معمل سمنت الكوفة

AI-KUFA CEMENT PLANT

(KF/19/01)

REPORT OF CEMENT QUALITY

OUALITY CONTROL DEP.\ (LAB.)

قسم السيطرة النوعية / (المختبرات)

Reference number Silo NO 2+3+4+5	Type of cement S.R. P.C.	
Factory / Al-Kufa Cement Plant	Sampling date From 1/5/2020	Testing date 31/5/2020

COMPONENT %	TEST RESULT	LIMITS	CONFORM
SiO ₂	21.26		
Al ₂ O ₃	4.16		
Fe ₂ O ₃	5.22		
CaO	61.46		
MgO	3.11	≤ 5%	OK
SO ₃	2.17	≤ 2.8% for OPC. ≤ 2.5% for SRPC.	
LOSS ON IGNITION	2.09	≤ 4%	OK
Total	99.45		
INSOLUBLE RESIDUE	0.60	≤ 1.5%	OK
FREE LIME	1.15		
L.S.F	0.88		OK
M.S	2.27		
M.A	0.80		
C ₃ S	42.39		
C ₂ S	28.97		
C ₃ A	2.19	(3.5 for SRPC	OK
C ₄ AF	15.87		
	Al ₂ O ₃ Fe ₂ O ₃ CaO MgO SO ₃ LOSS ON IGNITION Total INSOLUBLE RESIDUE FREE LIME L.S.F M.S M.A C ₃ S C ₂ S C ₃ A	Al ₂ O ₃ 4.16 Fe ₂ O ₃ 5.22 CaO 61.46 MgO 3.11 SO ₃ 2.17 LOSS ON IGNITION 2.09 Total 99.45 INSOLUBLE RESIDUE 0.60 FREE LIME 1.15 L.S.F 0.88 M.S 2.27 M.A 0.80 C ₃ S 42.39 C ₂ S 28.97 C ₃ A 2.19	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

PHYSICAL TEST				
		TEST RESULT	LIMITS *	CONFORM
Setting Time	Initial Final	110 3.10	≥ 45 min ≤ 10 hr	OK
Fineness (Blaine)		3186	$\geq 2500 \text{Cm}^2/\text{gm} \text{ for OPC}$. $\geq 2800 \text{Cm}^2/\text{gm for SRPC}$	OK
Compressive Strength	2days 28days	15.57 33.67	$ \geq 10 MN/m^2 $ $ \geq 32.5 MN/m^2 $	OK
Soundness (Autoclave) %		0.10	₹0.8	OK
Residue on sieve %	90 μm	5.69		
) 180 μm	0.41		

According to i.Q No 5/2019

Final Result

acceptable

Plant Manager

Production Man

Quality Manager

c.c. N/0