KCPC MATERIALS LAB
15100 E. Courtney Atherton Rd. Sugar Creek, MO 64054

FLY ASH SOURCE: Lacygne 1
COMPOSITE DATE: 27-Jun to 27-Jun-17
SAMPLE IDENTIFICATION: LA1170627-0627

				SPECIFICATIONS ASTM C 618 CLASS C	SPECIFICATIONS AASHTO M 295 CLASS C
CHEMICAL ANALYSIS					
SiO_2 (silicon dioxide), %	=	31.99			
Al_2O_3 (aluminum oxide), %	=	17.01			
Fe_2O_3 (iron oxide), %	=	10.33			
$SiO_2+Al_2O_3+Fe_2O_3$, %	=	59.3		50 Min	50 Min
CaO (calcium oxide), %	=	22.63			
MgO (magnesium oxide), %	=	4.55			
SO_3 (sulfur trioxide), %	=	2.55		5.0 Max	5.0 Max
Moisture content, %	=	0.22		3.0 Max	3.0 Max
Loss On Ignition, %	=	2.18		6.0 Max	5.0 Max
Na_2O (sodium oxide), %	=	1.95			
K_2O (potassium oxide), %	=	1.12			
PHYSICAL ANALYSIS					
Fineness, amount retained on #325 sieve, %	=	8.3		34 Max	34 Max
Density, Mg/m^3	=				
Strength Activity Index with Portland Cement at 7 days, % of cement control Cement: Central Plains Cement Sugar Creek Type I/II	=	0	XXXXXX	75 Min	75 Min
Water Requirement % of cement control	=		XXXXXX	105 Max	105 Max
Soundness, autoclave expansion or contraction, %	=	NA	XXXXXX	0.8 Max	0.8 Max

We hereby certify that the fly ash represented by the above chemical and physical analysis was tested in accordance with ASTM C618.

Prelimiary Data Only

6/27/2017
Report Date

Laboratory Manager
KCPC Materials Lab

ASTM C 618 Note 1 - Finely divided materials may tend to reduce the entrained air content of concrete. Hence, if a mineral admixture is added to any concrete for which entrainment of air is specified, provision should be made to ensure that the specified air content is maintained by air content tests and by use of additional air-entraining admixture or use of an air-entraining admixture in combination with air-entraining hydraulic cement.