

SIEVE ANALYSIS
ASTM C136

RABA KISTNER
a **kiwa** company
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Firm F-3257

ATTN.: MR. ROBERT E. LATHAM
TO: CEMEX USA
2682 WALD ROAD
NEW BRAUNFELS, TX UNITED STATES 78132

PROJECT NO.: ASD24-729-00
ASSIGNMENT NO.: S25-011161
TECHNICIAN: Kelly McClung
TESTED DATE: 02/20/2025
SHEET NUMBER: 1 of 1
REPORT VERSION: A

PROJECT: (CEMEX) CoMET Services RK Proposal PSD24-085-00

Material Description: Manufactured Sand

Sample Location: CEMEX

Sieve Analysis: Tested By:KM Tested Date:02/21/2025

Original Dry Sample Weight: 755.0 grams

Sieve Size	Individual/Cum. Weight Retained (grams)	Individual % Retained	Cumulative % Retained	% Passing	Specification
3/8	0.0	0	0	100	100 - 100
4	0.0	0	0	100	95 - 100
8	59.4	8	8	92	80 - 100
16	200.1	27	35	65	50 - 85
30	175.8	23	58	42	25 - 60
50	168.8	22	80	20	5 - 30
100	107.3	14	94	6	0 - 10
200	25.3	3	97	3	0 - 3

Finesness Modulus: 2.8 Pan: 18.3 Total: 755.0 * - Indicates noncompliance with specifications.

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AGGREGATE WORKSHEET



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PROJECT: (CEMEX) CoMET Services RK Proposal PSD24-085-00

Material Description: Manufactured Sand

Sample Location: CEMEX

Decantation Method ASTM C 117-17

Dry Sample Weight :	796.2
Washed Sample Weight :	762.7
Loss by Decantation :	33.5
Percent Loss by Weight:	4.2

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02/21/2025

Updated By: KBM 2/21/2025 10:28:41AM

Reviewed By: KBM 2/21/2025 10:29:33AM

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SAND EQUIVALENT, CLAY LUMPS & FRIABLE PARTICLES, ORGANIC IMPURITIES OF AGGREGATES

ATTN: MR. ROBERT E. LATHAM

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PROJECT(CEMEX) CoMET Services RK Proposal PSD24-085-00

Material Description: Manufactured Sand

Sand Equivalent (ASTM D 2419):

Sand Reading	Clay Reading	Sand Equivalent (%)
Test 1	3.9	96
Test 2	3.9	96
Test 3	3.9	96

Average: 96 %

Clay Lumps and Friable Particles (Deleterious Materials (TEX-413-A):

Sieve	Coarse Aggregate	Initial Weight	Washed Weight	% Clay Lumps	% of Original	Weighted Percentage
+1 1/2"						
-1 1/2" +3/4"						
-3/4" +3/8"						
-3/8" +No.4						

Fine Aggregate	
Initial Wt. (No. 16) :	9
Final Wt. (No. 20) :	9
Clay Lumps (%) :	
Coal (%) :	
Lignite (%) :	

Tx DOT Method		Organic Impurities (ASTM C 40)	
Percent Deleterious		Tested By: _____ KM Date Tested: 02/21/2025	
Initial Weight:	A	Organic Plate No.: _____ x - Lighter Than Standard - Lighter Than Standard - Standard - Darker Than Standard - Darker Than Standard - Darker Than Standard	
Wt. of Clay Lumps:	B		
Wt. of Share:	C		
Wt. of Friable Part:	D		
Wt. of Laminated Part:	E		
(B/A) * 100 = _____		Total Deleterious: _____ _____ _____ _____ _____	
(B/A) * 100 = _____			
(B/A) * 100 = _____			
(B/A) * 100 = _____			
(B/A) * 100 = _____			

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Raba Kistner, Inc.
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SHEET NUMBER: 1 of 1
TECHNICIAN: Kelly McClung
REPORT VERSION: A
Sample Location/Source: CEMEX
Tested By: KM Date Tested: 02/21/2025



SPECIFIC GRAVITY AND ABSORPTION OF
COARSE AND FINE AGGREGATES
ASTM C 127/ASTM C 128

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PROJECT NO.: ASD24-729-00
ASSIGNMENT NO.: S25-011161
SAMPLED BY: Kelly McClung
SAMPLED DATE: 02/20/2025
TESTED BY: KM
TESTED DATE: 02/21/2025
SHEET NUMBER: 1 of 1
REPORT VERSION: A

PROJECT: (CEMEX) CoMET Services RK Proposal PSD24-085-00

Material Description: Manufactured Sand

Sample Location: CEMEX

Specific Gravity and Absorption:

Pycnometer Method

Oven Dry Weight : 557.9 grams
Sat. Surf. Dry Weight : 566.8 grams
Weight of Sample,
Pycnometer and Water : 3,290.2 grams
Weight of Calib. and Pycno : 2,940.2 grams

Basket Method

Oven Dry Weight : grams
Sat. Surf. Dry Weight : grams
Wt. of Sample in Water : grams
Temp. of Water (23 +/- 2 °C) : °C

Dry Bulk SP Grav : 2.57
SSD Bulk SP Grav : 2.61
Apparent SP Grav : 2.68
Absorption (%) : 1.6 %
Density (pcf) : 160.2

Dry Bulk SP Grav :
SSD Bulk SP Grav :
Apparent SP Grav :
Absorption (%) :
Density (pcf) :

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UNIT WEIGHT AND PERCENT SOLIDS OF AGGREGATES

ASTM C 29/C 29M



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ASSIGNMENT NO.: S25-011161

SAMPLED BY: Kelly McClung

SAMPLED DATE: 02/20/2025

TESTED BY: KM

TESTED DATE: 02/21/2025

SHEET NUMBER: 1 of 1

REPORT VERSION: A

PROJECT: (CEMEX) CoMET Services RK Proposal PSD24-085-00

Material Description: Manufactured Sand

Sample Location: CEMEX

Unit Weight and Percent Solids:

	Dry Loose	Dry Rodded	SSD Loose	Jigged
Sam Wt. & Tare # 1:	14.20 lbs	15.00 lbs	lbs	lbs
Sam Wt. & Tare # 2:	lbs	lbs	lbs	lbs
Sam Wt. & Tare # 3:	lbs	lbs	lbs	lbs
Avg Sam Wt. & Tr.(A):	14.20 lbs	15.00 lbs	lbs	lbs
Tare Weight (B):	4.43 lbs	4.43 lbs	lbs	lbs
Bucket Factor (C):	10.01 cu.ft	10.01 cu.ft	cu.ft.	cu.ft.
Unit Wt.(D):	97.8 lbs/cu.ft.	105.8 lbs/cu.ft.	lbs/cu.ft.	lbs/cu.ft.

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Reviewed By: KBM 2/21/2025 10:29:33AM

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Resistivity Determination

TxDOT, TEX-129-E (1999)



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PROJECT NO.: ASD24-729-00

DATE: 02/21/2025

TESTED BY: CLIENT

ASSIGNMENT NO.: S25-011180

PREPARED BY: A. Garcia

PREPARED DATE: 02/18/2025

CALCULATED BY: A. Garcia

CALCULATED DATE: 02/18/2025

CHECKED BY: H. Stogsdill

CHECKED DATE: 02/21/2025

SHEET NUMBER: 1 of 1

REPORT VERSION: A

PROJECT: (CEMEX) CoMET Services RK Proposal PSD24-085-00

SAMPLE I.D.:

Material: Cemex Manufactured Sand

Water Added Total (mL)	Multiplier	Dial Reading	Resistance
100	1K	7.7	7,700
150	1K	5.4	5,400
200	1K	3.3	3,300

Mass of Soil (grams): 1,300.0

Soil Box Factor x Minimum Resistance = Resistivity:

$$6.67 \times 3,300 = 22,011 \text{ ohms-cm}$$

Remarks: pH=9.08

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Updated By: HS 2/21/2025 9:09:13AM

Reviewed By: RF 2/21/2025 10:11:37AM

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