



## Report of Concrete Compressive Strength

ASTM C-31 & C-39

**Project Name:** PORTLAND - OCEAN GATEWAY TERMINAL - MATERIALS TESTING **Project Number:** 05-0134

**Client:** REED & REED, INC.

**Client Contract Number:**

**General Contractor:**

**Concrete Supplier:** AUBURN CONCRETE

### PLACEMENT INFORMATION

**Date Cast:** 3/30/2006 **Time Cast:** 4:22 **Date Received:** 3/31/2006

**Placement Location:** A & C PIER CAP

**Placement Method:** CRANE & BUCKET

**Placement Vol. (yd<sup>3</sup>):** 71.5

**Cylinders Made By:** DAC

**Aggregate Size (in):** 3/4

### INITIAL CURING CONDITIONS

#### Temperatures

**Minimum (°F)** **Maximum (°F)**

### DELIVERY INFORMATION

**Admixtures:** COLD H2O; SILICA FUME; CNI; & POLYHEED 1020

### TEST RESULTS

**Slump (in) (C-143):** **Slump WR:** 7.75

**Load Number:** 5

**Air Content (%) (C-231):** **Air WR:** 7.6

**Mixer Number:** 106

**Air Temp (°F):** 50

**Ticket Number:** 106413

**Conc. Temp (°F) (C-1064):** 64

**Cubic Yards:** 10

**Design (psi):** 5075

| Cylinder Designation | Cylinder Weight (lbs) | Cylinder Diameter (in) | Cross Sectional Area(In) <sup>2</sup> | Date Of Test | Cure Type | Age (days) | Fracture Type | Load (kips) | Strength (psi) |
|----------------------|-----------------------|------------------------|---------------------------------------|--------------|-----------|------------|---------------|-------------|----------------|
| 561-5A               |                       | 6.00                   | 28.27                                 | 4/6/2006     | Lab       | 7          | 4             | 170.0       | 6010           |
| 561-5B               |                       | 6.00                   | 28.27                                 | 4/27/2006    | Lab       | 28         | 4             | 238.0       | 8420           |
| 561-5C               |                       | 6.00                   | 28.27                                 | 4/27/2006    | Lab       | 28         | 4             | 224.0       | 7920           |
| 561-5D               |                       |                        |                                       | Hold         | Lab       |            |               |             |                |
| 561-5E               |                       |                        |                                       | Hold         | Field     |            |               |             |                |
| 561-5F               |                       |                        |                                       | Hold         | Field     |            |               |             |                |

#### Fracture Types



Cone



Cone and Split



Cone and Shear



Shear



Columnar

Remarks: