

INTRODUCTION

BHP Billiton Petróleo Operaciones de México, S. De R.L. De C.V. ("BHP") is currently progressing appraisal activities in the Trion field in Mexico to assess the viability of its development. If the field is declared commercial, the development will require an in-field drilling and completion program ("Drilling Program") with the use of Completion Fluids Services.

PURPOSE OF THIS EOI

BHP is soliciting the interest of reputable Drilling Contractors (hereinafter referred to as "Contractors") experienced in the provision of Completion Fluids Services, to develop a list of suitable Contractors who may subsequently be invited into the bidding process for the execution of the here-in described Scope of Work. This process may eventually lead to the award of a contract for the provision of Completion Fluids Services.

The EOI seeks to provide prospective Contractors with relevant background information regarding the Trion project and to describe the information to be submitted by prospective Contractors in order to assist BHP in compiling a list of suitable Contractors for further assessment.

Key project metrics and specifications are as follows:

Trion Completion Fluids SOW Summary		
General Data		
Location	Deep Water Mexico, Trion Contract Area	
Water Depth	~ 2,500 m / 8,200 ft	
Well Depth Range	~ 4,500 - 5,500 m MD/ 14,800 - 18,000 ft MD	
BHT Range	55 - 85 °C / 132 - 185 °F (4°C / 40°F Seabed Temp)	
H2S	No	
CO2	<1.15% Mol	
Number of wells	11 to 18	
Rig	TBD	
Work Schedule	Work execution estimated between: 2024 – 2027 Surface sections to be batch drilled. Average total well drilling duration (including batch section) is 26 days. Average total well completion duration is 36 days.	
	Well Design	
	Completion Brine	
MW Range	9.0 - 11.0 ppg	
LCM Availability	Yes – post perforating (solids free) & post frac pack (engineered PSD)	
Hole sizes	17.5" to ~ 2500m, 12.3" to ~ 3900 m, 8.5" to TD (+/- 1500 bbls/w ell)	
Dischargeable to environment	Yes	
Equipment And Services		
Completion Fluid Testing Equipment	Full test kit and appropriate testing chemicals on rig and at contractor base. At a minimum need to be able to measure brine density, % solids, NTU, iron content, and pH of brine. All equipment to record properties in accordance with API RP 13J.	



Trion Completion Fluids SOW Summary		
Filtration Equipment & Services	Equipment and personnel necessary to filter completion brine to $2\mu m$ at rates up to 30 bpm.	
	2 x 1600 ft ² filter press skids	
	Cartridge filtration skid	
	Mixer for LCM preparation	
	2 x filtration hands	
	Equipment certified to DNV 2.7-1 / ISO 10855	
Consumables	DE forfilter press	
	Cartridges for filter pods	
	Additives for brine & packer fluid (to include, but not limited to corrosion inhibitor, scale inhibitor, biocide, oxygen scavenger, demulsifier)	
Waste management Services	Yes	
Technical Support and Facilities	All necessary equipment and services required to execute the drilling programs and well designs including:	
	Onshore support base	
	 Laboratory services including appropriate laboratory testing facilities (onshore and offshore). 	
	 Technical engineering support on BHP's office in CDMX. 	
	 Appropriate facilities for storage and maintenance of equipment and chemical products. 	
	 Qualified engineers, technicians, supervisors and operators for equipment maintenance and services. 	
	Note: All fluid systems, equipment and facilities must be fully compliant with local regulations and industry best practices.	

Logistics		
Trion Field Location	180 km East off the coast of Tamaulipas (Matamoros)	
BHP Rig operations Shorebase	Likely to be in Altamira/Tampico Note: contractor to provide transportation of the Contractor's Equipment and Contractor's Goods and Consumables between Contractor's Operations Base and BHP's Supply Base or Shorebase.	
Heliport	Likely to be in Matamoros	

Minimum Personnel Requirements		
Contract Coordinator / Engineer	Yes, onshore at BHP's Mexico office	
Senior Mud Engineer	Yes, offshore (1)	
Mud Engineer	Yes, offshore (2)	



Trion Completion Fluids SOW Summary		
HSE		
Minimum requirements	Must comply with BHP's HSE requirements and local regulations, including COVID-19 protocols (if applicable).	

Any entity responding to this EOI must have the capacity and capability to provide and safely execute the Completion Fluids Services with the related equipment that meet or exceed the specification noted above without co-venturing for supply.

<u>Note:</u> The scopes and specifications presented in this document are the most accurate estimates at this time and are subject to change. Any information included in this EOI is not to be associated with any other EOI or tender from BHP.

INFORMATION REQUIRED FROM PROSPECTIVE CONTRACTORS

Interested Contractors must provide the information requested below in order to be considered for further assessment (this information is also listed in the attached Expression of Interest (EOI) Response Form).

•	. , , , , ,
Company Name:	
Legal Entity Name (if different from Company Name):	
Company Type (Please check one):	☐ Local ☐ Foreign ☐ Joint Venture (JV) If JV, please list involved Companies:
Mailing Address:	
Country:	
Designated Contact (name and title):	
Email Address:	
Telephone:	
Year Company founded:	
Website URL:	
Please list your top three (3) competitors:	
Please list your top five (5) clients:	
Number of years' experience operating in Mexico:	
Deepwater Drilling experience:	
Anticipated lead time required to support the proposed scope:	
Anticipated Mexican content (local Content) in your operation:	



Brine systems and additives suitable for discharge and their characteristics and environmental compliance:	
Previous experience with the systems mentioned above:	

Confirmation of Interest – prospective Contractor is requested to confirm their company interest and compliance with requirements outlined in this EOI Letter by completing and signing the EOI Response Form.

EOI RESPONSE SUBMISSION REQUIREMENTS

Prospective Contractors interested in participating in the identification/assessment process must download, complete and sign the EOI Response Form attached. This Form should be signed by a legal representative of the Contractor. The representative's name should also be printed where requested. The electronic version of the Form is located at https://www.bhp.com/our-businesses/petroleum/trion/, and submit to the following inbox:

BHP Petroleum (BHP) Crystal.Torres-Gallardo@bhp.com

Submissions should be made electronically by no later than close of business 5:00 pm (CST) on 8th February 2021. BHP reserves the right not to accept submissions after this time. Submissions must be kept short and concise. Please endeavor to keep the submission under 5 MB, if possible.

Please note that this invitation to submit expression of interest does not constitute a formal request for quotation or proposal, nor is it intended to create any expectations regarding future business dealings between BHP and recipient.

All EOI documents will become and remain BHP's property. BHP shall not be liable in any respect for any costs, damages, charges or expenses incurred by the contractor in relation to preparing or submitting this EOI response. BHP reserves the right to accept or reject any or all EOI submissions that may be received related to the services requested. BHP reserves the right to change the requirements of this EOI, terminate further participation in the EOI process and change or terminate the contracting process at any time.

Thank you in advance for your willingness to respond to this EOI. We look forward to hearing from you. Should you have any questions or issues regarding the process outlined above, please contact the undersigned at Crystal.Torres-Gallardo@bhp.com

Sincerely,

Crystal Torres Gallardo
Principal Category Management
BHP Billiton Petroleum

Enclosures:

Expression of Interest (EOI) Response Form