



OIL & GAS DEVELOPMENT COMPANY LIMITED

Request for Quotation (Imports,

ANNEXURE 'A':

OGDCL House , Jinnah Avenue, Islamabad,Pakistan

Description: ONLINE MOISTURE ANALYZER FOR WALI FIELD
Tender Enquiry No: OGDCL/SCM/FD/PROD/WALI/RFQ-6200000011 / 2022
Delivery Period: 05 Months
Mode of Shipment: CPT BY AIR
Mode of Procurement: Competitive Bidding
Evaluation Criteria: Main Item Wise
Bid Bond Value: USD 1000
Bid Validity: 180 DAYS
Bidding Procedure: Single Stage two Envelope

SR NO	Material No	Material Description	Unit	Quantity	Unit Price (FOB)	Total Price (FOB)	Unit Price (CPT) BY AIR	Total Price (CPT)BY AIR	Deviation From Tender Spec. IfAny
1.	42-00025	ANALYZER, MOISTURE WITH BUILTIN GENERATOR AND ALL ACCESSORIES DETAIL SPECIFICATIONS ARE ATTACHED AT ANNEXURE "2".	NO	1					

vetted


ABIDA PARVEEN
Sr. Engr.(Telemetry)
Ext: 2575

ANNEXURE-Z

ONLINE MOISTURE ANALYZER

Independent Moisture Analyzer 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 1
3	Amb. Temperature limits	(-) 5°C to (+) 40°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	8" / Sch-80 / 1100 psi
Function Specifications		
8	Sensor Measuring Principle	Quartz Crystal Microbalance (QCM)
9	Sensor Response time	Near real time
10	Calibrated Range	Calibrated from 0.1 to 500 ppmv. Readout capability in ppmw, lb/mmscf, mg/N3 & dewpoint in °C or °F.
11	Span Limits	0 to 1000 PPMv
12	Measuring Range	(-) 130°F to (+) 50°F dew point temperature
13	O-ring (Gasket)	Viton O-ring seal
14	Process Connection	1/2" or 1" MNPT
15	Housing Material	Cast aluminum / stainless steel
16	Power Supply	220 VAC (50Hz) or 24 VDC.
17	Power Source	Solar or Generator (not in vendor's scope)
18	Local Display	Yes
19	Outputs	Isolated 4-20 mA, RS-232 & RS-485 ports (support Modbus RTU).
20	Alarm	Can generate alarm signal.
21	Online verification	Built-in Moisture Generator is mandatory with NIST-traceable calibration to enable on-demand verification of analyzer accuracy.



ANNEXURE-Z

22	Bracket Material	316 SS
23	Electrical Certification	FM approval (Class 1), division 1 standard
24	Protection Class	NEMA 4X (IP 65/66)
Performance Specifications		
25	Accuracy	+/- 10% of reading or better
26	Reproducibility	+/- 5.0% of reading
27	Detection Limits	0.1 ppmv
28	Operating flow rate	Approximately 1 SCFH @ 100 psig
Sample Probe & Conditioning System		
29	No. of Sample Streams	02 (01 for Analyzer, 01 for manual sampling)
30	Sample probe, insertion dia size 3/4"	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.
31	Inlet Filter	Yes to remove particulate from mixed (oil & gas) stream.
32	5 Meter Heat Tracing Sample line with 1/4" SS316 tubing	Yes. Electrically heated (Div1) to prevent any condensation during pressure let down to the appropriate pressure level. Heat tracing for sample line
33	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.
Accessories		
34	Pressure regulators	Yes (02 Qty)- to reduce sample pressure from 1100 psi in two stages.
35	Thermal fuse	Yes (10 Qty)
36	Valve Manifold	Yes
37	Coalescing & Membrane Separator with 3 sets of Filters.	Yes (Membrane type - to remove entrained liquids from sample stream)

ANNEXURE-Z

38	Software	Yes - application software & Backup Configuration software
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Documentation

39	Calibration Certificates	Yes
40	Certificate of Origin	Yes
41	Certificate of Conformity	Yes
42	O&M Manuals	Yes (At-least two sets of Hard & soft copies both)
43	Installation Manual with Online Verification Procedure	Yes (At-least two sets of Hard & soft copies both)
44	Performance Test Reports	Yes

2-Years Vendors Recommended Operational spares

45	Vendors Recommended Operational spares	1 lot
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Commissioning

46	<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> <p>Note: The evaluation shall be carried out on the basis of Main equipment wise with all accessories including installation, commissioning. Bidder to quote prices as follows:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:80%;">Description</th> <th style="width:20%;">CFR/CPT</th> </tr> </thead> <tbody> <tr> <td>Main Equipment (please mention name) inclusive of all accessories as per Annexure Z</td> <td></td> </tr> <tr> <td>Installation / Commissioning</td> <td></td> </tr> </tbody> </table> <p>Bidder to provide un-priced list of recommended spares with quantity in technical bid and unit price of each quoted spares to be provided in the financial bid only. Spares will not be part of Financial Evaluation.</p>		Description	CFR/CPT	Main Equipment (please mention name) inclusive of all accessories as per Annexure Z		Installation / Commissioning	
Description	CFR/CPT							
Main Equipment (please mention name) inclusive of all accessories as per Annexure Z								
Installation / Commissioning								



1.0 TERMS & CONDITIONS

- a) Manufacturer shall have at least 15 years' experience in the manufacturing/ supply of similar type of analyzer to the Oil and Gas Industry. In this regard, 15 years sale record shall be submitted by bidder in its technical bid.
- b) Bidder shall provide OEM Authority letter of main equipment in favor of the bidder and authority letter of the bidder in favor of the local agent with technical bid against this tender enquiry.
- c) Bidder/Manufacturer shall be responsible for provision of OEM standard Warrantees / Guarantees of equipment.
- d) Bidder /Manufacturer shall be responsible to ensure the delivery of complete material within 05 Months after the establishment of L/C.
- e) Bidder /Manufacturer shall be responsible to provide Original Testing and Calibration Certificates of the equipment.
- f) Bidder /Manufacturer shall provide Country of Origin of all quoted items.
- g) Non-compliance of any Tender Specification mentioned in Annexure-Z may lead to disqualification

