



OIL & GAS DEVELOPMENT COMPANY LIMITED

Request for Quotation (Imports)

ANNEXURE 'A':

OGDCL House , Jinnah Avenue, Islamabad, Pakistan

Description: 40,000 NOs. MULTI GEOPHONE STRINGS AND SPARES
Tender Enquiry No: OGDCL-SCM-FD-CB/ECMP-6200000043/2022
Delivery Period: 125 DAYS FROM LC ESTABLISHMENT
Mode of Shipment: CFR KARACHI
Mode of Procurement: PRESS TENDER
Evaluation Criteria: FULL CONSIGNMENT WISE
Bid Bond Value: USD 133,800/- VALID FOR 210 DAYS
Bid Validity: 180 DAYS FROM TECHNICAL BID OPENING
Bidding Procedure: SINGLE STAGE TWO ENVELOPE
Purchase Req: 20000135
Other Terms & (04 pages attached)

Conditions:

SR NO	Material No	Material Description	Unit	Quantity	Unit Price (FOB)	Total Price (FOB)	Unit Price (CFR)	Total Price (CFR)	Deviation From Tender Spec. If Any
1.	55-00018	. LAND MULTIGEOPHONE STRING	NO	30,000					
2.	55-00019	. MARSHY GEOPHONE STRING	NO	10,000					
3.	55-00012	. GEOPHONE COIL, 10 HZ (+/-2.5%) 375 OHM WITH 1000 OHM SHUNT RESISITOR	NO	150,000					
4.	55-00020	. GEOPHONE LAND CASE	NO	5,000					
5.	55-00021	. GEOPHONE MARSH CASE	NO	1,000					

**ATTACHMENT FOR THE PROCUREMENT OF
40,000 MULTI-GEOPHONE STRINGS & SPARES**

SR #	DESCRIPTION	UNIT	QTY.	SAP NO.
1	<p><u>LAND GEOPHONE STRINGS</u> a- Geophone element be designed to offer the Seismic industry standard with high quality product. b- Provide high fidelity data in 2-D & 3-D seismic surveys; allowing full bandwidth (10 to 240 Hz) at 2 msec sampling rate. c- Element is fully compatible with latest 24-bit seismic data recording systems especially 428XL,508XT, G3I NXT & G3i HD Systems etc.</p> <p>Geophone String Configuration Be consisting of twelve nos. of water proof geophones wired at 4 meters spacing in two parallel groups of six geophones in series using three conductor geophone cable.</p> <p>Lead-in 15 meters at both ends using 3-conductor gel filled geo-cable. Geo-cable must have molded polyurethane pick-up D-loops spaced at 1 meter intervals. Each Geo-string be collected on a carrying hasp of iron with rust proof coating. The total length of geo- string including end connectors is 74 meters.</p> <p>Connector Type. Both ends of Geophone strings be terminated with water proof '5517 Push Fit' or Equivalent connector array(male-female) with dust caps having interval of 0.5 m between male & female connectors. The D-loop between the male & female connector must be at a distance of 0.25m.</p> <p>Polarity: SEG polarity standard (geo. +ive to pin on male side)</p> <p>Geo-case: High strength rugged waterproof plastic land case (upright type) with 3.00" to 3.25" inch rust-proof & non-magnetic stainless steel spike for ground coupling, case stress relief equals cable break strength.</p> <p>A digital grade Geo-coil with following specifications: Natural Frequency: 10 Hz (Tolerance: $\pm 2.5\%$) for resistive damping, Minimum Allowable Tilt = 10 degrees for specified frequency. Coil resistance: 375 Ohms (Tolerance: $\pm 2.5\%$) with resistive damping Shunt resistance: 1000 Ohms (Tolerance: $\pm 5\%$) Spurious frequency: ≥ 240 Hz. Distortion: $\leq 0.1\%$ Minimum Tilt angle for specified distortion = 10 degree, At frequency of distortion=12 Hz.</p> <p>Open circuit Damping: 0.25 Damping: 68.6% (Tolerance: 0 to +5%) Sensitivity with shunt resistance: 20.9 V/m/s (Tolerance: $\pm 2.5\%$) Moving mass: 11 g Max Coil travel (peak to peak): 2 mm Coil Dimensions: Diameter: 25.4 mm (1 inch), Height: 32 mm (1.26 inches) Cable conductor: Strand construction: 19 wires, Strands formation: Standard Cable O.D.: 4.3 mm to 4.6 mm for three conductor <i>gel filled cable</i> Insulation: Extrude approved polypropylene, Jacket: Approved thermoplastic polyurethane (black color), Hardness: min. 80 shore A, Breaking load (3-conductor): 78 kg Minimum Operating Temperature: - 40 degrees C to +100 degrees C (All parameters are specified at +20 to +25 degrees Celsius in vertical position).</p>	No	30,000	55-00018

2	<p><u>MARSHY GEOPHONE STRINGS</u> Having marsh cases with the same specifications of basic element and configurations as required for serial No. 1, both sides terminated with marsh '5517 Push Fit' or Equivalent connector array(male-female) with dust caps having interval of 0.5 m between male & female connectors. The D-loop between the male & female connector must be at a distance of 0.25m. Drop cable of 01-meter length with outer diameter 7.6 mm to 8.3 mm and a molded D-loop be installed at 0.35 meter from the marsh phone case entry point. 3-conductor gel filled cable for marshy string, outer diameter be 6.35mm (Tolerance: ±2.5%) Marsh phone case, with single cable connection, fitted with rust proof 3 to 3.25-inch brass spike, water tight and water proof molded T-joint for leader and drop cable.</p>	No	10,000	55-00019
3	<p>Geophone coil damped as per specifications at Sr. No 1. <u>Quality of shunt resistor and soldering must be good.</u></p>	No	150,000	55-00012
4	<p>Geophone Land case complete with <u>stainless steel spike</u> (rust-proof & non-magnetic), inclusive lock washers, top cover, screws, water proof sleeve etc. as per specifications at Sr.No.1</p>	No	5000	55-00020
5	<p>Geophone Marsh case complete with <u>brass spike</u> inclusive water proof rubber plug, lock washer etc. as per specifications at Sr.No.2</p>	No	1000	55-00021
6	<p>Third Party Pre-Shipment Inspection (TPI):</p> <p>a) OGDCL will arrange mandatory third party pre-shipment inspection of ALL equipment at manufacturer's work place as per given scope of work (SOW). Detail SOW will be shared with successful bidder soon after issue of PO. Without TPI, equipment will not be accepted.</p> <p>b) Inspector would count and confirm the 100% indented quantity as per PO, therefore, bidder is advised to do packing of equipment keeping in view the inspection process.</p> <p>c) Technical indenting team of 02 OGDCL professionals may also visit the manufacturer's place at OGDCL cost during pre-shipment inspection to ensure that inspection strictly adheres to given scope of work and SOR specifications.</p> <p>d) It will be responsibility of bidder to extend full cooperation for inspection and ensure availability of ALL equipment for inspection purpose as per demand of inspector to perform TPI as per OGDCL SOW including but not limited to testing of minimum randomly selected 4-5% multi-geophone strings with available geophone tester(SMT/SGT).</p> <p>e) Apart from random testing, the bidder will provide test results of 100% geophone strings and coils to inspector & OGDCL team on their arrival before shipment (01 soft copy).</p> <p>f) 10 No. randomly selected geophone strings (item # 1 & item # 2 each) would be tested for tumble barrel test/drop test, high & low temperature test, water leakage test, tensile strength / pull test of cable and/or other industry standard tests mentioned in technical quote of bidder or available at manufacturing facility of bidder. These tested items would be marked by inspector and packed separately after test for identification.</p> <p>g) In order to ensure safest supply of the inspected material, the inspector would not only inspect the material but would also witness packing & labelling of the inspected material to be as per industry standards, and then, seal the material at manufacturer's site.</p> <p>h) The inspector would also witness loading of sealed material into the container(s) at manufacturer's place for transportation to port of shipment & then suitable sealing of the container(s). Then, he would also witness booking / shipment of the sealed container(s) preferably without opening the original seal fixed at manufacturer's site. In case the sealed container(s) are not allowed for booking without checking by port authorities/shipping line, then the checking and resealing at sea port after clearance, to be witnessed by TPI firm.</p> <p>i) TPI SOW is limited to physical inspection/random sample testing of equipment that does not void the performance/operational capability & warranty of equipment as already agreed by OEM & defined in OGDCL SOR. Nothing in this clause shall in any way release the Contractor from any Warranty or other obligations under this Contract.</p> <p>j) Bidder will be responsible to facilitate pre-shipment inspection through OGDCL nominated inspector within delivery period, hence, Bidder will be responsible to coordinate and cooperate with nominated inspector / firm and arrange packing of material in view of third party inspection process as described above without affecting the delivery period.</p> <p>k) Bidder will mention the minimum tentative days required to complete inspection of equipment as per detail given above.</p> <p>l) If any discrepancy is identified by inspector, OEM will be responsible to rectify that discrepancy and any extra man-days if needed to re-inspect the</p>	Compliance Required		

equipment after rectification of discrepancy, same will be paid by OEM.
m) All inspection expenses will be borne by OGDCL including visit of OGDCL professionals except expenses as per clause 6(l).

Terms and Conditions:

1. Delivery period: **125 Days** (Maximum).
2. The bidder must be **original equipment manufacturer (OEM)** of the quoted Geophone Strings. Bid from middleman, distributor or supply house would not be accepted.
3. Bidder will provide **signed & stamped TOR/SOR** along with item and term & condition wise **compliance sheet**.
4. Bidder will provide a **valid ISO 9001 or equivalent** quality certification.
5. The bidder must have **minimum 10 years' experience** of geophones' manufacturing. As proof of experience bidder is required to provide a valid verifiable business license/registration certificate. Business license from Chinese bidders, having unique license / certificate number issued in name of OEM, must be verifiable from relevant issuer authority website (www.gsxt.gov.cn) & (<https://iecms.mofcom.gov.cn>).
6.
 - a. Bidder will provide **sale record** of minimum sold quantity of **50,000 Nos** multi geophone strings sold to at least 02 No. geophysical companies during **last 05 years**, out of which 01 company must be based or engaged in seismic acquisition other than country of origin of OEM. Bidder will provide the list of buyer companies in tabular form mentioning all their details: qty sold, date of contract, company name, country name, web address, contact number, email address etc.
 - b. Bidder will also provide the satisfactory **performance certificates** from at least above 02 No. purchaser geophysical companies, out of which 01 company must be engaged in seismic acquisition other than country of origin of OEM, mentioning that they are using bidder's geophone groups for seismic data acquisition satisfactory.
 - c. Copies of unpriced legible copy of sale contract / purchase orders and performance certificates should be attached in support of clause 6 (a, b) clearly having the details including name of buyer company, email address, web site address, postal address, contact number, quantity sold, date of contract etc. All the certificates should be verifiable from the issuers.
7. The bidder must provide **samples** for Technical Evaluation as per following;
 - a. Item No. 1 = 02 No (Complete String with carrying hasp).
 - b. Item No. 2 = 02 No (Complete String with carrying hasp).
 - c. Item No. 3 = 05 No
 - d. Item No. 4 & 5 = 02 No each
 - e. 01 Meter gel filled 3-conductor Geo-Cable having a molded D-loop and fitted with connector at any one end or both to confirm quality of cable / No of strands/insulation/connector type etc.
 - f. Test results (01 hard copy) for item No.1, 2, 3 of above provided samples performed with SMT/SGT (Geophone Analyzer), would also be submitted along with the bid. Bidder will provide detail of all parameters (including tolerance limits, temperature coefficient, cable resistance etc.) fed in SMT/SGT (Geophone Analyzer) during performing of these tests.
 - g. All geophone strings should be clearly embossed/ printed or tagged with manufacturer's monogram / name on it in English, for identification. Samples without monogram/name will be considered as rejected. Each coil in a geophone string or separate, should have manufacturing date and brand model name printed/tagged on it.
 - h. All samples would be tested in Laboratory as well as in seismic field operation for data acquisition as part of technical evaluation.
 - i. **Non Submission of samples with the bid will result in its rejection.**
 - j. Successful bidder will also submit **production samples** for item No. 1 & 2 (01 No. each) after issuance of P.O within 03 weeks, before L.C

establishment. Bidder will start mass production only after successful testing and acceptance of its production samples by OGDCL. The Supplied material will be inspected as per approved production sample.

8.
 - a. Bidder will provide original latest technical brochure of the indented items in English including **diagrams/drawings of all items** for technical evaluation.
 - b. Bidder will confirm to provide Land Geophone String having 0.25 meters' distance from Geophone to nearest molded D-loop, so that all geophones in a string may lay in center while in hanging position in hanger.
 - c. As TPI SOW includes tumble barrel test/drop strength test, temperature test, leakage test, pull strength / tensile strength test of geophone cable etc., hence, manufacturer will provide a **certificate** that it has facility to perform all these standard quality tests performed for items No 1 & 2 to ascertain quality. Bidder will attach photographs of its test facility/equipment proving that it has capability & testing equipment available to perform the standard quality tests.
 - d. Bidder will provide a **certificate** that all land and marshy geophones are water proof and leakage free.
9.
 - a. Bidder will provide minimum **three years' warranty** for basic element (Geophone Coil) and 06 months for all other material. A **warranty certificate** to be submitted in this regard.
 - b. Defective items' replacement during warranty period will be **free of all charges** and the local agent will also be fully responsible for in time warranty replacement.
 - c. Bidder must submit a **compatibility certificate** that Geophone Strings (Sr # 1 & 2) will work satisfactorily with latest data acquisition systems (428 XL, G3i HD, G3I NXT, 508XT Systems etc.) and will replace any incompatible item **free of all charges**.
 - d. The bidder or its authorized representative will sign the protocol of acceptance, commissioning and start of warranty.
10. The bidder will ensure to supply spares of geophone strings for minimum 05 years.
11. Packing of all materials will be as per geophysical industry standards in pallet form having proper labelling.
12. Evaluation will be on full package C & F by Sea price basis.
13. Failure in meeting any criteria mentioned in specifications or any terms & conditions will result in rejection of the bid.
14. All documents being provided must be in English and legible. In case required document is in other language, bidder is required to submit its translated English version along with copy of original document and English translation would prevail. Any illegible / non-translated / expired document would be considered as rejected and might result in rejection of bid.
15. Submission of any fake/forged document will result in rejection of bid and blacklisting of bidder as per OGDCL procedure.