

# GENERAL TESTING LABORATORIES

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Paul Fendley  
Active Minerals International LLC  
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Dear Paul,

Your concrete additive Acti-Gel 208 has once again improved a process that is normally a slow, tedious casting using low slump and high vibration. Through the years casting of curb and gutter has been a challenge in maintaining a choreograph between laydown machines and the ready mixed concrete truck supplying product to the jobsite. Very low slumps in the range of  $\frac{1}{2}$ " to 1" were required to slip form product that will keep its shape and offer a limited workability of the surface. The low slump often resulted in areas of void along the sides of the laydown and offered very little in the way of workability. Acti-Gel 208 has changed that scenario.

On June 29, 2015 rectangular curbing was to be cast but this time with a difference. Previous casting was done using a 6.5 sack 30% Size 57 limestone and 70% Nebraska size 47B Sand/Gravel gradation. The slump was limited to  $\frac{1}{2}$ " to  $\frac{3}{4}$ " to maintain stability of the sides however this resulted in a very difficult casting as machine speeds were very slow and the stiff concrete was difficult to discharge from the truck. Unloading time was from 45 minutes to 1 hour for 9 yards of concrete. Due to nervousness about using higher slumps the first load using Acti-Gel 208 was slump tested at  $\frac{3}{4}$ " and the placement began. The dosage rate of Acti-Gel 208 added to the normal load weights was 2.67 lbs. (0.075%). The load was off after 45 minutes and the crew commented on the better side and top finish with no voids and easier finishing. A second load at 1- $\frac{1}{4}$ " slump began pouring and the unload time was 30 minutes with a laydown speed of about 8 feet per minute. The third load was similar to the second with a 1- $\frac{1}{2}$ " slump and a laydown time of 25 minutes. The fourth and final load arrived with a higher slump and that was adjusted on site to a slump of nearly 3". The overall laydown speed increased to 14 feet per minute and the load was off in 17 minutes while still maintaining forming shape integrity.

Overall I think the Acti-Gel 208 has a very positive influence on high vibration extruded concrete. Time was saved, finishing was easier, and the customer was happy. What more can you ask of a product? I continue to look for more ways to use this dynamic admixture.

Sincerely,



Rod Leber  
Laboratory Manager