

Oil India Limited (A Govt. of India Enterprise) P.O. Duliajan – 786602, Assam

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Tender No. & Date: SDG 3457P17/07 dated: 31.12.2016

Tender Fee : INR 30,000.00 OR USD 500.00 Bid Security Amount : INR 8,12,600.00 OR USD 12,000.00

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Period of Sale of

Bid Documents : From 05.03.2017 to 19.04.2017; 15:30 Hrs (IST)

Bid Closing on : 26.04.2017 (at 11.00 Hrs. IST)

Bid Opening on : 26.04.2017(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 26.11.2017

Performance Guarantee : Applicable @ 10% of Order value

Integrity Pact : Applicable

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No.	MATERIAL DESCRIPTION	QTY.	UOM
1.0	TECHNICAL SPECIFICATION FOR 3.1/2 INCH OD MUD MOTOR:	06	Nos.
10	A) 3.1/2 INCHES (88.90 MM) OD DOWN HOLE MUD MOTOR WITH SLICK (STRAIGHT) HOUSING, MEDIUM SPEED HIGH TORQUE POWER SECTION, RUGGED BEARING PACK, SAFETY CATCH FEATURES AND DUMP VALVE ASSEMBLY, DESIGNED FOR HIGH PERFORMANCE, EXTREME DOWNHOLE OPERATIONAL ENVIRONMENTS AND SUITABLE FOR CARRYING OUT SAND CLEANING, CEMENT CUTTING, MILLING/DRILLING BRIDGE PLUG, PACKER, JUNK, ETC., INSIDE 5.1/2 INCHES (139.70 MM) OD, 20 PPF CASING, WITH ALL ACCESSORIES AS PER THE FOLLOWING SPECIFICATIONS:-		
	B) PHYSICAL SPECIFICATIONS:		
	1) Motor OD: 3.1/2 inch (88.90mm) 2) Lobe configuration within: 5:6 to 7:8 3) Number of stages within: 3.0 to 5.0 4) Overall Length maximum: 8 m (26.25 ft) 5) Top connection (box): 2.7/8 inch API Regular RH 6) Bit box connection: 2.7/8 inch API Regular RH 7) Bit size range indicative (TCR & PDC): 4.1/4 inch to 5.1/2 inch / (107.95 mm to 139.70 mm) 8) Bearing package: Mud lubricated or Oil Sealed and Tungsten carbide type 9) Dump valve assembly: Removable Dump valve assembly with 2.7/8 inch Reg RH Box-up and 2.7/8 inch Reg Pin-down connection 10) Housing: Slick (straight) type housing 11) Safety catch system: In-built safety catch system to prevent fishing operation on a broken motor C) OPERATIONAL SPECIFICATIONS:		
	1) Flow rate range within: 70 gpm to 190 gpm / (265.00 lpm to		

	5) Peak torque minimum: 1250 ft-lbs / (1694.77 N-m) 6) Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7) Peak power output minimum: 38 hp / (28.33 kw) 8) Dynamic weight on bit minimum: 8,000 lbs / (4 Tons) 9) Working over-pull minimum: 27,000 lbs / (13.5 Tons) 10) Motor yield minimum: 150,000 lbs / (75 Tons) 11) Temperature rating minimum: 120 deg C / (248 deg F) 12) Working fluid: Mud motor should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base mud and KCL / NaCl mud. D) ACCESSORIES: 1. Lifting sub compatible with 2.7/8" square shoulder elevator -1 (one) no with each motor. Total-6(six) nos. 2) Spare dump valve assembly- 1 (one) no with each motor. Total- 6(six) nos.		
20	TECHNICAL SPECIFICATION FOR 4.3/4 INCHES (120.65 MM) MUD-MOTOR:	02	Nos
	A) 4.3/4 INCHES (120.65 MM) OD DOWN HOLE MUD MOTOR, WITH SLICK HOUSING, LOW SPEED HIGH TORQUE POWER SECTION, RUGGED BEARING PACK, SAFETY CATCH SYSTEM AND DUMP SUB ASSEMBLY, DESIGNED FOR HIGH PERFORMANCE, EXTREME DOWNHOLE OPERATIONAL ENVIRONMENTS AND SUITABLE FOR CARRYING OUT SAND CLEANING, CEMENT CUTTING, MILLING / DRILLING BRIDGE PLUG, PACKER, JUNK, ETC., INSIDE 7 INCHES (177.80MM) OD, 29 PPF CASING WITH ALL ACCESSORIES AND AS PER THE FOLLOWING MINIMUM SPECIFICATIONS:-		
	QUANTITY: 2 (TWO) NUMBERS.		
	B) PHYSICAL SPECIFICATIONS:		
	1) Motor OD: 4.3/4 inch (120.65 mm) 2) Lobe configuration within: 5:6 to 7:8 3) Number of stages within: 3.0 to 6.0 4) Overall Length maximum: 9.00 m (29.53 ft) 5) Top connection (box): 3.1/2 inch API IF (NC38) RH 6) Bit box connection: 3.1/2 inch API Reg RH box down 7) Bit size range indicative (TCR&PDC): 5.5/8 inch to 7.3/8 inch / (142.87 mm to 187.32 mm) 8) Bearing package: Mud lubricated or Oil Sealed and Tungsten carbide type 9) Dump valve assembly: Removable dump valve assembly with 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Pin-down connection 10) Housing: Slick (straight) type housing 11) Safety catch system: In-built safety catch system to prevent fishing operation on a broken motor		
	C) OPERATIONAL SPECIFICATIONS:		
	1) Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2) Bit speed range at full load within: 50 rpm to 200 rpm 3) Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4) Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5) Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6) Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7) Peak power output minimum: 60 hp / (44.74 kw) 8) Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9) Working overpull minimum: 100,000 lbs / (50 Tons) 10) Motor yield minimum: 270,000 lbs / (135 Tons) 11) Temperature rating minimum: 120 deg C / (248 deg F) 12) Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base mud and KCL / NaCl mud.		

D) ACCESSORIES:	
 Lifting sub compatible with 2.7/8" square shoulder elevator -1 (one) no with each motor. Total-2(two) nos. Spare dump valve assembly- 1 (one) no with each motor. Total-2(two) nos. 	

(A) GENERAL NOTES FOR E-TENDER:

- 1.0 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.
- 2.0 Technical and Commercial Check list is furnished vide Annexure B. Please ensure that the check list is properly filled up and uploaded along with Technical bid.
- 3.0 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 scribed with tender no. and due date to The Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender.
 - a) Original Bid Security along with duplicate copies of Bid Security.
 - b) Any other document which have been specified to be submitted in original.

4.0The 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.

- 5.0In 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"
- 6.0 PRICED BIDS OF ONLY THOSE BIDDERS WILL BE OPENED WHOSE OFFERS ARE FOUND TO BE TECHNO-COMMERCIALLY ACCEPTABLE.
- 7.0 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.
- 8.0 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 the rejection of its offer without seeking any clarifications.

9.0 TheIntegrity 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 has been signed by the bidder's authorized signatory who sign the Bid.If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.

OIL's Independent External Monitor at present are as under:

SHRI RAJIV MATHUR, IPS (Retd.), Former Director (IB) Govt. of India e-Mail ID: <u>rajivmathur23@gmail.com</u>

&

SHRI SATYANANDA MISHRA, IAS (RETD.)
Former Chief Information Commissioner of India &
Ex-Secretary, DOPT, Govt. Of India
e-Mail ID: satyanandamishra@hotmail.com

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(B) General Notes to Bidders:

- 1. The Bidder can quote either for both or any one of the two sizes of Mud-Motors. However, the quoted Mud-Motor(s) must be offered together with its accessories.
- 2. The Bidder must specify the offered item in details and should forward along with the technical bid relevant product catalogue with drawing and literature of the offered item and its performance curves consisting of speed curve, torque curve and power curve.
- 3. The items shall be brand new, unused and of prime quality. The Manufacturer shall warrant (in the event of an order) that the product/products supplied will be free from all defects and fault in material, workmanship and manufacturing 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 of the items whichever is earlier. The defective materials, if any, rejected by OIL shall be replaced by the supplier at their own expense. Bidders must confirm the same in their quotations.
- 4. All parts of the items should be suitably marked for identification purpose. Additionally, OIL purchase order number should be die stamped on the body of the Mud-Motors in the event of order. Bidders shall confirm the same while quoting.
- 5. The item(s) should be suitably coated with a protective coating both internally and externally to prevent corrosion and rusting during transit. Bidders must confirm the same while quoting.
- 6. The Bidder should forward a list of recommended spares for two (02) years operation indicating year wise requirement against the quoted item(s) indicating part numbers, quantity and unit price for each and every item separately along with the commercial bid and shall categorically confirm regarding submission of the same in the technical bid. The price should remain valid for at least two (02) years. However, the cost of these spares will not be considered for commercial evaluation.

- 7. Additionally, the Bidder shall submit an un-priced list of recommended spares for two (02) years operation against the quoted item(s), indicating year wise requirement, part numbers and quantity along with the technical bid.
- 8. The Bidder should indicate the name of Manufacturer, country of origin and port of dispatch for the quoted Mud Motor(s).
- 9. All test certificates/ reports (including Dynamometer test reports for speed curve, torque curve and power curve) against each size of Mud Motors should be submitted to OIL along with the supply. Bidder must confirm the same while quoting.
- 10. The Bidder should confirm to provide along with the supply, 3 (three) sets of Operation, service and maintenance manual indicating assembling and disassembling procedures, drawing and spare parts list with part numbers against each size of the Mud Motors.
- 11. The Mud Motors along with the accessories are to be procured from the same source for compatibility of the items. Bidder shall quote accordingly.
- 12. Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.
- 13. Bidder shall submit the duly filled in and signed "Technical check list" and "Technical Evaluation Sheet" along with the technical bid.
- 14. Bidders to take special note of the following conditions:
- 14.1 Against Tender Fee Payment should be made only through online mode and no other instrument (Cash/DD/Cheques/Cashier Cheque, etc) will be acceptable.
- 14.2 Against Bid Security/EMD/Performance Bank Guarantee Only payments through online mode or Submission of Bank Guarantee/LC will be acceptable. No DD/Cheques/Cashier Cheque or any other mode will be acceptable.

(C) Special Notes:

- 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 Deemed Export Benefit against this purchase. Details of Deemed Export are furnished vide Addendum to MM/GLOBAL/E-01/2005 attached. However, Indian bidders will not be issued Recommendatory Letter.
- In the event of an order on indigenous bidder under deemed export scheme, OIL will issue Project
 Authority Certificate (PAC) and arrange for DGH Certificate as may be appropriate /applicable.
 Supplier shall effect dispatch only on receipt of these certificates from OIL, failing which all related
 liabilities shall be to Supplier's account.
- 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.
- 4. Bidders to note that Govt. of India under Micro, Small and Medium Enterprises Development (MSMED) Act 2006, has proclaimed the Public Procurement Policy, 2012 with effect from 1st April, 2012 in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Departments and Public Sector Undertakings for promotion and development of Micro and Small Enterprises. A new Clause on applicability of Public Procurement Policy for procurement of goods from Micro and Small Enterprises (MSE) in the tender is furnished

- vide Amendment to General Terms and Conditions for Global Tender (MM/GLOBAL/E-01/2005). Bidders are requested to take note of the same and to submit their offers accordingly.
- 5. 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.

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

(I) BID EVALUATION CRITERIA

A. TECHNICAL

The bids shall conform generally to the specifications and terms as well as conditions laid out in the tender. Bids will be rejected in case the items offered do not conform to the required parameters stipulated in the technical specifications and to the respective international/national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements will have to be met by the bids, without which, the same shall be considered as non-responsive and stand rejected.

- 1.0) The Bidder in case of Manufacturer must have the experience of supplying at least 3 (three) numbers of MUD MOTORS of 3.1/2 inches (88.90mm) OD or higher size and at least 1 (one) number of MUD MOTOR of 4.3/4 inches (120.65mm) OD or higher size to the companies which are in the business of Oil & Gas (i.e. to E&P companies / Drilling Contractors / Drilling service providers) in the last 5 (five) years preceding the original bid closing date of this tender.
- 1.1) Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along-with copies of any of the following documents in respect of satisfactory execution of each of those purchase orders, such as:
- i) Satisfactory inspection report OR
- ii) Satisfactory Supply completion / Installation report OR
- iii) Consignee receipt / Delivery Challan OR
- iv) Central Excise Gate pass / Tax Invoice issued under relevant rules of Central Excise / VAT OR
- v) Bill of lading/ Commercial Invoice/ Payment Invoice OR
- vi) Any other documentary evidence that can substantiate the satisfactory execution of each of the purchase order cited above.
- 1.2) Those Manufacturers who have successfully supplied at least 4 (four) numbers of Mud Motors of 3.1/2 inches OD or higher size to OIL INDIA LTD. (OIL) in the last five years shall be considered to qualify the experience criteria as stated in the Clauses 1.0 & 1.1 provided they indicate in the bid itself the Purchase Order No. & Date, Quantity, Details of Mud Motor supplied to OIL in the past.
- 1.3) The Bidder in case of Manufacturer should confirm that the threading and gauging of the rotary shouldered connections of the offered Mud Motors will be as per API Spec.7-1 [latest edition] and forward along with the technical bid copies of valid API Spec 7-1 certificate continuously for 3 years preceding the original bid closing date of tender from the Manufacturer if threading and gauging will be carried out by the Manufacturer them self and from the Threader if threading and gauging would be carried out through a Threader.

The Bidder should also furnish an undertaking, as mentioned below, that the API license for threading and gauging of the rotary shouldered connections will be kept valid till execution of purchase order.

i) By the Manufacturer if threading and gauging of the rotary shouldered connections is done by the Manufacturer.

- ii) From the API approved Threader through whom the threading and gauging of the rotary shouldered connections will be done by the Manufacturer.
- 1.4) In case renewal process of API license is in progress at the time of bidding, the Bidder should furnish a letter from API to this effect that renewal of the license is under examination with API and that the Manufacturer or Threader is authorized for threading and gauging of the rotary shouldered connections till the renewal for license is issued.
- 2.0) In case the Bidder is not a Manufacturer, then the Bidder is required to submit documentary evidence in respect of the above clauses 1.0 and 1.1 or 1.2 from the concerned Manufacturer (having supplied such items either by Manufacturer himself or his distributor) along with the techno-commercial bid.
- 2.1) The Bidder is required to submit valid Authorization certificate with warranty backup from the Manufacturer along with the offer.
- 2.2) The Bidder must get confirmation from the Manufacturer that the threading and gauging of the rotary shouldered connections of the offered Mud Motors will be as per API Spec.7-1 [latest edition] and forward along with the technical bid copies of valid API Spec 7-1 certificate continuously for 3 years preceding the original bid closing date of tender from the Manufacturer if threading and gauging will be carried out by the Manufacturer them self and from the Threader if threading and gauging would be carried out through a Threader. The Bidder should also furnish an undertaking, as mentioned below, that the API license for threading and gauging of the rotary shouldered connections will be kept valid till execution of purchase order.
- i) From the Manufacturer if threading and gauging of the rotary shouldered connections is done by the Manufacturer.

OR

- ii) From the API approved Threader through whom the threading and gauging of the rotary shouldered connections will be done by the Manufacturer.
- 2.3) In case renewal process of API license is in progress at the time of bidding, the Bidder should furnish a letter from API to this effect that renewal of the license is under examination with API and that the Manufacturer or Threader is authorized for threading and gauging of the rotary shouldered connections till the renewal for license is issued.
- 2.4) The bidder should additionally have the experience of supplying at least 4(four) numbers of Mud Motors of 3.1/2 inches OD or higher size to the companies which are in the business of Oil & Gas (i.e to E& P companies/ Drilling Contractors/Drilling Service providers) in the last 5 (five) years preceding the original bid closing date of the tender.

Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along with copies of any of the following documents in respect of satisfactory execution of each of those purchase orders, such as:

- i) Satisfactory inspection report OR
- ii) Satisfactory Supply completion /Installation report OR
- iii) Consignee receipt / Delivery Challan OR
- iv) Central Excise Gate pass / Tax Invoice issued under relevant rules of Central Excise /VAT OR
- v) Bill of lading/ Commercial Invoice / Payment Invoice OR
- vi) Any other documentary evidence that can substantiate the satisfactory execution of each of the purchase order cited above.
- 3.0) Bidder should categorically confirm in the technical bid a delivery schedule within five (05) months, FOB Port of dispatch, after establishment of letter of credit (in case of foreign Bidder) or for dispatch of the equipment within five (05)

months after receipt of formal order (in case of indigenous Bidder) failing which their offer will be rejected.

Financial Criteria:

- 1 **Annual Turnover**: The bidder shall have an annual financial turnover of minimum US\$ 2,99,400.00 or Rs 2,03,17,000.00 during any of the preceding 03 (three) financial years reckoned from the original bid closing date of the tender.
- 2 "Net Worth" of the bidder should be positive for the preceding financial/accounting year just preceding the bid closing date of the tender.

Note: For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-

i) A certificate issued by a practicing Chartered Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE.

OR

- ii) Audited Balance Sheet along with Profit & Loss account.
- 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 of Balance Sheet and Profit & Loss Account. A CA certificate is to be submitted by the bidder regarding converted figures in equivalent INR or US\$.

B) COMMERCIAL

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.

- 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 Bid security of INR 8,12,600.00 or US\$ 12,000.00 shall be furnished as a part of the TECHNICAL BID. Any bid not accompanied by a proper bid security in ORIGINAL will 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.

- 2.1 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).
- 2.2 Bank Guarantee towards Bid Security shall remain valid till **26.11.2017**.
- 3) Validity of the bid shall be minimum 120 days from the date of Bid Closing Date. Bids with lesser validity will be straightway rejected.
- 4) Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of 18 months from the date of shipment/dispatch or twelve (12) months from the date of receipt of the items at destination, whichever is earlier against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier's expenses at no extra cost to OIL.
- Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for a period of 18 months from the date of shipment/dispatch or twelve (12) months from the date of receipt of the items at destination, whichever is earlier. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.
- 6) Offers should be submitted 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.
- 7) 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) Total Material Value:
 - (B) Packing & FOB Charges:
 - (C) Total FOB Port of Shipment value, (A + B) above:
 - (D) Overseas Freight Charges upto Kolkata, India:
 - (E) Insurance Charges:
 - (F) Total CIF Kolkata value, (C+D+E):
 - (G) Total Value in words:
 - (H) Gross Weight:
 - (I) Gross Volume:

II) Price Bid Format (SUMMARY) for Indigenous Bidders:

- (A) Total Material Value:
- (B) Packing and Forwarding Charges:
- (C) Total Ex-works value, (A + B) above:
- (D) Sales Tax, (Please indicate applicable rate of Tax)
- (E) Total FOR Despatching station price, (C+D) above
- (F) Road Transportation charges to Duliajan
- (G) Insurance Charges
- (H) Assam Entry Tax
- (I) Total FOR Duliajan value, (E+F+G + H) above
- (J) Total Value in words:
- (K) Gross Weight:
- (L) Gross Volume:

- Note: 1) 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. Indigenous bidders must quote Deemed Export prices. Excise Duty under Deemed Export is exempted.
- 8) The prices offered will 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.
- 9) Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
- 10) Bids containing incorrect statement will be rejected.
- 11)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

BID EVALUATION CRITERIA

Bids conforming to the specifications, terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria mentioned in Section D of "General Terms & Conditions" for e- Procurement as per Booklet No. MM/GLOBAL/E-01/2005.

Annexure-B

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.

A. TECHNICAL

TECHNICAL CKECKLIST FOR 3.1/2 INCHES (88.90 MM) OD DOWNHOLE MUD MOTOR

S1. No.	Requirements Compliance	Response
1	Whether the OD of offered MUD MOTOR is 3.1/2 inch (88.90 mm)?	Yes/ No

2	Whether the length of the offered MUD MOTOR is within 8m (26.25 ft)?	Yes/ No
3	Whether the housing of the offered MUD MOTOR is a SLICK (Straight) housing?	Yes/ No
4	Whether the offered MUD MOTOR is complete with Dump Valve assembly and Safety catch system?	Yes/ No
5	Whether the offered MUD MOTOR is suitable for operation inside $5.1/2$ inch (139.70MM) x 20 PPF casing?	Yes/ No
6	Whether the Lobe configuration of the offered MUD MOTOR is within 5:6 to 7:8?	Yes/ No
7	Whether the no of Stages of the offered MUD MOTOR is within 3.0 to 5.0?	Yes/ No
8	Whether the flow rate range of the offered MUD MOTOR is within (70 GPM to 190 GPM) / (265.00 LPM to 719.20 LPM)?	Yes/ No
9	Whether the full load bit speed range of the offered MUD MOTOR is within (80 to 300) RPM?	Yes/ No
10	Whether the differential pressure at full load of the offered MUD MOTOR is equal to or more than 450 psi (31.63 kg/sq cm)?	Yes/ No
11	Whether the rated torque at full load of offered MUD MOTOR is more than or equal to 950 ft-lbs (1288.02 N-m) at minimum 450 psi (31.63 kg/sq cm) or more differential pressure?	Yes/ No
12	Whether the peak power output of the offered MUD MOTOR is more than or equal to 38 hp (28.33 kw)?	Yes/ No
13	Whether threading and gauging of the rotary shouldered connection of the offered MUD MOTOR will be as per API Spec.7-1 [latest edition]?	Yes/ No
14	Whether the top connection of offered MUD MOTOR is 2.7/8 inch API Regular RH Box-up?	Yes/ No
15	Whether the bit box connection of offered MUD MOTOR is 2.7/8 inch API Regular RH Box-down?	Yes/ No
16	Whether the dump valve assembly connections of the offered MUD MOTOR are 2.7/8 inch API Regular RH Box-up and 2.7/8 inch API Regular RH Pin-down?	Yes/ No
17	Whether detailed technical catalogue and literature of the offered MUD MOTOR along with the three performance curves of the offered mud motor(s) consisting of speed curve, torque curve and power curve forwarded with the technical bid?	Yes/ No
18	Whether the offered MUD MOTOR shall be furnished with elevator sub for lifting purpose & suitable for use with square shouldered 2.7/8 inch OD drill pipe elevator?	Yes/ No
19	Whether the offered MUD MOTOR shall be furnished with spare Dump valve assembly?	Yes/ No
20	Whether the offered MUD MOTOR is suitable for operation with the drilling and work-over fluids as mentioned in this tender?	Yes/ No
21	Whether list of recommended spare parts for two (02) years trouble free operation with unit price and part numbers indicating with year wise consumption pattern forwarded separately along with the commercial against the offered MUD MOTOR?	Yes/ No
22	Whether un-priced list of recommended spare parts for two (02) years trouble free operation with part numbers indicating year wise consumption pattern forwarded along with the technical bid against the offered MUD MOTOR?	Yes/ No
23	Whether quoted as manufacturer?	Yes/ No
24	Whether the name of manufacturer, country of origin and port of shipment has been mentioned?	Yes/ No
25	Whether the "Matrix for Technical Evaluation Sheet" has been duly filled in and signed?	Yes/No

TECHNICAL CKECKLIST FOR 4.3/4 INCHES (120.65 MM) OD DOWNHOLE MUD MOTOR

S1. No.	Requirements Compliance	Response
1	Whether the OD of offered MUD MOTOR is 4.3/4 inch (120.65 mm)?	Yes/ No
2	Whether the length of the offered MUD MOTOR is within 9m (29.53 ft)?	Yes/ No
3	Whether the housing of the offered MUD MOTOR is a SLICK (Straight) housing?	Yes/ No
4	Whether the offered MUD MOTOR is complete with Dump Valve assembly and Safety catch system?	Yes/ No
5	Whether the offered MUD MOTOR is suitable for operation inside 7 inch (177.80MM) x 29 PPF casing?	Yes/ No
6	Whether the Lobe configuration of the offered MUD MOTOR is within 5:6 to 7:8?	Yes/ No
7	Whether the no of Stages of the offered MUD MOTOR is within 3 to 6?	Yes/ No
8	Whether the flow rate range of the offered MUD MOTOR is within (100 GPM to	Yes/ No

	250 GPM) / (378.5 LPM to 946.4 LPM)?	
9	Whether the full load bit speed range of the offered MUD MOTOR is within (50-200) RPM?	Yes/ No
10	Whether the differential pressure at full load of the offered MUD MOTOR is equal to or more than 450 psi (31.63 kg/sq cm)?	Yes/ No
11	Whether the rated torque at full load of offered MUD MOTOR is equal to or more than 2100 ft-lbs (2847.21 N-m) at minimum 450 psi (31.63 kg/sq cm) or more differential pressure?	Yes/ No
12	Whether the peak power output of the offered MUD MOTOR is equal to or more than 60 hp (44.74 kw)?	Yes/ No
13	Whether threading and gauging of the rotary shouldered connection of the offered MUD MOTOR will be as per API Spec.7-1 [latest edition]?	Yes/ No
14	Whether the top connection of offered MUD MOTOR is 3.1/2 inch API IF (NC38) RH Box-up?	Yes/ No
15	Whether the bit box connection of offered MUD MOTOR is 3.1/2 inch API Reg RH box down?	Yes/ No
16	Whether the dump valve assembly connections of the offered MUD MOTOR are 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH pin down?	Yes/ No
17	Whether detailed technical catalogue and literature of the offered MUD MOTOR along with the three performance curves of the offered mud motor(s) consisting of speed curve, torque curve and power curve forwarded with the technical bid?	Yes/ No
18	Whether the offered MUD MOTOR shall be furnished with elevator sub for lifting purpose & suitable for use with square shouldered 2.7/8" OD drill pipe elevator?	Yes/ No
19	Whether the offered MUD MOTOR shall be furnished with spare Dump valve assembly?	Yes/ No
20	Whether the offered MUD MOTOR is suitable for operation with the drilling and work-over fluids as mentioned in this tender?	Yes/ No
21	Whether list of recommended spare parts for two (02) years trouble free operation with unit price and part numbers indicating with year wise consumption pattern forwarded separately along with the commercial against the offered MUD MOTOR?	Yes/ No
22	Whether un-priced list of recommended spare parts for two (02) years trouble free operation with part numbers indicating year wise consumption pattern forwarded along with the technical bid against the offered MUD MOTOR?	Yes/ No
23	Whether quoted as manufacturer?	Yes/ No
24	Whether the name of manufacturer, country of origin and port of shipment has been mentioned?	Yes/ No
25	Whether the "Matrix for Technical Evaluation Sheet" has been duly filled in and signed?	Yes/No

B. COMMERCIAL

<u>S1</u>		COMPLIANCE
<u>no.</u>	REQUIREMENT	
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 (a) Amount:	Yes / No
	(b) Name of issuing Bank :	
	(c) Validity of Bid Bond :	

4.0	Whether offered firm prices ?	Yes / No
4.1	Whether quoted offer validity of 120 days from 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?	Yes / No
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 (refer Para 12.0 of BRC vide Annexure – II)?	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
3.0	Whether indicated the country of origin for the items quoted?	Yes / No
8.1	Whether technical literature / catalogue enclosed?	Yes / No
3.2	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

ANNEXURE - I

	TECHNICAL EVALUATION MATRIX (TO BE DULY FILLED IN BY BIDDER AND SIGNED)				
	BID EVALUATION CRITERIA				
Clause Number	BIDDER		RESPONSE BY THE BIDDER)		
	DESCRIPTION	(Complied / Not Complied / Deviation / Not Applicable)	Relevant Location of their Bid to support the remarks / compliance (Reference of Document name / Serial number / Page number of bid for documentary evidence)		
1.0	The Bidder in case of Manufacturer must have the experience of supplying at least 3 (three) numbers of MUD MOTORS of 3.1/2 inches (88.90mm) OD or higher size and at least 1 (one) number of MUD MOTOR of 4.3/4 inches (120.65mm) OD or higher size to the companies which are in the business of Oil and Gas (i.e. to EandP Companies / Drilling Contractors / Drilling Service Providers) in the last 3 (three) years preceding the original bid closing date of this tender.				
1.1	Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along-with copies of any of the following documents in respect of satisfactory execution of each of those purchase orders, such as: i) Satisfactory inspection report OR ii) Satisfactory Supply completion / Installation report OR iii) Consignee receipt / Delivery Challan OR				

	iv) Central Excise Gate pass / Tax Invoice issued under	
	relevant rules of central excise / VAT OR	
	v) Bill of lading/ Commercial Invoice/ Payment Invoice OR	
	vi) Any other documentary evidence that can substantiate	
	the satisfactory execution of each of the purchase order	
	cited above.	
	Those Manufacturers which successfully supplied at least	
	4 (four) numbers of Mud Motors of 3.1/2 inches OD or	
	higher size to OIL INDIA LTD (OIL) in the past shall be	
1.2	considered to qualify the experience criteria as stated in	
	the Clauses 1.0 and 1.1 provided they indicate in the bid	
	itself the Purchase Order No. and Date, Quantity, Details	
	of Mud Motor supplied to OIL in the past.	
	The Bidder in case of Manufacturer should confirm that	
	the threading and gauging of the rotary shouldered	
	connections of the offered Mud Motors will be as per API	
	Spec.7-1 [latest edition] and forward along with the	
	technical bid copies of valid API Spec 7-1 certificate	
	continuously for 3 years preceding the original bid closing	
	date of tender from the Manufacturer if threading and	
	gauging will be carried out by the Manufacturer them self	
	and from the Threader if threading and gauging would be	
	carried out through a Threader.	
1.3	carried out amough a rimeader.	
	The Bidder should also furnish an undertaking, as	
	mentioned below, that the API license for threading and	
	gauging of the rotary shouldered connections will be kept	
	valid till execution of purchase order.	
	valid till exceution of purchase order.	
	i) By the Manufacturer if threading and gauging of the	
	rotary shouldered connections is done by the	
	Manufacturer.	
	OR	

	ii) From the API approved Threader through whom the	
	'	
	threading and gauging of the rotary shouldered	
	connections will be done by the Manufacturer.	
	In case renewal process of API license is in progress at the	
	time of bidding, the Bidder should furnish a letter from	
	API to this effect that renewal of the license is under	
1.4	examination with API and that the Manufacturer or	
	Threader is authorized for threading and gauging of the	
	rotary shouldered connections till the renewal for license	
	is issued.	
	In case the Bidder is not a Manufacturer, then the Bidder	
	is required to submit documentary evidence in respect of	
	the above clauses 1.0 and 1.1 or 1.2 from the concerned	
2.0	Manufacturer (having supplied such items either by	
	Manufacturer himself or his distributor) along with the	
	techno-commercial bid.	
	The Bidder is required to submit valid Authorization	
2.1		
2.1	certificate with warranty backup from the Manufacturer	
	along with the offer.	
	The Bidder must get confirmation from the Manufacturer	
	that the threading and gauging of the rotary shouldered	
	connections of the offered Mud Motors will be as per API	
	Spec.7-1 [latest edition]. The Bidder should also furnish	
	an undertaking, as mentioned below, that the API license	
	for threading and gauging of the rotary shouldered	
2.2	connections will be kept valid till execution of purchase	
2.2	order.	
	i) From the Manufacturer if threading and gauging of the	
	rotary shouldered connections is done by the	
	Manufacturer.	
	OR	
	ii) From the API approved Threader through whom the	
	, , , , , , , , , , , , , , , , , , , ,	L

	threading and gauging of the rotary shouldered	
	connections will be done by the Manufacturer.	
2.3	In case renewal process of API license is in progress at the time of bidding, the Bidder should furnish a letter from API to this effect that renewal of the license is under examination with API and that the Manufacturer or Threader is authorized for threading and gauging of the rotary shouldered connections till the renewal for license is issued.	
3.0	Bidder should categorically confirm in the technical bid a delivery schedule within five (05) months, FOB Port of dispatch, after establishment of letter of credit (in case of foreign Bidder) or for dispatch of the equipment within five (05) months after receipt of formal order (in case of indigenous Bidder) failing which their offer will be rejected.	
	TECHNICAL SPECIFICATION FOR 3.1/2 INCHE	ES (88.90MM) OD MUD MOTOR:
A	A) 3.1/2 INCHES (88.90 MM) OD DOWN HOLE MUD MOTOR WITH SLICK (STRAIGHT) HOUSING, MEDIUM SPEED HIGH TORQUE POWER SECTION, RUGGED BEARING PACK, SAFETY CATCH FEATURES AND DUMP VALVE ASSEMBLY, DESIGNED FOR HIGH PERFORMANCE, EXTREME DOWNHOLE OPERATIONAL ENVIRONMENTS AND SUITABLE FOR CARRYING OUT SAND CLEANING, CEMENT CUTTING, MILLING/DRILLING BRIDGE PLUG, PACKER, JUNK, ETC., INSIDE 5.1/2 INCHES (139.70 MM) OD, 20 PPF CASING, WITH ALL ACCESSORIES AS PER THE FOLLOWING SPECIFICATIONS:-	

	QUANTITY: 06 (SIX) NUMBERS.	
В.	PHYSICAL SPECIFICATIONS:	
1.	Motor OD: 3.1/2 inch (88.90mm)	
2.	Lobe configuration within: 5:6 to 7:8	
3.	Number of stages within: 3.0 to 5.0	
4.	Overall Length maximum: 8 m (26.25 ft)	
5.	Top connection (box): 2.7/8 inch API Regular RH	
6.	Bit box connection: 2.7/8 inch API Regular RH	
7.	Bit size range indicative (TCR and PDC): 4.1/4 inch to 5.1/2 inch / (107.95 mm to 139.70 mm)	
8.	Bearing package: Mud lubricated or Oil Sealed and Tungsten carbide type	
9.	Dump valve assembly: Removable Dump valve assembly with 2.7/8 inch Reg RH Box-up and 2.7/8 inch Reg Pin-down connection	
10.	Housing: Slick (straight) type housing	
11.	Safety catch system: In-built safety catch system to prevent fishing operation on a broken Motor	
C.	OPERATIONAL SPECIFICATIONS:	
1.	Flow rate range within: 70 gpm to 190 gpm / (265.00 lpm to 719.20 lpm)	
2.	Bit speed range at full load within: 80 rpm to 300 rpm	
3.	Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm)	
4.	Torque at full load minimum: 950 ft-lbs / (1288.02 N-m)	
5.	Peak torque minimum: 1250 ft-lbs / (1694.77 N-m)	
6.	Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm)	
7.	Peak power output minimum: 38 hp / (28.33 kw)	
8.	Dynamic weight on bit minimum: 8,000 lbs / (4 Tons)	
9.	Working over-pull minimum: 27,000 lbs / (13.5 Tons)	
10.	Motor yield minimum: 150,000 lbs / (75 Tons)	
11.	Temperature rating minimum: 120 deg C / (248 deg F)	
12.	Working fluid: Mud Motor should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common	

D.	salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. ACCESSORIES: Lifting sub compatible with 2.7/8" square shoulder	
1.	elevator -1 (one) no with each Motor. Total-6 (six) nos. Spare dump valve assembly- 1 (one) no with each Motor.	
2.	Total- 6(six) nos.	
	TECHNICAL SPECIFICATION FOR 4.3/4 II	INCHES (120.65 MM) MUD-MOTOR
A.	A) 4.3/4 INCHES (120.65 MM) OD DOWN HOLE MUD MOTOR, WITH SLICK HOUSING, LOW SPEED HIGH TORQUE POWER SECTION, RUGGED BEARING PACK, SAFETY CATCH SYSTEM AND DUMP SUB ASSEMBLY, DESIGNED FOR HIGH PERFORMANCE, EXTREME DOWNHOLE OPERATIONAL ENVIRONMENTS AND SUITABLE FOR CARRYING OUT SAND CLEANING, CEMENT CUTTING, MILLING / DRILLING BRIDGE PLUG, PACKER, JUNK, ETC., INSIDE 7 INCHES (177.80MM) OD, 29 PPF CASING WITH ALL ACCESSORIES AND AS PER THE FOLLOWING MINIMUM SPECIFICATIONS:-	
B.	PHYSICAL SPECIFICATIONS:	
1.	Motor OD: 4.3/4 inch (120.65 mm)	
2.	Lobe configuration within: 5:6 to 7:8	
3.	Number of stages within: 3.0 to 6.0	
4.	Overall Length maximum: 9.00 m (29.53 ft)	
5.	Top connection (box): 3.1/2 inch API IF (NC38) RH	

6. Bit box connection: 3.1/2 inch API Reg RH box down 7. 7. 8 inch) / (142.87 mm to 187.32 mm) 8. Bearing package: Mud lubricated or Oil Sealed and Tungsten carbide type 9. Dump valve assembly: Removable dump valve assembly with 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Pindown connection 10. Housing: Slick (straight) type housing 11. Safety catch system: In-built safety catch system to prevent fishing operation on a broken Motor C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 ppm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3855.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 pp / (44.74 kw) 8. Dynamic weight on bit minimum: 150,000 lbs / (7.5 Tons) 9. Working overpull minimum: 120 deg C / (248 deg F) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES: 1. Lifting sub compatible with 2.7/8' square shoulder clevator -1 (onc)			
8. Bearing package: Mud lubricated or Oil Sealed and Tungsten carbide type 9. Dump valve assembly: Removable dump valve assembly with 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Pindown connection 10. Housing: Slick (straight) type housing 11. Safety catch system: In-built safety catch system to prevent fishing operation on a broken Motor C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3852.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 500 0bs / (7.5 Tons) 9. Working overpull minimum: 15.000 lbs / (7.5 Tons) 10. Motor yield minimum: 2100 on lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud.	6.	Bit box connection: 3.1/2 inch API Reg RH box down	
8. Bearing package: Mud lubricated or Oil Sealed and Tungsten carbide type 9. Dump valve assembly: Removable dump valve assembly with 3.1/2 inch API IF (RC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Pin- down connection 10. Housing: Sike (straight) type housing 11. Safety catch system: In-built safety catch system to prevent fishing operation on a broken Motor C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 hp / (44.74 kw) 8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 15,000 lbs / (50 Tons) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (284 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	7	Bit size range indicative (TCR & PDC): (5.5/8 inch to	
8. Tungsten carbide type 9. Dump valve assembly: Removable dump valve assembly with 3.1/2 inch API IF (NC38) RH Pindown connection 10. Housing: Sike (straight) type housing 11. Safety catch system: in-built safety catch system to prevent fishing operation on a broken Motor C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (38247.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3825.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 100,000 lbs / (50 Tons) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud.	7.	7.3/8 inch) / (142.87 mm to 187.32 mm)	
Dump valve assembly: Removable dump valve assembly with 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Pindown connection	Q	Bearing package: Mud lubricated or Oil Sealed and	
inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH Pindown connection 10. Housing: Slick (straight) type housing 11. Safety catch system: In-built safety catch system to prevent fishing operation on a broken Motor C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 hp / (44.74 kw) 8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 270,000 lbs / (350 Tons) 10. Motor yield minimum: 270,000 lbs / (358 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	0.		
down connection 10. Housing: Slick (straight) type housing 11. Safety catch system: In-built safety catch system to prevent fishing operation on a broken Motor C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 hp / (44.74 kw) 8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 100,000 lbs / (35 Tons) 10. Motor yield minimum: 270,000 lbs / (35 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	9.		
10. Housing: Slick (straight) type housing 11. Safety catch system: In-built safety catch system to prevent fishing operation on a broken Motor C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 hp / (44.74 kw) 8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 270,000 lbs / (50 Tons) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:			
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C. OPERATIONAL SPECIFICATIONS: 1. Flow rate range within: 100gpm to 250gpm / (378.50 lpm to 946.40 lpm) 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 hp / (44.74 kw) 8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 270,000 lbs / (135 Tons) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	11.		
Ipm 2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 hp / (44.74 kw) 8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 100,000 lbs / (50 Tons) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	C.		
2. Bit speed range at full load within: 50 rpm to 200 rpm 3. Differential pressure at full load minimum: 450 psi / (31.63 kg/sq cm) 4. Torque at full load minimum: 2100 ft-lbs / (2847.21 N-m) 5. Peak torque minimum: 2600 ft-lbs / (3525.12 N-m) 6. Differential pressure at peak torque minimum: 600 psi / (42.18 kg/sq cm) 7. Peak power output minimum: 60 hp / (44.74 kw) 8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 100,000 lbs / (50 Tons) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	1.		
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8. Dynamic weight on bit minimum: 15,000 lbs / (7.5 Tons) 9. Working overpull minimum: 100,000 lbs / (50 Tons) 10. Motor yield minimum: 270,000 lbs / (135 Tons) 11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	0.		
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11. Temperature rating minimum: 120 deg C / (248 deg F) 12. Working fluid: Mud Motor along with all the components should be suitable for operation with the following drilling and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	9.	, , ,	
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and work-over fluids: a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:	12.	Working fluid: Mud Motor along with all the components	
a) Salt solution: Sodium dichromate, cutch, common salt, CMC etc. and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:			
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and with 6000 ppm salt. b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:		a) Salt solution: Sodium dichromate, cutch, common	
b) Drilling fluid: Water base Mud and KCL / NaCl Mud. D. ACCESSORIES:		salt, CMC etc.	
D. ACCESSORIES:			
1. Lifting sub compatible with 2.7/8" square shoulder elevator -1 (one)	D.		
	1.	Lifting sub compatible with 2.7/8" square shoulder elevator -1 (one)	

	no with each Motor. Total-6(six) nos.		
2.	Spare dump valve assembly- 1 (one) no with each Motor. Total-6(six)		
	nos.		
	GENERAL NOTES FO	R BIDDERS:	
1.	The Bidder can quote either for both or any one of the two		
	sizes of Mud-Motors. However, the quoted Mud-Motor(s)		
	must be offered together with its accessories.		
2			
2.	The Bidder must specify the offered item in details and		
	should forward along with the technical bid relevant		
	product catalogue with drawing and literature of the		
	offered item and its performance curves consisting of		
2	speed curve, torque curve and power curve.		
3.	The items shall be brand new, unused and of prime		
	quality. The Manufacturer shall warrant (in the event of		
	an order) that the product/products supplied will be free		
	from all defects and fault in material, workmanship and		
	manufacturing 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 of the items whichever is earlier. The		
	defective materials, if any, rejected by OIL shall be		
	replaced by the supplier at their own expense. Bidders		
	must confirm the same in their quotations.		
4.	All parts of the items should be suitably marked for		
	identification purpose. Additionally, OIL purchase order		
	number should be die stamped on the body of the Mud-		
	Motors in the event of order. Bidders shall confirm the		
	same while quoting.		
5.	The item(s) should be suitably coated with a protective		
	coating both internally and externally to prevent corrosion		
	and rusting during transit. Bidders must confirm the		
	same while quoting.		
6.	The Bidder should forward a list of recommended spares		

	for two (02) years operation indicating year wise	
	requirement against the quoted item(s) indicating part	
	numbers, quantity and unit price for each and every item separately along with the commercial bid and shall	
	categorically confirm regarding submission of the same in	
	the technical bid. The price should remain valid for at	
	least two (02) years. However, the cost of these spares will	
	not be considered for commercial evaluation.	
7.	Additionally, the Bidder shall submit an un-priced list of	
/.	recommended spares for two (02) years operation against	
	the quoted item(s), indicating year wise requirement, part	
	numbers and quantity along with the technical bid.	
8.	The Bidder should indicate the name of Manufacturer,	
0.	country of origin and port of dispatch for the quoted Mud	
	Motor(s).	
9.	All test certificates/ reports (including Dynamometer test	
	reports for speed curve, torque curve and power curve)	
	against each size of Mud Motors should be submitted to	
	OIL along with the supply. Bidder must confirm the same	
	while quoting.	
10.	The Bidder should confirm to provide along with the	
	supply, 3 (three) sets of Operation, service and	
	maintenance manual indicating assembling and	
	disassembling procedures, drawing and spare parts list	
	with part numbers against each size of the Mud Motors.	
11.	The Mud Motors along with the accessories are to be	
	procured from the same source for compatibility of the	
	items. Bidder shall quote accordingly.	
12.	Any deviation(s) from the tender specification should be	
	clearly highlighted specifying justification in support of	
	deviation.	
13.	Bidder shall submit the duly filled in and signed	
	"Technical check list" and "Technical Evaluation Sheet"	

along with the technical bid.	

TECHNICAL CKECKLIST FOR 4.3/4 INCHES (120.65 MM) OD DOWNHOLE MUD MOTOR

S1. No.	Requirements Compliance	Response
1 1	Whether the OD of offered MUD MOTOR is 4.3/4 inch (120.65 mm)?	Yes/ No
2	Whether the length of the offered MUD MOTOR is 4.5/4 litch (120.03 lillin)? Whether the length of the offered MUD MOTOR is within 9m (29.53 ft)?	Yes/ No
3	Whether the housing of the offered MUD MOTOR is a SLICK (Straight) housing?	Yes/ No
4	Whether the offered MUD MOTOR is complete with Dump Valve assembly and Safety catch system?	Yes/ No
	Whether the offered MUD MOTOR is complete with Dulip Valve assembly and Salety catch system? Whether the offered MUD MOTOR is suitable for operation inside 7 inch (177.80MM) x 29 PPF casing?	Yes/ No
6	Whether the Lobe configuration of the offered MUD MOTOR is within 5:6 to 7:8?	Yes/ No
7	Whether the no of Stages of the offered MUD MOTOR is within 3 to 6?	Yes/ No
8	Whether the flow rate range of the offered MUD MOTOR is within (100 GPM to 250 GPM) / (378.5 LPM to 946.4 LPM)?	Yes/ No
9	Whether the full load bit speed range of the offered MUD MOTOR is within (50-200) RPM?	Yes/ No
10	Whether the differential pressure at full load of the offered MUD MOTOR is equal to or more than 450 psi (31.63 kg/sq cm)?	Yes/ No
11	Whether the rated torque at full load of offered MUD MOTOR is equal to or more than 2100 ft-lbs (2847.21 N-m) at minimum 450 psi (31.63 kg/sq cm) or more differential pressure?	Yes/ No
12	Whether the peak power output of the offered MUD MOTOR is equal to or more than 60 hp (44.74 kw) ?	Yes/ No
13	Whether threading and gauging of the rotary shouldered connection of the offered MUD MOTOR will be as per API Spec.7-1 [latest edition]?	Yes/ No
14	Whether the top connection of offered MUD MOTOR is 3.1/2 inch API IF (NC38) RH Box-up?	Yes/ No
15	Whether the bit box connection of offered MUD MOTOR is 3.1/2 inch API Reg RH box down?	Yes/ No
16	Whether the dump valve assembly connections of the offered MUD MOTOR are 3.1/2 inch API IF (NC38) RH Box-up and 3.1/2 inch API IF (NC38) RH pin down?	Yes/ No
17	Whether detailed technical catalogue and literature of the offered MUD MOTOR along with the three performance curves of the offered mud motor(s) consisting of speed curve, torque curve and power curve forwarded with the technical bid?	Yes/ No

18	Whether the offered MUD MOTOR shall be furnished with elevator sub for lifting purpose & suitable for use with square shouldered 2.7/8" OD drill pipe elevator?	Yes/ No
19	Whether the offered MUD MOTOR shall be furnished with spare Dump valve assembly?	Yes/ No
20	Whether the offered MUD MOTOR is suitable for operation with the drilling and work-over fluids as mentioned in this tender?	Yes/ No
21	Whether list of recommended spare parts for two (02) years trouble free operation with unit price and part numbers indicating with year wise consumption pattern forwarded separately along with the commercial against the offered MUD MOTOR?	Yes/ No
22	Whether un-priced list of recommended spare parts for two (02) years trouble free operation with part numbers indicating year wise consumption pattern forwarded along with the technical bid against the offered MUD MOTOR?	Yes/ No
23	Whether quoted as manufacturer?	Yes/ No
24	Whether the name of manufacturer, country of origin and port of shipment has been mentioned?	Yes/ No
25	Whether the "Matrix for Technical Evaluation Sheet" has been duly filled in and signed?	Yes/No

TECHNICAL CKECKLIST FOR 3.1/2 INCHES (88.90 MM) OD DOWNHOLE MUD MOTOR

S1.	Requirements Compliance	Response
No.		
1	Whether the OD of offered MUD MOTOR is 3.1/2 inch (88.90 mm)?	Yes/ No
2	Whether the length of the offered MUD MOTOR is within 8m (26.25 ft)?	Yes/ No
3	Whether the housing of the offered MUD MOTOR is a SLICK (Straight) housing?	Yes/ No
4	Whether the offered MUD MOTOR is complete with Dump Valve assembly and Safety catch system?	Yes/ No
5	Whether the offered MUD MOTOR is suitable for operation inside 5.1/2 inch (139.70MM) x 20 PPF casing?	Yes/ No
6	Whether the Lobe configuration of the offered MUD MOTOR is within 5:6 to 7:8?	Yes/ No
7	Whathauthau a Ghanna af tha affanal MID MOTOD is mithin 2.0 to 5.00	V/N-
/	Whether the no of Stages of the offered MUD MOTOR is within 3.0 to 5.0?	Yes/ No
8	Whether the flow rate range of the offered MUD MOTOR is within (70 GPM to 190 GPM) / (265.00 LPM to 719.20 LPM)?	Yes/ No
9	Whether the full load bit speed range of the offered MUD MOTOR is within (80 to 300) RPM?	Yes/ No
10	Whether the differential pressure at full load of the offered MUD MOTOR is equal to or more than 450 psi (31.63 kg/sq cm)?	Yes/ No

11	Whether the rated torque at full load of offered MUD MOTOR is more than or equal to 950 ft-lbs (1288.02 N-m) at minimum 450 psi (31.63 kg/sq cm) or more differential pressure?	Yes/ No
12	Whether the peak power output of the offered MUD MOTOR is more than or equal to 38 hp (28.33 kw) ?	Yes/ No
13	Whether threading and gauging of the rotary shouldered connection of the offered MUD MOTOR will be as per API Spec.7-1 [latest edition]?	Yes/ No
14	Whether the top connection of offered MUD MOTOR is 2.7/8 inch API Regular RH Box-up?	Yes/ No
15	Whether the bit box connection of offered MUD MOTOR is 2.7/8 inch API Regular RH Box-down?	Yes/ No
16	Whether the dump valve assembly connections of the offered MUD MOTOR are 2.7/8 inch API Regular RH Box-up and 2.7/8 inch API Regular RH Pin-down?	Yes/ No
17	Whether detailed technical catalogue and literature of the offered MUD MOTOR along with the three performance curves of the offered mud motor(s) consisting of speed curve, torque curve and power curve forwarded with the technical bid?	Yes/ No
18	Whether the offered MUD MOTOR shall be furnished with elevator sub for lifting purpose & suitable for use with square shouldered 2.7/8 inch OD drill pipe elevator?	Yes/ No
19	Whether the offered MUD MOTOR shall be furnished with spare Dump valve assembly?	Yes/ No
20	Whether the offered MUD MOTOR is suitable for operation with the drilling and work-over fluids as mentioned in this tender?	Yes/ No
21	Whether list of recommended spare parts for two (02) years trouble free operation with unit price and part numbers indicating with year wise consumption pattern forwarded separately along with the commercial against the offered MUD MOTOR?	Yes/ No
22	Whether un-priced list of recommended spare parts for two (02) years trouble free operation with part numbers indicating year wise consumption pattern forwarded along with the technical bid against the offered MUD MOTOR?	Yes/ No
23	Whether quoted as manufacturer?	Yes/ No
24	Whether the name of manufacturer, country of origin and port of shipment has been mentioned?	Yes/ No
25	Whether the "Matrix for Technical Evaluation Sheet" has been duly filled in and signed?	Yes/No