



**Twining, Inc. - Long Beach Lab**  
 3310 Airport Way, Long Beach, CA 90806  
 Ph: 562.426.3355  
 Fax: 562.426.6424  
 www.twininginc.com

## Concrete Test Report

**Report No: CON:W01-14-00503-C1**  
 Date of Issue: 2/14/2014 Issue No: 2

**Customer:** Cellular Concrete Technologies  
 c/o CDI  
 Irvine, CA, 92618  
**Project:** CCT Benchmark Testing  
 100 Pacifica  
 Irvine, CA, 92618

**Project No.:** 140024.1  
**Permit No.:**  
**OSHPD:**  
**DSA File #:**  
**DSA AP #:**

**Jurisdiction:** Irvine  
**Distribution:**

  
 Approved Signatory: Eugene Raymundo (Project Engineer)

### Mix Data

**Supplier:** N/A  
**Plant:** N/A  
**Mix Identification:** N/A  
**Specified Design Strength (psi):** 157 at age 28 days  
**Mortar Type:** N/A  
**Type of Shotcrete:** N/A  
**Type of Fibers:** N/A

### Details of Sample

<b>Date Sampled</b>	1/9/2014	<b>Date Received</b>	1/10/2014			<b>Measured</b>	<b>Specified</b>
<b>General Location</b>	Irvine	<b>Slump (in)</b>		ASTM C 143			N/A
<b>Sample Location</b>	fabricated by client	<b>Slump w/ plasticizer (in)</b>				N/A	
<b>Curing Method</b>	One day Field/Laboratory Cure	<b>Air Temp (°F)</b>				N/A	
<b>Field Sample ID</b>	30/157	<b>Concrete Temp (°F)</b>		ASTM C 1064		N/A	
		<b>Air Content (%)</b>		ASTM C 173		N/A	74
		<b>Field Cure Temp (°F) High</b>	N/A			N/A	
		<b>Low</b>	N/A	<b>Unit Weight (pcf)</b>	ASTM C 138	N/A	N/A
<b>Contractor</b>	N/A	<b>Batch Size (yd³)</b>				N/A	
<b>Nozzleman</b>	N/A	<b>Water Added (gal)</b>		<b>Before</b>		N/A	
<b>Gun Operator</b>	N/A			<b>After</b>		N/A	
<b>Truck No.</b>	N/A	<b>Ticket No.</b>	N/A	<b>Time Batched</b>		N/A	
<b>Sampled By</b>	N/A			<b>Time Sampled</b>		N/A	
<b>Submitted By</b>	N/A			<b>Time Placed</b>		N/A	
<b>Weather</b>	N/A			<b>Time In Truck (mins)</b>		N/A	
<b>Est. Wind (mph)</b>	N/A	<b>Yd³ Placed</b>	N/A				
<b>Est. Rh (%)</b>	N/A	<b>Yd³ Rejected</b>	N/A				

### Compressive Strength of Concrete Cylinders

**ASTM C 39**

Specimen ID	Date Tested	Age (Days)	Dimensions (in) Diameter	Height	Area (in²)	Type of Cap	Ultimate Load (lbf)	Type of Fracture	Compressive Strength (psi)	Required Strength (psi)
W01-14-00503-1\1	01/16/14	7	4.00	8.00	12.57		1260	1	100	N/A
W01-14-00503-1\2	01/23/14	14	4.00	8.00	12.57		1390	1	110	N/A
W01-14-00503-1\3	02/06/14	28	4.00	8.00	12.57		1980	1	160	
<b>Average 28 Day Compressive Strength (psi)</b>									160	

### Notes

1. Sampling to ASTM C 172
2. Specimen(s) Prepared to ASTM C 31
3. Capping: B = Bonded ASTM C 617, U = Unbonded ASTM C 1231

### Remarks

Fracture Type: 1 = C39: Cones on both ends; C1314: Conical Break  
 cellular concrete, Mix no. 30 pcf/157 GM