

Telephone No. (91-374) 2808720

Fax No: (91-374) 2800533

Email: mmfd1@oilindia.in; materials@oilindia.in; erp\_mm@oilindia.in

Tender No. & Date : **SDG6874L18/09 dated: 08.01.2018** 

Tender Fee : **NOT APPLICABLE** 

Bid Security Amount : INR 46,39,000.00 OR USD 71,500.00

Bidding Type : **SINGLE STAGE TWO BID SYSTEM** 

Pre-bid Conference : 30.01.2018 & 31.01.2018; 09:00 AM onwards

dates, time & Venue Venue: Well Logging Department, Oil India Limited,

Duliajan, Assam -786602.

Bid Closing on : **07.03.2018 (at 11.00 Hrs. IST)** 

Bid Opening on : **07.03.2018 (at 14.00 Hrs. IST)** 

Bid Validity : Bid Should be valid for 120 days from bid closing

date.

Bid Bond Validity : Bid Bond Should be valid up to 07.10.2018

Performance Guarantee : Applicable @ 10% of Order value

Integrity Pact : **Applicable** 

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No	Item Description Quantity	
10	Cased Hole Logging Unit with tools & accessories	1 No.
20	MIT & MTT	2 Nos
30	2.1/8" downhole tractor	1 No
40	Training & Inspection (item no. 10, 20 & 30)	1 AU
50	Installation & Commissioning (item no. 10, 20 & 30)	1 AU

List of Annexures applicable to the tender in addition to references therein:

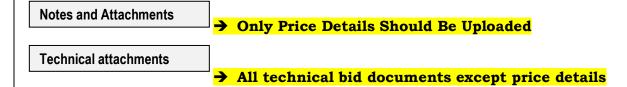
ANNEXURE- I : Page no. 2 to 8 of this document.

ANNEXURE- II : Page no. 9 to 92 of this document.

### **GENERAL NOTES TO BIDDERS**

Sl	Clause description
No	
1.0	Bid Security/EMD/Performance Bank Guarantee – Must be paid either through
	online mode or Submission of Bank Guarantee/LC only. No DD/Cheques/ Cashier Cheque or any other mode will be acceptable.
	Cashiel Cheque of any other mode will be acceptable.
2.0	a) A Pre-Bid Conference is planned to be held at Well Logging Department, Oil India Limited, Duliajan, Assam-786602 on 30th & 31st January' 2018 to explain the requirements of Company in details to the interested prospective Bidders and to understand bidders' perspective including exchange of views/clarifications, if any, on the Scope of Work, Bid Rejection/Bid Evaluation Criteria and other terms & conditions of the Tender. Bidders interested to attend the pre-bid conference as above must contact/ communicate with MM(FD), Oil India Limited, P.O. Duliajan-786602, ASSAM, Phone: 91-374-2808720, Fax: (91)374-2800533, E-mail: mmfd1@oilindia.in well in advance regarding the venue & other related details.
	<b>b)</b> Maximum two (2) representatives from each prospective bidder (authorized to participate in the tender), shall be allowed to participate in the pre-bid conference. All costs associated to attend the pre-bid conference by their representatives shall be borne by the interested Bidders.
	c) The prospective bidders may submit their queries, if envisaged against the tender conditions any, through e-mail/fax/letter to the above mentioned address at least one week prior to the date of pre-bid conference. OIL expects that the Bidders should comply to the tender conditions in toto. However, clarifications/exceptions/deviations, if required any, should be brought out by the bidders prior to or during the Pre-Bid Conference only. After processing these suggestions, as a sequel to the pre-bid conference, Company shall communicate the changes in this regard, if agreed any, through an addendum to tender document in e-portal.
3.0	The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e-Procurement.
4.0	Bid must be submitted online through OIL's e-procurement portal. Bid submitted in any other form will be rejected.
5.0	Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribing tender no. and due date to The DGM Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before 13:00 hrs (IST) on the Bid Closing Date mentioned in the Tender.

- a) Original Bid Security along with two duplicate copies of Bid Security.
- b) Any other documents which have been particularly asked for in this tender for submission.
- 6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time, failing which the offer shall be rejected.
- 7.0 The tender is invited under **SINGLE STAGE-TWO BID SYSTEM**. The bidder has to submit both the **"TECHNO-COMMERCIAL UNPRICED BID"** and **"PRICED BID"** through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The "Techno-commercial Unpriced Bid" shall contain all technical and commercial details except the prices which shall be kept blank. Details of prices as per Bid format / Commercial bid to be uploaded as attachment in the Attachment Tab "Notes and Attachments". Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.



Please do refer "NEW INSTRUCTION TO BIDDER FOR SUBMISSION" for the above two points and also please refer "New Vendor Manual (effective 12.04.2017)" available in the login Page of the OIL's E-tender Portal.



8.0 In Technical Bid opening, only Technical Rfx will be opened. Therefore, the bidder should ensure that "TECHNO-COMMERCIAL UNPRICED BID should contain details as mentioned in the technical specifications as well as BEC/ BRC and upload the same in the Technical RFx Response-> User - > Technical Bid. **No price should be** 

	given in above Technical Rfx otherwise the offer will be rejected. Please go
	through the help document in details before uploading the document and ensure uploading of technical bid in the Technical RFx Response-> User - > Technical Bid only. The "PRICE BID" must contain the price schedule and the bidder's commercial
	terms and conditions. Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments".
9.0	PRICED BIDS OF ONLY THOSE BIDDERS WILL BE OPENED WHOSE OFFERS ARE FOUND TO BE TECHNO-COMMERCIALLY ACCEPTABLE.
10.0	Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.
11.0	Please mention clearly in your quotation the Net. Weight, Gross Weight & Volume, Indian Agent's Name and its Commission, Payment Terms, Ocean Freight/Air Freight Charges, Port of Loading, Delivery period, Country of origin with manufacturer's name, etc.
12.0	To ascertain the substantial responsiveness of the bid, OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by OIL, failing which the offer will be summarily rejected.
13.0	Other terms and conditions of the tender shall be as per "General Terms & Conditions" for e- Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders). However, if any of the Clauses of the Bid Rejection Criteria (BRC) / Bid Evaluation Criteria (BEC) mentioned here contradict the Clauses in the "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.
14.0	All the Bids must be Digitally Signed using "Class 3" digital certificate (e-commerce application) only as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than "Class 3" digital certificate, will be liable for rejection.
15.0	Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.
16.0	The items shall be brand new, unused & of prime quality. The manufacturer shall warrant (in the event of an order) that the product supplied will be free from all defects & fault in material, workmanship & manufacture and shall be in full conformity with ordered specifications. This clause shall be valid for 18 months from date of shipment or 12 months from date of commissioning and handing over to OIL, whichever is earlier. The defective materials, if any, rejected by OIL shall be

placement of order. The minimum FOB/FCA charges in case of partial order for reduced quantity/enhanced quantity shall have to be indicated by the bidder. It case, this is not indicated specifically, the charges quoted would be pro-rat calculated and the same will be binding on the bidder.  18.0 Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.  19.0 The Integrity Pact is applicable against this tender .OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure XII of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed ((digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact with the bids shall be rejected straightway.  OIL's Independent External Monitors at present are as under:  SHRI RAJIV MATHUR, IPS (Retd.), Former Director (IB) Govt. of India e-Mail ID: rajivmathur23@gmail.com  SHRI SATYANANDA MISHRA, IAS(Retd.) Former Chief Information Commissioner & Ex-Secretary, DOPT, Govt. of India E-mail Id: satyanandamishra@hotmail.com  SHRI JAGMOHAN GARG, Ex-Vigilance Commissioner, CVC e-Mail id: jagmohan.garg@gmail.com  Original Bid Closing Date shall be considered by OIL for evaluation of BRC Criteria in case of any extension of the original bid closing date.  21.0 Performance Security clause (Clause No. 10.0 of Section-A) of "General Terms of Conditions for Global Tenders (MM/GLOBAL/01/2005)" has been amended and the new clause is detailed in the Amendment dated 25.04.2016 issued the MM/GLOBAL/01/2005. Successful bidder will be required to furnish Performance Bank Guarantee @10% of the order value. Bidders to note the same and to		replaced by the supplier at their own expense. Bidders must confirm the same in
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following details:	21.0	The Bank Guarantee issued by bank must be routed through SFMS platform as per

- a. (i) "MT760 / MT760 COV for issuance of bank guarantee
  - (ii) MT767/MT767 COV for amendment of bank guarantee

The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Duliajan Branch, IFS Code: UTIB0001129. Branch Address: Axis Bank Ltd., Duliajan Branch, Daily Bazar, Jyotinagar, Duliajan, Dist-Dibrugarh, Pin- 786602.

- b. The vendor shall submit to OIL the copy of the SFMS message as sent by the issuing bank branch along with the original bank guarantee.
- 22.0 Bidder to sign and submit completely filled up Technical & Commercial check list and Technical Evaluation Matrix for Bid evaluation criteria and Technical specification failing which their offer will be rejected.
- Payment terms: 80% payment will be made against supply of materials and balance 20% after satisfactory installation & commissioning at site along with the installation & commissioning charges. Bidders must confirm the same while quoting.
- 24.0 Liquidated Damage: Refer to "General Terms & Conditions" for e- Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders). The applicable GST on the Liquidated Damage shall have to be borne by the Seller. Accordingly, the Liquidated Damage shall be recovered from the Seller along with applicable GST.
- The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued/renewed after 01/04/99 and hence Nil Customs Duty during import will be applicable. Indigenous bidder shall be eligible for concessional rate of GST against Essentiality Certificate for invoice valuing 10 lakh and above.

In the event of an order on indigenous bidder, OIL will issue Project Authority Certificate (PAC) under Deemed Export, where import content is declared by the bidder for availing Custom Duty benefit on the import content.

Supplier shall arrange to provide all necessary documents to apply for the essentiality certificate on receipt of request from OIL, if any. Further, supplier shall affect dispatch only on receipt of relevant certificates from OIL, failing which all related liabilities shall be to Supplier's account.

#### 26.0 | Clauses related to GST

- 1. For the purposes of levy and imposition of GST, the expressions shall have the following meanings:
  - (a) GST means any tax imposed on the supply of goods and/or services under GST Law.

- (b) Cess means any applicable cess, existing or future on the supply of Goods and Services as per Goods and Services Tax (Compensation to States) Act, 2017.
- (c) GST Law means IGST Act 2017, CGST Act 2017, UTGST Act, 2017 and SGST Act, 2017and all related ancillary Rules and Notifications issued in this regard from time to time.
- 2. The rates quoted by the bidders shall be inclusive of all taxes, duties and levies. However, bidders are required to provide separately the rate and amount of all types of taxes, duties and levies. In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference in case the rate of duty/taxes finally assessed is on the lower side. Further, bidders have to clearly show the amount of GST separately in the Tax Invoices. Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.
- 3. Offers without giving any of the details of the taxes (Including rates and amounts) as specified above will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.
- 4. Bidders are required to pass on the benefit arising out of introduction of GST, including seamless flow of Input Tax Credit, reduction in Tax Rate on inputs as well as final goods by way of reduction of price as contemplated in the provision relating to Anti-Profiteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the bidders should confirm that benefit of lower costs has been passed on to OIL by way of lower prices/taxes and also provide details of the same as applicable. OIL reserves the right to examine such details about costs of inputs/input services of the bidders to ensure that the intended benefits of GST have been passed on to OIL.
- 5. Oil India Ltd. shall declare the value of free issue of materials and services, if any, involved in the execution of the contract. The Contractor should consider the same while working out the GST liability, if any. Further in cases where GST is leviable on any facilities provided by OIL and used by bidders and the consideration for which is recovered by OIL in the form of reduction in the invoice raised by bidders then OIL will raise GST invoices on such transactions and the same will be reimbursed by bidders.

### 6. When Input tax credit is available for Set Off

Evaluation of L-1 prices shall be done based on Quoted price after deduction of Input Tax Credit (ITC) of GST, if available to OIL.OIL shall evaluate the offers on the basis of the quoted rates only and any claim subsequently by the bidders for additional payment/liability shall not be admitted and has to be borne by the bidders

#### When Input tax credit is NOT available for Set Off

Evaluation of L-1 prices shall be done based on Quoted price only. OIL shall evaluate the offers on the basis of the quoted rates only and any claim subsequently by the bidders for additional payment/liability shall not be admitted and has to be borne by the bidders

7. Bidders agree to do all things not limited to providing GST compliant Tax

- Invoices or other documentation as per GST law relating to the supply of goods and/or services covered in the instant contract like raising of and /or acceptance or rejection of credit notes / debit notes as the case may be, payment of taxes, timely filing of valid statutory Returns for the tax period on the Goods and Service Tax Network (GSTN), submission of general information as and when called for by OIL in the customized format shared by OIL in order to enable OIL to update its database etc. that may be necessary to match the invoices on GSTN common portal and enable OIL to claim input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.
- 8. In case Input Tax Credit of GST is denied or demand is recovered from OIL by the Central / State Authorities on account of any non-compliance by bidders, including non-payment of GST charged and recovered, the Vendor/Supplier/Contractor shall indemnify OIL in respect of all claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. OIL, at its discretion, may also withhold/recover such disputed amount from the pending payments of the bidders.

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# TECHNICAL SPECIFICATIONS FOR CASED HOLE LOGGING UNIT WITH LOGGING TOOLS AND ACCESSORIES

#### **PREAMBLE**

OIL INDIA LIMITED (OIL) intends to procure 01 (ONE) no. of new, state-of-the-art, heavy duty, computerized, truck-mounted, integrated Cased Hole Logging Unit with downhole logging tools and accessories to carry out Wireline Cased Hole services and logging operations in Oil/Gas wells.

The Cased Hole Logging Unit must be a Computerized Truck mounted integrated Unit of latest technology. The Unit should cater to Wire Line Cased Hole services and logging operations in oil/gas wells upto 6000 meters depth. It must have all basic fittings and performance specifications conforming to logging operations as per international standards in addition to those specified below.

### SECTION - A **AUTOMOBILE AND HYDRAULIC SECTION**

The Logging Unit should be ergonomically designed, heavy duty type logging unit to be used in rough terrain, typical oil field roads and desert environment. The bidders should confirm that the offered model will be suitable for mounting complete logging cabin with all requisite hydraulic, pneumatic systems, tool racks etc., with documentary evidence. Complete specifications along with drawings, part numbers, part wise vendor/ manufacturers' lists, catalogues etc., are to be provided. The model offered should be state-of-art and conform to international quality standard norms.

#### TRUCK CHASSIS: 1.0

The truck chassis shall be of Kenworth / Peterbilt / International make only having specifications, fitments, accessories etc. as under-

Note: The Technical leaflets/brochure of the offered model truck chassis shall be submitted along with bid.

#### 1.1 **DIMENSIONS (COMPLETE UNIT WITH LOGGING CABIN):**

Overall Width -Not more than 2.60 meters.

Overall Height -Within 4.0 meters (approx.) from ground.

Overall Length -Within 11.00 meters.

Ground Clearance - Not less than 25.00 cm. However, if necessary, the bidder should mount

subsequently fitted under carriage component (i.e. other than those originally mounted components) at maximum height. The bidder has to submit GA (General Arrangement) drawing of the offered unit along with the bid.

#### 1.2 ENGINE:

Water-cooled diesel engine developing approximate 350-400 HP at rated RPM suitable for road drive of the truck as well as logging operation up to a depth of 6000 meters. While the engine shall conform to BS-IV / EURO-IV Emission standard. Engine must comply with EURO-IV diesel fuel only. The bidder must offer engine of make Caterpillar/Cummins/International only.

#### 1.3 TRANSMISSION:

Manual Transmission preferably Eaton Fuller with minimum 6 forward and 1 reverse speed shall be provided for both road drive and Logging Operation. The offered Transmission shall be compatible with the engine. Suitable Transfer Case & PTOs as per design / requirement shall be provided. The make and model of the offered transmission, transfer case, PTOs etc. shall be clearly indicated in the bid with supporting technical leaflets etc.

Fully automatic Transmission; Semi-Automatic/Automated Transmission are not acceptable.

### 1.4 DRIVE, COWL & STEERING:

**Drive**: 6 x 6 Drive (All live axles - one front, two rear). While normal drive shall be under 6 x 4 option, there shall be provision to shift to 6 x 6 drive option as &when required.

Cowl Design: Semi Forward Control (SFC) only.

**Steering**: Right Hand Drive Hydraulic Power Assisted Steering (Steering on Right Hand Side inside the driver's cabin).

Radius of Minimum Turning Circle(MTC) not more than 18.00meters.

#### 1.5 SUSPENSION, GVW & AXLES:

- A. Front Suspension Heavy Duty Multi-leaf Spring suspension of suitable design with Shock absorbers. Rear suspension Rocker Beam (Walking Beam) with auxiliary leaf springs suspension of suitable design with Shock absorbers. Air Spring type suspension (both at front & rear) is not acceptable. Details of suspension along with relevant technical leaflet shall be submitted along with the bid
- B. Total Laden Weight Within 30,000 Kg.
  Front Axle As per design. The total numbers of front axles offered should be clearly indicated in the bid. The make, model and capacity of the axles offered should be clearly indicated in the bid along with supporting technical leaflets etc.

Rear Axles - As per design. The total numbers of rear axles offered should be clearly indicated in the bid. The make, model and capacity of the axles offered should be clearly indicated in the bid along with supporting technical leaflets etc.

- C. Rear axles shall have Inter Axle Lock facility.
- D. Actual loading on each individual axle (all front and rear) shall be within maximum load bearing capacity of the respective axlei.e. Total Weight (Total Laden Weight) of the unit with all items/equipments shall be within Maximum Permissible Gross Vehicle Weight (i.e. Total Axle Capacity) of the truck unit.

#### 1.6 WHEELS & RIMS:

Suitable wheels (2 Nos. at Front Axle, 8 Nos. at Rear Axles) with tube & tyre of adequate ply rating with two sets of complete spare wheels for the unit(tyre, tube, flap & rim) (even in case of same front and rear wheels). It is desired that bidder should offer front and rear wheels of same size & type. If not possible for design constraint, two spare wheels – one for each type shall be supplied along with the unit. Suitable lifting and mounting arrangement facility for the spare wheels shall be provided. **Single giant tyre(s) are not acceptable.** 

### 1.7 BRAKES (Vehicle):

- A. Service Brake Multiple Circuit Pneumatic S Cam / Z-Cam brake acting on all wheels.
- B. Parking/Emergency Brakes Manual Hand Operated Parking Brake acting on all wheels. It shall automatically get engaged in the event of low/no air pressure.
- C. All Emergency/Parking Brake Servos shall have manual release mechanism (Screw Type) to release the brake manually in case oflow/no air pressure for maintenance.
- D. All air tanks shall have Drain Plugs.
- E. All wheel brake-drums shall have dust cover.
- F. Buzzer warning for low pressure.

#### 1.8 FUEL TANK:

The Fuel tank shall be of metallic having adequate capacity to cater fuel demand for at least30 Hrs. of continuous full load logging operation. Suitable strainer at the opening of the tank to prevent entry of foreign materials and locking arrangement shall be provided. The bidder should mention fuel capacity of the tank fitted in their offered truck.

#### 1.9 DRIVER'S CABIN:

Factory built (original built & supplied with chassis by chassis manufacture)ergonomically designed floating steel/aluminum driver's cabin complete with Air Conditioner and all standard fittings/accessories. The driver's cabin must be with Semi Forward Control (SFC) Cowl only.

#### 1.10 OTHER FITTINGS AND ACCESSORIES:

- A. Since the truck will be driven on Indian roads having traffic rules for Right Hand Drive vehicles only, sufficient and suitable Side marker lights, Hazard warning lights, rear and side reflectors, etc. as well as Air Horn in addition to Electric Horn shall be provided for safe road movement. While all lights shall be covered to the extent possible with suitable guard to prevent damage, all electrical fittings/components/connections shall be suitable to operate in hazardous oilfield area.
- B. All gauges & meters including Engine Tachometer & Hour Meter as per standard inside the driver's cabin are to be provided. The Speedometer & the Odometer shall be with Metric KM calibration system only. It shall be bidder's endeavor to provide the Engine Oil Pressure & Temperature meters, Air Pressure Meter, Transmission Oil Pressure & Temperature meters (if any) with high-low warning buzzers. In addition, similar types of Engine Oil Pressure & Temperature meters, Engine Tachometer as well as Transmission Oil Pressure & Temperature meters (if any) shall be provided inside the logging cabin. The temperature gauge should have centigrade scale.
- C. Suitable Reversing Audio Alarm with Blinker lights at rear of the unit.
- D. Suitable Air Dryer with replaceable type filter element in truck pneumatic system.
- E. Well-covered and non-conducting material wrapped Vertical Exhaust located behind and projected above the top of the driver's cabin.
- F. Suitable heavy-duty Towing Hooks both at front and rear capable ofpulling/towing the unit from bogged down situation in slushy areas in oil fields from front as well as rear.
- G. Electrical equipments like starter, alternator, etc. shall be of reputed Make.
- H. Suitable electrical Master Switch to engage all electrical circuits from battery.
- I. Well covered Battery box, Standard Tool Kit in a portable box for general maintenance of the truck, heavy duty Grease gun, wheel wrench & handle,2(two) Nos. 30 MT capacity hydraulic jack with handle02 (two) Nos. stopper Block for rear wheels to prevent accidental movement of unit while in stationary position, etc. along with the unit.
- J. Suitable 2(two) Nos. jack support plates at rear end of the chassis/body to level the truck in slushy ground.
- K. Fire Extinguisher and First Aid Box etc. as per standard inside driver's cabin for the unit.

L. To fix flour cent striker strip (preferably 3m make) on the front, rear and both side of the cabin as per the following color code:

Front: White, Rear: Red and Side: Yellow

#### 2.0 HYDRAULIC SYSTEM FOR LOGGING OPERATION:

The hydraulic system for logging operation shall be as per manufacture's design. However, the design shall ensure that the brakes of winch drums remain engaged until and unless the drums are selected for operation or the brakes are released. All hydraulic hoses shall be properly marked (at both the ends) for easy identification during maintenance/replacement. Hoses to be used should be of Parker/Gates/Eaton or reputed make of International Standard. Additionally fully pneumatic brakes for both the drums to be provided with hand operated lever located inside the Logging cabin near the operator's console.

#### 3.0 MANUALS & CATALOGUES:

The following Manuals & Catalogue in printed form in English Language shall be supplied along with the unit in addition to supply of the same in compact disc (CD)format. Supply of the manuals/catalogues only in compact disc format is not acceptable. Similarly, all the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY — not the generalized ones.

COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETEUNTIL & UNLESS ALL THE PRINTED MANUALS/CATALOGUES ARESUPPLIED.

- a. 3(three) sets of printed Spare Parts Catalogue and Workshop & Service Manual for all components/systems of the truck chassis like engine, transmissions, axles, brake, suspension, electrical & pneumatic systems, etc. with complete schematics of electrical & pneumatic circuits.
- b. 3(three) sets of printed Spare Parts Catalogue and Workshop & Service Manual in English Language for all components of the hydraulic systems for logging operation like hydraulic pumps, motors, winch drums, torque hubs(gearboxes) of winch drums, spooler arm, electrical/electronic control system of hydraulic operations, control panel circuitry, etc. complete with all hydraulic schematics (circuits) showing and labeling all components including hoses/pipes. Above shall be complete with functional logic explanation.

#### 4.0 SPARE PARTS:

All spares in specified quantity as indicated in the Automobile Spare Parts List vide **Para 5.3** below shall be supplied along with the unit. Specific description, Part Nos., Make, etc. of each and every item (spare) shall clearly be indicated in the Techno-commercial bid.

#### 5.0 BID SUBMISSION & DOCUMENTATIONS:

Bidder's response to all NIT stipulations should clearly be defined. Bidder shall furnish specific details/specifications of all major components, systems with Make &Model, etc. Generalized response like - 'As per NIT Specifications/Technical Leaflet', 'Noted', 'Accepted' or in any similar fashion is not encouraged. It shall be bidder's endeavor to offer the following items as per makes &models indicated against each item (other suitable makes & models are however equally acceptable in case of operational and/or design requirements supplemented with proper justification).

Transmission: Manual Transmission preferably Eaton Fuller.

Hydraulic Pump & Motors: Mannesmann Rexroth / Packer/Eaton.

Transfer Case: Fabco

Torque Hub (if any): Fairfield

Wheel/ Tyre Size: Front- 425/65 R22.5 or 315/80R-22.5, Rear- 11.00 R 22.5 or 295/75R-22.5 or Available Indian Make Tyres of size: Front- 14.00X20 and Rear-12.00X20 of suitable Ply rating.

### 5.1 The following documents shall be submitted along with the bid for bid evaluation:

- a. Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, power take off unit, transfer case (if any), axle, suspension, steering, wheel & rim, brake, etc.
- b. Detailed dimensional layout drawing/s illustrating Driver's Cabin, Logging Cabin, Rear Cabin and all major items/components.
- c. Technical leaflets with detailed specification, Make & Model of all hydraulic pumps, motors, torque hubs (gearboxes) of winch drums, brake mechanism of winch drums etc.
- d. List of items that shall be supplied under Engine Fault Diagnostic Tools (both Software as well as complete Hardware).
- e. List of tools that shall be supplied under Standard Tool Kit for general maintenance of the truck.

- f. Specific description, Part Nos., Make, etc. of each and every item (spare) as detailed in the Spare Parts List provided in the NIT.
- g. List of additional spares, if any, for 2(two) year maintenance as felt necessary but not covered in the Spare Parts List provided in the NIT with Description, Part Nos., Make, etc. (for future reference/procurement only, not for bid evaluation).
- h. A Checklist as per enclosed format shall be furnished along with the Techno commercial bid.

#### 5.2 The following documents are to be submitted along with the unit:

- a. Sale Letter, Pollution & Roadworthy Certificate (in similar format of Form 21, 22 & 22A of Indian Motor Vehicle Act sample copies enclosed), Engine Emission Norms Certificate, etc. as required under Indian Motor Vehicle Act for registration of the unit in the name of Oil India Limited. Additionally, Type Approval Certificate from chassis manufacturer duly certified by inspecting authority of the country of origin and Body Fabrication Approval certificate from body builder to be provided. In this regard, the bidder is requested to note the conditions given in Chapter-87 of ITC (HS), 2012, Schedule-1- Import Policy, Section: XVII of INDIA.
- b. Final Chassis Built Up/Vehicle Content Record documents from chassis manufacturer.
- c. Notwithstanding any clause mentioned elsewhere in the NIT, the Invoice for the complete unit shall be submitted in 2(two) parts separately asunder:
- i. Invoice for truck chassis and driver's cabin: it shall include the cost of the truck chassis with driver's cabin and cost of fabrication of the logging cabin only.
- ii. Invoice for logging equipments: it shall include cost of all other requipment, draw works, hydraulic system, winch, tools, accessories, etc. subsequently fitted in the original truck chassis and suppliedseparately as part of the unit.
- 5.3 AUTOMOBILE SPARE PARTS LIST: The following spares for the unit shall be quoted separately (in the price bid only) cost of which shall be considered for evaluation of the offers.

### **Annexure-A1**

### **AUTOMOBILE SPARES**:

SN	Description	Quantity			
-	A: ENGINE				
1	Fuel Filter Element	20 Nos.			
2	Water Separator Element	20 Nos.			
3	Engine Oil Filter Element	20 Sets			
4	Air Filter Element	20 Sets			
5	Water/Corrosion Filter Element	20 Nos.			
6	Fan Belt	8 Sets			
7	Alternator Belt	8 Sets			
8	Compressor Belt	8 Sets			
9	AC Compressor Belt	8 Sets			
10	Water Pump Assembly	4 Sets			
11	Water Hose	8 Sets			
12	Engine Mounting	4 Sets			
13	All Sensors for the engine (if applicable)	2 Sets			
14	Engine Control Module (ECM) (if applicable)	1 No.			
15	Engine Harness	2 sets			
16	Throttle Pedal	2 Nos			
E	B: TRANSMISSION				
1	Clutch Disc Assembly	6 sets			
2	Pressure Plate Assembly	4 Sets			
3	Release Bearing	6 Sets.			
4	Release Bearing Fork	4 Sets.			
5	Transmission Mounting	4 Sets			

C: T	RANSFER CASE & POWER TAKE OFF (PTC	0)
1	Transfer Case Assembly	1 No.
2	Oil Filter Element, if any	8 Sets
3	Mounting	4 Sets
4	Oil Seal	4 Sets
5	PTO repairing Seal Kit	10 Sets
6	PTO Assembly	02 Nos.
D:	FRONT AXLE	
1	Wheel Stud with Nut(s)	4 full sets for 2 wheels
2	Axle Stud with Nut	4 full sets for 2 wheels
3	Wheel Hub Oil Seal	8 full sets for 4 wheels
4	Wheel Hub Bearing	4 full sets for 1 wheel
5	Differential Oil Seal	4 Sets
E: 1	REAR AXLE	
1	Wheel Stud with Nut(s)	4 full sets for 4 wheels
2	Axle Stud with Nut	4 full sets for 4 wheels
3	Wheel Hub Oil Seal	4 full sets for 8 wheels
4	Wheel Hub Bearing	2 full sets for 2 wheels
5	Differential Oil Seal	4 full sets for both differentials
6	Differential Filter Element (in any)	4 Sets
F: I	DRIVE LINE (Propeller Shaft)	
1	UJ Cross (Spider and Bearing) for Front	2 Sets (1 set comprising of 02 Nos. Spider and Bearing)
2	UJ Cross (Spider and Bearing) for Rear	4 Sets. (1 set comprising of 06 Nos. Spider and Bearing).
3	UJ Cross (if any) for Hyd. Pump	4 Sets
4	Drive Line Assy. for PTO drive	2 Sets
G:	STEERING	

1	Steering Oil Filter Element	8 Nos.		
2	Steering Pump Repair Kit 4 Sets			
3	Steering Box/Cylinder Repair Kit 4 Sets			
4	Tie Rod End (for both sides)	2 Sets		
5	Steering Pump complete	2 Nos.		
6.	Steering Gearbox	2 Nos.		
H: E	BRAKE & PNEUMATIC CIRCUIT			
1	Foot Brake Valve Repair Kit	6 Sets		
2	Front Wheel Servo	4 Nos.		
3	Rear Wheel Servo	8 Nos.		
4	Air Dryer Filter Element	8 Nos.		
5	All Pneumatic Valves (Quick Release Valve, Relay Valve etc.)	2 Sets each		
I: SI	JSPENSION			
1	Heavy duty multi leaf spring (Front)	4 Sets (Complete)		
2	Rocker beam (Walking Beam) with auxiliary leaf 4 sets. (Complete) spring (Rear)			
J: E	LECTRICAL			
1	Engine Starter (for truck engine)	2 Nos.		
2	Alternator (for truck engine)	2 Nos.		
K: F	IYDRAULIC SYSTEM & ITS COMPONENTS			
1	Torque hub assembly (if applicable) for L/D	1 No.		
2	Torque hub assembly (if applicable) for S/D	1 No.		
3	Torque hub repair Kit	2 Sets for L/D		
4	Torque hub repair kit	2 sets for S/D		
5	Hydraulic Pump for winch operation	1 No.		
6	Hydraulic Pump for alternator drive	1 No		
7	Hydraulic motor for winch operation(L/D)	1 No.		

8	Hydraulic motor for winch operation(S/D)	1 No.
9	Hydraulic Filter Element	10 Sets
10	Repair Seal Kit for Hydraulic Pump	2 sets for each pump
11	Repair Seal Kit for Hydraulic Motor	2 sets for each motor
12	Repair Seal Kit for all Hydraulic Valves	2 sets for each valve
13	Hydraulic Hose (all the hoses used in the system)	2 Sets
14	Repair Seal Kit for Torque Hub	2 sets for each hub
15	Repair Seal Kit for all other Hydraulic Actuators	2 sets for each actuator
16	High/Low Clutch control Valve	4 Nos.
17	Brake Valve for Winch	2 Nos.
18	Solenoid for Pump Control	8 Nos.

#### NOTE:

- 1. All spares in specified quantity as indicated above shall be supplied along with the unit.
- 2. Specific description, Part Nos., Make, etc. each and every item shall clearly be indicated in the bid.
- 3. Bidder shall also quote separately for any additional spares with similar details as felt necessary but not covered in this list for future reference/procurement not for bid evaluation.
- 4. Following items shall be quoted (In the price bid only) by the bidder separately in the prescribed format, which may be procured against order from the successful bidder.

  Price quoted for this list shall not be considered for bid evaluation.

### **Annexure-A2**

Srl. No.	Name of the Part	Part Number	Cost per Unit
1	ECM of the offered Engine	- Italiiboi	
2	Wiring Harness from Driver's cabin to		
	engine		
3	Wiring Harness from Logging operator's		
	cabin to engine		
4	Sensors for the engine (all sensors present		
	in the engine)		
5	Injectors		
6	Water Pump		
7	Wheel Rim		
8	Brake Shoes		
9	ECM for ABS		
10	Sensors for ABS		
11	Clutch Disk of manual Transmission		
12	Clutch Cylinder repair Kit- if available (of		
	manual transmission)		
13	Seal Kit for Transfer Case (in case		
	Transfer Case is present)		
14	All major valves present in Hydraulic ckt.		
15	Repair kit for actuators-spooler etc.		
16	Charge Pump for Main Pump		
17	Charge Pump for Motor for driving the		
	Alternator		
18	Tires for Wheel		

## **Annexure-A3**

## CHECKLIST

### Part A TECHNICAL:

SI. No	PARA	METERS/REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARK S, IF ANY
1.	Overall Dimension complete unit	ons (Width, Height & Length) of		
2.	Ground Clearand	ce		
3.	Make & Model of	f Chassis		
4.	Wheelbase			
5.	Engine	a Make & Model		
		b Max. Output Power		
		c Max. Output Torque		
		d Naturally Aspirated or		
		Turbo Charged		
		e Emission norms		
		f Control System (Electronic)		
6	Transmission	a Make & Model		
		b No. of gears		
		c High/Low option		
7.	Make, Model & T	ype of Transfer Case (if any)		
8.	Drive			
9.	Cowl Design			
10.	Make, Model & Type of Steering System			
11.	Radius of Minimum Turning Circle (MTC)			
12.	Make, Model & Type of Front Suspension			
13.	Make, Model & Type of Rear Suspension			
14.	Max. Permissible Gross Vehicle Weight			
15.	Total weight of the unit (i.e. Total Laden Weight)			
16	No of Front Axle			
17	Make & Model of Front Axle			

18	No of Front Axle		
19	Make & Model of Rear axle		
20	Axle capacity	a Front	
		b Rear	
21	Axle Loading	a Front	
		b Rear	
22	Inter Ayle Leek fa		
22		cility for rear tandem axles.	
23	No of Front Tyre		
24	No of Rear Tyre		
25	No of Spare whee		
26	Type, Size of	a Front	
	Wheel & Tyre	b Rear	
27	Type of Comice	a Front	
27	Type of Service Brake	a Front	
	Diake	b Rear	
28	Type of Wheel	a Front	
20	Type of Wheel Brake		
		b Rear	
29	Fuel Tank capaci		
30		nent & capacity in Driver's cabin.	
31		with Blinker Lights	
32	_	equipments suitable for hazardous	
	oilfield area.		
33		ometer in Metric (KM) calibration.	
34		& gauges for transmission and	
		rs monitoring inside logging cabin.	
35	Provision of Air Dryer in truck's pneumatic system.		
36	Towing Hooks at front & Rear of the truck.		
37	Make of Starter, Alternator, etc. of engine.		
38	Winch drum brakes (as per NIT stipulations).		
39	Make & Model of Hydraulic Pumps.		
40	Make & Model of Hydraulic Motors.		
41	Make & Model of Torque Hubs of winch drums.		
42	Marking of hydraulic hoses (at both the ends) for		
	easy identification during maintenance / replacement.		

### Part B: DOCUMENTATIONS

SI. No	DESCRIPTIONS	DOCUMENT ENCLOSED Yes or No	REMARKS, IF ANY
1.	Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, transfer case,	Tes of No	
	power take off unit, axle, suspension, steering, wheel & rim, brake, etc.		
2.	Detailed dimensional layout drawing illustrating Driver's Cabin, Logging Cabin, Rear Cabin and all major items/components.		
3.	Technical leaflets with detailed specifications, Make & Model of all hydraulic pumps, motors, torque hubs (gearboxes) of winch drums, brake mechanism of winch drums, etc.		
4.	List of items that shall be supplied under Engine Fault Diagnostic Tools (both Software as well as complete Hardware).		
5.	List of tools that shall be supplied underStandard Tool Kit for general maintenance of the truck.		
6.	Specific description, Part Nos., Make, etc. each and every item (spare) as detailed in the Spares Parts List provided in the NIT.		
7.	List of additional spares as felt necessary for 2 years maintenance but not covered in the Spares Parts List provided in the NIT with Description, Part Nos., Make, etc. (for future reference/procurement only; not for bid evaluation).		

Signature	
Name	
Designation	
Date	

### **Annexure-A4**

### SAMPLE COPY OF FORM 21, 22 & 22-A (as referred above)

**A.** Following is a sample copy similar to FORM 21 of Indian Motor Vehicle Act only. The certificate to be issued by supplier in their letter head, shall contain following minimum information –

#### **FORM 21**

[See Rules 47 (a) and (d)]

#### SALE CERTIFICATE

(To be issued by manufacturer/ dealer or officer of Defence Department (in case of myehicles) for presentation along with the application for registration of a motor vehicle).	ilitary auctioned
Certified that(Brand	d name of the
vehicle)	
has been delivered by us to OIL INDIA LIMITED, DULIAJAN, ASSAM, INDIA on	
(date)	
Name of the buyer	
Son /wife / daughter	
Address (Permanent)	
(Temporary)	
The vehicle is held under agreement of hire-purchase/lease/hypothecation with	
The details of the vehicle are given below:	
1. Class of Vehicle	
2. Maker's name	
3. Chassis No.	

4. No.	Engin	9				
5.	Horse	power or cubic capacity				
6. cylinde 8.		sed of and year of manufacture				
9. driver) 10.	Seating capacity (including ) Unladen Weight					
11.		num axle weight & number & iption of tyres (in case of transport vehicle Front axle				
axle	(b)	Rear				
	(c)	Any other axle				
axle	(d)	Tandem				
12. body	Colour or colours of the					
13. weight		vehicle				
14. body	Type	of				

Signature of the Manufacturer /
Dealer or Officer of defence Department

**B.** Following is a sample copy similar to **FORM 22 & 22-A** of Indian Motor Vehicle Act only. The certificate to be issued by supplier shall contain following minimum information. —

#### **FORM 22**

[See Rules 47 (g), 115, 124(2), 126-A and 127(1), 127(2)]
INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION
STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD-WORTHINESS

### (TO BE ISSUED BY THE MANUFACTURER)

Certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made thereunder, including the following mass emission norms:

Brand name of the vehicle :  Chassis number :  Engine number/Motor number :  (In case of battery operated vehicles)  Sub-rule Noof rule 115 :  Emission norms :  [(Bharat Stage-IV/Bharat (Trem) Stage-IV/EURO-IV etc.]
Signature of Manufacturer
[Form 22, shall be issued with the signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the manufacturer.]
FORM 22-A  [See Rules 47 (g), 124, 126-A & 127]  INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION  STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD  WORTHINESS  (FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)
PART – I
(TO BE ISSUED BY THE MANUFACTURER)
Certified that

Signature of the Chassis Manufacturer

Form 22-A, Part I shall be issued with the signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the manufacturer.

### PART – II (TO BE ISSUED BY THE BODY BUILDER)

Certified that	at body of t	he vehicle				(br	rand	name	e of t	he vehicle)	bea	ıring
Chassis	number							ar	nd	Engine	Nun	nber
			has	been fa	bricated	by us	and	the	same	e complies	with	the
provisions o	of Motor Veh	icles Act, 1	988 and R	Rules ma	de thereu	under.						

Signature of the body builder

Form 22-A, Part II shall be issued with the signature of the body builder duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the body builder.

### SECTION - B

#### LOGGING SECTION

The logging unit must have the following minimum features as mentioned below, in addition to standard accessories and fittings.

The Logging unit must be a dual drum wireline unit and comprise of a logging cabin, surface electronics, operational and application software to carry out wireline logging, well completions and perforation services in Cased Hole up to a depth of 6000 m in vertical, highly deviated and horizontal wells.

### 1.0 ELECTRICAL SYSTEM / EQUIPMENT:

- Adequate, stable electrical power generated by the truck's Hydraulic alternator (preferably Marathon generator Magna Plus Model: 283PDL1766 having 30KW capacity) for power requirement of the surface system, down hole tools, air-conditioners & all other electrical accessories in the logging unit. The hydraulic alternator of the truck is to be driven by a Power Take-off unit coupled to the truck transmission system.
- ii The Alternator output voltage should be regulated within +/- 5 volt between no load and full load voltage.
- iii Must be equipped with voltage and frequency monitor & control, over/under voltage and frequency protection.
- iv The power generator must have automatic safety shut-down features.
- v The electrical system must have a Power Distribution board inside logging cabin, with circuit breakers, power plant controls, and frequency, voltage and current meters.
- vi A suitable power intake point is to be provided to feed power into the unit from external source. Flexible cable (Approx. 20 M in length) with suitable plugs for this purpose should be provided.
- **vii** Electrical power outlets for internal accessories are to be provided.
- **viii** Exterior power outlets should be properly covered.
- ix Color coded / Function coded truck electrical wiring and easily accessible for maintenance and service purposes must be provided. Entire wiring should be well documented.

- x A back up electrical power source of minimum 8 KVA should be provided. Following backup power system should be provided with manual switchover connection:
  - One Diesel Generator, low noise/silent (Preferably Cummins Onan Model 8HDKAU-41934R having 8KW capacity) mounted on the unit in addition to the main hydraulic alternator
- xi There should be provision of toggle switch to toggle between the power sources (Hydraulic Alternator and Backup diesel Generator).
- xii There should be provision of starting the backup diesel generator remotely from the logging cabin.

#### 2.0 LOGGING CABIN / OPERATOR'S COMPARTMENT:

- **i** Roll up tinted window shades is to be provided to minimize sunlight or external light glare through the windows.
- ii Cabin roof should be suitably designed to drain out the rain water.
- Logging cabin should be fitted with at least three (03) numbers roof mounted air conditioners, each of minimum 13500 btu.
- **iv** Proper metallic cover should be provided to protect the air conditioners from external damage.
- **v** Temperature and humidity indicator are to be provided inside the cabin.
- vi Cabin pressurization system should be provided to pump filtered fresh air in to the logging cabin for preventing dust entry.
- vii Three nos. of Swivel type chairs should be provided. One for the winch operator (movable and height adjustable) and two with rollers for the logging engineer. Additional sitting arrangement for at least two persons should be provided inside the cabin.
- **viii** At least four nos. of drawers with locking arrangement to store manuals, multi meters and other materials.
- ix Slip proof metallic floor with suitable washable carpet should be provided.
- x Logging Engineer console should be located side-by-side to the operator's winch panel.
- **xi** A fire extinguisher at readily accessible location should be provided.
- **xii** A first aid kit at readily accessible location should be provided.
- **xiii** The operator's console should include line load display, electronic depth display, engine RPM meter, oil pressure meter, air pressure meter and

- hydraulic oil temperature meter and meters for any other required parameters related to winch and engine etc.
- **xiv** The logging cabin should have provision of displaying various parameters such as generator voltage, frequency, power drawn from internal and external source etc.
- xv 110 V / 220 V AC along with 12V DC interior lights are to be provided.
- **xvi** Apart from normal power outlets (110Vac, 50/60 Hz) provided inside the logging cabin minimum one numbers of power outlets (220Vac, 50/60 Hz) to be given in the logging cabin with multi socket that accepts British plugs in addition to Euro, NEMA American and Australian plugs with ON/OFF switch.
- xvii Suitable LED lights must to be installed at the drum area for proper illumination. Proper LED rig-lights (AC) of minimum 5000 Lumen each to be installed to illuminate the working area. Additionally, LED rig-lights (DC) of sufficient power should be installed immediately below the rear corner rig-lights operated directly from the truck battery. Both the lights at the rear exterior corners must have suitable metallic cover at sides to protect against impact.
- **xviii** The rear corner LED rig lights should be mounted on a motorized platform controlled by remote to focus the light at desired area of working.
- **xix** Visible safety warning lights and stray voltage monitor panel for perforation safety must be provided with the logging unit.
- **xx** The logging unit's steel welded construction materials should be <u>properly</u> painted to resist corrosion.

NOTE: The Logging cabin must be designed to provide ample working and seating space.

#### 3.0 HYDRAULICS WINCH SYSTEM

In addition to the standard features, the logging unit should have the following fittings/features as specified below:

- i. The unit should be equipped with Direct Drive non-magnetic Dual Drums (with antirust / non-corrosive coating) to accommodate 5.55625 mm (7/32") OD and of 7.9375 mm (5/16") OD single conductor wireline cables having at least 7000 meters length.
- ii. The two independent winch drums (of cable 5/16" and 7/32" size) powered by the unit's hydraulic system should have speed ranges from 1 m/min or less to 150 m/min or more with fine speed control even at maximum load condition.
- iii. A certificate should be provided confirming micro fractures / cracks free base mounting frame of the cable drums.

- iv. Operation of both the winch drums should be controlled by an electronic proportional joystick control mounted on the operator's control panel. The joystick should get locked when brought to neutral position.
- v. Electrically operated hydraulic brake along with backup hydro pneumatic brake for the winch should be provided.
- vi. The logging unit winch drums must be capable to provide over-pulls up to 10,000 lbs during stuck conditions, the hydraulic system rating of the drums winch must be sufficient to withstand these over-pulls safely (well within system rating of the logging units).

#### 4.0 OVERHEAD SPOOLING AND DEPTH/TENSION MEASURING SYSTEM:

- i. Overhead cable spooling systems for 7.9375 mm (5/16") O.D. and 5.556 mm (7/32") mono conductor cable.
- ii. The overhead Spooling system must be lightweight with height adjustment and side to side steering.
- iii. Logging Cables specifications:

Cable O.D.	Breaking strength
i) 7.9375 mm (5/16")	11,000 Lbs
ii) 5.556 mm (7/32")	5,400 Lbs

Both the cables should be at least 7000 meter long mono-conductor rated for minimum 204.4  $^{\circ}$  C (400 $^{\circ}$  F) temperature and insulation resistance 460 M $\Omega$ /km @ 500VDC minimum.

- iv. Accurate straight line measuring head for metric depth measurement/recording having dual electronic encoders, magnetic mark detector, a tension device (Load Pin) and independent mechanical/electronic backup encoder for both the monoconductor cables drums. The backup depth display from the mechanical/electronic encoder is to be made available near the winch operator panel.
- v. Line weight measuring system with a weight indicator to measure line tension of at least 15,000 lbs to be provided. It should have digital display for total and differential load. Weight measurements should have audio and screen alarms at operator's panel for increase / decrease of line load. The line weight measuring system should have provision for both load pin and rig floor load cell connected with the sheave wheel.

#### 5.0 ADDITIONAL LOGGING UNIT FEATURES:

- i Built-in line oiler system for lubricating the cables with the operating switches on the winch operator's control panel.
- ii Grounding reel fitted with at least 50 meters cable with clamps for grounding during side wall coring, perforations and other allied wire line operations.

- iii Reels necessary for intercom, top load cell etc., of at least 100m length to be provided.
- iv Tool racks with suitable, independently working air bags for transportation of downhole tools must be provided. The air bags must be easy to access for replacement.
- v Tool storage area installed under the floor of the drum area for the longest tool must be guided with roller support throughout the rack length and fitted with air bags for transportation.
- vi The winch drums must be fitted with slip rings having ample protection from moisture, dust and rain. Both slips rings should be easily accessible for repair and maintenance work.
- vii A Switch must be provided to conveniently switch between both the cables inside the logging cabin.
- viii Rear bumper should be fitted with a working vise and light weight folding step.
- ix Pneumatic line wipers for cleaning drilling fluid from the cable while pulling out logging tools should be provided, for both mono conductor cables.
- x All the electrical wires running in the winch / draw works compartment must be concealed/in a conduit.
- xi Body to be painted to OIL's specification (with OIL logo).

  (Logo / specification shall be provided by OIL after placement of order)
- xii Safety / Warning Signs (pertaining to radioactive and explosive jobs) must be provided.

#### 6.0 STORAGE REQUIREMENT WITHIN THE LOGGING UNIT:

Two separate compartments, one for carrying Explosive Shaped Charges and the other for carrying Electric Detonators should be provided. These two compartments should be separated by a distance of minimum 1.5 meters as per Indian Explosive Rules. The inside of these compartments should be paneled with good quality non-sparking material. These two individual compartments should be minimum 1.15 meters away from the electrical power sources and fuel tanks mounted in the Logging Truck. The minimum size of the compartments carrying explosives should be as follows –

Compartments	Length (meters)	Breadth(meters)	Height(meters)
For charges	0.8	0.6	0.6
For Detonators	0.3	0.2	0.2

Enough storage space should be provided to carry at least 8 nos. 4" hollow steel carrier guns (HSC gun dimensions:- 4" Dia and 3 mtr in length). Additional racks should be provided to transport at least 4 nos. of logging tools with diameter ranging from 1 11/16" to 4". The length of these racks should be at least 6 mts

- (16.4 feet) each. In addition to this 2 small (at least 1.5 mtrs in length) racks should be provided for carrying CCL, MPD and other short length tools.
- iii Fixed positions should be provided for transportation of one pair of sheave wheels required for logging operation.
- iv Separate compartments to be provided for carrying hand tools / wrenches, rig up accessories and other logging related accessories.
- v All compartments should have heavy duty locking / latching arrangement.
- vi A suitable mounting arrangement for the high pressure grease control head to be provided near the spooler.
- vii The drum area flooring will be of aluminum tread plate material. A roll up weather resistant cover must be installed over the drum area opening.

#### 7.0 SURFACE LOGGING SYSTEM

- 7.1 The log data acquisition and processing system should be a rack mounted PC based system, integrated collection of state-of-the-art hardware & software. It must be field proven, latest version logging system, capable of performing the following logging & completion operations:
- i. All types of Perforations and Plug / Packer setting through wireline pressure setting tool.
- ii. Free point survey
- iii. Shooting CCL and Shooting Gamma Ray
- iv. Gamma ray/ Neutron/ Casing Collar Locator combination logs.
- v. Production logging.
- vi. Casing integrity checking tools such as MIT/MTT (GE Sondex)
- vii. Sector / Radial bond tools for cement evaluation
- viii. Downhole Tractor services
- ix. Analog CBL tool to record CBL Log
- **7.2** It should have a Shooting Panel with following features:
  - 7.2.1 A key type safety switch.
  - 7.2.2 It should be designed as per latest API recommended practices( API-RP)
  - 7.2.3 It should be able to supply "+"ve and "-"ve shooting voltage for all types of shooting operations

- **7.3** LED displays should be used for depth and line speed monitoring for winch operator.
- 7.4 The surface logging system offered should be able to perform logging with GE-Sondex Ultra-link tools (PLT/MIT/MTT) available with OIL. Suitable Hardware (External Panel mounted inside the logging cabin) and Software required to carry out these operations with above system must be quoted.

### 8.0 LOGGING SYSTEM HARDWARE

It must be a state-of-the-art PC based logging system. In addition to other standard fittings / accessories which are mounted in the logging cabin, the system should include at least the following features.

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i	RAM	8 GB(minimum)		
ii	Hard Disk	1 TB ( minimum )		
iii	Color Monitor (Dual display i.e One for Logging and another for witness)	17" TFT type (minimum), 02 Nos.		
iv	High Resolution Thermal Graphic Recorder. (Capable of taking Log prints both on paper and film for both roll & fanfold type paper).	2 Numbers ( quantity)		
V	Continuous 8.5" color LED printer to print colored logs	1 Number ( quantity)		
vi	CD/DVD writer.	1 Number ( quantity)		
vii	USB port to transfer data	4 (minimum) at the front side of CPU		
viii	External Portable USB Hard Drive (min 2 TB)	1 No.		
ix	Wireless Keyboard and Mouse	1 No. Each		
х	System must be having high speed CPU, supporting Dual display and offering multi-tasking operation.			
хi	UPS as power back up and to protect the equipment from power surges and fluctuations	1 No.		

#### 9.0 LOGGING SYSTEM SOFTWARE

- i The system should be based on latest version windows based operating system. Software should be menu driven, user friendly with multitasking capability. License for all supplied software should be provided for at least 10 years from the date of commissioning of the unit.
- ii All software must be in English language.
- iii Detailed help on the complete system should be available.
- iv The software must be capable of performing all well completion and cased hole logging operations given in clause 5.1.
- v The System must be able to convert log data into API standard LAS, LIS and ASCII format.
- vi Oil India Limited's logo must be incorporated in all outputs.
- vii Log labelling facility to be provided.
- viii It should be able to provide tool diagram and well sketch that can be plotted along with the log.
- ix The system software must include automatic depth correction capability.
- x The system software must display real-time corrected depth and line tension.
- xi Utilities like splice, merge and edit of logs to be provided.
- xii It should be capable of logging both in meters and feet.
- xiii Virus protection Software must be provided in the system with backup in CD/DVD/Portable Drive.
- xiv Complete image of the system must be provided in CD/DVD/Portable Drive.
- xv The bidder should give an undertaking to update the software as and when updates are available for a period of 10 years from the date of commissioning of the unit at no cost to OIL.
- xvi All software used in the system must be provided on CD / DVD's as back up.
- xvii Test and Diagnostic software for the surface system and downhole tools must be provided.
- xviii Record real-time and playback on thermal paper/film in different customizable depth scales i.e., 1/20, 1/40, 1/100, 1/200, 1/240, 1/1000 in metric system in API format.
- xix Details of the software with price break up should be provided.

## 10.0 RIG-UP, PRESSURE CONTROL EQUIPMENT & OTHER ACCESSORIES:

- Stray voltage monitor: One rig voltage monitor mounted inside the cabin, with 50
  meters long leads and accessories to measure a minimum rig voltage of 0.20 Volt at
  well site.
- ii. **Communication System**: Two way communication system for communication from cabin to rig floor and vice versa.
- iii. **Pressure Control Equipment:** The equipments for pressure control system **(Light Weight)** rated for 10,000 psi working pressure including all the accessories The pressure control equipment should be of "National Oilwell Varco" make.
- iv. Pneumatic Grease Injection System for Pressure Control: A built-in grease injection system for pressure control upto 5000 psi, comprising of grease tank (capacity minimum 150 ltrs) and air-operated (max air-pressure=100 psig) grease pump (Lincoln Model: Air Motor 84806/Pump Tube 85305 or equivalent) must be provided in the logging unit with their controls at suitable place easily accessible to the operator. For the air-operated Grease pump, compressed air will be provided by the Truck engine and separate air tank mounted in a suitable place in the unit (easily accessible), for this purpose, must also be provided. Necessary numbers of high pressure light weight hoses of required length (at least 75 meters) for grease injection with return line of equal length should be provided with reel fitted to the unit.
- v. A separate electrically operated air compressor with air regulator with gauze, water trap filter, should be installed at suitable place in the unit to get compressed air supply for Lincoln pump operation. The compressor should be connected to the separate air tank. There should be a provision of valve so that the tank can be filled up using air either from the unit (truck engine) or from the electrical air compressor installed.
- vi. The Logging unit should be fully equipped with rig up and other standard accessories for straight away commissioning of the unit. Detailed list along with price break up for each item is to be provided. However, certain operationally vital items with quantity as mentioned in the table below are to be included and confirmed in the offer.
- vii. Following rig-up/operational accessories and pressure control equipment are to be provided. **Price quoted for this list shall be considered for bid evaluation.**

i	Minimum 43.18 mm (17") dia., Upper and Lower Sheaves suitable for the 7.9375 mm (5/16") O.D mono- conductor cable with floor stand etc.	2 sets
ii	Minimum 35.56 mm (14") dia., Upper and Lower Sheaves suitable for the 5.556mm (7 /32") O.D monoconductor cable with floor stand etc.	2 sets

iii	T - Hangers for 5/16" and 7/32" cable.	1 No each
iv	Liner used in T-Hanger for 5/16" and 7/32" cable.	2 set each.
V	Elevator hook T - bar.	1 No.
vi	Tie back chains of at least 8.534 m (28 ft) with hooks to tie lower sheave (rated for 7.5 ton).	2 Nos.
vii	Goose Neck for 7/32" and 5/16" cable head.	1 No. each
viii	Hydraulic Cable Cutter with 10 nos.(spares) extra blades.	1 No.
ix	Mechanical cable cutter for 7/32" and 5/16" cable	5 Nos. each
x	Portable Analog Triplett multi-meter.	2 Nos.
xi	Blasting Galvanometer with case and 5 extra set of cells.	2 Nos.
xii	609.6 mm (24") pipe wrenches ("Ridgid" made or equivalent)	10 Nos.
xiii	457.2 mm (18") pipe wrenches ("Ridgid" made or equivalent)	12 Nos.
xiv	C - Wrenches to open supplied lubricator connections	4 Nos.
xv	Electronic toolbox with standard tools & kits ("Jenson" made or equivalent).	1 No.
xvi	Mechanical toolbox with standard tools & kits ("Craftsman" made or equivalent).	1 No.
xvii	Choke Blocks.	4 Nos.
xviii	Chain tongs – 18" and 24 "	10 Nos. each
xix	Cable head ( 1 7/16" OD – Spring Pin connection type, no banana pin connection) for i) 7/32" OD cable ii) 5/16" OD cable	10 Nos each
xx	Portable Digital Insulation Tester with case	2 No.
xxi	Re-head Kit for mono-cable (cone, cone-retainer, boots etc.) for both the mono conductor	50 Set EA
xxii	All hand tools needed for the re-head jobs must be quoted (Armor cutter, Wire Stripper, etc)	2 Set

xxiii	Grease for Cable head (to be used with Grease guns, DC-111 of 400 gm or equivalent)	50 Nos.
xxiv	Lubriplate or Equivalent (approx. 14 oz / 397 gms.)	20 Nos
XXV	Tool Dolly's, Basket Stands and adjustable high stands fitted with roller for use during tool testing, calibration and repair	10 nos. EA type
xxvi	Well-site handling tools – Allen keys sets, Screw Drivers, Nose Pliers, Monkey wrench, Snap-Ring pliers and other tools required for well-site operation.	2 Set each
xxvii	Derrick-mounted, top sheave load cell required for measurement of suspended weight of the wireline and tools with electronic read-out of the suspended weight displayed on the depth panel inside logging unit. The load cell shall be resistant to shock and vibration.	2 Nos
xxviii	Spare Load cell reel apart from one installed in the unit	2 Nos.
xxix	Swage adaptable to 2 7/8" EUE with 5000 psi rating.	2 Nos
xxx	Well Head Adapter Flange of 2 9/16" size, BX-153 groove, 10,000 psi rating	2 Nos
xxxi	Compact hydraulic activated Blow out Preventer of rating 10,000psi with metallic lifting cap and with suitable transportation frame.  (Single/Dual type, light weight) fitted with ram for 7/32 "	1 No.
XXXI	cable size	T NO.
	a) Spare Ram for 7/32" cable - 2 set	
	b) Spare ram for 5/16" cable – 2 set	
xxxii	Hydraulic activated Tool trap with lifting cap.	1 No.
xxxiii	63.5 mm (3.0") I.D. × 1.8 mts (6 ft.) long light weight alloy lubricators having one 1/2" NPT port (18 inch from bottom) with metallic lifting cap or thread protector.	2 Nos.
xxxiv	63.5 mm (3.0") I. D. × 3 meters (10 ft.) long light weight alloy lubricators with metallic lifting cap or thread protector.	4 Nos.
xxxv	Lubricator clamp, spreader and wire rope slings assembly	2 sets
xxxvi	Lubricator dolley for easy maneuvering of lubricator	02 No.
	ı	1

	string during rig up and rig down.	
xxxvii	Bleed off sub to release pressure trapped in PCE assembly	1 No.
xxxvii	Hoad catcher to catch 1 7/" cable head with cafety	1 No.
xxxix	Solid tube grease injection control head (working pressure 10,000 psi) with solid type flow tubes for 7/32" cable size complete with hydraulic packing nut assembly.	1 No.
xl	Solid tube grease injection control head (working pressure 10,000 psi) with solid type flow tubes for 5/16" cable size complete with hydraulic packing nut assembly.	1 No.
xli	Flow tube for 7/32" cable  1. supplied cable diameter + .008" clearance 2. supplied cable diameter+ .004" clearance	25 Nos. each
xlii	Flow tube for 5/16" cable  1. supplied cable diameter + .008" clearance 2. supplied cable diameter+ .004" clearance	6 Nos. each
xliii	Metallic Line bushing 7/32" cable	10 Nos.
xliv	Metallic Line bushing 5/16" cable	5 Nos.
xlv	Line wiper/rubber 7/32" cable	20 Nos.
xlvi	Line wiper/rubber 5/16" cable	5 Nos.
xlvii	All other spares and consumables of the grease control head for 7/32" and 5/16" OD cable (the bidder must quote all the spares and consumables required for grease injection control head).	10 sets each
xlviii	Hydraulic twin hand pump for BOP and Tool trap operation.	4 Nos.
xlix	Spare high pressure light weight hoses (at least 75 meters) same as fitted in the logging unit for grease injection with necessary connection and adaptors	2 Set
I	Suitable blank plugs to plug hoses, nipples fitted in the unit and pressure control equipments after use	2 Sets
li	Hydraulic hand pump (single operation) for line wiper, stuffing box or tool catcher	3 Nos

lii	1 11/16", 2" and 2 1/8" Sinker Bar (made of Tungsten) 5 ft and 3 ft	5 Nos EA
liii	1 11/16", 2" and 2 1/8" Sinker Bar (made of Lead) 5 ft and 3 ft	5 Nos EA
liv	Service Kit for sinker bar	30 sets.
lv	Shooting CCL 1 11/16 "	04 Nos.
lvi	Shooting CCL 3 1/4 " or 3 1/8 " with quick change coupling.	04 Nos.
lvii	1 11/16" Shooting GR/CCL (Titan Make) with shock absorber.	02 Nos.
lviii	Gamma Perforating Logging Tool with CCL with shock absorber and quick change to run with junk basket/BST tool	02 Nos.
lix	Safety tube for detonator testing (G-25/A-105 etc)	1 Nos.
lx	Heat Gun to dry out moisture in connectors	2 Nos.
lxi	Pressure Gauges to measure upto 10000 psi (fluid/gas) fitted to the lubricator	2 Nos.
lxii	Pressure Gauges to measure upto 5000 psi (fluid/gas) fitted to the lubricator	2 Nos.
lxiii	Strap wrenches (To operate with tools upto 6" OD)	5 Nos.
lxiv	Pneumatic tool box set to open various sizes nut bolts (snap on make or equivalent)	1 Box
lxv	At least 30 m pneumatic hose mounted in the unit with suitable quick connection to take air from the unit for various purpose like operation of pneumatic tools.	1 reel
lxvi	Accessories compatible with offered tools needed to carry out logging up to 60 degrees deviation wells, for example - [i] Knuckle subs [ii] Swivels [iii] Tool bottom terminator/ Bull plugs [iv] Tool body Rollers/Flywheels etc.	2 sets each
lxvii	Any other items, which are operationally required.	2 sets each

NOTE: In addition to the items in the above list, the bidder must quote for any other item(s), if required, for straightaway commissioning of the unit. During equipment commissioning, if it is found that certain items are required but not quoted by the bidder, then the bidder must provide the same free of charge to OIL.

OIL at its discretion may increase or decrease the quantity of items mentioned in the above list.

# 11.0 TECHNICAL MANUALS AND DOCUMENTATION: QUANTITY= 01 SET

The following technical manuals and documentations mentioned are to be supplied at no charge to OIL:

- **11.1** The following documents should be submitted along with the bid for bid evaluation:
  - i Technical leaflets, literatures with detailed specifications, Make & Model of Logging Truck, Downhole Tools, Surface System and Fishing equipment etc. must be offered in the Bid.
  - ii Block Diagram of the surface Logging System containing all panels.
  - iii Layout drawing of proposed logging Cabin.
  - iv Layout drawing of proposed logging unit with dimensions.
- **11.2** The following documents should be submitted along with the supply of the logging truck/equipment:
  - i Four sets of Training Notes / Study Guides for the offered logging tools in properly bound volumes.
  - ii Four sets each of Operations and Maintenance Manuals covering all Mechanical, Electrical, Electronic systems and sub-systems, schematics of all the systems and sub-systems, including downhole logging tools in properly bound volumes.
  - iii Soft copies of all the above documents in CD / DVD.

All technical brochures / specification documentation and software related to the logging systems, all downhole tools and all major equipments / accessories offered by the bidder must be in English Language.

## 12.0 DOWNHOLE LOGGING TOOLS:

All the down hole logging tools as mentioned below should be rated for minimum 104 MPA (15,000 PSI) pressure and 177 °C (350 °F) temperature. Temperature rating should be for a minimum of one-hour continuous exposure in the well bore.

The tools and cable head should have thread size  $1^{3}/_{16}$ " - 12 N – 2 ("GO" connection.)

## 12.1 <u>MULTI-FINGER IMAGING TOOL (MIT) OR EQUIVALENT</u>

Quantity = 02 Numbers

- a. MIT 24 fingers 01 no.
- b. MIT 40 fingers 01 no.

Multi-finger imaging tool that makes highly accurate radial measurements of the inner diameter of tubing and casing. The tools should have the following features.

#### **Minimum Technical Specification:**

- i The tool should be able to run on standard mono cable.
- ii The tool should use digital telemetry to transmit data in real-time to surface computer.
- iii Multi-finger caliper tool (qty=01 no.) having minimum 24 fingers should be capable of operating through 2-1/8 inches tubing to accurately measure the inner pipe diameters of 21/8 " tubing, 51/2 " casing and 7" casing.
- iv Multi-finger caliper tool (qty=01 no.) having 40 fingers or more to accurately measure the inner pipe diameters in 5½ " casing and 7" casing & 9-5/8" casing with maximum surface coverage.
- v The tools must have inclinometer to provide information on well deviation and sensor information to indicate high or low side of the well reference to measurement sensors.
- vi Bidder must provide suitable centralizers (3 arms in-line centralizers) for operating in 2 7/8 inch tubing, 5 1/2 inch, 7 inch and 9 5/8 inch casing sizes, quantity = 02 nos. for each size.
  - In case bidder offers less number of centralizers, it must specify whether the same set of centralizers is suitable for multiple casing sizes.
- vii Bidder must provide centralizers (4 arms inline centralizers) for application in high angled wells, horizontal wells operating in 2 7/8 inches tubing, 5 1/2 inches, 7 inches and 9 5/8 inches casing sizes, Quantity=02 nos. for each casing size. In case bidder offers less number of centralizers, it must specify whether the same set of centralizers is suitable for multiple casing sizes.
- viii Additionally, the bidder must offer 02 nos. each of Gamma Ray, Casing Collar Locator & Telemetry tool compatible to run with the offered multi-finger caliper tools.
- ix Calibration equipment should be offered for each set of multi-finger caliper tool, if same calibration equipment is used for both the tools, quantity 01 no. should be supplied.
- x Any other accessories required for the complete tool operation should also be provided.
- xi Bidder's tool must be compatible to be run with Warrior software.

xii All necessary software with license for processing the tool measurements should be quoted to generate 3D visualization of tubing/casing and to evaluate percentage of damage of tubing/casing.

xiii All items / assemblies of the tool should be quoted individually.

## 12.2 <u>MAGNETIC THICKNESS TOOL (MTT) OR EQUIVALENT</u>

Quantity = 01 Number

Bidder must offer Magnetic Thickness tool for corrosion measurement/variations of metal thickness of tubing and casing.

#### **Minimum Technical Specification of Tool:**

- i The tool should be able to run on standard mono cable.
- ii The tool should use digital telemetry to transmit data in real-time to surface computer.
- iii Bidder must offer through tubing Magnetic Thickness Tool capable of inspection of 2 7/8 inches tubing, 5 1/2 inches, 7 inches and 9 5/8 inches casing/liner sizes for internal & external metal loss, and to measure absolute wall thickness.
- iv The tool should be capable to evaluate quantitative thickness measurements up to three concentric pipes in multiple casings environment inside well.
- v The magnetic thickness tool must be able to detect pitting, any defect in pipe and gradual pipe metal loss.
- vi The tool should be capable of operating alone or simultaneously with above multi-finger caliper tools to provide a complete pipe integrity analysis of well.
- vii Bidder must provide 3 arms in-line centralizers for operating in 2 7/8 inches tubing, 5 1/2 inches, 7 inches and 9 5/8 inches casing sizes, Quantity 02 nos. for each casing size. In case bidder offers fewer centralizers it must specify whether the same set of centralizer is suitable for multiple casing sizes. (If the bidder quotes the same type of centralizers as quoted against MIT, only 01 no. of centralizer to be provided for 2 7/8 inches to 9 5/8 inches tubing/casing)
- viii Bidder must provide 4 arms inline centralizers for application in high angled wells, horizontal or undulating well paths operating in 2 7/8 inches tubing, 5 1/2 inches, 7 inches and 9 5/8 inches casing sizes, Quantity 02 nos. for each casing size. In case bidder offers fewer centralizers it must specify whether the same set of centralizer is suitable for multiple casing sizes.

(If the bidder quotes the same type of centralizers as quoted against MIT, only 01 no. of centralizer to be provided for 2 7/8 inches to 9 5/8 inches tubing/casing.)

- ix Bidder must offer 01 (One) number of Gamma Ray, Casing Collar Locator & Telemetry tool each compatible to magnetic thickness tool offered. If the quoted Gamma Ray, Casing Collar Locator & Telemetry tools are same as quoted against the MIT Tools, then the bidder need not quote these tools again against the MTT tool.
- x Calibration accessories and on site test equipment if required, should be quoted separately for magnetic thickness tool, quantity 01 no. each.
- xi Bidder's tool must be compatible to be run with Warrior software.
- xii Any other accessories required for the complete tool operation should also be provided.
- xiii All necessary software with license for processing the tool measurements should be quoted to generate 3D visualization of casing metal loss.
- xiv All items / assemblies of the tool should be quoted individually.

## 12.3 PRODUCTION LOGGING ARRAY TOOLS

Bidder must quote production logging tools, SONDEX MAKE, equipped with all the essential accessories to log "highly deviated or horizontal wells" by monoconductor cable with tractor. The production logging tool sensors should be spread across the entire well bore to measure three phase flow. Bidder must quote *Spinner Array Tool or equivalent, Resistance Array Tool or equivalent, Capacitance Array Tool or equivalent for horizontal wells applications (Quantity= 1 No. each).* 

- i. The horizontal tool sensors must be capable of using the same telemetry tool, Casing Collar locator tool, Gamma Ray tool mentioned below.
- ii. The tool should be able to run on standard mono cable.
- iii. Bidder must provide a highly accurate inclinometer tool compatible with array-type production logging tools for accurate measurement of deviation in high angle, horizontal or undulating well path.
- iv. Bidders must quote compatible Swivels or Rotational Subs to align the array production logging sensors, Knuckle Joints, Centralizers if required for operation in highly deviated and horizontal well. Quantity-04 nos each.
- v. Shop Calibration system and all onsite test equipments for tool check should be provided. Quantity -01 set.

- vi. Bidder must provide software having license valid for at least 10 years for 3D flow profile visualization of multiphase flow within the well bore by mapping of data from the array spinner, capacitance and resistance tools.
- vii. Bidder must quote all equipment and accessories, wherever necessary, for smooth operation.
- viii. All items / assemblies for the tool should be guoted individually.

## 12.3.1 Spinner Array Tool or equivalent

Spinner Array tool is required for obtaining Fluid-velocity measurements in deviated or horizontal wellbores conveyed by the offered tractor tool.

## **Minimum Technical Specifications**

- i. Bidder must quote a through tubing spinner array tool having 6 or more miniature impellers deployed on bow-spring arms or vertical axis for accurate detection of fluid velocity in segregated flow regime. Bidder must quote spinner array tool having high sensitivity and low threshold velocity of each impellers.
- ii. Bidder's spinner array tool must be combinable with other array tools offered.
- iii. Bidder spinner array tool must be able to operate in any well inclination and should be able to provide sensor orientation using its internal relative bearing sensor.
- iv. The offered array type spinner tool should be of size 2 1/8 inch for maximum hole coverage & must be capable of measurement in casing up to 7 inches diameter.

#### 12.3.2 RESISTANCE ARRAY TOOL OR EQUIVALENT

The Resistance Array Tool must be able to determine water holdup crosssectional profile in wellbores of any deviation, from vertical to horizontal. In deviated or horizontal wellbores the tool must be conveyable by the offered tractor tool.

## **Minimum Technical Specifications**

- Bidder must quote a through tubing resistance array tool having 12 or more resistance sensors deployed on bow-spring arms or vertical axis for accurate detection of resistance of fluid at tip of tool sensors.
- **ii.** Bidder's resistance array tool must be combinable with other array tools offered.
- **iii.** Bidder array tool must be able to operate in any well inclination and should be able to provide sensor orientation using its internal relative bearing sensor.

iv. The offered array type tool must be capable of measurement in casing up to 7 inches diameter.

## 12.3.3 CAPACITANCE ARRAY TOOL OR EQUIVALENT

The Capacitance array tool should be able to identify fluid phase circumferentially around the wellbore by measuring the dielectric constants of fluid phases in high deviation and horizontal wells.

- i. Bidder must quote a through tubing Capacitance array tool having 12 or more miniature sensors deployed on bow-spring arms or vertical axis for accurate detection of hold-ups on high or low side of a well.
- ii. Bidder's Capacitance array tool must be combinable with other array tools offered.
- iii. Bidder array tool must be able to operate in any well inclination and should be able to provide tool rotation 0 360° using its internal relative bearing sensor.
- iv. The offered array type tool must be capable of measurement in casing up to 7 inches diameter.

## 12.4 PRODUCTION LOGGING TOOL (PLT)

In addition to the Array tools mentioned above, the bidders must provide the following PL tools, SONDEX MAKE, as mentioned in clause No. 12.4.1 to 12.4.4 with the technical specifications as stated:

#### **Minimum Technical Specification of Tool:**

- i The tool should be able to run on standard mono cable
- ii The tool-string must be suitable for running through 2% inch tubing to log in standard casing/liner sizes up to 7 inch (OD).
- iii The tool should use high speed digital telemetry to transmit data in real-time to surface computer.

## 12.4.1 TELEMETRY TOOL

Quantity = 02 nos.

- i Bidder must provide telemetry tools that support high speed telemetry over mono-conductor cable compatible for all the PL tools mentioned in clause no 12.3 & 12.4.
- ii The tool must have facility to monitor tool head voltage and internal temperature of the telemetry controller.

iii All items / assemblies for the tool should be quoted individually.

## 12.4.2 **CCL TOOL**

Quantity = 02 nos.

- CCL tool to record casing collars up to casing/liner sizes up to 7 inch (OD).
- ii. Compatible to run with the quoted PL Tools.

## 12.4.3 GAMMA RAY TOOL

Quantity = 02 no.

- i Tool must measure the naturally occurring gamma radiation using high resolution scintillation detector.
- iiThe gamma tool measuring range should be minimum 0 to 1000 API and having accuracy of (+/-) 5 API units.
- iii All items / assemblies for the tool should be quoted individually.

## 12.4.4 <u>FULL BORE FLOWMETER</u>

**Quantity = 2 nos.** (one each for  $5 \frac{1}{2}$  inch and 7 inch casing)

- i Bidder must provide caged type Full bore spinner (having min 6 arm) to measure fluid velocity in the range of 1.7 ft/min approx (0.01m/s) 500ft/min (2.54m/s).
- ii Bidder must provide two independent caged full bore spinners required for flow measurement in 5.5 inches casing and 7 inches casing sizes.
- iii The spinner tool must also be able to determine direction of rotation of spinner.
- iv All items / assemblies for the tool should be quoted individually.

## 12.5 FREE-POINT INDICATOR TOOL (FPI)

Quantity = 2 nos.

The bidder must offer latest type of either motorized or magnetic FPI tool capable of providing accurate determination of stuck-point of tubular assembly on application of stretch and torque in vertical and deviated wells.

#### **Minimum Technical Specification:**

- i. The FPT tool must be 1-11/16 inch OD or less in diameter. The tool must be able to determine free-point inside 2 7/8 inch OD Tubing, 5 ½ inch to 9 5/8 inch OD casing and inside standard drill pipes IDs (3 1/2 inch to 5 inch DP) and weights. All necessary equipment, accessories, centralizers, if required must be quoted along with tool.
- ii. If the bidder offers motorized FPI tool, then it must be supplied with interchangeable doglegs/anchors for working within tubing, casing and drill-pipe ID. Bidder should quote 20 sets of dogleg/anchor assembly as spare item against above tubing, casing and drill pipe sizes.
- iii. The FPI tool must be able to run with CCL for depth correlation. Bidder must provide CCL compatible to run with the FPI tool.
- iv. The Free-Point tool response must be digitally recorded for playback and log printing.
- V. The FPI tool must have a portable surface panel for carrying out tool operation. The portable panel must be housed inside suitable carryon box.

**NOTE**: Magnetic Free Point Tool (MFPI) that can determine stuck-point in a single trip is preferred over Motorized FPI tool. However, if the bidder does not have MFPI technology, it may quote the Motorized FPI tool.

## 12.6 SLIM HOLE SEGMENTED OR RADIAL CEMENT BOND TOOL

#### Quantity = 2 nos.

The Slim hole *segmented or radial* Cement Bond tool should be able to evaluate cement bonding to a well's casing and to the formation to confirm the integrity of isolation between zones and avoid production problems.

## Minimum Technical Specification of Tool:

- The tool must be able to perform cement evaluation in casing using monocable conductor.
- ii. It should use digital telemetry to transmit data in real-time to surface computer.
- iii. The tool should be an acoustic logging tool having one transmitter, two omnidirectional receivers (Piezoelectric Crystals) 3ft and 5 ft respectively. The tool should also have 6 minimum segmented radial receivers (Piezoelectric Crystals) for radial cement mapping.
- iv. Bidder's tool must be suitable for running through 2½ inch tubing to log in standard casing/liner sizes 4.5 inches, 5.5 inches and 7 inches (OD).
- V. The offered tool must be capable of providing simultaneous measurements of casing to cement bond amplitude (Measurement range 0- 100 mV), receiver

- travel time and Variable Density Log (Measurement Range 200-1200microsec), radial cement imaging using acoustic techniques, Gamma Ray (measurement range 0- 1000 API) and casing collar information in single run.
- vi. The offered CBL tool should have in-built Casing Collar Locator (CCL) and Gamma Ray (GR) sections. Bidder may offer individual Gamma and casing collar locator tools compatible with slim-hole segmented or radial cement bond tool, if the tool does not have integrated CCL and Gamma Ray subsections.
- vii. Bidder must offer necessary centralizers (Quantity- 02 Nos. per tool for each casing size), calibration equipment (Quantity-01 No.) and any other accessories required for smooth operation with offered tool. In case bidder offers fewer centralizers it must specify whether the same set of centralizer is suitable for multiple casing sizes.
- viii. Bidder's tool must be compatible to be run with Warrior software.
- ix. Suitable post processing software for radial imaging information of cement bond should be provided, if any.
- x. All items / assemblies for the tool should be quoted individually.

## 12.7 DOWNHOLE TRACTOR TOOL

## **Quantity = 2 nos.**

Bidder must offer Downhole Tractor tool for conveyance of logging tools and explosive related services in highly deviated and horizontal wells in cased hole.

#### **Minimum Technical Specification of Tool:**

- i. The Downhole tractor should be able to operate using standard mono cable.
- ii. Bidder must offer Downhole Tractor tool capable to tractor various logging tools like production logging tools, cement and corrosion evaluation tools, through tubing gun or any other perforation services, plug and packer setting tool in a horizontal well with target depth of 3500 m with horizontal extension being around 500 m. The kick off point of the horizontal well shall be about 2000 m.
- iii. The Downhole Tractor tool should be able to convey the production logging tools, cement and corrosion evaluation tools and various through tubing perforation services through 2 7/8" inch OD tubing to log in standard casing/liner size mentioned in the **TABLE-A** in horizontal wells.
- iv. The Downhole Tractor tool should be able to perform logging while tractoring which is essential to run production logging services in horizontal wells. The minimum speed of the tractor tool while logging must be equal or greater than 30 ft/min.

- v. The Downhole Tractor tool should be provided with in built Electrical release system and one number of head tension device.
- vi. Bidder must provide down hole addressable perforating safety switch or equivalent with the tractor to carry out services related to perforation.
- vii. Downhole tractor should be able to generate adequate pull force (minimum 600 lbs) to convey all the services mentioned in clause 5.1 for OIL's horizontal wells.
- viii. The tool should have the option of increasing the tractor force by adding additional subs/tractors/arms to carry out operations like plug and packer setting in standard liner or casing with sizes of 5 inch to 7 inch OD.
- ix. Any panels if required to run the tractor system should be mounted in the logging unit.

#### 12.8 STANDARD WIRELINE CABLE GUIDED, OPEN ENDED FISHING EQUIPMENT

- i. The bidder must offer complete fishing kit assembly for fishing operation in casing/liner sizes from 5 1/2", 7" and 9 5/8" OD.
- **ii.** For the fishing kit, item-wise complete list of all the parts with respective Part Number is to be furnished.
- iii. Five nos. of grapples (with lock) for cable head (supplied with the unit-size=1 7/16") compatible with the overshot should be provided.
- **iv.**Two nos. of grapples (with lock) for fish OD of sizes 1 11/16", 2", 2 1/8", 3 1/4" compatible with the overshot should be provided as spares in addition to those provided under above clause.

NOTE: Bidder MUST quote all the components in order to make the fishing equipment list complete for entire range of logging tools/other sub-surface equipment for cased hole fishing.

## 13.0 COMPUTER SYSTEM FOR DATA PROCESSING & INTERPRETATION AT BASE:

## Minimum Specifications:

- i The bidder must provide Post DATA PROCESSING & INTERPRETATION Software to process MIT,MTT and PLT logging data to:
  - [a] Evaluate flow measurement.
  - [b] Identify fluid contacts
  - [c] Diagnose production problems

- [d] Water flow and its direction inside and behind casing
- [e] Zone Isolation
- [f] Borehole Water Holdup
- [e] Borehole Fluid Identification
- [f] Corrosion Evaluation
- The Data processing system hardware should consist of single user computer system with accessories, supporting the above mentioned software packages. The system should have at least 02 (two) 19" Monitors (TFT type preferably). One UPS should be provided with the system. The system should run on 220 volts AC / 50 Hz power source.
- iii Continuous Printers (02 nos.) Capable of printing high resolution color logs and other computed results.
- iv There should be CD/DVD read/write and USB portable Hard drive for data transfer and storage
- v Consumables like Paper, ink cartridges/toner etc. sufficient for 100 data processing jobs of 500 meters interval each should be provided.

**NOTE**: The Data processing and Interpretation System must be of Latest version having required software packages/modules with at least one license key.

**NOTE:** Details of all the hardware and software along with individual price break-up required for a full-fledged computer centre at Base for log data processing and interpretation should be provided in all details. **OIL reserves the right to select the requisite software and hardware modules.** 

**NOTE:** Any other processing software (with License Key) required for post processing for all the above tools has to be provided. Processing software found not supplied by bidder during commissioning period of the equipment or on a later date, shall have to be supplied at no charge to OIL.

## 14.0 SPARE PARTS AND CONSUMABLES:

Bidder must quote following spares and consumables with individual price break-up.

All Items in clause 14.0 (14.1 through 14.12) will be considered for bid evaluation.

#### 14.1 SPARES AND CONSUMABLES:

i. Tool-wise Spares and consumables against each offered tool required for Post Job Servicing for 50 runs of operations by each tool mentioned in clauses 12.1 through 12.7

- ii. Spares and Consumables for Straight Line Depth Measuring System Bidder must quote Measuring Wheels 01set, Encoders 01 set, Load pin 01 no, Tension Wheel 01 set (if applicable), Guide rollers, bearings and any other items that undergo wear and tear.
- iii. Spares & Consumables for Cable Head:

  Bidder must quote complete cable head spares and consumables for the offered cable heads. The bidder must quote cones, cone retainers, all connector boots & sockets, socket contacts, Teflon sleeves, O-Ring if used, sufficient for 50 number of re-head jobs for both the cables sizes (7/32" and 5/16").
- iv. Any other item, which the Bidder feels is required, but not mentioned in this clause.
- **14.2** Commonly addressed spares, consumables and accessories for the AC Power generator (stand-by) for carrying out minimum of 2 regular/periodic maintenance schedules as per OEM recommendation:

## 14.3 Printed Circuit Boards (PCB) and Other Maintenance Spares:

The Bidder is required to quote the following:

i. One no. each of all the Printed Circuit Boards (PCB) used in each down hole tool type as mentioned in the clause 12.1 to 12.7.

## The quotation for the PCBs must be tool-wise.

- ii. One number each of all the printed circuit boards/controllers used in the truck main AC alternator, winch drive and their control units
- iii. Complete Detector assemblies (for straightaway replacement) for 1 11/16" Shooting Gamma ray Tool, same as fitted in each such tools, Qty = 02 nos.
- iv. PCBs used in Logging unit Surface acquisition panels, cased hole interface panel, surface depth panel, Addressable downhole switch surface panel, Qty =01 no. EA
- v. Transmitters and Receivers set for the Sector Bond Sonic Tool/ Radial Bond Tool Qty = 01 nos. each
- vi. 2 sets each of (Normal and Extended, if applicable or equivalent) fingers used for each of the Multi finger imaging tool. (Total: 8 sets of fingers)
- vii. 1 set of motor section used in each of the Multi finger imaging tool.
- viii. 50 numbers of each type of O-ring used in each downhole tool which requires change after every run/post job servicing.
- ix. 20 numbers of each type of O-ring used in each downhole tool which requires change during carrying out periodic maintenance /tool assembly and disassembly.

- x. Nuts, bolts, washers, roll-pin, lock-pin, connectors, different pins and boots, backup rings etc. used in each down hole tool, Qty= 10 each
- xi. Two times the number of rollers, linkages/arms for centralizers and other conveyance accessories used in production logging.
- xii. Complete motor section (if any) of free point indicator tool (the complete spare assembly quoted must be readily replaceable within the supplied tool), Qty=02 sets
- xiii. Complete sensor section of free point indicator tool (the complete spare assembly quoted must be readily replaceable within the supplied tool), Qty=02 sets
- xiv. Joystick for winch drive operation , alternator speed and voltage controller/regulator 01 no. each
  - i slip-rings used for both cables similar to the one fitted in unit as spare, Qty=01 each
  - ii Spare cables used between measuring head to bulkhead connector, similar to the one fitted in the units, Qty=01 set
- NOTE: The Bidder is expected to quote every item as mentioned in the above clause 14.1, 14.2 and 14.3. If the Bidder fails to quote any of the above items in the bid, but found to be a part of the equipment during five years from the date of successful commissioning of the equipment, the bidder must supply the same FREE OF CHARGE TO OIL.
- **14.4** Winch Panel for Depth / Tension Measurement, if any, Qty= 01 no.
- **14.5** SPARE surface cased hole acquisition panel with license, similar to the one fitted in unit, Qty= 01 no.
- 14.6 One no. of each of printer similar to the one fitted in the logging unit must be quoted as SPARE.
- 14.7 Spare rack mounted surface computer similar to the one fitted in the logging unit with suitable licenses, Qty= 01 no.
- 14.8 One number of Hydraulic driven AC generator (Alternator) exactly similar to the one installed in the logging unit is to be quoted as <a href="SPARE">SPARE</a> along with all controllers / accessories. In case of failure of the truck mounted generator, the spare generator must be able to replace it directly.
- **14.9** Straight Line Measuring system, similar to the one installed in the logging unit, is to be quoted as spare, Qty= 01 no.
- **14.10** Perishable Items:

Fanfold paper for color printer - 2000 sheets (min)
Thermal film roll - 200 rolls
Thermal paper roll - 200 rolls

- **14.11** Any other panels used in the surface logging system/fitted in the unit, Qty= 01 no. each
- **14.12** Spare air pump (Lincoln pump) for grease injection same as fitted in the truck. Qty= 01 no.

NOTE: <u>Bidders must note that OIL at its discretion may increase or decrease the quantity of above spares and consumables.</u>

#### 15.0 RECOMMENDED SPARES LIST:

Apart from the spares, consumables and accessories mentioned in the clause 16.0, the bidder is required to submit a list of all the recommended spares (electronic, electrical, mechanical, hydraulic etc.), accessories and consumables for the truck mounted assemblies, sub-assemblies, surface electronic systems, and downhole tools. This recommended spare parts list should contain description, part number and quantity of each item. <u>The quantity of items recommended must be sufficient to cater 100 runs per tool in 02 years of uninterrupted operation and maintenance.</u>

This is required for OIL's future reference / procurement only, and will not be considered for bid evaluation.

#### NOTE:

- The Bidder must submit a written commitment that the spares and consumables will be supplied on chargeable basis to OIL for a period of 10 years from the date of closing of the bids, and in the event a part is not available due to a vendor going out of business or some other reason, the Bidder will determine and supply a suitable replacement part on chargeable basis to OIL.
- ii Perishable consumables like Paper, Films etc. are to be Air-freighted up to Kolkata / Delhi, India, and the bidders should quote accordingly.
- iii Procurement of spares, accessories, PCBs, consumables etc. mentioned against clauses 16.0 shall be at the discretion of OIL.

#### 16.0 STANDARD PRICE LIST

Bidders are also required to submit a **standard price list** of the **entire items** used in the offered tools and surface systems. The price list must include all electronic, electrical, hydraulic items, mechanical items, accessories and consumables, Sub

assemblies, surface electronic system of the truck unit and downhole tool. The price list should contain description, part number and unit price of each item and must be valid for a minimum period of **two years** from the date of **successful commissioning of the equipment.** 

## 17.0 PAST PERFORMANCE

At the time of technical evaluation of the offers, past performance of similar equipments supplied by the bidder as well as after-sales service, supply of spares etc. in respect of such equipment by the concerned bidder will be considered. If the same are not found to be satisfactory as already communicated to the bidder, the offer may be considered as unacceptable and rejected.

- 18.0 The bidder must confirm in writing along with their bid that they possess all standard testing & calibration facilities at their manufacturing Base / Testing centre, including pressure / temperature testing etc., for all the tools offered by them against this tender.
- 19.0 The logging truck, tools and accessories offered against this bid must be latest and state-of-the art in the Industry with capability of trouble free data recording and seamless data transferring up to well depth of at least 6400 mtrs. and must have been field proven for at least 1 year prior to bid closing date.
- **20.0** The bidder should also have proper R & D facilities for development and upgradation of their equipment.

#### 21.0 DELIVERY

- i. Delivery required against this tender is maximum 12 (Twelve) months from the date of opening of LC in case order is placed on the foreign supplier OR within 12 (Twelve) months from the date of receipt of order in case order is placed on indigenous supplier. Date of clean Bill of Lading (B/L in case of foreign supplier) or Consignment Note date (C/Note date in case of foreign supplier) shall be considered as delivery date.
- ii. Bidder must comply with the above schedule and confirm in their Techno-Commercial bid. Bids not meeting time schedule as mentioned in the tender shall be summarily rejected.

In the event of the Seller's default in maintaining the quoted delivery schedule, seller shall be liable to **pay liquidated damages** @ **0.5% per week** or part thereof of the material value of the order subject to a maximum of 7.5%. Liquidated damages

amount, if any, shall be adjusted/deducted while processing the balance payment which is payable after commissioning.

## 22.0 DEVIATIONS FROM TECHNICAL SPECIFICATIONS

The bidder must quote as per the tender requirement only and provide FULL INFORMATION wherever applicable in the bid. After opening of the bids, in case any technical clarification is required on any bid, OIL will seek clarification from that bidder and the bidder will have to reply/clarify with complete details within the specified time mentioned by OIL. If not complied, that particular bid may not be considered for further evaluation.

The bidder must respond to each and every clause in the NIT in a tabular form as per APPENDIX – B2.

## **SECTION - C**

#### 1.0 TRAINING & INSPECTION:

Immediately after placement of the Purchase Order, the successful bidder should communicate the proposed training schedule to OIL for the Field Engineers, Maintenance Engineers and Interpretation Engineers, at least 04 (four) months in advance for each training program. OIL in turn will confirm acceptance of the schedule of training at least two month in advance for each program. The engineer's training program must be completed within 9 months of the issuance of LOI.

- **1.1** The bidder will have to provide training for 3 (THREE) Field Engineers, 3 (THREE) Maintenance Engineers, 2 (TWO) Log Data Processing & Interpretation Engineers and at their training school which is equipped with Test Well and all other requisite facilities. The training charges, if any, should be quoted separately which shall be considered for evaluation of the bid. However, passage and living expenses, including accommodation charges of OIL Engineers nominated for the training courses will be borne by OIL.
  - Logging Operation Engineers Training: This should include detailed aspects of cased hole wireline logging, operation of tools procured, well completion system / different types of perforations and basic equipment trouble shooting at the Base & Fields in addition to the regular curriculum for Field Engineers' Training Course at the suppliers' Training School. Duration of the training period, locations of training and pre-requisites of the trainees, if any, should be specified in the bid documents.
  - Logging Maintenance Engineers Training: This should include detailed theoretical and practical training on the logging system Hardware & Software, Down hole tools to be supplied with the unit, Hydraulic and Pneumatic systems for operation, trouble shooting & repair of the operators' winch and power generating subsystems of the Logging Unit in addition to the scheduled regular Maintenance Engineers' Training course at the Suppliers' Training School. Duration of the training period, locations and pre-requisites of the trainees, if any, should be specified in the bid documents.
  - Log Data processing, Analysis & Interpretation Training: This should include detailed training on Data Processing, Analysis & Interpretation of log data for all offered tools and software modules procured from them at the suppliers Training School. Duration of the training period, locations and pre-requisites of the trainees, if any, should be specified in the bid documents.
    - Bidder must give special emphasis on processing and interpretation of log data from Multiple Array Production Logging Tools, MIT and MTT etc.
  - iv <u>Transport Maintenance (Automobile) Engineer's Training cum inspection:</u>

After completion of manufacturing of the logging unit, the supplier will have to arrange a training program for OIL's Transport Engineers on maintenance of the

Truck Engine, Mechanical, Hydraulic, Pneumatic systems and subsystems associated with the Logging Unit. Modalities of the arrangement proposed for this training at supplier's premises including duration of the training period and prerequisites of the trainee, if any, should be specified in the bid documents. The training should include the following:

- 1. Engine and its control system.
- 2. Transmission, Transfer Case, PTO, Axle, etc.
- 3. Brake & Pneumatic system of truck chassis.
- 4. Complete Hydraulic System (as per the hydraulic schematics).
- 5. All Pumps & Motors and Torque Hub of winch drums of the hydraulic system.
- 6. Electrical/electronic control system for operation of hydraulic winch, alternator and all other hydraulic actuators.

## 1.2 INSPECTION CUM ACCEPTANCE:

- i. After finalizing the tentative readiness of the equipment, the successful bidder should communicate the proposed inspection schedule to OIL, with the confirmed date for inspection, at least three months in advance. OIL, in turn, will confirm the scheduled date of visit of its personnel one month in advance to the successful bidder.
- ii. The pre-shipment inspection of the equipments shall be carried out in 2 (two) phases:-

Phase-1: for Automobile and Hydraulic Section and

**Phase-2:** for Logging Section, both at the supplier's premises by a team of executives from OIL as mentioned below. It is to be noted that immediately after completion of the Transport Engineers' Training, same team of two Transport Engineers from OIL will carry out the Phase – 1 inspection.

## **INSPECTION PHASE – 1**: Automobile and Hydraulic Section:

The supplier shall facilitate pre-dispatch inspection of the logging unit at their Plant / Works for a minimum period of 01 (one) week by 2 (two) Transport Engineer from OIL. Passage and living expenses, including accommodation charges of OIL Executives nominated to carry out the inspection work will be borne by OIL. The period of inspection and acceptance process may accordingly be specified by the bidders in the bid documents.

The inspection cum acceptance process will include the following minimum tasks / steps:

i. Physical verification / inspection of all the items / fittings / accessories as per the Purchase Order (related to the Automobile Section only),including all parts catalogue,

maintenance & Service Manuals, Schematics, Final Chassis built up/ Vehicle Content Record documents, etc. and actual loading on axles. The supplier shall arrange driver / operator, weighing facility and any other infrastructure as and when required during the process of inspection.

- ii. Verification of all Certificates / records of shock and vibration testing and other documents related to the logging truck.
- iii. Operational testing of the truck and the complete hydraulic system.
- iv. The supplier shall have to take note of any minor modification(s) for operational requirement suggested by the inspectors and comply with the same at no extra cost.
- v. The minutes of the inspection task would be prepared at the end of the inspection process and jointly signed by both the parties (OIL and the supplier).
- vi. The supplier shall confirm in writing compliance of all the points raised in the minutes of inspection as well as any other subsequent additions/ changes, following deliberations with the Phase 1 Inspectors after arrival at Duliajan, Assam.

**NOTE:** The team of 02 (two) Transport Engineers from OIL, immediately after completing the Transport Engineers Training, will carry out the Phase – 1 inspection for at least one week.

#### **INSPECTION PHASE – 2: Logging Section:**

The pre-shipment inspection of the equipment shall be carried out at the supplier's premises by a team of 02 (Two) executives from OIL as mentioned below.

The supplier shall facilitate pre-dispatch inspection of the logging unit at their Plant/Works for a minimum period of 02 (Two) weeks by 2 (TWO) Logging Engineers in senior level from OIL.

Passage and living expenses, including accommodation charges of OIL Executives nominated to carry out the inspection work will be borne by OIL. The period of inspection and acceptance process may accordingly be specified by the bidders in the bid documents.

The inspection cum acceptance process will include the following minimum tasks / steps:

- i Physical verification of all the items as per the Purchase Order with emphasis on items of cost more than US \$ 1500 per item.
- ii Functional testing of the logging system, logging tools and accessories to their rated specifications.

- iii Verification of all records of Pressure, Temperature, Shock and Vibration testing carried out after manufacture of the logging tools as applicable.
- iv Checking of Export Invoices and discussing necessary modalities for safe transportation of the goods.
- v Technical discussions on any deviations from the Purchase order and provide feedback to OIL with technical justifications for approval of the order amendment by the competent authority.
- vi Inspection of Training Manuals and other Engineering Documents.
- vii The Inspection and Acceptance report would be prepared jointly and signed by representatives of both the parties at the end of the inspection process.
- viii The supplier shall confirm in writing compliance of all the points raised in the minutes of inspection as well as any other subsequent additions / changes, following deliberations with the Inspectors after arrival at Duliajan, Assam.
- ix After completion of the Phase-2 inspection, the supplier will effect dispatch of the unit only on receipt of OIL's dispatch advice.

## **SECTION - D**

## 1.0 INSTALLATION AND COMMISSIONING

(i) Installation and commissioning includes commissioning of the logging Truck, testing of all the downhole tools in the well and testing of all other goods supplied. The bidder will have to depute personnel with good communication capability in English and with minimum of five years experience in operations and maintenance of wireline logging and downhole tools, to OIL, Duliajan for field commissioning of the entire equipment. The bidders must quote for lump sum commissioning charges which should include to and fro air-fare of their personnel.

The commissioning charges quoted will be considered for bid evaluation.

Supplier shall have to bear all expenses related to Train/Air/Sea travel, local transportation expenses, transit insurance and boarding and lodging expenses etc., for their personnel deployed during commissioning.

(ii) Immediately after receipt of all the materials by OIL at Duliajan, a written advice will be issued to the supplier asking them to commence installation and commissioning, which must be promptly acknowledged by the supplier.

Commissioning of the Logging Unit along with all the downhole tools and other accessories is to be completed within 03 (three) months from the date of receipt of such an advice from OIL (this three months period excludes the waiting time for well readiness).

Supply of short-shipped and warranty replacement items is to be arranged, including Customs Clearance etc. by the suppliers or their authorized representatives at their cost within 03 (three) months from the date of completion of commissioning of the entire equipment.

(iii)In addition to all other installation and commissioning jobs, all the downhole tools and pressure control equipment will be tested in OIL's oil/gas wells by carrying out actual logging operations. Each downhole tool and pressure control equipment must perform at least 02 nos. of successful logging operations in two different wells. Each of these logging jobs will have to be carried out in a well-depth of 3500 meters (approx.) or more as required by OIL

## 2.0 **LIQUIDATED DAMAGE:**

Liquidated Damage will be levied for any failure on the part of the supplier in completion of installation and commissioning @ 0.5% per full week or part thereof to a maximum of 10% of the value of the installation and commissioning. Moreover, if the successful bidder fails to commission the entire equipment within 01

(one) year from the date of intimation from OIL after arrival of the equipment at Duliajan, OIL will invoke performance security.

## 3.0 WARRANTY:

- 3.1 Oil India Limited (OIL) reserves the right to inspect, test and wherever necessary, reject the goods after arrival of the goods at site, only if the said rejection is attributed to be the responsibility of the Bidder. It shall, in no way be limited or waived by reason of the goods being previously inspected, tested and passed by OIL or its representatives prior to the goods shipment from the country of origin.
- 3.2 Materials supplied as per the Purchase Order should be under warranty by the suppliers for a **minimum period of 01 (one)** year from the date of successful completion of installation and commissioning of the entire equipment at site. Any item / sub item failed during the above mentioned warranty period is to be replaced / repaired within 03 (three) months from the date of notification of such failure. The warranty of the repaired / replaced items shall be correspondingly extended by a period equal to that from the date of failure to the date of commissioning of the replaced/repaired item. In order to keep the equipment fully operational, all spares and accessories required during the warranty period is to be arranged at site by the suppliers or their authorized representatives, within 03 (three) months, at their cost (including Customs Clearance etc.)

#### **SECTION-E**

#### BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

The bids shall broadly conform to the technical specifications and terms & conditions detailed in this tender document. Bids shall be rejected in case the items/equipment/tools do not conform to the required parameters stipulated in the technical specifications and to the respective international/national standards wherever mentioned as well as to the terms of the tender. Notwithstanding the general conformity of the bid to the tender provisions including the specifications and terms & conditions, the following requirements must be particularly met by the Bidder, without which the offer shall be considered as non-responsive and rejected.

#### (A) TECHNICAL:

#### A.1 BIDDER'S ELIGIBILITY:

1.0 The Bidder should either be the Original Equipment Manufacturer (OEM) of the offered Cased Hole Wireline Logging Unit.

#### OR

The offered Cased Hole Wireline Logging Unit is manufactured by the Bidder's Parent/Subsidiary/Co-subsidiary of any tier of same group company (any such relationship should be on 100% basis).

Note: Bidder must identify their status in the Technical Bid whether they are the OEM of offered Cased Hole Logging Unit or Bidding as a Parent/ subsidiary /co-subsidiary of the OEM.

- 2.0 The Original Equipment Manufacturer (OEM) of the offered Cased Hole Logging Unit must satisfy the following criteria, irrespective of whether the Bidder himself is the OEM of the offered Cased Hole logging Unit or not:
  - a) Should have minimum 05 (Five) years of experience in manufacturing Cased Hole Wireline Logging Units as on the original Bid Closing Date of the Tender.
  - b) Should have manufactured and sold minimum 05 (Five) numbers of Cased Hole Wireline Logging Units to various companies which are in the business of "Exploration & Production of hydrocarbons" and/or "Oil Field Service Providers" during the last 05 (Five) years as on the original Bid Closing Date of the Tender.
  - c) The 05 (five) numbers of Cased Hole Logging Units as mentioned in sub-para (b) above, must have been sold/supplied directly by the OEM themselves or through their Parent/Subsidiary/Co-subsidiary to the clients/purchasers based in at least 02 (Two) different countries.
- 3.0 Alongwith the Technical Bid, the Bidder must submit following documentary evidences in support of the credentials of the OEM of offered Cased Hole Logging Unit pursuant to clause No. 2.0 (a), (b) & (c) above.
  - (a) Photo Copies of the contracts/purchase orders awarded by Clients together with the corresponding dispatch/delivery documents (viz; Invoices/Bill of

Lading/Consignment Note etc.) and Successful Commissioning Report of the supplied units.

- (b) In addition to above, the Bidder must submit certificates/documents from minimum two (2) of their clients certifying that the Cased Hole Logging Units sold to them by the Bidder/OEM is/are functioning to their satisfaction. In lieu of such certificates from Clients, Undertaking from the CEO/Company Secretary of the bidding Company to the effect that his/her Company has executed/completed such Orders/Contracts for Cased Hole logging Units complete with necessary tools are performing to the best satisfaction of Customers/Clients.
- 4.0 In case the Bidder is not the OEM of the offered Cased Hole Logging Unit, but submitted their bid as the Parent/Subsidiary/Co-subsidiary of the same group company of OEM (on 100% basis), they must submit the following documents alongwith their Technical Bid, failing which their bid shall be considered as incomplete and rejected.
  - (a) Documentary evidences regarding existence of such relationship between the Bidder and the OEM of the offered Cased Hole Logging Unit.
  - (b) Authorisation Letter/Certificate from the manufacturer (OEM) on their official letter head duly authorizing the Bidder to quote and sell their products & services (installation, commissioning, training, upgradation & troubleshooting etc.).
  - (c) Back-up warranty letter from the concerned OEM for guaranteed supply and satisfactory performance of their Cased Hole Logging Unit in the event of an order by OIL on the Bidder against the Tender.

#### A.2 BIDDER'S EXPERIENCE AS A SERVICE PROVIDER:

- 1.0 The Bidder or its Parent/Subsidiary/Co-subsidiary of any tier of same group company (such relationship should be on 100% basis) must have experience of providing Wireline Logging Services for minimum of 2 (two) years to E&P companies at least in two (2) different countries other than its own country of origin during the last 5 (five) years preceding the original bid closing date of this tender.
- 2.0 In support of service experience as per clause No. 1.0 above, Bidder must submit documentary evidences in the form of relevant contracts/agreement copies evidencing the Scope of Work alongwith any one of the following documents:
  - (a) Satisfactory completion/Performance Reports issued by Clients

OR

(b) Proof of release of Performance Security after completion of contracts

OF

(c) Proof of settlement/release of final payment against the contracts

OR

(d) Documentary evidences in the form of initial and final signed job tickets/service tickets against each such contracts/agreements

OR

(e) Any other documents which can substantially prove the service experience criteria as per clause No. 1.0 above.

2.0 As on the bid closing date of this Tender, the bidder must have its base in India with capability to provide immediate support / solutions to the Logging Units / Tools, if required by OIL.

#### A.3 THE LOGGING UNIT:

- 1.0 The offered Logging Unit should be 6X6 Drive (All live axles one front & two rear). While the normal drive shall be under 6X4 option, there shall be provision to shift to 6X6 drive option as & when required.
- 2.0 Offers of **Left-Hand driven** (Steering on Left Hand Side inside the driver's cabin) Logging Truck will be rejected.
- 3.0 Offers other than **diesel fuel** driven Logging Trucks will be rejected.
- 4.0 Bids with qualifying conditions like "the product is under development and would be supplied by the time ..... etc.," will be summarily rejected.
- 5.0 Wherever two or more sets of the same equipment/item are required, the bidders must quote all the sets of the same item that are identical in all respects i.e. the same category of equipments must be of same make, model and compatible in all respects. The bidder must quote accordingly as mentioned in this clause.

#### A.4 LOGGING SYSTEM:

- 1.0 The offered logging system must be capable of performing the cased hole logging operations and services with the type of tools including production logging, well completion operations and perforations as described in the Tender document. Bidder must confirm compliance on this point in its bid.
- 2.0 All the downhole logging tools mentioned in this tender and offered by the bidder should be rated for minimum 104MPA (15000 psi) and 177 degree C (350 degree F) temperature. Temperature rating should be for a minimum of one hour continuous exposure in well bore.
- 3.0 The Bidder must submit a written commitment to supply spares & consumables on chargeable basis to OIL for a period of 10 (ten) years from the date of original Bid Closing of this Tender. In the event, any part becomes unavailable due to a vendor goes out of business or for some other reasons, the Bidder shall determine and supply a suitable replacement on chargeable basis to OIL.
- 4.0 The Bidder must offer free updates/up-grades of the Software for a minimum period of 10 (ten) years from the date of original bid closing of this tender.
- 5.0 The Bidder must categorically confirm in their technical bid that in the event of an order, they will carry out installation & commissioning of their entire supplied system including the Logging Unit with all tools at Duliajan, Assam, India as per provision of the Tender. Any Bidder not offering installation & commissioning of their offered system shall be as non-responsive and rejected.

- 6.0 The Bidder must offer at least 01 (one) year Warranty period for the entire equipment to be supplied by them from the date of completion of successful field commissioning. Any item/sub-item failed during the warranty period shall be replaced/repaired free of cost within 03 (three) months and warranty of such item(s) shall be extended accordingly.
- 7.0 Bidder must offer for Training and Inspection as detailed in the **ANNEXTURE-C** of this Tender document.

#### A.5 DELIVERY:

- 1.0 Delivery shall be essence of the contract/PO. Delivery required against this tender is maximum 12 (Twelve) months from the date of opening of LC in case order is placed on the foreign supplier OR within 12 (twelve) months from the date of receipt of detailed order in case the order is placed on indigenous supplier. Date of clean Bill of Lading (B/L in case of foreign supplier) or the date of Consignment Note (C/Note date in case of indigenous supplier) shall be considered as the date of delivery.
- 2.0 Bidder must comply the above schedule and confirm in their Techno-Commercial bid. Bids not meeting time schedule as mentioned in the tender shall be summarily rejected.
- 3.0 In the event of the Seller's default in maintaining the agreed delivery schedule, seller shall be liable to pay liquidated damages @ 0.5% per week or part thereof of the material value of the order subject to a maximum of 7.5%. Liquidated damages amount, if any, shall be adjusted/deducted while processing the balance payment which is payable after commissioning.

#### **GENERAL NOTE:**

Bidder must confirm their response to each & every aforementioned BRC (Technical) clauses as per check-list provided in this tender document vide **APPENDIX-B3**. The check-list should be duly filled in by the Bidder and upload as part of their Technical Bid to minimize post-tender clarifications and to avoid rejection of their offer.

#### (B) FINANCIAL EVALUATION CRITERIA:

- 1.0 The bidder shall have an annual financial turnover of minimum **INR 23.89 Crs or US\$**36,80,000.00 during any of the preceding 03 (Three) financial/accounting years reckoned from the original bid closing date, irrespective of whether their bid is for all the tendered items or not.
- 2.0 "Net Worth" of the bidder should be positive for the financial/accounting year just preceding to the original Bid Closing Date of the Tender (i.e., year 2016-17).
- 3.0 Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year

will be considered. However, the bidder has to submit an affidavit/ undertaking certifying that 'the balance sheet/Financial Statements for the financial year 2016-17 has actually not been audited so far'.

#### Note:

- a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the technical bid:-
- i) A certificate issued by a practicing Chartered / Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE-E-I.

OR

- ii) Audited Balance Sheet alongwith Profit & Loss account. In case of foreign bidders, self-attested/digitally signed printed published accounts are also acceptable.
- b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/ State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.
- 4.0 In case the Audited Balance Sheet and Profit & Loss Account submitted along with the bid are in currencies other than INR or US\$, the bidder shall have to convert the figures in equivalent INR or US\$ considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA certificate is to be submitted by the bidder regarding converted figures in equivalent INR or US\$.

#### (C) COMMERCIAL CRITERIA:

Commercial Bid Rejection Criteria will be as per Section D of General Terms & Conditions of Global Tender (MM/GLOBAL/E-01/2005) with following Special Bid Rejection Criteria.

- 1.0 Bids are invited under **Single Stage Two Bid System**. Bidders shall quote accordingly under Single Stage Two Bid System. **Please note that no price details should be furnished in the Technical (i.e. Unpriced) bid**. The "Unpriced Bid" shall contain all techno-commercial details except the prices, which shall be kept blank. The "Price Bid" must contain the price schedule and the bidder's commercial terms and conditions. Bidder not complying with above submission procedure will be rejected.
- 2.0 The prices offered shall have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- 3.0 Bids received in physical form against online invitation through e-portal shall be rejected (except the documents specifically called for in hard copies, if any). Similarly,

Bids received after the bid closing date and time shall be rejected. Also, modifications to bids received after the bid closing date & time shall not be considered.

- 4.0 Bids containing incorrect statement shall be rejected.
- 5.0 Validity of the bid shall be minimum 120 days from the date of Bid Closing Date. Bids with lesser validity will be straightway rejected.
- 6.0 **Bid Security in ORIGINAL** shall be furnished by the Bidder as a part of their Bid. The amount of Bid Security & its validity shall be specified in the covering letter of this bid document. **Any bid not accompanied by a proper bid security in ORIGINAL shall be rejected without any further consideration.** A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.
- 6.1 For exemption for submission of Bid Security please refer Clause No. 9.8 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders).
- 7.0 Bidders must confirm in their technical bid that Materials supplied as per the Purchase Order would be under warranty by the suppliers for a minimum period of 01 (one) year from the date of successful completion of installation and commissioning of the entire equipment at site. Any item / sub item failed during the above mentioned warranty period is to be replaced / repaired within 03 (three) months from the date of notification of such failure. The warranty of the repaired / replaced items shall be correspondingly extended by a period equal to that from the date of failure to the date of commissioning of the replaced/repaired item. In order to keep the equipment fully operational, all spares and accessories required during the warranty period is to be arranged at site by the suppliers or their authorized representatives, within 03 (three) months, at their cost (including Customs Clearance etc.). This is as per clause no. 3 of Section-D.
- 8.0 Successful bidder shall be required to furnish a Performance Security equivalent to ten percent (10%) of total evaluated value of Order, which should remain valid throughout the period as mentioned in MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders), including extension, if any. The successful bidder shall submit Performance Security within 30 days of award, failing which OIL reserves the right to cancel the order and forfeit their Bid Security. Bidders should undertake in their bids to submit Performance Security as stated above
- 9.0 Offers should be submitted along with Integrity Pact duly signed by the authorized signatory of the bidder. If any bidder refuses to sign Integrity Pact or declined to submit Integrity Pact with the offer, their bid shall be rejected straightway.
- 10.0 Bidders are required to submit the summary of the prices in their price bids as per bid format (Summary), given below.

## (i) Price Bid Format (SUMMARY) for Foreign Bidders:

A.1	Cost of items covered under Section-A except Annexure-A2
A.1 A.2	
	Cost of items covered under Section-B except Clause no. 15.0 & 16.0
В	Cost of commissioning spares, if any
C	Pre-Despatch/shipment Inspection Charges as per <b>Section-C, Clause no. 1.2</b> , if
	any
D	Total Cost of the unit, A1 + A2 + B + C
E.1	Packing, FCA (Gateway airport) Charges for Explosives, RA Sources and perishable
<b></b>	consumable
E.2	Packing & FOB (seaport) charges for Remaining items
F	Total FOB/FCA port/airport value, (D+E.1+E.2) above
G.1	Air Freight charges for Explosives, RA Sources and perishable consumables upto
	Hyderabad/Bangalore/Mumbai/Chennai, India
G.2	Ocean Freight Charges for Remaining items upto Kolkata, India
Н	Insurance Charges @ 0.5 % of Total FOB Value vide (F) above
I	Banking Charges @ 1% of Total FOB Value vide (F) above in case of payment
	through Letter of Credit. If confirmed L/C at buyer's account is required, 1.5% of
	Total FOB Value will be loaded)
J	CIF Value (F+G.1+G.2+H+I)
K	Landing Charges 1% on (J)
L	CIF Landed Value (J+K)
M	Basic Custom Duty on (L)
N	CIF +CD Landed Value (L+M)
O	IGST (including cess, if any) on (N)
P	CIF +CD+GST Landed Value ( N+O )
Q	Training charges at bidder's works as per Clause No. 1.0 of Section-C, If any
R	GST on Training Charges (Q)
S	Installation and commissioning Charges for the complete unit as per <b>Clause No.</b>
	1.0 of Section-D, if any
T	GST on Installation & Commissioning Charges
U	Total Value (P+Q+R+S+T)
V	Total Value in words :
W	Gross Weight:
X	Gross Volume :
Y	Cost of items covered under Annexure-A2 (will not be considered for evaluation)
Z	Cost of items covered under Section-B, Clause no. 15.0 & 16.0 (will not be
	considered for evaluation)

# (ii) Price Bid Format (SUMMARY) for Indigenous Bidders:

A.1	Cost of items covered under <b>Section-A except Annexure-A2</b>
A.2	Cost of items covered under Section-B except Clause no. 15.0 & 16.0
В	Cost of commissioning spares, if any
С	Pre-Despatch/shipment Inspection Charges as per <b>Section-C, Clause no. 1.2</b> , if
	any
D	Total Cost of the unit, A1 + A2 + B + C
E	Packing & Forwarding Charges, if any
F	Total Ex works Value (D+E)
G	GST on (F)
Н	Compensatory Cess, If any
I	Total FOR Despatching Station value(F+G+H)
J	Inland freight Charges upto Duliajan, Assam

K	GST on (J)
L	Insurance Charges @ 0.5 % of (F)
M	Training charges at bidder's works as per Clause No. 1.0 of Section-C, If any
N	GST on Training Charges (M)
О	Installation and commissioning Charges for the complete unit as per <b>Clause No.</b>
	1.0 of Section-D, if any
P	GST on Installation & Commissioning Charges (O)
Q	Total FOR Duliajan Value (I+J+K+L+M+N+O)
R	Total Value in words:
S	Gross Weight:
T	Gross Volume :
U	Import Content, if any
V	Cost of items covered under Annexure-A2 (will not be considered for evaluation)
W	Cost of items covered under <b>Section-B</b> , <b>Clause no. 15.0 &amp; 16.0 (will not be</b>
	considered for evaluation)

- 11.0 Bidder shall accept and comply with the following clauses as given in the Bid Document, failing which bid shall be liable for rejection:
  - i) Liquidated Damages
  - ii) Warranty/Guarantee of material
  - iii) Arbitration / Resolution of Dispute
  - iv) Force Majeure
  - v) Applicable Laws
- 12.0 A bid shall be rejected straightway if it does not conform to any one of the following clauses:
  - (a) Validity of bid shorter than the validity indicated in the Tender.
  - (b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.
  - (c) Bid Security with (i) validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.

#### D. BID EVALUATION CRITERIA:

The bids conforming to the specifications, terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria shall be considered for further evaluation as per General Terms and Conditions for Global Tender and the Bid Evaluation Criteria given below:

#### D.1 TECHNICAL

All materials as indicated in the material description of the tender should be offered. If any of the items are not offered by the bidder, the offer will not be considered for evaluation.

#### 1.0 SPARES AND CONSUMABLES:

i. Cost of spares, consumables, accessories, panels, critical items, PCBs etc. as mentioned in clause 16.0 of SECTION - B will be considered for Bid evaluation.

- ii Perishable consumables like paper, film, Radioactive items etc., are to be Air Freighted up to Hyderabad/Bangalore/Mumbai/Chennai, India and accordingly air freighted charges for these items shall be considered for evaluation.
- iii. Bid evaluation will be done only for those bids which offer full quantities of goods as mentioned in the SECTION A through SECTION D.
- 2.0 Bidder's response to all NIT technical specifications should clearly be defined. Bidder shall furnish specific details/specifications of all major components, systems with Make & Model, etc. as sought in the tender. Generalized response like 'As per NIT Specifications/Technical Leaflet', 'Noted', 'Accepted' or 'in any similar fashion' is not considered for evaluation of technical specification.

#### D.2 COMMERCIAL

- 1.0 The evaluation of bids shall be done as per the Price Bid Format (SUMMARY) provided in the Tender and detailed below
- 2.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
- 3.0 For conversion of foreign currency into Indian currency, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of price bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceed 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.
- 4.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made as under, subject to corrections / adjustments given herein.
  - <u>Note:</u> 1) Domestic Bidders must quote inland freight charges upto Duliajan. In case bidder fails to quote inland freight charges, highest freight quoted by domestic bidder (considering pro-rata distance) against this tender or OIL's estimated freight, whichever is higher, shall be loaded to their offer for comparison purpose.
  - 2) For enquiries with duty exemption benefit The items covered under this enquiry shall be used by OIL in the PEL/ML areas issued/renewed after 01/04/99 and hence, applicable customs duty for import of goods shall be zero. However, IGST @5% shall be applicable. Indigenous bidder shall be eligible for concessional rate of GST @5% against Essentiality Certificate for invoice valuing 10 lakh and above.

#### 4.1 When only foreign bidders are involved:

The Total Value of Foreign bidder as worked out as per para **Section-E, A.3, 10.0 (i), U** shall be compared

NOTE: \*Banking charge in the country of the foreign bidder shall be borne by the bidder. Banking charge 1% for payment through Letter of Credit. And 1.5 % if confirmed LC at buyer's account is required.

4.2 When only domestic bidders are involved or when more than one domestic bidders are in contention in case of mixed response:

The Total Value of Domestic bidder as worked out as per para **Section-E, A.3, 10.0 (ii), Q** shall be compared

4.3 When both foreign and domestic bidders are involved:

The Total Value of domestic bidder as worked out as per para **Section-E, A.3, 10.0 (ii), Q (excluding J, K & L)** above and Total Value of the foreign bidder worked out as per Para **Section-E, A.3, 10.0 (i), U** above will be compared.

Note: If the Government of India revises these evaluation criteria the same as applicable on the bid closing date will be adopted for evaluation of the offers.

5.0 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global Tender. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

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#### CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING CHARTARD ACCOUNTANTS' FIRM ON THEIR

LETTER HEAD		
	TO WHOM IT MAY CONCER	<u>RN</u>
financial statements of I	the following financial positions M/s eted accounting years upto	(Name of the bidder) for
YEAR	TURN OVER In INR (Rs.) Crores/ US \$ Million) *	NET WORTH In INR (Rs.) Crores / US \$ Million ) *
*Rate of	conversion (if used any): USD 1.	00 = INR
Place: Date:		
Seal		
Membership No: Registration Code:		
Signature		

<sup>\*</sup>APPLICABLE ONLY FOR GLOBAL TENDER

The bidder must submit along with its bid the following tool specifications sheet duly filled up against each downhole tool quoted:

#### **LOGGING TOOL SPECIFICATION SHEET**

	Tender No.		
	Bidder's Name		
	NAME OF DOWNHOLE TOOLS	SPECIFICATIONS/PARAMETERS	VALUE
1.		MEASUREMENT TYPE:	
		MEASUREMENT RANGE:	
		TOOL DIAMETER:	
		BOREHOLE DIAMETER RANGE:	
		ACCURACY:	
		TEMPERATURE: 350 deg F Minimum (for Downhole Tractor minimum 300 degree F)	
		PRESSURE: 15000 psi Minimum	
		RESOLUTION:	

## **TECHNICAL EVALUATION CHECKLIST**

Tender	No.		
Bidder <sup>3</sup>	s Name		
OIL NIT Clause No.	OIL NIT Clause Description	Bidder's Remarks(C omplied / Not Complied / Deviation)	Relevant Page no. of the Bid to support Bidder's response
SEC- B			
1.0 (i)	Adequate, stable electrical power generated by the truck's Hydraulic alternator (preferably Marathon generator Magna Plus Model: 283PDL1766 having 30KW capacity) for power requirement of the surface system, downhole tools, air-conditioners & all other electrical accessories in the logging unit. The hydraulic alternator of the truck is to be driven by a Power Take-off unit coupled to the truck transmission system.		
1.0 (ii)	The Alternator output voltage should be regulated within +/- 5 volt between no load and full load voltage.		
1.0 (iii)	Must be equipped with voltage and frequency monitor & control, over/under voltage and frequency protection.		
1.0 (iv)	The power generator must have automatic safety shut-down features.		
1.0 (v)	The electrical system must have a Power Distribution board inside logging cabin, with circuit breakers, power plant controls, and frequency, voltage and current meters.		
1.0 (vi)	A suitable power intake point is to be provided to feed power into the unit from external source. Flexible cable (Approx. 20 M in length) with suitable plugs for this purpose should be provided.		
1.0 (vii)	Electrical power outlets for internal accessories are to be provided		
1.0 (viii)	Exterior power outlets should be properly covered.		

1.0 (ix)	Color coded / Function coded truck electrical wiring and easily accessible for maintenance and service purposes must be provided. Entire wiring should be well documented.	
1.0 (x)	A back up electrical power source of minimum 8 KVA should be provided. Following backup power system should be provided with manual switchover connection	
	One Diesel Generator, low noise/silent (Preferably Cummins Onan Model 8HDKAU-41934R having 8KW capacity) mounted on the unit in addition to the main hydraulic alternator	
1.0 (xi)	There should be provision of toggle switch to toggle between the power sources (Hydraulic Alternator and Backup diesel Generator).	
1.0 (xii)	There should be provision of starting the backup diesel generator remotely from the logging cabin.	
2.0 (i)	Roll up tinted window shades is to be provided to minimize sunlight or external light glare through the windows.	
2.0 (ii)	Cabin roof should be suitably designed to drain out the rain water.	
2.0 (iii)	Logging cabin should be fitted with at least three (03) numbers roof mounted air conditioners, each of minimum 13500 btu.	
2.0 (iv)	Proper metallic cover should be provided to protect the air conditioners from external damage.	
2.0 (v)	Temperature and humidity indicator are to be provided inside the cabin.	
2.0 (vi)	Cabin pressurization system should be provided to pump filtered fresh air in to the logging cabin for preventing dust entry	
2.0 (vii)	Three nos. of Swivel type chairs should be provided. One for the winch operator (movable and height adjustable) and two with rollers for the logging engineer. Additional sitting arrangement for at least two persons should be provided inside the cabin	
2.0 (viii)	At least four nos. of drawers with locking arrangement to store manuals, multi meters and other materials	
2.0 (ix)	Slip proof metallic floor with suitable washable carpet should be provided	
2.0 (x)	Logging Engineer console should be located side-by-side to the operator's winch panel .	

2.0 (xi)	A fire extinguisher at readily accessible location should be provided.	
2.0 (xii)	A first aid kit at readily accessible location should be provided.	
2.0 (xiii)	The operator's console should include line load display, electronic depth display, engine RPM meter, oil pressure meter, air pressure meter and hydraulic oil temperature meter and meters for any other required parameters related to winch and engine etc.	
2.0 (xiv)	The logging cabin should have provision of displaying various parameters such as generator voltage, frequency, power drawn from internal and external source etc.	
2.0 (xv)	110 V / 220 V AC along with 12V DC interior lights are to be provided.	
2.0 (xvi)	Apart from normal power outlets (110Vac, 50/60 Hz) provided inside the logging cabin minimum two numbers of power outlets (220Vac, 50/60 Hz) to be given in the logging cabin with multi socket that accepts British plugs in addition to Euro, NEMA American and Australian plugs with ON/OFF switch.	
2.0 (xvii)	Suitable LED lights must to be installed at the drum area for proper illumination. Proper LED rig-lights (AC) of minimum 5000 Lumen each to be installed to illuminate the working area. Additionally, LED riglights (DC) of sufficient power should be installed immediately below the rear corner rig-lights operated directly from the truck battery. Both the lights at the rear exterior corners must have suitable metallic cover at sides to protect against impact	
2.0 (xviii)	The rear corner LED rig lights should be mounted on a motorized platform controlled by remote to focus the light at desired area of working.	
2.0 (xix)	Visible safety warning lights and stray voltage monitor panel for perforation safety must be provided with the logging unit	
2.0 (xx)	The logging unit's steel welded construction materials should be properly painted to resist corrosion.	
3.0 (i)	The unit should be equipped with Direct Drive non-magnetic Dual Drums (with antirust / non-corrosive coating) to accommodate 5.55625 mm (7/32") OD and of 7.9375 mm (5/16") OD single conductor wireline cables having at least 23000 feet length.	
3.0 (ii)	The two independent winch drums (of cable 5/16" and 7/32" size) powered by the unit's hydraulic system should have speed ranges from 1 m/min or less to 150 m/min or more with fine speed control even at	

	maximum load condition	
3.0 (iii)	A certificate should be provided confirming micro fractures / cracks free base mounting frame of the cable drums.	
3.0 (iv)	Operation of both the winch drums should be controlled by an electronic proportional joystick control mounted on the operator's control panel. The joystick should get locked when brought to neutral position.	
3.0 (v)	Electrically operated hydraulic brake along with backup hydro pneumatic brake for the winch should be provided	
3.0 (vi)	The logging unit winch drums must be capable to provide over-pulls up to 10,000 lbs during stuck conditions, the hydraulic system rating of the drums winch must be sufficient to withstand these over-pulls safely (well within system rating of the logging units).	
4.0 (i)	Overhead cable spooling systems for 7.9375 mm (5/16") O.D. and 5.556 mm (7/32") mono conductor cable.	
4.0 (ii)	The overhead Spooling system must be lightweight with height adjustment and side to side steering	
4.0 (iii)	Logging Cables specifications – as per tender	
4.0 (iv)	Accurate straight line measuring head for metric depth measurement/recording having dual electronic encoders, magnetic mark detector, a tension device (Load Pin) and independent mechanical/electronic backup encoder for both the mono-conductor cables drums. The backup depth display from the mechanical/electronic encoder is to be made available near the winch operator panel.	
4.0 (v)	Line weight measuring system with a weight indicator to measure line tension of at least 15,000 lbs to be provided. It should have digital display for total and differential load. Weight measurements should have audio and screen alarms at operator's panel for increase / decrease of line load. The line weight measuring system should have provision for both load pin and rig floor load cell connected with the sheave wheel.	
5.0 (i)	Built-in line oiler system for lubricating the cables with operating switches on the winch operator's control panel	
5.0 (ii)	Grounding reel fitted with at least 50 meters cable with clamps for grounding during side wall coring, perforations and other allied wire line operations	
5.0 (iii)	Reels necessary for intercom, top load cell etc., of at least 100m length to be provided.	
5.0 (iv)	Tool racks with suitable, independently working air bags for transportation of downhole tools must be	

	provided. The air bags must be easy to access for	
	replacement.	
5.0 (v)	Tool storage area installed under the floor of the drum	
	area for the longest tool must be guided with roller	
	support throughout the rack length and fitted with air	
	bags for transportation.	
5.0 (vi)	The winch drums must be fitted with slip rings having	
	ample protection from moisture, dust and rain. Both	
	slips rings should be easily accessible for repair and	
	maintenance work	
5.0 (vii)	A Switch must be provided to conveniently switch	
	between both the cables inside the logging cabin	
5.0 (viii)	Rear bumper should be fitted with a working vise and	
3.0 (VIII)	light weight folding step.	
	inght weight folding stop.	
5.0 (xi)	Pneumatic line wipers for cleaning drilling fluid from	
	the cable while pulling out logging tools should be	
	provided, for both mono conductor cables	
<b>50</b> (a)	•	
5.0 (x)	All the electrical wires running in the winch / draw	
	works compartment must be concealed/in a conduit.	
5.0 (xi)	Body to be painted to OIL's specification (with OIL	
, ,	logo).Logo / specification shall be provided by OIL	
	after placement	
5.0 (xii)	Safety / Warning Signs (pertaining to radioactive and	
	explosive jobs) must be provided	
6.0 (i)	Two separate compartments, one for carrying	
,	Explosive Shaped Charges and the other for carrying	
	Electric Detonators should be provided. These two	
	compartments should be separated by a distance of	
	minimum 1.5 meters as per Indian Explosive Rules.	
	The inside of these compartments should be paneled	
	with good quality non-sparking material. These two	
	individual compartments should be minimum 1.15	
	meters away from the electrical power sources and	
	fuel tanks mounted in the Logging Truck. The	
m	minimum size of the compartments are as per tender.	
6.0 (ii)	Enough storage space should be provided to carry at	
	least 8 nos. 4" hollow steel carrier guns (HSC gun	
	dimensions:- 4" Dia and 3 mtr in length). Additional	
	racks should be provided to transport at least 4 nos. of logging tools with diameter ranging from 1 11/16" to	
	4". The length of these racks should be at least 6 mts	
	(16.4 feet) each. In addition to this 2 small (at least 1.5	
	mtrs in length) racks should be provided for carrying	
	CCL, MPD and other short length tools.	
6.0 (iii)	Fixed positions should be provided for transportation	
0.0 (111)	of one pair of sheave wheels required for logging	
	operation	
	-1	

6.0 (iv)	Separate compartments to be provided for carrying hand tools / wrenches, rig up accessories and other logging related accessories	
6.0 (v)	All compartments should have heavy duty locking / latching	
6.0 (vi)	A suitable mounting arrangement for the high pressure grease control head to be provided near the spooler.	
6.0 (vii)	The drum area flooring will be of aluminum tread plate material. A roll up weather resistant cover must be installed over the drum area opening	
7.1	The log data acquisition and processing system should be a rack mounted PC based system, integrated collection of state-of-the-art hardware & software. It must be field proven, latest version logging system, capable of performing the logging & completion operations mentioned in the tender document.	
7.2	The log data acquisition and processing system has a Shooting Panel with features as mentioned in the tender document.	
7.3	LED displays should be used for depth and line speed monitoring for winch operator.	
7.4	The surface logging system offered should be able to perform logging with GE-Sondex Ultra-link tools (PLT/MIT/MTT) available with OIL. Suitable Hardware (External Panel mounted in the logging cabin, if required) and Software required to carry out these operations with above system must be quoted.	
8.0	LOGGING SYSTEM HARDWARE  It must be a state-of-the-art PC based logging system.  In addition to other standard fittings / accessories which are mounted in the logging cabin, the system includes at least all the features mentioned in the tender document.	
9.0 (i)	The system should be based on latest version windows based operating system. Software should be menu driven, user friendly with multitasking capability. License for all supplied software should be provided for at least 10 years from the date of commissioning of the unit.	
9.0 (ii)	All software must be in English language	
9.0 (iii)	Detailed help on the complete system should be available	

9.0 (iv)	The software must be capable of performing all well completion and cased hole logging operations given in clause 7.1 of the tender	
9.0 (v)	The System must be able to convert log data into API standard LAS, LIS and ASCII format.	
9.0 (vi)	Oil India Limited's logo must be incorporated in all outputs	
9.0 (vii)	Log labelling facility to be provided	
9.0 (viii)	It should be able to provide tool diagram and well sketch that can be plotted along with the log.	
9.0 (xi)	The system software must include automatic depth correction capability.	
9.0 (x)	The system software must display real-time corrected depth and line tension	
9.0 (xi)	Utilities like splice, merge and edit of logs to be provided	
9.0 (xii)	It should be capable of logging both in meters and feet.	
9.0 (xiii)	Virus protection Software must be provided in the system with backup in CD/DVD/Portable Drive.	
9.0 (xiv)	Complete image of the system must be provided in CD/DVD/Portable Drive	
9.0 (xv)	The bidder should give an undertaking to update the software as and when updates are available for a period of 10 years from the date of commissioning of the unit at no cost to OIL.	
9.0 (xvi)	All software used in the system must be provided on CD / DVD's as back up.	
9.0 (xvii)	Test and Diagnostic software for the surface system and downhole tools must be provided.	
9.0 (xviii)	Record real-time and playback on thermal paper/film in different customizable depth scales i.e., 1/20, 1/40, 1/100, 1/200, 1/240, 1/1000 in metric system in API format.	
9.0 (xix)	Details of the software with price break up should be provided	Page <b>82</b> of <b>92</b>

10.0 (i)	<b>Stray voltage monitor:</b> One rig voltage monitor mounted inside the cabin, with 50 meters long leads and accessories to measure a minimum rig voltage of 0.20 Volt at well site.	
10.0 (ii)	<b>Communication System</b> : Two way communication system for communication from cabin to rig floor and vice versa.	
10.0 (iii)	Pressure Control Equipment: The equipments for pressure control system (Light Weight) rated for 10,000 psi working pressure including all the accessories The pressure control equipment should be of "National Oilwell Varco" make	
10.0 (iv)	Pneumatic Grease Injection System for Pressure Control: A built-in grease injection system for pressure control upto 5000 psi, comprising of grease tank (capacity minimum 150 ltrs) and air-operated (max air-pressure=100 psig) grease pump (Lincoln Model: Air Motor 84806/Pump Tube 85305 or equivalent) must be provided in the logging unit with their controls at suitable place easily accessible to the operator. For the air-operated Grease pump, compressed air will be provided by the Truck engine and separate air tank mounted in a suitable place in the unit (easily accessible), for this purpose, must also be provided. Necessary numbers of high pressure light weight hoses of required length (at least 75 meters) for grease injection with return line of equal length should be provided with reel fitted to the unit.	
10.0 (v)	A separate electrically operated air compressor with air regulator with gauze, water trap filter, should be installed at suitable place in the unit to get compressed air supply for Lincoln pump operation. The compressor should be connected to the separate air tank. There should be a provision of valve so that the tank can be filled up using air either from the unit (truck engine) or from the electrical air compressor installed	
10.0 (vi)	The Logging unit should be fully equipped with rig up and other standard accessories for straight away commissioning of the unit. Detailed list along with price break up for each item is to be provided. However, certain operationally vital items with quantity as mentioned in the table below are to be included and confirmed in the offer.	
10.0 (vii)	Rig-up/operational accessories and pressure control equipment are to be provided as per Table-1 of the tender. Price quoted for this list shall be	

	considered for bid evaluation.	
11.0	Technical manuals and documentations mentioned are to be supplied at no charge to OIL as per Tender clause 11.0	
12.0	DOWNHOLE LOGGING TOOLS:  All the down hole logging tools as mentioned below should be rated for minimum 104 MPA (15,000 PSI) pressure and 177 °C (350 °F) temperature. Temperature rating should be for a minimum of one-hour continuous exposure in the well bore.	
12.1	The tools and cable head should have thread size 1 $^{3}/_{16}$ " - 12 N – 2 ("GO" connection.)  Multi-Finger Imaging Tool (MIT) or Equivalent provided as per tender requirement	
12.2	Magnetic Thickness Tool (MTT) or equivalent provided as per tender requirement	
12.3	Production logging Array Tools provided as per tender requirement	
12.4	Production Logging Tool (PLT) provided as per tender requirement	
12.5	Free-point indicator tool (fpi) provided as per tender requirement	
12.6	SLIM HOLE SEGMENTED OR RADIAL CEMENT BOND TOOL provided as per tender requirement	
12.7	Downhole Tractor Tool provided as per tender requirement	
12.8	STANDARD WIRELINE CABLE GUIDED , OPEN ENDED FISHING EQUIPMENT	
13.0	COMPUTER SYSTEM FOR DATA PROCESSING & INTERPRETATION AT BASE provided as per tender requirement	
14.0	SPARE PARTS AND CONSUMABLES:  Bidder must quote spares and consumables with individual price break-up per tender requirement.	
14.1	Spares and Consumables quoted as per clauses 14.1 through 14.12 of the tender document.	
14.3 (i)	One no. each of all the Printed Circuit Boards (PCB) used in each down hole tool type as mentioned in the clause 12.1 to 12.7.	

RECOMMENDED SPARES LIST provided as per tender document (clause no. 15.0)  STANDARD PRICE LIST provided as per tender document (clause no. 16.0)  The bidder must confirm in writing along with their bid that they possess all standard testing & calibration facilities at their manufacturing Base / Testing centre, including pressure / temperature testing etc., for all the tools offered by them against this tender.  The logging truck, tools and accessories offered against this bid must be latest and state-of-the art in the Industry with capability of trouble free data recording and seamless data transferring up to well depth of at least 6400 mtrs. and must have been field broven for at least 1 year prior to bid closing date.		
The bidder must confirm in writing along with their bid that they possess all standard testing & calibration facilities at their manufacturing Base / Testing centre, including pressure / temperature testing etc., for all the tools offered by them against this tender.  The logging truck, tools and accessories offered against this bid must be latest and state-of-the art in the Industry with capability of trouble free data recording and seamless data transferring up to well depth of at least 6400 mtrs. and must have been field broven for at least 1 year prior to bid closing date.		
that they possess all standard testing & calibration facilities at their manufacturing Base / Testing centre, including pressure / temperature testing etc., for all the tools offered by them against this tender.  The logging truck, tools and accessories offered against this bid must be latest and state-of-the art in the Industry with capability of trouble free data recording and seamless data transferring up to well depth of at least 6400 mtrs. and must have been field broven for at least 1 year prior to bid closing date.  The bidder should also have proper R & D facilities for		
against this bid must be latest and state-of-the art in the Industry with capability of trouble free data recording and seamless data transferring up to well depth of at least 6400 mtrs. and must have been field proven for at least 1 year prior to bid closing date		
· · ·		
development and upgradation of their equipment.		
<b>DELIVERY</b> quoted as per tender document (clause no. 21.0)		
The bidder must respond to each and every clause in the NIT in a tabular form as per APPENDIX – B2.		
<b>TRAINING &amp; INSPECTION</b> quoted as per tender document (section – C, clause nos. 1.1 & 1.2)		
<b>NSTALLATION AND COMMISSIONING</b> quoted as per tender document (section – D, clause nos. 1.0)		
Materials supplied as per the Purchase Order should be under warranty by the suppliers for a minimum period of 01 (one) year from the date of successful completion of installation and commissioning of the centire equipment at site. Any item / sub item failed during the above mentioned warranty period is to be replaced / repaired within 03 (three) months from the date of notification of such failure. The warranty of the repaired / replaced items shall be correspondingly extended by a period equal to that from the date of failure to the date of commissioning of the replaced/repaired item. In order to keep the requipment fully operational, all spares and accessories required during the warranty period is to be arranged at site by the suppliers or their authorized representatives, within 03 (three) months, at their cost		
on Time Vocated Fire and	ELIVERY quoted as per tender document (clause o. 21.0)  The bidder must respond to each and every clause in the NIT in a tabular form as per APPENDIX – B2.  TRAINING & INSPECTION quoted as per tender ocument (section – C, clause nos. 1.1 & 1.2)  INSTALLATION AND COMMISSIONING quoted as er tender document (section – D, clause nos. 1.0)  VARRANTY:  Materials supplied as per the Purchase Order should be under warranty by the suppliers for a minimum eriod of 01 (one) year from the date of successful completion of installation and commissioning of the natire equipment at site. Any item / sub item failed uring the above mentioned warranty period is to be explaced / repaired within 03 (three) months from the late of notification of such failure. The warranty of the explaced / replaced items shall be correspondingly extended by a period equal to that from the date of adilure to the date of commissioning of the explaced/repaired item. In order to keep the quipment fully operational, all spares and occessories required during the warranty period is to be arranged at site by the suppliers or their authorized	PELIVERY quoted as per tender document (clause o. 21.0)  The bidder must respond to each and every clause in the NIT in a tabular form as per APPENDIX – B2.  TRAINING & INSPECTION quoted as per tender ocument (section – C, clause nos. 1.1 & 1.2)  INSTALLATION AND COMMISSIONING quoted as er tender document (section – D, clause nos. 1.0)  VARRANTY:  Materials supplied as per the Purchase Order should e under warranty by the suppliers for a minimum eriod of 01 (one) year from the date of successful ompletion of installation and commissioning of the ntire equipment at site. Any item / sub item failed uring the above mentioned warranty period is to be eplaced / repaired within 03 (three) months from the ate of notification of such failure. The warranty of the epaired / replaced items shall be correspondingly extended by a period equal to that from the date of ailure to the date of commissioning of the eplaced/repaired item. In order to keep the quipment fully operational, all spares and coessories required during the warranty period is to e arranged at site by the suppliers or their authorized

	(including Customs Clearance etc.)	
APPEN	TECHNICAL BRC/BEC EVALUATION CHECKLIST	
DIX-B3	PROVIDED AS PER Appendix-B3	
APPEN	LOGGING TOOL SPECIFICATION SHEET	
DIX-B1	PROVIDED AS PER Appendix-B1	
APPEN	Bidder's Past Supply record provided as per	
DIX-B4	Appendix-B4 of the tender .	
APPEN	Confirmed to provide Invoices as per Appendix-B5	
DIX-B5	of the tender on supply of equipment	

## **TECHNICAL BRC/BEC EVALUATION CHECKLIST**

BRC (	CHECK LIST		
	Tender No.		
	Bidder's Name		
SI. no.	BEC /BRC Clause Description	Bidder's Response(co mplied/not- complied)	Relevant Page no. of the Bid to support Bidder's response
(A)	BID REJECTION CRITERIA (BRC)- Technical		
1.0	If the bidder is the OEM of Cased hole Logging Units & Tools:		
1.1	The Bidder should have minimum 05 (Five) years of experience in manufacturing of Cased-Hole wireline Logging unit.		
1.2	The Bidder should have manufactured and sold minimum 05 (Five) numbers of Cased-Hole Wire line Logging Units during the last 05 (Five) years as per tender stipulation.		
1.3	The bidder should have experience of successfully executing at least 1(one) similar order for 50% of the estimated value in preceding 5(five) years. Documentary evidence to be provided for such executed order		
1.4	The Purchase Orders mentioned above must have been effected to purchasers/clients based in at least 02 (Two) different countries		
1.5	Documentary evidence in respect of (1.1),(1.2),(1.3) & (1.4) above to be submitted with the bid.		
2.0	If the bidder is <b>not</b> the OEM of the Logging Units:		
2.1	Bidder's relationship with the OEM with documentary evidence regarding existence of such relationship to be submitted as per tender clause		
2.2	Authorization letter from the Manufacturer (OEM) to the effect that the OEM has authorized the Bidder to sell their products and services mentioned in the tender document		
2.3	Documentary evidence in respect of the OEM of offered logging unit as per clause 1.1 to 1.4 above to be submitted		
3.0	Experience of the bidder as service provider:		
3.1	The bidder must have provided Wire-line Logging services to at least 02 (two) different countries other than its country of origin during the last 5 (five) years.		
3.2	The bidder must have minimum of 2 (two) years of experience in providing Wire-line Logging Services to E&P companies in India as per tender clause no.		
3.3	The bidder must have its base in India with capability to provide immediate support / solutions if required by OIL as per tender clause no.		

4.0	Conditional Bids like "the product is under development and would			
4.0	be supplied by the time etc.," will be summarily rejected.			
5.0	Bidder's logging unit offer of Left-Hand drive shall be rejected			
	The offered surface logging system must be capable of performing			
6.0	the logging operations and services as mentioned in the tender			
	document			
7.0	Training & Inspection offered as per the tender			
8.0	Warranty to be offered for the entire equipment supplied as per			
0.0	tender clause			
	Written undertaking to be provided that all the spares and			
9.0	consumables will be supplied on chargeable basis for a minimum			
	period of 10 (Ten) years as per relevant clause of the tender			
10.0	Offered to carry out installation and commissioning of the logging			
10.0	units and tools as per the tender document.			
11.0	Delivery period of to be quoted as per the tender clause no.			

# Bidder's Past Supply record as per clause requirement :-

SL	Client/Customer	Order No	Date	Cased Hole	Completion	Reference of
No.	Name and Address with contact, e-mail id	/Contract No.	of order	Logging Unit Specification (Make, Model ) & Quantity supplied	date	Supporting document enclosed

## **INVOICE PROFORMA**

S/N	Section Clause	Items quoted under Segment 1	Quantity Required	Bidder's Total price	
1.	SECTION - A	TRUCK CHASSIS & DRIVER'S CABIN + COST OF FABRICATION OF THE LOGGING CABIN OF UNIT	As per tender documnet	INVOICE 1	
2.	SECTION - B	Logging Unit (DRAW WORKS, HYDRAULICS, WINCH, DATA ACQUISITION SYSTEM ETC.)	As per tender documnet	INVOICE 2	
3.	Clause 14.10 SECTION - B	Perishable Items as per Clause no. 14.10 of the Tender	As per tender documnet	INVOICE 3	
4.	Clause 12.1 AND 12.2 (SECTION - B)	Multi Finger Imaging Tool and Magnetic Thickness tool WITH calibration equipment, accessories required as part of tool as per tender documnet	As per tender documnet	INVOICE 4	
5.	Clause 12.7 (SECTION - B)	Downhole Tractor and any accessory required as part of tool  As per tender documnet		INVOICE 5	
6.	SECTION - C	Training charges	As per tender documnet	nder <u>INVOICE 6</u>	
7.	SECTION - D	Pre-Dispatch Inspection Charges	As per tender documnet	INVOICE 7	
8.	SECTION - E	Installation and Commission charges for Logging unit and tools	As per tender documnet	INVOICE 8	

#### **CHECK LIST**

THE CHECK LIST MUST BE COMPLETED AND RETURNED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT "Yes" OR "No" TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

S1#	REQUIREMENT	COMPLIANCE	
1.0	Whether bid submitted under Single Stage Two Bid System?	Yes / No	
2.0	Whether quoted as manufacturer?	Yes / No	
2.1	Whether quoted as OEM Dealer / Supply House. To Specify-	Yes / No	
2.2	If quoted as OEM Dealer / Supply House	Yes / No	
	(a) Whether submitted valid and proper authorization letter from manufacturer confirming that bidder is their authorized Dealer / supply House for the product offered?		
	(b) Whether manufacturer's back-up Warranty/Guarantee certificate submitted?		
3.0	Whether ORIGINAL Bid Bond (not copy of Bid Bond) as per Revised Format(Annexure VII Revised) Sent separately? If YES, provide details	Yes / No	
	(a) Amount:		
	(b) Name of issuing Bank:		
	(c) Validity of Bid Bond:		
4.0	Whether offered firm prices ?	Yes / No	
4.1	Whether quoted offer <b>validity of 120 days from</b> the bid closing date of tender?	Yes / No	
4.2	Whether quoted a firm delivery period?	Yes / No	
4.3	Whether agreed to the NIT Warranty clause?	Yes / No	
4.4	Whether confirmed acceptance of tender Payment Terms of 80% against shipment/dispatch documents and balance 20% after successful commissioning/testing along with commissioning/testing charges?		
5.0	Whether confirmed to submit PBG as asked for in NIT?	Yes / No	
5.1	Whether agreed to submit PBG within 30 days of placement of order?	Yes / No	
6.0	Whether Price submitted as per Price Schedule	Yes / No	
6.1	Whether cost of Recommended Spares for 2 years of operations quoted?	YES/NO	
7.0	Whether quoted as per NIT (without any deviations)?	Yes / No	
7.0	Whether quoted any deviation?	Yes / No	
7.1	Whether deviation separately highlighted?	Yes / No	
8.0	Whether indicated the country of origin for the items quoted? Yes / No		
8.1	Whether technical literature / catalogue enclosed?  Yes / No		
8.2	Whether weight & volume of items offered indicated?	Yes / No	

9.0	For Foreign Bidders - Whether offered FOB / FCA port of despatch including sea / air worthy packing & forwarding?	Yes / No
9.1	For Foreign Bidders – Whether port of shipment indicated. To specify:	Yes / No
9.2	For Foreign Bidders only - Whether indicated ocean freight up to Kolkata port (Excluding marine insurance )?	Yes / No
9.3	Whether Indian Agent applicable ?	Yes / No
	If YES, whether following details of Indian Agent provided?	
	(a) Name & address of the agent in India – To indicate	
	(b) Amount of agency commission – To indicate	
	(c) Whether agency commission included in quoted material value?	
10.0	For Indian Bidders – Whether indicated the place from where the goods will be dispatched. To specify:	Yes / No
10.1	For Indian Bidders – Whether road transportation charges up to Duliajan quoted?	Yes / No
10.2	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges?	Yes / No
10.3	For Indian Bidders only - Whether indicated import content in the offer?	Yes / No
10.4	For Indian Bidders only - Whether offered Deemed Export prices?	Yes / No
10.5	For Indian Bidders only – Whether all applicable Taxes & Duties have been quoted?	Yes / No
11.0	Whether all BRC/BEC clauses accepted?	Yes / No
12.0	Whether Integrity Pact with digital signature uploaded?	Yes / No
12. 1	Whether all the clauses in the Integrity Pact have been accepted?	Yes / No

Signature	
Name	
Designation	

Page **92** of **92**