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

AMENDMENT NO. 1 DATED 03.07.2019
TO TENDER NO SSG1033P20/05

1.0 This Amendment no. 1 dated 03.07.2019 to tender no. SSG1033P20/05 for supply of **Polymeric Deflocculant** is issued to incorporate the following changes in the tender.

EXISTING SPECIFICATION	REVISED SPECIFICATION
Polymer Based Mud Thinner	Polymer Based Mud Thinner
Polymeric Deflocculant.	Polymeric Deflocculant.
1. Physical State: The polymer should be in the form of white free flowing, dust free micro beads/liquid miscible with water.	1. Physical Properties: The material should be in the form of white free flowing and dust free micro - beads / viscous transparent liquid.
2. Dispersibility: Should be easily dispersible in water.	**2. NO CHANGE**
3. Particle Size: 100% through 20 mesh ASTM or equivalent.	**TO BE DELETED**
4. Specific gravity: 1.15 (in case of liquid)	3. Specific gravity: 1.15 – 1.25 (in case of liquid)
5. PH of sample:8.0 (in case of liquid)	4. PH of sample: 8.0 – 9.0 (in case of liquid sample)
6. Performance Test in:	5.Performance Test in:
A. Fresh Water mud:	A. Performance at 26 +/- 2 DegC:
(i) Preparation of base mud. Prepare a 10 % (w/v) bentonite suspension in distilled water using OIL approved bentonite and stir in multimixer for 15 minutes so that no lumps are left after the mixing period. Age the suspension at 90 +/- 2 DegC for 72 hrs. Cool the suspension and stir for 15 minutes in multimixer. Adjust apparent viscosity of the suspension to 52.5 +/- 205 cp by dilution with distilled water, if necessary.	**(a) Preparation fresh water mud**. Prepare base mud of 10 % (w/v) bentonite suspension in distilled water using OIL approved bentonite and stir the mixture in multimixer for 15 minutes so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 +/- 2 DegC. After the lapse of the aging period, cool the suspension and adjust apparent viscosity to 50 - 55 cp by dilution with distilled water. Measure rheological properties at 26 +/- 2 DegC (i)Apparent viscosity, cp: To determine (ii)Yield value, lbs/100ftsq: To determine
(ii) Preparation of treated mud. Treat the base mud 6A (i) with 0.15 % (w/v) of polymeric deflocculant sample and adjust the PH to around 8.5 by 1 N NaOH solution. Stir for 30 minutes in multimixer. Measure apparent viscosity. Yield point and 15 min. gel in a Fann VG meter at 26 +/- 2 DegC which should be as under:	**(b)Preparation of treated mud**: Treat the base mud with 0.10% (w/v) of the polymeric deflocculant sample and adjust the pH to the range 8.5 - 9.5 by adding 1N NaOH solution. Stir for 15 minutes in multimixer. Determine apparent viscosity and yield value

(a) Apparent viscosity cd max.: 10	i)Apparent viscosity, **cp**: should be less than 25 % of base mud
(b) Yield value. 1b /100 ft sq, max.: 15	ii)Yield value, **lbs/100ft sq**: should be less than 25 % of base mud
(c) 15 minute gel. 1b/100 ftsq max.:10 Age this mud at 160 +/- 2 DegC for 16 hrs. in rolling condition. Cool the mud and stir for 15 minutes in a multimixer. Adjust the PH at 8.5 if necessary. Determine apparent viscosity yield value and 15 min. gel at 26+/- 2 DegC which should be as follows.	B. **Performance Test at 160 + / - 2 DegC** Hot roll part of above base mud at 160 +/- 2 DegC for 24 hrs at roller oven. Cool the mud and stir for 15 min. in a multimixer. Determine apparent viscosity and yield point at 26 +/- 2 DegC (i) Apparent viscosity, cp: To determine (ii) Yield value, lbs/100ftsq: To determine
(a) Apparent viscosity, cp. max : 10	
(b) Yield value, 1b/100 ftsq, max :15	
(c) 15 min. gel, 1b/100 ftsq, max :10	
Age this mud at 160 +/-2 DegC for 16 hrs.in rolling condition.	Hot roll a part of the above treated mud at 160 +/- 2 DegC for 24 hrs. Cool the mud and stir for 15 minutes and determine apparent viscosity, yield value at 26 +/- 2 DegC
Cool the mud and stir for 15 minutes in a multimixer. Adjust the	i) Apparent viscosity, cp : should be less than 25 % of base mud (160 DegC) ii) Yield value, lbs/100ftsq: should be less than 10 % of base mud (160 DegC)
PH at 8.5 if necessary. Determine apparent viscosity, yield value and 15 min. gel at 26+/-2 DegC which should be as follows:	
(a) Apparent viscosity, cp max.:25	
(b) Yield value, lb/100 ftsq, max :15	
(c) 15 min. gel, lb/100 ftsq, max : 10	
B. Saline Water Mud :	**TO BE DELETED**
(i) Preparation of base mud. Prepare a 10 % (w/v) bentonite suspension in distilled water using OIL approved bentonite and stir the suspension in a multimixer for 15 minutes so that no lumps are left after the stirring period. Age the suspension for 72 hrs at 90 DegC. Cool the suspension and stir in a multimixer for 15 minutes. Adjust the apparent viscosity to 52.5 +/- 2.5 cp with distilled water, if necessary. Add 4% Nacl (LR grade) to it and stir again for 15 minutes. Age the salt treated mud at 26 +/- 2 DegC which should be as follows.	
(a) Apparent viscosity, cp max, : 20	
(b) Yield point. 1b/100 ftsq. max. :25	
(c) 15 min.gel. 1b/100 ftsq. max :30	
Age this mud at 160 +/- 2 DegC for 16 hrs. in rolling condition. Cool and stir in multimixer for 15 minutes. Determine apparent viscosity. yield value and 15 min. gel of the salt treated	

mud at 26+- 2 DegC which should be as under.	
(a) Apparent Visc. cp : Should not be more than that of 4B(ii.a)	
(b) Yield value. : 1b/100 ftsq.	
Should not be more than that of 4B(ii.b)	
(c) 15 min. gel :1b/100 ftsq : Should not be more than that of 4B(ii.c)	
7. Packing: The material should be packed in multiwalled paper bags with at least two innermost layers suitably water proofed strong enough to withstand rigours of transit and storage. Capacity 25 kg net per bag. In case of liquid: The material should be packed in 25/50 ltr. capacity leak proof HDPE/MS Drums. strong enough to withstand rigours of transit and storage.	NO CHANGE
8. Markings: Each bag/drum should have clear legible markings as given below: (i)Name of the product. (ii) Name of the supplier/ manufacturer. (iii) Date/Month/Year of manufacture. (iv) Supply order number against which the present supply is made.	NO CHANGE
N.B: Apparent viscosity yield point and gel values will be measured	**TO BE DELETED**

2.0 All other terms and condition of the tender will remain unchanged.

sd-
Adarsh Ranjan Padhy
Sr. Purchase Officer (FS)
For GM MATERIALS
For Resident Chief Executive