

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION E

(To be completed, filled in, signed
and stamped by the principal)

ANNEXURE 'A'

Material FIELD MOUNTED ONLINE MOISTURE ANALYZER FOR SALE GAS METERING
Tender Enquiry No PROC-FE/CB/PE&FD/TOGH-4904/2020
Due Date
Evaluation Criteria MAIN ITEM

SCHEDULE OF REQUIREMENT

Sr No	Description	Unit	Quantity	Unit Price (FOB)	Total Price (FOB)	Unit Price C & F BY AIR	Total Price C & F BY AIR	Deviated From Tender Spec. If Any
1	FIELD MOUNTED ONLINE MOISTURE ANALYZER WITH BUILT IN MOISTURE GENERATOR AND ALL OTHER ACCESSORIES FOR SALE GAS METERING. DETAIL SPECIFICATIONS ARE ATTACHED AT ANNEXURE "Z".	Number	1					

Note:

- Bid bond Amount:** - US\$ 1,400/- (USD One Thousand and Four Hundred only) or equivalent in Pak Rupees should be submitted with the technical bid.
- Evaluation Criteria:** MAIN ITEM/EQUIPMENT WISE ON CPT BY AIR BASIS ISLAMABAD under Single Stage –Two Envelope Bidding Procedure
- Terms and conditions:**-Bidders are advised to carefully read all the terms and conditions of the Tender Document available at OGDCL website in the Master Set of Foreign Tender Document (Press-Single Stage Two Envelope)-Updated
- Delivery Period:** 02 Months from the date of L/C establishment

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ONLINE MOISTURE ANALYZER

Independent Moisture Analyzer field mounted complete with sampling system for Moisture measurement is required for installation at Sale Gas metering on custody transfer point. Detailed specifications are as under.

1.0 General		
1	Service	Custody Transfer
2	Electrical Area Class	Class 1, Division 2, Group C & D
3	Amb. Temperature limits	(-) 5°C to (+) 55°C
4	Type	Online Independent field mounted type.
5	Enclosure	ATEX approved, NEMA 4X (IP65/66)
6	Communication link	Will be connected with Online Gas Flow Computer (not in vendor's scope) through digital signal via MODBUS.
7	Line Size/Schedule/ Pressure	6" / Sch-80 / 1100 psi
Function Specifications		
8	Sensor Measuring Principle	Capacitance principle or QCM
9	Operating Conditions	(-) 40°F to (+) 140°F
10	Sensor Response time	Near real time
11	Calibrated Range	Calibrated from 0.1 to 500 ppmv. Readout capability in ppmw, lb/mmscf, mg/N3 & dewpoint in °C or °F.
12	Span Limits	0 to 1000 PPMv
13	Measuring Range	(-) 130°F to (+) 50°F dew point temperature
14	O-ring (Gasket)	Viton O-ring seal
15	Process Connection	1/2" or 1" MNPT
16	Housing Material	Cast aluminum / stainless steel
17	Power Supply	220 VAC (50Hz) & 24 VDC both options available.
18	Power Source	Solar or Generator (not in vendor's scope)
19	Local Display	Yes
20	Outputs	Isolated 4-20 mA, RS-232 & RS-485 ports (support Modbus RTU).
21	Alarm	Can generate alarm signal.

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22	Online verification	Built-in Moisture Generator is mandatory with NIST-traceable calibration to enable on-demand verification of analyzer accuracy.
23	Bracket Material	316 SS
24	Paint	Epoxy coated
25	Electrical Certification	FM approval (Class 1), division 2 standard
26	Protection Class	NEMA 4X (IP 65/66)
Performance Specifications		
27	Accuracy	+/- 10% of reading or better
28	Reproducibility	+/- 5.0% of reading
29	Detection Limits	0.1 ppmv
30	Operating flow rate	Approximately 1 SCFH @ 100 psig
Sample Probe & Conditioning System		
31	No. of Sample Streams	02 (01 for Analyzer, 01 for manual sampling)
32	Sample probe	Included in the vendor's scope. Class 600 pressure rating. The sample probe is of the membrane probe type, allowing the Process GC's and Moisture Analyzer to derive their gas samples. The sample probe is retractable under full line pressure and will be equipped with an internal valve for process isolation.
33	Inlet Filter	Yes to remove particulate from mixed (oil & gas) stream.
34	Coalescing Filter	Yes
35	Pressure regulated	Yes. Electrically heated (Div2 or higher certified) pressure regulator to prevent any condensation during pressure let down to the appropriate pressure level.
36	Conditioning System	Comprises of all requisite filters, pressure regulators, temperature controllers, valves etc & designed to provide sample gas to the analyzer at optimal pressure, temperature, flow rate, and cleanliness as per manufacturer's recommendations.

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Accessories		
37	2-Years Operational spares	Unpriced list of recommended 02-year operational spares to be provided with technical bid and priced list mentioning unit price with financial bid. OGDCL reserves the right to delete any item or all without assigning any reason.
38	Pressure regulators	Yes (02 Qty)- to reduce sample pressure from 1100 psi in two stages.
39	Valve Manifold	Yes
40	Containment trap	Yes (to remove heavy hydrocarbons from sample stream).
41	Liquid Separator	Yes (Membrane type - to remove entrained liquids from sample stream)
42	Configuration H/W (laptop) & Software	Yes - Latest Quad Core i7 (10th gen or latest) with licensed operating system, application software & Backup Configuration software
Documentation		
43	Calibration Certificates	Yes
44	Certificate of Origin	Yes
45	Certificate of Conformity	Yes
46	O&M Manuals	Yes (At-least two sets of Hard & soft copies both)
47	Installation Manual with Online Verification Procedure	Yes (At-least two sets of Hard & soft copies both)
48	Performance Test Reports	Yes
Terms & Conditions		
49	Bidder shall provide OEM Authority letter with technical bid against this tender enquiry.	
50	Manufacturer shall have at least 10 years' experience in the manufacturing/ supply of similar type of analyzer. In this regard, 10 year sale record shall be submitted by bidder in its technical bid.	
51	Bidder/Manufacturer shall be responsible for provision of OEM standard Warrantees / Guarantees of equipment.	
52	Bidder/Manufacturer shall confirm provision of support for the hardware & software for a minimum period of 07 years.	



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Commissioning	
53	<p>Commissioning of the Moisture Analyzer shall be done at OGDCL site in Pakistan. This activity shall include configuration, calibration & testing etc for compliance of tender specifications.</p> <p>Bidders to quote firm price of commissioning including mobilization & demobilization cost with air travel, two night's hotel stay etc. in their financial bids.</p>

Note:

The evaluation shall be carried out on the basis of price of the Main Equipment Basis with all the required accessories including commissioning cost. Bidder to submit the list of two years recommended operational spares with Technical Bid. However, unit price and quantity of recommended two year operational spares to be quoted ONLY in the Financial Bid, for making decision for purchase of operational spares.

