

# LEHIGH

## HEIDELBERGCEMENT Group

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**PLANT LOCATION**  
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### CEMENT TEST REPORT

**Cement:** Plastic

**Report Date:** 5/16/2012

**Date Shipped:** April 2012

STANDARD CHEMICAL REQUIREMENTS	TEST RESULTS	ASTM C 1328 SPECIFICATIONS	
		TYPE S	
Silicon Dioxide (SiO <sub>2</sub> ), %	16.5	----	
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> ), %	3.9	----	
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> ), %	3.3	----	
Calcium Oxide (CaO), %	61.0	----	
Magnesium Oxide (MgO), %	1.4	----	
Sulfur Trioxide (SO <sub>3</sub> ), %	2.5	----	
Loss on Ignition (LOI), %	9.8	----	
<b>PHYSICAL REQUIREMENTS</b>			
(ASTM C 204) Blaine Fineness, m <sup>2</sup> /gm	444		
(ASTM C 430) -325 Mesh, %	98.5	76 Min	
(ASTM C 266) Time of Setting - Initial (Gillmore)	210	90 Min	
(ASTM C 266) Time of Setting - Final (Gillmore)	305	1440 Max	
(ASTM C 451) False Set, %	71.4	50 Min	
(ASTM C 185) Air Content, %	17	8-20	
(ASTM C 151) Autoclave Expansion, %	0.04	1.0 Max	
(ASTM C 91) Water Retention, %	75	70 Min	
(ASTM C 187) Normal Consistency, %	26.8	----	
(ASTM C 109) Compressive Strength, psi (MPa)			
7 Day	3401 (23.4)	1300 (9.0) Min	
28 Day (Previous month)	4626 (31.9)	2100 (14.5) Min	

This cement meets the requirements of specification:

ASTM C1328-97 Type S  
 AASHTO Practice R18 accredited laboratory

Albert J. Cornibe  
 Quality Manager