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AUDIO EVIDENCE LAB

Forensic Audio/Video Analysis
201 Cordoba Court
Arlington, Texas 76014



Barry G. Dickey, DABRE

To: Johnathan M. Tiongco
Digital Sound Productions
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Fairview, Quezon City
Philippines Zip 1100

Date of Report: 08/02/2005

RE: Forensic Analysis – Audio Recordings

Expert Report

I am Barry G. Dickey, an expert retained by Digital Sound Productions in the above captioned action. In my capacity as a forensic expert, I have analyzed specific audio recordings identified in this report. I am submitting this report on behalf of Digital Sound Productions as a summary of the opinions, which are based on my examination. I reserve the right to modify, amend, and/or supplement this report in the future.

Qualifications:

My field of specialty is the forensic evaluation and authentication of analog and digital media. I have been certified as an expert in forensic audio, forensic video, and voice identification by The New York Institute of Forensic Audio and am designated as a Diplomat of the American Board of Recorded Evidence. I am a member of the American College of Forensic Examiners and the Audio Engineering Society. Since 1993, I have consulted as a forensic expert in over 1000 civil or criminal matters. Attached as Exhibit "A" is further information concerning my qualifications, including a partial list of cases in which I have provided expert reports, trial and/or deposition testimony during the past four years.

Compensation:

None of my compensation is contingent in anyway upon the outcome of this matter or upon the opinions or positions I adopt or express. Further, to the best of my knowledge, I do not, nor have I ever, known or had any prior knowledge of or relationship with any individual related hereto.

Respectfully yours,


Barry G. Dickey, DABRE
Certified Forensic Analyst

Between 7/30/2005 and 8/2/2005, I consulted with Johnathan M. Tiongco of Digital Sound Productions and subsequently conducted an authenticity analysis utilizing QA-1. QA-1 was provided by Digital Sound Productions. The established standards and protocols for authenticity examination as approved by ABRE were utilized where applicable. The results of my examination are set forth below.

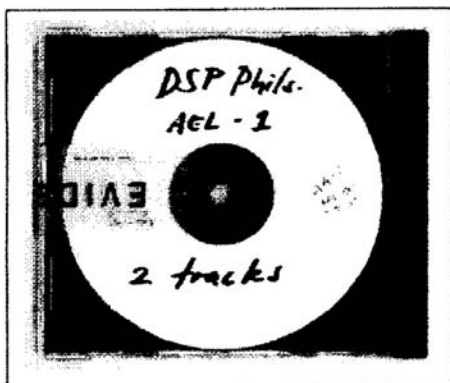
Exhibits Examined:

QA-1: BNG 700 MB CD-R containing (2) two audio recordings. Markings include: "DSP Phils", "AEL-1", "2 tracks", and AEL verification.

Documents Reviewed:

Waveform prints provided by Johnathan M. Tiongco of Digital Sound Productions were reviewed for this examination.

QA-1: CD-R - Track 1 & 2



Procedures:

Physical inspection of the disc was performed to verify that the integrity of the media had not been compromised during delivery. No evidence of damage was verified. The evidentiary recording was transferred to specialized programs for analysis.

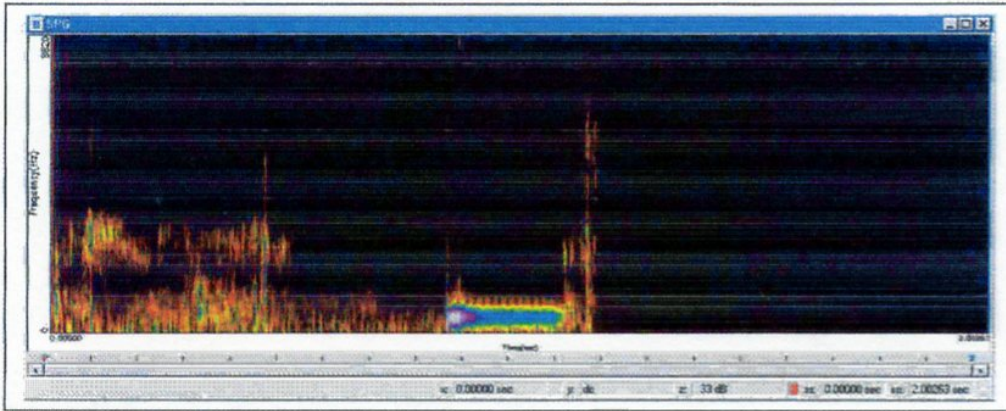
Critical listening, the use of human analytical capabilities to locate anomalies, was performed in order to identify variations requiring further investigation. The examination of the duplicated recording required an extensive audit of the foreground and background information, concentrated on voices and other sounds inconsistent with original recordings.

Utilizing waveform and spectrographic analysis, several anomalies associated with QA-1 were verified. The activation of the recording device creates a signature on original recordings that is very distinctive and comparable to other start signatures created by the same device. The absence of start signatures on both tracks of QA-1 is inconsistent with original recordings. Comparative analysis of the stop signature sequence associated with each track lacked consistency. Additionally, the voice at the front of the recording refers to participants in a manner that suggests knowledge of the following conversation prior to its actual disclosure of participants.

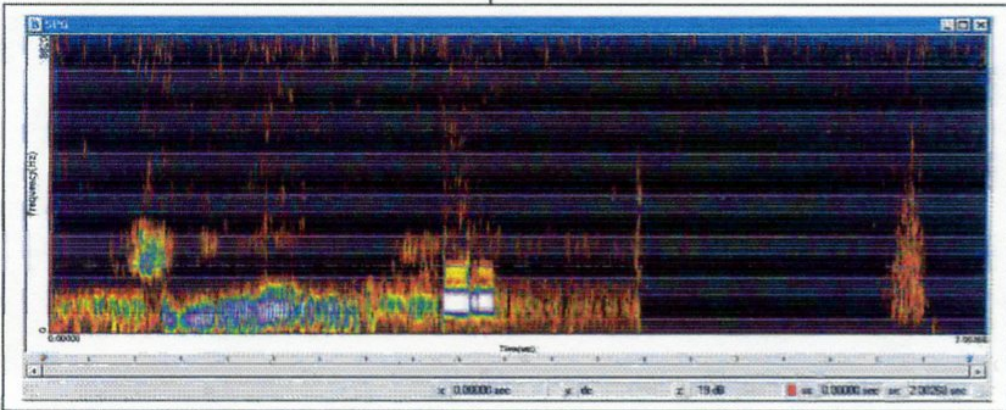
Examination of waveform and spectrographic data associated with 00:00:29.00 - 00:00:36.00 requires further investigation to render conclusive results. Exemplars associated with the original recording device are necessary in order to validate these inconsistencies. Comparative analysis of verifiable exemplars would disclose variations to positively identify additional anomalies associated with editing. Although positive identification of these specific inconsistencies is not possible without exemplars, the area associated with 00:00:29.00 - 00:00:36.00 is questionable, due to the sudden change in male voice/verbal pattern and surrounding events. Variation in fundamental frequency associated with the male speech contained in 00:00:33:00 - 00:00:35:000 is not consistent with the rest of the recording.

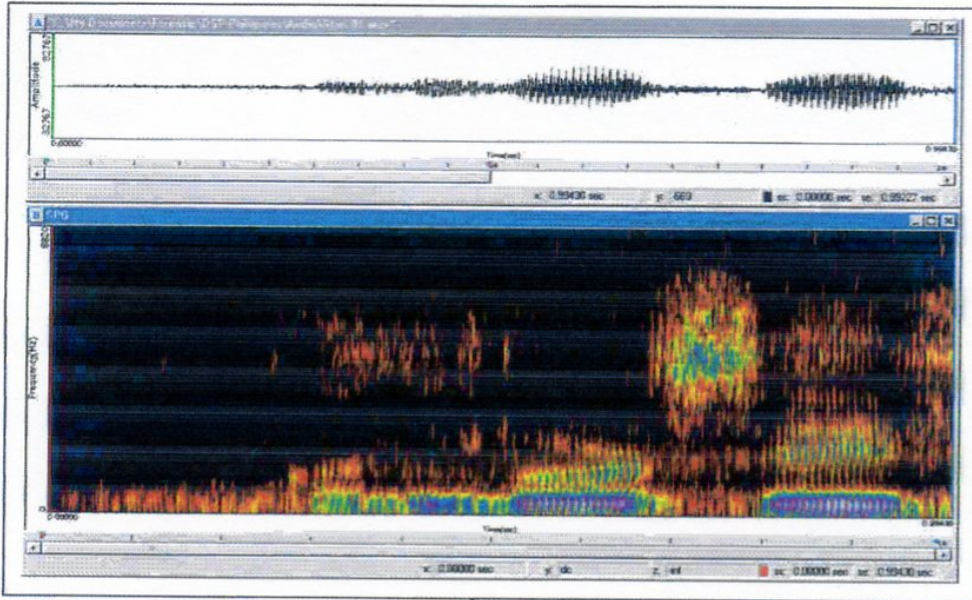
Conclusion:

It is my opinion, based on the examination of the copy provided, that several anomalies exist which question the integrity of QA-1. The results suggest that the audio is the resultant of several transfers, which involved the audio being recorded/encoded/decoded by different devices. With the exception of the variation of fundamental frequency referenced as 00:00:33:00 – 00:00:35:00, several anomalies associated with the time domain of 00:00:29.00 – 00:00:36.00 require further analysis of comparative exemplars created by the original recording.

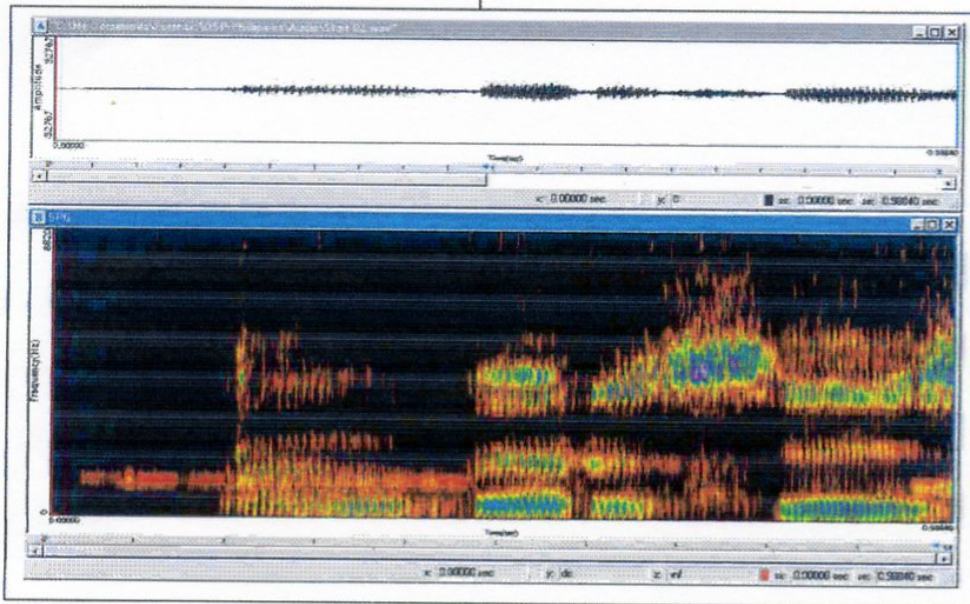


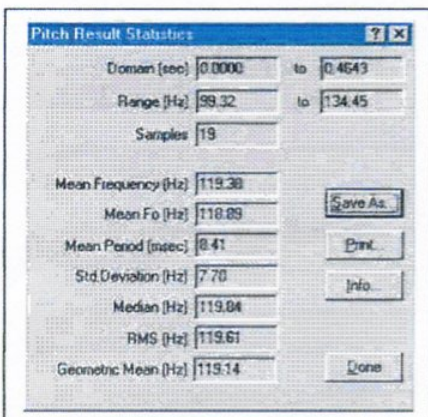
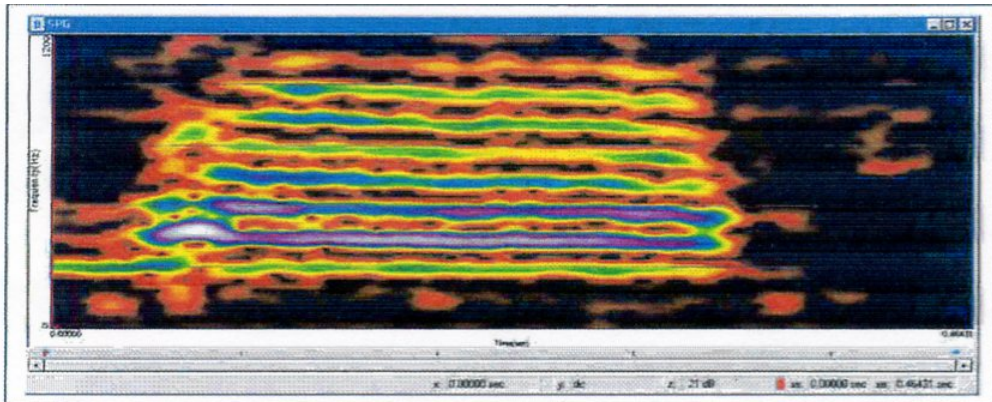
Comparative analysis of spectrographic data associated with the inconsistent sequence of stop signatures referenced with Track 1 above and Track 2 below





Comparative analysis of waveform and spectrographic data associated with the absence of start signatures referenced with Track 1 above and Track 2 below

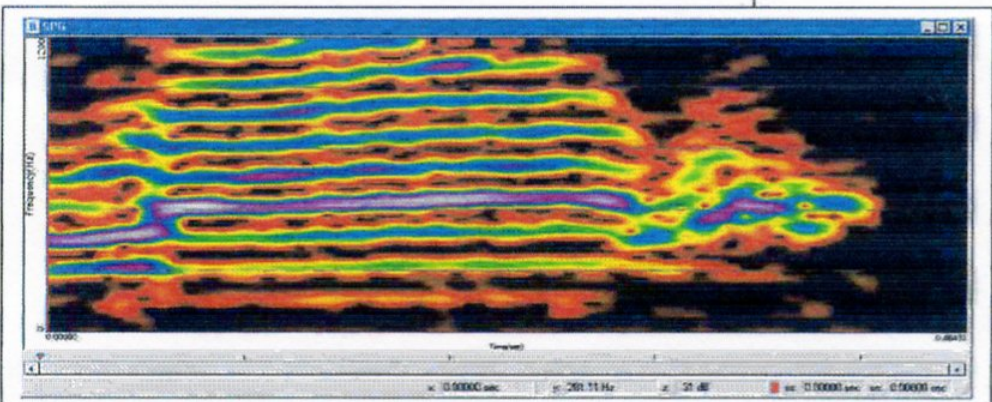
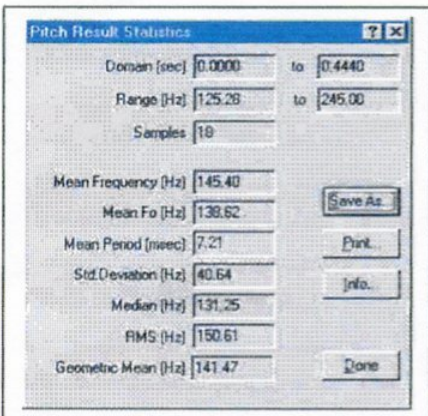




Spectrographic analysis and pitch statistical results associated with the sudden change of verbal pattern in Track 1.

The common voice is represented above and the sudden change represented below.

Limitations associated with the dialect prevented further evaluation of this area.



Remarks: All evidence and materials made available for the purpose of this report have been returned to Johnathan M. Tiongco of Digital Sound Productions. If additional consultation is required, please contact our offices for appropriate arrangements.