

Report Date
May 23, 2006

CEMENT MATERIAL TEST REPORT

Catskill Plant

Cement Type: I/II
Production Period: April 2006

Chemical Analysis (%)

Total Alkalis.....	0.75 *
Loss of ignition.....	1.2
Insoluble residue.....	0.4
Free Lime.....	0.4
SiO ₂	20.6
Al ₂ O ₃	4.7
Fe ₂ O ₃	3.3
CaO.....	63.9
MgO.....	1.6
SO ₃	3.7

Physical Tests

Fineness: blaine (cm ² /g).....	3940
% passing (325).....	87.91 %
Soundness:	
Autoclave Expansion.....	-0.004 %
C1038 Expansion of Hydraulic Cement	0.003 %
Vicat Setting Time	
Initial (min).....	165
Final (min).....	285
Air Content.....	7.2 %
False Set.....	72 %

Potential (%)

C3S.....	56
C2S.....	17
C3A.....	7
C4AF.....	10.0

Compressive Strength

	PSI	MPa
1 days.....	2130	14.7
3 days.....	3720	25.6
7 days.....	4790	33.0
28 days.....	6630	45.7

ASTM test methods used: C109, C114, C151, C185, C187, C191, C204, C305, C430, C451, C1038.
 The cement represented by this certificate conforms to the standard requirements of the following specifications (last revision):

ASTM C-150
 AASHTO M-85

*Catskill cement is classified as a high alkali cement for all NYDOT work

Tests performed by Mark Woodard

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