3.1 Inadequate Air Content

May identify additional perspective on this

issue as RCA related efforts proceeds

Description: Excessive amount of uncontrolled air contained within the concrete as a result of mixing/placing operations could cause voids. These voids of variable size and shape create weakness in the matrix. Excessive volume of air voids (entrained and entrapped) can weaken the concrete, provide an initiation zone for cracks, and increases potential for shrinkage/creep.

Data to be Collected and Analyzed:

- (1) Petrographic analysis (Exhibits 1 & 2)
- (2) Review pour tickets for measured air during construction (Exhibit 3). Exhibit 4 is a graph of the data from those pours.

Verified Refuting Evidence:

Preliminary

- 1. Amount of entrained air is within acceptable range according to Petrographic analysis.
- 2. Pour ticket review shows the air entrained admixture (DAREX) was used in all concrete pours in accordance with the design specifications.
- 3. Analysis of measured air confirmed that air content was within specifications.

Reviewed by: Dr. Avi Mor, 352-795-6486 , ext 1030 – PII CR3 Team Office Verified Supporting Evidence:



11/23/2009

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