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To: Case #967-5225 and 967-4924

From: B.J. Khreiss
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Subject: Detailed discussion of sample handling problem

Two cases, 967-5225 and 967-4924, were extracted on the same day. Both cases had an Item 3 which was differentially extracted for RFLP DNA. Item 3 in case 967-5225 had a marginal amount of spermatozoa in the microscopic examination, so two tubes of this item were extracted initially. This resulted in two tubes of male fraction of Item 3 from 967-5225 and one tube of male fraction of Item 3 from 967-4924. The sample mix-up between the Item 3s of the two cases probably occurred when the supernatants were removed after phenol-chloroform extraction. The two tubes for the male fractions of case number 967-5225, which was, in reality, one tube from 967-5225 and one from 967-4924, were combined before the yield gel was run. Since the Item 3 from 967-4924 (in reality, Item 3 of 967-5225) did not show much DNA in the yield gel, it was re-extracted. The new male fraction from 967-4924 Item 3 was combined with the male fraction from the first extraction (in reality Item 3 of 967-5225). The two cases were run separately after the yield gel stage. When the first probe was taken off on case 967-5225, a mixture was noted in Item 3. It was not recognized that a sample mix-up had occurred until the second case, 967-4924, was run and the first probe showed a mixture with the male fraction of 967-5225. At this time, both cases were re-extracted and run separately. A portion of the new extraction of Item 3 from 967-5225 was given to PCR for analysis. Neither case had a mixture in Item 3 when rerun.

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