



معمل سمنت المثنى
Al-Muthana Cement Plant

REPORT OF CEMENT QUALITY

QUALITY CONTROL DEPA (LAB.)

قسم السيطرة النوعية (المختبرات)

Reference number /	Type of cement / SRPC
Factory / Al-Muthana Cement Plant	Sampling date 8.12 -14.12.2018 Testing date

CHEMICAL ANALYSIS	COMPONENT %	TEST RESULT	LIMITS *	CONFORM
	SiO ₂	21.08	.....	
	Al ₂ O ₃	4.06	.....	
	Fe ₂ O ₃	5.02	.....	
	CaO	62.00	.....	
	MgO	3.54	≤ 5%	OK
	SO ₃ ●	2.27	≤ 2.8% for OPC. ≤ 2.5% for SRPC.	OK
	LOSS ON IGNITION	1.50	≤ 4%	OK
	Total	99.46		
	INSOLUBLE RESIDUE	0.79	≤ 1.5%	OK
	FREE LIME	1.48	.....	
	L.S.F	0.90	0.66 – 1.02	OK
	M.S	2.32	.....	
	M.A	0.81	.....	
	C ₃ S	45.26	.....	
	C ₂ S	26.29	.....	
	C ₃ A	2.27	≤ 3.5 % for SRPC.	OK
	C ₄ AF	15.26	.....	

PHYSICAL TEST		TEST RESULT	LIMITS *	CONFORM
Setting Time	Initial	120	≥ 45 min	OK
	Final	03:30	≤ 10 hr	
Fineness (Blaine)		3040	≥ 2300Cm ² /gm for OPC. ≥ 2500Cm ² /gm for SRPC.	OK
Compressive Strength	3days	20.60	≥ 15 MN/m ²	OK
	7days	28.48	≥ 23 MN/m ²	
Soundness (Autoclave) %			≤ 0.8	OK
Residue on sieve %	90 μm	1.47	.....	
	180 μm	0.02	.....	

*According to I.Q.S No. 5/1984

Final Result acceptable

Plant Manager

Production Manager

Quality Manager

