EXPRESSION OF INTEREST (EOI)
FOR
HIRING CONSULTANCY SERVICES FOR PORE PRESSURE & FRACTURE GRADIENT AND GEOMECHANICS STUDIES

1.0 PREAMBLE:

Oil India Limited (OIL), a Government of India 'Maharatna' enterprise, is a major upstream oil and gas company engaged in the exploration, production, and transportation of crude oil and natural gas. OIL's Field Headquarters is located at Duliajan, Assam. OIL's Exploration and Production (E&P) portfolio spans multiple sedimentary basins, including the Assam–Arakan Basin, Mahanadi Basin, Bikaner–Nagaur Basin, Kerala–Konkan Offshore Basin, and the Andaman & Nicobar Offshore Basin.

2.0 OBJECTIVE:

OIL's expanding E&P portfolio, coupled with its move into deeper, more complex targets and advanced well trajectories, has necessitated the extensive application of Pore Pressure and Fracture Gradient (PPFG) study and Geomechanics studies to ensure safe, efficient, and optimized drilling operations. Hence, OIL intends to engage with specialized service providers to meet its growing technical requirements and to adopt industry-standard practices through effective collaboration and knowledge integration.

3.0 BRIEF SCOPE OF THE SERVICES:

The Scope of the study includes following studies as per OIL's requirement for a period of two (02) years.

Sl. No.	Item	Quantity
i	Post-drill PPFG Study	15 locations
ii	Pre-drill PPFG study	90 locations
iii	1D Geomechanical Study	50 nos. of wells
iv	3D Geomechanics study	250 sq.km.

The study may pertain to any of the sedimentary basins (Onshore/Offshore) and in-country/overseas where OIL has operational presence. The studies will include following as the case may be:

a) **Log Data Preparation:** The scope will include log data preparation for the study, comprising splicing of different runs, depth matching, normalization, conditioning, generation etc., as applicable and as the study demands. It will also include petrophysical analysis for mechanical stratigraphy determination and its subsequent use in various studies, as per requirement.

b) **Post-drill PPFG:** Post-drill PPFG analysis involves integration of drilling data, well logs, seismic data, mud weights, and calibration measurements to

analyse pore pressure and fracture gradient profiles. This study will help in validating pre-drill predictions and improving future well planning by identifying uncertainties and drilling issues encountered.

c) **Pre-drill PPFG study:** Pre-drill PPFG study focuses on predicting pore pressure and fracture gradients ahead of drilling using seismic data or/and offset well information (2-5 wells as per availability), calibration datasets and geological understanding. It supports safe well design, casing program optimization, and mitigation of drilling hazards.

d) **1D Geomechanical Study:** The 1D geomechanical study involves modelling of Pore-pressure, in-situ stresses, elastic properties, and mechanical rock properties for a given well to assess wellbore stability, sanding potential, and related geomechanical risks. It supports the design of an optimum mud weight window, minimizes borehole instability issues, and enables safe and efficient drilling operations.

e) **3D Geomechanics study:** The 3D geomechanical study develops a spatial model of stress, pressure, and rock mechanical properties across the reservoir or field. It supports field development planning, hydraulic fracturing design, sand production analysis, and overall reservoir management in complex geological settings. For 3D geomechanics, a reservoir-specific structural model may be available. The service provider will be required to prepare and refine the structural model as per geomechanics requirements using the available surfaces and fault sticks/polygons/surfaces, as applicable and as the study demands.

4.0 DELIVERABLE:

Industry standard workflows & deliverables of the abovementioned studies in-compatible with Techlog and Petrel for future updating & usage.

5.0 EOI SUBMISSIONS & EVALUATION CRITERIA:

The bidder may be required to give a presentation to OIL on a later date after submission of EOIs on the possibility of rendering the services of "PORE PRESSURE & FRACTURE GRADIENT AND GEOMECHANICS STUDIES" of OIL to be hired through an open tender in the future. The proposals received through this Expression of Interest (EOI) shall be evaluated based on the following criteria for OIL's future open tender for hiring Consultancy Services:

a) Technical experience of the bidder in last seven (7) years.
b) Overall Manpower experiences.
c) Software and hardware capabilities.

6.0 SUBMISSION OF EXPRESSION OF INTEREST:

Interested parties are requested to submit their EOIs in electronic format to **koushikkarmakar@oilindia.in, subrat_borah@oilindia.in** or hard copy may be submitted to the following address no later than **19.06.2026:**

CGM-Geophysics (HoD)
GEOPHYSICS DEPARTMENT
INDUSTRIAL AREA
OIL INDIA LIMITED
P.O. DULIAJAN-786602
DIST. DIBRUGARH, ASSAM, INDIA

The EOI shall include the following information:

a) Company profile, including relevant experience in similar study.
b) List of similar jobs in the past 07 years.
c) Manpower & relevant experience.
d) List and specification of hardware & software resources.
e) Terms of reference and necessary specifications with proposed methodology.

Note: Based on the input received from the prospective bidders, a Scope of Work will be prepared and forwarded to the parties for obtaining Budgetary Quotation for OIL's future open tender.

7.0 GENERAL NOTES:

a) All documents/brochures submitted along with the EOI shall be self-certified and clear & legible.
b) The EOI is liable to be ignored in case of submission of any misleading/false representation.
c) OIL reserves the right to ignore any or all EOI bids, without assigning any reason thereof.

8.0 CONFIDENTIALITY:

All information provided during the EOI process will be treated as confidential and used solely for the purpose of evaluating submissions and thereby enabling OIL to prepare a final Scope of Work / Schedule of Rate for OIL's upcoming open tender for "PORE PRESSURE & FRACTURE GRADIENT AND GEOMECHANICS STUDIES".

Please note that this invitation does not constitute a commitment to award the project or provide any form of reimbursement for costs incurred during the preparation of the EOI.

Should you have any questions or require further clarification, please do not hesitate to contact us at **koushikkarmakar@oilindia.in, subrat_borah@oilindia.in**. We look forward to receiving your Expression of Interest and exploring the potential of working together on this important project.

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