OIL INDIA LIMITED
(A Government of India Enterprise)
P.O. Duliajan, Pin – 786602
Dist-Dibrugarh, Assam

CORRIGENDUM

Addendum No. 3 Dated 12.12.2015 to IFB No. CDG8782P16

This Addendum No. 3 dated 12.12.2015 to IFB No. CDG8782P16 for Hiring of Low Density Drilling Fluid Services with Specialised Additives & Mud Engineering Expert for a Period of 2(two) years or completion of 5(five) Nos Wells whichever is earlier, is issued to notify the clarification/reply of queries of different bidders and also to notify extension of the Sale Date & Bid Closing / Technical Bid Opening date as under:

i) Last Date of Selling Date : 29th December, 2015

ii) Bid Closing Date & Time / : 05th January, 2016 (11.00 Hrs, IST) /
Tech. Bid Opening Date & Time : 05th January, 2016 (14.00 Hrs, IST)

All other Terms & Conditions of the Bid Document remain unaltered.

The clarifications/replies of different bidders are given as **Annexure-I** to this page. Bidders are requested to take note of the same while preparing and submitting their offer.

Annexure-I

Reply of Queries of Different Bidders

Sl. No	Clause /Sub-Clause	Queries by bidder	OIL's comments
1		Regarding the low-density drilling fluid as required by the tender, is the density range between 0.90～1.00g/cm3 or 0.75～1.00g/cm3? Kindly provide us the requisite mud specifications such as Viscosity, water loss, apparent viscosity, plastic viscosity and PH.	Designing of Low Density Drilling Flud (LDDF) is under Contractor's scope of work .In this connection, please see the reference clause in Page no 48, Part-III, Point No 4.0 –SCOPE OF WORK. Regarding the mud density, please refer to Tabulation A, Last Column in Formulation of Low Density water based Drilling Fluid System Proforma –X,PRICE SHEDULE(Tabulation -last column) . The achievable mud density should be between 46.4pcf ≈ 6.2ppg) .Also see the Page NO 67 in Part -3,Section –II under Scope of Work ,Point No 21,NOTE: (ii) regarding mud weight requirement
2		Based on the drilling fluid parameters provided from one adjacent well, the lowest density of drilling fluid system of weighting 0.75 g/cm3 using aerated drilling fluid is also acceptable. Kindly confirm.	Yes, aerated drilling fluid is also acceptable so long the density of mud is achieved at 6.2ppg. However, the mud formulation should be made without any bentonite clay.
3		Regarding the requirement of Laboratory facilities for drilling mud analysis, kindly provide us the list of Lab experiments and technical specifications of Lab required.	Testing Facilities required for LDDF depends on the type of mud to be used. It is the responsibility of the bidder to provide such requirement.
4		The responsibility of providing Laboratory facilities for carrying out laboratory studies of core samples/drill cuttings should be excluded from the responsibility of contractor. Kindly confirm.	As it is already well defined under Scope of work (please see the reference clause in Page no 49, Section-II, Part-3, Point No III under the heading TECHNICAL BACK –UP SUPPORT OF SOFTWARE AND LABORATORY STUDIES SCOPE OF WORK. The bidder's request for exclusion of such clause is not an agreeable. Moreover, Moreover, amendment of this clause will not be possible at this stage.
5		Regarding the requirement of "software for rheology and hydraulics control under dynamic temperature and pressure conditions for data analysis & reporting for drilling the wells in depleted reservoir", kindly provide us details and specific requirement of software.	It is already well defined under Scope of work (please see the reference clause in Page no 49, Section-II, Part-3, Point No III under the heading TECHNICAL BACK –UP SUPPORT OF SOFTWARE AND LABORATORY STUDIES SCOPE OF WORK.
6		Kindly provide the details about the geological stratification, lithological analysis, reminders of temperature and certain formation risks in the designated service area.	OIL have attached the complete documents for Naharkatiya structure upto a depth of Eocene basement. However, for clarifying the above query, please consider the geological stratification, formation lithology etc upto the depth of 2500 meter depth only. Regarding the reservoir temperature, please see the offset well data, page No. 68 of tender document .As per the offset well data, the maximum reservoir temperature of most of the wells are within the range of 85 deg C ± 5 degC. (Geological stratification and formation geology/lithology is enclosed).

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7		Is it acceptable to implement underbalanced drilling technique using aerated drilling fluid on the basis of drilling fluid parameters provided by OIL and in consideration of protection of low permeability and low pressure reservoir? The requisite low density drilling fluid system of weighing 46.4 pcf cannot be provided in conventional drilling even using Hollow glass sphere. Moreover, Hollow glass sphere may plug the reservoir and reduce the production and hence aerated drilling fluid system will be more useful. However, in case of underbalanced drilling technique using aerated drilling fluid system some additional equipment such as air compressors, boosters, nitrogen making machine, rotary pressure control equipment, etc will be required in addition to Mud Engineers, Chemicals & Additives, Laboratory, etc as specified in the tender. Kindly clarify.	Starting from Formulation, Designing and Maintenance of LDDF is completely under the vendor's scope. The proposed mud weight is 46.4 pcf (6.2ppg) based on minimum mud weight that can be formulated with water base system. Under balanced drilling is entirely a new technology which is beyond the scope of this tender.
8		Is the formation stable so as to prevent the well wall from collapsing for underbalanced drilling?	This tender is not for supplying a drilling fluid for Under balanced drilling but for supplying of low density drilling fluid with weight 6.2ppg (Mentioned in Proforma –X) for drilling sub hydrostatic formation. Based on formation pressure, LDDF will be able to control hole collapse mechanically.
9		Kindly provide us details information about the well type and well design of the wells proposed for drilling using low density mud system.	All the wells are planned to drill and complete in three stage casing policy system. The tentative drilling plan/casing plan of such wells are as follows: 17 1/2 inch Open Hole and 13 3/8 inch conductor casing /Surface casing) (0-150m) 12 1/4 inch Open Hole and 9 5/8 inch Isolation Casing (150-1500m) 8 1/2 inch Open hole and 5 1/2 inch oil string casing /production casing (1500-2500m) LDDF will be used only during drilling 81/2 inch hole section.
10		Will OIL carryout any experiment about reservoir protection and evaluation after the mud service in each well?	Yes, OIL will carry out certain experiment during the stage of production testing .During drilling stage of the well, the performance of the mud system will be monitored to assess the efficacy of the fluid system.

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11		Upon completion of drilling fluid service on site, how does the OIL appraise the performance of mud service? Is it OK, if contractor provides mud services as per their designed drilling fluid Engineering? Or the contractor has to provide mud services according to OIL's work orders. ?	Yes, The contractor will maintain drilling fluid as per OIL's work order. OIL will regularly monitor the performance of mud system in OIL's service provider's laboratory. On the basis of the result/output; OIL may appraise the contractor regarding the mud performance, as and when required. The basis of issuing /awarding contract to the contractor will be as per the guidelines of NIT.
12		Based on the geological data provided by OIL and well engineering, Contractor shall design suitable Low Density drilling fluid and hydraulic system for 8 1/2" oil string section of all 5 wells. Contractor will provide drilling fluid engineering services for the Low Density drilling fluid system approved by OIL. Contractor shall submit a detailed Low Density drilling fluid program for each proposed well in advance. The designed Low Density drilling fluid/hydraulics program should be supported by software for analysis and to make reports. Contractor will also have to plan for contingency chemicals for treatment of problems like cement contamination, cavings, hole pack off, differential sticking, mud loss, hole erosion and/or any other down hole problems. Contractor will prepare contingency plan to meet any unexpected problems, anticipated contaminations etc. and will propose for back-up chemicals. Contractor should ensure that entire composite Low Density drilling fluid system fulfils regulatory requirements of environment /safety etc.	Based on the geological data provided by OIL and well engineering, Contractor shall design suitable Low Density drilling fluid and hydraulic system for 8 1/2" oil string section of all 5 wells. Contractor will provide drilling fluid engineering services for the Low Density drilling fluid system approved by OIL. Contractor shall submit a detailed Low Density drilling fluid program for each proposed well in advance. **During designing and formulation of Low Density Drilling Fluid, the contractor shall not use any Bentonite Clay in their offered mud system. Moreover, the contractor shall also send all requisite chemicals 500 grams each to us for our own laboratory evaluation accompanied with the bid.** The designed Low Density drilling fluid/hydraulics program should be supported by software for analysis and to make reports. Contractor will also have to plan for contingency chemicals for treatment of problems like cement contamination, cavings, hole pack off, differential sticking, mud loss, hole erosion and/or any other down hole problems. Contractor will prepare contingency plan to meet any unexpected problems, anticipated contaminations etc. and will propose for back-up chemicals. Contractor should ensure that entire composite Low Density drilling fluid system fulfils regulatory requirements of environment /safety etc.

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13	Sec-I, Clause 8.7 page-34	1) Will OIL issue way Bill? 2) Will OIL issue C-form for supplies of imported items made within India from other states of Assam	1) Regarding Way bill it has been mentioned in the tender document (Refer clause No.17.3 of SCC) that arranging Road permit will be Contractor's responsibility. Therefore, the clause will remain unchanged. 2) OIL will not issue C-form against this tender.
14	Prform a-X Price Schedu le A: Page-87	Formulation for Low Density **Water** Drilling Fluid System: 18,000Bbls	Yes, There is a typographical error in the tender. The correct heading is as follows: Formulation for Low Density **Water Based** Drilling Fluid System: 18,000Bbls.

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