02/03/2026

WILDCAT CONCRETE COMPANY

**RE: Mix Design Submittal - WATERMAIN ABONDONMENT**
**NEWELL & ST PAUL**

We propose to furnish the following concrete mix design(s) for the above referenced project:

| Mix | Use | Slump | Air | W/CM | Specified Strength |
|---|---|---|---|---|---|
| KS0509<br>KDOT SLURRY GROUT HS | Slurry Grout | 7 to 9" | 2% Entrapped | 0.62 | 200 psi @ 28 Days |

**When placing orders for this project, please order by product mix code number.**

The above mix(es) have been proportioned in accordance with the requirements of the American Concrete Institute (ACI) sections 318, 301 or 211, applicable practices, project specifications or by customer request.The proposed mix design(s) will meet the project specifications when handled, placed and tested in accordance with current A.S.T.M. and A.C.I. standards and recommended practices.

***In accordance with ASTM C-94, please copy our office with all test results obtained on this concrete by independent testing laboratories.*** These tests will assure our ability monitor the mix performance throughout the project and provide data for future submittals.

Unless instructed differently, we will assume the proposed design(s) are accepted and approved as submitted for the referenced project.

**Notes:**

Respectfully submitted,

**Neal Morris**
Pearson Ready Mix
Mobile (316) 650-8621
**nmorris@pearsonreadymix.com**

*This submittal contains proprietary, confidential, and legally privileged information. Disclosure, copying, and distribution without express written permission are strictly prohibited*

PEARSON READY-MIX

# Concrete Mix Submittal

## Submittal Information

**Submittal Name** WATERMAIN ABONDONMENT Submittal - Wildcat Concrete
**Date Submitted** 02/03/2026
**Customer** WILDCAT CONCRETE COMPANY
**Project Name** WATERMAIN ABONDONMENT

**Use** Slurry Grout

## Mix Information

**Mix ID** KS0509
**Mix Name** KDOT SLURRY GROUT HS
**Compressive Strength (f'c)** 200 psi @ 28 Days

**Aggregate Nominal Size** #4 (4.75mm)
**Air Entrained** ☐

## Mix Properties

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Slump** | 7 to 9" | **Sack Content** | 6.4 | 94 lb/sack | **Total Mass** | 3764 | lb |
| **Air** | 2% Entrapped | **Total Water** | 44.6 | gal | **Total Volume** | 26.93 | ft3 |
| **W/CM Ratio** | 0.62 | **Water/Sack** | 7.0 | gal | **Unit Weight** | 139.8 | lb/ft3 |

| Group | Material Description | Supplier | Absorption | Specific Gravity | Mass lb | Volume ft3 |
|---|---|---|---|---|---|---|
| Cement | Blended Hydraulic Type IL - ASTM C595 1L<br>Ash Grove Cement | Ash Grove Cement | | 3.07 | 360 | 1.879 |
| Additive | Fly Ash - ASTM C618<br>Class C Flyash | EcoMaterials Technologies | | 2.68 | 240 | 1.435 |
| Aggregate | Fine Aggregate - ASTM C33 Sand<br>FA-1 Sand | Cornejo Materials | 0.3 | 2.614 | 2792 | 17.116 |
| Water | Municipal Water - ASTM C1260<br>Water | City Water | | 1 | 372 | 5.962 |
| Air | Air | | | | | 0.539 |

**Contact** Neal Morris
**Phone** (316) 263-3100
**Email** nmorris@pearsonreadymix.com

PEARSON READY-MIX

# Concrete Compressive Strength Report

## Sample Information

| | | | |
|---|---|---|---|
| **Sample No** | 47365101 | **Ticket Number** | 21018631 |
| **Mix ID** | KS0509 | | |
| **Mix Name** | KDOT SLURRY GROUT HS | | |
| **Specification** | | | |
| **Date Batched** | 08/12/2024 13:21 | | |
| **Date Sampled** | 08/12/2024 13:21 | | |
| **Date Cast** | 08/12/2024 13:21 | | |
| **Age** | 0 min | **Sample Type** | Investigative |
| **Sampled By** | Jose A Hernandez | **Sample Method** | Drum Truck Mixer |

## Properties

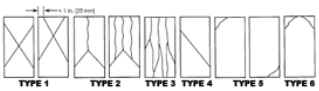
| Test | Result | Unit | Tolerances | Method |
|---|---|---|---|---|
| Air Content | 4.5 | % | | |
| Slump | 7.00 | in | | |
| Temp (Air) | 88.0 | degrees | | |
| Temp (Concrete) | 84.0 | degrees | | |
| Unit Wt (Concrete) | 137.3 | lb/ft3 | | |

## Break Results

| | | | |
|---|---|---|---|
| **Type** | Cylinder | **Method** | |
| **Curing** | Moist Room | **Lab** | |
| **Capping** | Neoprene Pad | **Design Strength** | 200 psi @ 28 Days |
| | | **Curing Temp (Min/Max)** | |

| ID | Test Date | Tested By | Age | Diameter, Height in | Area in2 | Fracture Type | Max Load lbf | Compressive Strength psi | % Design Strength |
|---|---|---|---|---|---|---|---|---|---|
| 24846-1 | 08/19/2024 | | 7 d | 4, 8 | 12.57 | | 37918 | 3017 | |
| Average | 08/19/2024 | Jose A Hernandez | 7 d | | | | 37918 | 3020 | 1510 |
| 24846-2 | 08/26/2024 | | 14 d | 4, 8 | 12.57 | | 55821 | 4441 | |
| Average | 08/26/2024 | Jose A Hernandez | 14 d | | | | 55821 | 4440 | 2220 |
| 24846-3 | 09/09/2024 | | 28 d | 4, 8 | 12.57 | | 60174.6 | 4787 | |
| 24846-4 | 09/09/2024 | | 28 d | 4, 8 | 12.57 | | 59338.9 | 4721 | |
| 24846-5 | 09/09/2024 | | 28 d | 4, 8 | 12.57 | | 58847.1 | 4682 | |
| Average | 09/09/2024 | Jose A Hernandez | 28 d | | | | 59454 | 4730 | 2365 |

**Fracture Types**




**Notes**

Neal Morris / QA Manager

# ASH GROVE CEMENT COMPANY

Chanute Plant
1801 North Santa Fe
Chanute, Kansas 66720
Phone #: (620)-433-3569

Blended Cement Type: IL(11) (MS)

Production Period December 1, 2025 - January 1, 2026 Date: January 9, 2026

ASTM C595/C595M
REQUIREMENTS

**CHEMICAL**

| Item | Spec. Limit | Test Result |
|---|---|---|
| Sulfate as $SO_3$ (%) | 3.0 max[A] | 3.2 |
| Loss on ignition (%) | 10.0 max | 5.2 |
| Equivalent alkali content of portland cement ($Na_2O_{eq}$ %)[E] | [B] | 0.56 |
| Limestone (%) | >5 and ≤15 | 11.2 |
| $CaCO_3$ + $MgCO_3$ in limestone (%) | 70 min | 91.9 |
| Optional information | | |
| Equivalent alkali content of finished cement ($Na_2O_{eq}$ %) | [B] | 0.51 |

**PHYSICAL**

| Item | Spec. Limit | Test Result |
|---|---|---|
| Air content of mortar (volume %) | 12 max | 5.9 |
| Blaine fineness ($m^2/kg$) | [B] | 466 |
| Fineness, No. 325 sieve (% retained) | [B] | 1.8 |
| Density ($g/cm^3$) | [B] | 3.13 |
| Compressive strength (psi) | | |
| 1 day | [B] | 2,702.3 |
| 3 days | 1,890 min | 4,245.0 |
| 7 days | 2,900 min | 5,174.8 |
| 28 days[C] | 3,620 min | 6,754.0 |
| Time of initial setting (Vicat) | | |
| Not less than (minutes) | 45 | 111 |
| Not more than (minutes) | 420 | |
| Heat of hydration, C1702/C1702M, (kJ/kg)[C] | | |
| 3 days | [B] | 320 |
| Mortar bar expansion, C1038/C1038M, (%)[C] | 0.020 max[D] | 0.011 |
| Sulfate resistance, C1012/C1012M, (%)[C] | | |
| Expansion at 180 days | 0.10 max | 0.06 |

[A] Default table maximum may be exceeded if Test Method ASTM C1038/C1038M limit is met.

[B] Not applicable.

[C] Test results for this production period may not be available and most recent test results provided (some data may be for information only).

[D] Required only if percent $SO_3$ exceeds the limit in Table 1.

[E] As per ASTM C1778, Portland Cement is defined as "Clinker + Gypsum" constituents and is to be used for calculating equivalent alkalis in the base cement.

We certify that the above described blended cement, at the time of shipment, meets the chemical and physical requirements of the ASTM C595/C595M Type IL(MS) and AASHTO M240 Blended Hydraulic Cement specifications.

Signature: *Rylee Green* Title: Quality Manager

Name: Rylee Green

ECOMATERIAL TECHNOLOGIES
A CRH COMPANY

**Materials Testing & Research Facility**
2650 Old State Hwy 113
Taylorsville, GA 30178
770-684-0102

# ASTM C618 / AASHTO M295 Testing of Jeffrey Energy Center Coal Ash

**Sample Date:** 11/1-11/31/25 **Report Date:** 1/6/2026

**Sample Type:** Monthly **MTRF ID:** 252400

**Sample ID:** Unit 2

| Chemical Analysis | Results | ASTM Limit Class F / C | AASHTO Limit Class F / C |
|---|---|---|---|
| Silicon Dioxide (SiO2) | 36.04 % | | |
| Aluminum Oxide (Al2O3) | 21.09 % | | |
| Iron Oxide (Fe2O3) | 5.93 % | | |
| Sum (SiO2+Al2O3+Fe2O3) | 63.06 % | 50.0 min | 50.0 min |
| Sulfur Trioxide (SO3) | 1.46 % | 5.0 max | 5.0 max |
| Calcium Oxide (CaO) | 22.87 % | 18.0 max / >18.0 | 18.0 max / >18.0 |
| Magnesium Oxide (MgO) | 5.54 % | | |
| Sodium Oxide (Na2O) | 2.01 % | | |
| Potassium Oxide (K2O) | 0.56 % | | |
| Total Alkali (Sodium Oxide Equivalent) | 2.4 % | | |
| Moisture | 0.12 % | 3.0 max | 3.0 max |
| Loss on Ignition | 0.99 % | 6.0 max | 5.0 max |

| Physical Analysis | | | |
|---|---|---|---|
| Fineness, % retained on 45-µm sieve | 12.92 % | 34 max | 34 max |
| Strength Activity Index - 7 or 28 day requirement | | | |
| 7 day, % of control | 95 % | 75 min | 75 min |
| Water Requirement, % control | 93 % | 105 max | 105 max |
| Density, ASTM C604 | 2.60 g/cm3 | | |

**The test data listed herein was generated by applicable ASTM methods. The reported results pertain only to the sample(s) or lot(s) tested. This report cannot be reproduced without permission from EM Resources LLC.**

**Meeting either 7-day or 28-day strength activity index indicates specification compliance**

Corbin Golyer
Lab Manager

AASHTO ACCREDITED

# Aggregate Summary

GSI Engineering LLC - A UES Company
4503 East 47th St. South
Wichita, KS 67210
Phone: 316-554-0725

**Client:**

Cornejo Materials
3500 N West Street
Wichita, KS 67205

**Project:**

A25125.00045
2025 Aggregate Testing
Multiple
Wichita, KS

## Sample Details

| Sample Number | Sampled Date | Sampled From | Location Details | Material Description |
|---|---|---|---|---|
| 13971 | 01/16/2025 | Stockpile | FA1 - #345 | Sand |

## Organic Impurities in Fine Aggregate

| | |
|---|---|
| **Color:** | Organic Plate 1 |

ASTM C40 - Organic Impurities in Fine Aggregates for Concrete

## Soundness of Fine Aggregate

| | |
|---|---|
| **Solution:** | Sodium Sulfate (previously used) |

| | |
|---|---|
| **Total Weighted Percent Loss:** | 2.2 |

ASTM C88 - Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate

## Lightweight Particles

| | |
|---|---|
| **Heavy Liquid Used:** | Zinc Chloride - 2.00 sp.gr |

| | |
|---|---|
| **Mass of Test Sample (grams):** | 218.78 |

| | |
|---|---|
| **Lightweight Particles (%):** | 1.0 |

ASTM C123 - Lightweight Particles in Aggregate

## Clay Lumps and Friable Particles

| | |
|---|---|
| **Clay Lumps and Friable Particles (%)** | 0.0 |

ASTM C142 - Clay Lumps and Friable Particles in Aggregates

## ASTM C33 Specifications

| | |
|---|---|
| **Organic Impurities:** | 1, 2, or 3 |
| **Sodium Sulfate Soundness Loss:** | 10% Max |
| **Lightweight Particles:** | 1% Max |
| **Clay Lumps and Friable Particles:** | 3% Max |
| **Fineness Modulus:** | 2.3 to 3.1 |

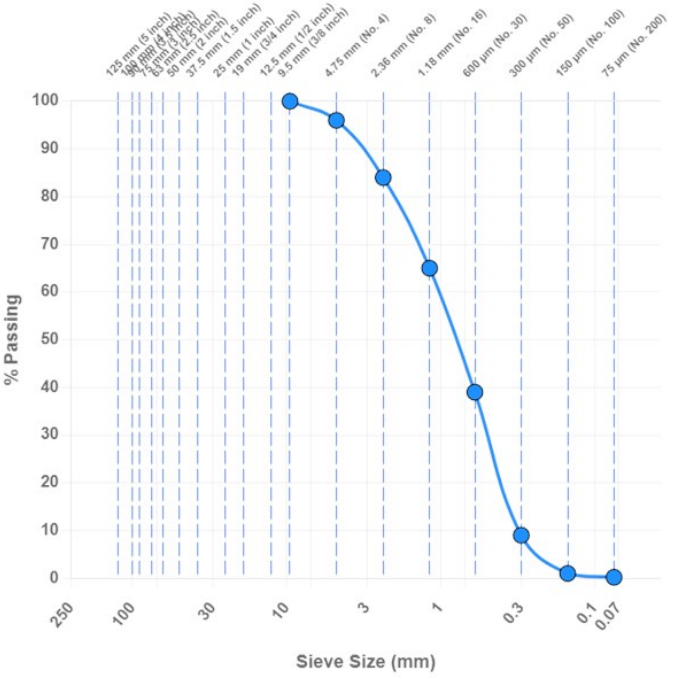
Taylor Boone
CMT Manager

## Sieve Analysis

| Sieve Size | Percent Passing | Range | Result |
|---|---|---|---|
| 9.5 mm (3/8 inch) | 100 | 100 | Pass |
| 4.75 mm (No. 4) | 96 | 95 - 100 | Pass |
| 2.36 mm (No. 8) | 84 | 80 - 100 | Pass |
| 1.18 mm (No. 16) | 65 | 50 - 85 | Pass |
| 600 µm (No. 30) | 39 | 25 - 60 | Pass |
| 300 µm (No. 50) | 9 | 5 - 30 | Pass |
| 150 µm (No. 100) | 1 | 0 - 10 | Pass |
| 75 µm (No. 200) | 0.2 | 0 - 3 | Pass |

| | |
|---|---|
| **Fineness Modulus:** | 3.10 |

ASTM C136 - Sieve Analysis of Fine and Coarse Aggregates



**SAFETY DATA SHEET**

Date Prepared: 04/01/2024

**READY MIX CONCRETE**

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity
Product Name: READY MIX CONCRETE
General or Generic ID: READY MIX CONCRETE

Company
Pearson Ready Mix
2901 N Mead
Wichita, KS, 67219

Emergency Telephone Number:
(316) 263-3100

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## 2. COMPOSITION/INFORMATION OR INGREDIENTS

| Ingredient(s) | CAS Number | % (by weight) |
|---|---|---|
| CALCIUM CARBONATE | 1317-65-3 | 40.0-50.0 |
| PORTLAND CEMENT (INDISC) | 65997-15-1 | 20.0-30.0 |
| QUARTZ | 14808-60-7 | 10.0-20.0 |

---

## 3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye
Can cause permanent eye injury. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure cornea and cause blindness.

Skin
Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects). Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing
This material is not likely to be swallowed. However, if swallowed, exposure causes severe irritation of the gastrointestinal tract.

Inhalation
Sawing or grinding hardened concrete may result in dust particles which may cause slight irritation of the eyes or of the nose, throat and airways. Prolonged or repeated breathing of concrete dust may result in progressive and permanent lung disease (silicosis) which may cause death from respiratory and/ or heart failure. Symptoms include coughing and difficult breathing which becomes worse with physical activity.

Symptoms of Exposure
Signs and symptoms of exposure 1D this material through breathing, swallowing, and/ or passage of the material through the skin may include: irritation (nose, throat, airways).

Target Organ Effects
No data

Developmental Information
There are no data available for assessing risk to the fetus from maternal exposure to this material.

Cancer Information
The International Agency for Research on Cancer (IARC) and the National Toxicology Program have determined that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or crystalline. In addition, IARC has determined that there is sufficient evidence for the carcinogenicity of quartz and crystalline in experimental animals. Among individuals with silicosis, lung cancer occurs more frequently in those who smoke.

Other Health Effects
No data

Primary Route(s) of Entry
Inhalation, Skin contact, Eye contact.

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## 4. FIRST AID MEASURES

Eyes
If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of dust exposure, immediately

move individual away from exposure before flushing eyes as recommended above. Seek immediate medical attention.

Skin
Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse.

Swallowing
Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave the individual unattended.

Inhalation
If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians
Preexisting disorders of the following organs *(or* organ systems) may be aggravated by exposure to this material: respiratory tract skin, lung (for example, asthma-like conditions).

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**5. FIRE FIGHTING MEASURES**

Flash Point
Not applicable

Explosive Limit
No data

Auto ignition Temperature
No data

Hazardous Products of Combustion
No data

Fire and Explosion Hazards
No data

Extinguishing Media
No data

Fire Fighting Instructions
No data

NFPA Rating
Not determined

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**6. ACCIDENTAL RELEASES**

Small Spill
Ready mix concrete will harden in 2 to 8 hours. Scoop or scrape up spill while still wet. Water can be used to dilute. Put in container for recovery or disposal.

Large Spill
Notify the proper authorities as required that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

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**7. HANDLING AND STORAGE**

Handling
Avoid creating dust.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Eye Protection
If conditions are dusty or if splashing could occur, wear safety glasses in compliance with OSHA regulations. (Consult your safety representative.)

Skin Protection
Wear clothing to protect skin from cement and cement mixtures, such as gloves, overalls with long sleeves and full-length trousers, and water-proof boots. Clothing should be worn so as to avoid traps for fresh mortar or concrete to fall into, that is, wear clothing with sleeves over the gloves and trouser legs over the boots – NOT tucked inside.

Respiratory Protections
Not required under normal conditions of use. A NIOSH approved particulate filter respirator is recommended if excess dust is generated. Work in a way which minimizes the amount of dust produced.

Engineering Controls
Not required under normal conditions of use.

Exposure Guidelines
Component

CALCIUM CARBONATE (1317-65-3)
OSHA PEL 5.000 mg/tu3 - TWA respirable fraction
OSHA PEL 15.000 mg/m3 - TWA total dust
OSHA VPEL 5.000 mg/tu3 - TWA respirable fraction
OSHA VPEL 15.000 mg/tu3 - TWA total dust
ACGIH TLV 10.000 mg/m3 - TWA
PORTLAND CEMENT (INDISC) (65997-15-1)
OSHA PEL 5.000 mg/tu3 - TWA respirable fraction
OSHA PEL 15.000 mg/tu3 - TWA total dust
OSHA VPEL 5.000 mg/tu3 - TWA respirable fraction
OSHA VPEL 10.000 mg/tu3 - TWA total dust
ACGIH TLV 10.000 mg/tu3 - TWA
QUARTZ (14808.60-7)
OSHA VPEL 0.100 mg/tu3 - TWA respirable dust
ACGIH TLV 0.050 mg/tu3 – TWA

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point
No data

Vapor Pressure
Not applicable

Specific Vapor Density
Not applicable

Specific Gravity
> 1.000 @ 77.00 F

Liquid Density
No data

Percent Volatiles
No data

Evaporation Rate
No data

Appearance
GRANULAR MUD

State
COMPOSITE SOLID (SOLID/SEMI-SOLID)

Physical Form
SLURRY

Color
GREY

Odor
NONE

pH
No data

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**10. STABILITY AND REACTIVITY**

Hazardous Polymerization
No data

Hazardous Decomposition
No data

Chemical Stability
Stable.

Incompatibility
No data

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**11. TOXOCOLOGICAL INFORMATION**

No Data

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**12. ECOLOGICAL INFORMATION**

No Data

## 13. Disposal Consideration

Waste Management Information
Dispose of in accordance with all applicable local, state and federal regulations.

## 14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101
DOT Description:
NON-REGULATED BY D.O.T.

RQ (Reportable Quantity) - 49 CFR 172.\01
Not applicable

## 15. REGULATORY INFORMATION

US Federal Regulations
CERCLA RQ - 40 CFR 302.4(a)
None listed

SARA 302 Components - 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class - 40 CFR 370.2
Immediate(X) Delayed(X) Fire () Reactive () Sudden Release of Pressure ( )

SARA 3 \3 Components - 40 CFR 372.65
None

OSHA Process Safety Management 29 CFR 19\0
None listed

EPA Accidental Release Prevention 40 CFR 68
None listed

International Regulations
Inventory Status
Not determined

## 16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Last page