CLARIFICATION#1

AGAINST TENDER # PROC-SERVICES/CB/EXPL-4939/2021- HIRING OF SERVICES FOR 3D SEISMIC UNCONVENTIONAL RESERVOIR CHARACTERIZATION STUDY FOR IDENTIFICATION OF THE SWEET SPOTS INLOWER INDUS BASIN OF PAKISTAN

Following Clarifications have been made in the subject tender.

S. No.	Clarifications	OGDCL Reply
1	The study will be carried out into 03stages, I. Rock physics feasibility II. Inversion feasibility III. Reservoir characterization on 3D Seismic. **Rock physics Feasibility**: The main objectives of the intended project are listed but not limited to, as follows: **Well data conditioning. QC/prediction of Vs and Rho Assess and correct data for presence of anisotropy, in wellbores Derive dynamic elastic properties. Interpret image logs for fracture orientation, density and other stress indicators.** What well logs will be provided? Are well logs located in Target Horizons? How may Logs and its type will be provided by each well?	Please refer the TOR clause 1.4/N.
2	Petrophysical analysis. **Define the geologically possible ranges of variation in shale reservoir properties (Kerogen/TOC, Porosity, fluids saturation). Use the ranges in stimulation to increase the number of data points for further analysis.** Would the Kerogen/TOC data be provided by Customer?	TOC data will be provided to the bidder.
3	Rock physics analysis to establish the relationship between petrophysical and elastic properties of targeted reservoirs which can be extracted from seismic data. AVO analysis on synthetic AVO gathers from the insitu reservoir properties and also from the reservoir properties rturbation/substitutions. Facies definition on the basis of reservoir properties (important for shale reservoir characterization) on wells at seismic scale. Facies probability analysis at well locations using post/prestack seismic attributes and elastic rock properties. Lab Data calibration with the reservoir facies. Does 3.1.11 means Core analysis?	Analyzed core data will be provided for calibration.