



September 22, 2023
 Project No. 2892.040

Mr. Eric Jones
JOY ENGINEERING
 1584 Wolf Meadows Lane
 Portola, California 96122

RE: Sloat Quarry – 1 Inch X No. 4 Concrete Aggregate

Dear Mr. Jones:

Per your request, we have performed Aggregate Quality Testing on the Concrete Aggregate received by our laboratory from the Sloat Quarry. Test results in comparison with Section 90 of the 2018 Caltrans Standard Specifications and ASTM C33 specifications are as follows:

| Sieve Size Analysis of Fine and Coarse Aggregate (CT202 & ASTM C136/C117) | | | | |
|---|---------------------------|---------|--|-----------------------|
| U.S. Standard Sieve Size | Percent By Weight Passing | | | |
| | 1 Inch X No. 4 | X-Value | Caltrans Operating Range Specifications Section 90-1.02C | ASTM C33 No. 67 Stone |
| 1½ Inch | 100 | – | 100 | 100 |
| 1 Inch | 100 | – | 88 – 100 | 100 |
| ¾ Inch | 94 | 85 | 70 – 100 | 90 – 100 |
| ½ Inch | 41 | – | – | 20 – 55 |
| ⅜ Inch | 19 | 20 | 5 – 35 | – |
| No. 4 | 1 | – | 0 – 16 | 0 – 10 |
| No. 8 | 1 | – | 0 – 6 | 0 – 5 |
| No. 200 | 0.3 | – | – | 0 – 1.0 |

Aggregate Properties

| Test | Caltrans (Section 90) | | | ASTM C33 | | |
|---|-----------------------|---------|--------|----------|----------------------|---------|
| | Method | Results | Spec. | Method | Results ¹ | Spec. |
| Clay Lumps and Friable Particles (%) | --- | --- | --- | C142 | 0.0 | 2.0 Max |
| Coal and Lignite (%) | --- | --- | --- | C123 | 0.0 | 0.5 Max |
| Los Angeles Abrasion (500 Rev., Grading B, %) | CT211 | 18.2 | 45 Max | C131 | 18.2 | 50 Max |
| Cleanness Value | CT227 | 91 | 75 Min | --- | | |
| Sodium Sulfate Soundness (%) | CT214 | 5 | 10 Max | --- | | |
| Dry Rodded Unit Weight | CT212 | 98.2 | --- | --- | | |
| Bulk Specific Gravity | CT206 | 2.745 | --- | C127 | 2.745 | --- |
| Absorption (%) | | 1.8 | --- | | 1.8 | --- |

¹ ASTM results reported based on Caltrans methods where Caltrans has determined methods as equivalent.

<https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/lapm/c16/16s.pdf>

We appreciate the opportunity to provide our laboratory testing services. If you have any questions or require further information, please do not hesitate to call.

Sincerely,

WOOD RODGERS, INC.

Wheeler Musnicki
 Wheeler Musnicki
 Assistant Lab Manager

Mischelle J. Smith
 Mischelle J. Smith, PE
 Senior Engineer
 RE No. C38777
 Expires 3/31/25

