



Resource Materials Testing, Inc.

"Specialists in Fly Ash Testing"

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REPORT OF NATURAL POZZOLAN ANALYSIS

PROJECT NO.: RMT-453
SAMPLE NO.: 15186
DATE RECEIVED: 7-14-06
DATE REPORTED: 9-27-06

PROJECT NAME: Pozzolan Evaluation
SAMPLE ID: Raw Lassenite Material

CHEMICAL ANALYSIS:	RESULTS:	ASTM C-618 - SPEC Nat Pozz
Silicon Dioxide, SiO ₂ , %	70.92	----
Aluminum Oxide, Al ₂ O ₃ , %	16.63	----
Iron Oxide, Fe ₂ O ₃ , %	4.85	----
Sum of SiO ₂ , Al ₂ O ₃ & Fe ₂ O ₃ , %	92.40	70/50 Min
Calcium Oxide, CaO, %	2.84	----
Magnesium Oxide, MgO, %	0.66	----
Sodium Oxide, Na ₂ O, %	2.03	----
Potassium Oxide, K ₂ O, %	1.73	----
Sulfur Trioxide, SO ₃ , %	0.34	4.0 Max
Moisture Content, %	9.39	3.0 Max
Loss on Ignition, %	4.62	10.0 Max

PHYSICAL ANALYSIS:	RESULTS:	ASTM C-618 - SPEC Nat Pozz
Amount Retained on No. 325 Sieve, %	32.9	34 Max
Sieve Uniformity, % Points from Ave	----	5 Max
Strength Activity Index		
Portland Cement @ 7 days, % of Control		
Portland Cement @ 28 days, % of Control	82	75 Min
Water Requirement, % of Control	106	115 Max
Autoclave Expansion, %	-0.01	0.8 Max
Density	2.28	
Density Uniformity, % from Ave	----	5 Max
Increase of Drying Shrinkage, %*	----	0.03 Max
Reactivity with Cement Alkalis, %*		
Reduction of Mortar Expansion, %	----	----
Mortar Expansion, % of LA Cement Control	0.6	100 Max
Air Entrainment of Mortar, %	----	----
Uniformity*	----	20
Multiple Factor*	----	255 Max

*Optional Requirements applicable only when requested by purchaser. **This material meets the requirements of ASTM C 618 for natural pozzolans.**

By Robert L. Smith
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