

**CLARIFICATION#5 AGAINST TENDER # PROC-SERVICES/CB/EXPL-4722/2020 INTEGRATED SEQUENCE STRATIGRAPHIC STUDY OF LOWER GORU AND SEMBAR FORMATIONS IN SINJHORO EL AND ALLIED D&PLS FOR THE DELINEATION OF STRATIGRAPHIC/COMBINATION LEADS & PROSPECTS**

Following Clarification has been made in the subject tender.

S. No.	Clarifications	OGDCL Reply
1	Regarding to "Infill fault and horizon interpretation, where existing interpretation is sparse, and their smoothing/conditioning may be required for structural modelling. Interpretation on additional structural horizons, stratigraphic horizons/segments as required for entire integrated sequence stratigraphic framework would be carried out by the contractor." mentioned in Part 5.15, the following questions are listed as below: 1. What is the grid density of infill fault and horizon interpretation as required (8x8 or ?	<b>In order to reply the question, Please elaborate clearly with example that what do you want to convey.</b>
2	In addition to the 5 key horizons, how many additional horizons need to be interpreted approximately?	<b>Apart from 5 horizons, at least one horizon in Basal Sand level, at least 3 to 4 horizons within Massive Sand and the Sembar formation will depend upon the outcome of sequence stratigraphic results.</b>
3	Regarding to the "SEM (Scanning electron microscope) and CT scan analysis of core samples", the following questions are listed as below: 1. Do we need to analyze the core samples in lab. or are there any lab analysis results already?	<b>Lab analyses are required.</b>
4	If we need to analyze the core samples, how many samples would be sampled and analyzed?	<b>Around 60 samples should be analyzed.</b>
5	Are there any quantitative palynological data, regarding to "OGDCL strongly suggest undertaking quantitative palynology as the prime discipline"? And, is it required to conduct additionally palynological samples testing in laboratory by using newly collected core samples or cutting samples this time?	<b>We have not any quantitative palynological data. Answering to second part of the question yes it is required.</b>
6	How many FMI interpretation logs and reports were done in 12 wells? If there is no interpretation report, is it necessary to re-interpret ?	<b>Few FMI logs are interpreted. New interpretation and re-interpretation shall be performed as per scope of the study.</b>

7	Regarding to “Depositional environments and facies maps of each system tract ....” and “Seismic facies maps of each system tract....” Whether relevant maps mentioned above and seismic interpretation horizons of only main target sequences and interested system tract (with exploration potential) could be provided?	No
8	Are digital core photographs available for all cores listed in Table 4.3?	No
9	Please confirm that it is only the existing RCA reports and ditch cuttings (listed in Table 4.3) that will be made available for this study? The listed sedimentology and biostratigraphy reports will NOT be available. Is this correct?	Yes
10	The If RCA reports for the 17 wells listed in Table 4.3 are available, please indicate if these are all in digital format. If not, please confirm how many are NOT available in digital format.	RCA reports for all the 17 wells are not available. Only 4 to 5 wells have RCA reports.
11	Are any existing petrography reports to be made available for review/integration?	Not Available
12	Are any existing petrographic thin sections to be made available for review by Contractor?	Not Available
13	Please confirm that no new core analysis (RCA and SCAL) is required? If new analysis is required, the work programme needs to be specified as it will have a significant impact on the study costs.	New core analysis is required. Contractor to provide RCA & SCAL costs with timeline.
14	FMI data are available for 13 wells (c. 14,250 m total thicknesses). OGDCL have said that few are interpreted. Are you able to indicate which intervals have been interpreted in each well.	Only reservoir part is interpreted ( Basal or Massive sand).
15	For interpreted FMI data – what level of interpretation has been carried out – simple dip picking only and/or detailed facies and structural interpretation of the image logs? Which contractor/company has carried out	Simple dip and structural interpretation is done by Schlumberger.

	these interpretations?	
16	What type/ specification of image data is available, by which logging company and in which format? FMI, FMS, FMIHD.	FMI
17	Are the FMI data speed-corrected?	Interpreted intervals are speed corrected rest to be checked.
18	Are the FMI data available as DLIS files? If not, what format are they in?	DLIS, PDS etc
19	Suggested work programme includes 'review of petrographic data, available well reports, biostratigraphic/chronostratigraphic breakdowns of formations, review of all stratigraphic reports and charts, available zonation schemes and correlation panels' – but clarifications state that 'OGDCL will not share any biostrat and sedimentology studies. Please confirm that review of existing datasets and interpretations is NOT now part of the scope of work	Review of existing data and interpretation is limited to the data set/ Reports shared by OGDCL. This will lead to unbiased interpretation of data and conclusive independent study.
20	900 samples are tentatively suggested for analysis – is this only for the biostratigraphy or does it also include the sedimentology/petrography/SEM/RCA/SCAL etc. (i.e. all analyses required for the entire study)?	Yes it includes stratigraphy, sedimentology, petrography, SEM, RCA, SCAL. But we suggest 200 samples roughly for the above mentioned analysis.
21	Section 5.12 states that micropalaeontology and nannofossil analyses are to be run on a targeted dataset defined by the palynological results. We understand there are 900 samples available for palynological analysis. As it is a LUMP SUM bid, can you indicate the number of samples that are expected to be analysed for micropalaeontology and nannofossil studies in order that such costs can also be quantified?	200 Samples approximately.
22	<b>Project timeline</b> It is indicated that the Main Project (Phases II & III) is to be completed in 4.5 months. The work programme is comprehensive and	As per TOR

	<p>multidisciplinary, requiring close liaison between the different experts to achieve the technical objectives. In the light of Covid-19, will OGCDL consider extending Phase II to ensure that the work programme can be carried out under the constraints of the new safe working requirements? If so, could you please indicate by how much?</p>	
23	<p><b>Phase I meetings and secondment of OGDC staff to project</b></p> <p>It is noted that contractor staff are required to visit OGDC for the project kick-off, including the review and selection of the dataset for the study. In light of the Covid-19 pandemic and travel restrictions presently in place, will you consider allowing this start up meetings to be held remotely if the contractor is prepared to use local staff to assist with sample collection and data transfer.</p>	<p>Hopefully the pandemic will be over at that time</p>
24	<p>In the event that travel to Islamabad to start up the project is not possible, please advise how OGDC might address the constraints that this may place on implementing the project, including secondment of OGDC staff to the project both in Islamabad and later on, travel to the contractor's offices overseas?</p>	<p>Yes. But both contractor and OGDC staff will visit respective offices.</p>
25	<p>Does OGDC have any plans or arrangements in place to allow for virtual meetings where possible?</p>	<p>Yes</p>