KLEINFELDER
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1826 Kramer Lane, Suite M
Austin, Texas 78758
p | 512-926-6650
f | 512-833-5058
kleinfelder.com

**To:** Austin Aggregates
Attn.: Mr. Troy Carter
P.O. Box 27935
Austin, Texas 78755

**Project:** 2010 Austin Aggregates QA

**Project No.:** 109970
**Date:** 07-12-10
**Control No.:** 062814 A



| | |
|---|---|
| REPORT OF: | Sieve Analysis, Specific Gravity, Rodded & Loose Unit Weight, Decantation, Crushed Face Count, Los Angeles Abrasion, and Deleterious Materials |
| TEST METHOD: | TEX 400A, TEX 401A, TEX 403A, TEX 404A, TEX 406A, TEX 410A, TEX 413A, and TEX 460A Part I |
| LAB ID NUMBER: | G-2783 |
| MATERIAL DESCRIPTION: | 1" River Gravel |
| MATERIAL SOURCE: | Plant Stockpile |
| SAMPLED BY: | K. Woodard, NICET II #107418 |
| DATE SAMPLED: | 06-28-10 |
| TEST PERFORMED BY: | D. Potteiger, ACI #01147441; K. Eidenschink |
| RESULTS: | |

| Sieve Size | Percent Passing | TxDOT Item 421 / COA Item 403 Grade 4 Specifications |
|---|---|---|
| 1 ½" | 100 | 100 |
| 1" | 96.3 | 95-100 |
| 3/4" | 77.4 | -- |
| 1/2" | 44.1 | 25-60 |
| 3/8" | 23.6 | -- |
| #4 | 4.8 | 0-10 |
| #8 | 1.2 | 0-5 |

| | | |
|---|---|---|
| Specific Gravity | 2.626 | |
| Absorption, % | 1.0 | |
| Oven Dry Loose Unit Weight, pcf | 96.0 | |
| Oven Dry Rodded Unit Weight, pcf | 102.4 | |
| Decantation, % | 0.4 | (Maximum 1.0) |
| Deleterious Materials (%) | 0.00 | (Maximum 0.25) |
| Abrasion (Grading-A) % Loss | 23.0 | (Maximum 40) |
| Crushed Face Count, % by Count | 29.0 | |

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| | |
|---|---|
| REPORT OF: | Sieve Analysis, Specific Gravity, Rodded & Loose Unit Weight, Decantation, Los Angeles Abrasion, and Clay Lumps & Friable Particles |
| TEST METHOD: | ASTM C136, C127, C29, C117, C131, C142, D75 and C702 |
| LAB ID NUMBER: | G-2783 |
| MATERIAL DESCRIPTION: | 1" River Gravel |
| MATERIAL SOURCE: | Plant Stockpile |
| SAMPLED BY: | K. Woodard, NICET II #107418 |
| DATE SAMPLED: | 06-28-10 |
| TEST PERFORMED BY: | D. Potteiger, ACI #01147441; K. Eidenschink |
| RESULTS: | |

| Sieve Size | Percent Passing | ASTM C-33, Grade 57 Specifications |
|---|---|---|
| 1 ½" | 100 | 100 |
| 1" | 96.3 | 95-100 |
| 3/4" | 77.4 | -- |
| 1/2" | 44.1 | 25-60 |
| 3/8" | 23.6 | -- |
| #4 | 4.8 | 0-10 |
| #8 | 1.2 | 0-5 |

| | |
|---|---|
| Specific Gravity | 2.626 |
| Absorption, % | 1.0 |
| Oven Dry Loose Unit Weight, pcf | 96.0 |
| Oven Dry Rodded Unit Weight, pcf | 102.4 |
| Decantation, % | 0.4 |
| Deleterious Materials (%) | 0.00 |
| Abrasion (Grading-A) % Loss | 23.0 |

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**Date:** 07-12-10
**Control No.:** 062814 A



REPORT OF: 5-Cycle Magnesium Soundness of Coarse Aggregate
TEST METHOD: TEX-411-A
LAB NUMBER: G-2783
MATERIAL DESCRIPTION: 1" River Gravel
MATERIAL SOURCE: Plant Stockpile
SAMPLED BY: K. Woodard, NICET II #107418
DATE SAMPLED: 06-04-10
TEST PERFORMED BY: D. Potteiger, ACI #01147441
RESULTS:

MAGNESIUM SULFATE SOUNDNESS TESTS OF COARSE AGGREGATE

| Sieve Size | Grading of Original Sample | Wt. of Fraction Before Test (g) | Wt. of Fraction After Test (g) | %Passing Designated Sieve After Test | Weighted Percentage Loss |
|---|---|---|---|---|---|
| 1/2" to 3/8" | 66%* | 1000.9 | 980.3 | 2.1 | 1.4 |
| 3/8" to #4 | 34%* | 302.1 | 283.2 | 6.3 | 2.1 |
| | | | | | |
| | | | | Total % Loss | 3.5 |
| | | | | % Unsound | 4.0 |

*Normalized Gradation, Used Solution*

1-Above

Report Reviewed by: MHH

Mark Holcomb, C.E.T.