✓		✓
75	Provision of mud logging services		✓		✓
76	Provision of wireline logging services as per company's evaluation program		✓		✓
77	Dedicated 5 Seater vehicle in Excellent condition stationed at well site with log book for Company Personnel with a monthly running of 3000 kms.	✓		✓	
78	Provisioning of Office space, boarding and lodging provision for upto 5 Company Personnel at Rig site	✓		✓	
79	Security for Contractor Equipment and Personnel at the wellsite.	✓		✓	
80	Permits, licenses, etc, of any nature required for operation of Contractor's equipment or usage of Contractor supplied consumables/ products. (E.g.: EC's)	✓		✓	

Responsibility Matrix					
Sr. No.	Item Description	At Expense of		Supplied By	
		Contractor	Company	Contractor	Company
81	First aid and medical attention, equipment and supplies for Contractor's Personnel at the WELL SITE including medic.	✓		✓	
82	Ambulance services for transportation from Well Site to contractor's designated (tie-up) nearby hospital, equipped and of a type approved by Company.	✓		✓	
83	Safety equipment required to operate Contractor's Equipment and required to comply with Legislation and Contractor's safety regulations as applicable.	✓		✓	
84	Personal Protective Equipment (PPE) including safety hats, shoes, gloves, glasses, eye and ear protection and all protective clothing for all Contractor Personnel.	✓		✓	
85	Visas, work permits, residence permits, identification cards, social security registration, health certification, licences, industry certification (where necessary), MOHA for all Contractor Personnel.	✓		✓	
86	Obtaining PESO approvals for use and storage of Diesel	✓		✓	

Annexure II: Well Acceptance Check List



Sr. No.	Description	Comment	Well acceptance criteria
1	Deliverables as per Scope of Work	Submission of all reports as per Scope of Work	All reports have been submitted.
2	Deviation from pre-submitted Drilling Montage / Program	As per approved Drilling Montage/ Program	MOC/ Dispensation form approved by Company towards any deviation from drilling montage/ program shall be in place. This shall include but not limited to change in mud weight, cement design, directional plan, casing seat etc.
3	Deliverables during and after drilling	Drilling as per Scope of Work	All reports have been submitted.
4	End of well reports	EOWR for each Well to be provided	EOWR shall be provided capturing details of drilling & completion within 2 weeks after end of each Well.

Annexure-III

Deductions/LD applicable for Non Productive Time (NPT) **(Delayed beyond quoted time for each well)**

There will be deductions applicable for IDS contractor's NPT considering project delay and stand by charges of other third party support services deployed by company (Mud logging, Wireline logging, Drill site consultants etc.). Bidder has to quote their estimated time duration for each well as required under **SOW Key Details point no. 6**. This estimated time duration must include the wireline logging days mentioned for each well.

In case of drilling time goes beyond bidder's quoted time duration then following deductions shall be applicable:

Sr. No.	Duration of Delay beyond quoted time	Percentage of R1 day rate of IDS Package deductible on hourly pro-rata basis
1	Day 1 to Day 7	10% for each 24 hrs
2	Day 8 to Day 14	15% for each 24 hrs
3	Day 15 to Day 21	20% for each 24 hrs
4	Beyond 21 days	GEL reserve the right to terminate the contract as per Clause 4.19. Deduction at 20% of R1 for each 24 hrs delay on pro-rata basis will be applicable until issuance of termination.

For delay in ILM and Mobilization, the Liquidated Clause 4.28 will be applicable.

SECTION 8 — DELETED



SECTION 9 — PRICE SCHEDULE

Prices shall be quoted strictly in the format below. Indian Bidders shall quote in INR only; Foreign Bidders in USD only. Rates are inclusive of all taxes/duties except GST, which shall be indicated and paid separately, as per Clause 4.4.6/4.13 of the GTC.

The Technical Bid shall carry this Price Schedule with the word "QUOTED" against every applicable line item and no figures; the priced version shall be submitted only in the Commercial Bid.

Price Schedule & Evaluation Matrix for: INTEGRATED DRILLING SERVICES (IDS)

Table A: Integrated Drilling Service (IDS)

Bidder to provide service wise breakup under sr. no. 1, 2, 3, 4, 5 & 6 (Mobilization, Demobilization, Well Drilling Cost, Extra meterage cost, ILM, Operating and Stand By Day Rates)

Sr. No.	Description	UoM (A)	Estimated Quantity (B)	Rate/Price (INR or USD) (C)	Total (INR or USD) (D) = (B) x (C)
1	Mobilization Charges for Integrated Drilling Services from bidder's base to GEL wellsite				
1a.	Mobilization of Integrated Drilling Services to Ankleshwar block (=Total of all services below 1a.1 to 1a.5)	Lumpsum	01		
1a.1	Drilling Rig	Lumpsum			
1a.2	Cementing Service	Lumpsum			
1a.3	Drilling Fluid Service	Lumpsum			
1a.4	Mobile ETP	Lumpsum			
1a.5	Directional Drilling	Lumpsum			
1b.	Mobilization of Integrated Drilling Services to Tarapur Block (including RFPSC) (= Total of all services below 1b.1 to 1b.5)	Lumpsum	Rate Only		
1b.1	Drilling Rig	Lumpsum			
1b.2	Cementing Service	Lumpsum			
1b.3	Drilling Fluid Service	Lumpsum			
1b.4	Mobile ETP	Lumpsum			
1b.5	Directional Drilling	Lumpsum			
1c.	Mobilization of Integrated Drilling Services to Ahmedabad Block (Including RFPSC) (= Total of all services below 1c.1 to 1c.5)	Lumpsum	Rate Only		
1c.1	Drilling Rig	Lumpsum			
1c.2	Cementing Service	Lumpsum			
1c.3	Drilling Fluid Service	Lumpsum			
1c.4	Mobile ETP	Lumpsum			
1c.5	Directional Drilling	Lumpsum			
2	De-mobilization Charges for Integrated Drilling Services from GEL wellsite to bidder's base				
2a.	Demobilization of Integrated Drilling Services from Ankleshwar Block (= Total of all services below 2a.1 to 2a.5)	Lumpsum	Rate Only		
2a.1	Drilling Rig	Lumpsum			
2a.2	Cementing Service	Lumpsum			
2a.3	Drilling Fluid Service	Lumpsum			
2a.4	Mobile ETP	Lumpsum			
2a.5	Directional Drilling	Lumpsum			



2b.	Demobilization of Integrated Drilling Services from Tarapur Block (Including RFPSC) (= Total of all services below 2b.1 to 2b.5)	Lumpsum	Rate Only		
2b.1	Drilling Rig	Lumpsum			
2b.2	Cementing Service	Lumpsum			
2b.3	Drilling Fluid Service	Lumpsum			
2b.4	Mobile ETP	Lumpsum			
2b.5	Directional Drilling	Lumpsum			
2c.	Demobilization of Integrated Drilling Services from Ahmedabad Block (Including RFPSC) (= Total of all services below 2c.1 to 2c.5)	Lumpsum	01		
2c.1	Drilling Rig	Lumpsum			
2c.2	Cementing Service	Lumpsum			
2c.3	Drilling Fluid Service	Lumpsum			
2c.4	Mobile ETP	Lumpsum			
2c.5	Directional Drilling	Lumpsum			
3	2 CP Well Drilling Cost (Lumpsum & extra meterage cost)				
3a.	Drilling 2CP Vertical Well up to 1500 m as per SOW (= Total of all services below 3a.1 to 3a.4)	Lumpsum/ well	02		
3a.1	Drilling Rig	Lumpsum			
3a.2	Cementing Service	Lumpsum			
3a.3	Drilling Fluid Service	Lumpsum			
3a.4	Mobile ETP	Lumpsum			
3b.	Extra meterage for 2 CP vertical well- Per Meter Drilling Cost (either plus or minus) increase or decrease over and above 1500 m as per SOW (= Total of all services below 3b.1 to 3b.4)	Per meter	+ 150		
3b.1	Drilling Rig	Per meter			
3b.2	Cementing Service	Per meter			
3b.3	Drilling Fluid Service	Per meter			
3b.4	Mobile ETP	Per meter			
4	3 CP Well Drilling Cost (Lumpsum & extra meterage cost)				
4a.	Drilling 3CP Directional Well up to 1800m as per SOW (= Total of all services below 4a.1 to 4a.5)	Lumpsum/ well	02		
4a.1	Drilling Rig	Lumpsum			
4a.2	Cementing Service	Lumpsum			
4a.3	Drilling Fluid Service	Lumpsum			
4a.4	Mobile ETP	Lumpsum			
4a.5	Directional Drilling	Lumpsum			
4b.	Extra meterage for 3CP Directional well- Per Meter Drilling Cost (either plus or minus) increase or decrease over and above 1800 m as per SOW (= Total of all services below 4b.1 to 4b.5)	Per meter	+150		
4b.1	Drilling Rig	Per meter			
4b.2	Cementing Service	Per meter			
4b.3	Drilling Fluid Service	Per meter			
4b.4	Mobile ETP	Per meter			



4b.5	Directional Drilling	Per meter			
5	Inter Location Movement (ILM) Between well locations (Applicable for all Blocks)				
5a.	ILM (00 – 10 KM) (= Total of all services below 5a.1 to 5a.5)	Lumpsum per move	Rate Only		
5a.1	Drilling Rig	Lumpsum			
5a.2	Cementing Service	Lumpsum			
5a.3	Drilling Fluid Service	Lumpsum			
5a.4	Mobile ETP	Lumpsum			
5a.5	Directional Drilling	Lumpsum			
5b.	ILM (10.01 – 50 KM) (= Total of all services below 5b.1 to 5b.5)	Lumpsum per move	3		
5b.1	Drilling Rig	Lumpsum			
5b.2	Cementing Service	Lumpsum			
5b.3	Drilling Fluid Service	Lumpsum			
5b.4	Mobile ETP	Lumpsum			
5b.5	Directional Drilling	Lumpsum			
5c.	ILM (Beyond 50 KM) (per KM rate) (= Total of all services below 5c.1 to 5c.5)	per KM	140		
5c.1	Drilling Rig	per KM			
5c.2	Cementing Service	per KM			
5c.3	Drilling Fluid Service	per KM			
5c.4	Mobile ETP	per KM			
5c.5	Directional Drilling	per KM			
6	Day Rate for any additional work beyond tender scope (or any remedial work not attributable to contractor's fault)				
6a.	Operating Day Rate (R1) (= Total of all services below 6a.1 to 6a.5)	Per day	8		
6a.1	Drilling Rig	Per day			
6a.2	Cementing Service	Per day			
6a.3	Drilling Fluid Service	Per day			
6a.4	Mobile ETP	Per day			
6a.5	Directional Drilling	Per day			
6b.	Stand By Day Rate (R2) (= Total of all services below 6b.1 to 6b.5)	Per Day	8		
6b.1	Drilling Rig	Per day			
6b.2	Cementing Service	Per day			
6b.3	Drilling Fluid Service	Per day			
6b.4	Mobile ETP	Per day			
6b.5	Directional Drilling	Per day			

- Bidder to provide service wise breakup under sr. no. 1, 2, 3, 4, 5 & 6 in above table. In case of vertical well (or activity without directional service), directional service related cost will not be payable.

**Table B: Contingency Chemicals /cement slurry**

Contingency Chemicals (Bidder has to furnish the cost mandatorily for the mentioned quantity)					
S. No.	Chemicals	UoM	Estimated Quantity for Evaluation (B)	Rate/Price (INR or USD) (C)	Total (INR or USD) (D) = B x C
1.	Spotting Fluid	DRUM (55 Gal)	6		
2.	Rice Husk	KG	100		
3.	CaCo ₃ Coarse	KG	500		
4.	Mica	KG	200		
5.	Walnut Shell	KG	200		
6.	Defoamer	DRUM (55 Gal)	1		
7.	LUBE Lubricant	DRUM(55 Gal)	2		
8.	Cement slurry (15.8 ppg & 24 hr compr. strength at least 1500 psi)	Per bbl	200 bbl		
Total Lumpsum (Total of all above line items) = Summation of Contingency Chemicals & cement slurry (D)					

- The bidder must quote the unit rates for the above contingency material which shall be included for evaluation. If these specialized chemicals are put to use in case of drilling complications not attributable to contractor's fault, the payment shall be made on actual consumption basis.
- Bidder to provide Cement slurry cost of 15.8 ppg and 24 hr compressive strength minimum 1500 psi. This cement slurry cost will be payable in case it is used for any near surface leakage around cellar pit or any downhole plug job not attributable to contractor's fault. Payment will be done as per actual use.



Table C: Grand Summary of Table A and Table B

Sr. No.	Description	Reference	Amount (INR/USD)
Integrated Drilling Services Cost (From above Table A of price schedule)			
1	Mobilization Charges for IDS package	Sr. No. 1A	
2	Demobilization Charges for IDS package	Sr. No. 2C	
3	Drilling of 02 Nos. 2 CP Vertical Wells (up to 1,500 m)	Sr. No. 3A	
4	Extra Meterage for 2 CP Vertical Wells (±150 m)	Sr. No. 3B	
5	Drilling of 02 Nos. 3 CP Directional Wells (up to 1,800 m)	Sr. No. 4A	
6	Extra Meterage for 3 CP Directional Wells (±150 m)	Sr. No. 4B	
7	Inter Location Movement (ILM) (10.01-50 Km)	Sr. No. 5B	
8	Inter Location Movement (ILM) (Beyond 50 Km)	Sr. No. 5C	
9	Operating Rate (R-1)	Sr. No. 6A	
10	Standby Rate (R-2)	Sr. No. 6B	
X	Sub Total - Integrated Drilling Services (IDS) (Excluding GST) = Sum of Sr. No. 1 to 10 (X)		
Contingency Chemicals & Cement Slurry (From above Table B of price schedule)			
11	Contingency Chemicals & Cement Slurry	(TABE B: Sr. No. 1 to 8) Total	
Y	Sub Total - Contingency Chemicals (Excluding GST) = Sr. No. 11 (Y)		
Z= X+Y	Total Evaluated Contract Value of Table A and Table B (Excluding GST) = (X+Y).		
	Applicable GST / IGST ____ % (SAC CODE _____)		
	Grand Total Contract Value (Including GST)		

Notes for Price Schedule:

1. The above quantities are for evaluation purpose only based on estimates of 04 drilling wells (03 firm + 01 contingent). The above quantities may increase or decrease during actual execution based on actual operational requirement and drilling progress. Payment shall be done as per actual utilization.
2. IDS cost under Table A shall include all cost pertaining to cost of drilling rig, Drilling Fluid, Directional Drilling, Cementing, Mobile ETP, Drill Bits and Casing Accessories (Float Equipments, Top & bottom Plugs etc as mentioned in tender document).



3. Evaluation shall be done based on total price of Z(X+Y) under Table C (Grand Summary) without GST.. Bidders/Contractors to mention the currency (USD or INR) for the above line items. Indian Bidder/Contractors to quote the prices only in INR. Exchange rate shall be considered as bid closing date of RBI reference rate for comparing INR and USD currency.
4. The applicability of the above rates is subject to all the relevant clauses of the contract.
5. Operating Day Rates (R-1) and Standby Day Rate (R-2) more or less than 24 hours shall be pro-rated as per the contract. These R-1 & R-2 rates shall be payable in case any additional work beyond tender scope is carried out on GEL's request or any remedial work done which is not attributable to contractor's fault.
6. Contingency Chemicals & Cement Slurry (Table B above) are considered for evaluation purposes. It will be used if required in well due to complications if any.
7. Day Consideration for wireline logging operation:
 - In Ank#21D1 well (2 CP) of maximum depth 1550 mtrs, 2.5 days for wireline logging including any hole conditioning round trip in 8 ½" hole section has been considered.
 - In GSAH#5-D5 well (2 CP) of maximum depth 1550 mtrs, 4.5 days for wireline logging including any hole conditioning round trip in 8 ½" hole section along with VSP has been considered.
 - In TA#6-D1 well (3 CP) of maximum depth 1900 mtrs, 2.5 days for wireline logging including any hole conditioning round trip for 12 ¼" and 8 ½" hole section has been considered.
 - In PNE#1-D1 well (3 CP) of maximum depth 1900 mtrs, 4.5 days for wireline logging including any hole conditioning round trip for 12 ¼" and 8 ½" hole section along with VSP has been considered.
8. **Extra Meterage Rates (Sr. No 3b & 4b of price schedule Table A)**
 - The Bidder shall quote separate rates per meter for additional/decreased drilling depth for both 2 CP Wells and 3 CP Wells.
 - The quoted rates shall be applicable on a pro-rata basis for any increase or decrease in the actual well depth from the planned depth specified by the Company.
 - In the event the actual depth exceeds the planned depth, payment for the additional meterage shall be made at the quoted extra meterage rates.
 - Conversely, in the event the actual depth is less than the planned depth, a corresponding deduction shall be applicable from the Contract Price at the same quoted rates for the reduced meterage.
 - The rates quoted for extra meterage shall remain firm and shall be used for both upward and downward adjustments in the Contract Price arising out of variation in well depth.
9. Bidders must comply with the limits indicated against each of the following rates:
 - i) Mobilization charges for IDS/Drilling shall not exceed 2% of the total quoted value of the Contract in the Price Bid format. However, Mobilization charges if quoted in excess of 2% in case of IDS of total quoted value for the Contract, the excess amount shall be withheld and paid at the end of the contract.
 - ii) De-Mobilization charges for IDS/Drilling should not be quoted less than 2% of the quoted total value of the Contract in the Price Bid format. If De-mobilization Charges of IDS are quoted in deficit or less than 2% of total quoted value, 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.



10. The text description of an item given herein is intended only as a brief description for identification and not an exhaustive detailing of the obligation or work involved.

The rates, sums and prices:

- a) Prices are quoted in ____ <specify currency (USD/INR>. (Indian bidder should quote in INR only)
 - b) are considered complete in respect of the Services and no extras will be considered unless they are deemed extra to the Services.
 - c) shall remain fixed and firm and shall not be subject to amendment for any cause, except as expressly stated in the Contract.
 - d) are all inclusive rates, sums and prices including without limitation all taxes chargeable, including Indian With-holding taxes and VAT (if applicable) under the Contract and payable by the Contractor, allowances for the local conditions, profit and overheads, financing costs, logistics, insurance, supervision, safety, equipment and maintenance cost, fuel cost, lubricants etc. and all personnel costs (including without limitation salaries, rotation, insurance, welfare, quartering and feeding, training, etc.). The only sole exception is applicable Goods & Services Tax and if applicable Company shall bear the cost.
 - e) The cost of any item where the price is left blank shall be deemed included elsewhere.
11. The Lumpsum Price per Well will include cost for designing, drilling, completing, data acquisition in the Well as per **scope of work** and will include (without limitation) all costs, expenses and Taxes for or in relation to the Rig and other Contractor Items & Personnel, any associated drilling or well services, integrated service coordination management, logistics and transportation, waste management, communication, security, documentation and all other costs, expenses, and overheads arising out of the performance of the Work.

BIDDER TO MANDATORILY UPLOAD THE ABOVE PRICE SCHEDULES / TABLES IN THE PRICE BID SECTION TO INDICATE THE PRICE BREAKUP



SECTION 10: Bidder Qualification Criteria (BQC)

A. TECHNICAL CRITERIA:

Sr. No.	Qualification Criteria and its Supporting Documents: Bidder has to provide all supporting documents against each of qualification criteria mentioned below:
A.1	<u>Drilling Rig Ownership and its Operatorship</u> The Bidder shall be the owner and operator of an onshore drilling rig with minimum capacity 900 HP or more for drilling the wells envisaged under this tender. The Bidder shall submit the following: • Documentary evidence of ownership of the drilling rig; • The proposed rig shall be capable of drilling and completing onshore wells up to approximately 2,200 meters depth.
A.2	<u>Experience Criteria:</u> • Integrated Drilling Services Experience The Bidder shall satisfy either of the following criteria: – The Bidder shall have successfully executed following Integrated Drilling Services (IDS) Contract/s(*) for any E&P Operator during the last five (05) years preceding the bid due date: ○ at least one (01) Integrated Drilling Services (IDS) Contract of minimum four (04) wells OR ○ two (02) Integrated Drilling Services (IDS) Contract of minimum two (02) wells under each contract – *For the purpose of this criterion, the above Integrated Drilling Services (IDS) contract must include drilling rig services together with at least any two service contracts out of the following services inhouse or through Joint venture agreement/Subcontracting: • Drilling Fluids Services • Cementing Services • Directional Drilling Services . – However, GEL reserves the right to accept the IDS Package subject to GEL's inspection at present location of the rig and all other integrated services packages. <u>Supporting Documents:</u> Documents to be Submitted in Support of Experience Criteria The Bidder shall submit the following documentary evidence in support of the above Experience Criteria. A. Documents must be submitted The Bidder shall submit: 1. Copy of Contract/Agreement/Letter of Award (LOA)/Purchase Order clearly indicating: • Name of Client/ E&P Operator; • Name of Contractor; • Contract Number and Date; • Scope of Work; • Contract Duration. 2. Documentary evidence of satisfactory execution/completion of the contract in the form of any one of the following: • Completion Certificate issued by the Client; • Performance Certificate issued by the Client; • Contract Closure Certificate;



	• Certificate issued by the Client confirming satisfactory execution of the work. 3. In case the above documents do not clearly indicate the required details such as number of wells, well depth or scope of work, the Bidder shall additionally submit a certificate issued by the Client clearly confirming the same. 4. A detailed Scope clearly identifying all services delivered satisfactorily under the contract. 5. Documentary evidence establishing that the Integrated Drilling Services Contract included: ○ Drilling Rig Services; and ○ At least any two (02) of the following services: ▪ Drilling Fluids Services; ▪ Cementing Services; ▪ Directional Drilling Services If bidder has outsourced these other drilling services and where the Bidder relies on Technical Partner /(s) for execution of above IDS, the Bidder shall additionally submit Contract /Work order and Scope allocation clearly identifying the services performed by each party.
A.3	The Bidder shall submit, as part of the Technical Bid, a copy of the prescribed Price Schedule without indicating any prices, rates or amounts. The word "QUOTED" shall be mentioned against each applicable line item of the Price Schedule. Submission of the blank Price Schedule shall be deemed as the Bidder's confirmation that: • All line items of the Price Schedule have been duly considered while preparing the Financial/Price Bid; • The corresponding duly filled Price Schedule containing the quoted prices has been submitted only in the Financial/Price Bid; and • No line item has been omitted from the Financial/Price Bid. Document Required: Unpriced price Schedule with the word "QUOTED" against each applicable line item and without any prices, rates or amounts.
A.4	<u>Single Point Responsibility:</u> Bidder shall remain solely responsible for execution of all services provided by the bidder including those performed through subcontractors or technical partners as per tender scope of work and responsibility matrix. The Bid shall be submitted by a single legal entity. Consortium, Joint Venture (JV) and Association of Persons (AoP) bids shall not be permitted. In case bidder does not have its own services apart from drilling rig, then Bidder must have Memoranda of Understanding (MoUs)/Sub-contracting or other legal agreements with specialized service providers for meeting the tender scope of work. Such arrangements shall not be construed as a Consortium, Joint Venture or Association of Persons (AoP). The Bidder shall be solely responsible and fully liable for the execution and performance of the entire Contract, including the services performed by its MoU/ Technical partners, subcontractors or associates. <u>Document Required:</u> Bidder shall submit an undertaking on its letterhead confirming compliance with the above requirements and furnish copies of the MoUs/Agreements with the proposed service providers, wherever applicable.



A.5	<u>Compliance with API Specifications</u> The Bidder shall confirm that the offered Drilling Rig and major equipment proposed under the Integrated Drilling Services (IDS), including Drilling Fluid Equipment, Cementing Equipment, Directional Drilling Equipment, Chemicals, Drill Bits and Casing Accessories, shall conform to the applicable API Specifications/Recommended Practices (API RP) wherever applicable as per scope of work of the tender. Documentary Evidence: As per scope of work, the Bidder shall submit a duly signed and stamped undertaking confirming compliance with the applicable API Specifications/Recommended Practices for the offered equipment/chemicals/consumables as per scope of work of the tender.
A.6	<u>Technical Tie-up for Integrated Drilling Services:</u> Where the Bidder does not possess in-house capability for Drilling Fluid Services, Cementing Services, Directional Drilling Services, Mobile ETP Service, Drill Bit Supply and Casing Accessories, the Bidder may engage one or more Technical Partner(s) through a legal agreement as per the options provided in the scope of work. The Bidder shall remain solely responsible for the execution and performance of all such services under the Contract. For Supply Items: 1. Drill Bits: The bidder shall submit an undertaking stating that the drill bits to be supplied for drilling of wells under this tender shall be from any of API Spec 7-1 authorized/licensed manufactures: Baker Hughes/Schlumberger (Smith)/Halliburton/Reed (NOV)/Drill Bits International (DBI). 2. Casing Accessories (Float Shoe, Float collar, Top & Bottom Plugs, Centralizers etc): The bidder shall submit an undertaking stating that the item supplied for drilling of wells under this tender shall be from any of the reputed manufacturers confirming to API standards. Documentary Evidence Required: (i) Legal Memorandum of Understanding (MoU)/Technical Collaboration Agreement/Service Agreement executed between the Bidder and the each of Technical Partner(s). (ii) Each agreement shall clearly indicate the scope of services, roles and responsibilities, validity covering the entire contract period of four wells to be drilled, and commitment of the Technical Partner(s) for execution of the proposed services. Bidder shall have to include the experience criteria requirement mentioned in the tender document. (iii) Technical Partner MoUs are required to 'be co-terminus with, or exceed, the full Contract Term (including any extension)
A.7	<u>Experience of Technical Partner(s):</u> Each Technical Partner proposed by the Bidder for execution of Drilling Fluid Services, Cementing Services, Directional Drilling Services & Mobile ETP services, shall have successfully executed the respective service(s) for at least four (04) onshore wells during the last five (05) years preceding the original bid due date. The above experience may have been gained either: a) as an independent service provider under a standalone contract; or b) as a Technical Partner/Subcontractor under an Integrated Drilling Services (IDS) Contract.



	Supporting Documents: The Bidder shall submit the following documents for each proposed Technical Partner: 1. Copy of Work Order/Contract/Letter of Award (LOA) indicating the scope of work. 2. Completion Certificate or Performance Certificate issued by the Client. 3. Documentary evidence confirming that the Technical Partner executed the respective service for at least four (04) onshore wells. 4. If the number of wells is not evident from the Work Order or Completion Certificate, the Bidder shall submit a certificate from the Client clearly indicating the number of wells and the services executed.
A.8	Technical manpower • Bidder to provide qualified & experienced personnel (Rig Crew, Drilling Fluid crew, Cementing Crew, Directional drilling crew etc) as per requirement mentioned in the tender document, to perform operations safely and timely under these tendered services. Supporting Documents: • Bidder to submit undertaking confirming that the required personnel shall be provided as per the requirement mentioned in the tender documents duly supported by Bidder certified CVs mentioning educational qualification and Experience in the work position, and Passport copies (if expatriate). • Bidder to submit the undertaking that Valid IWCF/IADC Well-Sharp Certificate shall be provided for the key personnel as per SOW of the tender document. • Any replacement of key personnel shall be made only with the prior approval of Gujarat Energy Limited (Company).
A.9	Integrated Project Management Team: Undertaking for Deployment of Integrated Project Management Team Bidder to submit undertaking that, upon award of the Contract, bidder shall deploy a competent Integrated Project Manager experienced in planning, coordination, supervision and execution of the Integrated Drilling Services as per requirement mentioned in the tender document. The Integrated Project Management Team shall meet the requirements specified in the Tender Document.
A.10	Acceptance of Tender Terms & Conditions: • Bidder's unconditional acceptance of all Tender Terms and Conditions unless and until any change/s accepted by GEL. Supporting Document: Bidder to submit an undertaking confirming acceptance of tender terms & conditions.
A.11	MOBILIZATION COMMITMENT Bidder shall mobilize the Integrated Drilling Services within stipulated time for mobilization (without any subject to availability of any services) as per the terms mentioned in the tender document. GEL intends to spud the first well by 2nd week of Nov'26. GEL reserves the right to accept or reject the bid in case mobilization time does not support the above mentioned timeline. If the Bid submitted by the Bidder quote any time exceeding the time to mobilize the IDS mentioned in the terms of the Tender Document, then GEL reserves its right to reject the Bid. Supporting Document: Undertaking on Bidder's Letterhead for confirmation of above mobilization commitment.
B. FINANCIAL CRITERIA	
Sr No	Qualification Criteria and its Supporting Documents:
B.1	Bidder is required to submit the following bid bond as per condition mentioned in the tender document US\$ 100,000 for foreign bidder & Rs. 1.0 crore for Indian Bidder



	GEL Bank Details: Account Name : GEL CB ONN 2003/2 ANKLESHWAR JV ACCOUNT Account No. 57500001061328 IFSC Code : HDFC0000006 (for INR payments only) Bank Name : HDFC Bank Ltd Account type : Current Address : Ground Floor Astral Tower, Near Mithakali Six Road, Navrangpura, Ahmedabad, GUJARAT Supporting Documents: Proof of EMD/Bid Bond submission
B.2	AVERAGE ANNUAL TURNOVER & Net worth: Average Annual Turnover: The Bidder shall have an Average Annual Turnover during the last three (03) financial years (i.e. FY 2023-24, FY 2024-25 & FY 2025-26 or the preceding three (03) financial years in case the audited financial statements for FY 2025-26 are not available) of at least: – Indian Bidder: INR, 40,00,00,000 (Rs. Forty Crore) – Foreign Bidder: USD: 4,200,000. (US \$ 4.2 million) Net Worth: The Bidder shall have a Positive Net Worth as on the last date of the latest completed financial year. Net Worth = (Equity + Free Reserves) – (Revaluation Reserves + Intangible Assets + Miscellaneous Expenditure to the extent not written off + Carried Forward Losses). Documents to be Submitted For Indian Bidders: • Audited Financial Statements for the relevant financial years. • Certificate from a Practicing Chartered Accountant certifying the Average Annual Turnover and Positive Net Worth. The certificate shall bear a valid UDIN, Membership Number and Firm Registration Number (FRN). For Foreign Bidders: • Audited Financial Statements (or equivalent financial statements as per the applicable laws of the bidder's country) duly audited by an Independent Auditor/Statutory Auditor/Certified Public Accountant (CPA) or equivalent authority. • Where the Average Annual Turnover and/or Net Worth are not readily ascertainable from the audited financial statements, a certificate issued by the Independent Auditor/Statutory Auditor/CPA or equivalent authority certifying the Average Annual Turnover and Positive Net Worth.
B.3	The Bidder shall not be under liquidation, court receivership, bankruptcy, insolvency proceedings, business suspension, or any analogous proceedings under the laws of its country on the original bid submission date. A self-declaration to this effect shall be submitted. Supporting Document: Bidder to submit Self-Declaration.
Note: 1. If FY 2025-26 audited statements are unavailable, preceding audited FY may be considered. 2. In case bidder is incorporated less than three years ago, completed financial years shall be considered. 3. GEL reserves the right to verify financial information submitted by the Bidder	
C. OTHER REQUIREMENTS	
Sr. No.	Criteria & Supporting Document:
C.1	Bidder shall not be on Holiday List / Blacklisted / Debarred by GEL or any GEL Group Company. Bidder to submit Self-Declaration



C.2	Consortium, Joint Venture (JV) or Association of Persons (AoP) bids are not permitted . The Bid shall be submitted by a single legal entity, which shall be solely responsible for the execution and performance of the entire Contract. The Bidder should be a company.
C.3	GEL reserves the right to verify submitted credentials directly with clients/customers through third party also. Any false declaration may result in rejection of bid and forfeiture of EMD and debarment as per GEL policy mentioned on website.

D. COMMERCIAL CRITERIA

Sr. No.	Criteria
D.1	Only technically qualified and responsive bids shall be considered for commercial evaluation.
D.2	Bidder shall quote all line items. Partial quoting shall lead to rejection of the Bid.
D.3	Evaluation shall be carried out on the basis of total prices quoted for Table A & Table B excluding GST . However, bidder is required to quote applicable GST with valid SAC/HSN code.
D.4	For evaluation purposes, exchange rate on the bid submission date shall be considered.
D.5	Deleted
D.6	Applicable duties and taxes shall be payable as per prevailing statutory rates.
D.7	Bidder to quote its prices inclusive of all customs duties, exemptions, Essentiality Certificate benefits, taxes, levies and concessions considered while arriving at the quoted price. Any omission shall be to Bidder's account.
D8	In case of discrepancy between unit price and total price, the unit price shall prevail unless otherwise specified.
D9	- Commercial evaluation shall be carried out on the basis of the Total Evaluated Basic Price (excluding GST/IGST) derived from the Price Schedule of each part. GST/IGST shall be quoted separately by the Bidder and shall be payable at actual applicable rates in accordance with the prevailing statutory provisions. GST/IGST shall not be considered for the purpose of commercial evaluation and determination of the Lowest Evaluated Bidder (L1). - The Bidder shall indicate the applicable HSN/SAC Code and GST/IGST rate in the Price Schedule. Any incorrect classification or tax rate shall be the sole responsibility of the Bidder and shall not affect the commercial evaluation. - GEL is required to complete the well drilling program as per the scope of work by 31st March 2026. Accordingly, successful bidder/(s) have to plan and execution of work accordingly.
D10	Currency of Bidding and Commercial Evaluation - Indian Bidders shall quote their prices only in Indian Rupees (INR). - Foreign Bidders shall quote their prices only in United States Dollars (USD). - No other currency shall be accepted for submission of the Price Bid. - For the purpose of commercial evaluation and determination of the Lowest Evaluated Bidder (L1), all bids quoted in USD shall be converted into INR using the SBI Exchange Rate prevailing on the Original Bid Submission Date. The converted value shall be considered solely for bid evaluation.

Note: All documents submitted in support of the Bid Qualification Criteria (BQC) shall be **clear, legible and self-certified by the Bidder**. GEL reserves the right to verify the authenticity of any document submitted by the Bidder from the issuing Client/Operator or any other source considered appropriate. Submission of false, misleading or forged documents shall render the bid liable for rejection and may result in further action as deemed appropriate by GEL.



Bidder is required to submit the undertaking with all details as mentioned in attachment -16 in section 11 with all supporting details to be attached in the technical bid with proper numbering of soft copy of document.



SECTION 11: Attachments

Attachment No.	Description
Attachment 1	Forwarding Letter / Bidder's Response Acknowledgement
Attachment 2	Exception / Deviation / Condition Proforma For Pre-Bid Clarification
Attachment 3	Bid Bond Format
Attachment 4	List of Approved Banks for Submission of Bank Guarantees
Attachment 5	Performance Bank Guarantee (PBG) Format
Attachment 6	Mobilization Confirmation Undertaking
Attachment 7	Undertaking for Acceptance of Liquidated Damages for Mobilization/ NPT Clauses
Attachment 8	Vendor Registration Form
Attachment 9	No Gift Representation
Attachment 10	Self-Declaration-cum-Undertaking
Attachment 11	Bid Submission Checklist
Attachment 12	Undertaking for Single-Point Responsibility / No Consortium
Attachment 13	Declaration of No Deviations / Unconditional Acceptance of Tender Terms
Attachment 14	Comprehensive Bidder's Undertaking and Declaration
Attachment 15	Bidder, Drilling Rig & Technical Partner Information Sheet
Attachment 15-A	Letter Of Commitment by Technical Partner
Attachment 16	Bid Qualification Criteria (BQC) Compliance Matrix



ATTACHMENT 1 — FORWARDING LETTER / BIDDER'S RESPONSE**ACKNOWLEDGEMENT****(On Bidder's Letterhead)****To,****Gujarat Energy Limited GEL Bhavan, Sector-11,****Gandhinagar - 382010**

Kind Attn: [Nominated Officer]

Ref: Tender No. /___ dated _____

Dear Sir,

We, _____ ("Bidder"), acknowledge receipt of the above Tender Document and confirm our intention to bid as indicated below (tick as applicable):

- ☐ — Integrated Drilling Services (IDS) with full scope of work

We confirm having reviewed the Instructions to Bidders, General Terms & Conditions, the applicable Special Conditions of Contract, Scope of Work, BQC and Price Schedule, and are submitting our Bid accordingly, valid for 180 days from the Bid Due Date.

For Bidder — Name, Signature, Seal, Date



ATTACHMENT – 2
FOR PRE-BID CLARIFICATION FORMAT
EXCEPTION / DEVIATION / CONDITION PROFORMA
(Any Deviation to tender terms to be requested during pre-bid meeting in the given format)

Tender No.: _____

Tender Title: _____

The Bidder shall carefully examine the Tender Document before submission of the Bid.

The Bidder is expected to seek pre-bid clarification and submit all exceptions, deviations or conditions, if any, during the Pre-Bid stage for consideration by Gujarat Energy Limited (GEL). GEL shall examine the requests and, wherever considered appropriate, issue clarification(s) and/or Corrigendum(s), which alone shall become part of the Tender Document.

No deviation, exception or condition shall be deemed accepted unless specifically accepted by GEL through a written Corrigendum, Addendum or subsequent written communication.

PART – A

Technical Exceptions / Deviations / Conditions

(To be submitted with the Technical Bid)

Sl. No.	Section No.	Page No.	Clause No.	Description of Exception / Deviation / Condition	Reason for Exception / Deviation	Whether Cost Impact Exists (Yes/No)	Effect on Mobilization / Commencement Schedule

Note:

1. Do **not** indicate any price or cost implication in Part-A.
2. If additional sheets are required, they shall be signed and submitted as part of this Proforma.

PART – B

Commercial Exceptions / Deviations / Conditions

(To be submitted with the Commercial Bid only)

Sl. No.	Section No.	Page No.	Clause No.	Description of Exception / Deviation / Condition	Reason for Exception / Deviation	Cost Impact on Bid Price if Accepted / Rejected by GEL	Effect on Mobilization / Commencement Schedule

Note:

1. The Bidder shall clearly indicate the commercial impact of each deviation, if any.
2. Commercial deviations not included in this Proforma shall be deemed as **Nil**.

**ATTACHMENT – 3****BID BOND**

Note: Separate bid bond to be submitted with each bid

TO: GUJARAT ENERGY LIMITED, a Company incorporated under the provisions of the Companies Act, 2013 and having its registered office at GEL Bhavan, Behind Udyog Bhavan, Sector -11, Gandhinagar, Gujarat, India. (hereinafter referred to as “Company”).

WHEREAS:

..... (hereinafter referred to as “Tenderer”) has submitted a proposal dated (“hereinafter referred to as Proposal”) against Tender No.- _____ for Hiring of Integrated Drilling Service (hereinafter referred to as the “Tender”).

NOW, THEREFORE,

(1) In response to the request made by the Tenderer, we (Name of Banker/Insurer:) _____ (hereinafter called the “Guarantor”) hereby irrevocably and unconditionally guarantee the sum of INR _____/-/- (Indian Rupees _____ – for Indian Bidders) and US\$ _____/-(United States Dollars _____ only – for Foreign Bidders) in favor of Company, if Tenderer fails to perform its obligations as set forth below:

(i) The Tenderer agrees to keep the Proposal open for acceptance by Company during the period of validity (180 days from the Closing Date) specified in the Tender.

(ii) The Tenderer, having been notified of acceptance of its Proposal by Company during the period of Tender validity:

1. Fails or refuses to execute the agreed Contract, if required; or
2. Fails or refuses to furnish the Performance Bank Guarantee in accordance with the format provided in the Tender document; or
3. Seeks Variation or modification of Proposal; modifications to the agreed terms and conditions
4. Tries to influence Company on bid evaluation, bid comparison or Contract award decision.
5. The sum shall become payable by us immediately on first demand by Company without proof or conditions notwithstanding any constitution or protest by the Tenderer or any other third party.
6. Company shall have the fullest liberty without our consent and without affecting in any manner, our obligation hereunder, to relax any of the terms and conditions of the aforesaid Tender, from time to time, or to postpone any time any of the powers exercisable by Company against the said Tenderer and Guarantor shall not be relieved from its liabilities by reason of any such relaxation being granted to the Tenderer by Company or any indulgence by Company to the said Tenderer or by any such matters or things whatsoever.

The Guarantor shall not be discharged or released from this Guarantee by any Contract made between the Tenderer and Company with or without the consent of the Guarantor or by any alteration in the obligations undertaken by the Tenderer or by any change in name or constitution of Company or the Tenderer.

The Guarantee herein shall not be affected by any change in the constitution of the Bank or the Tenderer.

This Guarantee shall not be revoked during its currency, and shall remain in effect for One Hundred and Eighty (180) days from the Tender Closing Date.

This Guarantee shall be governed and construed in accordance with the laws of India and all of the parties to this Guarantee hereby irrevocably submit to the non-exclusive jurisdiction of the Competent Courts at Gandhinagar.



IN WITNESS whereof this Guarantee has been duly executed by GUARANTOR the _____ day of _____ for and on behalf of (_____)

Name : _____
Designation : _____
Banker's Seal : _____
Address : _____

BID BOND

It is a condition precedent to the acceptance of any Tender by the Company that the Tenderer shall provide a Bid Bond by means of a Bank Guarantee for an amount stated in the Invitation to Tender in the prescribed format and valid for a period of 180 days from the Closing Date. The Tender may be disqualified in the absence of a Bid Bond in the prescribed format.

Conditions for Invoking of Bid Bond Guarantee

The following conditions would also lead to the invoking of Bid Bond Guarantee:

- If the Tender is withdrawn during the validity period or any extension thereof.
- If the Tender is varied or modified in a manner not acceptable to Company during the validity or agreed extension validity period duly agreed by the Tenderer or after notification of award by Company and prior to signing of the Contract.
- If the successful Tenderer is seeking modifications to the agreed terms and conditions after notification of award or declines to accept the Letter of Intent/Award.
- If the successful Tenderer fails to furnish Performance Bank Guarantee within 21 days of the issue of the Letter of Intent/Award.
- Any effort by the Tenderer to influence Company on bid evaluation, bid comparison or Contract award decision. The formats for any of the Bank Guarantees shall not be changed except for any minor variations that the Bank may require. Failure to comply with this requirement may entail disqualification of the Tender.

**ATTACHMENT -4****LIST OF APPROVED BANKS FOR SUBMISSION OF BANK GUARANTEES (BID BOND / PERFORMANCE BANK GUARANTEE)****Reference:** Finance Department, Government of Gujarat GR No.**FD/MSM/efile/4/2025/2712/D.M.O. dated 01.04.2026****A. Bank Guarantees issued by the following banks shall be accepted on a permanent basis:**

- All Nationalized Banks.

C. Bank Guarantees issued by the following banks shall be accepted as per the provisions of the above Government Resolution:

Sr. No.	Bank Name	Sr. No.	Bank Name	Sr. No.	Bank Name
1	Axis Bank	16	IndusInd Bank	31	Saraswat Co-operative Bank Ltd.
2	AU Small Finance Bank	17	Jammu & Kashmir Bank	32	SBPP Co-operative Bank Ltd.
3	Bandhan Bank	18	Jana Small Finance Bank	33	SVC Co-operative Bank Ltd.
4	City Union Bank	19	Karnataka Bank	34	The Cosmos Co-operative Bank Ltd.
5	CSB Bank	20	Karur Vysya Bank	35	The Gujarat State Co-operative Bank
6	DBS Bank India Limited	21	Kotak Mahindra Bank	36	The Surat District Co-operative Bank Ltd.
7	DCB Bank	22	RBL Bank	37	The Surat People's Co-operative Bank Ltd.
8	Dhanlaxmi Bank	23	South Indian Bank	38	The Baroda Central Co-operative Bank
9	Equitas Small Finance Bank	24	Standard Chartered Bank	39	The Panchmahal District Co-operative Bank
10	Federal Bank	25	Tamilnad Mercantile Bank	40	The Kalupur Commercial Co-operative Bank
11	HDFC Bank	26	Ujjivan Small Finance Bank	41	The Rajkot Commercial Co-operative Bank
12	HSBC Bank	27	YES Bank	42	The Banaskantha Mercantile Co-operative Bank Ltd.
13	ICICI Bank	28	Ahmedabad Mercantile Co-operative Bank	43	Gujarat Gramin Bank
14	IDBI Bank	29	Nutan Nagarik Sahakari Bank Ltd.		
15	IDFC First Bank	30	Rajkot Nagarik Sahakari Bank Ltd.		

Note: All eligible banks shall collect the original documents/papers of the Bank Guarantee from the concerned Tendering Authority as stipulated in Finance Department, Government of Gujarat GR No. **FD/MSM/e-file/4/2025/2712/D.M.O. dated 01.04.2026.**

(Sandeep Kumar)
Secretary (Economic Affairs) Finance Department –

----- XXXXX -----



ATTACHMENT – 5: Proforma for Performance Bank Guarantee

TO: GUJARAT ENERGY Ltd., a company incorporated under Company's Law 2013 and having its registered office at GEL Bhavan, Sector-11, Gandhinagar- 382011 India (hereinafter referred to as **"GEL"**).

WHEREAS:

(1) By A contract for Integrated Drilling Service (hereinafter referred to as the **"Contract"**) between _____ hereinafter referred to as the **"Contractor"**) of the one part and GEL of the other part, the Contractor agrees to perform the Work in accordance with the Contract.

(2) In response to the request made by Contractor, we (Name of Banker:) _____ (hereinafter referred to as the **"Guarantor"**) hereby irrevocably and unconditionally and payable on first demand, bank guarantee in favour of GEL, the payment of amounts (without any withholding, deduction or set off) upto. _____ (Rupees/US \$ _____) being Ten percent (10%) of Contract value as guarantee for the obligations of the Contractor to perform the Work in accordance with the Contract. The sum shall become payable by us immediately on first demand by GEL without proof or conditions notwithstanding any dispute or protest by the Contractor or any other third party. Multiple demands may be made in respect of our guaranteed obligations.

(3) We shall not be discharged or released from this Guarantee by any waiver, modification, agreement made between the Contractor and GEL with or without our consent or by any alteration in the obligations undertaken by the Contractor or by any forbearance whether as to payment, time performance or otherwise, or by any change in name or constitution of GEL or the Contractor.

(4) This Guarantee is a continuing security and, accordingly, shall remain in operation for Ninety Days after completion / termination of the Contract.
We agree that the Guarantee is given regardless of whether or not the sum outstanding occasioned by the loss, damages costs, expenses or otherwise incurred by GEL is recoverable by legal action or arbitration.

The rights under this Guarantee shall be assignable by GEL to third parties if required This Guarantee shall be governed by and construed in accordance with the laws of India.

The Guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or changes or constitution or insolvency of the said Contractor but shall in all respects and for all purposes be binding and operative until payment of all money due to you in respect of such liabilities is paid.

IN WITNESS where of this Guarantee has been duly executed by GUARANTOR the _____ day of _____ 2026 __ or and on behalf of (_____).

Name :
Designation :
Banker's Seal :
Address :



ATTACHMENT 6 — MOBILIZATION CONFIRMATION UNDERTAKING

(On Bidder's Letterhead)

We confirm to mobilize the IDS within the stipulated time mentioned in the Tender Document (not subject to any "availability of rig/services" caveat), :

We understand and accept that GEL has planned to spud the first Well around 2nd Week of November 2026.

For Bidder —

Name,

Signature,

Seal,

Date



ATTACHMENT 7 — UNDERTAKING FOR ACCEPTANCE OF LIQUIDATED DAMAGES / DEDUCTIONS /NPTCLAUSES

(On Bidder's Letterhead)

We, _____, confirm our unconditional acceptance of Clause 4.28 (Liquidated Damages) of the General Terms & Conditions of this Tender, including recovery of Liquidated Damages for delay in mobilization/commencement/ILM of Work attributable to us and Non-Productive Time without prejudice to GEL's other rights including termination, forfeiture of Performance Bank Guarantee, and recovery of actual additional costs. We further confirm acceptance of the Zero-Rate, and other Deductions/rate-forfeiture provisions set out in Annexure-III and the Rate Entitlement Chart of SCC applicable to.

For Bidder —

Name,

Signature,

Seal,

Date



ATTACHMENT -8

VENDOR REGISTRATION FORM

Vendor Registration Form to be submitted by the bidder along with bid bond
Vendor Registration Form (to be filled by the Vendor in preferably in Excel format and submitted soon after making bid bond remittance).
The form filled by the vendor should be sent by email to the following mail ID's
manoj@gujenergy.com; durgadatta@gujenergy.com & alpeshshah@gujenergy.com

GUJARAT ENERGY LIMITED	
(New Vendor Registration Form)	
Vendor details	
Company Code	9999
Name of Vendor	
Date of Formation	
Address	
City	
State	
Country	
PIN Code	
Telephone No.	
Fax No.	
Mobile No.	
E mail address	
Registration Information (please provide self-certified copies of registration certificates as proof)	
Excise Code Number	
Excise Registration No.	
Excise Range No.	
Excise Division No.	
Excise Collectorate	
Micro Small Medium Enterprise	YES / NO
If Yes then provide Details	
Works Contract Tax Registration No.	
Tax Deduction account Number (TAN)	
Permanent account no. (PAN) **	
CST Number with Date	
LST / VAT Number with Date	
GSTIN Number **	
Service Tax Registration No.	

** To be filled (Compulsory fields)

Bank Details	
Title of Account in the Bank	
Account type	
Bank Account Number	
Name of the Bank	
Address of the Bank	
City	



State	
Country	
PIN Code	
Telephone No. with STD code	
Fax No with STD Code	
Bank Branch MICR Code	
Bank Branch IFSC Code	
Mode of Payment	RTGS / NEFT /IMPS

CHECK LIST OF DOCUMENTS TO BE SUBMITTED ALONG WITH THIS VENDOR REGISTRATION FORM BY THE BIDDER

VENDOR REGISTRATION FORM	(Preferably In Excel format)
GST Certificate	
PAN Card	
MSME Certificate	
Cancelled Cheque	

For F&A Department use only

Vendor no.	
Purchasing Organization	
Accounting Group	
Reconciliation Account	



ATTACHMENT - 9

No Gift representation

Contractor and its officers and directors executing this document represent and warrant to Company and agree with Company as follows: -

Neither Contractor, nor any officer, director, employee, ultimate beneficial owner of shareholder of Contractor, has made or will make or cause to be made connection with the performance of this Agreement or any other contract or agreement with Company, any payments, loans or gifts or promises or offers of payments, loans or gifts of any money or anything of value directly or indirectly pay to or for the user benefit of any official or employee of:

- (a) Company
- (b) Any government or agency or instrumentality of any such government
- (c) To any political party official or candidate thereof
- (d) Company's Co-ventures: or
- (e) To any other person in advance or as a reimbursement if it knows or has reason to suspect that any part of such payment, loan or gift will be directly or indirectly given or paid by such other person, or will reimburse such other person for payments, gifts or loans previously made to any of the foregoing.

The payment of which would violate the laws or policies of India.



ATTACHMENT -10

Self-Declaration Form:

ON LETTER HEAD OF THE BIDDER

Date: _____

Ref: Tender No. _____ dated: _____

Self- Declaration Cum Undertaking

I / We _____ (*Bidder Name*) _____ undertake that:

1. I/ We _____ (*Bidder Name*) _____ is not on a holiday list or is black-listed by GEL or any of the Group Companies of GEL.
2. I/ We _____ (*Bidder Name*) _____ have not initiated any legal action/litigation against GEL or any of the Group Companies.

I/ We _____ (*Bidder Name*) _____ agree and acknowledge that in the event after the issuance of LoA/Work Order/award of Contract, it is discovered/found by GEL that any of the conditions stated in the above Undertaking furnished by me / us at the time of bidding is found to be false or any event mentioned in such undertaking occurs after the award of the Contract, GEL shall have a right to terminate the Contract immediately at its sole discretion, including its right to forfeit the Performance Bank Guarantee (PBG).

Sign

Stamp

Bidder Name: _____

(BIDDER TO USE THE ABOVE FORMAT ONLY FOR SUBMISSION. NO OTHER FORMAT SHALL BE ACCEPTED)

**ATTACHMENT 11 — CHECKLIST**

Sr.	Document	Submitted (Y/N)	Reference
1	Bid Bond (Attachment 3)		
2	Forwarding Letter (Attachment 1)		
3	BQC Technical documents (rig ownership, experience)		
4	Technical Partner MoUs (BQC)		
5	Un-priced Price Schedule marked “QUOTED”		
6	Mobilization Confirmation (Attachment 6)		
7	LD/Deduction Acceptance Undertaking (Attachment 7)		
8	Self-Declaration (Attachment 10)		
9	Vendor Registration Form (Attachment 8)		
10	No Gifts Representation (Attachment 9)		
11	Financial documents (Turnover/Net Worth, CA certified)		
12	TPI Certificate / Undertaking for Rig		
13	Single-Point Responsibility Undertaking		
14	All attachments 12 /13/14/15 & 15A & 16		



**ATTACHMENT 12 — UNDERTAKING: SINGLE-POINT RESPONSIBILITY /
NO CONSORTIUM****[ON LETTER HEAD OF THE BIDDER]**

We confirm that this Bid is submitted by a single legal entity, that no Consortium/Joint Venture/ Association of Persons (AoP) is involved, and that we shall remain solely and fully responsible and liable for execution and performance of the entire Contract, including any portion performed through permitted Technical Partners, sub-contractors or associates, in accordance with the BQC and the Instructions to Bidders.

For Bidder —

Name,

Signature,

Seal,

Date



**ATTACHMENT 13 — DECLARATION OF NO DEVIATIONS /
UNCONDITIONAL ACCEPTANCE OF TENDER TERMS**
[ON LETTER HEAD OF THE BIDDER]

TENDER NO.: _____

(To be submitted as part of Technical bid)

Bidder's Name _____

[Address and Contact Details]

Bidder's Reference No. _____ Date.....

Tender Document No.

Subject: Declaration of Compliance with Tender Terms and Conditions

We hereby confirm that we have thoroughly read, understood, and acknowledged the terms and conditions of this tender. Where necessary, we have sought and obtained clarifications from GEL. Additionally, we have duly noted all clarifications, amendments, and addenda issued by GEL in relation to this tender and have accordingly submitted our bid.

We further confirm that our submission does not include any deviations, exceptions, or reservations to the terms and conditions set forth in the tender document or any subsequent clarifications, amendments, or addenda issued by GEL.

We unconditionally accept and agree to comply with all terms and conditions of the tender without variation or modification. Any terms and conditions stated elsewhere in our bid that are contrary to the tender requirements shall be deemed null and void.

.....
(Authorized Signature with date)

.....



ATTACHMENT – 14

COMPREHENSIVE BIDDER'S UNDERTAKING AND DECLARATION

(To be submitted on the Bidder's Letter Head)

Tender No.: _____

Tender Title: Hiring of Integrated Drilling Services (IDS)

To,
Gujarat Energy Limited (GEL)
Gandhinagar, Gujarat

Subject: Comprehensive Bidder's Undertaking and Declaration

We, _____ ("Bidder"), having examined the Tender Document and intending to participate in the above Tender, hereby irrevocably undertake and declare as follows:

1. We have carefully read, understood and examined the entire Tender Document, including all Sections, Scope of Work, Bid Qualification Criteria (BQC), General Terms & Conditions (GTC), Special Conditions of Contract (SCC), Price Schedule, Attachments, Annexures, Corrigenda, Addenda and Clarifications issued by GEL.
2. We hereby confirm that our Bid is submitted without any technical deviation, commercial deviation, qualification, reservation, condition, assumption or exception whatsoever, except those specifically accepted by GEL through Corrigendum/Addendum issued prior to the Bid Due Date.
3. We confirm that all information, documents, certificates, declarations, statutory registrations, experience credentials, financial information and supporting documents submitted by us are true, complete, authentic and valid. No material information has been concealed or misrepresented.
4. We authorize GEL to independently verify any information or document submitted by us from any client, statutory authority, banker, auditor or any other agency considered appropriate by GEL.
5. We understand and accept that submission of any false declaration, forged document, misleading information or suppression of material facts shall make our Bid liable for rejection at any stage and, if awarded, shall entitle GEL to terminate the Contract, forfeit the Bid Security/Performance Security, debarment of bidder as per GEL policy and initiate any other action as deemed appropriate under the Tender conditions and applicable law.
6. We confirm that we possess and shall continue to possess throughout the Bid validity period and the Contract period the necessary technical capability, financial resources, infrastructure, equipment, personnel and organizational capability required for satisfactory execution of the Contract.
7. We undertake that the offered Drilling Rig, integrated services, equipment, tools, personnel, consumables and all other resources committed in our Bid shall remain available for execution of the Contract and shall not be withdrawn or substituted without prior written approval of GEL.
8. We undertake that, if awarded the Contract, we shall mobilize and execute the work strictly in accordance with the Contract requirements and within the prescribed mobilization period.
9. We declare that we are not under liquidation, insolvency, bankruptcy, receivership or any similar proceedings, and no such proceedings have been initiated or are pending against us.



10. We declare that we are not banned, blacklisted or debarred by the Government of India, any State Government, PSU, Government Agency or any International Oil Company as on the Bid Due Date, except as specifically disclosed in our Bid.
11. We undertake to comply with all applicable laws, statutory requirements, labour laws, environmental laws, HSE requirements, tax laws and other legal obligations applicable to the execution of the Contract.
12. We undertake that all statutory licences, approvals, permits, authorizations and insurance policies required for execution of the Contract shall remain valid throughout the Contract period.
13. We shall immediately inform GEL, in writing, of any material change in our legal status, ownership, financial position, technical capability, litigation status or any other information submitted as part of our Bid which may affect our eligibility or performance under the Contract.
14. We acknowledge that GEL reserves the right to reject our Bid, seek clarification, verify submitted information or cancel the award if any declaration made herein is found to be incorrect, misleading or incomplete.
15. We agree that this Undertaking shall form an integral part of our Bid and shall remain binding upon us during the Bid validity period and, in the event of award, throughout the Contract period.

We hereby certify that the foregoing declarations are true and correct to the best of our knowledge and belief and that this Undertaking has been executed by the undersigned, who is duly authorized to bind the Bidder.

For and on behalf of _____

Authorized Signatory

Name: _____

Designation: _____

Date: _____

Place: _____

Company Seal

**ATTACHMENT – 15****BIDDER, DRILLING RIG & TECHNICAL PARTNER INFORMATION SHEET****Tender No.:** _____**Tender Title:** _____

The Bidder shall furnish the following information along with the Technical Bid. The information furnished shall be complete, accurate and supported by documentary evidence wherever applicable. Any false declaration, suppression of material information or submission of incorrect information may render the Bid liable for rejection.

A. Bidder Information

Sl. No.	Particulars	Details
1	Name of Bidder	
2	Country of Incorporation	
3	Registered Office Address	
4	Corporate Office Address	
5	Name of Authorized Contact Person	
6	Designation	
7	Official Email ID	
8	Mobile Number	
9	Telephone Number	
10	Website	

B. Offered Drilling Rig Details

Sl. No.	Particulars	Details
1	Name of Offered Rig	
2	Rig Type (Mechanical / SCR / AC / VFD etc.)	
3	Rig Rating (HP)	
4	Manufacturer	
5	Year of Manufacture	
6	Ownership Status (Owned / Leased)	
7	Name of Owner (if leased)	
8	Present Location of Rig	
9	Current Status (Operating / Standby / Warm Stack / Cold Stack / Under Repair / Idle)	
10	Present Client	
11	Current Contract / Work Order No.	
12	Current Contract Completion Date	
13	Earliest Availability Date	



14	Earliest Mobilization Period from receipt of Mobilization Notice (Days)	
15	Proposed Mobilization Origin	
16	Proposed Mobilization Route	
17	Confirmation that the Rig shall be available as per GEL's Mobilization Schedule (Yes/No)	
18	Confirmation that the Rig shall not be diverted or committed elsewhere after Bid submission without prior written approval of GEL (Yes/No)	
19	Date of latest Third Party Inspection (TPI)	
20	Name of TPI Agency	

C. Major Equipment Offered with the Rig

Equipment	Make	Model	Year	Quantity	Present Location	Current Status
Top Drive (if top drive rig offered)						
Drawworks						
Mast						
Travelling Block, Crown block						
Swivel						
Mud Pumps						
BOP Stack						
BOP control unit						
Choke & Kill Manifold						
Solids Control Equipment						
DG Sets						
Drill Pipe						
HWDP						
Drill Collars						
Handling Tools						
Other Major Equipment						
Equipment	Make	Model	Year	Quantity	Present Location	Current Status
Top Drive (if top drive rig offered)						
Drawworks						
Mast						
Travelling Block, Crown block						



Swivel						
Mud Pumps						
BOP Stack						
BOP control unit						
Choke & Kill Manifold						
Solids Control Equipment						
DG Sets						
Drill Pipe						
HWDP						
Drill Collars						
Handling Tools						
Other Major Equipment						

D. Technical Partner / Sub-contractor Details

Separate details shall be furnished for each Technical Partner.

Sl. No.	Particulars	Details
1	Service Category	
2	Name of Technical Partner / Sub-contractor	
3	Registered Office Address	
4	Operational Base / Yard Location	
5	Contact Person	
6	Designation	
7	Official Email ID	
8	Mobile Number	
9	Telephone Number	
10	24 × 7 Emergency Contact Number	

E. MOU Details

Sl. No.	Particulars	Details
1	Service Covered under MOU	
2	MOU / Agreement Number	
3	MOU Date	
4	Validity of MOU	
5	Scope Covered	
6	Whether Exclusive for this Tender (Yes/No)	
7	Whether Legally Enforceable (Yes/No)	



8	Copy of MOU Enclosed (Yes/No)	
---	-------------------------------	--

F. Equipment & Resource Availability of Technical Partner

Particular	Details
Equipment / Unit Description	
Make & Model	
Year of Manufacture	
Quantity Offered	
Present Location	
Current Status (Operating / Under Contract / Standby / Under Maintenance / Idle)	
Present Client	
Current Contract / Work Order No.	
Current Contract Completion Date	
Earliest Release Date	
Earliest Mobilization Date	

G. Service-wise Technical Partner Summary

Sl. No.	Service Category	Technical Partner	MOU No.	MOU Date	MOU Validity	Equipment Location	Current Status	Mobilization Accepted (Yes/No)
1	Drilling Fluids Services							
2	Cementing Services							
3	Directional Drilling Services							
4	Drill Bit Supply							
5	Casing Accessories							
6	Mobile ETP							
7	Any Other Service							

H. Mobilization & Resource Commitment

The Bidder shall confirm the following:



Particular	Confirmation (Yes/No)
Offered Rig shall be available as per GEL's Mobilization Schedule	
All proposed equipment shall be available for deployment	
Required manpower shall be available	
All Technical Partners have accepted GEL's Mobilization Schedule	
All equipment shall be mobilized from the declared locations	
Mobilization shall not be dependent upon release from any undisclosed contract	
No Rig, Technical Partner or major equipment shall be changed without prior written approval of GEL	
Bidder accepts Single Point Responsibility for the complete Contract	
Bidder accepts the Liquidated Damages provisions for delayed mobilization/ILM/Commencement	

I. Mandatory Documents to be Enclosed

The Bidder shall submit the following documents, wherever applicable:

1. Rig General Arrangement (GA) Drawing.
2. Rig Specification Sheet.
3. Rig Inventory List.
4. List of Major Equipment with Make, Model and Year of Manufacture.
5. Organization Chart for the proposed project.
6. CVs of Key Personnel.
7. Executed MOU(s) with each Technical Partner.
8. Third Party Inspection (TPI) Certificates.
9. Rig Photographs.
10. Detailed Mobilization Plan.
11. HSE Manual.
12. Quality Management System Certification.
13. Equipment Calibration Certificates, wherever applicable.
14. Equipment Ownership / Lease Documents.
15. Current Equipment Deployment Details.
16. Valid Statutory Registrations, Licences and Approvals.

J. Letter of Commitment by Technical Partner

Each Technical Partner proposed by the Bidder shall submit a **separate Letter of Commitment** in the prescribed format enclosed as **Attachment – 15(A): Letter of Commitment by Technical Partner**. The Letter of Commitment shall be submitted on the original letterhead of the respective Technical Partner, duly signed by its Authorized Signatory and stamped.

The Bidder shall provide the following summary of the Technical Partners whose Letters of Commitment are enclosed with the Bid.



Sl. No.	Service Category	Name of Technical Partner	MOU No.	MOU Date	MOU Validity	Letter of Commitment Attached (Yes/No)	Authorized Signatory	Contact Person	Official Email ID	Mobile No.
1	Drilling Fluids Services									
2	Cementing Services									
3	Directional Drilling Services									
4	Drill Bit Supply									
5	Casing Accessories									
6	Mobile ETP									
9	Any Other Service									

Note:

1. A separate Letter of Commitment shall be submitted by each Technical Partner.
2. The Letter of Commitment shall be in the prescribed format (Attachment – 15(A)).
3. The Letter of Commitment shall be signed by the Authorized Signatory of the respective Technical Partner.
4. Failure to submit the prescribed Letter of Commitment for any Technical Partner may render the corresponding service offer liable for rejection.
5. The information furnished above shall be consistent with the corresponding MOU submitted with the Bid.

K. Estimated Timeline to Drill the Well up to TD, Production Casing & Cementation (*To be quoted by the Bidder*)

Sr. No.	Well No.	Well Type	Estimated Timeline to Drill the Well up to TD, Production Casing & Cementation (<i>To be quoted by the Bidder</i>)	Maximum Permissible Duration
1	Ank#21-D1	2 CP Well	_____ Days	Not more than 23 Days
2	TA#6-D1	3 CP Well	_____ Days	Not more than 33 Days
3	PNE#1-D1	3 CP Well	_____ Days	Not more than 35 Days
4	GSAH#5-D5	2 CP Well	_____ Days	Not more than 25 Days



L. Declaration by the Bidder

We hereby certify that:

1. The information furnished in this Attachment is true, complete and correct.
2. The proposed Rig, equipment, manpower and Technical Partners are available or shall be made available as declared herein.
3. All MOU(s) submitted with the Bid are genuine, valid and legally enforceable.
4. All Technical Partners have agreed to provide the respective services exclusively through us for execution of this Contract.
5. We shall remain solely responsible to Gujarat Energy Limited for successful execution of the entire Contract, irrespective of any Technical Partner or Sub-contractor engaged by us.
6. No Rig, major equipment, Technical Partner or key resource shall be changed without prior written approval of Gujarat Energy Limited.
7. We undertake to mobilize the complete Integrated Drilling Services package strictly in accordance with GEL's mobilization schedule and the terms and conditions of the Contract.
8. We understand that any false declaration, suppression of material information, submission of forged documents or breach of the above commitments may result in rejection of our Bid, forfeiture of Bid Security/Performance Security, termination of the Contract and such other action as Gujarat Energy Limited may deem appropriate.

For and on behalf of the Bidder

Authorized Signatory: _____

Name: _____

Designation: _____

Date: _____

Place: _____

Company Seal

**ATTACHMENT – 15(A)****LETTER OF COMMITMENT BY EACH TECHNICAL PARTNER**

(To be submitted on the Original Letterhead of the Technical Partner)

Tender No.: _____

Tender Title: _____

Service Category: _____

Name of Bidder: _____

To

Gujarat Energy Limited (GEL)

Subject: Letter of Commitment for Providing Technical Services to the Bidder

We, _____ ("Technical Partner"), having our registered office at _____, hereby confirm and undertake as follows:

1. We have entered into a valid Memorandum of Understanding (MOU)/Technical Collaboration Agreement with **M/s.** _____ (**Bidder**) for providing _____ **Services** under the above Tender.
2. The details of the MOU are as follows:

Particular	Details
MOU / Agreement No.	
Date of MOU	
Validity of MOU	
Scope of Services	

3. We confirm that the above MOU is genuine, valid, legally enforceable and shall remain valid throughout the Bid validity period and, in the event of award, during the execution of the Contract.
4. We hereby irrevocably commit ourselves to provide the above services exclusively through the above Bidder for this Tender.
5. Details of the equipment/resources proposed by us are as under:

Particular	Details
Equipment / Unit	
Make & Model (wherever applicable)	
Quantity	
Present Location	
Current Status (Operating / Standby / Under Maintenance / Idle)	
Present Client (if deployed)	
Current Contract Completion Date	
Earliest Availability Date	

6. We confirm that the above equipment, manpower and other resources shall be available for deployment in accordance with GEL's mobilization schedule.



7. We accept GEL's mobilization schedule and undertake to mobilize the required equipment, personnel and consumables immediately upon instructions received from the Bidder pursuant to GEL's Mobilization Notice.
8. We confirm that the equipment and manpower proposed herein shall not be diverted to any other assignment in a manner that adversely affects the execution schedule of this Tender.
9. We shall not withdraw, terminate or materially modify our commitment or the above MOU during the Bid validity period or, if the Contract is awarded, during the Contract period without prior written approval of Gujarat Energy Limited.
10. We acknowledge and agree that **M/s. _____ (Bidder)** shall remain the sole contractual counterparty and the Single Point Responsible Contractor to Gujarat Energy Limited for execution of the Contract.
11. We undertake to extend full technical, operational and logistical support to the Bidder for successful execution of the Contract.
12. We authorize Gujarat Energy Limited to verify any information contained in this Letter and the MOU directly with us at any time during the Bid evaluation or Contract period.
13. We understand that submission of any false information or withdrawal of this commitment may result in rejection of the Bid and such other action as Gujarat Energy Limited may deem appropriate.

Contact Details of Technical Partner

Particular	Details
Company Name	
Registered Office	
Operational Base	
Contact Person	
Designation	
Official Email ID	
Mobile Number	
Telephone Number	
24 × 7 Emergency Contact Number	

We hereby certify that the information furnished above is true and correct and this Letter of Commitment has been executed by the undersigned who is duly authorized to bind the Technical Partner.

For and on behalf of the Technical Partner

Authorized Signatory: _____

Name: _____

Designation: _____

Date: _____

Place: _____

Company Seal

**ATTACHMENT – 16****BID QUALIFICATION CRITERIA (BQC) COMPLIANCE MATRIX****Tender No.:** _____**Tender Title:** _____***Instructions to the Bidder***

1. The Bidder shall complete this Compliance Matrix in full and submit it as part of the Technical Bid.
2. The Bidder shall indicate compliance against each Bid Qualification Criterion (BQC) specified in Section-10 of the Tender Document.
3. The Bidder shall provide the reference of the supporting document submitted and the corresponding page number(s) of the Technical Bid.
4. Wherever the supporting document consists of multiple pages, the Bidder shall indicate the complete page range.
5. Submission of this Compliance Matrix shall not relieve the Bidder from submitting the required supporting documents.
6. Any incorrect declaration, false information or incorrect page reference may render the Bid liable for rejection.

PART-A: TECHNICAL CRITERIA

Sl. No.	BQC Clause	Qualification Requirement	Complied (Yes/No)	Supporting Document Submitted	Bid Page No.(s)/ Ref.	Remarks
1	A.1	Drilling Rig Ownership & Operatorship				
2	A.2	IDS Experience Criteria				
3	A.3	Unpriced Price Schedule				
4	A.4	Single Point Responsibility				
5	A.5	API Compliance				
6	A.6	Technical Partner / MOU				
7	A.7	Technical Partner Experience				
8	A.8	Technical Manpower				
9	A.9	Integrated Project Management Team				



10	A.10	Acceptance of Tender Terms & Conditions				
11	A.11	Mobilization Commitment				

PART-B: FINANCIAL CRITERIA

Sl. No.	BQC Clause	Qualification Requirement	Complied (Yes/No)	Supporting Document Submitted	Bid Page No.(s)/Ref .	Remarks
1	B.1	Bid Bond / EMD				
2	B.2	Average Annual Turnover				
3	B.2	Positive Net Worth				
4	B.3	Declaration regarding Insolvency / Liquidation				

PART-C: OTHER REQUIREMENTS

Sl. No.	BQC Clause	Qualification Requirement	Complied (Yes/No)	Supporting Document Submitted	Bid Page No.(s)/Ref .	Remarks
1	C.1	Not Blacklisted / Holiday Listed				
2	C.2	Single Legal Entity (No Consortium / JV / AOP)				

PART-D: DOCUMENTS SUBMITTED

The Bidder shall confirm submission of the following documents.

Sl. No.	Document	Submitted (Yes/No)	Bid Page No.(s)/Ref.
1	Bid Forwarding Letter		
2	Bid Bond / EMD		
4	No Exception/Deviation Undertaking		
5	Comprehensive Bidder's Undertaking		
6	Bidder, Rig & Technical Partner Information Sheet		
7	Letter(s) of Commitment from Technical Partner(s)		
8	MoU(s) with Technical Partner(s)		
9	Rig Specification Sheet		



10	Rig General Arrangement Drawing		
11	Rig Inventory List		
12	List of Major Equipment		
13	Third Party Inspection Certificates		
14	Mobilization Plan		
15	Organization Chart		
16	CVs of Key Personnel		
17	HSE Manual		
18	Quality Management System Certificates		
19	Financial Documents		
20	Any Other Document		

Declaration

We hereby certify that:

7. We have carefully examined all Bid Qualification Criteria specified in Section-10 of the Tender Document.
8. We fully comply with all applicable Bid Qualification Criteria.
9. All supporting documents referred to in this Compliance Matrix have been submitted as part of our Technical Bid.
10. The page references furnished above are correct.
11. The information furnished in this Compliance Matrix is true, complete and accurate.
12. We understand that submission of incorrect information, incorrect page references or false declarations may result in rejection of our Bid.

For and on behalf of the Bidder

Authorized Signatory: _____

Name: _____

Designation: _____

Date: _____

Place: _____

Company Seal