

Clarification No. 03

TENDER ENQUIRY NO. PROC-SERVICES/CB/WS-4222/2019

HIRING OF MUD ENGINEERING SERVICES ALONGWITH MUD CHEMICALS IN CENTER / SOUTH REGION UNDER RATE RUNNING CONTRACT ON AS AND WHEN REQUIRED BASIS

Some of the Prospective bidders have made a few queries against the subject Tender Enquiry. The queries along with OGDCL replies are given below for information of all the prospective bidders.

SR #	BIDDERS CLARIFICATIONS	OGDCL COMMENTS												
1	<p><u>SECTION –C</u> <u>CENTER REGION</u> <u>Phase No</u> III, IV , V and VI (Page-12,13)</p> <p>Please mention the concentration of Sodium Formate/ Potassium formate. Please mention Under balanced system (UBD)</p> <p><u>Completion</u> Please mention Brine density for each system</p>	<p>Under Balanced System (UBD) is a procedure used to drill oil and gas wells where the pressure in the wellbore is kept lower than the static pressure then the formation being drilled. As the well is being drilled, formation fluid flows into the wellbore and up to the surface Concentration of Sodium Formate/ Potassium Formate</p> <table><tr><td>Brine</td><td>Formate Concentration % (W/W)</td><td>Brine Density Kg/cu m</td><td>PH</td></tr><tr><td>Sodium Formate</td><td>45</td><td>1338</td><td>9.4</td></tr><tr><td>Potassium Formate</td><td>76</td><td>1598</td><td>10.6</td></tr></table> <p>Brine Density for each system is according to pore pressure or according to well bore behavior Brine density range is 1.05 to 1.30</p>	Brine	Formate Concentration % (W/W)	Brine Density Kg/cu m	PH	Sodium Formate	45	1338	9.4	Potassium Formate	76	1598	10.6
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Sodium Formate	45	1338	9.4											
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2	<p><u>South REGION</u> <u>Phase No (Page-13,14)</u> i. Hole size 26” 0-300m-3740m – casing size 13 3/8” Please confirm casing size</p>	<p>Casing Sizes are as follow:- 1):- Approx 0-300 M : Casing Size 20" Inch 2):- Approx 300-1390 M : Casing Size 13-3/8" Inch 3):- Approx 1390-3000 M : Casing Size 9-5/8" Inch 4):- Approx 3000-3740 M : Liner Size 7" Inch</p>												

	<p>ii. Hole size 17 ½" 300-1390m- casing Size 13 3/8" Properties of Silicate system and concentration of Sodium Silicate</p> <p>iii. Hole size 12 ¼" 1390-m-3000m -casing Size 9-5/8" Properties of Silicate system and concentration of Sodium Silicate</p> <p>iv. Hole size 8 ½" 3000m-3740m Liner 7"Please mention the concentration of Sodium Formate/ Potassium formate.</p> <p>v. Completion Please mention Brine density for each system</p>	<p>Sodium Silicate approximately 7-9% by volume</p> <p>Sodium Silicate approximately 7-9% by volume</p> <p>The Weight %age is about 30-50% depending upon the required density.</p> <p>Brine density range is approximately 1.10 to 1.25 S.G</p> <p>All the parameters mentioned in tender documents are tentative, otherwise depend upon the pore pressure trend or well behavior.</p>
3	Please clarify if synergistic polymer effectiveness included in the technical specification of mud chemicals section needs to be checked-up to 230C or less.	"Thermal stability of Synergistic Polymer is 204 °C (minimum) and its effectiveness will also be checked at 204 °C while 230 °C is the maximum temperature for its efficiency".
4	In reference to the technical evaluation part criteria, Sr.No. 9, part (a), Please clarify if every bidder needs to provide certificate of satisfaction from 3 Nos international companies with relevant experience or is this only for those bidders who have not rendered the mud engineering services to OGDCL.	"The certificates of satisfaction is required from only those bidders who have not rendered the mud engineering services to OGDCL."