

6980 Sierra Center Parkway, Suite 90 Reno, NV 89511

February 9, 2015 File: 1042

Mr. Rick Joy JOY ENGINEERING 1584 Wolf Meadows Lane Portola, CA 96122

RE: Bar One Quarry - Soundness

Dear Mr. Joy:

Per your request, we have performed soundness testing on samples from the Bar One Quarry sampled on January 19, 2015. The results are as follows:

Sodium Sulfate Soundness (ASTM C88)	
Percent Loss	
2.5	
2.1	
6.2	

The values do not represent loss based on weighted percent loss. Weighted percent loss is based on the above values times total percent retained on each designated sieve sequence. The total percent retained is determined from a gradation test performed on the material.

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

Sincerely,

CONSTRUCTION MATERIALS ENGINEERS, INC.

Steven L. Vineis Laboratory Manager svineis@cmenv.com Direct: 775-737-7568

Mobile: 775-772-9921

Roger O. Corkill Jr., PE Project Manager RE Number 19868 Expiration Date 12-31-16 rcorkill@cmenv.com

<u>rcorkill@cmenv.com</u> Direct: 775-737-7581 Mobile: 775-722-5067

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