

# **TENDER DOCUMENT**

# For

# **Hiring of Rig for Integrated Drilling Services**

# On Callout Basis

for

# **Onshore Oil & Gas Fields**

Tender No. SunPetro/Gujarat/Onshore/IDS/2022-23/SPPL-134



# SUN PETROCHEMICALS PRIVATE LIMITED

8<sup>th</sup> Floor, ATL Corporate Park, Opp. L&T Gate no.7, Saki Vihar Road, Chandivali, Powai Andheri (E), Mumbai – 400072[INDIA]



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# **SECTION-1**

# **INVITATION TO BID (ITB)**



Date: 19th October 2022

# **Sun Petrochemicals Private Limited**

(SunPetro)

**Commercial & Supply Chain Management** 

8<sup>th</sup> Floor, ATL Corporate Park, Opp. L&T Gate no. 7, Saki Vihar Road, Chandivali, Powai

Andheri (E), Mumbai – 400072, Maharashtra [INDIA]

www.sunpetro.com

CIN: U24219GJ1995PTC028519

Ref. No. SunPetro/Gujarat/Onshore/IDS/2022-23/SPPL-134

# **INVITATION TO BID**

Tender No.: SunPetro/Gujarat/Onshore/IDS/2022-23/SPPL-134

Title: Hiring of Rig for Integrated Drilling Services on Callout basis for Onshore Oil & Gas Fields.

Dear Sir / Madam

1.0 Sun Petrochemicals Private Limited (hereinafter referred to as Sun Petro / Company) is pleased to invite you to submit the Bid for the subject tender in accordance with the requirements & details as stated in the Tender Document, under TWO ENVELOPE SINGLE STAGE BIDDING SYSTEM in following two Envelopes:

**ENVELOPE-I: Technical & Un-Priced Commercial Bid** 

**ENVELOPE-II: Priced Commercial Bid** 

Bidders are requested to read the instructions and requirements in the Tender Document carefully and accordingly to submit the Technical &Un-Priced Commercial Bid in one envelop and Priced Commercial Bid in another envelop as stated above, each in a separate wax sealed envelopes. Both envelops are required to be placed in one wax sealed envelope and be send to the tendering office address. Bids should be complete in all respects, as per the requirements of the relevant SECTIONs & ANNEXUREs.

#### 1.1 SALIENT FEATURES OF THE TENDER

1]	Tender No.	SunPetro/Gujarat/Onshore/IDS/2022-23/SPPL-134	
2]	Title of Tender	Hiring of Rig for Integrated Drilling Services on Callout basis for	
		Onshore Oil & Gas Fields	
3]	Scope of Work	SunPetro intend to hire Rig for Integrated Drilling Services for 3 years on call out basis. The envisaged numbers of well with no firm commitment is around 10 wells. Sunpetro reserves sole discretion to increase / decrease no. of wells as per its work program with no liability whatsoever.  Detailed as per SECTION-4 & 5	
4]	Location	SunPetro's Oil & Gas field in Gujarat (Bhaskar Field in Anand Dist. – CB-ONN-2003-1), Hazira Field, Baola Field & Modhera Field or any other blocks in Gujarat)	
5]	Bid Validity	One Hundred and twenty (120) days	
6]	Bid Bond / Bid Security	Bidders are required to furnish Bid Bond along with Technical & Un-priced-Commercial Bid in ENVELOPE-I in the format as attached herewith at ANNEXURE-2 drawn from a Nationalized/Scheduled bank as listed at ANNEXURE-9 for an amount as specified below:  Indian Bidder: Indian Rupees: 15 Lakhs Foreign bidder: USD: 20,000  Note:  1] Bid Bond shall be acceptable in INR from Foreign bidders also.	



7]	Bid Bond Validity	2] In lieu of bid bond, bidder can also submit DD /Pay order / wire transfer. DD / Payorder / Wire transfer shall be governed by Bid Bond terms and conditions. DD / Payorder to be issued in the name of "Sun Petrochemicals Private Limited" payable at Mumbai.  150 days
8]	Last Date & Time For Seeking Clarification by Bidders	02/11/2022 at 16:00 hrs IST
9]	Tender Closing Date & Time / Bid Submission Date	09-11-2022 at 1500 hrs. IST.
10]	Address For Correspondence /Tendering Office	Office of Head – Commercial & SCM SUN PETROCHEMICALS PVT. LTD. 8 <sup>th</sup> Floor, ATL Corporate Park, Opp. L&T Gate no.7, Saki Vihar Road, Chandivali, Powai Andheri (E), Mumbai – 400072[INDIA]  Kind Attn: Nihit Jain E-mail: nihit.jain@sunpetro.com
11]	Mobilization Date	Tentative On First Week of JAN 2023 Or As Stated In LOI / LOA / Contract
12]	Terms & Conditions of Contract	As per SECTION-3 of this tender Document
13]	Contract Validity	Three (3) year from the Commencement date with provision of one year extension.
14]	Submission of Bid Documents	Bidders to submit wax sealed bid (ENVELOPE-I and ENVELOPE-II), complete in every respect & strictly in accordance with the Terms & condition in the Tender Documents through one waxed envelope containing both envelops as described above, at the reception of "Tendering Office" as detailed above, on or before Date of Closing of Tender or in case of extension, new date as communicated by the Company

## NOTE:

Receiving the tender from company does not qualify the bidder automatically for their bid consideration. The bidders has to qualify tender terms & conditions including BEC described in the tender

# 1.2. ACKNOWLEDGEMENT OF TENDER DOCUMENT

Bidder(s) receiving this 'Invitation To Bid' are required to confirm in writing whether they intend to bid or not within three days from electronic issue of this document, stating the reasons if declining to bid in this instance. Bidders not conforming to this requirement risk being barred from future inquiries.

# 1.3. PRICING STRATEGY

Bidder is to quote strictly as per the 'Price Schedule' (SECTION-7) of this Tender document.

#### 1.4. PURCHASE PREFERENCE LINKED WITH LOCAL CONTENTS (L.C.)

Wherever goods / services for exploitation of oil / gas fields are procured by a Company whereby Government or any Government body, approval is necessary, the 'Purchase Preference' will be given to eligible techno-commercial bidder based on local contents criteria and policy announced by MOPNG for 'Price Preference' under 'Make in India' campaign or any other policy. Bidders are to know the government guidelines on this account.

The applicability and evaluation procedures of the bids, for procurement of goods and services, defined by MOPNG will be strictly followed and applied for giving the 'Purchase Preference' to the eligible bidder for award of work for supply of goods / services.



#### 1.5 EVALUATION STRATEGY

Evaluation of Bids for awarding will be based on the most advantageous offer to Sun Petro reflecting a combination of technical acceptance, qualification as per Bid Evaluation Criteria (BEC) as per SECTION-6 and Cost .

However, Company reserves the right to reject or accept, in whole or in part, any Bid; waive formalities in the bidding processor to negotiate Contract terms with any individual bidder when such is deemed fit by Company to be in their best interest. Company will be under no obligation to provide reasons for accepting or rejecting any Bid.

#### 1.6 AWARD STRATEGY

Single Award or Multiple award is at SunPetro's discretion.

#### 1.7 CHECK LIST

Bidders should review and submit the check list (as per format at ANNEXURE-3) along with bid in the ENVELOPE-I (**Technical & Un-Priced Commercial Bid**).

#### 1.8 SUBMISSION OF BIDS

Bidders to submit wax sealed bid (ENVELOPE-I and ENVELOPE-II), complete in every respect & strictly in accordance with the Terms & condition in the Tender Documents through one waxed envelope containing both envelops as described above, at the reception of "Tendering Office" as detailed above, on or before Date of Closing of Tender or in case of extension, new date as communicated by the Company.

- **1.9** Bidders to note that Non-compliance with the bidding instructions, except as permitted in the Bid and/or late arrival of Bid shall result in Bid rejection.
- **1.10** Only bids submitted by bidders who have been issued bid document by the Company shall be considered whereas unsolicited bid shall not be considered.

Further details are available in the Tender Document for the compliance.

Please acknowledge the receipt of the tender document per ANNEXURE-1 within 3 days from date of this ITB.

We look forward to receive your bid complete in all respect on or before due date and time of bid submission.

#### Regards

Nihit Jain
Head-SCM & Commercial
Sun Petrochemical Pvt. Ltd.



# SECTION - 2

# **INSTRUCTIONS TO BIDDERS**



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#### INSTRUCTIONS TO BIDDERS

#### 2.1 General Instructions

- 2.1.1 Bidders must review the General Conditions of the Contract (GCC) and Detailed Scope of Work /Supply and specifications as per Tender, besides Bid evaluation Criteria, Responsibility matrix, commercial aspect, Schedule of Rates /Bill of quantity and other information in the Tender document.
- 2.1.2 Bidders shall be deemed to have understood, and taken into account all the terms and conditions prescribed in the Tender Document. Any exceptions/deviations, including those pertaining to Clauses affecting prices must be clearly stated ONLY in the format provided in *Annexure#4*. However, in case no exceptions/deviations are made / taken by the bidder, Bidder must return the form marked "Not Applicable".
- 2.1.3 Bids from agent / agent's representatives will not be accepted, unless backed by valid Letter of Authorization from the bidder's Company.
- 2.1.4 Bids submitted by fax / email will summarily be rejected. Responsibility for the timely delivery of the Bid package before the Bid Due Date rests solely with the Bidder.
- 2.1.5 All prices and terms and conditions should be valid for entire period of Contract Period as well as extension period if any.
- 2.1.6 SunPetro may further place repeat order for any or all the material/services/equipment at the same rates, terms and conditions for the other fields and offices which SunPetro may acquire or associates with in future.
- 2.1.7 The complete bid along with price Bid shall be duly signed and sealed by the Authorized Representative of the Bidder.

#### 2.2 Joint Venture / Consortium Bidder's Bid

- **a.** In case of a joint venture / consortium bid, the members / partners of joint venture / consortium must meet the qualification criteria jointly as specified.
- **b.** The overall responsibility of the Contract Management shall be of Lead member / partner of Joint Venture / Consortium.
- c. In case of Joint venture / Consortium Bid, following additional requirement must also be satisfied:
- i) Indian bidders whose proposal for technical collaboration / Joint Venture / consortium involves foreign equity participation / or payment of royalty and / or a lump-sum for technical know-how and wherever Govt. approval is necessary on their application submitted to SIA (Secretariat for Industrial Assistance), are required to submit:
- A copy of Govt. approval, along with techno-commercial bid (if already granted). OR

 Furnish an undertaking to submit a copy of the required approval prior to the date of price bid opening.

- ii) Bidders should submit a Memorandum of Understanding (MOU) / Agreement with their technical collaborator / joint venture / consortium partner (in case of Joint venture) clearly indicating their roles and responsibility under the scope of work.
- iii) MOU / Agreement concluded by the bidder with technical collaborator / joint venture / Consortium partner (in case of joint venture), should also be addressed to Sun Petro, clearly stating that the MOU / Agreement is applicable to this tender and shall be binding on them for the entire currency of period of Contract / PO. Notwithstanding the roles and responsibilities of each partner defined in the MOU / Agreement, all the partners will be jointly and severally responsible for completion of job under this contract.

A statement to this effect shall be included in the authorization / nomination/ MOU / Agreement by all members / partners of JV / consortium.



#### 2.3 Use of English Language

All correspondence, documentation and drawings shall be in the English Language.

#### 2.4 Late Bids

Company reserves the Right to reject / accept the bid submitted after the deadline for submission of bids prescribed by the Company .

#### 2.5 Clarifications

Bidders must seek any clarifications with respect to the Tender Document after tender issue date and till the date mentioned in the schedule of tendering. Any clarifications required to be sent to the following email: <a href="mailto:nihit.jain@sunpetro.com">nihit.jain@sunpetro.com</a>

#### 2.6 Submission of Bids

- 2.6.1 A two-Envelope single stage International Completive Bidding (ICB) system, i.e "Technical & Commercial Un-priced Bid" and "Commercial Priced Bid", shall be followed.
- 2.6.2 Bids are to be submitted in duplicate i.e. two (2 copies each) of "Technical & Un-Priced Commercial Bid" and "Priced Commercial Bid" in the separate sealed envelopes as follows:

ENVELOPE-I: Technical & Un-Priced Commercial Bid ENVELOPE-II: Priced Commercial Bid

- 2.6.3 The Technical & Un-Priced Commercial Bid shall contain all details but with the price column of the Price Schedule Format blanked out. However a Tick mark (√) shall be provided against each item of the Price Schedule Format to indicate that there is a quote against that item in the Commercial Priced Bid
  - The Priced Commercial Bid shall contain only prices duly filled in as per the price schedule format.
  - Bids which Technical & commercial Un-Priced Bid is containing prices shall be rejected.
- 2.6.4 Each of the "Technical & Un-Priced Commercial Bid" and "Priced Commercial Bid" shall be properly identified as "Original Technical & Un -Priced Un-priced commercial Bid" & "Copy Technical & Un-Priced Commercial Bid" and "Original Priced Commercial Bid" & "Copy Priced Commercial Bid".
- The "Original Technical & Un-Priced Commercial Bid" along with one more "Copy of Technical & Un-Priced commercial Bid" with price deleted commercial copy shall be submitted in a separate sealed envelope (ENVELOPE-I) by pasting "cut out slip as per \*Annexure #5". The same procedure shall be adopted for submission of the "Original Priced Commercial Priced Bid" and "Copy of Priced Commercial Bid" in separate envelope (ENVELOPE-II) by pasting "cut out slip as per \*Annexure#6". Each Bidder will submit two soft copies of complete signed and stamped "Technical & Un-Priced Commercial bid in the \*Flash Drive\*, in PDF format along with "Technical & Un-Priced Commercial Bid" in the sealed cover i.e. ENVELOPE-I. Also Bid Security / Bid Bond should be submitted in the ENVELOPE-I with "Original Technical & Un-priced commercial Bid"
- 2.6.6 The entire Bid i.e ENVELPOE –I and ENVELOPE –II should be then placed in a cloth-lined outer envelope duly sealed by pasting cut out slip as per *Annexure#7*" and superscripted as prescribed.
- 2.6.7 The Bids shall be submitted to the following address: Head – Commercial & Supply Chain Management SUN PETROCHEMICALS PRIVATE LIMITED (SunPetro) 8<sup>th</sup> Floor, ATL Corporate Park, Opp. L&T Gate no.7, Saki Vihar Road, Chandivali, Powai



- 2.6.8 The Technical & Un-priced Commercial Bid of the Bidder will be opened and evaluated first. If the offer is technically & commercially acceptable or acceptable alternatives to the minimum requirements specified in the Tender; and conforms to technical and commercial requirement or as may be decided by the Company, then the "Commercial Priced Bid" will be opened and evaluated.
- 2.6.9 In the Technical & Un-Priced Commercial Bid all the technical annexures should be submitted which would include compliance with Technical Specifications and all Price information should be left blank The Commercial part should be a comprehensive package which should include all Price information as well as "Technical" bid information.
- 2.6.10 Bidder will provide the Delivery Period / Mobilisation Period / Completion Period, as required in tender document from the date of NOA.

# 2.7 Validity Period

The Bids shall be valid for acceptance for a period of **One Hundred & twenty (120) days** from the Bid Due Date of submission. Company, however, reserves the right to seek extensions of the validity period as may be required. In the event of extension of the validity period of the Bid, all other terms and conditions including the provisions relating to Bank Guarantee shall also continue to be valid for the period of such extension.

## 2.8 Technical Proposal Requirement

The Bidder must adhere to the Technical Specification requirements as mentioned in the Tender.

#### 2.9 Certificate & Inspection

At any time prior to supply / execution of the contract, or during the course of delivery/completion and thereafter, Company shall have the right to access materials and Supplier shall assist in the verification of certificates & inspections. The Company shall exercise reasonable judgement in acceptance or rejection of such verifications, but Company reserves all the rights conforming to the requirements of the contract. It will be the Bidder's responsibility to correct any deviations from specifications found by inspection prior to mobilization of equipment. This will be at the cost of the Bidder / contractor.

Criteria for inspection - Conformance with Specifications.

Award of the contract will be subject to detailed rig inspection to the satisfaction of COMPANY and as per the Industry standards. It will be the Bidder's responsibility to correct any deviations from the quoted/accepted specifications found during Inspection prior to mobilization. This will be at the cost of the Bidder. Along with the technical bid, Bidder shall submit TPI Certificates of the inspection conducted within 1 year prior to date of Bid submission OR an undertaking that TPI certificates from internationally reputed Inspection agencies like ABS, BV, DNV, Lloyds, Oil field audit services Inc, SGS India Pvt. Ltd., Tube-star for all the equipment's mentioned in tender document shall be provided by Bidders Post LOA at Bidder's cost within 70% of quoted mobilization time. Rig shall be accepted by the company for initial mobilization subject to satisfactory verification of TPI certificates by Company representative.

Contractor agrees to perform a visual inspection, using its personnel, of all materials and appliances furnished by Company when delivered into Contractor's possession and shall notify Company's representative of any apparent defects observed therein so that Company may replace such defective materials or appliances. If Contractor fails to notify Company of any apparent defects as provided above, it shall be conclusively presumed that such materials and appliances are free from such apparent defect. Contractor shall not be liable for any loss or damage resulting from the use of materials or appliances furnished by Company containing latent defects. Upon the termination of this Agreement, Contractor shall return to Company at the Well site all machinery, equipment, tools, spare parts and supplies received by Contractor from Company or purchased by Contractor for Company's account and not used or consumed in the operations, in as good condition as

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when received by Contractor, normal wear & tear excepted. If damage to any Company's equipment is caused due to sole negligence of the Contractor, same will be repaired or replaced at Contractor's cost. Contractor shall, if requested by Company also maintain or repair, at its cost, any of Company's items, at the Drilling Unit which Contractor is qualified to and can maintain or repair with Contractor's normal complement of personnel and the equipment at the Drilling Unit provided however that Company shall at its cost provide all spare parts and materials required to maintain or repair Company's items. However, it shall remain the Company's basic responsibility and liability to ensure that such items are always in good workable condition.

Company shall have the right to inspect or reject for any valid cause any items furnished by Contractor and Contractor, shall replace or repair at its sole expense such items so rejected with items free of defects, to the satisfaction of Company.

# 2.10 Commercial Proposal Requirements

#### 2.10.1 **Currency**

Bidders are free to quote in any currency and shall be paid in the same currency. The foreign exchange rate shall be calculated on the date of bid closing date for evaluation of bids only, whereas the payment of invoices will be made based on the exchange rate as prevalent the previous day of the payment.

#### 2.10.2 Price in Words & Figures

In case of discrepancy between words and figures, the advantage in favour of Company will apply.

# 2.11 Deadline for Submission of Bids

The due date mentioned in the "Invitation to Bid" (ITB) shall be deadline for submission of bids. In case of the unscheduled holiday in Mumbai, (India) being declared by Company on the prescribed closing day of the tender, the next working day will be treated as the scheduled prescribed day of closing of the tender.

#### 2.12 Splitting of work

The Company shall have a Right to split the work /supply between two or more bidders at its sole discretion.

# 2.13 Payment Terms

Compensation to the Bidder shall be made as per the prices quoted and in accordance with terms of the payments as may be finalized with Bidder and stipulated in the LOI / Contract. Invoices shall be raised & un-disputed invoice / items shall be paid based on approved "Call out" orders for each Service. No payment will be due to the Contractor / Supplier prior to signing of the Contract.

# 2.14 Taxes, Duties and Approvals

2.14.1 The Bidders shall quote their prices inclusive of any or all taxes and duties that are applicable including transport, insurance on a CIF basis at the designated port of delivery or Site Location in India. Except Good and Service tax (GST) (if applicable to services provided under this Contract), the prices shall reflect delivery inclusive of all applicable fiscal charges including but not limited to fees, duties, cess, licenses, import duties, personal income tax, corporate tax, freight, insurance, and similar expenses. The GST if applicable, shall be paid by the Company at actual.

2.14.2 Bidder shall consider in their bid and shall be responsible to obtain at its own cost, all required Permits / Consents / Essentiality Certificates (EC) to avail concessional / Nil duties & taxes applicable for the field, wherever applicable and required for the performance of the Bidder's obligations under the Contract, from the Government of India/concerned State Governments, authorities or agencies or political sub-division thereof including any for exemption of custom duties (as per *Annexure #10*) and other duties on material / equipment imported into India. Company will provide reasonable assistance wherever required including obtaining all certificates including Essentiality Certificate for claiming Zero Custom Duty / Concessional IGST/GST as applicable under PSC, but all expenses related to obtaining all such Permits, Consents etc. shall be to the Bidder's account.

#### 2.15 Performance Bank Guarantee

The Successful bidder shall furnish to Company, a Performance Bank Guarantee for 10% of the estimated annualized Contract value within 15 days of issue of the LOI / Contract (whichever is earlier) in the format as given in *Annexure* #8 from any of the nationalised or scheduled private banks as listed in the tender document *Annexure* #9. If the bidder does not submit the Performance Bank Guarantee as stipulated above, SunPetro reserves the Right to take appropriate measures to secure the interest of the Company and right to cancel the award of LOI without thereby holding / incurring any liability towards bidder for any work / material / services already done / provided by the bidder / supplier.

# 2.16 Change Orders & Rates:

- 2.16.1 Company shall have the right to make changes, including additions to or deletions from the services and equipment originally asked for or in the specifications. A checklist for post award of work is placed at **Annexure #11**. The quoted and finally negotiated rates shall be valid & firm from issue date of LOI up to the completion of the contract.
- 2.16.2 Company will issue written orders to Bidder for any change or extra work, except in the event of an emergency which in the opinion of Company requires immediate attention, Company will also be entitled to issue oral orders to the Bidder for any work required by reason of such emergency. Company shall ensure that such oral orders shall be followed up with written communication.
- 2.16.3 All changes in services/ equipment / specifications will be performed at a mutually agreed delivery Schedule in the Contract period and price of such works shall be finalised / derived in terms and rates elsewhere in the Contract documents.
- 2.16.4 For any additional goods/service, not specified herein, but needed for operations, the Bidder shall be required to provide, on agreed time, these additional goods & services, at agreed cost or actual costs + 5% handling fees.

# 2.17 Mobilization Period / Completion Period

Time is essence of the Contract and Contractor shall / perform the Work and Services diligently in accordance with the Bidder's promised / Mobilisation period /Completion Period as set forth in Delivery schedule or agreed for any additional work / services / Supplies. In the event it becomes apparent that the timeline cannot be met, the Contractor shall, at its own cost, take all necessary steps to expedite the process, failing which the provisions of Liquidated Damages as specified in the Contract shall be applicable. The Company may also terminate the LOI or Contract immediately invoking the available remedies for protecting the interest of the Company. Company will have the right to reject any bid not meeting the delivery schedule / Mobilization time.



#### 2.18 Bid Bond

Bid Bond shall be returned to all unsuccessful bidders within one month after completion of tendering process (however, in case of the successful bidder, Bid Bond will be returned after submission of Performance Bond and failure to submit Performance Bond will lead to forfeiture of Bid bond)

#### 2.19 Annexures

Please note that all Annexures are placed at the end of this document

## 2.20 Amendment of Bidding Document

At any time prior to the bid due date, Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Document. Amendments (if any) will be notified in writing to all prospective Bidders who have been issued the Tender Document and will be binding on them. In order to afford prospective Bidder, reasonable time in which to take the amendment into account in preparing their bids, COMPANY may, at its discretion, extend the bid due date.

#### 2.21 Right to accept or reject Bids

Company may, at its discretion, reject any Bid or all Bids received or may accept part Bid which, in Company's sole judgement, is the most advantageous to Company.

# 2.22 Singing of Contract:

The successful Bidder shall be required to sign a Contract (hereinafter reffered to as the Contract") as per the Model Contract attached herewith within 30 days from issuance of LOI/LOA.

#### 2.23 Sub-Contractors

The Bidder shall have the right to appoint Sub-contractors for partial performance of the work and preference to Indian resources wherever available shall be taken up. Company shall have the right to approve the Sub-contractors appointed by the successful Bidder for partial performance of the Work, prior to their appointment. The Bidder shall be responsible for all its Sub-contractors' acts and omissions in the performance of the Work and shall indemnify Company for any costs, losses and expenses resulting from any acts of the Sub-contractor. Approval of the appointment of the Sub-contractor by Company shall not imply that the Sub-contractor has recourse to Company. The Sub-contractor shall have recourse only to the Bidder and the Bidder shall ensure that it enters into similar agreements with its Sub-contractors. Bidders are also required to furnish Letter of Authority from the manufacturers from whom the Bidder proposes to procure and supply the material against this tender. No payment shall be made before signing of the Contract.

#### 2.24 Indicative Non-Binding Project Information:

Company has planned to hire one Rig for Drilling Integrated Services for drilling operations in various blocks of SunPetro located in Gujarat. Company shall have the right to deploy the hired rig at any location for drilling exploratory / development wells within the capacity of the rig.

#### 2.25 Services:

All SERVICES supplied must meet the requirements of the applicable codes and Technical specifications of the Tender including but not limited to standards of ASTM, API, ISI, NACE, IADC etc. The services must meet all international and industry standards.



# **SECTION-3**

# **MODEL CONTRACT**

# **Preamble of the Contract**

**General Conditions of the Contract (GCC)** 



#### PREAMBLE OF THE CONTRACT

THIS AGREEMENT, is made this day of 2022

#### BY AND BETWEEN

Sun Petrochemicals Pvt. Ltd. a company organised and existing under the laws of India and having its head office at F.P. 145 , Ram Mandir Road, -Mumbai , Maharashtra ,India and  $8^{th}$  Floor, ATL Corporate Park, Opp. L&T Gate no.7, Saki Vihar Road, Chandivali, Powai Andheri (E), Mumbai – 400072[INDIA] (hereinafter referred to as "Company" or "SunPetro")

#### AND

#### **RECITALS**

WHEREAS, Contractor is engaged in such specialized operations and represents that it has adequate resources and drilling capability and personnel in accordance with Good International Petroleum Industry Practices and is willing to supply the Drilling Rig along with all auxiliary equipment, personnel and services for drilling integrated services and represents that it possesses the necessary premises, equipment, personnel and capability to carry out such Services and is willing to do so on the terms and conditions hereinafter contained;

Hereafter both Company and Contractor shall be called jointly as Parties.

**NOW, THEREFORE**, in consideration of the mutual covenants herein contained, it is hereby agreed between the Parties as follows:

This Contract witness that in consideration of the premises and the payment to be made by the Company to the Contractor provided for herein the Contractor shall supply Drilling Rig along with all equipment and /or materials and execute and perform all Services /Supply strictly according to the SCOPE OF WORK (Section-4) various provision in tender schedule and upon such supply, execution and performance of services to the satisfaction of the Company, the Company shall pay to the Contractor at the rates accepted as per the said Price schedule (Attached at Section-7) and in terms of the provisions therein.

The following documents, in order of precedence descending, comprise the entire Contract between the parties:

- 1] This Preamble of Contract
- 2] Articles of Contract (General Conditions of Contract)
- 3] Special Terms & Condition of Contract
- 4] Technical Specifications and Scope of work
- 5] Annexures / Attachments

he salient features of the Contracts as detailed herewith highlighted for ready reference
ote 1 : Title of the Contract :
ote 2 : Contract No.:
ote 3 : Point of Delivery/Site address:
ote 4 : Project/Block Number:
ote 5 : Effective Date of the Contract:
ote 6 : Due Date of Mobilization:
ote 7 : Duration /Validity of the Contract
ote 8 : Tentative Value Of The Contract:



Note 9 : Company's Representative:	
IN WITNESS WHEREOF, the parties have herein and seals the day, month and year respectively set	·
Sun Petrochemicals Pvt Ltd	
(Company)	(Contractor)
Signature	Signature
Name:	Name:
Title:	Title:
In Presence of witness	
1) Name	1) Name
Title	Title
Signature / Initials	Signature / Initials
2) Name	2) Name
Title	Title
Signature / Initials	Signature / Initials



# GENERAL CONDITIONS OF THE CONTRACT (GCC)

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# **GENERAL CONDITIONS OF THE CONTRACT (GCC)**

#### 3.1 **DEFINITIONS AND INTERPRETATION**

The following definitions and interpretation shall apply and shall have the meanings assigned to them in this Contract except where the context otherwise requires:

- 3.1.1 "Affiliate" of a Party means any Person, whether directly or indirectly, controlling, controlled by, or under common control with, such Party or Person, as applicable. For the purposes of this definition, the term "control" means (i) direct or indirect ownership of more than fifty percent (50%) of the equity (or such lesser percentage which is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction) having the power to vote on or direct the affairs of such Party or Person, as applicable, or (ii) the power to direct decisions of such Party or Person, as applicable, including the power to direct management and policies of such Party or Person, as applicable, whether by reason of ownership, by contract or otherwise.
- "Agreement" or "Contract" or "Contract Document" "Contract" means the instruction to the bidders mentioned in the tender document, the preamble, these contract definitions, General Contract Conditions, Special Contract Conditions, Schedule of Rates, Responsibility Matrix etc, specifications, scope of work, all exibits, annexures, appendices, schedules, agreement entered into between Company and contractor, as recorded in the contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein along with any amendments, change orders agreed and issued subsequently;
- 3.1.3 "Applicable law" shall mean any Indian law, regulation, bylaws, rule, directive, ordinance, judicial or quasi-judicial decree, order or notification enacted, issued or modified by any Government Agency in India.
- 3.1.4 "Approved and Approval" shall mean approved or approval in writing by the Company.
- 3.1.5 "Associated equipment and services" means equipment and services, asked for, along with Drilling unit in this bid document. These include but not limited to camp/catering/medical services, communication, safety & fire fighting services well control services etc.
- 3.1.6 "Contract Administrator" shall mean the contract administrator so appointed by SunPetro.
- 3.1.7 "Contract Price" shall mean the lump sum prices and/or rates of payment specified in Price Schedule in Section 7 and as may be indicated in the Price schedule, which SunPetro shall compensate Contractor for the actual work executed and certified by SunPetro's Representative subject to any additions/deletions thereto which may be made through the application of relevant provisions of the Contract.
- 3.1.8 "Contract Area" shall mean various Exploration & Production Blocks and Fields as awarded to the Operator by Government of India and/or any other Block awarded to Company from time to time and as identified as "Contract Area" or where company has participatory interest.
- 3.1.9 "Certificate of Release and Final Payment" is the certificate issued by to SunPetro as per the terms of Clauses mentioned herewith.
- 3.1.10 "Contractor" shall mean M/s. \_\_\_\_\_and includes, its consortium partners, sub-contractors and vendors and the officers, directors, commissioners, employees, servants, representatives and agents of any of them as applicable.
- 3.1.11 "Contractor's Equipment" shall mean all the equipment(s), rigs, units etc. along with auxiliary, plant, machines, spares, facilities, miscellaneous materials /services and consumables etc., provided by the Contractor or its Sub-contractors in connection with the Scope of Work specified in *Section 4*.



- 3.1.12 "Contractor's Personnel" means the personnel to be provided by the contractor to provide services as per the contract"
- 3.1.13 Commencement Date" shall mean the date when the Contractor's equipment / services are tested by Company's representatives, rigged up on work site and ready to commence operations on the designated site for working as intimated by SunPetro to Contractor.
- 3.1.14 "Completion Date" shall mean the time and date when the work is completed by the Contractor as per the Scope of Work.
- 3.1.15 "Company" or "SunPetro" means Sun Petrochemicals Pvt. Ltd.
- 3.1.16 "Company's Equipment" shall mean all equipment, appliances, tools, parts and supplies provided by Company and / or its associates.
- 3.1.17 "Company Group" shall mean the Company, its affiliates their contractors, subcontractors and equipment vendors of any tier, its Co-ventures, their personnel, officers, directors, employees and agents but excluding Contractor Group;
- 3.1.18 "Daily Operation Report" shall mean the daily report submitted by the Contractor to Company as per the requirements of contract.
- 3.1.19 "Day" means a calendar day of twenty-four (24) consecutive hours beginning at 06:00 hrs. and ending at 06:00 hrs.
- 3.1.20 "Days" shall indicate consecutive calendar days, it being understood that all dates and time periods referred to in the Contract are expressed in terms of the Gregorian calendar. "Day" means a calendar day of twenty hours as referred to local time at the Site.
- 3.1.21 "Demobilization" shall mean the actual demobilization of contractor's equipment and contractor's personnel including disassembly, removal, and site cleanup & restoration of all facilities assembled on site, repair of access roads to the full satisfaction of the Company. SunPetro, will issue the de-mobilization letter for the services as and when requirement ends.
- 3.1.22 "Deviated / Directional Well" shall mean a Well with trajectory being inclined from the vertical by more than 5 Degrees.
- 3.1.23 'Drilling Unit' means drilling rig complete with pumps, power packs, and other accessories and equipment as listed in the Contract.
- 3.1.24 ."Effective Date" shall be the date of issue of NOA(Notification of Award) /LOI(letter of Intent) / LOA(Letter of Award) / Work Order or as specified by Company.
- 3.1.25 "Exhibits" are those documents attached hereto and form an integral part of this Contract for all purposes and consisting of all the exhibits and annexures.
- 3.1.26 "GIPIP" shall mean specific guidelines in conformance with the Good international practices/norms and applicable standards / legislations and prevalent regulatory regime as specified by the Government of India.
- 3.1.27 "Good Oilfield Practices" means good international petroleum industry practices with such degree of diligence and prudence reasonably and ordinarily exercised by experienced parties engaged in a similar activity under similar circumstances and conditions.
- 3.1.28 "Government" shall mean Government of India or Government of State, or any political subdivision or administrative agency thereof, as the case may be, and/or their respective representatives having jurisdiction over the Work performed under this Contract.

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- 3.1.29 "Gross negligence" shall mean (i) the intentional failure to perform a manifest duty, in reckless disregard of or wanton indifference to the consequences to the life, health, safety or property of others; or (ii) any act or failure to act which, in addition to constituting negligence, was in reckless disregard of or wanton indifference to the consequences to the life, health, safety or property of others.
- 3.1.30 Interpretation
- a. Reference to "Section", " Para " "Clause" "Article" and "Provision" shall have the same meaning.
- b. The headings and sub-titles in these Conditions of Contract are included solely for convenience and shall not be deemed to be part thereof and shall not affect the meaning or operation of the Contract.
- c. Words imparting the singular meaning only also include the plural and vice versa except where the context otherwise requires.
- d. Any reference to statute, statutory provision or statutory instrument shall include any reenactment or amendment thereof for the time being in force.
- e. Reference to Applicable Laws shall also include amendments and extensions thereto.
- 3.1.31 "Letter of Intent / Letter of Award / Notification of Award / Work Order" or "LOI / LOA / NOA/ WO" shall mean the letter of Intent or Letter of Award or Work Order issued to the Contractor by Company.
- 3.1.32 "Logging Unit" shall mean the mobile unit capable of carrying out logging and perforation services in a well along with consumables as defined in the Scope of Work.
- 3.1.33 "Mobilization" shall mean the actual mobilization of the Contractor's equipment which are fit for operational requirements, along with auxiliary equipment and contractor's personnel during contract period and shall include any demurrage incurred during the period up to and including the date the Work begins at the Work Site of this Project except if such delay or demurrage has occurred due to acts or omissions of the Operator. SunPetro, will issue the mobilization letter for the services as and when requirement comes.
- 3.1.34 "Operator" shall mean Sun Petrochemicals Private Limited(SunPetro) / Company
- 3.1.35 "PSC" shall mean the production-sharing contract entered into between the Government of India and SunPetro or its consortium.
- 3.1.36 "Project" shall mean the work and other related activities as may be indicated in the LOI/ Contract as per the Scope of Work.
- 3.1.37 "Reservoir Monitoring Services" shall mean the unit and tools capable of recording the reservoir pressure, temperature and fluid level in the well using gauges, echo meter equipment etc. as defined in the Scope of Work.
- 3.1.38 "Services" shall mean the services to be provided by the Contractor under the Contract as more particularly described in Scope of Work, to this Contract and shall include such other services as may from time to time be agreed in writing between the Contractor and SunPetro.
- 3.1.39 "Sun Petro " / "SPPL" shall mean Sun Petrochemicals Private Limited .
- 3.1.40 "SunPetro's s Representative" or "Company Representative" shall mean the person or persons expressly designated in writing by Company, who shall be Company's representative and shall be empowered to act, monitor and direct the performance of the Work required under this Contract on behalf of Company.
- 3.1.41 "SunPetro Supply Item" shall mean a supply item, which is expressly identified in the Contract as being for supply by SUNPETRO or its contractors.

- 3.1.42 "Sub-Contractors" shall mean those persons or companies engaged by the Contractor in connection with the Services / contracts approved by SunPetro.
- 3.1.43 "SunPetro 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.
- 3.1.44 "Performance Bank Guarantee" shall mean the unconditional, irrevocable bank guarantee required to be submitted by the Contractor to the Company in accordance with the terms of the contract and in the form of which bank guarantee is set forth in *Annexure* #8 hereof.
- 3.1.45 "Rates" or "Rate" shall mean the applicable rates of compensation to be paid to Contractor for work hereunder as set forth in the Price Schedule.
- 3.1.46 "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 Company, in accordance with its terms, whichever occurs earlier.
- 3.1.47 "Vertical Wells" shall mean a well drilled with the intention of maintaining the well bore close to 90° to the surface of the earth with a tolerance of 3 degrees
- 3.1.48 "Well" shall mean either a Vertical or a Deviated Well or horizontal well.
- 3.1.49 "Well Depth" shall mean the depth (TVD / MD) of each Well as may be specified in SunPetro's Completion Programme, which SunPetro may amend from time to time.
- 3.1.50 "Well Locations" shall mean the locations of the Wells within the Contract Area at which Contractor shall carry out operations and such other locations as may be specified by SunPetro.
- 3.1.51 "Willful Misconduct" means Intentional disregard of Good Oilfield Practice or proper conduct under the Contract with knowledge that it is likely to result in either financial loss to the Company or any injury to any person or persons or loss or damage of property.
- 3.1.52 "Work" means each and every activity required for the successful performance of the services described in the Scope of Work, GCC, SCC, or in any other sections of the contract;
- 3.1.53 "Work Site / Work Location" shall mean the land or well site inside Contract Area of the Company and as specified to the Contractor by the company.
- 3.1.54 "Third Party" shall mean a person / entity which is not included in Company Group or Contractor Group.

#### 3.2 DURATION OF CONTRACT

3.2.1 Primary term of this contract will be 3 (Three) years from the "commencement date" with a provision to extend for 1(one) more year on same rate, terms and conditions. The term of the extension period shall be automatically extended till completion of ongoing well at the end of extension period.

During the term of Contract, SunPetro reserve the right to utilize this contract in any other block in Gujarat where SunPetro is an operator at the same rates, terms and conditions of this Contract.

- 3.2.2 Commencement Date, Completion Date and Termination Date for rate applicability:
- o Commencement date: As per 3.1.13 of GCC
- Completion date of contract : Expiry Date of Contract or as per Section 3.7
- o Termination Date: Expiry of the Contract or as per Section 3.7



# 3.3 Materials, Supplies, Equipment, Services And Personnel

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.

## 3.3.1 Additional Services, Materials, Supplies and Equipment

If it is not a part of contract, Company will pay based on agreed cost or actual cost plus 5% handling / service charges. 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.

3.3.2 The Company has full right to delete any item (s) / service(s) from the contract. The payment will be made only for the quantities of item(s) / Service(s) as certified by the company's representative.

#### 3.4 INSPECTION OF MATERIAL

## 3.4.1 **Inspection of Contractor Equipment**

Company shall have the right at any time to inspect and reject for valid cause any items of equipment furnished by the Contractor for performance of the Services and Contractor shall replace within a reasonable time period as communicated by the Company, at no additional cost to Company, such items so rejected with items free from defects or if Company agrees, repair such items at Contractor's cost. Any rejection during inspection conducted before the commencement date shall not extend the commencement date and contractor has to rectify the points within the same time period. Contractor shall maintain at its sole cost test certification on all Contractor's Rig Mast, Draw-works, BOP, solid control equipments and other vital equipments and spare parts and ensure the structural and operational integrity of the Equipment, particularly any load bearing or pressure containing Equipment.

# 3.5 COMPANY'S WORK COMPLETION PROGRAMME

# 3.5.1 Work Programme

The Work Programme shall be specified by the Company for each work / services/supplies.

3.5.2 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.

## 3.6 **PERFORMANCE OF THE WORK/SERVICES/SUPPLIES**

#### 3.6.1 Conduct of Services /supplies

The Services shall be performed by Contractor in accordance with Best international petroleum industry practices. The Contractor shall be responsible for all interface issues, related to providing multiple services under the umbrella of Integrated Services as required as per scope of work / services / supplies.



- 3.6.2 All correspondence from either party to the other party shall be addressed to its Contract Administrator, unless provided otherwise in the Contract.
- 3.6.3 **Discipline**
- 3.6.3.1 Contractor shall maintain at all times strict discipline and good order among its employees and subcontractors and shall abide by and conform to all reasonable rules and regulations promulgated by Company governing the scope of work/supplies.
- 3.6.3.2 Contractor shall, and shall ensure that its employees and subcontractors are qualified, experienced & trained and shall, comply with the all Conditions set forth in scope of work /supplies. Contractor agrees to all provisions set forth in this tender and further agrees that failure to comply with the requirements of scope of work/supplies shall constitute grounds for termination of this Contract.
- 3.6.3.3 Company have the right to ask contractor to change / replace its personnel for misbehaving / indiscipline during contract period. Contractor will replace person, within 5 working days without affecting the work progress.
- 3.6.4 Legal Requirements

Contractor shall apply for and obtain all necessary certifications, permits, licenses and authorizations for personnel, equipment and technology required in India, including any authorizations or licenses from any governmental body for use of Contractor's Personnel or technology in the Services or the export of such technology to India.

#### **Provident Fund Act**:

No dues of Payment of PF Contribution from the Employer & Employees in respect of Contractor working for Onshore Block under Contract along with monthly Returns and remittance particulars of Challans and Statement of workmen.

#### **ESI Act:**

No dues of Payment of ESI Contribution from the Employer & Employees in respect of Contractor working for Onshore Block under Contract along with their Half-yearly Returns and remittance particulars of Challans and Statement of workmen.

#### As per the Labour enactments:

Regular compliance to Minimum Wage 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, Un-availed Leave salary, Notice pay & etc.

#### **Labour Welfare Cess:**

All prices are inclusive of all taxes including Labor welfare cess. Each bidder has to provide the proof of deposit of Labor welfare cess to SunPetro duly signed by CA of the firm.

The Contractor shall indemnify the Company in case of his failure in meeting the statutory requirements as mentioned above. Submission of the above documents shall not relieve the Contractor of any liability to comply with the Applicable Laws.

# 3.7 TERMINATION BY COMPANY

3.7.1 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.

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

If the Contractor fails to timely mobilize the Materials or Equipment 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 , the Contractor shall not be entitled to any payment whatsoever. The Contractor shall immediately refund any sum which the Company might have paid 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.

## 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. 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 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
- c) Fails to make prompt payment to Sub-contractors or materials, equipment or labour; or
- d) Is in breach of Applicable Law; or
- e) Otherwise breaches the provisions of the contract or part thereof; or
- f) Suspends or abandons activities in the Work site; or Is wound up (not being a member's winding up for the purpose of reconstruction or amalgamation only) 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
- g) 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. Further, the Company shall be entitled to take possession of the Work and finish the Work at the 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. and additional expenses which the Company shall sustain, to get the work executed, on account of such breach by the Contractor. The liability of the contractor shall be limited 100% of contract value.

# 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, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination and demob charges, if applicable as per Contract. No Party shall be obligated to pay the other Party for losses (including consequential losses), expenses, damages etc. sustained on account of event of Force Majeure.

#### D. Termination for Convenience



Company 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 for the work / services performed by the Contractor till the date of such termination as well as demobilization charges.

# E. Termination for non-performance or non-satisfactory performance

The Contractor shall perform the work in accordance with Good oilfield practices / GIPIP 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 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 repeatedly; the Company shall have a right to terminate the Contract immediately without any further notice. The liability of the contractor shall be limited 100% of contract value.

# **Consequences of Termination:**

Upon termination of Contract by Company under this sub-clause, the Contractor shall be entitled to payment for the work successfully completed and certified by the Company Representative till the date of Termination. Further, the Company shall be entitled to take possession of the Work 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.

- 3.7.2 Upon receipt of Notice of Termination, the Contractor shall, unless a notice directs otherwise:
- a) Immediately discontinue the work from 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) 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.
- d) Shall return to Company all of Company's items, which are at the time in Contractor's possession.

#### 3.7.3 Payment upon Termination to be confirmed

If the unpaid balance of the Contract Price exceeds the cost incurred by the Company on finishing the work as provided in the Contract, such excess shall be paid to Contractor upon completion of the Work. If the unpaid balance of the Contract Price is lower than the cost incurred by the Company on finishing the work as provided in the Contract, the Contractor shall promptly pay the difference to the Company upon receipt from the Company of the certificate certifying the amount of such difference. Obligations arising under this article shall survive the termination of the contract.

## 3.7.4 **De-hiring:**

Company may, at its option, de-hire the services of the Contractor due to interruption in the work / unit programme, by giving five (5) days written notice to the Contractor and during this period applicable charges for equipment and personnel etc. shall be payable by Company. However, unless notice directs otherwise, contractor will take immediate action to demobilize the personnel, machines and other equipment immediately. SunPetro may call the Contractor along with the whole setup by issuing fifteen days' notice to mobilize again.



# 3.8 HEALTH, SAFETY & ENVIRONMENT (HSE) General

During bid evaluation stage, Contractor shall also be evaluated on HSE. HSE evaluation shall be based on Contractor's response to the bid. Company may also conduct pre hire HSE audit of Contractor to assess their HSE capability.

Contractor warrants that it shall perform all such services in a Good and Workmanlike Manner and as per the guidelines issued by DGH and OISD from time to time. Contractor warrants to Company that Contractor's Personnel who are skilled, experienced and competent in their respective positions, and who are fit for duty shall perform all Services. Contractor undertakes to ensure that its personnel comply with Company's regulations regarding health, safety and training which are in force at such time and at such place.

Before the commencement of work, Contractor is required to submit the Safety Management Plan including details of Risk Management related to nature of job. To ensure the safe operations at site, Contractor is required to submit the written safe procedures related to work and comply with DGMS / OMR-2017 and OISD requirements including amendments / modifications issued by DGMS from time to time.

Contractor to provide Health, Safety & Welfare Policy Manual which should be aligned with Company's HSE Policy

#### 3.8.1 **Safety**

- 3.8.1.1 In performing the Services hereunder, Contractor and its officers, directors and employees and any subcontractors and their officers, directors and employees shall comply with the provisions of and/or meet the Health, Safety and Environment best Industry standards and requirements set forth in:
- a) the safety management system (hereinafter referred to as "the Safety Management System") established by Contractor;
- b) Onshore safety, health, training and protective clothing requirements; and
- c) All applicable laws, rules and regulations of India.
- d) Proper safety kits liveries and uniform for all employees / subcontractors working at site.
- 3.8.1.2 The Contractor shall ensure strict compliance to the latest editions of Oil Mines Regulation Act and OISD Standards at all times.
- 3.8.1.3 Prior to commencement of operations, Contractor shall ensure that all Contractor's personnel and the personnel of its subcontractors are familiar with the provisions of *Contractor's Safety Management System*.
- 3.8.1.4 Contractor is responsible for the supervision, monitoring and compliance of and with the requirements and shall take prompt and appropriate action to correct any unsafe work practices by its personnel and those of its subcontractors.
- 3.8.1.5 Company shall, at its complete discretion, monitor and audit Contractor and its subcontractors in respect of compliance with the requirements of this Clause. Contractor shall co-operate fully with, and rectify any deficiencies in compliance pointed out by the Company.
- 3.8.1.6 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.
- 3.8.1.7 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.



- 3.8.1.8 Required PPE to be identified & sufficient stock shall be maintained at all time. Also the Contractor's Employee shall be trained for uses of PPE.
- 3.8.1.9 Contractor shall provide certificates for but not limited to Lifting Equipment like Crane, Slings, D-Shackles, Chain pulley Blocks. Lifting Equipment shall be color coded & numbered. The Contractor 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 contractor shall take immediate steps to remove and replace the equipment at contractor's cost. The duration any particular equipment is not available for use shall be taken into account for deduction of day rates at a cost estimated reasonably by the Company.
- 3.8.1.10 Contractor shall provide Test certificate for Cylinder, High pressure Hoses, & Electrical appliances or as specified in the contract.
- 3.8.1.11 Contractor has to develop ERP jointly with Company & shall ensure awareness Training imparted to all concerned personnel. Mock drill (Table top) for critical scenario need to be conducted before Work over operation. Records to be maintained.
- 3.8.1.12 Contractor shall ensure PTW developed by Company and shall be followed.
- 3.8.1.13 Contractor shall maintain following Records:
  - 1. Employee detail
  - 2. Pre medical check-up record
  - 3. Competency Record
  - 4. Training & awareness Record
  - 5. PPE record
  - 6. Accident / Incident Record
  - 7. Mock drill Record
  - 8. Audit Observation & compliance record.
  - 9. Accident / Near miss Report.
- 3.8.1.13 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.
- 3.8.2 Environment
- 3.8.2.1 Contractor hereby acknowledges Company's commitment to conduct its operations in a manner that not only complies with all relevant environmental protection and pollution control legislation of India but also that, such operations do not cause environmental damage or pollution. In recognition of the aforementioned commitment, Contractor shall perform the Services in an environmentally acceptable and safe manner consistent with GIPIP and shall ensure that its performance of the Services is properly monitored
- 3.8.2.2 Contractor shall prepare Aspect & Impact document related to their Job scope and shall submit to Company.
- 3.8.2.3 Valid Pollution under control Certificate for Engine above 150 KVA
- 3.8.2.4 Contractor shall have Waste Management Plan for their scope of work.
- 3.8.2.5 Hazardous Waste shall be sorted out & disposed as per the Pollution Control Board norm as applicable by the Contractor at their own cost.
- 3.8.2.6 Contractor shall display MSDS for Chemicals, Reaction Matrix for Chemicals and High noise area.



- 3.8.2.7 Eye wash station shall be provided at suitable place.
- 3.8.2.8 Working area is to be illuminated as per Lux standard.

In particular, the Contractor shall:-

- a) employ generally accepted industry standards, including, as required, advanced techniques, practices and methods of operation then available for prevention of environmental damage;
- b) take necessary and adequate steps to prevent environmental damage and, where some adverse impact on the environment is unavoidable, to minimise such damage and the consequential effects thereof on people and property; and
- c) adhere to the guidelines, limitations or restrictions, if any, imposed by the Environmental Clearance referred to in this clause as applicable on the date of this Contract and as such Environmental Clearance may be revised, expanded or replaced.
- 3.8.2.9 Without limiting the generality of the provisions of this Clause hereof, Contractor shall comply with, and ensure that its employees, agents and subcontractors comply with, all applicable environmental protection and pollution control laws, regulations, rules and ordinances of all relevant state, central and local Government of India.
- 3.8.2.10 If during Contractor's performance of the Services, Company is of the opinion that Contractor is either not conducting the Services in compliance with any one or more of the provisions of Clause, all applicable environmental protection laws, rules and regulations imposed by state, central or local governments and all environmental guidelines and procedures furnished by Company to Contractor from time to time, or is conducting the Services in such a way as to endanger the environment or as to risk being in breach of any laws, rules or regulations of any such bodies, then Company shall notify Contractor of the breach involved and suspend all operations whereupon the provisions of clauses mentioned herewith in the contract apply as if the Well Operations had been suspended due to equipment breakdown.
- 3.8.3 Contractor has to submit Monthly Compliance Reports to the company on all aspects as listed above or as decided by the company.

## 3.9 SETTLEMENT OF DISPUTE/ ARBITRATION

- 3.9.1 The Company and the contractor undertake that all disputes, differences or questions at any time between the parties as to the construction to this Contract or as to any matter or thing arising out of it or in any way connected therewith ("Disputes") shall be resolved between the parties in good faith by having the discussion between the Project Manager / Contract Manager level and if required may be taken up to the Company -Head level to resolve the issues / disputes in the interest of the work and at least three attempts shall be made by the both the parties in this direction.
- 3.9.2 Any disputes arising out of or connected with this Contract, which cannot be amicably resolved, shall be finally 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 Judges of any of the High Courts or Supreme Court of India. Unless otherwise agreed in writing, the arbitration shall be held at Mumbai, India. The parties shall equally bear the cost of arbitration.
- 3.9.3 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. Notwithstanding any disagreement, dispute, protest, request for or pendency of 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 Company in accordance with the terms and conditions of this Contract. Notwithstanding anything contained herein, If the Contractor fails to proceed with the Work, he shall be considered to be in default and shall be held liable for direct, indirect and 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.

- 3.9.4 The right to arbitrate disputes and claims under this Contract shall survive the termination or invalidity of this Contract or any term hereof.
- 3.9.5 Any award rendered by the arbitrators shall be final and binding upon the parties.

  Any judgment upon such award may be entered in any court having jurisdiction or application may be made to such court for a judicial confirmation of such award and judgment or order of enforcement, as the case may be.
- 3.9.6 English language shall be used in the arbitral proceedings Unless otherwise agreed in writing, each party shall equally bear the cost of arbitration.

#### 3.10 ENTIRE CONTRACT / AGREEMENT / WAIVERS

- 3.10.1 This Contract sets forth the entire CONTRACT between Company and Contractor which shall supersede all previous communication/ agreements either oral or written. No terms, conditions, understandings or agreements purporting to modify or vary the terms of the Contract (whether written or oral) of the parties made prior to the date of this Contract shall apply except where Company and Contractor have expressly varied the same in writing under the terms of this Contract.
- 3.10.2 None of the provisions of this Contract shall be considered waived by Company unless Company 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.
- 3.10.3 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:
- i) Failure by Company to insist upon strict performance of any terms or conditions of this Contract,
- ii) Failure or delay to exercise any rights or remedies provided herein or by law,
- iii) Failure to properly notify Contractor in the event of breach, except for any breach which according to provisions of Contract has to be notified,
- iv) Acceptance of or payment for any Service or review of any design, or
- v) Warranty on the Equipment if sold to Company by the Contractor will continue upto the expiry of the warranty period even if the Contract is expired or terminated.

## 3.11 **LIQUIDATED DAMAGES**

#### 3.11.1 Liquidated damage

If Contractor for any reason other than Force Majeure, fails to timely mobilize all the equipment (fit for purpose) and/or personnel with requisite experience at designated location/well site as per the time schedule mentioned in the Contract or the extended date or fails to timely commence, continue or perform the services or continue uninterrupted Work in accordance with the terms of this Contract or the extended date or if Contractor repudiates the Contract before completion of the Works in accordance with the Contract, or any if above reason resulting to delayed delivery of work completion, the Company may without prejudice to any other right or remedy available to the Company, shall have a right to seek payment from the Contractor as ascertained and agreed liquidated damages, and not by way of penalty, half percent (1/2%) for each

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week on pro rata basis of late completion of work / delayed delivery of work up to a maximum of Ten percent (10%) of total work order value. However, delay in mobilization will attract half percent (1/2%) per week of late mobilization on pro rata basis up to a maximum of Ten percent (10%) estimated annualized contract value.

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:

- a. Terminate the Contractor or a portion or part of the Work thereof at any time during the term of the Contract and / or,
- b. Recover damages resulting from Contractor's breach of any of the provisions hereof from any kind of dues and / or,
- Get the Work done by any other contractor at the risk and cost of the Contractor and/or,
- d. Invoke bank guarantee or any other security provided by the Contractor and/or, 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 Law.
- 3.11.2. If Contractor is not able to provide any type of material or services on time, delay in rig repair to non-availability of back up of critical part, non-compliance of HSE and Technical audit points, non -availability or absence of Rig Manager/DS, Tool Pusher, NTP or Driller than LD shall apply and the Company may without prejudice to any other right or remedy available to the Company, shall have a right to seek payment from the Contractor as ascertained and agreed liquidated damages, and not by way of penalty, half percent (1/2%) for each week on pro rata basis of late completion of work / delayed delivery of work up to a maximum of Ten percent (10%) of total value of on a well. Any delay period from 12 hours to seven days shall be considered as reduction of half percent (1/2%).
- 3.11.3 The Parties agree that the liquidated damages indicated hereinabove are genuine preestimate 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.
- 3.11.4 Where Company is required to wait for any reason for a Contractor Equipment and/or personnel which is not made available on the site as per the schedule, in addition to liquidated damages payable by the Contractor, the Contractor shall also pay as preagreed damages an amount equivalent to daily **operating rate** for hired equipment, till time such equipment is made available to Company.
- 3.11.5 By way of abundant caution it is clarified that during this period of delay, Contractor will not be eligible for any payment, whatsoever.

#### 3.12 NOTICES

All notices and other communications provided for in this Contract shall be in writing and shall be delivered at the addresses for notices given in the Contract. A party may notify the other from time to time of changes in the address for notices. E -mails and facsimile transmissions shall be held to have been received at the time of transmission report.

#### 3.13 APPLICABLE LAW

All questions, disputes or differences arising under, out of or in connection with this Contract and the relationship of the parties hereunder shall be governed by and interpreted in accordance with the laws of India (both procedural and substantive) and parties hereby agree to submit to the jurisdiction of the Courts in Mumbai / Mumbai, India.

## 3.14 ACTS AND REGULATIONS, GUIDELINES

THE MINES ACT, 1952 along with the 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.



#### 3.15 CONFIDENTIALITY

- 3.15.1 "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:
- 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 required to be disclosed under any Applicable Law (subject however to the party who is required to disclose the information as such is providing reasonable notice of the same to the other party, prior to making any such disclosure).
- 3.15.2 The Contractor shall hold the information confidential and shall not divulge or disclose the information, or make the information available to any person or entity, other than its 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 any of its authorized Representatives, then damages alone may not be an adequate remedy and that the remedies of injunction and specific performance or any other equitable relief may imposed.

#### 3.16 ASSIGNMENT AND SUBCONTRACTING

- 3.16.1 Company shall be entitled to freely assign its rights, obligations and duties under this Contract to its Affiliate or other Participant or JV, for any Blocks 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.
- 3.16.2 Contractor shall not sublet or subcontract in part or in whole the Services to any third party without prior written consent of Company. If the Contractor sub contracts part of the Contract to a sub-contractor, Contractor shall ensure that sub order's 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 Contract with the Sub Contractors, the same shall be notified to the Company with in a period of one (1) month.
- 3.16.3 However, no such approval for sub-contracting shall relieve Contractor from any obligation or liability under the Contract and Contractor shall be fully 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.

#### 3.17 **INVOICING AND PAYMENT**

- 3.17.1 Invoices shall be itemized with a full break down of the Service performed /supplies made and shall be complete with all back-up details, documentation, information, receipts, packing list, ocean bills of lading, certificate of origin, 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.
- 3.17.2 Contractor shall invoice to Company for payments hereunder on Completion of

Services. Unless and otherwise mentioned anywhere else in this Contract Company shall make payment, of the correct/ undisputed / Certified invoice supported with job sheet / field ticket / any other relevant document, which is jointly signed by Engineer In-charge / Company representative along with the Contractor representative, within Thirty (30) working days period after receipt of invoice unless the Company disputes the invoice or a part thereof. Prices negotiated and finalized shall be firm and binding for the agreed Contract period as per Clause 3.2. (General Instructions) i.e. 36 (Thirty six) Months and 12 (Twelve) months extension period. No interest shall be payable on delayed payments by the Company. Exchange Rate used for payment will be the average of SBI Selling and Buying rate prevailing one day prior to the date of release of payment.

The invoice should be submitted to Company only after having submitted the following documents at Mumbai, if applicable. The Contractor shall indemnify the Company at all times for the damages caused or losses incurred by the company due to noncompliance with the existing laws and regulations by the Contractor.

- 3.17.3 The settlement 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. 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 and in no event later than sixty (60) days from the date of such claims.
- 3.17.4 Contractor shall support all invoices with any data and/or information reasonably requested by Company. Contractor agrees to retain all applicable documentation and records for a period of not less than Four (4) years from the end of the calendar year in which this Contract terminates. Company or any party nominated by Company shall be entitled to audit and examine all documents and/or records necessary to verify the correctness of charges contained in any invoice. The payment of an invoice shall not preclude Company's right to audit any charge during said three-year period. Any discrepancies found in such audit shall be paid or reimbursed forthwith. Company shall have the right to reproduce any such documents which have been inspected. Invoices shall be endorsed with the Contract number and title and shall be submitted in triplicate with one original and two Copies (clearly marked "Original" or "Copy") once in each month and shall be forwarded to:

Head - Commercial & Supply Chain Management **Sun Petrochemicals Private Limited** 8th Floor, ATL Corporate Park, Opp. L&T Gate no.7, Saki Vihar Road, Chandivali, Powai Andheri (E), Mumbai – 400072[INDIA]

- 3.17.5 All payments to the Contractor under this Contract shall be made in the currency quoted by them or Indian Rupees to the Indian Bidders or United States Dollars to the Foreign Bidders.
- 3.17.6 The Contractor shall not claim any charges under any head during the period the equipment or tools are damaged, damaged beyond repair, un-operational, or declared dangerous for operation and cannot be operated / used for the said services. No payment shall be made for either the Standby rate, Stack Rate or under any other head till the tools / equipment are redressed, replaced or declared safe for operation & fit for purpose. No payment for either standby rate or operational rate shall be made for the personnel associated with the operation of the said tools/equipment.

#### 3.17.7 **Audit**

The Company and its authorized representatives shall have access to, and the right to audit and obtain copies of any of Contractor's and its subcontractors' or agents' documents of whatsoever nature (except the confidential information of pricing formulate of the Contractor) 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

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records. The Contractor will preserve and will cause its subcontractors and agents to preserve all such records for a period of four (4) 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 periodwhenever 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 may 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's 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.

#### 3.18 TAXES AND DUTIES

#### 3.18.1 **Taxes**

All rates and the Contract Price shall be inclusive of all concessional Taxes & duties and such other payments as may be payable under any Applicable Laws (except goods and service tax). Except as stated, Contractor shall bear all income, corporate, property, work contract taxes 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. GST if applicable shall be charged over and above the quoted prices and shall be paid by Company along with the invoice on submission of proof.

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.

#### 3.18.2 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 shall be paid by Contractor. 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.

## 3.18.3 Custom Duty, Entry taxes, etc.

The rates do not include 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 Essentiality Certificate (EC) and such notifications applicable to Oil & Gas / Petroleum Operations. Contractor expressly agrees to furnish necessary documentation, bonds or undertakings to Government authorities and / or to Company, which may be required for availing such concessional exemption. It is expressly understood that Contractor shall be required to re-export any of its Equipment (unless consumed during performance of Services) and left-over chemicals / additives 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 fifteen (15)



days of completion or termination of Services or accordance with applicable legislation, 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.

3.18.4 Contractor shall protect, indemnify and hold harmless Company, its Co-ventures, 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-ventures, their directors, officers and employees' including from any and all claims or on account of any payment made to or earned by contractor.

## 3.18.5 Change in Law

- 3.18.5.1 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 / decrease cost of the works under the Contract though increased / decreased 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 provided the rates and all applicable taxes along with the tax rate, were clearly indicated at the time of Bid submission by contractor.
- 3.18.5.2 Similarly, if any change or amendment of any Act or Law, Rules or Regulations of any Govt. or public body becomes effective after the 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.
- 3.18.5.3 Company shall not bear any liability in respect of (i) Personnel taxes on the employees of Contractor and the employees of all its sub-Contractors etc. (ii) Corporate taxes in respect of the Contractor and its sub-Contractors." (iii) Any taxes for which the Contractor or any or all of his sub-contractors are directly assessable i.e. Corporate taxes and Fringe benefit tax in respect of Contractors and all of their sub-contractors, agents etc.

#### 3.19 **INSURANCE**

- 3.19.1 For its risks and liabilities assumed hereunder, the Contractor shall, at it's 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 Sub-Contractors) other than Employers Liability Insurance / Workmen's Compensation to the extent of the liabilities assumed by the Contractor under the Contract.
- 3.19.2 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 risks and 5% more expense.

- 3.19.3 The Contractor shall be responsible for and shall save, indemnify, defend and hold harmless SunPetro, Joint Venture partners of SunPetro, 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 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.
- 3.19.4 Prior to commencement of services / delivery / work hereunder or within 7 days of signing of Contract, whichever is later, Contractor shall deliver to Company the following 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/work without delivering the certificates of insurance shall not constitute a waiver of contractor's obligation to provide the required coverage.
- 3.19.5 The insurance shall cover for the following:
- 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 equal to the contract value combined single limit each occurrence with an aggregate limit of contract value for bodily injury and property damage provided that there will not be any excess/deductibles in the policy to be taken by the contractor. 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.** Personal Accident and Medical Insurance for each of Contractor's Personnel valid for the area(s) in which Work is to be performed and for any travel for any period(s) during which Work is being performed. This insurance should include cover for all hospital and medical costs, and all costs for repatriation.
- **5.** Contractor shall carry or cause to be carried insurance covering all Contractor's Equipment against loss or damage at all times including during transportation to/from the site and at the site. However, Contractor reserves the right to self insure its own assets.
- **6.** The Contractor will be required to have insurance coverage for "Oil Industries Endorsement" in its insurance policy.

## **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. 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.
- C. 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.



D. All exclusions and indemnities given under this Contract 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.

### 3.20 CONTRACTOR'S OBLIGATIONS AND WARRANTIES

- 3.20.1 The general allocation of responsibilities between Company and Contractor are set out in responsibility matrix and other clauses mentioned in this documents and the Exhibits.
- 3.20.2 Contractor represents that it is engaged in such specialized operations and represents that it has adequate resources and personnel in accordance with Good international Petroleum Industry Practices and shall perform the Work strictly in accordance with this Contract and shall comply with and adhere strictly to Company's instructions and directives on any matter concerning the Work. Contractor warrants that it is aware of the entire Well Locations environment, zoning and other regulations legal description prescribed in this Contract.
- 3.20.3 At all times Contractor shall respond promptly and shall accurately furnish to Company information about the Work as requested.
- 3.20.4 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 Contractors custody.
- 3.20.5 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.
- 3.20.6 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.

### 3.20.7 Contractor Personnel

Contractor shall use all reasonable care to provide, at Contractors sole risk and cost, competent, skilled personnel to perform Work and shall take responsibility for their actions. Contractor shall ensure that the necessary personnel are available at the Work Site / Location when required by SunPetro for commencement of the Work and shall continuously be available during the duration of the Contract. Contractor shall be solely responsible throughout the period of this Contract for providing all the requirements of its personnel, including but not limited to, accommodation, transportation, meals, medical attention, vacations and time-off allowance, travel and any other benefits due to such employees under any law or otherwise. SunPetro shall have no responsibilities or liability whatsoever in this regard.

3.20.8 SunPetro shall be entitled, without prejudice to any other rights or remedies available to SunPetro under this Contract or otherwise in law to object to and require Contractor to remove from the Work any person who in the reasonable opinion of SunPetro is incompetent, misconduct's himself, is negligent in the proper performance of his duties or is otherwise considered to be undesirable. In such an event, Contractor shall forthwith remove such person from the Work, and such person shall not be again employed upon the Work without the written permission of Company. Contractor shall forthwith replace within 5 working days, at Contractor's sole expense, any such discharged person with a suitable qualified and experienced person satisfactory to Company without affecting the work.

# 3.20.9 Permits and Instructions

Contractor shall obtain all requisite permits and approvals under Applicable Law for the performance of the Scope of Work / supplies. In the event of Contractor receiving instructions from Company to stop Work/supplies operations, Contractor shall comply with the same with immediate effect.



### 3.21 **FORCE MAJEURE**

- 3.21.1 "Force Majeure" shall mean any act which is insurmountable and outside the reasonable control of the parties Events of Force Majeure shall include, but shall not be limited to, acts of God, lightning, earthquake, flood, fire, explosion, major storm (hurricane, typhoon, cyclone, etc.) or tidal wave, act of war (declared or undeclared) or public enemy, riots (otherwise than amongst Contractor's personnel), strike (excluding strikes, lockouts or other industrial disputes or action solely among employees of Contractor or its subcontractors), act or omission of sovereign states or those purporting to represent sovereign states, blockade, embargo, quarantine, public disorder, sabotage or any other events beyond the control of the parties or either of them., Strikes shall only be considered as Force Majeure if they are officially declared/ accepted strikes. However, Force Majeure shall not include occurrences as follows:
- 3.21.1.1 Late delivery of materials caused by congestion at supplier's plant or elsewhere, an oversold condition of the market, inefficiencies, or similar occurrences
- 3.21.1.2 Late performance by Contractor and/or a sub-contractor caused by unavailability of equipment, supervisors or labor, inefficiencies or similar occurrences;
- 3.21.1.3 Mechanical breakdown of any item of Contractor's or its Sub-contractor's equipment, plant or machinery; or
- 3.21.1.4 Delays due to ordinary storm, inclement weather, seasonal rains or monsoon; or
- 3.21.1.5 Non-conformance by Sub-contractors;
- 3.21.1.6 Financial distress of Contractor or any Sub-contractor
- 3.21.1.7 Failure to carry out 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.

Any delay or failure to in performance by either party hereto shall not give rise to any claims for damages or loss of anticipated profits if, and to the extent, such delay or failure is caused by Force Majeure. Neither Party hereto shall be liable to the other, for the payment of money, for failure to perform any obligations hereunder when performance is hindered or prevented by Force Majeure. However, during the initial 72 hours of force maejure period, bidder shall be paid at 1/3 (one third) of the applicable standby rate and thereafter shall be paid at 0 (zero) rate. During the period of zero rate, bidder shall be reimbursed for fuel charges on actuals.

The affected party shall inform the other party immediately in writing (within 24 hours) of its inability to meet its obligations hereunder, specifying the cause of Force Majeure, and shall do all that is reasonably within its power to remove the Force Majeure conditions. Such party shall advise the other party when such Force Majeure ceases (within 24 hours of ceasing of Force Majeure) and shall resume performance of its obligations hereunder as soon as reasonably possible thereafter. No payment will be due to the Contractor between the commencement of Force Majeure and commencement of Normal operations by the affected party.

3.21.2 The affected party shall make every reasonable effort to. Should any act or acts of Force Majeure cause the suspension or artificial suspension of operations there under for all or part of the Work for a continuous period of more than seven (7) days, the parties shall meet and determine the appropriate measures to be taken. In the event that a condition of Force Majeure exists at the Site for a period of at least fifteen (15) consecutive days, Company shall have the right to terminate this Contract by giving two (2) days advance notice to Contractor.

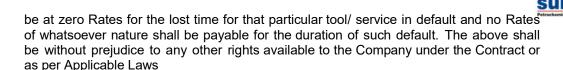
### 3.22 WARRANTIES AND REMEDIES

3.22.1 Contractor represents that is it is engaged in such specialized operations and represents that it has adequate resources, service capability and personnel in accordance with GIPIP and shall perform the Work strictly in accordance with this Contract and shall comply with and adhere strictly to Company's instructions and

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directives on any matter concerning the Work. Contractor agrees to comply with, and shall ensure that its Personnel comply with, all Applicable laws, International /Indian codes, rules, regulations and specifications applicable to the Equipment and Services. Contractor warrants that all items rented to Company under this Contract shall meet specifications as set forth in the contract and shall be in good working condition throughout the Contract period (ordinary wear and tear excepted). All Equipment, materials, machinery and goods procured and supplied by Contractor under this contract, including, without limitation, service related materials (collectively items) shall be of good quality and workmanship, safe and free from defects in workmanship. Time is of the essence of the Contract and Contractor shall perform all Services in conformity with the time schedule, specifications and the obligations contained herein, unless the delay is due to Force Majeure or reasons wholly within Company's control. Any failure by Contractor to timely deliver the goods / materials work at the point of delivery and / or perform the services in timely manner shall attract the provisions of Clause indicated in Liquidated Damages.

- 3.22.2 The Service warranty applies to all services performed by Contractor as part of the Work. Contractor warrants that it shall perform all such services in a Good and Workman like Manner. Contractor may be required at Company's sole option (unless stated otherwise elsewhere in the Contract) to supervise the installation, running in or pulling out of the Equipment to enable it to be fully operational within the time specified in the Contract. Contractor warrants to Company that Contractor's Personnel who are skilled, experienced and competent in their respective positions, and who are fit for duty shall perform all Services. Contractor undertakes to ensure that its personnel comply with Company's regulations regarding health, safety and training which are in force at such time and at such place.
- In the performance of the Services, if the Contractor fails to comply with the warranties and undertakings set forth, the Contractor shall as directed by the Company prior to demobilization, at Contractor's cost and without prejudice to any other right or remedy of Company under this Contract, re-perform the Services or correct such failure or furnish an alternative acceptable to Company in order to comply fully with the requirements of the Contract. Defects shall not be deemed waived by Company's failure to notify Contractor upon receipt of Services or by payment of invoice.
- 3.22.4 Contractor shall use all reasonable care to provide, at Contractors sole risk and cost, competent, experienced, skilled personnel to perform Work and shall take responsibility for their actions. Contractor shall ensure that the necessary personnel are available at the Work Site / Location when required by Company for commencement of the Work and shall continuously be available during the term of the Contract. Contractor shall be solely responsible throughout the period of this Contract for providing all the requirements of its personnel, including but not limited to, accommodation, transportation, meals, medical attention, necessary permits / licenses as per rules / laws, vacations and time-off allowance, travel and any other benefits due to such employees under any law or otherwise. Company shall have no responsibilities or liability whatsoever in this regard. Company shall provide boarding and lodging to the Contractor's personnel while at the work.
- 3.22.5 Day-rates or compensation of whatsoever nature shall not apply to time when the Contractor's Equipment/tool and Manpower is unable to perform to the satisfaction of the Company in accordance with the Contract for any reason.
- 3.22.6 If Contractor shall fail in its obligations under this Contract and does not remedy such default after having received prior written notice thereof, Company may on its own initiative arrange for alternative means of performance of Services. Any direct and reasonable costs or expenses incurred by Company thereby, shall, together with an additional five per cent (5%) of such costs and expenses, be payable by Contractor and may be deducted and set off against any monies owed to Contractor by Company pursuant to the Contract. Should any time be lost during any such alternative arrangements in the performance of the Services, the Equipment and Personnel shall



- 3.22.7 Contractor shall take all measures necessary and / or proper to protect personnel, Work Site and facilities as well as observe all safety rules and regulations of Company, given to Contractor in writing provided such rules do not conflict with those of any Governmental Agency having jurisdiction over operations conducted hereunder. No smoking or open flames shall be permitted on the drilling unit and nearby except in areas marked by Contractor and approved in writing by Company. Contractor shall use all reasonable means to prevent and control fires and blowouts, as well as protect the hole, the reservoir or any other underground formation from loss or damage.
- 3.22.8 Contractor shall have no authority to make any statements, representations or commitments of any kind or to take any action which shall be binding upon Company, except as provided for herein or otherwise authorized in writing by Company.
- 3.22.9 Contractor shall notify Company promptly, but no later than twenty four (24) hours, upon discovery of any instance where Contractor has not complied with the requirements of this Clause.
- 3.22.10 The Company reserves the right to purchase / replace specific tools / equipment at any time during the Contract and include them in the Contract.

### 3.23 **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. 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, with an additional five per cent (5%) of such costs and expenses, be payable by Contractor 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.

### 3.24 **INDEMNITY AND LIABILITIES**

### 3.24.1 Indemnity by Contractor:

Contractor shall be responsible at all times, including time in storage, in transit, on the rig or at Company's well location and shall indemnify and keep the Company Group indemnified and harmless from all actions, proceedings, suits, claims, demands, liabilities, damages, losses, costs, charges, expenses or other obligations hereunder directly or indirectly associated herewith, judgments and fines arising out of or in the course of execution of work under the Contract or performance of obligations by the Contractor thereunder including but not limited to:

- a) personal injury, illness or death of:
- i) any of Contractor's Group's personnel (except if directly caused by the Gross Negligence or Willful Misconduct of Company Group).
- b) loss or damage to:
- i) any property owned, hired or supplied by Contractor Group (except if directly caused by the Gross Negligence or Willful Misconduct of Company Group).

# 3.24.2 Indemnity by Company:

Company 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 Company 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 Company Group (except if directly caused by the Gross Negligence or Willful Misconduct of Contractor Group).

### 3.24.3 Third Parties:

A. Contractor shall defend, indemnify and hold Company Group harmless from and against any and all claims in respect of:

- i. the personal injury, illness or death of a Third Party; and/or
- ii. the loss of or damage to any facilities, tools, equipment and/or personal belongings of a Third Party; arising in connection with the CONTRACT to the extent caused by the negligence and/or breach of duty (statutory or otherwise) of Contractor Group.
- B. Company shall defend, indemnify and hold Contractor Group harmless from and against any and all claims in respect of:
- i. the personal injury, illness or death of a Third Party; and/or
- ii. the loss of or damage to any facilities, tools, equipment and/or personal belongings of a Third Party; arising in connection with the CONTRACT to the extent caused by the negligence and/or breach of duty (statutory or otherwise) of Company Group.

"Third Party" shall mean a person/entity which is not included in Company Group or Contractor Group."

# 3.24.4 Contractor's Material, Equipment, Services and Property

The Unit / equipment / services / tools (herein referred to as Equipment) 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 equipment 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 or contributed to 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 mobilization in the country 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) of Para 2 above. Company shall not be responsible if Contractor's tools/equipment incur damage as a result of Contractor's negligent acts and/or omissions".

### 3.24.5 Liability for Radioactive sources

The radioactive sources, which Contractor may use in performing the Services, are potentially dangerous. If any radioactive source is lost in a well, at the well site, while being transported by or on behalf of Company or by conveyance arranged by the Company or while under the custody or control of the Company or its representatives, Company shall be solely responsible for recovery or abandonment of the source and shall take special precautions in order to avoid breaking or damaging the source container. If the source



cannot be recovered, or if the container is broken, Company shall immediately comply with all laws and regulations applicable to Company, as well as to Contractor as owner of the source, including the isolation and marking of the location of the source, and shall defend, indemnify and hold harmless Contractor from and against any and all liabilities arising with respect thereof, and shall keep Contractor informed of all related developments, except when it is caused due to Gross Negligence or Wilful Misconduct by Contractor Group.

# 3.24.6 Limitation of Liability

The total liability of the contractor shall be limited to 100% of the contractor value if no fault by contractor. In case intentional damages, it would be 200% of the contract value. The Company shall indemnify and hold harmless the Contractor against all claims and liabilities in excess of the above limits, 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.

### 3.24.7 Consequential Damage

Notwithstanding anything else contained herein to the contrary and subject to clause no. 3.9.3, 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.

3.24.8 The Contractor shall indemnify and hold Company harmless from and against any claim, action, suit, proceeding, loss, liability, damage or expense (including, without limitation, reasonable attorney's fees), directly or indirectly arising from or related to: (a) any breach by Contractor of any of its representations, warranties, covenants, or obligations pursuant to this Contract;(b) the negligent or wrongful acts of a Contractor; (c) Breach of Applicable Laws by the Contractor /Contractor Group; (d) Intellectual Property and Confidentiality breach

### 3.24.9 Liability for the Well or Reservoir

Subject to clause 3.24.1 and notwithstanding anything else contained herein to the contrary, Contractor Group shall not be liable and responsible 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, death, damage to or loss of property or any other claims 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.

## 3.24.10 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 if 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 pursuant to applicable period as may be determined by Company and, if appropriate, 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 3.24.1, 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.

### 3.24.11 Certain Restrictions on Indemnities

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

### 3.25 **PERFORMANCE BANK GUARANTEE**

Within fifteen (15) days of the issue of Letter of Intent/ award, the Contractor shall present to the Company a Performance Bond / Bank Guarantee (As per format in accordance to *Annexure #8*) in the form of an irrevocable, unconditional, payable on first demand by Company, divisible bank bond in the format of *Annexure #8* issued by an approved bank. Failure to comply with this condition will constitute grounds for termination of the award / Contract.

The Performance Bank Guarantee shall be of 10% of one year estimated contract value and shall be valid and be retained for Ninety (90) Days after the completion/termination of the Contract except where claims are outstanding there under or where previously drawn by the Company but not later than Thirty (30) days after the final settlement of such claims or Ninety (90) Days whichever is later If the Contractor does not submit the Performance Bank Guarantee as stipulated above, SunPetro reserves the right to cancel the award of LOI / LOA.

Company shall not be liable to pay any Bank Charges, Commissions or Interest on the amount of Performance Bank Guarantee. The performance bond 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 it's other rights under the Contract or at law, Company shall be entitled to forfeit the performance bond, should the Contractor fail to perform the Services in accordance with the provisions of the Contract or fail to comply with the provisions of this Contract. The Performance Bank Guarantee shall remain at the entire disposal of Company as Security for the satisfactory commencement, performance and completion of the Scope of Work under the conditions of the Contract / Contract including recovery of amounts due to the Company from the Contractor arising out of this Contract under whatever head.

Company reserves 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 LOA/LOI/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 contract.

SunPetro will accept the bank guarantee from all public sector banks in India or any of the banks listed in the *Annexure #9*.

### 3.26 **SEVERABILITY**

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

### 3.27 **NON-EXCLUSIVE CONTRACT**

This Contract is none xclusive, and Company reserves the right to engage other contractors to perform similar or identical work. Contractor shall afford such other contractors' adequate opportunity to carry out their agreements and shall accomplish the work in cooperation with those contractors and with Company.

### 3.28 **EXPORT CONTROLS**

SunPetro confirms that the Equipment or Services to be provided under this Contract (Collectively 'Items') shall only be for use by it in India for the purpose of production of hydrocarbons. However, if for any reason whatsoever the end use or end user of these Items is required to be changed or if these items are to be taken for use in countries outside India to do any work associated with this Contract, then SunPetro would request the Contractor to obtain consent from the concerned authority in the Contractor's Country. The Contractor shall obtain such consent at its sole risk and costs.

### 3.29 SPECIAL CONDITION OF THE CONTRACT (SCC)

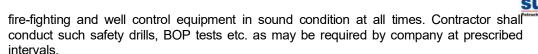
- 3.29.1 The job is to be performed in oil & gas installation, therefore, contractor to ensure all safety precautions as per Oil Mines Regulation Act but not limited to followings:
  - i. Contractor to perform the work under valid work Permit only.
  - ii. All material supplied & used at site shall have valid Material Test Certificates from accredited lab/ Test agency / TPI.
  - iii. Contractor shall deploy persons who are medically fit & furnish physical Fitness Certificate from authorized medical practitioner.
  - iv. Contractor to ensure use of proper PPE, detector etc. as per requirement of work
  - v. Vessel Entry Permits to be taken before entering into any Vessel.
  - vi. Contractor to ensure Oxy Acetylene Cylinder Test Certificate, Hose & Gas cutter Test certificates etc. for undertaking fabrication of work.
  - vii. Contractor to ensure Welding Generator Electrical Test Certificates, Cables Test Certificate are available before undertaking work.
  - viii. All material handling equipment shall have valid load test certificates.
  - ix. Contractor to ensure transfer of Hazardous Waste / Waste generated during work to earmarked storage place for further disposal by self.
  - x. Contractor to ensure Earth moving / lifting Equipment etc. are deployed have valid certification.
  - xi. Contractor shall provide adequate First Aid Kit at site. At least one personnel in Contractor's team shall have proper First Aid Training. Certification for the same shall be provided.
  - xii. Contractor shall have tie up with nearby hospitals in case medical evacuation is required.
  - xiii. The Contractor is responsible for implementing any regulations concerning the scope of work which are mandatory by Government of Gujarat and other statutory agencies.
  - xiv. Contractor to note that the work may be carried out simultaneously along with the testing



- operations on the well & treatment of the reservoir etc. Hence, contractor shall exercise utmost care while executing the activities which are being done simultaneously along with other operations.
- xv. Damage of equipment, if any, during mobilization Commissioning & De-mobilization shall be on account of Contractor.

### 3.29.2 CONDUCTING DRILLING OPERATIONS

- The Contractor shall carry out all operations mentioned hereunder with due diligence in a safe and workmanlike manner and in accordance with accepted international oilfield practices.
- ii. Wells shall be drilled to a depth as specified in the drilling programme but subject to the condition that company may elect to drill a well to a depth either lesser or deeper than originally planned. However, it shall be within the drilling depth range and maximum casing section depth of the rig.
- iii. The drilling Unit and all other equipment and materials to be provided by Contractor shall be in excellent working condition.
- iv. The drilling program provided by company shall primarily include planning of the following:
  - a) Well structure & deviation plan.
  - b) Casing program program
  - c) Well head assembly including production well head.
  - d) Expected formation details.
  - e) Mud rheology and physico-chemical parameters.
  - f) Coring programme (if any).
  - g) Cementing programme.
  - h) Drill stem testing programme (if any).
  - i) Wireline logging programme.
  - j) Mud hydraulics programme.
  - v. Well testing programme provided by the Company primarily may include the following: a)Well testing programme.
  - b) Well head assembly, blow out prevention system.
  - c) Details of workover string.
  - d) Mud hydraulic programme.
  - e) Cement repair programme (if any).
  - f) Wire line logging programme.
  - g) Drill out plug and packers (if any).
  - h) Casing repair job.
  - i) Gas and water injection programme.
  - i) Wire line operation including perforation.
- vi. Completion of drilling shall occur when the well has been drilled to the required depth with casings lowered, cemented, logged satisfactorily, hermetically tested, and drill pipes broken off, initial production testing carried out and well completed unless otherwise advised by Company.
- vii. Operation of Integrated Drilling Services: Contractor shall be solely responsible for the operation of the Drilling Rig, Cementing Unit, Mud Engineering Services and directional drilling services including but not limited to supervising rig move operations and positioning and rigging up at drilling location, preparing and monitoring of Mud services and preparation of cementing plan & its execution as required by Company as well as such operations at drilling locations as may be necessary or desirable for the safety of the Drilling Unit.
- viii. **Safety:** Contractor shall observe such safety regulations in accordance with acceptable oilfield practice and applicable Indian Laws such as Mines safety rules etc. Contractor shall take all measures reasonably necessary to provide safe working conditions and shall exercise due care & caution in preventing fire, explosion and blow out, and maintain



- ix. **Cores:** Contractor shall take either rathole or fullhole, conventional or diamond cores between such depths as specified by company and in the manner requested by company and shall deliver at the location all recovered cores to company.
- x. **Cuttings:** Contractor shall save and collect cuttings samples according to company's Instructions and place them duly labeled in containers furnished by company
- xi. Hole Inclination: Contractor shall do his best in accordance with good oil field drilling practices to maintain the deviation of the hole within the limit specified by the company in the drilling programme. Should the well deviation from vertical exceed the above-specified limit, contractor will take necessary steps to bring the hole within permissible limit as requested by the company. The Contractor will deliver all such deviation survey records to the company. No separate charge shall be payable for this service and it will be covered under per day rate. Planned Deviation Drilling: Contractor shall do his best in accordance with good oilfield drilling practices to maintain planned deviation of the hole within the limit specified by the company in the drilling programme. The contractor shall deliver all deviation survey records to the company.
- xii. xii. Contractor shall assist in performing any tests to determine the productivity of any Formation encountered as may be directed by company. Such tests and services may include, but not limited to electric logging, drill stem tests, perforation of casing, acidizing, swabbing, fracturing and acid fracturing. Specialised Tools/ Company will provide personnel for these operations.
- xiii. **Depth Measurement:** Contractor shall at all times be responsible for keeping accurate record of the depth of the hole and record such depth on the daily drilling report and tally books. OIL shall have the right at any time to check measurements of the depth of the hole in any manner.
- xiv. **Plug back and Side track:** Upon being requested to do so by the company, Contractor shall cease drilling and carryout operations for plug back and side track of the hole.

### **DEFICIENCY:**

In the event of the contractor failure to strictly adhere in providing the minimum requirements of key personnel as set out in the Personnel Deployment Plan, the penalty shall be levied at the following rates.

### **FAILURE PENALTY**

Failure to provide Rig Manager and Tool Pusher /Night Tool Pusher: zero rate

a) Failure to provide Driller, Chief Electrician, Chief Mechanic and Assistant Driller: Zero rate.

### NOTE:

- The above penalty rates are applicable for the first five days. In case more than one key
  personnel are not available at a time, penalties applicable for such personnel will be
  levied simultaneously.
- 2. Beyond 5 days, the penalty will be levied at double the rates mentioned above for each day for non-availability of any key personnel.
- 3. Operation will be suspended and contractor will be paid for zero rates for non-availability of above key personnel.

### INTER-LOCATION RIG MOVE STANDARD FOR DRILLING RIG PACKAGE:

Rig movement time for cluster movement will be 5 day from the time of rig release. Rig movement time for movement upto 10km will be 8 days from the time of rig release. Rig movement time for movement more than 10 km will be calculated as 5 days plus 3 hour per KM in excess of 10km from the time of rig release. The ILM charge shall be discounted by 10% for each day's delay beyond the standard, as stipulated above of total cost for inter-location movement rate payable for that particular rig movement, when the rig move is delayed beyond the standard.



## **CIVIL WORK INVOLVEMENT:**

Company shall provide foundation for the standard rig equipment including hard standing and cement concreting areas, effluent pit provision etc. Any additional civil work involvement besides the standard indicated plinth area / civil work should be highlighted by the bidder in the technical bid.



# SECTION-4 and 5&5A

	Scope of Work (SOW) / Technical Specifications / Responsibility Matrix
	<ul> <li>I- INTEGRATED DRILLING SERVICES</li> <li>I-4 Scope of Work (SOW) for Integrated Drilling Services</li> <li>I-5 Technical Specification for Drilling Rig</li> </ul>
4 and 5 & 5.A	II- INTEGRATED DIRECTIONAL DRILLING SERVICES II-4 Scope of Work (SOW) for Integrated Directional Drilling Services
	I & II-5.A Responsibility Matrix III- INTEGRATED LOGGING SERVICES



# I- INTEGRATED DRILLING SERVICES



### SCOPE OF WORK (SOW) FOR INTEGRATED DRILLING SERVICES

### 4.0 Broad Scope of Work

SunPetro is an operator of in Gujarat oil & gas fields and want to drill wells in Gujarat field Typical Drilling well will include all these activities and time to be quoted including all these services, even if some of the services are provided by company;

- Drilling.
- Cementation
- Logging
- Lowering of surface and production casing
- Cementation
- CBL-VDL & Perforation
- Special EOR treatment (if required)
- Completion with 2 7/8: tubing and PCP/ESP pump.

For the purpose of carrying out above operations, SunPetro is looking for Integrated drilling services provider. The specification of the equipment required for this purpose are listed below;

### 4.1 Services Required

- a. Drilling Rig along with required crew and tools.
- b. Mud Engineering Services along with drilling and completion fluids.
- c. Cementing Service with unit and cement for carrying out cementing job.
- d. Directional drilling services and equipment's.
- e. Logging and Perforation Services
- f. Mud Logging services
  - Rig for Drilling (wet lease) on call out basis; includes but not limited to:
- a) Drilling rig package of 1000 HP along with drilling tools and crew for Drilling Services, Mud Engineering services, Cementing services, technical water. Drilling rig package consist of 1000HP with all necessary drilling tools to drill 17 ½",12 ¼" & 8 ½" hole section.
- b) Other associated supplies / works and services as defined in the detailed scope of work.

## 4.2 Scope of work for Drilling operations

- 4.2.1 To drill onshore wells through hire of TWO (2) No. Drilling Rig of capacity 1000HP with associated equipment / tools & services for an initial period of 3 year with provision for extension by 1 more year at the same rates terms and conditions. The wells will be either straight vertical/directional holes or planned deviated holes with formation pressure to be near or below hydrostatic. Well depths are expected to be in the range of 1000 2200 meters. Depths of the wells may somewhat increase or decrease at the discretion of the company within the rated capacity of the rig.
- 4.2.2 The Contractor shall provide the services of 2 (Two) no. of rig package along with all necessary equipment and personnel as mentioned in this tender to carryout drilling operations including but not limited to coring, round tripping, lowering & setting of casings, completion, abandonment, Production testing as and when required, and all other associated operations including, rig up, rig down, interlocation movement etc. in accordance with the well drilling, and completion programme to be furnished by the company 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, fuel (HSD) for running the operations, Lubricant and shall carry out drilling with tools & expert supplied by the contractor. The contractor shall keep adequate stock of spares at all time for uninterrupted progress of work and make available all items listed in this document ready for use.
- 4.2.3 Bit program (Mutually agreed), mud program, casing policy, well program will be decided by the Company.
- 4.2.4 Contractor shall make, maintain and use drilling mud as per drilling policy with water loss, weight, viscosity in accordance with mud programme as the Company or the Mud Engineer deputed by the Company may decide as per good oilfield practices, Diligence in keeping the hole and all strings of casing and space between casing filled with drilling mud shall be exercised. The contractor shall record the mud parameters and use of mud and mud



chemicals in its daily drilling report. Contractor will also be required to keep hourly record of mud weight, viscosity (in and out), active tank volume etc. making and maintaining the drilling fluid will be contractor's responsibility at his own cost..

- 4.2.5 Other tasks to be performed by the Contractor:
- a) Installation of Conductor with 20"/ 16/ 13 3/8" casing upto 50 m.
- b) Making & breaking including stacking and running in of production tubing (2-7/8"/3 1/2" OD EUE/NUE, 7/8 Sucker Rod, Polish Rod, etc) as per the standard practice.
- c) Installation of Tubing Head Spool, packing of primary & secondary seal and testing of the same as per the rating. i.e. installation of well heads etc.
- d) Testing of X-Mas tree and installation of the same.
- e) Making necessary tubing/ casing connections to the well head set up.
- f) Hooking up of the production equipment namely Tanks, Separator, Steam jacket, ground X-Mas tree etc and test the same before commissioning as per the requirement.
- g) Make the gas flare line to the flare pit. Measure the flow rate and to analyses the produced fluid as and when required.
- h) Maintain the Drill Pipe and tubing tally including any down hole equipment run.
- i) All necessary surface connections to be made by the contractor for enlivening of the wells using nitrogen pumping unit or CTU or air compressor.
- 4.2.6 All tools required for making up of the above equipment's are to be supplied by the contractor i.e. Elevators, slips, Tubing tong, Coupling tong, Hydraulic pumps and other necessary equipment's for hydraulic testing of the X-Mas tree, Tubing Hanger and Wellheads.
- 4.2.7 Consumables as thread dopes to be provided by the contractor.
- 4.2.8 Supply, storage, consumption / regulation of fuel at the well sites as well as at the camp site shall be the contractor's responsibility. Any shut down of operation due to non-availability of water and fuel shall be on the contractor's account. The Contractor shall also provide fuel for all of their vehicles and other stationary engines.
- 4.2.9 The Contractor shall be required to take cores during drilling in different stages whenever desired by the Company. The Operating Day rate will be applicable during the coring period. The hole proving trips / preparation of hole to take cores will be considered as coring operation.
- 4.2.10 Assistance in Other Services: Requirements as depicted in the drilling programme will be met by Company through other service provider including but not limited to Logging, Cementing, Mud Services, Directional Drilling, etc however Contractor to assist in all operations performed by service companies, if in other's scope.
- 4.2.11 Maintenance of Company's Equipment: The Contractor shall maintain and operate Company supplied equipment and tubulars as desired by the Company as Contractor's cost
- 4.2.12 Totco Service: The contractor shall provide Totco service to measure the hole deviation. Self-floating electronic/Anderdrift is preferable.
- 4.2.13 The Contractor has to carry out all required work-over activities including listed services along with required supplies as responsible contractor following best in class industry practices:
- 1. Assist in all operations performed by service companies, if in other's scope (Logging, cementing, Slick-line and Reservoir Stimulation etc.) used during operation The contractor has to keep an emergency vehicle with driver, First Aid kit, Stretcher and fuel at its own cost. The age of vehicle as on date should not be more than 5 years Maintain at his own cost adequate stock of contractor's item (Spare parts and maintenance requirements) and replenishing necessary items for repair of contractor's equipment.
- 2. Provide all fuel and lubricants for use on the rig site, Contractors Camp and his vehicles.
- 3. Furnish latest Non Destructive Testing (NDT) certificate of tubular and equipment of the contractor as per tender conditions.
- 4. Provide adequate security arrangements for the rig & equipment at well site and all relevant establishments in connection with the rig operations.
- 5. In addition to scope of work mentioned in tender document, bidder may have to provide services of tools and personnel, in exigencies for continuation of operation as the operational requirement.
- 6. The contractor will provide an air conditioned Bunk House with hygienic wash room including portable water supply for SunPetro representatives at the rig site. The Bunk



- house must be properly maintained to the satisfaction of SunPetro Co-ordinator.
- 7. The contractor will be responsible for the operations of the rig which include without limitation to job supervision, moving between wells and positioning the rigs and camp locations as required by SunPetro as well as such operations at the well site as may be necessary or desirable for the safety of the rig operation under this contract in line with International Practices in Oil Fields.
- 8. Loading and unloading and transportation of all items and equipment of contractor will be done by Contractor at their cost and payment of ILM charges will be made only after clearing all his items, material from previous site.
  - Contractor should keep sufficient spare quantity of kits and liveries for distinguished visitors during their visit to the rig site.
- 9. Contractor shall complete the work as per plan within time defined in the program/tender.
- 10. Comply with all Indian rules & regulations and acts pertaining to oilfield operation e.g. Oil Mines Act and all national Enactments. Facilitate SunPetro and other statutory bodies in inspecting the documents, site, equipment etc.
- 11. In the event of any difficulty arising which precludes the performance of any other operation planned for a well, the contractor may suspend the work in progress and shall immediately notify to the representative of SunPetro, in the meantime exerting reasonable effort to overcome the difficulty.
- 12. Keep and furnish to SunPetro an accurate record of the work performed on a daily Progress Report format acceptable to SunPetro.
- 13. Fire Fighting Equipment: The rig should have sufficient fire fighting equipment as per Oil Mines Act, Mines Safety Regulation, OSID-189 or any other statutory requirements and valid certificates from relevant regulatory body shall be made available to SunPetro before commencement of the operation under this contract.
- 14. Provide required spark arrestors of approved make (for light/heavy vehicle) at the entrance gate of rig site for use on vehicles entering premises.
- 15. All necessary road registration certificate (RTO) for all the mobile/ self propelled equipment are to be furnished to SunPetro before commencing operations.
- 16. Contractor has to submit end of well report within seven (7) days from end of operations on each well including the following:
- A detailed recap of the operations
- Schematic and description of each BHA used
- An equipment performance review
- A planned vs. Actual well profile
- A detailed discussion and report on equipment failures or downtime
- 17. Reporting requirements:
- Complete inventory of tools and personnel deployed in the field with their locations on a daily basis to Company Operations Manager in Mumbai/Ahmedabad office.
- To provide a Daily Report in a format acceptable to Company or a format provided by Company.
- Upon completion of a drilling well, statement stating that the well has been completed in accordance with the terms of this Contract and signed by the representatives of both Contractor and Company, will be made available to Company.
- 18. Wells may require servicing/change of well head flange, studs etc. before proceeding for actual operation.
- 19. Contractor has to provide scraper for 9 5/8", 7", 5 ½" & 5-3/4" Casing
- 20. Likely Sequence Of Drilling Operations:
- a. Installation of conductor with 20"/ 16/ 13 3/8" casing upto 50 m.
- b. DRILLING Section as specified in respective generalized well program.
- c. Open hole logging.
- d. CEMENTING
- e. Install well head
- f. Completions.



Type - A   TVD- 1500 m	HOLE   DEPTH   Mud Type   A   TVD-1500									ANNEXURE -	  -									
HOLE   DEPTH   Mud Type - A   TVD-15(10 m ± 50 m, MD; 17(10 m ±	NEW   Library   Type - A   TYD- 1500							DATA	TO BE	USED FOR CEMEN	NT SLUI	RRY DI	SIGN							
HOLE   DEPTH   Mud Type   Mud T	Name	0000		0	٠ -		TVD 15	0 m + 20		MD: 1700 m + 50 m										
HOLE   DEPTH   Mind Type   MIN   FRACE   MAX.   CASING   EXCESS VOL.   SPACER   LEAD   THOREW COMPRE WEIGHT LENGTH   MIND TROWN   TEMP at SIZE   LEAD   MIND TROWN   THOREW COMPRE	HOLE   DEPTH   Mud Type   MW   FRAC.   MASSIZE   MDD   MDD   MDD   MDD   TE   MDD   MDD	T V	JSED WE	9	Type - B		TVD- 15(	00 m + 50	i li li	MD: 1500 m ± 50 m,				Urectiona Vertical						
NOTE	NCH   METERS   PPG   PPG   DPG   PPG   DPG   PPG   P	S.NO	HOLE	ОЕРТН	Mud Type	WW		MAX. TEMP at section TD		EXCESS VOL.	SPAC	SER		LEAD				⊣ <b></b> Δ		
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12-1/4"   500   WBM   9.6   13.8   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5   9.5	12-1/4"   500   WBM   11.5   13.8	Well#Typ	A ac	TVD-15	00 m ± 50 m,	MD: 170	0 m + 50 1	'n,	Profile:	l_										
S-1/2"   1.700   WBM   11.5   13.8   107   5.1/2"   Solution   S	8-1/2"   1,700   WBM   11.5   13.8	-	12-1/4"	200	WBM	9.6	13.8	53	.8/9-6	50% excess cement slurry for washout of open hole washout.	As per C	Sement		UPTO	5-6	200	15.4		3-4 Hrs nore than Pumping	2500
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12-1/4"   500   WBM   9.6   13.8   5.3   9.5/8"   washout of open hole washout.   As per Cement \$1.0.0     2.1/2"   1,500   WBM   11.5   13.8   107   5.1/2"     Sulvator of open hole washout.   As per Cement \$1.0.0   Properties that the data given above and submit an alternate proposal.   Tight Slury shall be use for Production casing.   Sulvator of status and remember and remember and cement additives must be available on every well   Solar death and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and remaining cement in Bedder's scope.   Sulvator of status and statu	8-1/2" 1,500 WBM 11.5 13.8  8-1/2" 1,500 WBM 11.5 13.8  s track of two joints for 9-5/8" casings & 5 1/2" casing. Ing the process of lab testing and simulation runs if the Bidder feels the all as per the data given above and submit an alternate proposal.  Tils 10 deg celsius less than Bottom home temp given.  Tight Slurry shall be use for Production casing.  sure and Temperature Curve will be share of offset well of Backup of cement and cement additives must be available on every we and of remaining cement in Bedder's scope.  The above given cement slurry design is for evaluation purpose only.	/ell#Type	В	1500 m ±		1500 m ±	50 m,		Profile:	Vertical										
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sure and lemperature Curve will be share of offset well  6 Backup of cement and cement additives must be available on every we csal of remaining cement in Bedder's scope.  In Additivies from standard manufacturer	sure and lemperature. Curve will be share of offset well  6 Backup of cement and cement additives must be available on every we  8 backup of cement and cement in Bedder's scope.  1 Bedder's scope.  1 The above given cement sturry design is for evaluation purpose only.	3. BHCT I	is 10 deg ce ght Slurry sh	lsius less nall be use	than Bottom home to for Production casin	emp given. ig.	_													
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ent Additivies from standard manufacturer	lent Additives from standard manufacturer The above given cement slurry design is for evaluation purpose only.	7. Dispos	al of remain	ing cement	in Bedder's scope.															
	The above given cement slurry design is for evaluation purpose only.	8. Cemen	t Additivies	from stand	ard manufacturer															



# **SECTION-5**

# **TECHNICAL SPECIFICATIONS**



## **5. TECHNICAL SPECIFICATIONS**

# 5.1 SPECIFICATION OF DRILLING RIG

Hiring of Rig Services (wet lease) on call out basis includes:

	Technical Specifications for 1000 HP Drilling Rig Package			
	Description	SUNPETRO Requirement		
Α	TYPE OF RIG	CARRIER MOUNTED MOBILE RIG (All Equipment of Drilling Rig are to be as per API Standards)		
В	RIG MODEL	Provide Model Number and Name of Manufacturer		
B1	Working Hook Load Capacity	200Ton- Traveling block and hook should be independent		
B2	Drilling Depth	3000m with 5" Drill Pipe- 4 $\frac{1}{2}$ " IF connection. G-grade 105, Pup joints of		
В3	RIG Engine	1. Capacity: 540 HP X 2		
		2. Transmission: as per spec.		
	Dimensions	Dimensions of Truck mounted rig while transportation (LXBXH)		
B4	MAST			
B4.1	Mast Type	Truck Mounted Telescopic- with alarm system and self- locking system. (capable for doubles stand of R-II drill pipes rack back)		
B4.2	Racking/Setback Capacity	2200m with 5" Drill Pipe/2 7/8" & 3 1/2" tubing minimum		
		Ladders with safety cage, rest platforms, Anchor point to suspend block during cut & slip, counter balance system to suspend rig tongs etc.		
		Derick to be fitted with vapors tight, heavy duty fluorescent lighting system for use in Zone-1/Zone-2 as per API		
		Derrick equipped with certified pad eyes for installation of wire line, 2 completion control line sheaves and guide		
B4.3	Crown Block			
	Minimum Capacity	200T		
	Travelling Block	Minimum Load Capacity 200T. Compatible with Working hook load capacity requirement.		
B4.4	Elevator Links	Length: Standard Length, Drilling Link and Casing RIH link, should able to accommodate the Cementing Head at time of cementing.		
B4.5	Swivel	1. Minimum Load Capacity 200T., or Compatible with Working		
		2. Pressure Rating: 5000 psi		
B4.6	Rotary Hose	Pressure Rating: 5000 psi, properly clamped with Derrick and swivel with safety sling.		
		2. Size: 4" / as per std		
		3. Compatible with above Swivel and Standpipe		
B4.7	Standpipe	1. Pressure Rating: 5000 psi		
		2. Size: 4" / as per std		
		3. Compatible with above Rotary Hose		
		4. Valve Manifold at the Rig Base to connect to Kill Manifold.		



		5. Valve Manifold at Rig Floor. With 1 blind end port (optional)
		6. Pressure Gauge (0-5000 psi) installed on Standpipe at Rig
B4.9	Dead line anchor	Pressure sensor should be calibrated & tested.
	Make, type, Capacity	
	Complete with Weight Sensor	Yes
B5.0	Drilling line	Must install new line from Drum if Rig is stack from last
	Size	
	Туре	
	Diameter	29mm (1-1/8") minimum-/ as per std
	Length	1000m or sufficient length for the entire campaign. Ton-Mile/ KM
B5.1	SUBSTRUCTURE	Must have foot rail & hand railing on ladders.
	Height	Below Rotary table 13 feet, Minimum clearance below to accommodate BOP Stack (Annulur, Double Ram, Drilling Spool, DSA). Ground level.
	BOP Lifting System	Lifting system installed under Substructure with crane and dolly
B5.2	Drawworks	Pneumatically activated twin stop protector system to protect
	Components conforming to API Spec 7K-2010 5th Edition,	
	Rated input power	1000 HP
	Brake System	
	Auxiliary Brake, Make, Model	Hydromatic
	Make, Model	
B5.3	ROTARY	
	Load Capacity	Minimum 200T
	Hole Opening	not less than 22"
	Master Bushing	Compatible with this Rotary Table
	Kelly Bushing	Compatible with this Rotary Table
	Lock down pins for kelly drive	Yes
	Rotary lock	Yes
	Anti-slip matting (rotary table)	Must required
	Rotary Bushing	Full Range of insert bowls to suit 20", 13 3/8", 9 5/8", 7" & 5 1/2"and 4 1/2"casing sizes
	Lifting sling and hooks	One for lift master bushing, other for casing bushing and inset
B5.4	Kelly	<ol> <li>5-1/4" and 3-1/2" HEX Kelly with compatible connections with Swivel.</li> <li>PressureRating:5000 psi</li> <li>Includes Lower and Upper Kelly Cock</li> <li>Included Kelly Saver Sub</li> </ol>



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B5.5	Driller's Console	<ol> <li>Includes Remote instrumentation Panel of Mud Pumps.</li> <li>Weight Indicator (0–350-ton Ton minimum) and Load Cell on Deadline Anchor. (calibrated)</li> <li>Rotary Torque Gauge</li> <li>Recording Device</li> <li>Output arrangement for remote data display.</li> </ol>
B5.6	Emergency Shutdown System Location	Driller's console
B5.7	Catwalk, V-Door and Pipe Rack	Compatible with the Rig Substructure. Length of Pipe rack: as per Std Height of Pipe Rack: As per std Pipe Rack Qty: 6 with stoppers. Provide Dimensions of Catwalk (LXBXH)
B6.0	Monkey Board Safety Device	<ol> <li>Fall Arrestor</li> <li>Climbing Assist</li> <li>Emergency escape line. (2 Sets for opposite directions)</li> </ol>
B6.2	Hydraulic Winch (2 Nos.)	Minimum Load capacity 5T and 3T
B6.3	Hydraulic Unit	To Operate Hydraulic Power Tongs if not available with the rig carrier.
B6.4	Hydraulic Power Pack	To Operate Hydraulic Power Casing Tong.
С	MUD PUMP	Provide Name of Manufacturer
C1.1	Capacity	Capable to deliver 1200 GPM Combined F-1000 or equivalent, capable to Drill 17 1/5", 12 1/4" & 8 1/2" section.
C1.2	Quantity	2 Set/3 set
C1.3	Engine	Capacity
C1.4	Transmission	As per manufacture
C1.5	Liner Size	As per manufacture
C1.6	Skid	Mud Pump and Engine coupled and mounted on single skid for easy transportation on low-bed trailer.
C1.7	Charging pump	Centrifugal/supercharger pump of sufficient power for feeding the mud pump. To be DGMS Approved.
C1.8	Instrumentation panel	<ol> <li>Throttle control system</li> <li>Digital SPM and total strokes display</li> <li>Pressure Gauge (0-5000 psi)</li> <li>Electrical panel for power distribution</li> <li>Remote instrumentation panel for rig floor</li> <li>Rig should have full instrumentation systems and sensors for all equipment with two Real time display monitors out of which one shall be at company man's office.</li> <li>Note: 24x7 Real Time accurate data need to be displayed on Monitor.</li> </ol>
C1.9	Working Pressure Rating	5000 psi
C1.10	Pipe manifold	Manifold for suction from mud tank     Discharge Manifold
C1.11	Pulsation Dampener	Standard
C1.12	Shear Safety Valve	Standard
C1.13	Bleed off Line	Standard
C1.14	Mud Pump Hoses	<ol> <li>Flexible hoses (5000 psi) for connection to standpipe.</li> <li>Flexible hoses to connect to suction Tank</li> </ol>

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C1.15	Strainer	Strainer installed in Suction and Discharge
C1.16	Cooling System	Mud Pump cooling system installed with motor
D	SOLID CONTROL SYSTEM	
D1.1	Mud Tank Capacity	Circulation system 1200-1500 bbl+ Reserve tank 400-600 bbl. Mud Tank must be capable enough to encounter all Drilling sections i-e 17 ½", 12 ¼" & 8 ½" & Completions.
D1.2	Trip Tank	Standard Configuration
D1.3	Suction Tank and Mud Mixing	Standard Configuration
D1.4	Shaker Tank	Standard Configuration.
D1.5	Shaker Screen Sets	Various. 2 Each- API 100,120,160,180,200,220(Specified in Mud Program)
D1.6	Hopper System	All tanks connected/installed with hopper system.
D1.7	Agitator	All tanks installed with agitator.
D1.8	Mud Gun/Jet Gun	All tanks installed with mud gun.
D1.9	Shaker	<ol> <li>Capable to handle 1200 GPM combined.</li> <li>Quantity: 2 Sets or std</li> <li>Make: DERRICK Preferred</li> </ol>
D1.10	Other Equipment	<ol> <li>Vacuum De-Gasser (separate pump for de-gasser, 35 HP or more)</li> <li>De-silter (separate pump for de-silter, 35 HP or more)</li> <li>Centrifuge (2700 rpm)</li> <li>Desander (ALL NEW CYCLON CONE REQUIRED)</li> </ol>
D1.11	Water Tank	50m3 with charging pump.
D1.12	Fire Tank	53m3 with independent diesel engine and fire hydrant and 100m fire hose as per OMR and OISD standards
D1.13	Cellar Pump	Qty:3
D1.14	Pig House	Qty:1- Equipped with MUD Balance & vis meter
Е	Electrical System	All electrical system to be DGMS, OISD, OMR approved.
E1.1	Diesel Generator	Setup Enclosed in Container with adequate ventilation system.
	Capacity	Capable to operate solid control system, motors, lighting and rig site Camp
	Quantity	2 Sets/ as per requirement for operations on Rig.
	Make	Caterpillar. Provide details: Model, Power Output
	Starter	Air and Battery
E1.2	MCC	Compatible for the above rig setup.
		Provision for supply of Power to:
		Mud Logging Unit
		MWD/LWD Unit
		Mud Tanks
		Rig Site Camp
F	WELL CONTROL SYSTEM	



		Suit	
F1.1	BOP Stack (as per API) Composed of annular, double rams, and drill spool. Conforming to API RP53, 16A 3rd Edition. BOP, Choke and Kill line suitable for water based and synthetic oil base mud. Temperature Level of rubber sealing part: BB	13 5/8" BOP Stack of Annular and 13 5/8" Double Ram Pressure Rating: 5000 psi RAM: Blind, Pipe, Annular for Casing Size: 9-5/8", 7", 5 ½" and Drill Pipe Size: 5", 2-7/8". Tubing: 3-1/2", 2-7/8" API monogrammed. Contractor to provide all ring gaskets to connect with the well heads.	
F1.2	Drilling Spool/Mud Cross (as per API)	Size: 13 5/8" 5M Pressure Rating: 5000 psi Gate Valves: 4-/16" (HCR and Manual: 2Each) with coflex hose to connect with Choke and Kill Manifold.	
F1.3	DSA	Compatible with Wellheads annexure provide.	
F1.5	Choke and Kill Manifold	Standard Configuration (5000 psi). Choke Manifold: Conforming to API 53 Kill Manifold: Conforming to API 16C 2nd Edition.	
F1.8	Mud Gas Separator/Poor Boy	Standard Configuration.	
F1.9	BOP Control Unit. Conforming to API Spec16D 2nd Edition.	Able to operate above BOP Stack configuration and Drilling spool. Flexible armored hoses from Control unit to BOP Stack. 2 Remote Control Panels: 1 on rig floor and 1 at a safe distance from the substructure. Usable fluid: To be able to Close all Rams + Open both HCR + 50% safety margin	
F1.10	Chickson Pipes (5000 psi minimum), 6O2 Hammer Unions	Sufficient elbow swivel joints. Include safety restrainers.	
F1.11	BOP Test Pump with recorder	Provide Make, Model, Pressure rating.	
F1.12	BOP Test Stump/Cup Tester	For all sizes mentioned above in conjunction with casing size: 5-1/2" 7", 9-5/8" , 13-3/8"	
G	AUXILLIARY EQUIPMENT		
G1.1	DIESEL TANK (1 Nos.)	For storing sufficient fuel at site for uninterrupted operations.  Contractor to obtain required PESO approvals for the same.	
G2.3	WELDING MACHINE	Electric Welding Machine	
н	AIR COMPRESSOR	Capable to run the equipment on the rig. Installed with Independent small diesel generator and provision of electric supply also.	
1	HANDLING TOOLS		
I1.1	Drill Pipe Handling Tools		
	Manual Tong	For all standard hole size 17 $\frac{1}{2}$ ", 12 $\frac{1}{4}$ ", 8 $\frac{1}{2}$ " & Completion sections.	
	Chain Tong	For all standard hole size 17 $\frac{1}{2}$ ", 12 $\frac{1}{4}$ ", 8 $\frac{1}{2}$ " & Completion sections.	
	Elevator	For all standard hole size 17 $\frac{1}{2}$ ", 12 $\frac{1}{4}$ ", 8 $\frac{1}{2}$ " & Completion sections.	

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	Power Slip	For all standard hole size 17 ½", 12 ¼", 8 ½" & Completion sections.
	Slips:	For all standard hole size 17 ½", 12 ¼", 8 ½" & Completion sections.
	Dog Clamps	For all standard hole size 17 ½", 12 ¼", 8 ½" & Completion sections.
	Pipe Spinner	For all standard hole size 17 ½", 12 ¼", 8 ½" & Completion
l1.2	Casing Handling Tools	
	Manual Tong	For: 5-1/2", 7" , 9-5/8", 13-3/8"
	Hydraulic Tong and Power	For: 5-1/2", 7" , 9-5/8", 13-3/8"
	Casing Slip	For: 5-1/2", 7" , 9-5/8", 13-3/8", Load capacity 250 T minimum
	Elevators	For: 5-1/2", 7" , 9-5/8", 13-3/8", Load capacity 250 T minimum
	Casing Protector	For: 5-1/2", 7" , 9-5/8", 13-3/8"
	Hydraulic/Pneumatic Casing	7", 5-1/2"
	Single Joint Elevator	For: 13-3/8", 9-5/8", 7", 5-1/2"
	Circulation Head	For Casing Thread: BTC. 5-1/2" Pin X 4-1/2" IF Box (1Set) 5-1/2" Pin X Hammer Union 6O2 Female (1Set) 7" Pin X 4- 1/2" IF Box (1Set) 7" Pin X Hammer Union 6O2 Female (1Set) 9-5/8" Pin X 4-1/2" IF Box (1Set) 9-5/8" Pin X Hammer Union 6O2 Female (1Set) 13-3/8" Pin X 4-1/2" IF Box (1Set) 13-3/8" Pin X Hammer Union 6O2 Female (1Set)
J	TUBULARS	
J1.1	Drill Pipe (with stress relief grooves)	5" DP, IF thread, G-105 grade, 19.5 ppf, ID: 4.276", R2, Length:2500m. (Also suitable for Directional wells)
		2 7/8" IF thread, G – 105 grade, 10.4 ppf, R2 range, Length: 2500 (Also suitable for Directional wells)
		Pup Joints(2 Nos. each Size): for 5" IF and 2 7/8" IF DP Length: 2.5m, 3m, 4.5m, 5m, 6m
J1.2	Drill Collar (with stress relief grooves)	<ul> <li>6-1/2", 300 m. ID: 3", R2(Spiral with recess for elevator)</li> <li>8", 300 m, ID: 2.75", R2 (Spiral with recess for elevator)</li> <li>1/8", 150 m, R2 (Spiral with recess for elevator)</li> </ul>
J1.3	HWDP	5", 400m, ID: 3", R2 Also suitable for Directional wells
J1.4	Bit Sub	For Bit Size: 4 3/4", 4 1/2", 6", 8-1/2", 12-1/4", 17 1/2"
J1.5	Cross-Over	Appropriate Cross-Overs for above drill string BHA and hole size 12 ¼", 8 ½" and 9 5/8", 7" & 5 ½" cased hole completion string
J1.6	Lifter	2 7/8" IF, 4-1/2" IF, 6-5/8" REG, 7-5/8" REG- For all standard Tubulars.
J1.7	Drill Pipe Strainer	For 5" DP, 2-7/8" DP & 2 7/8" & 3 ½" tubing
J1.8	FOSV	5000 psi for 5" DP,2 7/8" D/P 2 7/8" & 3 ½" tubing
J1.9	Circulation Head	5000 psi rating, Hammer Union 6O2 for 5" and 2-7/8" IF Drill Pipe for 3-1/2" NUE, 2-7/8" EUE

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J1.100	Bit Breaker	For Bit Size: 4 3/4", 4 1/2", 6", 8-1/2", 12-1/4", 17-1/2"
J1.11	Bit Gauge	For Bit Size: 4 3/4", 4 1/2", 6", 8-1/2", 12-1/4", 17-1/2"
J1.12	D/P Wipers	5", 3-1/2", 2 -7/8"
J1.13	Inside BOP	Qty: 1
		Connection: To match 5" and 2-7/8" Drill Pipe
		Working Pressure: 5000psi
J1.14	Float Valve c/w provision to install float	QTY: 2. Check must compatible with ID of above bit sub, must have grove to install float v/v.
J1.15	Drifts	For above tubulars as per API
	Casing Scrapper	For casing size 5 3/4", 5 1/2" ", 7", 9-5/8"
	TOTCO System	Standard configuration
K	FISHING KIT	Consist of Fishing Tools for 17 $\frac{1}{2}$ ", 12 $\frac{1}{4}$ " & 8 $\frac{1}{2}$ " Open Hole and Fishing Tools for 13 3/8", 9 5/8", 7" & 5 $\frac{1}{2}$ " Cased Hole.
L	COMMUNICATION	
L1.1	Wireless Radio Intrinsically	QTY: 6
М	SAFETY EQUIPMENT	
M1.1	Eye Wash Station	4
		Location-Rig floor, mixing room, mud tank area and engine room.
M1.2	Emergency Shower	2
		Location- Mud Mixing room, another place
M1.3	Derrick Safety Equipment	
	Derrick Escape Chute	1
		Inertial type
	Derrick Climbing Line	1
		Inertial type
	Derrick Safety Belts	3
	Fall Arrestor	2
M1.8	Emergency Light	3
		Location: Rig Floor, escape ladder, Koomy Unit
M1.9	Gas Detection Equipment	Multigas detector for H2S, CO2, and HC
		Qty: 3 (1no. fix gas detector and 2 no. Portable) as per DGMS,OMR, OISD.
M2.0	Wind Socks	2
M2.1	Fixed Firefighting equipment	Standard as per OISD 189, DMGS, OMR
M2.2	Portable Fire extinguisher	Standard as per OISD 189, DGMS, OMR
M2.3	Fire Blankets	2
M2.4	Stretchers: portable folding and	1 ea.
M2.5	General Alarm System	1
M2.3	Other Equipment	
	Cold cutting equipment	Equipment for cutting casing in cellar.
	Hydra	10 – Ton capacity hydra
	Crane	40 – Ton capacity Crane
Ν	RIG SITE CAMP	

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N1.1	Office-cum-bathroom-cum accommodation	For Company man (With Desktop, Printer and necessary amenities)	
N1.2	Office-cum-bathroom	For Tool Pusher (With Desktop, Printer and necessary amenities)	
N1.3	Office-cum-Bathroom  For Chief Electrician and Chief Mechanic (With Desktop, Printer and necessary amenities)		
N1.4	Clinic-cum-Accommodation	For Wellsite Doctor (Clinic as per standard )	
N1.5	Canteen  20 ft Bunk Rig Site Canteen for Rig Crew with a capacitor of the content		
N1.6	Toilet	20 ft Bunk with minimum 4 Toilets W/C, 4 Urinals and 2 Wash basin	
0	Top Drive System	NOV/CANRIG/TESCO- SA type	
		Capacity: Minimum 200 - 250 Ton	
	Capable to drill 3000 mtr well		

Note: Any Services/ tools/handling equipment/Running in equipment's/cross-overs, subsetc which required for drilling a well, which is not mention in above equipment list, if required contractor need to provide it.

### 5.2 SCOPE OF CEMENTING SERVICES

For the purpose of carrying out various operations, Sun Petro is looking for the following cementing services to carry out cementing job.

The Cementing unit on call out basis; includes but not limited to:

- a) The cementing unit with Cementing tools and crew for the cementing services.
- b) The Cementing package include all equipment & manpower necessary for the cementing job, such as cementing head, cement, top plugs & bottom plugs etc.
- c) Other associated supplies / works and services as defined in the detailed scope of work.
- d) Transportation of all equipment and chemicals & cement required for cementing job.
- e) Contractor should provide cement test report and after job completion report.
- f) All Cementing chemical must be sources from a reputed cementing companies from worldwide. (Preferred Haliburton/SLB/Baker only).
- g) Supply of Top plug and bottom plugs for wells.
- h) All Equipment, cement and cement chemicals shall be available with 100% back up at well site.



# **TECHNICAL SPECIFICATIONS**

Sr. No.	Equipment	Company's minimum specification	Technical Specification including Make/ Model/ Capacity of Bidders offered equipment/tools
1.	Truck/Trailer Mounted Twin Pump Cementing Unit. Qty – 1	10,000 psi rated 2 x diesel power source delivering minimum 320 BHP 2 X 10 bbl measurement tanks graduated for measurement every 1/4 bbl. The Unit should be capable to achieve displacement rate of 8 bbls/min for all job designs.  Electronic automated mixing control device.  Re-circulating mixer/slurry blender Pressure recorder.  Cement surge hopper.  Low pressure gauge manifold to conduct leak off test. (if specified in job).  Martin Decker or equivalent chart recorder.  computerized cementing parameters recording and printing/plotting device.  Automatic real time density measurements.  Pressurized mud balance. Necessary spares and tools. Independent air compressor Relief valve (safety valve)  Densitometer (appropriately located/connected) to measure the weight of the cement slurry being pumped, Radioactive type of densitometer will not be accepted Any other relevant specifications not mentioned  Cementing Unit must have Digital as Analog gauges for both pumps.	



2 Bulk fac Qty – 1 Lot	Bulk storage facilities at rig site. Adequate volume of storage to be able to meet the project requirements. Specify proposed facility size for the following:  1. 1 x Pneumatic Vertical Silos each capable of storing min 1000 cubic feet of cement.  2. Two Air Compressor (Diesel driven).(Or required of cementing job)  3. Cutting bottles with table and platform (optional)  4. Batch blender  5. Air Dryer  6. Dust collector (Two numbers)  7. Rock Catcher (one for each tank) and 2 spares  8. All pressure vessel equipment should have pressure gauges and over pressure relief valves  9. The cutting plant shall be covered to enable to operate at any weather conditions.  10.Covered space for storage of chemicals and cement.  11. Complete set and spare hoses with end connectors compatible to transfer bulk on the vessel.  12. Bidder shall be responsible to do the necessary fabrication work, including but not limited to fabrication/provision of manifold as per ASI standards
3. (Optional) Qty – 1 No.	Truck mounted mobile silos of 10 MT capacities each with necessary hoses and connectors.
4. Batch Cement Mixer Qty – 1 No	Truck or Skid Mounted Twin 50 bbl compartments (Total 100 bbl capacity) c/w chemical hopper, mixing facilities and transfer arrangements Paddle mixer system ,Diesel engine powered
5. 250 bbls capacity water Tank Qty – 1 No.	250 bbls capacity mix water tank graduated for measurement of 5 bbls. The tank should have one re-circulating pump.



			Petrochemicals
6.	Steel Hose Assemblies as Required (All connec tions should be 1502 connections) All the components shall be rated to 10,000 psi Working Pressure  Qty – 1 Lot	The following Steel Hose Assemblies, as required for cement jobs and cover for all piping and connections from Rig floor to cement unit and to mud tanks (as required).  1. Lo-Torc valves — Any number required for successful completion of job, but not less than 5 in number.  2. 90 degree Elbows & 45 degree  3. Elbows  4. Swivels  5. X-O as requuired  6. Adapters  7. 2" "T"s and "Y"s for Steel Hose Assemblies.  8. Any other related item not mentioned above but required as per Bidder's understanding  9. Cement plug/squeeze job have to be carried out through 2-7/8" tubing/2-7/8" DP 2 7/8"/3-1/2"  10. DP/tubing either directly or through circulating head.	
7.	Cementing Tools Qty – 1 no. (Optional)	2" High pressure co-flexip hoses with 1502 connections with min 10,000 psi WP rating. All connections should be Minimum length 30 feet.1502.	
8.	Pressurized mud balance c/w spares	Qty – 2 nos	
9.	Sampling kit for collecting and transporting samples	Qty – As required	
10.	Additional equipment if any with quantities as per Bidders understanding of Scope of Services.	Qty – As required	

### Note:

1) Bidder to give, Make, Model, Capacity, Pressure rating and all other technical details of the equipment proposed for all the equipment as per the above list.

The Steel Hose Assemblies and the bends as mentioned in item above are only for minimum. All the Steel Hose Assemblies, bends, piping as required for installation of cementing unit with the rig floor, mud tanks and any other locations are to be provided by the Bidder



The proposal shall include without limitation the following:

- Spacer types, slurry formulation, slurry properties and additive usage.
- Pumping schedules.
- Safety limits both static and dynamic against the formation strength at setting depths of various casing.
- Recommended and detailed cementing procedures.
- Recommended centralization plan.
- Slurry recommendation must be accompanied by laboratory results.
- For Cementing program design please refer the annexure attached.
- Based on actual condition at site cementing program/design my change.

### Note:

- 1. The well wise cement, additives necessary for preparing the slurry and chemicals to be provided.(Such as Gas tight chemicals, additives etc)
- 2. The quantity of cement and each chemical should be provided with relevant UOM like SK or GL or LB or bbl.
- 3. Volume of slurry for each hole section/well wise to be considered as per depth given.
- 4. All chemical quantities are to be based on the slurry formulation designed and slurry design need to be provided.
- 5. Slurry design is totally based on the data taken on field, based on the above other chemicals if required Bidder can proposed. Price for the extra chemicals requirement will be based on actuals plus 5%.

### 5.3 SCOPE OF WORK FOR MUD ENGINEERING SERVICES

Integrated Drilling Services Bidder need to provide the Mud Engineering services which is best suitable for Sunpetro operations.

For the purpose of carrying out above operations, SunPetro is looking for Mud Engineering Services to carry out drilling operations. The specification of the services/equipment/material/personal required for this purpose is listed below;

### A. MUD ENGINEERING SERVICES:

The contractor shall provide in Mud engineering services under the contract with respect to following:

- 1. The Contractor has to supply all Mud chemicals for drilling, completion fluids and well control for all wells.
- 2. The Contractor has to provide casing wash and completion fluid at the end of each well for production testing objects for oil/gas.
- 3. Brine solutions would be required of 1.02-1.20 sp. Gr or may be higher end. Brine chemicals (Depending upon the current situation of the well). Brine Unit filtration unit need to provided
- 4. Contractor has to provide the technical water. The quality of water should be the same throughout the contract.
- Special Technical water required for cementation is also need to be provided by contractor.
   In addition, the contractor has to observe the following key performance indicators to improve the operational efficiency:
  - NPT (Mud Loss)
  - NPT (Stuck Pipe)
  - NPT (logging) (Due to mud stick-up)
  - Frequency of hole pack
  - · Drilling fluid cost per meter
  - · Quality of additives
  - Hole cleaning efficiency
  - Caliper
  - Productivity of wells



Moreover, the contractor will transport, supervise safe loading-unloading of chemicals at drill site/stores and will also monitor the required stock for smooth function at well site.

The contractor has to provide the latest test reports/specifications of chemicals for strict quality control from approved agencies otherwise the bid will be rejected.

The contractor shall workout well wise design of drilling fluid, mud parameters to be used and chemicals required based on the given information and provide a copy to the company for its review and agreement.

The contractor shall provide a proposed Mud Engineering program for each phase of well drilling 17  $\frac{1}{2}$ ", 12  $\frac{1}{4}$ " & 8  $\frac{1}{2}$ " Hole Hole Size inclusive of proposed chemicals and submit a report.

Program shall include estimation of quantity (each well section wise i-e 17  $\frac{1}{2}$ ", 12  $\frac{1}{4}$ " & 8  $\frac{1}{2}$ " Hole Size") and cost break up of each item and payment would be based on actual chemical consumption. Bidder can also quote for the lump sum cost for the well. In addition, while giving the lump sum cost, bidder should also provide the cost per section.

Fresh mud pumping of same parameter 1.5 times of annulus volume to be pumped ahead of production casing cementation.

Minimum 100 MT Barite shall be available at well site as safety factor for well control scenario in Jumbo Bags Package form.

The Contractor shall comply with all the HSE norms as per oil industry practices.

The Contractor shall provide material safety data sheets (MSDS) of all the chemicals.

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.

The contractor should also provide for necessary technical support such as test procedures for estimation of chemicals in the mud and relevant software packages for drilling fluid data management, advance drilling fluids engineering and Hydraulics.

### B. The Equipment:

A comprehensive Inventory must be made available to the Company prior to each wellbeing spud, to ensure that all equipment, consumables and spares given below are available either at the well site or at the storage facility provided by the Company. Contractor will provide, operate and maintain the equipment and other Contractor Supply Items as required for operations at the Drilling Site.

### C. Laboratory Testing Facilities:

Contractor shall provide laboratory-testing facilities at drilling site for detailed analysis of mud properties as per standard oil field practices.

Without limiting the generality of the foregoing, the Equipment shall include but not limited to, as a minimum, the equipment and other items as listed below:



Mud lab with all necessary provisions for testing mud samples:

ITEM	QTY
Balance for density determination	2
Balance for density determination	1 (pressurized type)
Marsh funnel	2
FANN 35 A Viscometer	2
Baroid Filter Press	1
Solids measuring device Retort-Kit	1
Kit for determining sand content	1
Ph test paper PH-Meter	1 set
HamiltonBeach Mix	1 set
Salinity measurement	2
MBC analysis kit	1
Centrifuge (Electric)	1
Cloud point detector	1
Lubricity detector/ Tester	1

Note: Contractor can suggest further Item/Equipment required for Mud Engineering services.

Any further equipment required at the time of drilling which is not mention in mud program, cost is take care by the contractor.

Contractor must have back of each equipment

### D. Contractor's Personnel:

Without limiting the generality of the foregoing, the Contractor's Personnel at the Drilling Site shall include, as a minimum, the numbers and categories of personnel listed below.

The following number and categories of Contractor Personnel are the minimum staffing levels proposed by the Contractor for the efficient performance and completion of the Services.

Job Category	Qualification & Work Experience	No. of Personnel
MUD ENGINEER	Post graduate in Chemistry or B.E. Chemical Engineering with work experience of at least 10 - 15years as Mud Engineer with experience in handling low solids low weight mud (KCL-XC polymer PHPA mud system) and also in exploratory and high pressure area.	2 (DAY+NIGHT)

**E. Mud Chemicals List**: Contractor can add the chemicals which is not listed in the below list but required in Mud Program.

Sr. No.	Mud Chemical	Brand Name (Bidder need to mention)	Unit	Qty (Bidder need to mention)	Specs. Enclosed (Y/N)
	Regular Chemicals				
1	Barite		MT		
2	Bentonite		MT		
3	CMC R		MT		
4	CMC LV		MT		

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5	PHPA	MT	Petrochemicals
6	Sodium Bicarbonate	MT	
7	Citric Acid	MT	
8	Caustic Soda	MT	
9	Soda Ash	MT	
10	Calcium Carbonate	MT	
11	Potassium Chloride	MT	
12	Defoamer	GAL	
13	Pipe freeing agent	MT	
14	LCM Blend	MT	
15	Defloculant	MT	
16	Detergent	GAL	
17	PH control	MT	
18	Sodium Chloride	MT	
	Completion chemicals		
1	Sodium Chloride	MT	
2	Calcium Chloride (82-85%)	MT	
3	Corrosion Inhibitor for Brine	MT	
	Contingency chemicals (Lost Circulation Materials)		
1	Mica	KG	
2	Kwik seal	KG	
3	Fibro seal	KG	

Note: Contractor can add additional chemicals required for mud program. Above is list of Regular chemicals required for preparation for Drilling Mud.

# Technical inputs for Mud Program.

## Mud Engineering:

KCI- polymer, water based non-damaging drilling fluid (NDDF), low solid, low weight mud system with suitable chemical additives for filtration loss control is proposed to be used in oil / gas producing layers.

	Mud Parameters					
Depth (m)	Hole (inch)	Weight (ppg)	MF Viscosity (sec)	Fluid Loss (API) (cc)	Туре	
0-500 TVD/MD	12.1/4	8.75 – 9.6	35-45	<5	Bentonite Mud partially treated with F/loss controlling agents and Lubricants. (Pv: 10-12, Yp: 15-23, Sand content: <1%)	
500-1500 TVD/1700 MD	8.1/2	9.5 – 12.5	40-50	<4.5	KCL Polymer (Pv: ALAP, Yp: 10- 25, Sand Content: <0.5%, KCL: 8- 8.5%)	

### Mud Sections:

Mud Properties	0-500m
Mud Type	WBM (Prehydrate
Mud Type	Bentonite)
Mud weight, ppg	8.7-10
Viscosity, sec	45 - 50
Plastic Viscosity (cp)	10-12



Yeild Point (lb/100 ft²)	15-23		
Gel Strength	4/8		
рН	9.5		
Sand Content	<1%		

Mud Properties	500-1700m
Mud Type	WBM (KCL – Polymer)
Mud weight, ppg	10-12.5
Viscosity, sec	45 - 50
Plastic Viscosity (cp)	ALAP
Yeild Point (lb/100 ft²)	10-25
pH	9.5
Sand Content	< 0.5 %
KCL	8 – 9.5 %
APL Fluid Loss	2 – 5 cc

Type of wells : Vertical/Directional Expected Pore Pressure (expected) : Hydrostatic +/-10-20%

Temperature Gradient (estimated) : Min. 3.5 deg C / 100m TVD + 30 deg C

Expected H<sub>2</sub>S : Nil Expected CO<sub>2</sub> : Nil

Mud Type : Water based inhibitive system.

The above data is only tentative and is subject to change during the detailed engineering work and prior to commencement of operations.

The Contractor shall provide mud engineering services during drilling of the wells (vertical/inclined) at different stages using different mud systems as per operational requirement and also the well completion fluid.

Note: Above depth may vary at the time of actual drilling depending upon the geological data. The indicative Mud Program which may be amended by Company subject to the actual hole condition (or Company's program) encountered during drilling is as follows:

Depth Range (m)	Sp. Gr.ppg	Viscosi ty (cp)	Gel10 (secs)	W/L API (cc)	pН	Sand (%)	PV (cps)	YP per 100 sft
0-500	9-10	40-48	-	-	9.5	< 2	-	-
500-1700	10-12.5	45-50	55-60	4-5	8.5-9.5	<1	8-10	20-25

The Contractor has to provide different types of Mud system according to casing policy and depth interval. The tentative estimation of mud volume and chemical doses in different phases of drilling is also given below for planning purpose.

Note: Bidder can suggest the best possible combination of **Chemical Dosage** % Lithocolumn for BHASKER:

AGE	FORMATION OR ZONE	TVDSS (M)	LITHOLOGY DESCRIPTION
PILESTOCENE TO RECENT	GUJARAT ALLUVIUM	Surface to 200	Majorly Sandstone upto 95 % and Claystone upto 5%
PILESTOCENE	JAMBUSAR	200 - 500	Majorly Claystone upto 90% and Sandstone upto 10%
PLIOCENE	BROACH	500 - 590	Majorly Claystone upto 90% and Sandstone upto 10%
UPPER MIOCENE	JHAGADIA	590 - 770	Majorly Claystone and Sandstone with few traces of siltstone from 700 m to 740

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			m Petrochemicals	
MID-MIOCENE	KAND	770 - 1050	Majorly Claystone upto 70% and Sandstone upto 30%	
LOWER MIOCENE	BABAGURU	1050 - 1390	Majorly Claystone and Sandstone with patches of coal from 1330 m to 1390 m	
	MBS TOP (Pay Zone)	1390	Claystone and Sandstone	
	MBS BASE (Pay Zone)	1410		
UPPER EOCENE TO OLIGOCENE	TARAPUR TOP	1410 - 1550	Claystone and Tarapur shale	

Note: Further required details lithology for offset wells will be share at time of planning. After the award of the Contract, the Bidder shall submit detailed mud engineering proposals for each well at least 15 days prior to the commencement of the well.

Such proposal shall include but not be limited to the following:

- Mud system proposed for each section of the hole.
- Detailed mud system formulation for each hole section.
- Mud weights suggested per section.
- Chemicals used and Bidders recommended concentration for the proposed mud system for each

### Section.

- Total volume usage for each hole section and the complete well.
- Complete cost estimates of building and maintaining the mud system as well as unit cost for each

Chemical used for each hole section and all standby chemicals.

• Mitigating methods for curing losses and stuck pipe with detailed procedures. Two (2) well volume kill fluid must be available at well site while drilling.



# **II-INTEGRATED DIRECTIONAL DRILLING SERVICES**



#### 4.0 SCOPE OF WORK FOR DIRECTIONAL DRILLING SERVICES

Integrated Drilling Services Bidder need to provide the Directional Drilling services which is best suitable for Sunpetro operations.

#### **DIRECTIONAL DRILLING SERVICES:**

The contractor shall provide in Directional Drilling services under the contract with respect to following:

- 1. The Contractor has to supply all Directional Drilling tools/equipment for 12 1/4" & 8 1/2: section.
- 2. The Contractor has to provide the manpower for the above services.
- 3. The contractor has to specify the technical details of equipment used such as MWD, MUD motor etc.
- 4. Contractor need to supply the bunk house which is required for the Directional Drilling services.
- 5. Contractor has to submit the well trajectory for Directional well based on the company input.
- 6. Contractor need to submit the EOWR for Directional Drilling separately with including gamma ray logs and all charts.
- 7. For MWD services include the gamma ray recording etc.
- 8. 100 percent back for Mud Motor, MWD and Drilling Jar must be available for each section. Moreover, the contractor will transport, supervise safe loading-unloading of equipment's at drill site/stores and will also monitor the required stock for smooth function at well site.

The contractor has to provide the latest test reports/specifications of equipment for strict quality control from approved agencies otherwise the bid will be rejected.

The Contractor shall comply with all the HSE norms as per oil industry practices.

The Contractor shall provide all the safety kits & liveries and PPE to the workers at the site as per oil industry practices.

The contractor should also provide for necessary technical support such as test procedures relevant software packages for drilling management, advance Drilling engineering and Hydraulics.

#### The Equipment:

A comprehensive Inventory must be made available to the Company prior to each well, being spud, to ensure that all equipment, consumables and spares given below are available either at the well site or at the storage facility provided by the Company. Contractor will provide, operate and maintain the equipment and other Contractor Supply Items as required for operations at the Drilling Site.

Note: Contractor can suggest further Item/Equipment required for Directional Drilling Services.

Any further equipment required at the time of drilling which is not mention Directional Drilling Services, additional cost is take care by the contractor.

#### **Contractor's Personnel:**

Without limiting the generality of the foregoing, the Contractor's Personnel at the Drilling Site shall include, as a minimum, the numbers and categories of personnel listed below.

The following number and categories of Contractor Personnel are the minimum staffing levels proposed by the Contractor for the efficient performance and completion of the Services.

Job Category	Qualification & Work Experience	No. of Personnel
DD	BE Mech/petroleum or equivalent -10 years	2 (DAY+NIGHT)
	experience	
MWD	BE Electronic/petroleum or equivalent10	2 (DAY+NIGHT)
	years experience	

Note: Contractor can add additional equipment's required for Directional drilling services



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## **RESPOSIBILLITY MATRIX**

				pense of	Sup	plied By
	S. No.	Item Description	Contractor	Operator	Contractor	Operator
	1	Deployment of Drilling Rig for Integrated package with all associated equipment and manpower (wet lease) as per technical specifications mentioned in this document.	<b>✓</b>		<b>✓</b>	
	2.1	Company man office at site. (With Desktop, Printer and necessary amenities)	<b>✓</b>		~	
	2.2	Fooding and Housing of all Sunpetro representative at well site as mutually approved and required by Sunpetro Company Man and Rig Co-Ordinator	<b>✓</b>		<b>✓</b>	
	3	All equipment for brine/mud preparation.	✓		✓	
	4	Handling (loading & unloading) and storage of Company's, contractor's & subcontractor's materials at drill site.	✓		~	
RIG	5	Transportation of entire drilling Rig with Integrated Package between old location to new location (interlocation move)  ✓				
Inter-location movement of com		Inter-location movement of company's left over equipment	✓		✓	
DRILLING RIG	Fuel and lubricants etc for all Drilling unit, vehicles & camp. Grease, cleaning solvent, oil for main engines				<b>✓</b>	
	Dedicated Four wheel Vehicle for Company Man.		✓		<b>✓</b>	
	9	Thread lubricants for D/P, Casings & tubing. Drill pipe wipers & flappers			<b>✓</b>	
	10	Installation of Conductor with 20" or 16" or 13 3/8" casing upto 50 m.	<b>✓</b>		<b>✓</b>	
	11	API inspection on contractor's drill string after completion of each 6 months/well throughout the duration of the contract	✓		<b>✓</b>	
	12	Equipment, personals and instruments for mud, completion fluid preparations quality surveillance and measurement at site.	✓		✓	
]	13	Welding materials & welding operations.	✓		<b>✓</b>	
	14	Tubing, sucker rod and other handling equipment required for PCP/ESPCP/ SRP Completion.	<b>✓</b>		~	
	15	Consumables not designed/mentioned but required by contractor for operations or needed for the maintenance of contractors all equipment.	<b>✓</b>		<b>✓</b>	
	16	Transportation of contractor's personnel from site to camp and vice-versa	✓		<b>✓</b>	
	17	Testing services-Assistance, Well testing/flow equipment up to choke manifold	✓		<b>✓</b>	

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18	TCR and PDC Drill bits and its Nozzles as per Bit program or Reference well data.	✓		<b>✓</b>	
19	Installation of well head and X mas tree	<b>√</b>		✓	
20	Inspection required by SunPetro or any statutory agency.		✓		✓
21	Periodic inspection of Contractor's equipment as per International Oilfield Practices	✓		~	
22	Generation of End of well report, Cementing Report , Mud Report and Directional drilling report and data both in 3 nos. color hard copies and and 5 nos. soft copies in separate pendrive	✓		<b>✓</b>	
23	Equipment & services (Integrated Packages) not designed/mentioned but required by contractor in normal day today operations on Callout basis	✓		<b>✓</b>	
24	Safety equipment for personal as per HSE standards of oil field	✓		~	
25	Food and housing of contractor's personnel	✓		✓	
26	All equipment required for Drilling a well in Integrated Drilling contract, which include surface & Down hole Lost In Hole. All Lost In Hole of surface and down hole equipment in Contractor's scope.	<b>√</b>		<b>✓</b>	
27	Maintenance of well site & camp site facilities including Supply of potable water and drinking water for persons working at site.	<b>√</b>		<b>✓</b>	
28	Supply & maintenance of firefighting equipment required during contract period.	✓		✓	
29	Security at camp site & Rig site. Cleaning of well site after Rig released	✓		✓	
30	Removal of Cutting/mud/brine/cementing waste from waste pit/site.		<b>✓</b>		<b>√</b>
31	Availability of Hydra and Crane at site for loading / unloading of company's equipment/ material at site till rig release.	<b>√</b>		<b>✓</b>	
32	Any type of material, chemicals required to carry out the cementing job successfully is the carried by contractor.	<b>~</b>		<b>✓</b>	
33	Transportation of chemicals and cement	<b>√</b>		<b>√</b>	
34	Provide the Valid API certificate of cement used & chemicals.	✓		✓	
35	Provide number of person required to do cementing job successfully Mention in cementing program.	<b>√</b>		<b>✓</b>	

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Provide the cementing program and slurry design as per data given by Company.  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.  40 Sample of technical drilling water is given by the company.  41 The Cementing unit should be tested prior to the job as specified by Company Man available at Drill site.  42 Provide the Sequence of pumping schedule in program and plug bumping pressure.  43 Provide the Casing stand off 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 Speloryment of Mud Engineering services package with all associated equipment and manpower per technical specifications mentioned in this document.  45 Transportation of all Equipment and chemicals required for the smooth operation.  46 To Design Mud Program as per data given by the company.  47 All equipments, water and manpower for brine/mud preparation.  48 Supply if Mud engineering lab as mention in SOW.  49 Provide the Mud Engineering personal , cementing personal, logging personals and any other service provider working at site.  50 Iddiging of the Mud Engineering personal , cementing, & directional driller and rig crew  51 Any Additional electrical connection required to install Mud lab, directional drilling , cementing or any third party services.  52 All HSE gears required to work on the Drilling Rigs for Contractor's personal.  53 Need to give us the Minimum chemicals requirement in mud program.					Su		
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personnel, logging personals and any other service provider working at site.  50 lodging of the Mud Engineering personal, cementing, &  directional driller and rig crew  51 Any Additional electrical connection required to install Mud lab,  directional drilling, cementing or any third party services.  52 All HSE gears required to work on the Drilling Rigs for  Contractor's personal.  53 Need to give us the Minimum chemicals requirement in mud  program.	48	Supply if Mud engineering lab as mention in SOW.	✓		<b>✓</b>		
directional driller and rig crew  Any Additional electrical connection required to install Mud lab, directional drilling, cementing or any third party services.  All HSE gears required to work on the Drilling Rigs for Contractor's personal.  Need to give us the Minimum chemicals requirement in mud program.	49	personnel, logging personals and any other service provider	✓		<b>✓</b>		
directional drilling, cementing or any third party services.  All HSE gears required to work on the Drilling Rigs for Contractor's personal.  Need to give us the Minimum chemicals requirement in mud program.	50		✓		<b>✓</b>		
Contractor's personal.  Need to give us the Minimum chemicals requirement in mud program.	51		✓		<b>✓</b>		
program.	52		✓		<b>✓</b>		
54 Resume of Mud Engineer with prior experience certificates. ✓ ✓	53		<b>✓</b>		<b>✓</b>		
	54	Resume of Mud Engineer with prior experience certificates.	<b>√</b>		<b>✓</b>		

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Transportation of the Mud Engineer from their base to rig site is in the scope of the contractors.  Certificates of the chemicals need to provide, Such as date of manufacturing, expiry date etc.  If any imported chemicals need to be used contractor need to provide the required documents for the custom duty exemption.  Any additional data required for design of mud program.  Technical water required for entire contract.  Provide all equipment list required for Directional drilling well considering 17 ½" 12 ¼" & 8 ½" Section.  Provide the man power for required Directional drilling services.  All transportation required for Directional Drilling services.  All transportation required Directional Drilling equipment at site.  Loading and unloading the Directional Drilling equipment at site.					36	
manufacturing, expiry date etc.  If any imported chemicals need to be used contractor need to provide the required documents for the custom duty exemption.  Sa Any additional data required for design of mud program.  Technical water required for entire contract.  Provide all equipment list required for Directional drilling well considering 17 ½" 12 ¼" & 8 ½" Section.  Provide the man power for required Directional drilling services.  All transportation required for Directional Drilling services.  All transportation required for Directional Drilling equipment at site.	55		<b>✓</b>		Petroche  ✓	micals
provide the required documents for the custom duty exemption.  Any additional data required for design of mud program.  Technical water required for entire contract.  Provide all equipment list required for Directional drilling well considering 17 ½" 12 ½" & 8 ½" Section.  Provide the man power for required Directional drilling services.  All transportation required for Directional Drilling services.  All transportation required for Directional Drilling services.  Loading and unloading the Directional Drilling equipment at site.	56	·				
Technical water required for entire contract.  60 Provide all equipment list required for Directional drilling well considering 17 ½" 12 ¼" & 8 ½" Section.  61 Provide the man power for required Directional drilling services.  62 All transportation required for Directional Drilling services.  63 Loading and unloading the Directional Drilling equipment at site.  64 LIH for directional drilling tools & equipment's	57		<b>✓</b>		<b>✓</b>	
60 Provide all equipment list required for Directional drilling well considering 17 ½" 12 ¼" & 8 ½" Section.  61 Provide the man power for required Directional drilling services.  62 All transportation required for Directional Drilling services.  63 Loading and unloading the Directional Drilling equipment at site.  64 LIH for directional drilling tools & equipment's	58	Any additional data required for design of mud program.	✓	✓	✓	✓
considering 17 ½" 12 ¼" & 8 ½" Section.  61 Provide the man power for required Directional drilling services.  62 All transportation required for Directional Drilling services.  63 Loading and unloading the Directional Drilling equipment at site.  64 LIH for directional drilling tools & equipment's	59	Technical water required for entire contract.	<b>✓</b>		✓	
62 All transportation required for Directional Drilling services.   63 Loading and unloading the Directional Drilling equipment at site.   64 LIH for directional drilling tools & equipment's	60		<b>√</b>		<b>√</b>	
63 Loading and unloading the Directional Drilling equipment at site.   64 LIH for directional drilling tools & equipment's	61	Provide the man power for required Directional drilling services.	<b>√</b>		<b>√</b>	
64 LIH for directional drilling tools & equipment's ✓ ✓	62	All transportation required for Directional Drilling services.	✓		<b>√</b>	
9 11	63	Loading and unloading the Directional Drilling equipment at site.	<b>√</b>		<b>√</b>	
65 POOH for change of battery for MWD	64	LIH for directional drilling tools & equipment's	✓		<b>✓</b>	
	65	POOH for change of battery for MWD	<b>√</b>		✓	

**Note:** ✓ means covered in the scope of work.

#### **Special condition for Integrated Drilling Services**

- In case bidder has remarked 'not confirmed' against any item in the table, bidder has to clarify the reason on separate sheet indicating the serial no. of the table 5.1.2. The Bidders should provide the following information for technical evaluation:
- Rig Capacity & Type:
- ii. Rig year of manufacture and residual working life:
- iii. Present rig location:
- iv. Rig availability date:
- v. Number of loads (rig site camp): please specify for mobile rigs also as applicable.
- vi. Time and Place of rig being stacked if not under operations
- vii. Recent history of rig operation for the last 2 years including past performance
- viii. Past records of having provided integrated services
- ix. Non-Productive time due to rig failure/NPT, rig move data etc.
- x. LTI details.
- xi. Drilling Rig Technical Specification details as per Annexure-II
- 2. Contractor has to provide the site layout quite in advance to enable Sun Petro to prepare Drill site and & Handover Site to Contractor before start of Operations.
- 3. Contractor has to provide the standard operating procedure (SOP) related to all the operation before spudding the well.
- 4. Contractor needs to provide the check list of all the material required for Drilling of well quite in advance & has to confirm its acceptance before start of Drilling of well.
- 5. All the well related materials (like Casing, Centralizer, Well head, Bits, etc.) will be provided before the start of Drilling operations. Contractor once accept, has to provide the detailed drilling programme to the company for monitoring.



- 6. Contractor has to stack properly all the well consumables (such as casing etc.) provided by the company and has to follow the standard practices while using these.
- 7. Contractor has to facilitate the loading and unloading of all the material required (including materials from SunPetro) for the drilling well, at their own cost at well site.
- 8. Contractor has to arrange their own security at well site & base camp to ensure safety of persons & Materials.
- 9. Contractor has to ensure that all the HSE practices are followed strictly. All other contractors and Company personals will also be asked to follow the best HSE practice.
- 10. Contractor has to provide the well control procedure in case of emergency.
- 11. Contractor has to prepare a detailed Mud programme based on reservoir properties with suitable drilling fluid, as stipulated in the mud engineering tender. Share one week before the start of well. Contractor has to take into account the contingencies arising out of possible mud loss or gain situation.
- 12. Contractor has to maintain and provide the riser pipe for all the section.
- 13. Contractor has to make sure the availability of suitable BOP (as given in tender documents) required for drilling operations so that the change over time is not more than 6 hrs. Any extra time will be treated as the down time.
- 14. BOP need to be tested as per API standard.
- 15. Best efforts will be made to maintain the tripping speed of more than 30 pipes / hrs while carrying out the completion job after Drilling or Completion operations.
- Contractor has to provide the calibrated TOTCO tool reading at every 300 meters of the Drilled section.
- 17. Contractor has to ensure that well remains vertical and deviation should be in limit of +/- 3-4 degrees. Specified in Drilling program.
- 18. Company has hired Logging and perforation services and its time will be included in the cost of Integrated Drilling Services. No extra payment for this time will be made.
- 19. Any extra waiting time (Apart from normal service time due to tool failure/ tool not working /fishing/ re-run) on Sun Petro's third party services like perforation & logging services shall be paid as "Standby charges", if the total SunPetro time goes beyond 6 days of testing.
- 20. Contractor has to provide detailed cementing plan 24 hrs in advance taking into consideration the hole quality, cement setting time, water quality, fracture gradient and formation pressure.
- 21. Cementing WOC as per the mutually agreed Program including the test setting report of cement sample.
- 22. Contractor has to provide the suitable cement plugs required for the cementation of the casing at its own cost, & has to ensure its quality. Contractor shall be responsible for the failure of cement job
- 23. Operator will take the final call to accept the well after CBL VDL GR & Hermetical testing in brine. Cement quality bond as CBL-VDL will be the deciding factor. If required, then contractor has to carry out secondary cementation at their own cost. Once drilling is completed and well is accepted for completion, six days will be made available for perforation, Chemical treatment and RIH completion string before rig release. Any delay beyond 6 days will be charged to company as per BOQ.
  - 1<sup>st</sup> day start from CBL-VDL results acceptance.
- 24. Contractor has to transfer all the formation cuttings, mud, cement, chemicals & brine to the designated waste pit at site, & handover the site after completion of job in clean condition. SunPetro will dispose off drill cutting and mud/ brine stored in waste pit.
- 25. Testing of the well head and the casing head need to be carried out as per the API standards before starting the next operation / section.
- 26. Contractor has to provide IADC format daily Drilling & Workover DPR by 0800 hrs duly signed by the Tool pusher and countersigned by the Sun Petro Company Man. A short DPR is also to be sent at 18:00 hrs daily.
- 27. Contractor has to plan in advance for the mobilization of Third party services of company required for Drilling of Well. Contractor has to ensure that there is no waiting period as it may lead to additional financial burden on the company.



- Contractor has to provide all the possible support to the Third party for the safe and timely
  completion of their jobs. This may also include but not limited to the services for crane lifting
  services etc.
- 29. Contractor has to make arrangement of all the fishing tools required for smooth fishing operation, if required, during the Drilling operation at their own cost.
- 30. Contractor shall be responsible for the LIH for its Drill strings and all Tools during the Drilling operation covered under the Lump sum Cost.
- 31. Any situation arising due to LIH or unforeseen circumstances which lead to abandonment of Hole, Contractor has to side-track / Drill new well at their own cost.
- 32. Contractor has to arrange and maintain the Quantity of Technical water required
- 33. Cellar pit and well site needs to be cleaned before handing over the site by the contractor.
- 34. Contractor has to maintain the hygiene condition in and around well bore & well site.
- 35. Contractor has to complete drilling of the well in 45 days from time of mobilization to the site.
- 36. Contractor has to provide the End of well report along with the final completion diagram in the standard format. Report needs to be submitted in the hard copy as well as soft copy in CD/DVD/Pen Drive.
- 37. Contractor has to provide the well experienced crew and has to share their CV to get approval from SunPetro before deployment.
- 38. Detailed GTO (apart from detailed G & G & Drilling plan) will be provided.
- 39. TCR & PDC bit will be provided by Sun Petro.
- 40. Transportation of contractor's personnel & their material from camp site to drill site and between drilling sites shall be the responsibility of the contractor. All vehicles deployed for this purpose should be in prime condition.
- 41. Bits required for drilling of wells shall be supplied by Company. However, it is the responsibility of Contractor for loading/offloading and to transport the same from Company's yard/Go-down.
- 42. Contractor to maintain sufficient numbers of Diesel Hydraulic, Truck mounted, Telescoping Boom mobile crane of suitable capacity during rig up /rig down & inter-location movements of Rig package.
- 43. Contractor to maintain sufficient number of load carrying vehicles and cranes so that the inter-location movement is completed without any delay.
- 44. Minimum 1 no. of 10 Ton Hydra and 1 no. of 40 Ton Crane minimum capacity to be made available at all times at well site. Also, it is preferred to make available 1 no. crane extra as standby for time of casing lowering operation.
- 45. Sunpetro shall witness mud chemicals testing and cement chemicals additives test and cement slurry lab testing. Contractors shall inform for same in advance to SunPetro.
- 46. All Test certificate shall be provide to Sunpetro.
- 47. If Company operation gets hampered due to non-payment/late payment to any Third-party services, company has a right to stop the operation or terminate the contract or apply LD.
- 48. Bidders needs to submit the Third-party payment receipt of previous well payment confirmation before raising the new well invoice to SunPetro.
- 49. Full manpower must be available at well site from start of Spud to Rig Release as per personal requirement mentioned. In case of any emergency Contractor shall arrange reliver of same in earliest possible or max within 12 hours. If Contractor is not able to arrange than LD shall apply even if operations is continued during that time.
- 50. Drill bits and its all equipment/tools like nozzles, bit brakers, etc. shall be provided by Contractor as per the Agreed Bit program or Bit record as per reference well. Bidders need to give us confirmation for the Bit acceptance prior to commence Rig move.
- 51. Drill bit selection, Drill Bit Nozzles selection shall be decided by contractor on basis of optimize drill bit hydraulics and formation data.
- 52. Optimize Drill Bit Hydraulic shall be calculation by contractor and provide to Sunpetro.
- 53. The contractor will provide an air conditioned 40 ft Bunk House with hygienic washroom including portable water supply for SunPetro representatives at the rig site. The Bunk house must be properly maintained to the satisfaction of SunPetro Co-Ordinator. (Split type Accommodation not acceptable)



- 54. Additional Single occupancy Executive accommodation with attached washrooms for 5 number of SunPetro personal to be provided at Well site with basic amenities like AC, TV, Fridge, Heater, Cupboard, etc and maintain to the satisfactory of Sunpetro Representative with room services.
- 55. All stationary and basic facility like printer, computer, file cabinet/cupboard, etc shall be provided by contractor in Sunpetro representative Bunk offices.
- 56. Dedicated AC four-wheeler for 24x7 for Sunpetro representative shall be provided by Contractor. Vehicle shall be maintained and provide to the satisfaction of Sunpetro Representative. Vehicle provided shall not be older than two years.
- 57. SUNPETRO Technical and department may inspect the rig at wellsite as and when required. All the observations shall be communicated to the contractor by the company for compliance via email or letter. Contractors to start immediate compliance of all HSE / Technical observations & send the compliance / action taken report for closure of the pending points within 7-10 working days. Non Compliance of HSE / Technical Observations or Non submission of action taken report within stipulated time shall be viewed seriously by the company and may also result into imposing penalty on the contractor and the Company may without prejudice to any other right or remedy available to the Company, shall deduct, half percent (1/2%) for each week on pro rata basis of late completion of work / delayed delivery of work up to a maximum of Ten percent (10%) of total value of on a well. Any delay period from 12 hours to seven days shall be considered as reduction of half percent (1/2%).
- 58. SUNPETRO may ask for all the supporting documents & reports pertaining to preventive & scheduled maintenance of all the vital rig equipments. Bidder to submit the latest maintenance report for the repairs/maintenance work done on equipments like Draw works, mud pump, rotary brake & clutch etc
- 59. If Contractor is not able to provide any type of material or services on time, delay in rig repair to non-availability of back up of critical part, non-compliance of HSE and Technical audit points, non -availability or absence of Rig Manager/DS, Tool Pusher, NTP or Driller than LD shall apply and the Company may without prejudice to any other right or remedy available to the Company, shall have a right to seek payment from the Contractor as ascertained and agreed liquidated damages, and not by way of penalty, half percent (1/2%) for each week on pro rata basis of late completion of work / delayed delivery of work up to a maximum of Ten percent (10%) of total value of on a well. Any delay period from 12 hours to seven days shall be considered as reduction of half percent (1/2%).
- Contactor shall submit Preventive Maintenance Schedule, Standard Operating Procedure (Operational as well as Maintenance of Equipment), with Technical Bid as supporting documents.
- 61. Contractor shall confirm their Third Party Technical Service Providers name for cementation, Drilling Fluid, Logging, Directional Drilling, in Technical Bid.
- 62. Non-Discloser Agreement shall be signed between Sunpetro and Contractor, and its all third-party services provider.
- 63. Contractor will have to do all technical discussion for well operations with third party service provider in looping to Sunpetro Team.
- 64. The Bidder must adhere to the Technical Specification requirements as mentioned in the Tender and state the same in the "Technical Bid".
- 65. The Bidder shall state in its Bid proposal that it has experienced personnel available in the number and disciplines required for the Scope of Work and performance of the Services, and that it will commit the resources needed to carry out the Work in a timely, work-man like and professional manner. The Bidder is to satisfy Company regarding the Bidder's capabilities and experience.
- 66. The Bidder shall indicate the manner in which it plans to monitor, co-ordinate, control cost and schedule performance of the work and services.
- 67. The location and description of Bidder's facilities from where the Bidder plans to



- coordinate work must be indicated and should be available for inspection by Company.
- 68. Company shall have the right to inspect or reject for any valid cause any items furnished by Contractor and Contractor, shall replace or repair at its sole expense such items so rejected with items free of defects, to the satisfaction of Company.
- 69. Bidder to submit a self-declaration along with OEM certificate (if any) confirming compliance to OEM recommendations in preventive & scheduled maintenance of rig equipments.
- 70. Bidder need to Submit the End Of well Report (EOWP) with the Invoice of the next well Conductor Invoice.
- 71. Brine Unit filtration unit need to provided for the entire 6 days provided for Completion. Filtration unit Company can used it on other Rig too.
- 72. Bidder need to take approval from Company for all the services provider who are associated in this Contract. During Execution of the work Company have Rights to do real time check on the work/services for the associated services provider.
- 73. Bidder need to Provide the all Inspection certificate at the time of Bid Submission.
- 74. Contractor need to provide a separate 40' Bunk house come office for company man. Split Bunk is not acceptable. Separate Wi-fi need to provided Company man office.
- 75. Separate Vehicle . Mahindra Bolero (AC)Jeep need to provided 24 hrs to Company man.
- 76. 10 Personal boarding and lodging need to be reserved for the Company personal. (Accommodation not more than 2 man bunk house).
- 77. Idling period of the rig shall not be more than two (2) years continuously in last three (3) years on the date of submission of bid.
- 78. Contractor is responsible to comply all rule and regulations of DGMS, OISD, OMR, API, Environment, Labour law, etc as per oilfield standard practice.
- Site Crew must medically fit to work on Drilling Rigs and for each crew member form "O" as per mines rule 1955.
- 80. Contractor must provide the mines vocational training certificates MVT, for the crew working on sites.
- 81. Contractor to provide the experience certificate of Tool pusher, NTP, Driller & AD, Safety officer and other key personal.
- 82. Contractor must submit the Emergency response plan before Rig mobilization.
- 83. Contractor must submit the Risk matrix before spudding the well.
- 84. Contractor must submit the IWCF certificate before spudding the well.
- 85. Rig must have all compliance considering the DGMS rules & regulation.
- 86. Rig must have all compliance considering CEA(Measures relating to safety & electricity supply),Regulations 2010.



#### 5.4 PERSONNEL TO BE DEPLOYED

The Contractor will have to deploy adequate manpower to carry out the required operations. The deployment pattern will be as per the contractor's discretion for all the required services except for the rig operations during drilling & completion phases for which the deployment pattern has to be as per the following norm with the indicated key personnel:

E 4.4 Drilling Dig		
5.4.1 Drilling Rig		
Key Personnel Number on location	Per shift	Working Hours
Rig manager/Rig Superintendent	1	On call 24 Hrs
2. Well site Drilling Engineer	1	On call 24 Hrs
3. Tool Pusher	1	12 Hrs -Day
4. Night Tool Pusher	1	12 Hrs-Night
5. Driller	1	12 Hrs.
6. Asstt. Driller	1	12 Hrs
7. Derrick Man/Top man	2	12 Hrs
8. Floormen	5	12 Hrs
9. Roustabout	5	12 Hrs
10. Chief Mechanic	1	On call 24 Hrs
11. Mechanic	1	12 Hrs
12. Chief Electrician	1	On call 24 Hrs
13. Electrician	1	12 Hrs
14. Welder	1	On call 24 Hrs
15. Hydra operator	2	24 Hrs
16. Medic	1	On call 24 Hrs
17. HSE	1	On call 24 Hrs
20. Crane Operator	1	12 Hrs

**5.4.3 The Rig Manager / Rig Superintendent** has to be present at site all the times and should report to Company Man's office as and when asked for to receive instruction/resolving any issue on contractual obligation.

**5.4.4 KEY PERSONNEL:** The qualification and experience of the key personnel are to be as under

#### i. The Rig Manager / Rig Superintendent

Should be of sound health and have work experience in drilling oil and gas wells, for about 10 years, of which atleast 5 years should be in a senior management level. Must posses valid well control certificate (IWCF) and should be conversant with well control methods to take independent decisions in case of well emergencies. Qualification: Must be Engineering / Science Graduate or engineering diploma holder. Rig manger/Rig Superintendent shall be main contact/focal point at well site from Contractor side.

#### ii. Well Site Drilling Engineer

Should be of sound health and have work experience in drilling oil and gas wells, for about more than 3 years. Qualification: Must be Mechanical or Petroleum Engineering. Well site Drilling Engineer shall work as supporting hand to Rig Manger/ Rig Superintendent only and shall not be considered as replacement of any other key personnel.

#### iii. TOOL PUSHER:

Should be of sound health and have work experience in drilling deep oil/gas wells. Should be conversant with working in diesel mechanical rigs. Must possess valid well control certificate (IWCF level 4) well cap; and should be conversant with well control methods to take independent decisions in case of well emergencies. Should be conversant about mud chemicals & maintenance of mud property. Graduate in Engineering/ Science Or 3-Years



Diploma in Engineering or B.Sc or equivalent. 10- years in Drilling, out of which at least one year as rig-in-charge In exploratory & development wells.

#### iv. **NIGHT TOOL PUSHER:**

Should be of sound health and have work experience in drilling deep oil/gas wells. Should be conversant with working in diesel mechanical rigs. Must possess valid well control certificate (IWCF-level-4) and should be conversant with well control methods to take independent decisions in case of well emergencies. Should be conversant about mud chemicals & maintenance of mud property. Graduate in Engineering/ Science Or 3-Years Diploma in Engineering or B.Sc or equivalent. 6-years in drilling, out of which at least one year as tool pusher In exploratory & development wells.

#### v. **DRILLER:**

Should be of sound health and have work experience as driller for a minimum period of 5 years in drilling oil/gas wells. Should be conversant with working in diesel mechanical rigs. Must possess valid well control certificate (IWCF-Driller level) and should be conversant with well control methods to take independent decisions in case of well emergencies. Should be conversant about mud chemicals & maintenance of mud property. 3-years Diploma in Engineering/ B.Sc or equivalent and 5 years in Drilling, out of which at least one year as Shift in-charge / Driller.

#### vi. ASSISTANT DRILLER:

Should have minimum of 4-5 years' experience as headman of a drilling crew in drilling oil gas wells. Must possess valid well control certificate (IWCF-Driller level). Should be conversant with working in diesel electrical rigs. Should be conversant with well control methods to take independent decisions in case of well emergencies. Should be conversant about mud chemicals & maintenance of mud property. Qualification: SSC/HS/PU/I.Sc or equivalent with 4-5 years' experience as Asst. Driller/ Head-man.

vii. **TOPMAN:** Should have minimum 1 year experience as Topman in a drilling rig.

#### viii. FLOOR-MAN/ROUSTABOUT:

Should have sufficient knowledge/ experience in working at derrick floor in a drilling/Work over rig with at least one year experience as Floor man/Rigman.

#### ix. CHIEF MECHANIC:

Should have a degree in Mechanical Engineering or Diploma in Mechanical Engineer with mini. 6 years' experience in Diesel Mechanical Drilling Rig.

#### x. MECHANIC:

Should have a minimum working experience as mechanic in drilling rig. Should have sufficient knowledge of operation and maintenance of Drilling/workover rigs and its components viz. engines, rig pumps supercharge pumps, centrifugal pumps, solid control equipment, degasser, shale shaker and all other mechanical items/engines operating in drilling rigs. Qualification: Diploma in Mech/Chemical B.Sc or equivalent with 3 years' experience or SSC/HS/PU/I.Sc or equivalent with 6 years' experience. Out of which atleast one year as Mechanic in Drilling /Work over rig.

#### xi. CHIEF ELECTRICIAN:

Should have Degree in Electrical Engineering with minimum 3 years' experience OR Diploma in Electrical Engineering with 5 yrs experience in Diesel Mechanical drilling rigs. He should be confident in independently carrying out the fault finding analysis, rectification of fault, operation and maintenance of all the electrical items of diesel electric drilling 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.

#### xii. **ELECTRICIAN**:

Must be diploma / ITI in Electrical discipline with minimum 3 yrs. / 8 yrs. Experience respectively in the operation and maintenance of diesel mechanical drilling rig

independently in shifts. He should be able to read circuits, communicate, detect and rectify faults. He must possess valid Electrical Supervisor's Certificate of competency issued by State Licensing Board

#### xiii. WELDER:

Should have adequate experience in working in drilling wells and must be conversant of welding of casing and well head accessories. He must possess the certificate of welding trade from any recognized institute of State Govt. (One year course).

#### xiv. **HYDRA OPERATOR**:

Should have a minimum of 2 years work experience in operating a Hydra attached to drilling rigs and possess license for driving heavy motor vehicle.

5.4 On top of the experience of the personnel as listed above, they all should be conversant with BOP drill as per standard oilfield practice. ii. In addition to the above key-personnel, following additional personnel are to be made available compulsorily throughout the contract period.

CategoryNature of dutyMin. ExperienceQualified DoctorAvailable for 24 hours/day05 yrs

#### 5.5 Medical Fitness:

 The Contractor shall unsure that all of the Contractor Personnel shall have had a full medical examination prior to commencement of the Drilling operation.
 A qualified and registered doctor shall conduct all such medical examinations in accordance with accepted medical standards.

#### 5.6 Training Courses:

- i. The Contractor shall ensure that all of the Contractor Personnel performing services hereunder shall have attended all safety and operational training courses such as mines vocational training etc. required by applicable law and as is generally consistent with international petroleum industry practice and/or as otherwise required by the Company.
- ii. The Contractor shall, if requested, forthwith produce valid and current certificates of completion or attendance for the Company's inspection.

Personnel should be well versed in firefighting, BOP control, gas testing etc.

Bidder shall furnish bio-data of key personnel along with the bid with all supporting documents, certificates etc.

Employment of personnel other than key persons shall be at the discretion of the contractor in line with normal drilling practices. Bidders shall forward a complete list of all the persons with their job descriptions that they shall deploy to run all operations at wellsite and camp successfully.

The Contractor shall indicate their manpower category wise clearly in their offer. The qualification/bio-data / experience / track record of the personnel proposed to be deployed shall have to be indicated clearly. Any additional manpower deployed by the contractor shall be at the expense of the Contractor. The age of key personnel except Rig Manager/Rig Superintendent should not be more than 50(fifty) years. However, Company deserves the right to accept the personnel of above 50 years with good health conditions. Company reserves the right to instruct for removal of any Contractor's personnel who in the opinion of company is technically not competent or not rendering the services faithfully, or due to other reasons. The replacement of such personnel will also be fully at cost of the Contractor and the Contractor shall have to replace within Five (5) days of such instruction. All charges for personnel are included in Day rates. No. separate charges shall be payable



for the personnel deployed.

Contractor should employ adequate number of authorised supervisors as per rule 110 of Indian Electricity rules, 1956 having relevant experience of minimum 5 years and possess appropriate license(s).

**SECURITY SERVICES:** Contractor shall provide adequate security personnel to safeguard their own Rig package, accessories and camp site with proper security guard



# **III-INTEGRATED LOGGING SERVICES**



# **Technical Specifications**

Bidder has to provide Logging and Perforation Services on onshore blocks of SunPetro in Gujarat, to meet the following requirements:

SI. No.	Name of Tools	Tools Specification
		Logging Unit Specifications: Onshore Logging Unit
		The Logging unit should be heavy duty truck mounted /skid mounted on truck with State-of-the-art (MAXIS-500, ECLIPS, INSITE or equivalent) and should have latest version of surface recording system to meet onshore safety and operational requirements and should be with: -
		Emergency lights, well head potentiometer for perforating safely, automatic tension safety meter to avoid accidental weak point breakage, air-conditioned cabin, capable of running all the wire line logging & perforation tools/services available with the Bidder.
		Latest version reel & frame assembly along with other associated mechanical, hydraulic and cable depth measuring system.
		Unit should have capacity to do open hole cased-hole wire line and perforation up to well depth of 3000 meters in vertical / deviated wells for the given scope of work.
		Facilities to accurately measure mud, mud-cake and filtrate resistivity
		The Logging Cabin should also have seating place for the witness attending Logging Job.
	ਰਿ	SURFACE SYSTEM
1	Logging Unit (LOGIQ)	The state of art latest version surface system with printer and DVD/DVD writer. The system should have minimum redundancy for Central processor, Power Supply to Tools, Operating System Software, Software for Data Acquisition and System Diagnostic Software either in-built in the system or as separately provided on site for all the cased hole, open hole services, perforation & related completion services listed under Specification and Scope of Work. The unit should have test & diagnostic facility for troubleshooting and functional testing of entire logging unit prior to logging. For other subsystem redundancy is optional.
		Unit should have data compression feature and security protection as per oil industry standards.
		ACCESSORIES
		The unit should have dedicated accessories and equipment such as: -
		One set of fishing kit for fishing of down-hole tools for cut and thread and open end fishing.
		GR, CCL, dummy and sinker bar assemblies for depth determination runs in liners/casings through tubing etc.
		Collar locators for tubing & casings perforations, puncture and cutting etc.
		Down-hole device with wire-line assemblies for measuring temperature & tension.
		Required bridle/ stringers with weak point breaking system (electrical/mechanical)
		All other miscellaneous requirements for carriage of tools, explosives, radioactive sources etc. required to perform as per scope of work.

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SU	ın

## Junk baskets with gauge rings suitable for 5 1/2", 7" & 9 1/8" liner/casings **FUNCTIONS** The Surface equipment should be able to do the following functions:-Data verification Change of data density Merging/splicing/depth correction TVD computation Generating plots or alternate presentations Generation of hard copy on paper, colour prints, DVD/DVD for final product delivery. Bidder is to mention the name / Code of the offered unit State-of-the-art (MAXIS-500, ECLIPS, INSITE or equivalent) Modular Logging unit, mechanical system and hydraulic system to meet offshore safety and operational requirements and should be with Emergency lights, well head potentiometer for perforating safely, automatic tension safety meter to avoid accidental weak point breakage, air-conditioned cabin, capable of running all the wire line logging & perforation tools/services available with the Bidder. Latest version reel & frame assembly along with other associated mechanical,

Latest version reel & frame assembly along with other associated mechanical hydraulic and cable depth measuring system.

Dual Drum / Split drum for hepta cable & Mono cable operations or hepta cable drum with facility to add-on/replace with auxiliary drum for open hole and cased hole operations.

Unit Spooling system should be capable of close and high angle rig up.

#### **CABLE**

The cable should be new or in very good condition without any splice at the time of initial deployment capable to carry out all types of open hole, cased hole logging and perforation jobs as per scope of work.

#### Firm Tools (No.2 to No.7)

	Bidder is to mention the name / Code of the offered tool	
		Temperature rating : 300° F or more
2	Commo Boy	Pressure rating : 12000 PSI or more
	Gamma Ray	Suitable for hole sizes : 6" to 17 ½" dia or more
		Total GR: 0-1000 API
		Vertical resolution 2'or better
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
	High Resolution Lateral Tool	Pressure rating : 15000 PSI or more
		Suitable for hole sizes : 6" to 16 " dia or more
		Measurement Range: 1 to 2000 ohm-m Resistivity
		Vertical resolution: 1 ft
3		Multiple depths of investigation (at least four)
		Depth matched and resolution aligned measurements using multiple frequencies
		Combinable with other logging tools
		Deliverables: Rt, RXO, DI (diameter of Invasion) on site using 1-D Inversion
		Raw Array curves, TVD logs.
		POST PROCESSED DATA

1		Sun
		2D Inversion (true resistivity, flushed zone resistivity, and depth of investigation) of HRLA data or equivalent.
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 15000 PSI or more
		Suitable for hole sizes : 6" to 12 1/4" dia or more
		Tool should consists of Density, Neutron Porosity and Shallow Micro-Resistivity
		Should be combinable with HRLA
		Length of COMBO with HRLA together around 20 mts.
		COMBO combined with resistivity (Induction or Latero) to provide primary open hole high resolution of 1 ft, speed corrected resistivity and nuclear measurements in real time in one run.
	Compact	Should provide Micro-focused shallow resistivity, borehole caliper, tool acceleration and borehole temperature
4	Combo Tool (COMBO)	Should provide Dual spacing neutron
	(COMBO)	Should provide fully compensated and speed corrected formation density with Photo-Electric Factor (PEF)
		Accessories to record down hole angle, azimuth, temperature, tool head tension, mud Resistivity and any other parameter if any for log quality control with HRLA in same run.
		MEASUREMENT RANGE
		Density: 1.30 gm/cc or less to 3 gm/cc or more
		Neutron: 0-60 pu (limestone scale)
		GR: 0-300 API
		WELL SITE PRODUCTS
		TVD logs, Environment corrected Neutron, Density, FEP, Caliper & Micro resistivity logs
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 15000 PSI or more
	Power or Mechanical	Suitable for hole sizes : 5" to 20" dia or more
		Curves to be recorded: Hole Radius, diameters and volume computation
		Vertical resolution: 6"
5		Accuracy: 3 % or ± 0.1 in, whichever the greater of radius reading with standard arm and tool centered in the caliper open position.
3	six arm	Fully combinable with a range of tools
	Caliper Tool	Independent setting force on each arm for centering and eccentering applications.
		Have the capability to run in hole with caliper arms fully open
		Record caliper data while running in hole for logs corrections
		To center tools while running in hole and guide them away from washouts and caves.
		Caliper extensions could be configured according to Hole size
		Trial 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
		Bidder is to mention the name / Code of the offered tool
	Cement Bond	Temperature rating : 300° F or more
6	Cement Bond Evaluation Tool with GR	



	•	Juli
		MEASUREMENT AND RANGE
		Acoustic amplitude 0-100mv (3 ft T-R spacing)
		VDL 200-1200 micro-sec (5 ft T-R spacing)
		GR 0-200 API
		CCL
		Travel time (3 ft T-R spacing)
		Radial profiling /Azimuthal mapping
		POST PROCESSED DATA
		Playback for data repair/recomputation
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
	Cement Channel Analyser Tool	Pressure rating : 15000 PSI or more
7		Suitable for 9 5/8", 7" and 5 ½" liners/casings liners/casings with high deviation up to 85°
		360° evaluation of cement bonding with casings / liners, using Ultrasonic rotating head
		Identification of Cement Channels or voids of width 1.25 inch or more
		Orientation of Cement voids or channels
		Real time colour presentations of impedance images
		Should be able to run in casing corrosion mode
		Post-processed data: Playback for data repair/re-computation
		Perforation Services

#### Perforation Services

- a. The penetration (TTP) mentioned in specifications is at 5000 PSI as per certificate mentioned in specifications of respective item below.
- b. Normalisation factor shall be taken as 5% per 1000 PSI.
- c. HMX explosive is also acceptable against requirement of RDX, provided it meets the required EHD and TTP at no extra cost to SunPetro.
- d. Gun size variation up to  $\pm$  0.15" with respect to indicated sizes are acceptable, other parameters remaining the same.

	Bidder is to mention the name /Code/Part No. of the offered charge	
		Perforation charge is of RDX
		Size: 3 3/8"
8	Perforator 3 ¾" Gun	SPF: 6
	/8 Guii	EHD: ≥ 0.30"
		TTP: ≥ 30"
		Bidder is to provide API 19B certificate
		Bidder is to mention the name /Code/Part No. of the offered charge
	Perforator 4" Gun	Perforation charge is of RDX
		Size: 4"
9		SPF: 5 or 6 (bidder is to mention the shot density of the offered system)
		EHD: ≥ 0.36"
		TTP: ≥ 40"
		Bidder is to provide API 19B certificate
		Bidder is to mention the name /Code/Part No. of the offered charge
		Perforation charge is of RDX
10	Perforator 4 ½" Gun	Size: 4 ½"
	/2 5411	SPF: 5 or 6 (bidder is to mention the shot density of the offered system)
		EHD: > 0.36"

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SU	ın

Bidder is to provide API 19B certificate	I	I	TTP: ≥ 40"
Cement Squeeze   Service   Service   Cement Squeeze   Service   Cement Squeeze   Service   Cement Squeeze   Service   Service   Service   Cement Squeeze   Service   Service   Solder is to mention the name   Code/Part No. of the offered charge   Tubing puncture is of RDX   Suitable for: 2 %", 3 %" 4 %" tubing   Bidder is to mention the name   Code/Part No. of the offered cutter   Tubing cutter   Solder is to mention the name   Code/Part No. of the offered cutter   Tubing cutter is of RDX   Suitable for: 2 %", 3 %" 4 %" tubing   Bidder is to mention the name   Code/Part No. of the offered cutter   Tubing cutter is of RDX   Suitable for: 5", 5 %", 7" 8 9 %" casing   Bidder is to mention the name   Code/Part No. of the offered cutter   Split shot cutter is of RDX   Suitable for: 5", 5 %", 7" 8 9 %" casing   Service   Sidder is to mention the name   Code/Part No. of the offered charge   Colloidal/Severing is of RDX   Suitable for: 5%" to 11" drill pipe/ drill collar   Bidder is to mention the name   Code/Part No. of the offered material   Sidder is to mention the name   Code/Part No. of the offered material   Sidder is to mention the name   Code/Part No. of the offered material   Tools on Call out Basis   Bidder is to mention the name   Code/Part No. of the offered material   Tools on Call out Basis   Bidder is to mention the name   Code/Part No. of the offered material   Tools on Call out Basis   Bidder is to mention the name   Code/Part No. of the offered material   Tools on Call out Basis   Bidder is to mention the name   Code/Part No. of the offered material   Tools on Call out Basis   Bidder is to mention the name   Code/Part No. of the offered material   Tools on Call out Basis   Tools on Call out Basis   Bidder is to mention the name   Code/Part No. of the offered material   Tools on Call out Basis   To			
Tubing Puncture  Tubing Puncture  Bidder is to mention the name //Code/Part No. of the offered charge  Tubing Cutter  Tubing Cutter  Tubing cutter is of RDX  Suitable for: 2 ½", 3 ½", 4 ½" tubing  Bidder is to mention the name //Code/Part No. of the offered cutter  Tubing cutter is of RDX  Suitable for: 2 ½", 3 ½", 4 ½" tubing  Bidder is to mention the name //Code/Part No. of the offered cutter  Tubing cutter is of RDX  Suitable for: 2 ½", 3 ½", 8 4 ½" tubing  Bidder is to mention the name //Code/Part No. of the offered cutter  Tubing cutter is of RDX  Suitable for: 2". 9" pipe  Bidder is to mention the name //Code/Part No. of the offered cutter  Split shot cutter  Split shot cutter is of RDX  Suitable for: 2". 9" pipe  Bidder is to mention the name //Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3" ½" to 11" drill pipe/ drill collar  Bidder is to mention the name //Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name //Code of the offered tool  Temperature rating: 15000 PSI or more  Pressure rating: 15000 PSI or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation Tester Tool  Tester Tool  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressure v/s depth & formation pressure v/s time plots of individual tests  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  14.7 PSI-15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles sh	11	_	·
Tubing puncture is of RDX Suitable for: 2 1/2", 3 1/2", 4 1/2" tubing  Bidder is to mention the name /Code/Part No. of the offered cutter  Tubing Cutter  Tubing cutter is of RDX Suitable for: 2 1/2", 3 1/2", 4 1/2" tubing  Bidder is to mention the name /Code/Part No. of the offered cutter  Tubing cutter is of RDX Suitable for: 5 1/2", 7 1/2 9 1/2" casing  Bidder is to mention the name /Code/Part No. of the offered cutter  Tubing cutter is of RDX Suitable for: 5 1/2", 7 1/2 9 1/2" casing  Bidder is to mention the name /Code/Part No. of the offered cutter  Split shot cutter is of RDX Suitable for: 2"-9" pipe  Colloidal/I Severing Service  Colloidal/Severing is of RDX Suitable for: 3 1/2" to 11" drill pipe/ drill collar  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX Suitable for: 3 1/2" to 11" drill pipe/ drill collar  Bidder is to mention the name / Code of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool  Temperature rating: 300" F or more  Pressure rating: 15000 PSI or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressure with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure swith quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. T	11		Cement Squeeze Service is of RDX
Tubing Cutter  Tubing Cutter  Tubing cutter is of RDX Suitable for: 2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1			Bidder is to mention the name /Code/Part No. of the offered charge
Tubing Cutter  Tubing cutter is of RDX  Suitable for: 2 ½", 3 ½", 4 ½" tubing  Bidder is to mention the name /Code/Part No. of the offered cutter  Tubing cutter is of RDX  Suitable for: 2 ½", 3 ½", 8 4 ½" tubing  Bidder is to mention the name /Code/Part No. of the offered cutter  Tubing cutter is of RDX  Suitable for: 5", 5 ½", 7" & 9 ½" casing  Bidder is to mention the name /Code/Part No. of the offered cutter  Split shot cutter  Split shot Cutter  Colloidal/ Severing Service  Colloidal/Severing is of RDX  Suitable for: 3", 9" pipe  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3½" to 11" drill pipe/ drill collar  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3½" to 11" drill pipe/ drill collar  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool  Temperature rating: 300" F or more  Pressure rating: 15000 PSI or more  Suitable for hole sizes: 6" to 12½" dia or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressure swith quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14,7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft an	12	_	Tubing puncture is of RDX
Tubing Cutter  Tubing cutter is of RDX Suitable for: 2 1/2", 3 1/2" & 4 1/2" tubing Bidder is to mention the name /Code/Part No. of the offered cutter  Tubing cutter is of RDX Suitable for: 5 1/5 1/2", 7 8 9 1/4" casing  Bidder is to mention the name /Code/Part No. of the offered cutter  Split shot Cutter  Colloidal/ Severing Service  Colloidal/Severing is of RDX Suitable for: 2 1/2 9" pipe  Bidder is to mention the name /Code/Part No. of the offered charge Colloidal/Severing is of RDX Suitable for: 3 1/2" to 11" drill pipe/ drill collar  Back-off Services  Tools on Call out Basis  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name /Code of the offered tool Temperature rating : 300" F or more Pressure rating : 15000 PSI or more Suitable for hole sizes : 6" to 12 1/2" dia or more Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling Multi samples PVT sampling module with 3 PVT bottles (MS-PVT) Formation & mud pressures with quartz & strain gauges Any number of pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water Online temperature correction to pressure gauges readings 14 7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more ana 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant Each tool set should include 6 PVT sample bottles. The bottles should be cartified by competent authority for transportation by passenger Aircraft and Helicopter.		Functure	Suitable for: 2 1/8", 3 1/2", 4 1/2" tubing
Suitable for: 2 %", 3 ½" & 4 ½" tubing  Bidder is to mention the name /Code/Part No. of the offered cutter  Tubing cutter is of RDX  Suitable for: 5", 5 ½", 7" & 9 %" casing  Bidder is to mention the name /Code/Part No. of the offered cutter  Split shot Cutter  Colloidal/ Severing Services  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3" pipe  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3" to 11" drill pipe/ drill collar  Back-off Services  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name /Code of the offered tool  Temperature rating: 300° F or more  Pressure rating: 15000 PSI or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressure wist quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Bidder is to mention the name /Code/Part No. of the offered cutter
Bidder is to mention the name /Code/Part No. of the offered cutter	13	Tubing Cutter	Tubing cutter is of RDX
Tubing cutter is of RDX Suitable for: 5", 5 1/4", 7" & 9 1/4" casing  Bidder is to mention the name /Code/Part No. of the offered cutter  Split shot cutter is of RDX Suitable for: 2"-9" pipe  Bidder is to mention the name /Code/Part No. of the offered charge Colloidal/ Severing Service  Bidder is to mention the name /Code/Part No. of the offered charge Colloidal/Severing is of RDX Suitable for: 31/4" to 11" drill pipe/ drill collar  Back-off Services  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool Temperature rating: 300" F or more Pressure rating: 15000 PSI or more Suitable for hole sizes: 6" to 121/4" dia or more Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling Multi samples PVT sampling module with 3 PVT bottles (MS-PVT) Formation Tester Tool with GR (Modular)  Dynamic Formation Tester Tool with GR (Modular)  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Suitable for: 2 1/8", 3 1/2" & 4 1/2" tubing
Suitable for: 5", 5 %", 7" & 9 %" casing  Bidder is to mention the name /Code/Part No. of the offered cutter  Split shot cutter is of RDX  Suitable for: 2"- 9" pipe  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/ Severing Service  Back-off Services  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3½" to 11" drill pipe/ drill collar  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool  Temperature rating: 300" F or more  Pressure rating: 15000 PSI or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI-15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Bidder is to mention the name /Code/Part No. of the offered cutter
Split shot Cutter   Split shot Cutter   Split shot Cutter   Split shot cutter is of RDX   Suitable for: 2"- 9" pipe	14	Casing Cutter	Tubing cutter is of RDX
Split shot Cutter  Split shot Cutter  Split shot cutter is of RDX Suitable for: 2"- 9" pipe  Bidder is to mention the name /Code/Part No. of the offered charge Colloidal/Severing is of RDX Suitable for: 31/2" to 11" drill pipe/ drill collar  Back-off Services  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool Temperature rating: 300" F or more Pressure rating: 15000 PSI or more Suitable for hole sizes: 6" to 121/2" dia or more Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT) Formation Tester Tool with GR (Modular)  Dynamic Formation Tester Tool with GR (Modular)  Any number of pressure tests in one run and provision for 3 samples Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests Fluid identification mechanism to distinguish between oil/gas and water Online temperature correction to pressure gauges readings 14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run Tool and sample chamber should be H <sub>2</sub> S resistant Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Suitable for: 5", 5 ½", 7" & 9 %" casing
Colloidal/ Severing Service  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3"." to 11" drill pipe/ drill collar  Back-off Services  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool  Temperature rating: 300° F or more  Pressure rating: 15000 PSI or more  Suitable for hole sizes: 6" to 12"." dia or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation Tester Tool with GR (Modular)  Dynamic Formation  Tester Tool with GR (Modular)  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Bidder is to mention the name /Code/Part No. of the offered cutter
Suitable for: 2"- 9" pipe  Bidder is to mention the name /Code/Part No. of the offered charge  Colloidal/Severing is of RDX  Suitable for: 3½" to 11" drill pipe/ drill collar  Back-off Services  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool  Temperature rating: 300° F or more  Pressure rating: 15000 PSI or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.	15		Split shot cutter is of RDX
Colloidal/Severing Service  Revices  Back-off Services  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool  Temperature rating: 300° F or more  Pressure rating: 15000 PSI or more  Suitable for hole sizes: 6" to 121/4" dia or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.		Cutter	Suitable for: 2"- 9" pipe
Severing Service   Colloidal/Severing is of RDX		Colloidal/	Bidder is to mention the name /Code/Part No. of the offered charge
Back-off Services  Tools on Call out Basis  Bidder is to mention the name /Code/Part No. of the offered material  Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool Temperature rating: 300° F or more Pressure rating: 15000 PSI or more Suitable for hole sizes: 6" to 12½" dia or more Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling Multi samples PVT sampling module with 3 PVT bottles (MS-PVT) Formation Any number of pressure with quartz & strain gauges Any number of pressure tests in one run and provision for 3 samples Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests Fluid identification mechanism to distinguish between oil/gas and water Online temperature correction to pressure gauges readings 14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.	16		Colloidal/Severing is of RDX
Tools on Call out Basis  Bidder is to mention the name / Code of the offered tool Temperature rating: 300° F or more Pressure rating: 15000 PSI or more Suitable for hole sizes: 6" to 12½" dia or more Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling Multi samples PVT sampling module with 3 PVT bottles (MS-PVT) Formation & mud pressures with quartz & strain gauges Any number of pressure tests in one run and provision for 3 samples Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests Fluid identification mechanism to distinguish between oil/gas and water Online temperature correction to pressure gauges readings 14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run Tool and sample chamber should be H <sub>2</sub> S resistant Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.		Service	Suitable for: 3½" to 11" drill pipe/ drill collar
Bidder is to mention the name / Code of the offered tool  Temperature rating: 300° F or more  Pressure rating: 15000 PSI or more  Suitable for hole sizes: 6" to 12'/4" dia or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.	17		Bidder is to mention the name /Code/Part No. of the offered material
Temperature rating: 300° F or more Pressure rating: 15000 PSI or more Suitable for hole sizes: 6" to 121/4" dia or more Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation Tester Tool with GR (Modular)  Provision for Mud pressure swith quartz & strain gauges Any number of pressure tests in one run and provision for 3 samples Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Tools on Call out Basis
Pressure rating: 15000 PSI or more  Suitable for hole sizes: 6" to 12½" dia or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Bidder is to mention the name / Code of the offered tool
Suitable for hole sizes: 6" to 121/4" dia or more  Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Temperature rating : 300° F or more
Single probe with resistivity based fluid analyzer (SP-RFA)  Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Pressure rating : 15000 PSI or more
Pump out (PO), with ability to control the flow rate down hole while sampling  Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Suitable for hole sizes : 6" to 12¼" dia or more
Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)  Formation & mud pressures with quartz & strain gauges  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0  PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Single probe with resistivity based fluid analyzer (SP-RFA)
Dynamic Formation Tester Tool with GR (Modular)  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Pump out (PO), with ability to control the flow rate down hole while sampling
Dynamic Formation Tester Tool with GR (Modular)  Any number of pressure tests in one run and provision for 3 samples  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Multi samples PVT sampling module with 3 PVT bottles (MS-PVT)
Dynamic Formation Tester Tool with GR (Modular)  Provision for Mud pressure v/s depth & formation pressure v/s time plots of individual tests  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Formation & mud pressures with quartz & strain gauges
Formation Tester Tool with GR (Modular)  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			Any number of pressure tests in one run and provision for 3 samples
with GR (Modular)  Fluid identification mechanism to distinguish between oil/gas and water  Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.	40	Formation	
Online temperature correction to pressure gauges readings  14.7 PSI -15 KPSI with resolution of 0.01 PSI or better and accuracy +/- 4.0 PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.	18		Fluid identification mechanism to distinguish between oil/gas and water
PSI at full scale  At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.		1	
samples using normal sample chamber of 1 gal or more and 2.6 gal or more capacity in one run  Tool and sample chamber should be H <sub>2</sub> S resistant  Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			
Each tool set should include 6 PVT sample bottles. The bottles should be certified by competent authority for transportation by passenger Aircraft and Helicopter.			At least three 450 C.C. (or more) samples of PVT quality and two normal samples using normal sample chamber of 1 gal or more and 2.6 gal or more
certified by competent authority for transportation by passenger Aircraft and Helicopter.			Tool and sample chamber should be H <sub>2</sub> S resistant
POST PROCESSED DATA			certified by competent authority for transportation by passenger Aircraft and
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I	I	Single probe/packer protect analysis
		Single-probe/packer pretest analysis  Interpretation of DFTS pressure test per test including advanced permeability studies
		Detailed P* Modeling (modeled undisturbed formation pressures) computation by identifying flow regimes and using pressure derivatives versus delta-time plots including geo-mechanically stress test interpretation and advanced single probe pretest analysis.
		Fluid gradient identification
		Different types and sizes of probes are to be provided as per technical requirement to make DFTS jobs successful
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 15000 PSI or more
		Suitable for hole sizes : 6" to 17 ½" dia or more
	Gamma Ray	Total GR: 0-1500 API
19	Spectrometry	U, Th and K measurement separately
	Tool	Vertical resolution 2'or better
		Quality check to be furnished
		Combinable with Resistivity Tool, COMBO-C, Sonic Tool and Resistivity Imager Tool
		Post-processed data: Environmentally corrected data with U, Th and K counts and their ratios
		Playback for data repair/recomputation
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 15000 PSI or more
		Suitable for hole sizes : 6" to 17 ½" dia or more
		MEASUREMENT RANGE
		Delta T Shear 80 micro sec/ft to 1000 micro sec/ft
		Delta T Stoneley from 80 microsec/ft to 1000 microsec/ft
		Delta T Compressional from 40 microsec/ft to 250 microsec/ft
		ACOUSTIC BAND WIDTH
		For Monopole: (Lower Frequency Limit - LFL-M): LFL-M<= 2.0 kHz
	Dipole Sonic	For Monopole: (Upper Frequency Limit - UFL-M): UFL-M > =10.0 KHz
20	Tool	For Dipole: (Lower Frequency Limit - LFL-D): LFL-D <= 1.0 KHz
		For Dipole: (Upper Frequency Limit - UFL-D): UFL-D >=5.0 KHz
		OTHER FEATURES
		Minimum 2 sets of orthogonal Dipole transmitters
		Shear, Compressional & Stoneley wave forms
		Two dipole measurements for redundancy
		Measurement to compute absolute value of effective permeability from Stoneley
		Logging speed in cross-dipole mode of operation should be at least 1650 ft/hr or more.
		Should be combinable with Resistivity Tool & COMBO-C
		WELL SITE PRODUCTS

		Raw waveforms of Shear, Compressional & Stoneley. Shear, Compressional & Stoneley Slowness with integrated travel times, Vp/Vs, Poisson's ratio, Coherence plot of waveform & TVD log
		POST PROCESSED DATA
		Shear, Compressional & Stoneley Slowness with integrated travel times, Vp/Vs, Poisson's ratio , Coherence plot of waveform , Permeability from Stoneley, Stress Analysis & Dipole Shear anisotropy.
		Bidder is to mention the name / Code of the offered resistivity based tool and should be suitable for hole sizes : 6" to 16" dia or more
		Temperature rating : 300 ° F or more
		Pressure rating : 15000 PSI or more
		At least 67% coverage in 8 ½" hole, in single pass
		Should have a resolution of 0.2" both vertical and azimuthal to pick stratigraphic dips.
		Speed correction feature
		Facility for dead button correction
		Each caliper arm should have independent electronics.
21	Full Bore Resistivity	Should be combinable (for Offshore) with other logging tools
21	Imager Tool	WELL SITE PRODUCT
		Colour image of static image processing
		Computed Mean Square Dip (well site/ post processed data) and TVD log
		POST PROCESSED DATA
		Interactive dip picking & feature interpretation to perform advanced geological interpretation and provide dip and azimuth for different beds
		Fracture analysis, fracture aperture analysis, fracture density, fracture porosity curves and fracture dips in plots.
		Image processing, static and dynamic (normalized and enhanced images with 1 m sliding depth windows in 1:20 scale).
		Texture characterization and heterogeneity analysis
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 20000 PSI or more
		Suitable for hole sizes : 6" to 14" dia or more
		CURVES TO BE RECORDED
		Anisotropy Index at one or more depth of investigation.
	3D Resistivity	True Vertical Resistivity "Rv" (borehole corrected) at one or more depth of investigation.
22		True Horizontal Resistivity "Rh" (borehole corrected) at one or more depth of investigation.
		Measurement of all 9 components of resistivity in 3 axis transmitter to receiver signal
		Spontaneous potential measurement
		Dip & Azimuth measurement
		Tool should have provision for mud Resistivity sensor for borehole correction.
		Tool should provide above output stand alone or in combination but no additional charges will be paid for additional tool.
		COMBINABILITY

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	I	Should be combinable with COMBO
		POST PROCESSED DATA
		All Answer products relevant to Acquisition Mode, including Rtv & Rth computation, Laminated Sand Analysis, Reservoir delineation.
		Bidder is to mention the name / Code of the offered tool
		Temperature rating: 300° F or more
		Pressure rating: 15000 PSI or more
		Suitable for hole sizes: 6" to 17 ½" dia or more
23	Elemental Concentration Log	Essential features: Concentration of elements from single neutron induced Gamma ray spectrometer for the determination of Silicon, Calcium, Iron, Gadolinium, Titanium, mica feldspar composite and other minerals for accurate clay volume estimation and clay typing.
		Post-processed data: Spectrolith lithology from ECL spectra from corrected clay model and dry weights. Output should be in DLIS, PDF & LAS file.
		Bidder is to mention the name / Code of the offered tool
		Temperature rating: 300° F or more
		Pressure rating: 15000 PSI or more
		Suitable for hole sizes: 8 1/2" to 14" dia or more
		ESSENTIAL FEATURES
	Nuclear	Vertical resolution: 2 ft or better, Give T2 distribution 0.5 millisecond or less to 3 sec.
24	Magnetic Resonance Log	Formation lithology independent porosity and permeability measurements, Free fluid Index, Permeability estimation, Pore size distribution and If required Hydrocarbon typing in separate pass
		Well Site Product: NMR porosity, T2 distribution, free fluid index permeability estimation
		POST PROCESSED DATA
		High resolution porosity & permeability processing
		Hydrocarbon typing
		NMR Reprocessing
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 10000 PSI or more
	Cased hole	Suitable to run in the low salinity water (from 6000 ppm to 35000 ppm of NaCl)
25	Reservoir Saturation Tool (RST /	Suitable for running through 2 $\%$ ", 3 $1/2$ " & 4 $1/2$ " tubings into 5", 5 $1/2$ ", 5 $3/4$ ", 7" & 9 $5/6$ " casings / liners in flowing and non-flowing vertical and deviated wells up to 60° deviation
	RMT-GR)	Depth of Investigation >6"
		Data to be recorded in In-elastic & capture sigma mode, Apply environmental corrections
		Processing of data for saturation estimation in different zones and submission of Interpretation Report along with raw and processed data
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
26	Side Wall Core with GR	Pressure rating : 15000 PSI or more
		Suitable for hole sizes : 6" to 121/4" dia or more
		Minimum 24 cores gun
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		Minimum two guns combinable in one run
		Core size 1" x 1.5" or 0.85" x 2"
		Core to be provided in bottle
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		Depth positioning of SWC by Gamma Ray
		Bullet design suitable for optimum core recovery in various range of formation consolidation
		Bidder is to mention the name / Code of the offered tool
		Temperature rating: 300° F or more
		Pressure rating: 15000 PSI or more
27	Free Point	OD of tool 1- 7/16" or less
21	Indicator	Motorized or magnetic / Bow spring anchoring
		Should be run with CCL
		Facility to back –off in the same run
		Response to Both stretch and torque inside pipes
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 350° F or more
	Plug, Packer,	Pressure rating : 15000 PSI or more
28	Cement	Suitable for : 5" to 9 5%" liner /casing
	Retainer Setting Tool	Dummy run with junk basket for hole probing
	Octaing 1001	Combinable with CCL
		Plug/packers to be provided by SunPetro
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 15000 PSI or more
		Size : 1.5 " to 4" suitable for various drill pipes, collars & tubings
29	Radial Cutting	Cutting technology should consists of mixture of various powdered metals and
	Torch	a nozzle section
		Cut without the use of high explosives or dangerous chemicals
		Safe to use in Radio Sensitive areas
		Puncher charges(explosives) to make holes to establish circulation to be provided by bidder
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 300° F or more
		Pressure rating : 20000 PSI or more
	Motorized	Core drilling tool with diamond coring bit for soft and hard formation to be run wire line.
30	Coring Tool	Core size cut should be of 1.75" or more X 0.90" or more size.
		Core to be provided in bottle
		Capability to cut at least 20 cores in one run.
		Should be capable to cut the core and extract the same undisturbed even in
		hard rock condition.
		Bidder is to mention the name / Code of the offered tool
	Dual Packer	Inflatable Dual Packer (Straddle packer) module with the following ratings:
31	Module of – Formation	Temperature rating: 325° F or more
01	Tester- 350°	Pressure rating: 15000 PSI or more
	F	Suitable for hole sizes: 8 1/2" to 121⁄4" dia or more
		POST PROCESSED DATA AND ADDITIONAL SERVICES

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		DFTS Dual Packer pre-test interpretation
		Real-Time Monitoring of jobs by Domain Expert
	Fluid Analyzer Module of Formation tester	Bidder is to mention the name / Code of the offered tool
		Temperature rating : 347° F or more
		Pressure rating : 15000 PSI or more
32		Suitable for hole sizes : 6" to 121/4" dia or more
52		Fluid analyzer based on principle of spectral analysis or Resonance, capable of measuring viscosity, GOR and Bubble Point.
		Live real-time fluid analysis
		Real-Time Monitoring of Jobs by Domain Expert
		Bidder is to mention the name / Code of the offered tool
		Temperature rating : 347° F or more
	Insitu Fluid Analyser Module of Formation tester	Pressure rating : 20000 PSI or more
		Suitable for hole sizes : 6" to 141/4" dia or more
		Real-time accurate quantitative fluids measurements and density down hole at reservoir conditions
		Quantitative hydrocarbon composition (C1, C2, C3-C5, and C6)
33		Quantitative GOR measurement, Live-oil density, C02, pH of water (aquifer, connate, injection, or water-based mud filtrate)
33		Reservoir fluid colour, free gas detection, down hole fluorescence
		Flow line pressure and temperature, resistivity of reservoir water, oil-based mud filtrate contamination
		Down hole "Grating Spectrometer" which quantifies the fluid data and provides distribution of fluid properties across the reservoir
		Density measurement range 0.05 to 1.2 g/cc
		Density measurement resolution: 0.001
		Live real-time fluid analysis
		Real-Time Monitoring of Jobs by Domain Expert

#### General Conditions & Deliverables:

- The BIDDER shall arrange at his cost customs clearance of the units, tools, equipment, spares, consumables, accessories and explosives, etc., imported for providing the services under the CONTRACT for maintenance and operations of the equipment throughout the duration of the CONTRACT.
- 2. The BIDDER will be responsible for timely re-export of the units, tools, equipment, spares, consumables, accessories, etc. and timely lodging and settlement of duty drawback claims, if any, as per the provisions of this contract. However, SunPetro will provide assistance in this regard to the extent of issuing recommendatory letters only.
- 3. BIDDER should possess a valid Importer/Exporter Code so that he can Import/Export the material in his name. All imports of Units, Tools, Equipment, spares, Consumables, Accessories and Explosives etc. and re-exports thereof shall be in the name of BIDDER. All formalities for Customs Clearance at the time of import including the signing of all relevant Customs documents will be arranged by the BIDDER. The BIDDER should also possess valid import documents for the units, tools, accessories and equipment imported earlier and available in India for re-deployment against the CONTRACT which would be produced for verification at the time of mobilization.
- 4. At the time of applying for EC the BIDDER shall furnish an undertaking on non-judicial stamp paper similar to that being furnished by SunPetro to Customs of suitable amount to avoid any misuse of spares, equipment and consumables imported by the BIDDER against EC and to indemnify SunPetro from any punitive action against SunPetro by any Authority for any violation or default by BIDDER and SunPetro ON becoming party to such irregularity and becoming liable to pay Customs duty, fine and penalty in future. BIDDER shall also



- furnish a certificate to the SunPetro regarding consumption of such items in those areas for which EC has been obtained as and when such items are consumed on a quarterly basis.
- 5. The BIDDER agrees to keep SunPetro indemnified for any costs & liabilities incurred by it as a result of its executing any document for customs clearance.
- 6. All imports and import clearance under the contract shall be done by the bidder and SunPetro will not provide any assistance in this regard except to the extent of issuing recommendatory letter for issuance of Essentiality Certificate from DGH as above.
- 7. In case units/equipment/tools to be deployed against this CONTRACT are available in India which were imported in the name of SunPetro (or another client of the BIDDER) against previous contract(s), it is the responsibility of the BIDDER to get the items transferred in the name of the BIDDER and arrange customs clearance for their overstay for this CONTRACT. All required customs formalities (filing of IGM, identification on 100% examination of goods and as per New EXIM Policy 2002-2007 on submission of re-export bond etc.) would be complied with for imports and the BIDDER would be responsible for having complied with all customs formalities.
- 8. Bidder has to make own arrangement for the Import of Explosive at their own license and at their own cost. SunPetro will provide the required EC for the purpose of custom duty. The BIDDER shall also comply with the requirement and stipulation as per the Explosives Act 1884, the Explosives Substance Act 1908 and the Explosives Rule 2008 or later and also the directive given by the chief Controller of Explosives, Nagpur, India, from time to time.
- 9. Bidder has to store explosive at their/ hired explosive storage area at their own cost.
- 10. Bidder shall transport explosive to SunPetro designated site in safe manner at its own cost and will take care of all liabilities in case of any unwanted incident.
- 11. Dummy run, if required for hole probing, before perforation or bridge plug setting will be carried out by Bidder at their own cost.
- 12. Damaged explosives shall be liquidated by the BIDDER in consultation with SunPetro following the provisions of Explosives Act. Cost of liquidation of damaged/broken explosives shall be to the BIDDER'S account. Unused explosives shall be carried forward to the next contract, if any.
- 13. Bidder has to make own arrangement for the Import of Radio Active Material at their own license and at their own cost. SunPetro will provide the required EC for the purpose of custom duty. BIDDER will obtain necessary licenses for storage of radio Active sources/materials for providing the services. However, SUNPETRO shall provide necessary assistance in the form of recommendatory letters for availing licenses/permissions. BIDDER shall comply with the relevant sections of the Atomic Energy Act, 1962; Radiation Protection Rules, 1971, Atomic Energy Safe Disposal Rules, 1987 and all such statutory regulations as may be imposed by the Atomic Energy Regulatory Board, in respect of all operations pertaining to the handling of Radio Active Sources and storage and transportation of the same.
- 14. Bidder has to store Radio Active Material at their/ hired safe storage facility at their own cost.
- 15. Bidder shall transport Radio Active Material to SunPetro designated site in safe manner at its own cost and will take care of all liabilities in case of any unwanted incident.
- 16. Bidder shall submit to the SunPetro half yearly status reports in respect of all the radioactive sources and quarterly status reports in respect of all the explosives imported and utilised by them during that period. The statement will be verified and retained by the SunPetro. The BIDDER shall provide to the SunPetro all facilities for verification and inspection of stocks as and when required. Further, Bidder should also submit monthly status of deployment of units and tools covered under this Contract along with their location.
- The BIDDER shall be the owner of its Units, Equipment, tools, spares, consumables etc. responsible for its Crew deployed/employed for the purpose of providing services under this CONTRACT.



- 18. SunPetro hereby acknowledges that the equipment and tools to be provided and used under the Contract shall be at all times, handled and manned and owned by the Bidder. SunPetro shall not be entitled to use/operate any of the Bidder's Equipment for providing Services under the Contract.
- All the Operations shall be performed by the BIDDER in accordance with the provisions under this CONTRACT, under Bidder's overall supervision and control.
- 20. 50 meter of repeat log to be recorded as quality check for all logs and the same has to be provided with the deliverables.
- 21. Latest Environment Correction Charts for the different types of logs used in log analysis must be provided by Bidder. Also the BIDDER will make available the Environmental Correction Charts in hardcopy and as software installable on different systems if requested. The Environmental Correction Software should be available in BIDDER'S Data Services Centres.
- 22. Two hard copies of wellsite logs, 1:200 and 1:500 scale to be provided
- 23. Two soft copies (DVDs/Pen drive) of logs, 1:200 and 1:500 scale to be provided at well site just after the logging / perforation operation
- 24. Five hard copies of final logs, 1:200 and 1:500 scale to be provided at office in Mumbai
- 25. Five soft copies (DVDs/Pen drive) of final logs (Raw and Processed), 1:200 and 1:500 scale to be provided at office in Mumbai.
- 26. BIDDER will maintain at least one centre for Data Processing and Interpretation in India at no cost to the SunPetro during the contract period. These centres must have facilities and capabilities of log data processing for tools under this contract. Such data processing facilities shall be available to the SunPetro to process well logging data acquired under the provisions of this CONTRACT.
- 27. Initial Tool calibration reports at the time of Unit mobilisation and subsequently after six months should be provided to SunPetro.
- 28. The job is to be performed in oil & gas installation, therefore, Bidder to ensure all safety precautions as per Oil Mines Regulation Act but not limited to followings:
- 29. Bidder to perform the work under valid work Permit only.
- 30. All material supplied & used at site shall have valid Material Test Certificates from accredited lab/ Test agency / TPI.
- 31. Bidder shall deploy persons who are medically fit & furnish physical Fitness certificate from authorized Medical practitioner.
- 32. Bidder to ensure use of proper PPE, HC detector etc. as per requirement of work
- 33. All material handling equipment shall have valid load test certificates.
- 34. Bidder to ensure transfer of Hazardous Waste / Waste generated during work to earmarked storage place for further disposal by self.
- 35. Bidder shall provide adequate First Aid Kit at site. At least one personnel in Bidder's team shall have proper First Ait Training. Certification for the same shall be provided.
- 36. Bidder shall have tie up with nearby hospitals in case medical evacuation is required.
- 37. The Bidder is responsible for implementing any regulations concerning the scope of work which are mandatory by Government of Gujarat and other statutory agencies.
- 38. Damage of equipment, if any, during mobilization Commissioning & De-mobilization shall be on account of Bidder.



### **Responsibility Matrix**

Following Responsibility Matrix is to be observed during the contract period:

				At Expense of		Supplied By	
	S. No	Item Description	Bidder	Operator	Bidder	Operator	
	1.	Timely Supply of Tools and Logging Unit					
	2.	Acceptance of Logging Unit & Tools					
	3.	Regulatory clearance for explosive handling					
	4.	Import, Custom clearance and storage of Explosive					
	5.	Supply of explosives, prima cord, detonator, guns etc. for perforations					
	6.	Regulatory Compliance and reporting of explosive uses					
	7.	All manpower required for logging and perforation jobs					
ES	8.	Safe Transportation of Explosives to drill site					
2	9.	Safe handling of Explosives					
FR	10.	Regulatory Compliance for explosives					
IONS	11.	Quality control and Checks of logging and perforation jobs					
ORAT	12.	Safe handling of Radioactive material					
RFC	13.	Regulatory Compliance for Radioactive material					
ID PE	14.	Safe Transportation of Radioactive material to drill site					
G AN	15.	Transportation of Bidder's personnel					
LOGGING AND PERFORATIONSERVICES	16.	Any other related work/item required for completion of job but not specifically mentioned					
2	17.	Submission of interpretation report					
	18.	Acceptance of service products/reports by SunPetro					
	19.	Callout basis					
	20.	Safety Equipment According to technical specifications and statutory requirements					
	21.	Food and housing of Bidder's personnel					
	22.	Supply & maintenance of fire fighting equipment required during contract period					



## **SECTION-6**

# **BID EVALUATION CRITERIA**

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#### **BID EVALUATION CRITERIA**

#### 6.1 TECHNICAL EVALUATION CRITERIA

Bid should be complete in all respect covering all the scope of work and should conform to the technical specifications indicated in the bid documents, duly supported with technical catalogues / literatures wherever required. Incomplete and non-conforming bid to the specifications will be rejected outright.

- 6.1.1 The bidder to quote for Suitable Drilling Rig along with cementing, mud and directional services, Logging & Mud Logging meeting Technical specifications and fit to Purpose. Bidder need to submit proposed Rig Technical Specification as per Annexure-II.

  However bidder should confirm acceptance of complete scope of work against each Categories / Services quoted
- 6.1.2 The bidder should meet the following criteria:
- a. The bidder should have executed at least one Integrated drilling services/ Integrated work over services contract in the last 5 (five) years for the Categories / Services quoted.
- b. The bidder, an Indian company / Indian Joint venture company along with its technical collaborator / joint venture partner, if any, should meet the criteria laid down paragraph a) and b) above.
- c. Details of experience and past performance of the bidder and the collaborator (in case of collaboration) or of joint venture partner (in case of a joint venture), on Categories / Services provided of similar nature in the past and details of current work in hand and other contractual commitments, indicating areas and clients are to be submitted along with the technocommercial bid, in support of the experience laid down above.
- d. In case the bidder is a Joint Venture company, the following requirement should be satisfied by the bidder:
- The leader of the JV should confirm unconditional acceptance of full responsibility of executing the 'Scope of work' of this tender including all interface risks of services / equipment being provided. This confirmation should be submitted along with the technocommercial bid.
- ii. All the members of the JV must undertake in their MOU that each party shall be jointly and severally liable to SunPetro for any and all obligations and responsibilities arising out of this contract (if awarded).
- 6.1.3 Bidders should provide all information about all the Categories/ Services quoted, for technical evaluation as indicated below;
- i. Technical specifications of Drilling rig with reference to clause 5.1.3 above and experience as per 6.1.2.b above

#### 6.2 COMMERCIAL EVALUATION CRITERIA

- 6.2.1 Proof of the issue of Tender Document must be sent along with "Technical & Un Priced Commercial Bid" in ENVELOPE I.
- 6.2.2 Submission of Bid
  - Bids be submitted as per instruction provided in Notice Inviting of Tenders in Section 2.
- 6.2.3 Acceptance of Terms &conditions
  - The bidder must confirm unconditional acceptance of Terms & Condition of Contract as per Section-3, Price Schedule format as per Section-8 and Instruction to bidder as per Section-2
  - 6.2.4 Offer of following type shall liable for rejection:
- a. Fax / e-mail / Xerox/photo/scanned copy offers
- b. Offer made by Agent /retainer/consultant / Representatives /Associates / of the foreign



- principal
- c. Offer do not conform to validity period as per ITB
- d. Offer without Bid bond /bank guarantee in prescribed format for amount and validity as per ITB
- e. Offer without valid GST registration
- f. Offer not accompanied with an undertaking to provide all necessary certificates / document for enabling Company to avail input GST credit and CENVAT credit benefit ( wherever applicable ) in respect of the payment of GST, Excise Duty, any other taxes etc. which are payable against the supply and services (if awarded) along with documentary evidence of payment of Excise duty, GST.
- g. Offer where prices are not firm during entire duration of the contract and /or with qualifications.
- h. Offer not duly signed by authorized signatory
- i. Bidders not meeting Mobilization, Delivery schedule ,completion period
- 6.2.5 Bidder agrees that quoted prices are inclusive of all taxes and duties, as applicable, including corporate tax / income tax etc.

#### 6.3 FINANCIAL CRITERIA

- 6.3.1 The bidder should have average yearly turnover for last three financial years (2018-19, 2020-21 & 2021-22) more than U.S. Dollars One Million (USD 1,000,000)/ INR Seven Crore fifty lakh (Rs 7,50,00,000)
- 6.3.2 Net worth of the bidder for FY 2021-22 should be positive. CA Certified statement to be provided for Point 6.3.1 & 6.3.2 along with audited balance sheet.
- 6.3.3 Indian Agent

Bidders are encouraged to quote directly rather than having Indian Agents. In case, it is unavoidable, Indian Agent is permitted to represent only one foreign bidder.

- 6.3.4 Purchase Preference Linked With Local Contents (LC)
- 6.3.4.1 Wherever goods / services for exploitation of oil / gas fields are procured by a Company whereby Government or any Government body, approval is necessary, the 'purchase preference' will be given to eligible techno-commercial bidder based on local contents criteria and policy announced by MOPNG for 'price preference' under 'Make in India' campaign or any other policy.

The applicability and evaluation procedures of the bids, for procurement of goods and services, defined by MOPNG will be strictly followed and applied for giving the 'Purchase Preference' to the eligible bidder for award of work for supply of goods / services.

- 6.3.4.2 Bidder needs to ascertain eligibility under this category and submit proof of eligibility as per MOPNG guide line failing which they will not be considered under this category.
- 6.3.4.3 Further, false or misleading information in this category will lead to rejection of bid and suitable action as per MOPNG guide lines on the subject.
- 6.3.5 Discount

Bidders are advised not to indicate any separate discount .Discount, if any should be merged with the quoted prices.

#### 6.4 **GENERAL**

Bidders to note the followings:

- 6.4.1 In case bidder takes exception to any clause or terms condition of tender document not covered under BEC, Company shall has discretion to reject the offer on account of such exception.
- 6.4.2 In case any contradiction between BEC and a clause appearing elsewhere in the bidding document, provision of BEC shall supersede all such clauses.
- 6.4.3 Inspection will be carried out by Company's officers / representative / Third party at the discretion of Company.



# **SECTION-7**

# BILL OF QUANTITY (BOQ) / PRICE SCHEDULE (PS)



#### **BILL OF QUANTITY (BOQ) / PRICE SCHEDULE (PS)**

The bidders must take into account the following rates in their priced bids as per the format given. Separate price bids for Drilling Rig to be submitted:

#### 1.0 MOBILIZATION CHARGES (ONE TIME LUMP SUM CHARGES) (M):

In case the Integrated services including rig, cementing & mud engineering package is contemplated to be mobilized partly or fully from outside India then the breakup of the mobilization charges to 1st location must be furnished separately.

#### NOTE: ·

- a. Mobilization charges should include mobilization of equipment and manpower for Integrated services including rig, cementing & mud engineering etc.
- b. Directional Drilling services as and when required by the company are to be mobilized separately.
- c. Mobilization charges should cover local and foreign costs to be incurred by the Contractors to mobilize to the first location.
- d. The first location will be in Bhasker Field/or as per the Company mention in Rig move notice.

#### 2.0 DEMOBILIZATION CHARGES (LUMP SUM) (D):

De-mobilisation of Integrated Drilling / work over services including rig, cementing, Mud services for rig package from last drilling location.

#### NOTE:

Demobilization charges should include demobilization of all equipment and manpower.

#### 3.1 OPERATING DAY RATE (Per 24 Hrs. day) (ODR)

The Operating Day rate will become eligible as defined below For Drilling Rig Coring

- Fishing for company / third party equipment's
- Retrieving casing
- Any other operations not defied in SOW.
- Any other repeat operation performed due to company's requirement.

#### 4.0 STAND BY DAY RATE (Per 24 Hrs. day) (SB)

The Standby Day rate will be payable under the following conditions:

#### For Drilling Rig:

- Electric logging and wire line operations (both open and cased hole) if performed by third party.
- Waiting on companies decision.
- Waiting on company's equipment, materials and services.
- For all time during which the company at its option may suspend operations.
- No separate standby charges for cementing and mud logging services

**Note:** Stand by day rate should not exceed 75% of the operating day rate.

#### 5.0 INTERLOCATION MOVE RATE

- 5.1 Depending on the distance between the locations, separate rates will be applicable as mentioned in BOQ:
- Interlocation movement operation will start from the moment the company releases the drilling rig down at previous location. Rig & all materials including the additional and optional items, if any, are to be transferred after rig down and rig up at the next location is completed and the well is spudded (For Drilling) Before spudding in, the Contractor shall complete all jobs, including, but not limited to, rig up of service lines, block, hook etc, drilling and setting scabbards of mouse & rat hole, compliance/rectification to meet safety norms and any other job normally done prior to spudding in. The inter-location movement of Rig package should be completed within the period as specified time mentioned under special terms and conditions.
- 5.3 The Inter location movement operation will include the clearing of the drilling location of all



materials, rig parts and made free from all pollutants excluding waste pit mud and drill cuttings.

No day rate under para 1.0, 2.0, 3.0 & 4.0 hereof will be payable when inter-location move rate is applicable.



#### PRICE SCHEDULE FORMAT

Bidder has to provide price of all items as indicated in price schedule below for all the services. Provide separate price bids for Drilling Rig:

Sr No	Provide separate price bids for Drilling Rig	Evaluation quantity	Unit Rate (INR)	Additional Rate per Meter for Integrated Drilling Services
1	Mobilisation of Integrated Drilling Services (Lump sum rate)	1		Diming Services
2	De-mobilisation of Integrated Drilling Services (Lump sum rate)	1		
3	Lump sum rate for drilling up to 1100 M MD well having 2 casing policy using the Integrated services (Rig + Cementing + Mud+Standard Logging Suit (High Resolution Latro Logging + Compact COMBO + Gamma Ray + Six Arm Caliper), a. 12 ¼" hole- 500 m MD b. 8 ½" hole – 500 to 1100 m MD	1		a. 12 1/4" hole beyond 500 m MD:  b. 8 1/2" hole beyond 1100 m MD to 1500 m MD:  c. Cost of CBL, VDL, Gama Ray & Cement Channel Analyser per run:  d. per meter perforation cost for 4 1/2" gun, 5 SPF, using deep penetration RDX charges (70") using CCL:  e. per meter perforation cost for 3 3/8" gun, 5 SPF, using deep penetration RDX charges (40") using CCL:
4	Lump sum rate for drilling up to 1500-1800 M MD well having 2 casing policy using the Integrated services (Rig + Cementing + Mud+Standard Logging Suit (High Resolution Latro Logging + Compact COMBO + Gamma Ray + Six Arm Caliper , a. 12 1/4" hole- 600 m MD b. 8 1/2" hole 600 to 1800 m MD	1		a. a.12 ¼" hole- beyond 600 m MD: b. 8 ½" hole beyond 1800 m MD: c. Cost of CBL, VDL, Gama Ray & Cement Channel Analyser per run:  d. per meter perforation cost for 4 ½" gun, 5 SPF, using deep penetration RDX charges (70") using CCL: e. per meter perforation cost for 3 3/8" gun, 5 SPF, using deep penetration RDX charges (40") using CCL:

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				sun			
5	Lump sum rate for drilling up to 1800-2000 M MD well having 3 casing policy using the Integrated services (Rig + Cementing + Mud + Standard Logging Suit (High Resolution Latro Logging + Compact COMBO + Gamma Ray + Six Arm Caliper a. 17 ½" hole-600 m MD b. 12 ¼" hole- from 600 to 1200 m MD c. 8 ½" hole – from 1200 to 2000 m MD	1		<ul> <li>a. 17 ½" hole beyond 600 m MD:</li></ul>			
10	Lump sum rate for providing required directional drilling equipment & personal services for from KOP a. 12 1/4" HOLE:500 MD b. 8 1/2" HOLE:500 MD		a. b.	a. 12 1/4" Hole per meter beyond 500 m:  b. 8 1/2" Hole per meter beyond 500 m:			
11	Operating Rate [R-I (Rate- 1)] (Including Integrated Drilling Services)	1					
12	Standby Rate [R-II (Rate-2)]- (Including Integrated Drilling Services)	1					
13	Operating Day Rate (RIG, RIG SERVICES AND RIG CREW) ONLY)	1					
14	Stand By Day Rate (RIG, RIG SERVICES AND RIG CREW) ONLY)	1					
15	Interlocation charges (cluster movement within 100 m cellar to cellar)	1					
16	Interlocation charges (101m-5km)	1					
17	Interlocation charges (5.01Km – 10km)	1					
18	Interlocation charges (10.01km-15km)	1					
19	Interlocation charges (15.01km-30 km) Interlocation charges (per km above 30-50	1					
19	km.  Rig move per km beyond 50 Km	1					
	Drill Bits						
1	12 1/4" TCR Drill Bit, IADC- 1 1 7	1					
2	12 1/4" TCR Drill Bit, IADC- 1 3 7	1					
3	8 1/2" TCR Drill Bit, IADC- 1 1 7	1					

- (	6	7)
S	u	n

4	8 1/2" TCR Drill Bit, IADC- 1 3 7	1	Petrochemicals
5	8 1/2" TCR Drill Bit, IADC- 4 1 7	1	
6	8 1/2" TCR Drill Bit, IADC- 4 3 7	1	
7	12 1/4" PDC Drill Bit	1	
8	8 ½" PDC Drill Bit	1	

Optional Logging Tools Cost						
Sr No	Description of	of service	UOM	UNIT PRICE	Total	
		Dipole Sonic Tool	Per Run			
		Nuclear magnetic Resonance Log	Per Run			
		Side Wall Core with GR(24 samples)	Per Run			
1	Charges for	Dynamic Formation Tester Tool with GR (Modular)	Per Run			
		Gamma Ray Spectrometry Tool				
		Full Bore Resistivity Imager	Per Run			
2		3D Resistivity	Per Run			
3		Elemental Concentration Log	Per Run			
4		Cased hole Reservoir Saturation Tool (RST / RMT-GR)	Per Run			
5 6		Free Point Indicator	Per Run			
7		Bridge Plug /Packer/ Cement Retainer Setting Tool including junk basket	Per Setting of B/ P / packer / C/R			
8		Radial Cutting Torch	Per Run			
9		Motorized Coring Tool (24 samples)	Per Run			
10		Dual Packer Module of – Formation Tester- 350° F	Per Run			
11		Insitu Fluid Analyser Module of Formation tester	Per Run			
12		Perforation for Cement Squeeze	Per Run			
13		Tubing Puncture	Per Run			
14		Tubing Cutter	Per Run			
15		Casing Cutter	Per Run			
16		Split shot Cutter	Per Run			
17		Colloidal/ Severing Service	Per Run			
18		Back-off Services	Per Run			

#### Note:

- The above quantity is for evaluation purpose only. Payment shall be made as per actuals. 1.
- 2. If well is drilled less than 1100 M, considering 2 casing policy, charges for 1100 m will be
- If well is drilled in between 1500 M-1800 M ranges using 2 casing policy, charges for 1800 M 3. will be paid.



- 4. If well is drilled in between 1800 M-2000 M ranges using 3 casing policy, charges for 2000 M will be paid.
- 5. If in special case Well design requirement changes then respective additional drilling rate per meter is applicable.
- 6. Drill Bit shall be charge on consumption basis. Running hours shall be considering as per previous OEM bit running history and recommendation.
- 7. Casing size is as per below.

Sr nos	HOLE SIZE	CASING SIZE
1	17 ½"	13 3/8"
2	12 1⁄4"	9 5/8"
3	8 ½"	7" OR 5 ½" 0r 5 ¾"

NOTE: Casing size may change considering well design requirement but limited to hole size & casing requirement mention above table.

#### 8. Payment Terms:

Payment of the correct / undisputed / Certified invoice supported with job sheet / field ticket / any other relevant document, which is jointly signed by Engineer In-charge/ Company representative along with the representative, shall be made within Thirty (30) working days' period after receipt of invoice unless the Company disputes the invoice or a part thereof.

- a) Milestone payment for two casing policy wells, as per below:
- 5% of payment shall be released at the conductor casing
- 35% of payment shall be released at the end of 1st casing
- 35% of payment shall be released at the end of 2nd casing
- 25% payment to be released on completion of well.
- b) Milestone payment for three casing policy wells, as per below:
- 5% of payment shall be released at the conductor casing
- 20% of payment shall be released at the end of 1st casing
- 25% of payment shall be released at the end of 2nd casing
- 25% of payment shall be released at the end of 3rd casing
- 25% payment to be released on completion of well.



## **SECTION-8**

## **PERFORMANCE MEASUREMENT**



#### **PERFORMANCE MEASUREMENT**

The time is of essence of all activities under the contract and Bidder shall be penalized / rewarded based on the performance during the operations using the following mapping parameters at sole discretion of SunPetro, if required.:

Incentive will be given if Contractor scores the marks to more than 95% However, Penalty shall be imposed if the overall performance scoring is below 90%. The mapping parameters are to be

agreed with mutual consent of Company and Contractor post award of contract.

No	Performance Indicator ( Monthly Average Basis)	MOU	Limiting Value	Weightage	Actual Score based on prorate	Score
1	Uses of proper PPE at site	No of Violation	0 – Violation	10 /0		
2	Job specific safety Training & awareness program as per calendar.	%	90 to 100 %	10		
3	Waste Management as per SunPetro Policy	Y/N	Y/N	10/0		
4	No of LTI cases	No	0- Ccurrence	10/0		
5	Work delayed by more than 24 hrs due to non- availability of Manpower	No	0-Occurrence	10/0		
6	Work delayed by more than 24 hrs due to non- availability of Resources	No	0-Occurrence	10/0		
7	Repetition of Job: poor quality of construction or material	No	0-Occurrence	10/0		
8	Deviation: Design Vs. Actual job done	%	90 to 100 %	10		
9	Delay: Schedule completion time Vs actual time	%	90 to 100 %	10		
10	Compliance of Observation by Inspection	%	90 to 100 %	10		
				Total Score a	chieved (%)	

#### 8.2 Incentives

Minimum Expectation of Performance Level > 90 %. Incentive will be given if Contractor scores the marks ≥ 95%.

- I. If the monthly performance is ≥ 95% consecutively for 3 months, contractor shall be paid incentive on mutually agreed formulae to be decided on award of work.
- II. If the Site is free from LTI for more than 150 days, contractor shall be paid incentive @ 5000 rupees / annum or on pro-rata basis if work in a year is less than 365 days.

#### 8.3 Penalties:

**8.3.1** The Contractor shall maintain very good standard of Housekeeping. Regular Inspection shall be carried by SunPetro representative. Suitable action shall be taken by the Contractor for any observation by SunPetro representative within 48 hour.



In the event of non-compliance for observation, Contractor shall be penalized at the rate of 500 (Five hundred rupees) per day until action is taken.

8.3.2 Performance shall be evaluated on a monthly Basis. Penalty shall be imposed if the overall performance is below < 90 %. In the event of performance below expectation (Expected Performance ≥ 90 %), Contractor shall be penalized with 1% less payment for every 1% less performance from 90% limit (Pro-rata Basis) or to be finalized on discussions with the contractor on award of work</p>

In case of PPE non-compliance, a penalty of Rs. 2000/- per person shall be levied per incident of not using proper PPE.



ANNEXURE's	CONTENTS
ANNEXURE-1	Bidder's Response Acknowledgement Form for Receipt of Tender Document
ANNEXURE-2	Bid Bond Format
ANNEXURE-3	Check List Prior to Bidding
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ANNEXURE-5	CUT-OUT SLIP for Un-priced Technical Offer
ANNEXURE-6	CUT-OUT SLIP for Priced Offer
ANNEXURE-7	CUT-OUT SLIP for outer envelops
ANNEXURE-8	Proforma Bank Guarantee
ANNEXURE-9	List of Approved Banks
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ANNEXURE-11	Check List Post Award of Contract
ANNEXURE-12A	Personal Deployment plan
ANNEXURE-12B	Proforma for experience of contractor's personnel
ANNEXURE-13	Proforma for Provisional Acceptance Certificate
ANNEXURE-14	Proforma for Final Acceptance Certificate
ANNEXURE - 15	Hiring of Rig Services (wet lease) on call out basis includes: Drilling rig along with all necessary equipment and services, mud services, cementing services and directional drilling services (wherever required).



## BIDDERS RESPONSE ACKNOWLEDGMENT FORM FOR RECEIPT OF TENDER DOCUMENT

As a delegated authority/representative of the organization named below, I have reviewed the contents of the package and on behalf of my Company, acknowledge the receipt of the same and advise that we will:

BID		
NOT BID		_
Reason for no Bid (optional):		
For	<del></del>	
	:	····
Signature	:	
Title	:	<del></del>
Date	:	<del></del>
Transmittal via facsir	nile:	
		ATTENTION
		Head -Supply Chain Management
		Sun Petrochemicals Private Limited
		8 <sup>th</sup> Floor, ATL Corporate Park, Opp. L&T Gate no.7,
		Saki Vihar Road, Chandivali, Powai
		Andheri (E), Mumbai – 400072[INDIA].
		Email: nihit.jain@sunpetro.com



#### **BID BOND FORMAT**

Corpo 4000' <i>WHE</i>	the provisions of the Comporate Park, Opp. L&T Gate 72[INDIA]. (hereinafter refe	oanies Act, 1956 no.7, Saki Vihar rred to as "Comp	and having its Road, Chandir pany").	registered of vali, Powai Ar	ffice at 8 <sup>th</sup> Floo ndheri (E), Mui	or, ATL mbai –
	(hereinaft ("hereinafter referred		s "Tenderer") Proposal")		ed a proposal TENDER dated	dated NO.:
	for		(herei	nafter referre	d to as the "Te	nder").
	, THEREFORE, In response to the req					
Bidde	nditionally guarantee the sers) and US \$United pany, if Tenderer fails to pe	d States Dollars	only	/ – for Foreig		
of (ii) T	e Tenderer agrees to keep validity (150 days from the he Tenderer, having been riod of Tender validity:	Closing Date) sp notified of acce	pecified in the period in the	Tender. Proposal by		
(b) Fa pro (c) Se	ills or refuses to execute the ills or refuses to furnish the ovided in the Tender docun teks Variation or modification anditions	Performance Banent; or	ank Guarantee	in accordance		nat
(d)Tr	ies to influence Company o	n bid evaluation	, bid compariso	on or Contrac	t award decisi	on.
	um shall become payable tions notwithstanding any c	•	•			
(2)	Company shall have the manner, our obligation her Tender, from time to time Company against the said by reason of any such reindulgence by Company to	eunder, to relax e, or to postpor Tenderer and C elaxation being	any of the terr ne any time a Guarantor shal granted to the	ns and condit ny of the po I not be reliev e Tenderer I	tions of the afc wers exercisa ved from its lia by Company	oresaid ble by bilities or any
(3)	The Guarantor shall not be made between the Tender by any alteration in the ob or constitution of Company	er and Compan ligations underta	y with or withou aken by the Te	ut the consen	it of the Guara	ntor or
(4)	The Guarantee herein sha or the Tenderer.	all not be affecte	d by any chan	ge in the cor	nstitution of the	: Bank

This Guarantee shall not be revoked during its currency, and shall remain in effect for One

Hundred and fifty (150) days from the Tender Closing Date.

(5)

(6)	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 High Court of Mumbai.				
		reof this Guarantee has been duly executed by GUARANTOR the f for and on behalf of ()			
	Name	<u>:</u>			
	Designation	<u> </u>			
	Banker's Seal	<u> </u>			
	Address	:			

#### NOTE:

#### 1. Bid bond required as Tender Security deposit /Earnest money

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 150 days from the Closing Date. The Tender may be disqualified in the absence of a Bid Bond in the prescribed format. In providing such a Bid Bond the bank shall also undertake to issue the Performance Bank Guarantee as required by Company in the event that the Tender is accepted.

#### 2. Conditions for Invoking of Bid Bond Guarantee

The following conditions would also lead to the invoking of Bid Bond Guarantee:

- a) If the Tender is withdrawn during the validity period or any extension thereof.
- b) 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.
- c) 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.
- d) If the successful Tenderer fails to furnish Performance Bank Guarantee within 10 days of the issue of the Letter of Intent/Award.
- e) 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.



#### **CHECK LIST FOR BIDDING**

This portion of the Tender is intended to serve as a checklist to ensure that all information necessary to evaluate your proposal has been included. Please indicate Yes / No or Acceptable / Not Acceptable, whichever is not applicable.

#### **TECHNICAL**

- 1. Has the bidder quoted for full scope of work as specified in the tender?
  YES / NO
- 2. Has the bidder furnished the list of equipment that will be used in the performance of the work, along with their make, technical data, catalogue/ brochure of the manufacturer, etc.?

YES / NO

- 3. Has the bidder furnished the minimum personnel proposed to be assigned to this work in the format provided at Annexure 12? YES / NO
- **4.** Quality Control Manual and/ or Quality Control Program along with the Unpriced Techno Commercial Bid

YES / NO

#### **COMMERCIAL**

**5.** Confirm whether the bidder has submitted a Bid Bond as per Clause mentioned in the Instructions to Bidders.

YES / NO

- Confirm whether the bidder agrees to furnish a performance Bank Guarantee YES / NO
- 7. Confirm that the prices quoted are firm and are inclusive of all taxes, duties, levies etc., applicable to personnel, equipment and materials to be used for execution of the Contract for the first thirty six (36) months and 12 months extension period if exercised .
  YES / NO
- **8.** Confirm whether the prices quoted are firm and applicable even if the work is awarded only in part.

YES / NO

9. Has the bidder confirmed the Commencement Date?

YES / NO

10. Confirm acceptance of Insurance liability as per Clause of the Model Contract.

YES / NO

- 11. Confirm acceptance of Force Majeure provision as per mentioned in the Model Contract. YES / NO
- 12. Confirm acceptance of Liquidated Damages provision as per the Model Contract.

YES / NO



Confirm acceptance provision for Arbitration as per Clause of the Model contract.
 YES / NO

14. Confirm acceptance Taxes and Duties provision as per of the Model Contract.

YES / NO

15. Confirm whether Unprized Technical bid with all annexures and enclosures have been furnished in duplicate (10riginal + 1 copy) in a separate sealed cover. Ensure that Price Schedule of the Unprized Technical bid is blank.

YES / NO

16. Confirm whether Priced Commercial Bid (1 Original +1 Copy) comprising only the Price Schedule has been furnished

YES / NO

17. Has bidder ensured that there is no over-writing in the offer? Have corrections, if any, been properly attested/ initialled by the bidder

YES / NO

- 18. Has bidder ensured that the all pages of the bid documents including additional sheets, if any, attached by the bidder signed by the duly authorized officer of the bidder? YES / NO
- 19. Bidder ensured that proof of the signing authority

YES / NO

20. Does the bidder accept bid validity period?

YES / NO

21. If the bid is submitted by a consortium, confirm whether the MOU of the consortium / JVC has been furnished.

YES / NO

22. Have all the exceptions/deviations/conditions taken by the bidder, having cost impact or not, been listed in the format provided as Annexure 4 and attached with the Un priced Techno Commercial Bid, without including the cost impact, if any?

YES / NO

23 Has bidder proposed any incentive scheme?

YES / NO

24 Has the bidder included the cost impact of incentive schemes in the Priced Commercial Bid only?

YES / NO

25 Has the cost impact, if any, of the exceptions taken been attached with the Priced Commercial Bid?

YES / NO

26 Confirm whether the bidder agrees for applicability of Indian Laws YES / NO



## **EXCEPTION / DEVIATION / CONDITIONS PROFORMA**

Section No, Page No. and Clause No.	Description of exception/ deviation/ condition	Reason(s) for exception/ deviation/ condition	Whether there is a Cost impact? ** (Yes / No)	Effect on Commencement Date

<sup>\*\*</sup> Please do not indicate the price impact, if any, here.

l ender No
Commercial Part (attach to Priced Commercial Bid)
Currency :



## CUT-OUT SLIPS FOR TECHNICAL & UNPRICED COMMERCIAL BID

## DO NOT OPEN - THIS IS A TENDER QUOTATION

#### (TECHNICAL & UN-PRICED COMMERCIAL BID )

Client	: SUN PETROCHEMICALS PRIVATE LIMITED	
Tender No.	:	
Project Name	·	
Bid Due Date	:	
From:	То:	
(Bidder's	Head-Commercial & Supply Chain Management	
Details)	SUN PETROCHEMICALS PRIVATE LIMITED (SunPetro)	
-	8 <sup>th</sup> Floor, ATL Corporate Park, Opp. L&T Gate no.7,	
	Saki Vihar Road, Chandivali, Powai	
	Andheri (E), Mumbai – 400072[INDIA].	
	Kind Attn: Mr Nihit Jain	



## **CUT-OUT SLIPS FOR PRICED OFFER**

#### **DO NOT OPEN - THIS IS A TENDER QUOTATION**

#### (PRICED COMMERCIAL BID )

Client	: SUN PETROCHEMICALS PRIVATE LIMITED	
Tender No.	:	
Project Name	:	
Bid Due Date	:	
From:	То:	
(Bidder's	Head-Commercial & Supply Chain Management	
Details)	SUN PETROCHEMICALS PRIVATE LIMITED (SunPetro)	
•	8th Floor, ATL Corporate Park, Opp. L&T Gate no.7,	
	Saki Vihar Road, Chandivali, Powai	
	Andheri (E), Mumbai – 400072[INDIA]	
	Kind Attn: Mr Nihit Jain	



#### **CUT-OUT SLIPS FOR OUTER ENVELOPE**

#### **DO NOT OPEN - THIS IS A TENDER /QUOTATION**

## (OUTER ENVELOPE CONTAINING TECHNICAL & UN-PRICED COMMERCIAL BID + PRICED COMMERCIAL BID )

Client	: SUN PETROCHEMICALS PRIVATE LIMITED	
Tender No.	:	
Project Name	:	
Bid Due Date	:	
From:	То:	
(Bidder's	Head-Commercial & Supply Chain Management	
Details)	SUN PETROCHEMICALS PRIVATE LIMITED (SunPetro)	
-	8th Floor, ATL Corporate Park, Opp. L&T Gate no.7,	
	Saki Vihar Road, Chandivali, Powai	
	Andheri (E), Mumbai – 400072[INDIA]	
	Kind Attn: Mr. Nihit Jain	

(To be pasted on the outer envelope containing PRICED & UNPRICED OFFER)



#### PROFORMA OF PERFORMANCE BANK GUARANTEE

TO: Sun Petrochemicals Private Limited, a Company incorporated under Company's Law 1956 and having its office at 8th Floor, ATL Corporate Park, Opp. L&T Gate no.7, Saki Vihar Road, Chandivali, Powai Andheri (E), Mumbai - 400072[INDIA]. (hereinafter referred to as "Company"). WHEREAS: By an Contract for (here in after referred to as the "Contract") (1) hereinafter referred to as the between "Contractor") of the one part and Company of the other part, the Contractor agrees to perform the Work in accordance with the Contract. (2) In response the request made by Contractor, (Name Banker:) (hereinafter referred as the "Guarantor") hereby irrevocably and unconditionally guarantee in favour of Company, the payment amounts (without any withholding, deduction or ) being 10% **of the** upto. (Rupees estimated / Annualized 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 Company 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, Contract made between the Contractor and Company 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 Company or the Contractor. (4) This Guarantee is a continuing security and, accordingly, shall remain in operation for three months after the 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 Company is recoverable by legal action or arbitration. The rights under this Guarantee shall be assignable by Company 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 202\_\_\_ or and on behalf Name Designation Banker's Seal Address :

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#### **ANNEXURE -9**

#### **LIST OF APPROVED BANKS**

Guarantee issued from following banks will be accepted as PBG/SD/EMD/BID BOND

- 1. All Nationalised Banks including Public Sector Banks-IDBI Ltd
- 2. Private Sector Banks- Axis Bank, ICICI Bank and HDFC Bank
- 3. Commercial Banks:
  - I. Kotak Mahindra Bank
  - II. Yes Bank
  - III. RBL Bank (The Ratnakar Bank Ltd)
  - IV. IndusInd Bank
  - V. Karur Vysya Bank
  - VI. DCB Bank
  - VII. Fedrel Bank
  - VIII. South Indian Bank
- 4. Co-operative and Rural Banks:
  - I. The Kalupur commercial co-operative bank Ltd
  - II. Rajkot Nagrik Sahakari Bank Ltd
  - III. The Ahmedabad Mercantile Co-operative Bank Ltd
  - IV. The Mehsana Urban Co-operative Bank Ltd
  - V. Nutan Nagrik Sahakari Bank Ltd
  - VI. Dena Gujarat Gramin Bank



#### **CUSTOMS NOTIFICATION**

Custom Notifications will be applicable as per latest and relevant guidelines for goods imported in connection with the contract signed with the Government of India as applicable under the relevant Production Sharing Contract (PSC) / New Exploration Licensing Policy (NELP).

## Sun Petrochemicals

#### **ANNEXURE - 11**

#### **CHECK LIST POST AWARD OF WORK**

This check list is preliminary for vital compliance to be fulfilled by successful bidder at immediate post award stage and not limited to followings:

#### Commercial / Financial

- a. Performance bank guarantee value and validity
- b. PAN / TAN / GSTN number
- c. Bank Account number with documentary proof

#### Operational

- a. Detailed sequence of operations with ball park time estimates
- b. Availability of services & materials with time lines
- c. Lead time of critical spares
- d. Interface management of various services
- e. Logistics control
- f. Discussion and finalisation on incentives Bonus/Malus
- g. Organogram with HSE set up

#### General

a. Overall inputs required for meeting all operational needs



## ANNEXURE-12A: PERSONNEL DEPLOYMENT PLAN

## Minimum Personnel to be provided by the Contractor

1. 1.Rig manager/Rig Superintendent	1	On call 24 Hrs
2. Tool Pusher	1	On call 24 Hrs
3. Night Tool Pusher	1	12 Hrs-Night
4. Driller	1	12 Hrs.
5. Asstt. Driller	1	12 Hrs
6. Derrick Man/Top man	2	12 Hrs
7. Floormen	4	13 Hrs
8. Roustabout	4	12 Hrs
9. Chief Mechanic	1	On call 24 Hrs
10. Mechanic	1	12 Hrs
11. Chief Electrician	1	On call 24 Hrs
12. Electrician	1	12 Hrs
13. Welder	1	On call 24 Hrs
14. Hydra operator	1	12 Hrs
15. Medic	1	On call 24 Hrs
16. HSE	1	On call 24 Hrs
19. Crane Operator	1	12 Hrs



## ANNEXURE-12B PERFORMA FOR EXPERIENCE OF CONTRACTOR'S PERSONNEL

Sr.	Name &	Age,	Educational	Previous	Peri	od	Type of Work	Remarks
No.	address	Date	qualification	experience			/Job	
	of the	Of	& Year of	(Name &			Responsibility	
	person	Birth	Passing	Address of				
	with			previous				
	position			Client)				
					From	То		

#### Note:

- 1. Bidder is free to identify more personnel for each category as an alternative.
- **2.** Bidders need to attach the bio-data along with the bid. Certificates to be enclosed along with this Performa.



## PROVISIONAL ACCEPTANCE CERTIFICATE

CONTRACT /CONTRACT NO:
Date:
DESCRIPTION OF SUPPLIES / SERVICE:
The above SUPPLIES / SERVICES have been provisionally accepted with effect from
on behalf of(COMPANY) in good order with the exceptions as described in Appendix-1(if applicable), subject to the Delivery and Warranty
conditions contained in the AGREEMENT, effective from
For and an habalf of
For and on behalf of:
(COMPANY)
Name
Designation
Designation
Signature
Date



Appendix-1

# EXCEPTIONS TO COMPLETION Ref: PROVISIONAL ACCEPTANCE CERTIFICATE

COMPANY to detail below any and all exceptions to the completion of the SUPPLIES/SERVICES described in this PROVISIONAL ACCEPTANCE CERTIFICATE.



#### **FINAL ACCEPTANCE CERTIFICATE**

AGREEMENT/CONTRACT NO:	
Date:	
DESCRIPTION OF SUPPLIES	
The above SERVICE /SUPPLIES have been finally a (COMPSNY) in apparent good order, subject to the AGREEMENT, with effect from20	•
For and on behalf of:	
(COMPANY)	
Name	
Designation	
Signature	
Date Da	ate



## Hiring of Rig Services (wet lease) on call out basis includes

	Technical Specifications for 1000 HP Drilling Rig Package				
Sr No	Sr No Description SUNPETRO Requirement		BIDDER SPEIFICATION		
A	TYPE OF RIG	CARRIER MOUNTED MOBILE RIG (All Equipment of Drilling Rig are to be as per API Standards)			
В	RIG MODEL	Provide Model Number and Name of Manufacturer			
B1	Working Hook Load Capacity	200 Ton- Traveling block and hook should be independent			
B2	Drilling Depth	3000m with 5" Drill Pipe- 4 $\frac{1}{2}$ " IF connection. G-grade 105, Pup joints of Drill pipe 3 mtr, 6mtr, 9 mtr.			
В3	RIG Engine	1. Capacity: 540 HP X 2			
		2. Transmission: as per spec.			
	Dimensions	Dimensions of Truck mounted rig while transportation (LXBXH)			
B4	MAST				
B4.1	Mast Type	Truck Mounted Telescopic- with alarm system and self- locking system. (capable for doubles stand of R-II drill pipes rack back) after fully raised mast.			
B4.2	Racking/Setback Capacity	2200m with 5" Drill Pipe/2 7/8" & 3 1/2" tubing minimum			
		Ladders with safety cage, rest platforms, Anchor point to suspend block during cut & slip, counter balance system to susprig tongs etc.			
		Derick to be fitted with vapors tight, heavy duty fluorescent lighting system for use in Zone-1/Zone-2 as per API			
		Derrick equipped with certified pad eyes for installation of wire line, 2 completion control line sheaves and guide			
B4.3	Crown Block				
	Minimum Capacity	200T			
	Travelling Block	Minimum Load Capacity 200T. Compatible with Working hook load capacity requirement.			
B4.4	Elevator Links	Length: Standard Length, Drilling Link and Casing RIH link, should able to accommodate the Cementing Head at time of cementing.			
B4.5	Swivel	Minimum Load Capacity 200T., or Compatible with     Working hook load capacity requirement.			
		2. Pressure Rating: 5000 psi			

Tender No: SunPetro/Gujarat/Onshore/IDS/2022-23/SPPL-134

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B4.6	Rotary Hose	<ol> <li>Pressure Rating: 5000 psi, properly clamped with Derrick and swivel with safety sling.</li> </ol>	Petrochemicals
		2. Size: 4" / as per std	
		3. Compatible with above Swivel and Standpipe	
B4.7	Standpipe	1. Pressure Rating: 5000 psi	
		2. Size: 4" / as per std	
		3. Compatible with above Rotary Hose	
		Valve Manifold at the Rig Base to connect to Kill Manifold.	
		5. Valve Manifold at Rig Floor. With 1 blind end port (optional)	
		6. Pressure Gauge (0-5000 psi) installed on Standpipe at Rig Floor.	
B4.9	Dead line anchor	Pressure sensor should be calibrated & tested.	
	Make, type, Capacity		
	Complete with Weight	Yes	
B5.0	Drilling line	Must install new line from Drum if Rig is stack from last	
	Size		
	Туре		
	Diameter	29mm (1-1/8") minimum-/ as per std	
	Length	1000m or sufficient length for the entire campaign. Ton- Mile/ KM record to be submitted	
B5.1	SUBSTRUCTURE	Must have foot rail & hand railing on ladders.	
	Height	Minimum clearance below to accommodate BOP Stack (Annulur, Double Ram, Drilling Spool, DSA). ground level.	
	BOP Lifting System	Lifting system installed under Substructure with crane and dolly.	
B5.2	Drawworks	Pneumatically activated twin stop protector system to protect crown and floor. Or As per Standard	
	Components conforming to	·	
	Rated input power	1000 HP	
	Brake System		
	Auxiliary Brake, Make,	Hydromatic	
	Make, Model		
B5.3	ROTARY		
	Load Capacity	Minimum 200T	
	Hole Opening	27-1/2" but not less than 22"	
	Master Bushing	Compatible with this Rotary Table	
	Kelly Bushing	Compatible with this Rotary Table	
	Lock down pins for	Yes	
	Rotary lock	Yes	
	Anti slip matting (rotary	Must required	

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	Rotary Bushing	Full Range of insert bowls to suit 20", 13 3/8", 9 5/8", 7" & 5 1/2"and 4 1/2"casing sizes	Petrochemicals
	Lifting sling and hooks	One for lift master bushing, other for casing bushing and inset	
B5.4	Kelly	5-1/4" and 3-1/2" HEX Kelly with compatible connections with Swivel. PressureRating:5000psi Includes Lower and Upper Kelly Cock Included Kelly Saver Sub	
B5.5	Driller's Console	<ol> <li>Includes Remote instrumentation Panel of Mud Pumps.</li> <li>Weight Indicator (0-350 ton Ton minimum) and Load Cell on Deadline Anchor.(calibrated)</li> <li>Rotary Torque Gauge</li> <li>Recording Device</li> <li>Output arrangement for remote data display.</li> </ol>	
B5.6	Emergency Shutdown	Driller's console	
B5.7	Catwalk, V-Door and Pipe	Compatible with the Rig Substructure.	
B6.0	Monkey Board Safety	4. Fall Arrestor	
B6.2	Hydraulic Winch (2 Nos.)	Minimum Load capacity 5T and 3T	
B6.3	Hydraulic Unit	To Operate Hydraulic Power Tongs if not available with the rig carrier.	
B6.4	Hydraulic Power Pack	To Operate Hydraulic Power Casing Tong.	
С	MUD PUMP	Provide Name of Manufacturer	
C1.1	Capacity	Capable to deliver 1200 GPM Combined F-1000 or equivalent	
C1.2	Quantity	2 Set/3 set	
C1.3	Engine	Capacity	
C1.4	Transmission	As per manufacture	
C1.5	Liner Size	As per manufacture	
C1.6	Skid	Mud Pump and Engine coupled and mounted on single skid for easy transportation on low-bed trailer.	
C1.7	Charging pump	Centrifugal/supercharger pump of sufficient power for feeding the mud pump. To be DGMS Approved.	
C1.8	Instrumentation panel	7. Throttle control system 8. Digital SPM and total strokes display 9. Pressure Gauge (0-5000 psi) 10. Electrical panel for power distribution 11. Remote instrumentation panel for rig floor 12. Rig should have full instrumentation systems and sensors for all equipment with two display monitors	

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C1.9	Working Pressure Rating	5000 psi	Petrochemicals	
C1.10	Pipe manifold	3. Manifold for suction from mud tank 4. Discharge Manifold		
C1.11	Pulsation Dampener	Standard		
C1.12	Shear Safety Valve	Standard		
C1.13	Bleed off Line	Standard		
C1.14	Mud Pump Hoses	Flexible hoses (5000 psi) for connection to stand pipe. Flexible hoses to connect to suction Tank		
C1.15	Strainer	Strainer installed in Suction and Discharge		
C1.16	Cooling System	Mud Pump cooling system installed with motor		
	, , , , , , , , , , , , , , , , , , ,			
D	SOLID CONTROL SYSTEM			
D1 1	Mud Tank Capacity	Circulation system 1200-1500 bbl+ Reserve tank 400-600 bbl. Mud Tank must be capable enough to encounter all Drilling sections i-e 17 ½", 12 ¼" & 8 ½" & Completions.		
D1.2	Trip Tank	Standard Configuration		
D1.3	Suction Tank and Mud	Standard Configuration		
D1.4	Shaker Tank	Standard Configuration.		
D1.5	Shaker Screen Sets	Various. 2 Each- API 100,120,160,180,200,220(Specified in Mud Program)		
D1.6	Hopper System	All tanks connected/installed with hopper system.		
D1.7	Agitator	All tanks installed with agitator.		
D1.8	Mud Gun/Jet Gun	All tanks installed with mud gun.		
	Shaker	Capable to handle 1200 GPM combined.		
D1.10	Other Equipment	Vacuum De-Gasser (separate pump for de-gasser, 35 HP or more) De-silter (separate pump for de-silter, 35 HP or more) Centrifuge (2700 rpm) Desander(ALL NEW CYCLON CONE REQUIRED)		
D1.11	Water Tank	50m3 with charging pump.		
D1.12	Fire Tank	53m3 with independent diesel engine and fire hydrant and 100m fire hose as per OMR and OISD standards		
D1.13	Cellar Pump	Qty:3		
D1.14	Pig House	Qty:1- Equipped with MUD Balance & vis meter		
Е	Electrical System	All electrical system to be DGMS, OISD, OMR approved.		
E1.1	Diesel Generator	Setup Enclosed in Container with adequate ventilation system.		
	Capacity	Capable to operate solid control system, motors, lighting and rig site Camp		
	Quantity	2 Sets/ as per requirement for operations on Rig.		
	Make	Caterpillar. Provide details: Model, Power Output		
	Starter	Air and Battery		
E1.2	MCC	Compatible for the above rig setup.		
		Provision for supply of Power to :		

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	<u></u>	<del> </del>	Petrochemicals
	Mud Logging Unit		
		MWD/LWD Unit	
		Mud Tanks	
		Rig Site Camp	
F	WELL CONTROL	-	
F1.1	BOP Stack (as per API) Composed of annular ,double rams, and drill spool. Conforming to API RP53, 16A 3rd Edition. BOP, Choke and Kill line suitable for water based and synthetic oil base mud .Temperature Level of rubber sealing part :BB Temperature Level of metallic part:T20 (-29°C~121°C)	13 5/8" BOP Stack of Annular and 13 5/8" Double Ram Pressure Rating: 5000 psi RAM: Blind, Pipe, Annular for Casing Size: 9-5/8", 7", 5 ½" and Drill Pipe Size: 5", 2-7/8". Tubing: 3-1/2", 2-7/8" API monogrammed. Contractor to provide all ring gaskets to connect with the well heads.	
F1.2	Drilling Spool/Mud Cross (as per API)	Size: 13 5/8" 5M Pressure Rating: 5000 psi Gate Valves: 4-/16" (HCR and Manual: 2Each) with coflex hose to connect with Choke and Kill Manifold.	
F1.3	DSA	Compatible with Wellheads annexure provide.	
F1.5	Choke and Kill Manifold	Standard Configuration (5000 psi). Choke Manifold: Conforming to API 53 Kill Manifold: Conforming to API 16C 2nd Edition.	
F1.8	Mud Gas Separator/Poor	Standard Configuration.	
F1.9	BOP Control Unit. Conforming to API Spec16D 2nd Edition.	Able to operate above BOP Stack configuration and Drilling spool. Flexible armored hoses from Control unit to BOP Stack. 2 Remote Control Panels: 1 on rig floor and 1 at a safe distance from the substructure. Usable fluid: To be able to Close all Rams + Open both HCR + 50% safety margin	
F1.10	Chickson Pipes (5000 psi minimum), 6O2 Hammer Unions	Sufficient elbow swivel joints. Include safety restrainers.	
F1.11	BOP Test Pump with recorder	Provide Make, Model, Pressure rating.	
F1.12	BOP Test Stump/Cup Tester	For all sizes mentioned above in conjunction with casing size: 5-1/2" 7", 9-5/8", 13-3/8"	
G	AUXILLIARY EQUIPMENT		
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G1.1	DIESEL TANK (1 Nos.)	For storing sufficient fuel at site for uninterrupted operations. Contractor to obtain required PESO approvals for the same.	responenticats.
G2.3	WELDING MACHINE	Electric Welding Machine	
Н	AIR COMPRESSOR	Capable to run the equipment on the rig. Installed with independent small diesel generator and provision of electric supply also.	
ı	HANDLING TOOLS		
I1.1	Drill Pipe Handling Tools		
	Manual Tong	For all standard hole size 17 $\frac{1}{2}$ , 12 $\frac{1}{4}$ , 8 $\frac{1}{2}$ & Completion sections.	
	Chain Tong	For all standard hole size 17 $\frac{1}{2}$ , 12 $\frac{1}{4}$ , 8 $\frac{1}{2}$ & Completion sections.	
	Elevator	For all standard hole size 17 $\frac{1}{2}$ , 12 $\frac{1}{4}$ , 8 $\frac{1}{2}$ & Completion sections.	
	Power Slip	For all standard hole size 17 ½", 12 ¼", 8 ½" & Completion sections.	
	Slips:	For all standard hole size 17 $\frac{1}{2}$ ", 12 $\frac{1}{4}$ ", 8 $\frac{1}{2}$ " & Completion sections.	
	Dog Clamps	For all standard hole size 17 $\frac{1}{2}$ ", 12 $\frac{1}{4}$ ", 8 $\frac{1}{2}$ " & Completion sections.	
	Pipe Spinner	For all standard hole size 17 $\frac{1}{2}$ , 12 $\frac{1}{4}$ , 8 $\frac{1}{2}$ & Completion sections.	
I1.2	Casing Handling Tools		
	Manual Tong	For: 5-1/2", 7" , 9-5/8", 13-3/8"	
	Hydraulic Tong and Power	For: 5-1/2", 7" , 9-5/8", 13-3/8"	
	Casing Slip	For: 5-1/2", 7" , 9-5/8", 13-3/8", Load capacity 250 T	
	Elevators	For: 5-1/2", 7" , 9-5/8", 13-3/8", Load capacity 250 T minimum	
	Casing Protector	For: 5-1/2", 7" , 9-5/8", 13-3/8"	
	Hydraulic/Pneumatic	7", 5-1/2"	
	Single Joint Elevator	For: 13-3/8", 9-5/8", 7", 5-1/2"	
	Circulation Head	For Casing Thread: BTC.	
J	TUBULARS		
J1.1	Drill Pipe (with stress relief grooves)	5" DP, IF thread, G-105 grade, 19.5 ppf, ID: 4.276", R2, Length:2500m. (Also suitable for Directional wells)	
		2 7/8" IF thread, G – 105 grade, 10.4 ppf, R2 range, Length: 2500 (Also suitable for Directional wells)	
		Pup Joints(2 Nos. each Size): for 5" IF and 2 7/8" IF DP Length: 2.5m, 3m, 4.5m, 5m, 6m	



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J1.2	Drill Collar (with stress relief grooves)	6-1/2", 300m. ID: 3", R2(Spiral with recess for elevator) 8", 3000m, ID: 2.75", R2 (Spiral with recess for elevator) 4 1/8", 150 m, R2 (Spiral with recess for elevator)	Petrocnemicals
J1.3	HWDP	5", 350m, ID: 3", R2 Also suitable for Directional wells	
J1.4	Bit Sub	For Bit Size: 4 3/4", 4 1/2", 6", 8-1/2", 12-1/4", 17 1/2"	
J1.5	Cross-Over	Appropriate Cross-Overs for above drill string BHA and hole size 12 ¼", 8 ½" and 9 5/8", 7" & 5 ½" cased hole completion string	
J1.6	Lifter	2 7/8" IF, 4-1/2" IF, 6-5/8" REG, 7-5/8" REG- For all standard Tubulars.	
J1.7	Drill Pipe Strainer	For 5" DP, 2-7/8" DP & 2 7/8" & 3 ½" tubing	
J1.8	FOSV	5000 psi for 5" DP,2 7/8" D/P 2 7/8" & 3 ½" tubing	
J1.9	Circulation Head	5000 psi rating, Hammer Union 6O2 for 5" and 2-7/8" IF Drill Pipe for 3-1/2" NUE, 2-7/8" EUE	
J1.100	Bit Breaker	For Bit Size: 4 ¾", 4 ½", 6", 8-1/2", 12-1/4", 17-1/2"	
J1.11	Bit Gauge	For Bit Size: 4 ¾", 4 ½", 6", 8-1/2", 12-1/4", 17-1/2"	
J1.12	D/P Wipers	5", 3-1/2", 2 -7/8"	
J1.13	Inside BOP	Qty: 1	
		Connection: To match 5" and 2-7/8" Drill Pipe	
		Working Pressure: 5000psi	
J1.14	Float Valve c/w provision to install float	QTY: 2. Check must compatible with ID of above bit sub, must have grove to install float v/v.	
J1.15	Drifts	For above tubulars as per API	
	Casing Scrapper	For casing size 5 ¾", 5 ½" ", 7", 9-5/8"	
	TOTCO System	Standard configuration	
К	FISHING KIT	Consist of Fishing Tools for 17 ½", 12 ¼" & 8 ½" Open Hole and Fishing Tools for 13 3/8", 9 5/8", 7" & 5 ½" Cased Hole.	
L	COMMUNICATION		
L1.1	Wireless Radio Intrinsically	QTY: 6	
М	SAFETY EQUIPMENT		
M1.1	Eye Wash Station	4	
		Location-Rig floor, mixing room, mud tank area and engine room.	
M1.2	Emergency Shower	2	
		Location- Mud Mixing room, other place	
M1.3	Derrick Safety Equipment		
	Derrick Escape Chute	1	
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		Inertial type	Petrochemicals
	Derrick Climbing Line	1	
		Inertial type	
	Derrick Safety Belts	3	
	Fall Arrestor	2	
M1.8	Emergency Light	3	
		Location: Rig Floor, escape ladder, Koomy Unit	
M1.9	Gas Detection Equipment	Multigas detector for H2S, CO2, and HC	
		Qty: 3(1no. fix gas detector and 2 no. Portable) as per DGMS,OMR, OISD.	
M2.0	Wind Socks	2	
M2.1	Fixed Firefighting	Standard as per OISD 189, DMGS, OMR	
M2.2	Portable Fire extinguisher	Standard as per OISD 189, DGMS, OMR	
M2.3	Fire Blankets	2	
	Stretchers: portable	1 ea.	
M2.5	General Alarm System	1	
M2.3	Other Equipment		
	Cold cutting equipment	Equipment for cutting casing in cellar.	
	Hydra	10 – Ton capacity hydra	
	Crane	40 – Ton capacity Crane	
N	RIG SITE CAMP		
N1.1	Office-cum-bathroom	For Company man (With Desktop, Printer and necessary amenities)	
N1.2	Office-cum-bathroom	For Tool Pusher (With Desktop, Printer and necessary amenities)	
N1.3	Office-cum-Bathroom	For Chief Electrician and Chief Mechanic (With Desktop, Printer and necessary amenities)	
N1.4	Clinic-cum- Accommodation	For Wellsite Doctor (Clinic as per standard )	
N1.5	Canteen	20 ft Bunk Rig Site Canteen for Rig Crew with a capacity of 10 person Seating.	
N1.6	Toilet	20 ft Bunk with minimum 4 Toilets W/C, 4 Urinals and 2 Wash basin	
0	Top Drive System	NOV/CANRIG/TESCO- SA type	
		Capacity: Minimum 200 - 250 Ton	
		Capable to drill 3000 mtr well	

NOTE: Contractor need to propose all tools, equipment, material required for completing Drilling and Completion operations other than above list as per Integrated Drilling Services Package.



#### **END OF TENDER DOCUMENT**