



# MJ Wilson Group Limited

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Date: 14/07/2021

## Quotation No: QUO187642

Invoice address: SOUTHHOO  
South Hook LNG Terminal Co Ltd  
Accounts Payable  
Dale Road  
Herbrandston  
Milford Haven  
SA73 3SU

Delivery address:-  
**As Opposite**

**Attention: Paul Jonker**  
**Reference: NOx Analyzer System**

**Doc Ref:DOC0328556**

Code	Description	Qty	Price£	+/-	Total£
	<p><b>BUDGETARY PRICE PROPOSAL</b></p> <p>1 EXECUTIVE SUMMARY</p> <p>MJ Wilson is pleased to submit this budget proposal for 2 off Continuous Emissions Monitoring Systems for South Hook LNG, UK. MJ Wilson fully appreciates the business and technical needs required to help you deliver a successful project. MJ Wilson have the experience and skilled personnel to ensure that our deliverables meet your needs. Our solution includes proven products and services that are flexible and emphasize MJ Wilsons strengths.</p> <p>Scope of supply</p> <p>This proposal will cover the design and construction of the following equipment:</p> <p>Option 1:</p> <ul style="list-style-type: none"><li>• 2 pcs Heated Sample Probe</li><li>• 2 pcs Sample Handling System</li><li>• 2 pcs XEGP Process Gas Analyzer - measuring NO (reported as NOx) and O2</li><li>• 2 pcs Analyzer Cabinet</li></ul> <p>The analyzer cabinet (including the analyzer and the sample handling system) is suitable to be installed indoors, in non-hazardous area, at ambient temperatures ranging between +5°C and +40°C. However, please note that the sample probes are suitable for use outdoors and in a hazardous area ATEX Zone 2 IIB T3.</p> <p>General System Information</p> <ul style="list-style-type: none"><li>• Labels material is ABS.</li><li>• Sample wetted parts material is PTFE/PVDF/stainless steel 316 and glass (flowmeters).</li><li>• All vents will be connected to atmosphere via a local vent outside the analyser enclosure.</li></ul>			0.00	

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	<ul style="list-style-type: none"> <li>• Fittings shall be twin-ferrule compression type. The tubing and fittings sizes installed on the gas panel will be metric.</li> <li>• Gas cylinders for normal operation of the system are not included in the present offer.</li> <li>• If not stated otherwise, pressure and temperature gauge dial size are 63mm wide.</li> <li>• The system needs to have available the following utilities which are in customer responsibility: <ul style="list-style-type: none"> <li>o Power - 230 VAC 50 Hz</li> <li>o IA (instrument air) free of oil</li> <li>o Calibration gases: TBD after detailed engineering</li> </ul> </li> <li>• Please note field interconnecting cables are not included in the present offer, except for any applicable proprietary cables, which are manufacturer standard.</li> <li>• All interconnecting cables between electrical equipment, analysers, junction boxes, power distribution boxes will be unarmoured and will be as per manufacturer standard.</li> <li>• The cable entry position remains to be discussed during the detailed engineering phase</li> <li>• Cable tray material is galvanized steel unless stated otherwise.</li> <li>• Cable glands material is polyamide or nickel-plated brass unless stated otherwise.</li> <li>• PDB/Junction box material is polyester/GRP/aluminium unless stated otherwise.</li> <li>• The following documentation is provided in English language and electronic format: <ul style="list-style-type: none"> <li>o User Manual Analyzer System Quality Documentation (Test Reports and Declaration of Conformity)</li> </ul> </li> </ul>				
	<b>QUOTE REVISION HISTORY</b> Revision No: A Date : 09/07/2021 Revision Comment : First issue of budgetary proposal.			0.00	
	<b>ASSUMPTIONS (A)/CLARIFICATION (C)/</b> ASSUMPTIONS (A)/CLARIFICATION (C)/DEVIATION (D)			0.00	
	Item :- Process data Description :- Customer to provide process parameters and sample composition to ensure the technical solution meets technical requirements. Type :- C				
	Item :- Emission limit value Description :- Based on the provided document "EPR-XP3538LD-V004 South Hook LNG Permit - signed 14.4.2021", we have considered as the emission limit value for NOx to be 107 mg/m3. Type :- C				
	Item :- CEMS Certification Description :- The CEMS systems quoted are MCERTS certified. However, the extended heated lines and hazardous area probes required will be deviations from the standard product which will require agreement from the environment agency, but this should be a formality. Type :- C				
	Item :- Calibration accessories Description :- Please note that calibration accessories have not been				

Code	Description	Qty	Price	+/-	Total
	<p>included in this quotation, however, we can include them upon request. Type :- C</p> <p><b>ANALYTICAL SYSTEM (OPTION 1)</b> Analytical System (Option 1)</p> <p>Continuous Emissions Monitoring System (2 off)</p> <p>Item :- 1 Qty :- 2 Description :- Heated Sample Probe</p> <ul style="list-style-type: none"> <li>• Heated up to more than 185°C</li> <li>• With downstream filter and weather hood</li> <li>• For dust loads up to 2 g/m<sup>3</sup></li> <li>• Ambient temperature: -20°C to +40°C</li> <li>• Marking: II 2G Ex de ib IIC T3</li> </ul> <p>Item :- 2 Qty :- 2 Description :- Sample Handling System</p> <ul style="list-style-type: none"> <li>• Sample gas cooler</li> <li>• Sample gas pump</li> <li>• Recycle valve for pump</li> <li>• Filter with 2µm PTFE element</li> <li>• Condensate vessel with limit switch</li> <li>• 2/2-way solenoid valves &amp; 3/2-way solenoid valves for stream switching between the sample and calibration gases</li> <li>• Needle valve for flow adjustment</li> <li>• NO<sub>2</sub>/NO Converter, high capacity of NO-conversion (up to 300 ppm), including reactor cartridge</li> <li>• Water trap filter – used for the protection of the analyser against condensate and dust</li> <li>• PTFE tubing &amp; all required fittings</li> </ul> <p>Item 3 Qty 2 Description Emerson XEGP Analyzer (NO<sub>x</sub>/O<sub>2</sub>) The X-STREAM platform enables the combination of up to five channels of non-dispersive infrared, ultraviolet, visible photometers (NDIR/UV/VIS), thermal conductivity (TCD), trace moisture (tH<sub>2</sub>O), paramagnetic and electrochemical oxygen (pO<sub>2</sub>/eO<sub>2</sub>) detectors Measurement ranges:</p> <ul style="list-style-type: none"> <li>• NO: 0-150 to 2000 mg/m<sup>3</sup></li> <li>• O<sub>2</sub>: 0-10 to 25%</li> </ul> <p>Item 4 Qty 2 Description Analyzer Cabinet The sample handling system, together with the analyzer, will be installed inside a cabinet suitable for indoor installation of the following characteristics:</p> <ul style="list-style-type: none"> <li>• Material: sheet steel, IP55</li> <li>• Dimensions: 2000 x 800 x 800 mm (H x W x D)</li> <li>• Colour: RAL 7035</li> <li>• Including: <ul style="list-style-type: none"> <li>o Electrical panel on back panel</li> <li>o Internal light, Fan 230m<sup>3</sup>/h with filter</li> <li>o Swing frame 19", lifting lugs</li> </ul> </li> </ul> <p>Additional Service</p>	1.00	92545.45	0.00	92545.45

Code	Description	Qty	Price	+/-	Total
	<p>Item 5 Qty 1 Description Engineering, documentation, testing and project management</p> <p>Item 6 Qty 1 Description Packing – standard for road transportation</p> <p>.....Note: Prices are valid only for the purchase of the entire scope.</p> <p><b>COMMERCIAL DETAILS</b></p> <ul style="list-style-type: none"> <li>• Delivery: 21 weeks after receipt of technically and commercially clarified order (Option 1)</li> <li>• End user: UK</li> <li>• Terms and conditions: MJ Wilson Standard Terms &amp; Conditions of Sale</li> <li>• Prices: Net excluding VAT and export/import duties</li> <li>• Currency: GBP</li> <li>• Validity: 90 days</li> <li>• Quote type: Budgetary +/- 25%; not open for order acceptance</li> <li>• Warranty: 12 months from start-up or 18 months from delivery, whichever occurs first.</li> </ul> <p>Notwithstanding anything to the contrary, MJ wilson shall not be considered in breach of its obligations under this offer to the extent the compliance with its obligations has been prevented or frustrated by delays related to COVID-19. This shall apply even if the Parties could have foreseen such occurrence at the time of entering into the order. MJ Wilson shall give written notice as soon as possible to Buyer as such delays arise and Buyer and MJ Wilson shall work together to determine a mutually agreeable Solution.</p>				0.00

**Terms & Conditions:**

Quotation Validity: 30 Days from quote date

Payment Terms: 30 Days Net monthly account or in advance if no terms agreed

Documentation: Any extra required will be charged at cost

The Prices quoted are in Sterling unless stated otherwise and exclusive of VAT

Delivery: As quoted above from receipt of order subject to prior sale

Packing & Carriage is to UK Mainland unless stated otherwise above

Standard Terms & Conditions Apply

This Quotation is Priced in Sterling

**Total 92545.45**

Options included in the Total  
Price excludes VAT.



Cert No 11283