

Issue Date: 01/31/2020

Submittal of 1" x No.4 Concrete Aggregate - 2364
ASTM No.57 Aggregate - Caltrans Coarse Aggregate

Pursuant to ASTM C33\C33M-16 and 2015 Caltrans Standard Specifications, the following is submitted:

| SAMPLE GRADATION | | | | |
|------------------|----------------------|-----------------|------------------|-------------|
| Method | CT 202 | | C136 | |
| | CALTRANS TEST RESULT | CALTRANS LIMITS | ASTM TEST RESULT | ASTM LIMITS |
| Sieve Size | Percent Passing | | Percent Passing | |
| 1.5" | 100 | 100 | 100 | 100 |
| 1.0" | 100 | 88-100 | 100 | 95-100 |
| 3/4" | X=85 | 70-100 | 92 | --- |
| 1/2" | 47 | --- | 47 | 25-60 |
| 3/8" | X=15 | 0-30 | 11 | --- |
| #4 | 0 | 0-16 | 0 | 0-10 |
| #8 | 0 | 0-6 | 0 | 0-5 |
| PAN | 0.0 | --- | 0.0 | --- |

| TEST NAME | CALTRANS TEST METHOD | CALTRANS TEST RESULT | CALTRANS LIMIT | ASTM TEST METHOD | ASTM TEST RESULT | ASTM LIMIT |
|---|----------------------|----------------------|----------------|--------------------|------------------|--------------|
| SPECIFIC GRAVITY (Dry, Gsb) | CT 207 | 2.638 | --- | C127 | 2.624 | --- |
| SPECIFIC GRAVITY (SSD) | CT 207 | 2.669 | --- | C127 | 2.661 | --- |
| SOUNDNESS (Na2SO4, %) | CT 214 | 3.0 | 0-10 | C88 | 4.6 | 0-12 |
| -#200 SIEVE (75 um, %) | D1140 ¹ | 0.4 | --- | C117 | 0.4 | 0-1 |
| LA ABRASION (B, 500, %) | CT 211 | 20.0 | 0-45 | C131 | 20.0 | 0-50 |
| COAL\LIGNITE (%) | --- | --- | --- | C123 | 0.4 | 0-0.5 |
| CHERT (%) | --- | --- | --- | C123 | 2.7 | 0-3 |
| CLAY LUMPS & FRIABLE PARTICLES (%) | --- | --- | --- | C142 | 0.1 | 0-2 |
| ABSORPTION (%) | CT 206 | 1.1 | 0-4.2 | C127 | 1.4 | --- |
| CLEANNES VALUE (CV, %) | CT 227 | 91.0 | >75 | --- | --- | --- |
| ALKALI-SILICA REACTIVITY (ASR) ² | C1293 ² | NON-REACTIVE | NON-REACTIVE | C1293 ² | NON-REACTIVE | NON-REACTIVE |

Notes:

1. ASTM Test Method
2. Per ASTM C33/C33M-16 - This test method is considered to be the most reliable procedure among ASTM test methods for the evaluation of aggregates for alkali-silica reaction and is substituted in lieu of ASTM C227, C289, and C1260. Refer to ASTM C33 Appendix Sections X1.3.1 to X1.3.6. Non-reactive = less than 0.04% length change within the prisms after 12 months.

Expires 12 months from date of issue