

Chemical and Physical Analysis of Natural Pozzolan

Developed For: *Geo Fortis Pozzolans*
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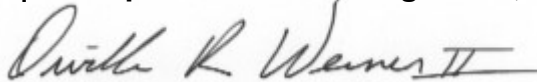
CTL Ticket: 19184 CTL Project: 16530 Report Date: 11/29/2019	Source: <i>Faust, Utah</i> Sample ID: <i>Faust, Pozz Oct</i> Docket: <i>Oct 2019 -</i>	Sample Date Range: to: Date Received: 09/19/2019
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<u>Chemical Composition (%)</u> <small>(by Wyoming Analytical Laboratories, Inc.)</small>		ASTM C618-19 <u>Class N</u>
Total Silica, Aluminum, Iron:	86.1	70.0 Min
Silicon Dioxide:	72.5	
Aluminum Oxide:	11.4	
Iron Oxide:	2.3	
Sulfur Trioxide:	0.1	4.0 Max
Calcium Oxide:	0.7	
Moisture Content:	0.3	3.0 Max
Loss on Ignition:	4.3	10.0 Max
		AASHTO M295-11 Specifications
Available Alkalies (as Na ₂ O):	0.8	1.5 Max
Sodium Oxide:	0.40	
Potassium Oxide:	0.67	

<u>Physical Test Results</u>		ASTM C618-19 <u>Class N</u>
Fineness, Retained on #325 Sieve (%):	2.8	34 Max
Strength Activity Index (%)		
Ratio to Control @ 7 Days:	95.3	
Ratio to Control @ 28 Days:	105.8	75 Min
Water Requirement, % of Control:	99.6	115 Max
Soundness, Autoclave Expansion (%):	-0.01	0.8 Max
Drying Shrinkage, Increase @ 28 Days (%):	0.02	0.03 Max
Density Mg/m ³ :	2.38	

Comments: *Meets ASTM C618-19 Class N and AASHTO M295-11 (15) Spec.*

CTL | Thompson Materials Engineers, Inc.



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