## Nowell, Keith, Env. Health

**From:** John Lucio <John.Lucio@erm.com>
**Sent:** Tuesday, September 18, 2018 4:28 PM
**To:** Nowell, Keith, Env. Health
**Cc:** Roe, Dilan, Env. Health; Conner, Anne P; Xiaodong Huang; Gina Sperinde; Arun Chemburkar
**Subject:** FW: Final Report for bulk sampling at Cemex Quarry for the PGE project at 205 Brush Street, Oakland, CA.
**Attachments:** Cemex-Clayton-Class-II-AB-Gradation.pdf; Cemex-Clayton-Dust-Tailing-Gradation.pdf

Hi Keith,

Per our conversation, attached are the gradations for the two potential fill materials from the Cemex Clayton Quarry. I am still awaiting confirmation on how the surface will be finished.

Thanks,

John Lucio
Program Director

ERM
1277 Treat Boulevard, Suite 500
Walnut Creek, CA 94597

Tel: +01 925 482 3222 (direct line)
Tel: +01 925 946 0455 (switchboard)
Mobile: +01 925 623 4453

www.erm.com
john.lucio@erm.com

Clayton Quarry
515 Mitchell Canyon Road
Clayton, CA 94517
925-672-4900

09/07/2018

PSC Industrial Outsourcing
Email/ Fax: edwin.sargenti@hydrochempsc.com
Attn: Edwin Sargenti

Project Reference: General Information

We submit the typical test data below for your approval and as certification of the following product:

Source: Clayton # 4402
SMARA #: 91-07-0004

## 3/4" CLASS AGGREGATE BASE-1307921

| Procedure | Sieve/Test | Average | Unit | CALTRANS Cl 2 agg Base |
|---|---|---|---|---|
| CTM - 201 & 202 | 1" (25mm) | 100.0 | % | ≥100 |
| | 3/4" (19mm) | 97.5 | % | 90-100 |
| | 1/2" (12.5mm) | 83.0 | % | |
| | 3/8" (9.5mm) | 69.0 | % | |
| | #4 (4.75mm) | 37.8 | % | 35-60 |
| | #8 (2.36mm) | 24.8 | % | |
| | #16 (1.18mm) | 17.7 | % | |
| | #30 (0.6mm) | 12.9 | % | 10-30 |
| | #50 (0.3mm) | 9.1 | % | |
| | #100 (0.15mm) | 6.8 | % | |
| | #200 (75µm) | 5.39 | % | 2-9 |
| C-217 | SE | 53 | % | ≥25 |

| | | | | |
|---|---|---|---|---|
| CTM - 229 | Durability | 49 | | 35 min |
| CTM - 301 | R - Value | 78 | | 78 min |
| C - 131 | LA Abrasion ( 500 revs ) | 16.0 | % | 50 max |
| D - 1557 | Maximum Density | 146.2 pcf @ 7.9 % | | |

This product complies with CalTrans Standard Specifications, 2010, Section 26-1.02 B for 3/4" Maximum Gradation.

The above referenced product is produced from all virgin material.

If you have any questions, please feel free to contact:

Antonio C. Fuentes, Manager, Quality Control at (925) 426-2293 or

Ron Novak, Quality Control Representative at (925) 303-5021

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09/12/2018

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Project Reference: General Information

We submit the typical test data below for your approval and as certification of the following product.

Source: Clayton #4402
SMARA # 91-07-0004

## 1/2 x DUST-1312686

| Procedure | Sieve/Test | Average | Unit | 1/2 x DUST |
|---|---|---|---|---|
| | 3/4" (19mm) | 100.0 | % | |
| | 1/2" (12.5mm) | 100.0 | % | |
| | 3/8" (9.5mm) | 99.6 | % | |
| | #4 (4.75mm) | 87.6 | % | |
| | #8 (2.36mm) | 58.6 | % | |
| | #16 (1.18mm) | 38.7 | % | |
| | #30 (0.6mm) | 30.4 | % | |
| | #50 (0.3mm) | 19.4 | % | |
| | #100 (0.15mm) | 15.6 | % | |
| | #200 (75µm) | 11.18 | % | |
| C-217 | SE | 58 | % | |

The above referenced product is produced from all virgin material

If you have any questions, please feel free to contact:

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Ron Novak, Quality Control Representative at (925) 303-5021