

National Ready Mixed Concrete Co.

TECHNICAL SERVICES

CONCRETE TEST CYLINDER DATA

IDENTIFICATION DATA

PROJECT: Stucco Plaster Mix CUSTOMER: NRMC
ADDRESS: _____ BATCH PLANT: Sun Valley Plant CAST BY: Darrell Johnson

LOAD #: 1 TRUCK #: N/A TICKET #: N/A

MATERIALS & MIX DESIGN

MIX DESIGN NO. : ST65 CEMENT CONTENT: 6.50 Sk. $f'c$ STRENGTH: 1,500 Psi @ 28 Days
POZZOLAN %: 0%
ADMIXTURES: _____ AIR CONTENT: 22 %
CONCRETE TEMP: N/A ° F Unit Wgt: 110
AMBIENT TEMP: N/A ° F SLUMP: 5
CYLINDERS MADE: 6 DATE CAST: December 18, 2014 DATE RECEIVED: December 31, 2014

CYLINDER TEST DATA

| CYLINDER NO. | DATE TESTED | AGE | COMPRESSIVE STRENGTH | AVERAGE |
|--------------|-------------|-----|----------------------|----------|
| 1 | 1/8/2015 | 14 | 2090 | 2145 psi |
| 2 | 1/8/2015 | 14 | 2200 | |
| 3 | 1/15/2015 | 21 | 2680 | 2650 psi |
| 4 | 1/15/2015 | 21 | 2620 | |
| 5 | 1/22/2015 | 28 | 2710 | 2695 psi |
| 6 | 1/22/2015 | 28 | 2680 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

CYLINDERS CONFORM TO $f'c$: YES

TEST PERFORMED BY NATIONAL READY MIXED CONCRETE CO. PERSONNEL ARE IN ACCORDANCE WITH APPLICABLE ASTM METHODS.

REVIEWED BY:

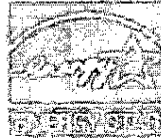


Marc G. Robert - Manager of Technical Services

DATE: January 22, 2015



National Cement Company of California, Inc.
LEBEC Plant



MILL TEST REPORT

We certify that the below described Portland Cement, at the time of shipment having **June 2014 Average** meets the Chemical and physical requirements of TYPE II & V as per ASTM C150/C150M-11 and AASHTO M 85

| Chemical Specifications and Analysis | | | | Physical Specifications and Analysis | | | | | |
|--|-----------|----------|----------|--------------------------------------|--------------------------------|-----------|-----------|----------|--|
| | ASTM C150 | | Actual | | | ASTM C150 | | Actual | |
| | TYPE II | TYPE V | Analysis | | | TYPE II | TYPE V | Analysis | |
| SiO2 | NA | NA | 21.36 | % | Air content of mortar(%volume) | 12 max | 12 max | 7 | |
| Al2O3 | 6.0 max | NR | 4.12 | % | Blaine, Sq.cm/gm | 2600 min | 2600 min | 4071 | |
| Fe2O3 | 6.0 max | NR | 3.82 | % | Autoclave Exp. % | 0.800 max | 0.800 max | 0.006 | |
| CaO | NA | NR | 63.70 | % | Time of Setting: | | | | |
| MgO | 6.0 max | 6.0 max | 2.10 | % | Vicat (A) Initial | 45 min | 45 min | 116 | |
| SO3 | 3.0 max | 2.3 max | 2.58 | % * | Vicat (A) Final | 375 max | 375 max | 227 | |
| Loss | 3.0 max | 3.0 max | 1.76 | % | Gilmore, Initial | 60 min | 60 min | 160 | |
| Insoluble | 0.75 max | 0.75 max | 0.34 | % | Gilmore, Final | 600 max | 600 max | 263 | |
| Eq. Alkalies | 0.60 max | 0.60 max | 0.54 | % | C-1038 Mortar bar exp.(%)** | | 0.020 max | | |
| Free CaO | NR | NR | 0.79 | % | Compressive Strength: | | | | |
| * Meets ASTM C150, Table 1, Option D for Type-II & V | | | | | 1 day (Psi) | NR | NR | 2527 | |
| Potential Phase Compounds: | | | | | 3 days (Psi) | 1450 min | 1160 min | 4133 | |
| C3S | NR | NR | 51.9 | % | 7 days (Psi) | 2470 min | 2180 min | 5175 | |
| C2S | NR | NR | 21.8 | % | 28 days (Psi) | NR | 3050 min | 6835 | |
| C3A | 8 max | 5 max | 4.4 | % | | | | | |
| C4AF | NR | NR | 11.6 | % | | | | | |
| 2C3A+C4AF | NR | 25 max | 20.4 | % | | | | | |
| %CO2 | NA | NA | 1.05 | % | | | | | |
| % Limestone | 5.0 Max | 5.0 Max | 2.42 | % | | | | | |
| %CaCO3 in LS | 70%min | 70%min | 98.05 | % | | | | | |

NA = Not Applicable
NR = No Requirement

This Cement Meets Or Exceeds The Following Described Specifications

ASTM & AASHTO: ASTM C150/150M-11 and AASHTO M85 Types II & V Modified, (low Alkalie)
California: Section 201-1.2 of Standard Specifications for Public Works Construction,
Caltrans: Section 90-1.02B(2) of Standard Specifications, T-II Modified Low Alkali (2010 Stan. Specs.)
Section 90-2.01 of Standard Specifications, T-II Modified Low Alkali (2006 Stan. Specs.)

Main Office:

15821 Ventura Blvd.
Suite 475
Encino, Ca. 91436-2935
(818) 788-4228

NATIONAL CEMENT COMPANY OF CALIFORNIA

By: *[Signature]*

INTERIM QUALITY CONTROL MANAGER
7/29/14

Vulcan Materials Company

Contractor: *National Ready Mix*

January 21, 2015

Project: *various*

Plant: *Vulcan Materials / Sun Valley*

Material: *Washed Plaster Sand (WPS)*

This is to certify that Vulcan Materials Company, Western Division, *Sun Valley*, will supply Washed Plaster Sand (WPS) to the above listed project and that this product will conform to Sections 4, 5 and 6 of ASTM designation C897 - 05, for base coat portland cement-based plasters, natural sand, except where indicated.

| Sieve Size | ASTM C897 Sect. 6 natural sand | Percent Passing |
|------------------|-----------------------------------|--------------------|
| 4.75 mm (No. 4) | 100 | 100 |
| 2.36 mm (No. 8) | 90 - 100 | 99 |
| 1.18 mm (No. 16) | 60 - 90 | 84 |
| 600 um (No. 30) | 35 - 70 | 56 |
| 300 um (No. 50) | 10 - 30 | 25 |
| 150 um (No. 100) | 0 - 5 | *7 |
| 75 um (No. 200) | 0 - 3 | 2.7 |

* indicates out of specification

| | Method | Result | Spec. |
|--------------------------|--------|--------|-------------|
| Fineness Modulous (F.M.) | C 136 | 2.30 | 2.05 - 3.05 |

Composition and Physical Properties

| | Method | Result | Spec. |
|--------------------|--------|--------|--------------|
| Friable Particles | C 142 | 0.4% | 1 % Max. |
| LtWt particles | C 123 | 0.0% | 0.5 % Max. |
| Organic Impurities | C 40 | Sat. | Satisfactory |
| Soundness | C 88 | 3% | 20% Max. |

Submitted by:



Timothy Reed
Manager Technical Services
TR/ans

Southern California Regional Laboratory

16009 Foothill Boulevard • Irwindale, California 91706 • Tel (626) 856-6190



AMRL Certified

Please Note: NOT VALID IF ALTERED

Vulcan Materials Company

Contractor: *National Ready Mix*

January 21, 2015

Project: *various*

Plant: *Vulcan Materials / Sun Valley*

Material: *Washed Plaster Sand (WPS)*

This is to certify that Vulcan Materials Company, Western Division, *Sun Valley*, will supply Washed Plaster Sand (WPS) to the above listed project and that this product will conform to Sections 4, 5 and 6 of ASTM designation C144 - 04, aggregate for use in masonry mortar, natural sand.

| Sieve Size | ASTM C144 Sect. 4 natural sand | Percent Passing |
|------------------|-----------------------------------|--------------------|
| 4.75 mm (No. 4) | 100 | 100 |
| 2.36 mm (No. 8) | 95 - 100 | 99 |
| 1.18 mm (No. 16) | 70 - 100 | 84 |
| 600 um (No. 30) | 40 - 75 | 56 |
| 300 um (No. 50) | 10 - 35 | 25 |
| 150 um (No. 100) | 2 - 15 | 7 |
| 75 um (No. 200) | 0 - 5 | 2.7 |

Composition and Soundness

| | Method | Result | Spec. |
|--------------------|--------|--------|--------------|
| Friable Particles | C 142 | 0.4% | 1 % Max. |
| LtWt particles | C 123 | 0.0% | 0.5 % Max. |
| Organic Impurities | C 40 | Sat. | Satisfactory |
| Soundness | C 88 | 3% | 10% Max. |

Submitted by:



Timothy Reed
Manager Technical Services
TR/ans

Southern California Regional Laboratory

16009 Foothill Boulevard • Irwindale, California 91706 • Tel (626) 856-6190



AMRL Certified

Please Note: NOT VALID IF ALTERED

Vulcan Materials Company

Contractor: *National Ready Mix*

January 21, 2015

Project: *various*

Plant: *Vulcan Materials / Sun Valley*

Material: *Washed Plaster Sand (WPS)*

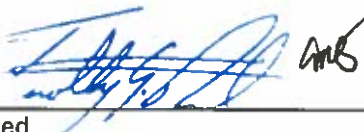
This is to certify that Vulcan Materials Company, Western Division, *Sun Valley*, will supply Washed Plaster Sand (WPS) to the above listed project and that this product will conform to Sections 4 and 5 of ASTM designation C35 - 01, inorganic aggregates for use in Gypsum Plaster, for natural sand.

| Sieve Size | ASTM C35 Table 1 - sand | Percent Passing |
|------------------|----------------------------|--------------------|
| 4.75 mm (No. 4) | 100 | 100 |
| 2.36 mm (No. 8) | 95 - 100 | 99 |
| 1.18 mm (No. 16) | 70 - 95 | 84 |
| 600 um (No. 30) | 35 - 70 | 56 |
| 300 um (No. 50) | 5 - 35 | 25 |
| 150 um (No. 100) | 0 - 10 | 7 |
| 75 um (No. 200) | 0 - 5 | 2.7 |

Chemical Composition

| | Method | Result | Spec. |
|--------------------|--------|--------|--------------|
| Organic Impurities | C 40 | Sat. | Satisfactory |

Submitted by:



Timothy Reed
Manager Technical Services
TR/ans

Southern California Regional Laboratory

16009 Foothill Boulevard • Irwindale, California 91706 • Tel (626) 856-6190



AMRL Certified

Please Note: NOT VALID IF ALTERED

Vulcan Materials Company

Contractor: *National Ready Mix*

January 21, 2015

Project: *various*

Plant: *Vulcan Materials / Sun Valley*

Material: *Washed Plaster Sand (WPS)*

This is to certify that Vulcan Materials Company, Western Division, *Sun Valley*, will supply Washed Plaster Sand (WPS) to the above listed project and that this product will conform to Section 200-1.5 of the 2012 Standard Specifications for Public Works Construction.

| Sieve Size | Greenbook Sect. 200-1.5.5(A) | Percent Passing |
|------------------|---------------------------------|--------------------|
| 4.75 mm (No. 4) | 100 | 100 |
| 2.36 mm (No. 8) | 95 - 100 | 99 |
| 1.18 mm (No. 16) | 70 - 95 | 84 |
| 600 um (No. 30) | 35 - 70 | 56 |
| 300 um (No. 50) | 5 - 35 | 25 |
| 150 um (No. 100) | 0 - 10 | 7 |
| 75 um (No. 200) | 0 - 5 | 2.7 |

| | Test Method | Result | Spec. |
|--------------------|-------------|--------|--------------|
| Sand Equivalent * | CT 217 | 79 | 75 min. |
| Durability ** | CT 229 | 78 | 60 min. |
| Organic Impurities | ASTM C40 | Sat. | Satisfactory |
| Soundness | CT 214 | 3% | 10% max. |

* SE result is average of tests on 3 samples

** Soundness requirement is waived provided
Durability result is 60 or greater.

Submitted by:



Timothy Reed
Manager Technical Services
TR/ans

Southern California Regional Laboratory

16009 Foothill Boulevard • Irwindale, California 91706 • Tel (626) 856-6190



AMRL Certified

Please Note: NOT VALID IF ALTERED