Corigendum no. 1 dated 07.11.2019.

The details of the Hydrocracker and Hydrogen Units Catalyst has been elaborated as under. Rest all, remain the same.

Hydrocracker Catalyst					
Reactor	**Catalyst**	**Composition**	**Percentage**	**Quantity, Kg**	**MSDS review date**
RB-01,02,03	GSK 19	Mullite	50-60 %	2535	3rd April'13
		Silica, Crystalline	30-40 %		
		Synthetic, amorphous silicate	5-10%		
RB-01,03	GSK 10 6MM	Aluminum Oxide	>95%	979	7th July'14
		Quartz (SiO2)	< =2.5%		
		Mullite	< =2.5%		
RB-01,02,03	GSK 10 8MM	Aluminum Oxide	>95%	1551	7th July'14
		Quartz (SiO2)	< =2.5%		
		Mullite	< =2.5%		
RB-01,02,03	DENSTONE 2000 1/4	Kaolin,Calcined	75-90%	7070	13th Dec'13
		Quartz(SiO2)	10-25%		
RB-01,02,03	DENSTONE 2000 1/8	Kaolin,Calcined	75-90%	7447	13th Dec'13
		Quartz (SiO2)	10-25%		
RB-03	ICR 142 v2 NAQ	Aluminum Oxide	<50 %	13877	
		Aluminum Silicate	<60 %		
		Zeolites, aluminosilicates	3-7 %		
		Nickel Oxide	<10 %		
		Tungsten Oxide	<30 %		
RB-01	ICR 161 NAQ	Aluminum Oxide (non-fibrous forms)	70-90%	1497	8th July'14
		Molybdenum trioxide	2.5-10%		
		Aluminium Phosphate	2.5-10%		
		Nickel Oxide	<=1%		
		Aluminum Molybdenum oxide	<=2.5%		
		Molybdenum Nickel Oxide	<=1%		
		Nickel Aluminate	<=1%		
RB-001	ICR 173 KAQ	Aluminum Oxide	60-100 %	6530	7th June'13
		Molybdenum trioxide	<10 %		

		Aluminium Phosphate	5-10 %		
		Molybdenum Nickel Tetra oxide	<5 %		
		Aluminum Molybdenum Oxide	<2.5%		
		Nickel Oxide	<2.5%		
		Nickel Aluminate	<1%		
RB-02	ICR 180 NP4	Aluminum Oxide (non-fibrous forms)	2.5-10 %	58774	5th May'14
		Zeolite (crystalline alumino silicate)	2.5-10%		
		Amorphous aluminium silicate	50-80 %		
		Tungsten Trioxide	25-50 %		
		Nickel Oxide	2.5-10 %		
RB-01,02,03	ICR 250 NAQ	Aluminum Oxide	Not mentioned	114458	18th April'13
		Amorphous Silicon Dioxide	Not mentioned		
		Zeolite (crystalline aluminosilicate)	Not mentioned		
		Tungsten trioxide	10-30%		
		Organic acid, Nickel salt	7-13%		
RB-01,02	ICR 512 NAQ	Aluminum Oxide (non-fibrous forms)	25-50 %	49637	5th Feb'14
		Aluminium Phosphate	2.5-10%		
		Aluminum Molybdenum Oxide	<2.5%		
		Molybdenum trioxide	10-20%		
		Polycarboxilic acid	10-20%		
		Molybdenum nickel Oxide	2.5-10%		
		Polycarboxilic acid,Nickel salt	2.5-10%		
		Synthetic amorphous aluminum silicate	<=5%		
		Nickel Aluminate	<=2.5		
		Nickel Oxide	<=1%		
			Total	**264355**	

HYDROGEN UNIT CATALYST

Reactor	Catalyst	Components	W/W %	Quantity, m3	Quantity, Kgs
MT Shift 05-RB-204	LSK-2	Alluminum Oxide	>=25 - <=43	1.3	19625
		Copper Oxide	>=18 - <=24		
		Zinc Oxide	>=18 - <=31		
		Copper Hydroxide Carbonate	>=2 - <=5		
	LK-813	Copper Oxide	>=39 - <=47	6.5	
		Zinc Oxide	>=24 - <=30		
		Aluminum Oxide	>=7 - <=14		
		Copper Hydroxide Carbonate	>=8 - <=15		
	LK-819	Zinc Oxide	>=38 - <=48	6.8	
		Copper Oxide	>=30 - <=36		
		Aluminum Oxide	>=15 - <=25		
	½ '' ceramic balls				2200
Pre-Reformer 05-RB-203	RKNGR	Ni-Nickel	20-25	9.2	17400
		NiO- Nickel monoxide	0-5		
		MgO-Magnesium Oxide	60-70		
		Al_2O_3- Aluminum Oxide	5-10		
	½" Alumina balls				2100
	1" Alumina balls				500
Reformer 05-FF-201	R-67-7H	NiO-Nickel Monoxide	15-20	~7-8	16037
		MgO-Magnesium Oxide	20-25		
		Al_2O_3-Aluminum Oxide	55-60		
Sulphur Absorber 05-RB-202A	HTG-1	Al_2O_3-Aluminum Oxide	60-75	0.944	10956
		K_2CO_3-Potassium Carbonate	25-40		
	DS-90-E	Zinc Oxide	90%	8.4	
		Alumina Binders	Balance		
	½" ceramic balls				900
					69718