

JED FUHRMAN SUMMARY OF 8-04-05 VIRUS/DNA TESTING

Bottom Line: All Bacteroides (human-specific fecal bacteria) tests were negative. Note that after we ran all the samples, we ran a second test with added fecal bacterial DNA (to each) to be sure that there was not something in the samples that prevented us from detecting them. Most worked at full efficiency, but a faint signal in three told us that the sensitivity was reduced in the Hammonds, Haley Drain, and Mission Creek samples due to inhibitors, meaning that the threshold for a positive was probably increased in those three samples. Therefore it is possible that one or more of those samples might have had a level of contamination above our usual detectability limit, but masked by the interference with the test.

The human enterovirus samples were negative with the clear exception of Haley Drain (both duplicates were positive). There were also single positive hits at West Beach and Hope Ranch Beach, but as they were not repeated in the replicates, they are uncertain. We find that repeat samples from such uncertain locations can go either way.

Overall, then, we saw some evidence for human fecal contamination at Haley Drain, and did not find conclusive evidence at other locations tested.

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