

1 Dean A. Dickie (*Pro Hac Vice application pending*)
 dickie@millercanfield.com
 2 MILLER, CANFIELD, PADDOCK AND STONE, P.L.C.
 225 West Washington Street, Suite 2600
 3 Chicago, Illinois 60606
 Telephone: 312.460.4217
 4 Facsimile: 312.460.4288

5 Ira Gould (*Pro Hac Vice to be filed*)
 gould@igouldlaw.com
 6 Ryan L. Greely (*Pro Hac Vice to be filed*)
 rgreely@igouldlaw.com
 7 GOULD LAW GROUP
 120 North LaSalle Street, Suite 2750
 8 Chicago, IL 60602
 Telephone: 312.781-0680
 9 Facsimile: 312.726.1328

10 George L. Hampton IV (State Bar No. 144433)
 ghampton@hamptonholley.com
 11 Colin C. Holley (State Bar No. 191999)
 cholley@hamptonholley.com
 12 HAMPTONHOLLEY LLP
 2101 East Coast Highway, Suite 260
 13 Corona del Mar, California 92625
 Telephone: 949.718.4550
 14 Facsimile: 949.718.4580

15 Attorneys for Plaintiff
 BRYAN PRINGLE

17 **UNITED STATES DISTRICT COURT**
 18 **CENTRAL DISTRICT OF CALIFORNIA**
 19 **SOUTHERN DIVISION**

20 BRYAN PRINGLE, an individual,
 21 Plaintiff,

22 v.

23 WILLIAM ADAMS, JR.; STACY
 24 FERGUSON; ALLAN PINEDA; and
 JAIME GOMEZ, all individually and
 25 collectively as the music group The Black
 Eyed Peas; DAVID GUETTA;
 26 FREDERICK RIESTERER; UMG
 RECORDINGS, INC.; INTERSCOPE
 27 RECORDS; EMI APRIL MUSIC, INC.;
 HEADPHONE JUNKIE PUBLISHING,
 28 LLC; WILLIAM MUSIC, LLC;

Case No. SACV10-1656 JST (RZx)

**DECLARATION OF
 MARK RUBEL IN SUPPORT
 OF PLAINTIFF'S EX PARTE
 APPLICATION FOR
 TEMPORARY RESTRAINING
 ORDER AND ORDER TO
 SHOW CAUSE RE
 PRELIMINARY INJUNCTION**

1 JEEPNEY MUSIC, INC.; TAB
2 MAGNETIC PUBLISHING; CHERRY
3 RIVER MUSIC COL.; SQUARE
4 RIVOLI PUBLISHING; RISTER
EDITIONS; and SHAPIRO,
BERNSTEIN & CO.,

5 Defendants.

6
7 **DECLARATION OF MARK RUBEL**

8 I, Mark Rubel, have personal knowledge of the facts contained within this
9 declaration, and if called as a witness, could and would testify regarding the following
10 facts:

11 1. I am a college instructor and audio director, musician, consultant, record
12 producer and engineer, studio owner and writer. Since 1980 I have engineered and/or
13 produced many recordings, live sound for concerts and television shows and more, at my
14 own Pogo Studio in Champaign Illinois, elsewhere in the US and abroad including New
15 York, California, and Alaska. I have worked on hundreds of recording projects, including
16 with such well-known artists as Rascal Flatts, Alison Krauss, Fall Out Boy, Luther
17 Allison, Melanie, Vernon Reid, Taj Mahal, Daniel Lanois, Andy Summers of the Police,
18 Los Lobos, Jay Bennett, Keb' Mo', Adrian Belew, Henry Butler, and done recording work
19 for RCA Records, BMG/Catalyst, Capitol, Warner/Reprise, BBC America, the
20 Smithsonian Institution, Jive/Zomba Records, and many others. Since 1985 I have taught
21 Audio Technology, Music Business and other subjects to thousands of college students,
22 many of whom are now audio and music business professionals in their own right. I am a
23 full-time member of the Eastern Illinois University Music Department Faculty
24 (Charleston, IL), where I teach Music Technology and Music History, and have
25 independent study students in Audio Technology and Music Business at both graduate and
26 undergraduate levels. I am also the Audio and Recording Director at EIU's new \$52
27 million, 234,000 sq. ft. Doudna Fine Arts Center, responsible for training and the
28

1 supervision of audio services, laboratories, and studios. Additionally I teach Introduction
2 to Recording and Intermediate Recording classes at my studio through Parkland
3 Community College, Champaign Illinois, currently for the seventy-third semester.

4 2. I was retained by the Gould Law Group as a professional forensic sound
5 engineer to analyze the sound recordings for derivative version of Bryan Pringle's song,
6 "Take a Dive," and the Black Eyed Peas' song, "I Gotta Feeling" and determine whether
7 the Black Eyed Peas contain the sample that is referred to in the Complaint as the "guitar
8 twang sequence"; in other words, whether or not the Black Eyed Peas used the "guitar
9 twang sequence" contained in Pringle's sound recording and directly inserted it into the
10 sound recording of "I Gotta Feeling."

11 3. After listening to and analyzing each song closely, it is my professional
12 opinion that the Black Eyed Peas sampled the guitar twang sequence that is in the
13 derivative version of "Take a Dive" when they recorded "I Gotta Feeling."

14 4. I was provided with three Mp3s to conduct my test, which were identified to
15 me as follows:

- 16 a. Bryan Pringle – The derivative version of "Take a Dive"
- 17 b. Bryan Pringle – The "guitar twang" sequence
- 18 c. Black Eyed Peas – "I Gotta Feeling"

19 The second Mp3 is simply the "guitar twang sequence" soloed out from "Take a Dive,"
20 with no other instrumentation or vocals. Having the isolated guitar twang sequence from
21 "Take a Dive" allows me to better compare the guitar twang sequence contained in "I
22 Gotta Feeling" without the interference of other sonic elements.

23 5. I performed two major tests: listening and computer waveform analysis.
24 These are, in my opinion, the most reliable tests for determining of samples.

25 6. Careful listening is an important test. It is essential not to underestimate the
26 innate power that human beings have to extract patterns from information of many kinds,
27 including sound. A careful listen can reveal the subtleties and earmarks that can confirm
28

1 the similarities, differences, and provenance of a sound, in a way that no current
2 computing device can.

3 7. Waveform analysis is also an important tool. This means a comparison of
4 the shapes of two different sound waves, to determine whether they share a common
5 source. If the waveforms are identical or very close, that will show that sampling has
6 taken place as opposed to a new and similar-sounding recording. The shape of the waves
7 is a kind of sonic fingerprint- if one sings the same note numerous times, close analysis of
8 the waveforms will show that they are different. In most cases involving sampling, the
9 encoded waves get altered enough in the recording process that they are not completely
10 identical wave for wave. However expert analysis can reveal similarities that, as in this
11 case, could not have been achieved in any way other than that they stem from the same
12 electronic source.

13 8. To begin with, my hearing, upon which I and my clients rely, tells me that
14 the "Guitar Twang Sequence" appears identically in both "Take A Dive" and "I Gotta
15 Feeling." Many listening experiments as detailed in my complete report, coupled with
16 waveform analysis, reinforce this conclusion.

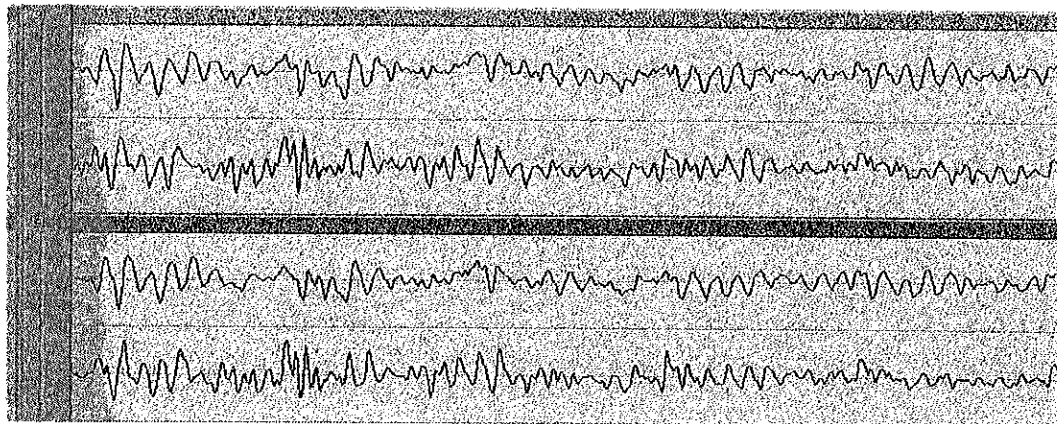
17 9. For the waveform analysis, I took the 8-measure long "Guitar Twang
18 Sequence," and lined it up with the introduction of "I Gotta Feeling"- that is where the
19 sample for the guitar twang sequence in "I Gotta Feeling" is most exposed, having only a
20 low string/cello-like sound overlaid. I moved the "Guitar Twang Sequence" so that the
21 first notes of each sequence start at the same time. I then matched up the tempos, as "I
22 Gotta Feeling" is very slightly (1.5%) slower than "Take a Dive," and applied what is
23 called a *high pass filter* on "I Gotta Feeling," in order to reduce the volume of the low
24 cello-like sound that has been laid over the guitar twang sequence in the introduction. The
25 purpose of the high pass filter is to attempt to analyze the guitar twang sequence in "I
26 Gotta Feeling" in its purest form, without any other sound interference.

27
28

1 10. Below is a picture of wave forms for the guitar twang sequence from "I
2 Gotta Feeling," which is on top, and the guitar twang sequence from "Take a Dive," at the
3 bottom:

4
5
6 "I Gotta Feeling"

7
8
9 "Take a Dive"



10
11
12 These are not identical, due to the fact that the low cello is still present in the Black Eyed
13 Peas song and cannot be total removed, but the synchronization and correlation of the two
14 sequences are so strong that the only conclusion is that these two waveforms are derived
15 from the same source and are "electronic twins."

16 11. A more in-depth analysis of my findings, along with a copy of my CV, can
17 be found in the report I prepared in anticipation of this litigation, a copy of which is
18 attached hereto as Exhibit A. All of the facts and opinions made in my report are true and
19 correct to the best of my knowledge and belief.

20 I declare under penalty of perjury under the state law of California that the
21 statements contained in this Declaration are true and correct to the best of my knowledge.

22 Executed this 17th day of November, 2010

23 By: Mark Rubel
24 Mark Rubel

25 18,543,585.1\146614-00001
26 11/18/10 12:47 AM

Ryan Greely
GOULD LAW GROUP
120 N. LaSalle St.
Suite 2750
Chicago, IL 60602
Tel - (312) 781-0680
Fax - (312) 726-1328

Re:

Expert Report
Mark Rubel
11.17.10

RE: Qualifications

I, Mark Rubel, having personal knowledge regarding the matters described, herein, declare as follows:

I am over the age of 18 and competent to testify as to the matters stated herein. I have been retained by Plaintiffs in this action to render my opinion as to whether the Black-Eyed Peas recording "I Gotta Feeling" contains a sample from the recording "Take A Dive", by Bryan Pringle.

I am a college instructor and audio director, musician, consultant, record producer and engineer, studio owner and writer. Since 1980 I have engineered and/or produced many recordings, live sound for concerts and television shows and more, at my own Pogo Studio in Champaign Illinois, elsewhere in the US and abroad including New York, California, and Alaska. I have worked on hundreds of recording projects, including with such well-known artists as Rascal Flatts, Alison Krauss, Fall Out Boy, Luther Allison, Melanie, Vernon Reid, Taj Mahal, Daniel Lanois, Andy Summers of the Police, Los Lobos, Jay Bennett, Keb' Mo', Adrian Belew, Henry Butler, and done recording work for RCA Records, BMG/Catalyst, Capitol, Warner/Reprise, BBC America, the Smithsonian Institution, Jive/Zomba Records, and many others.

I have published essays, interviews and equipment reviews in Mix Magazine and Tape Op Magazine, including an interview with Les Paul. I also work as a consultant, textbook reviewer and beta tester in the fields of electro-acoustic design, music business and audio.

I have been a musician since the age of 12 (1970), and have been working full-time in the music business since 1979. I continue to work as a professional performer and studio musician, am a published songwriter and a member of the Audio Engineering Society, the Engineering and Recording Society (former vice president), the American Society of Composers and Publishers, Society of Professional Audio Recording Studios, and the National Academy of Recording Arts and Sciences. I have served on the Grammy Producers Committee since 2001 and am a member of the NARAS Producers and Engineers Wing.

Since 1985 I have taught Audio Technology, Music Business and other subjects to thousands of college students, many of whom are now audio and music business professionals in

their own right. I am a full-time member of the Eastern Illinois University Music Department Faculty (Charleston, IL), where I teach Music Technology and Music History, and have independent study students in Audio Technology and Music Business at both graduate and undergraduate levels. I am also the Audio and Recording Director at EIU's new \$52 million, 234,000 sq. ft. Doudna Fine Arts Center, responsible for training and the supervision of audio services, laboratories, and studios. Additionally I teach Introduction to Recording and Intermediate Recording classes at my studio through Parkland Community College, Champaign Illinois, currently for the seventy-third semester.

I am a member of the Music and Entertainment Industry Educators Association, and have been a panelist, judge or invited speaker at many events including the 2009 International Conference of the Audio Engineering Society, The Recording Summit in Nashville, South By Southwest Music Festival in Austin, TX (SXSW), Tape Op Magazine Recording Conferences, the Midwest Music Summit; the Tisch School in New York, the John Lennon Foundation, and at many other schools and events, as documented in my attached curriculum vitae.

Having produced, recorded and taught audio for many years, and having been involved in the making of many records of all styles, I am quite familiar with the tools and techniques involved in their creation.

Tools and Techniques

Modern recording production of most music involves a number of technologies, including the various processes of recording, sampling, synthesis, and numerous types of sound alteration through editing and processing.

For many decades now, the recording process has been able to go beyond the capturing of a live performance. *Multi-Track* recordings such as the ones considered here are assembled from individual elements, which may include recordings of acoustic elements such as voices, guitars, drums and anything else that moves air; electronic sources such as synthesizers or turntables; or *samples*, which are recordings of recordings.

Sampling consists of the recording and playing back of recorded sounds of any length. These may be instrumental notes or figures, sound effects, vocal sounds, words, phrases or noises, or selections from pre-existing recordings of songs. Frequently these samples are *looped*, i.e. repeated, to form the base or "bed" of music over which singing and/or rapping can be recorded.

Sampled recordings can be played within a computerized music production environment, and manipulated in the same way as any recordings. The samples may be new recordings of original sounds or performances; purchased (or pirated) from companies that specialize in their production; or taken from existing recordings. According to the widely available U.S. copyright law, samples of pre-existing material inherently appropriate the "master rights" that adhere to the original sound recording copyright owner; a license needs to be sought and granted if the use is to be legal. Contrary to legend, no amount of a copyrighted recording can be used without permission.

In addition, as is generally known in the music business, samples also embody the underlying compositions and arrangement and, if unlicensed, infringe on the rights of the owners of those copyrights as well. An exception would be public domain works, but in my experience uses of pre-1922 material in modern pop music are comparatively few.

In the recording/assembly process, the samples can be combined with computerized, *synthesized* or recordings of actual instruments and voices. There are no actual sounds contained in any recording, whether *analog* like vinyl records or cassettes, or *digital* like CD's or mp3 files. The recordings contain data or instructions for creating sound. Whether the original source of the samples is acoustic or electronic, all digital samples are electronic in their nature, and acoustic in their playback- speakers moving air.

Once a sample has been made, and often looped, then playing, singing and/or rapping are *overdubbed* or added, after which the whole song is *mixed*, meaning combined and balanced; and *mastered*, which usually refers to a final polishing process performed by a specialized engineer. The end result is a pastiche or collage of new and pre-existing elements. At times there may be a *remixing* process as well, which can mean several things: it could be a reassembly of the same elements in a different balance, or it can mean a more radical reworking of the song, with new elements added and structural revisions. If the remix contains an unauthorized sample taken from the original mix, it is no less an infringement.

Samples can be altered. *Digital editing* is similar to word processing of sound: the source piece can be separated and rearranged. Recordings can be edited, looped, time-compressed or expanded, pitch shifted, reversed and otherwise digitally processed in myriad fashions.

Once a song or a part of it has been sampled and exists as digital information, timing and duration can be separated from pitch information. Thus a loop or musical section can easily be made longer or shorter without changing its pitch ("time expansion/compression"). This enables it to be combined with other elements at the desired tempo, with the different elements meshing in rhythm. This "time-stretching" can be done manually in many commonly available software programs such as Pro Tools® and Digital Performer®. Music software programs designed specifically for loop-based music production such as Acid Pro®, Ableton Live® and Reason®, can automatically lengthen or shorten selections to fit them to tempo. The "Take a Dive – Piano Twang" sample that appears in "I Gotta Feeling" had to be slowed down 1.5% in order to match the tempo.

Likewise, the pitch of each sample or element can be digitally altered to tune it to the rest of the track, without altering timing. This feature is built into many audio programs like Digital Performer®, Pro Tools®, and Audacity, and also available in software plug-ins such as Serato "Pitch 'n' Time®", Melodyne®, and "Auto-Tune"®. The pitch in this case is unchanged.

Computer programs and plug-ins, and hardware audio devices also, can be used to further process the audio. Some common types of signal processing include *equalization* or EQ, which changes the tonal characteristics; *compression/limiting*, which affects volume, echo and other time-based effects, *panning* (spatial movement) and so on.

A process that I employed in comparing recordings is the use of *filters*: these are a part of equalizers, and remove a range of frequencies (pitches). In this case I employed *high-pass filters*

(HPF), which filter out the sound below a certain frequency (in this case, 200 hertz or cycles). This removes a bit more than the bottom three octaves of the human hearing range, but let's the rest through, hence high-pass filter- it lets the highs pass through. I did this in order to lessen the low string sound in the Black-Eyed Peas' introduction, in order to isolate the sample more.

In the modern computer recording environment, it is a trivial matter to alter samples by these and many other processes. These processes all alter the waveform: the shape of the vibrations over time. Therefore when samples as used in songs are compared to the original songs, their waveforms are often not identical. Something as simple as a turn of a bass knob alters the waveform, but that does not make it a new creation, and therefore immune from infringement. Two recordings can share the same material, but not be identical. However, if their two waveforms are so close in shape that they can only be from the same source, even at high resolution (zoomed in), then that is definitive.

Comparison Methods

I have been asked to determine whether the recording "I Gotta Feeling", by Black Eyed Peas shares samples with "Take A Dive", by Bryan Pringle. It does. Ryan Greely of the Gould Law Group sent me three recordings for analysis: "I Gotta Feeling", "Take A Dive - No Vocals", and "Take A Dive - Piano Twang Sequence Only". I reviewed and analyzed them using a Macintosh® computer and the software program "Digital Performer", listening extensively in my recording studio on studio monitor speakers and on headphones.

I performed two major tests: listening and computer waveform analysis. These are, in my opinion, the most reliable tests for determining of samples.

Careful listening is an important test. It is essential not to underestimate the innate power that human beings have to extract patterns from information of many kinds, including sound. A careful listen can reveal the subtleties and earmarks that can confirm the similarities, differences, and provenance of a sound, in a way that no current computing device can.

Waveform analysis is also an important tool. This means a comparison of the shapes of two different sound waves, to determine whether they share a common source. If the waveforms are identical or very close, that will show that sampling has taken place as opposed to a new and similar-sounding recording. The shape of the waves is a kind of sonic fingerprint- if one sings the same note numerous times, close analysis of the waveforms will show that they are different. In most cases involving sampling, the encoded waves get altered enough in the recording process that they are not completely identical wave for wave. However expert analysis can reveal similarities that, as in this case, could not have been achieved in any way other than that they stem from the same electronic source.

There are a couple of other testing methods: phase inversion involves subtracting one recording from another. If they cancel completely (which is to say, disappear), that is an unassailable determination of sampling. But as I said above, the slightest change of timbre, speed or any other type will make two samples of the same recording non-identical, so that they will not cancel out. Therefore, if two recordings subtracted from each other do not cancel each other, one may still be a sample of the other. Given the multi-track masters of both songs, a test of this kind has the potential to be highly revealing.

There is another type of analysis called spectral analysis, but even a simple change of tone alters a recording's spectrum, so that type of comparison is not useful. There even exist programs like "Dynamic Spectrum Mapper" by a company called Pro Audio DSP, that samples the dynamic and frequency spectrum of one recording, and maps it onto another recording, which could be completely unrelated. Given that one recording can be made to have the same spectral analysis as a completely different one, in my opinion spectral analysis is not a definitive test.

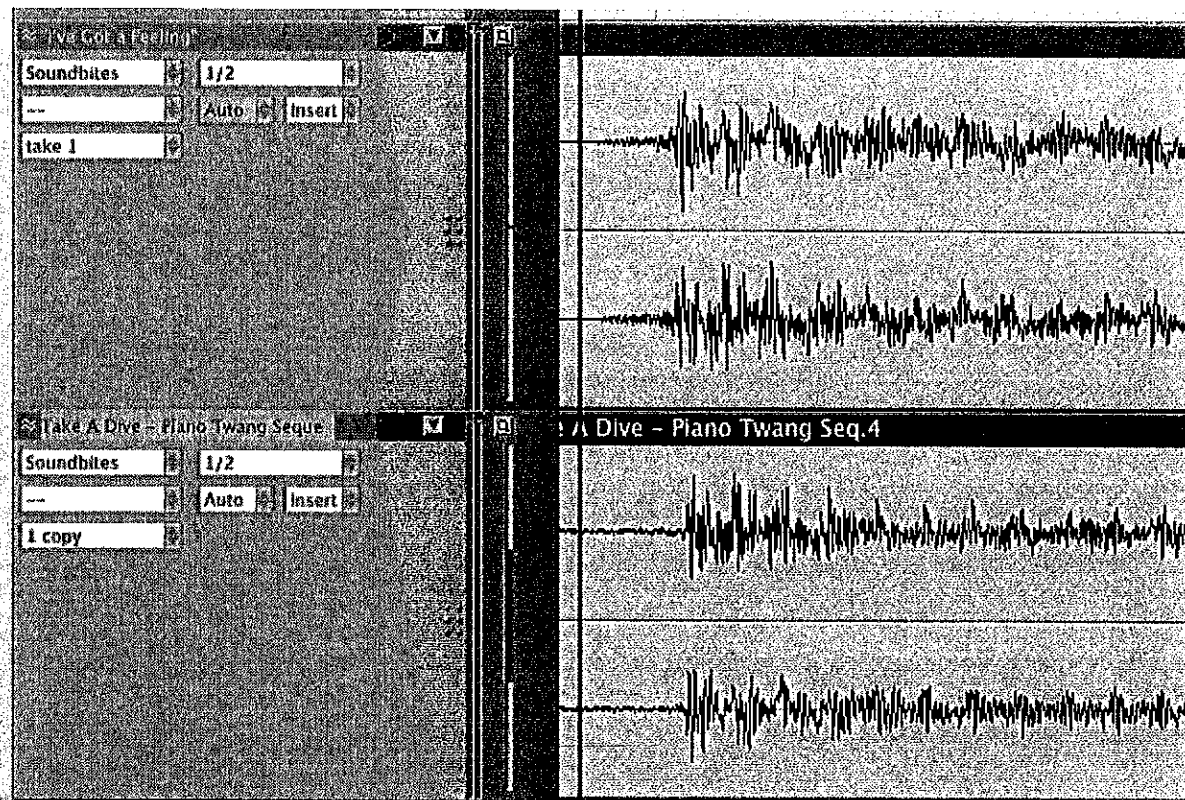
Listening and Waveform Comparison: "I Gotta Feeling" V. "Piano Twang Sequence"

The complete recordings I was given are first on the "Audio Examples" CD:

1. Black Eyed Peas, "I Gotta Feeling"
2. Bryan Pringle, "Take A Dive - No Vocals"
3. Bryan Pringle, "Take A Dive – Piano Twang Sequence"

Internet research yielded anecdotal reports that "I Gotta Feeling" contains a sample from another song called "Love Is Gone", by one of the Black Eyed Peas producers, a person named David Guetta. A quick listen ruled that out: though the chord structure may be similar on the surface, it's a completely different sound, tempo and key, as anyone can hear (CD example 4).

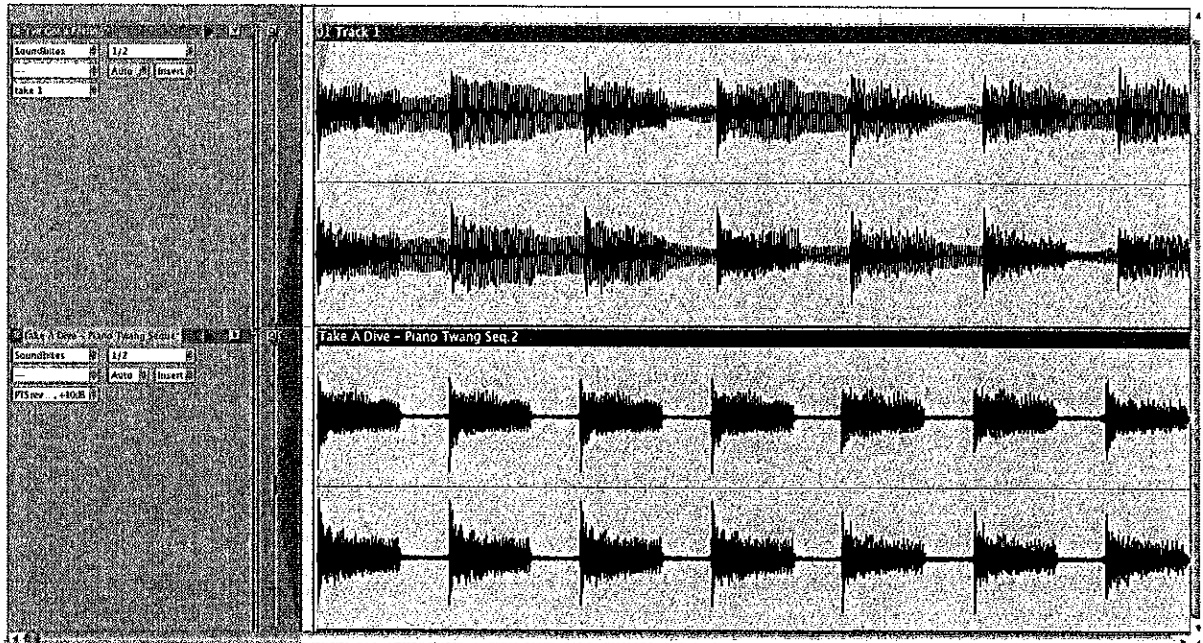
The sample in question in this action is embodied in the "Take A Dive – Piano Twang Sequence", which does appear in "Take A Dive". It is a guitar-like synthesizer sound, with a very characteristic brightness and tonality. To begin with, I took the 8-measure long "Piano Twang Sequence", and lined it up with the introduction of "I Gotta Feeling"- that is where the sample is most exposed, having only a low string/cello-like sound overlaid. I moved the "Piano Twang Sequence" so that the first notes of each sequence start at the same time, which is the horizontal axis of the digital audio workstation's display.



"I Gotta Feeling" is at the top, and "Piano Twang Sequence" below, as labeled. Each of these is a stereo file, with the display showing the left waveform at the top and the right at the bottom. The alternately waving line represents the varying pressure or voltage that would be produced on playback, that when amplified and used to cause a speaker to move, will create an analogous wave in air: sound.

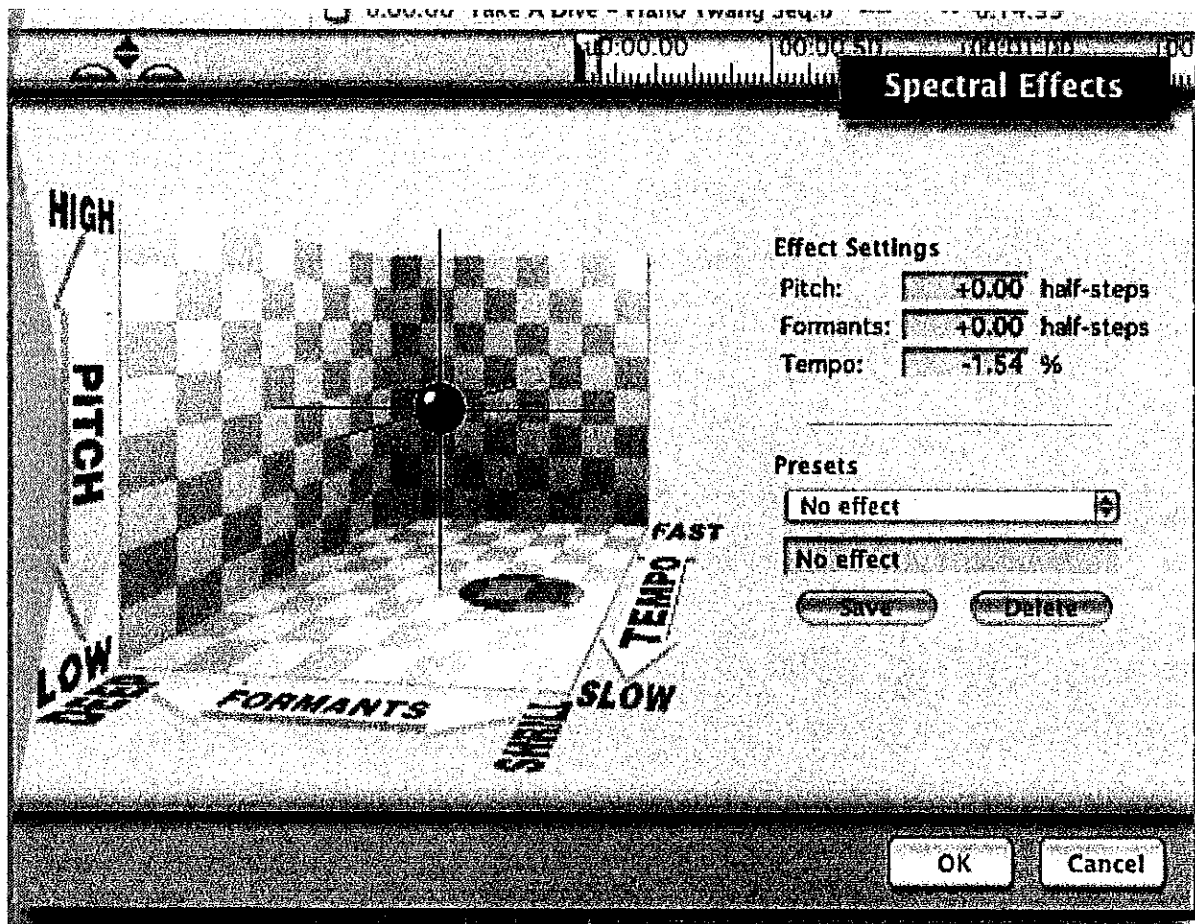
I recognized that the left and right sides of the sample were reversed, and so inverted them, also bringing the level of the Piano Twang Sequence up by 10 decibels. The volume can be corrected for in a number of ways, including with the volume controls built into the DAW (digital audio workstation computer).

The tempo of the Black Eyed Peas song is slightly slower, as can be seen here:

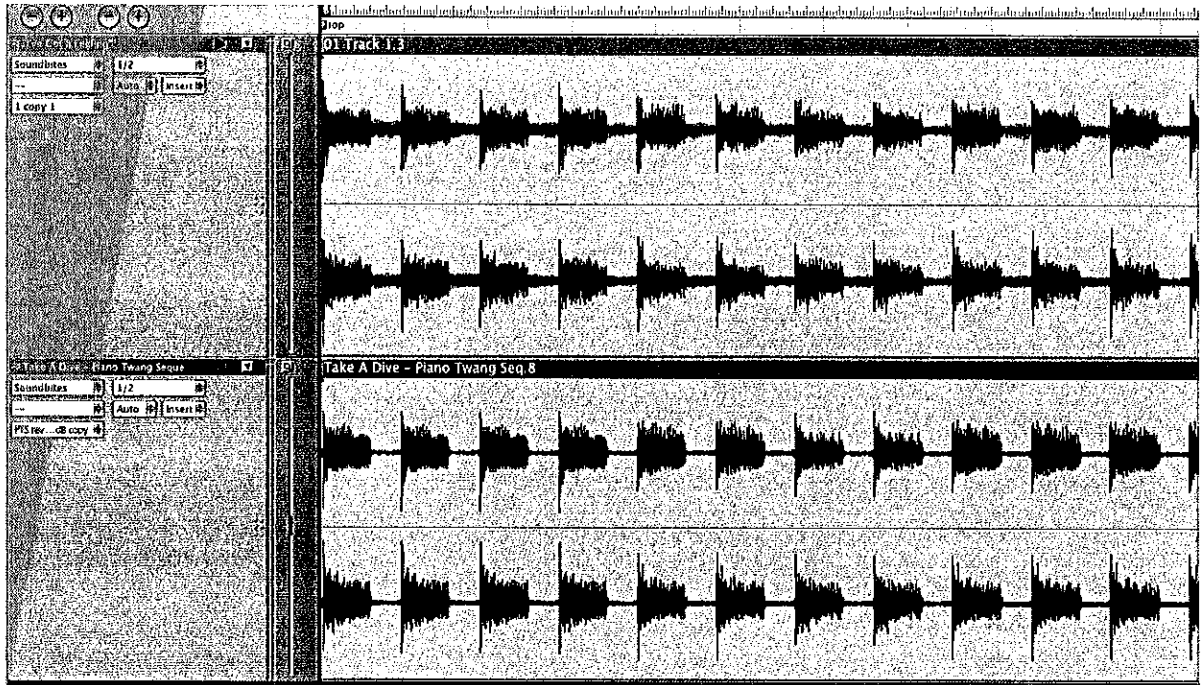


The beats occur faster in the bottom stereo file, "Piano Twang Sequence".

In order to match tempos I used the time stretch feature within Digital Performer, known as "Spectral Effects". The display shows that time, speed and something called formants can be manipulated, separately or together. In this case, I simply slowed the tempo by 1.54%, a small amount:



And, that brought the two into alignment:

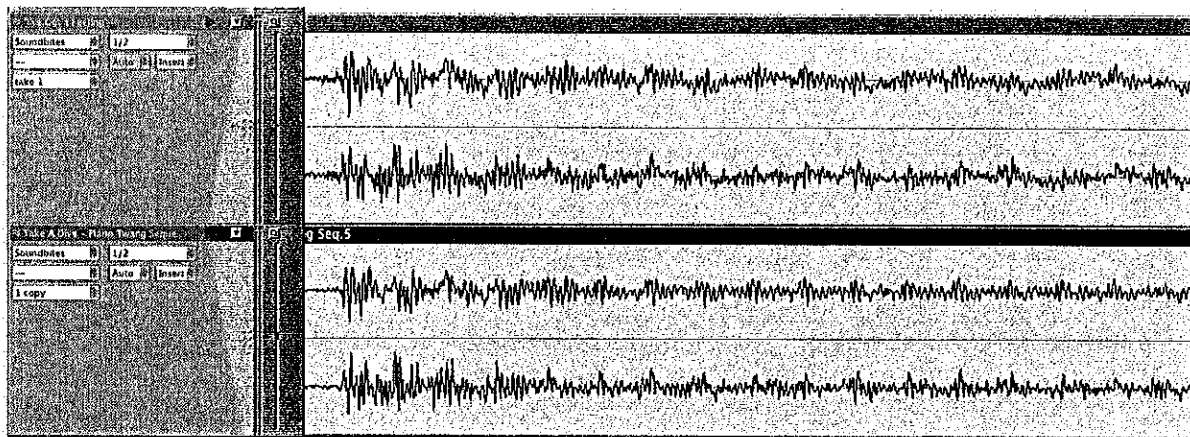


Notice that the top file, which is the “I Gotta Feeling” introduction, looks less fuzzy and more like “Piano Twang Sequence” than it did in the previous screen shot. That is because I also applied a *high pass filter* to remove the bass below 200 hertz, in order to reduce the volume of the low cello-like sound that has been combined with the sample in the Black Eyed Peas song. Here is what the filter looks like; it leaves everything above the mid-bass alone and removes bass below 200 hertz. Since there isn’t much bass in the sample, it is much less affected.

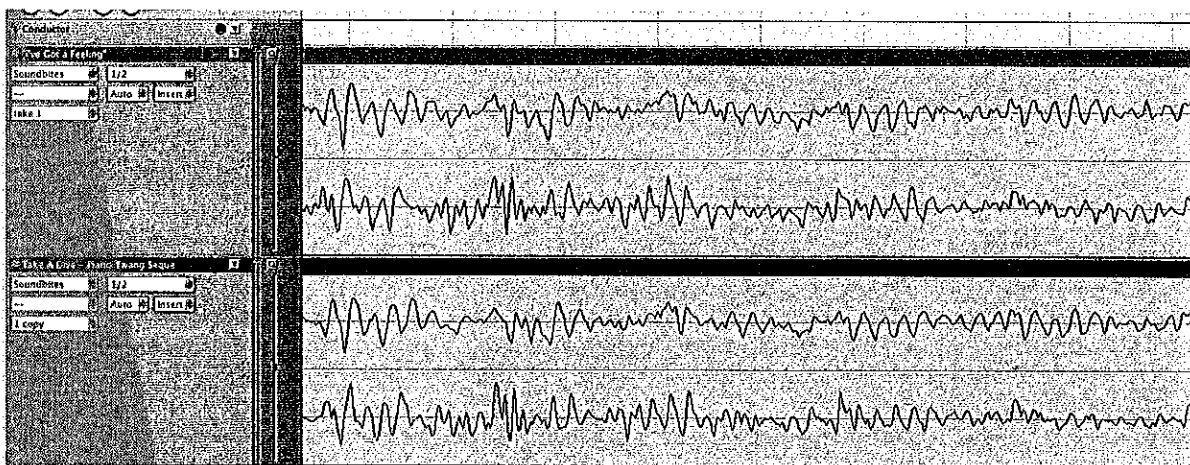


CD Audio Example #5 is the first eight measures of "I Gotta Feeling" before filtering, and #6 is after. The "cello" is reduced, and the sample can be better heard. As a simple test of whether the sample embodied in "Piano Twang Sequence" is in fact in "I Gotta Feeling", compare CD #6 and #7, using your ears. Number 6 is filtered Black Eyed Peas, and #7 "Piano Twang Sequence". Sounds like the same thing, doesn't it?

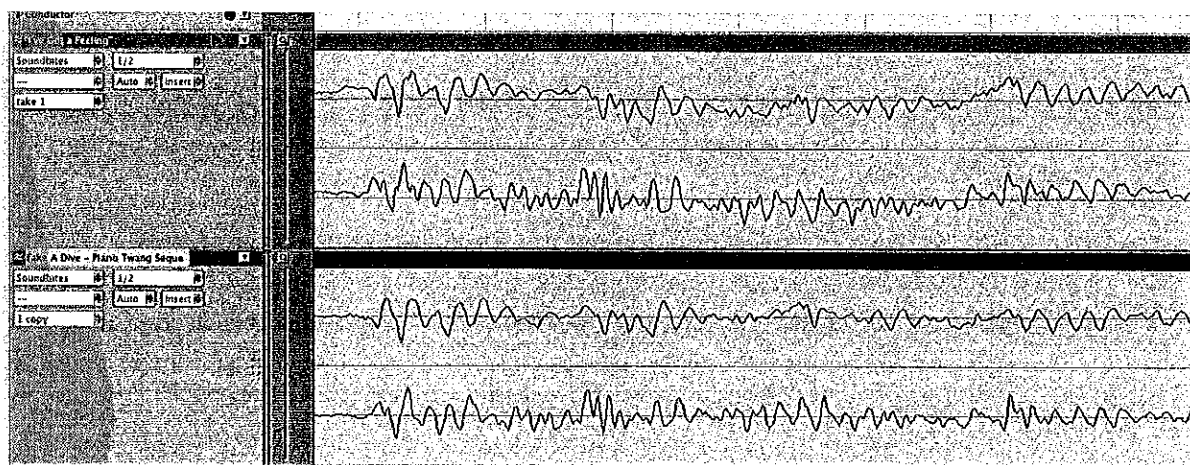
I then compared the waveforms by zooming in to varying degrees. Again, we would not expect the waveforms to be exactly identical, as we know that Black Eyed Peas slowed the sample down slightly, and added the "cello" over the top of it. However if there are sections of waveform that move in tandem and trace the exact same waveform even for a while, it cannot be an accident. The only explanation is that they are the same.



Please keep in mind that one should compare the top (left) waves of each pair with each other, and the bottom (right) waves.



Considering that "I Gotta Feeling" at the top has the extra synthesizer, there is a high degree of correlation, for which again the only explanation is that they are electronic twins.

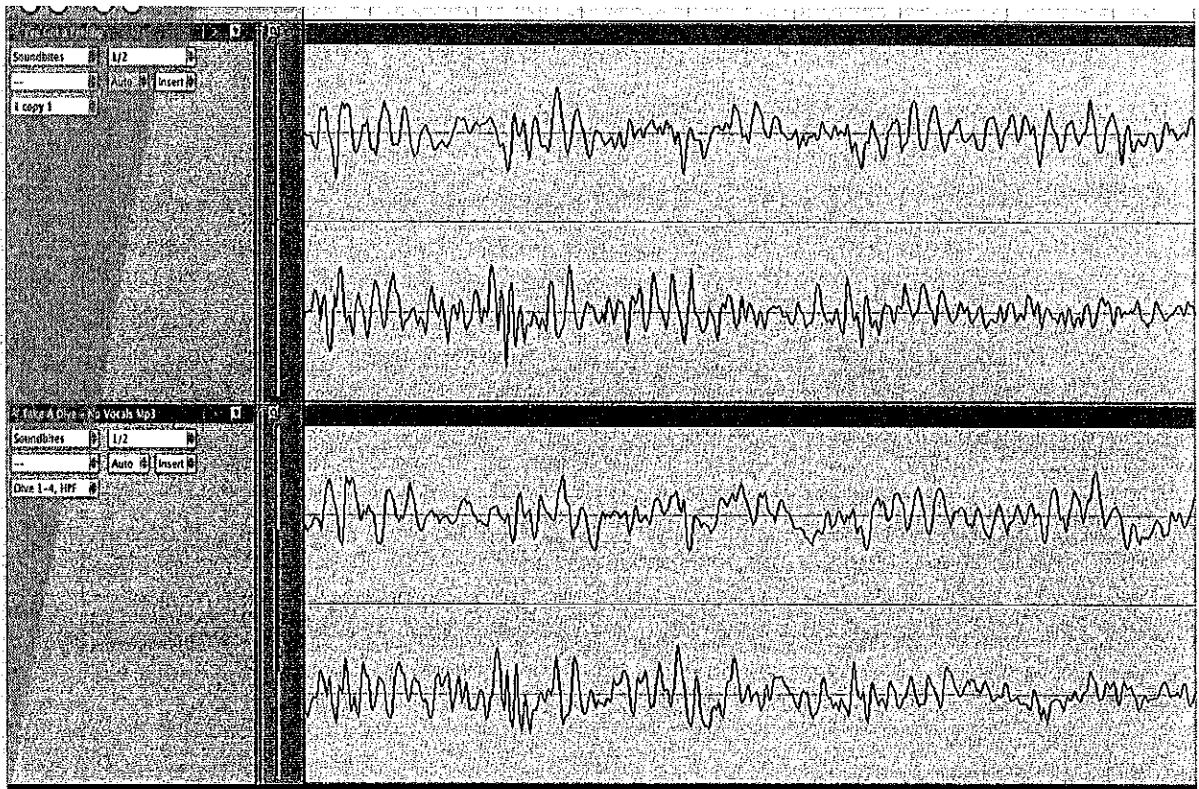


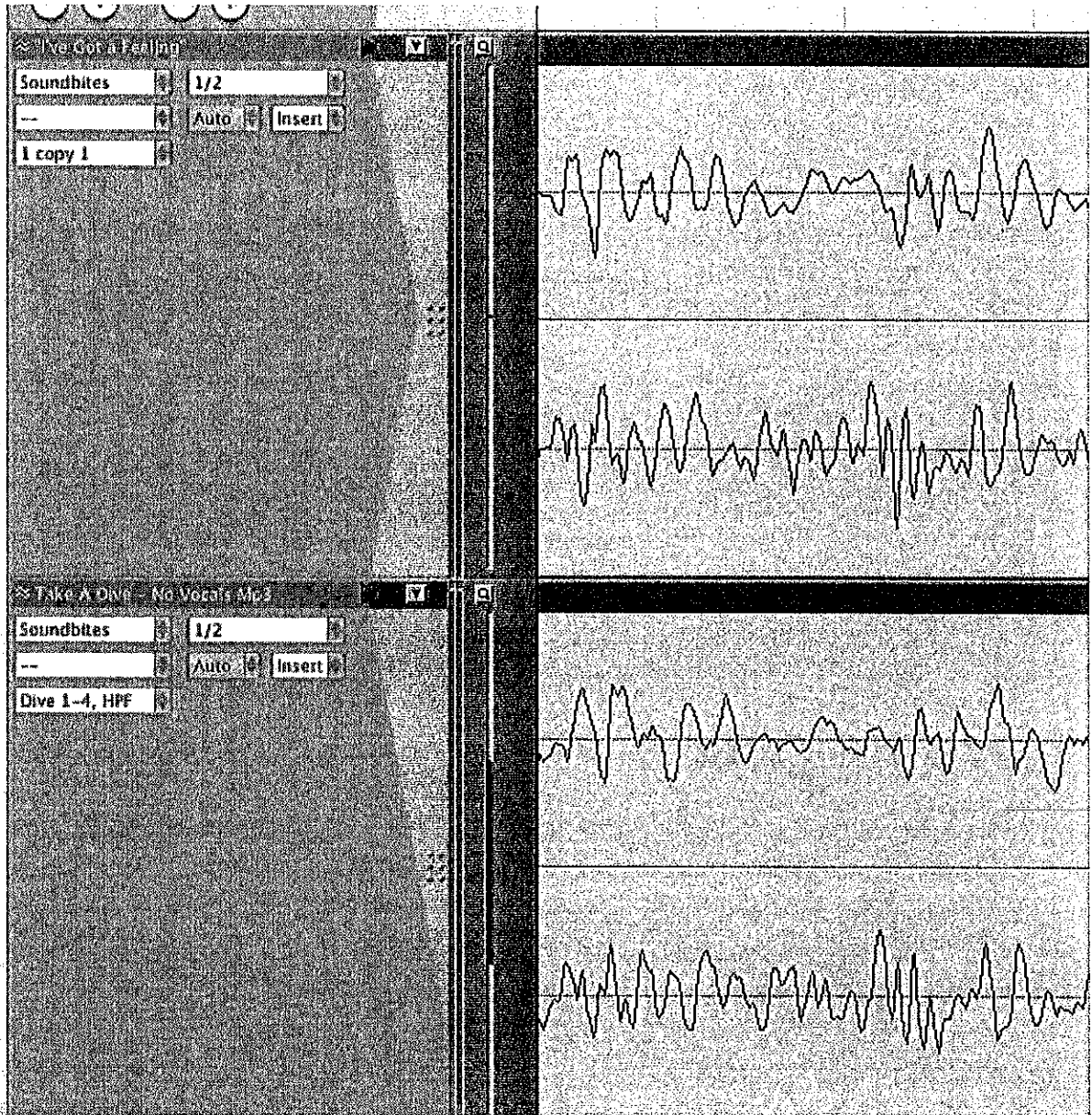
Again these are not identical, but the synchronization and correlation are so strong that the only conclusion is that these two waveforms are derived from the same source. An analysis of the master multi-track recordings, when they are made available, will prove most instructive, and bear out the fact that this is an occurrence of sampling.

Listening and Waveform Comparison: "I Gotta Feeling" V. "Take A Dive – No Vocals"

Later I will show that the "Piano Twang Sequence" is a part of "Take A Dive", but it is useful to compare the filtered Black Eyed Peas introduction (Audio example #11) with the mixed Pringle song. I trimmed the introduction from "Take A Dive", and isolated the first four measures after the sample begins (Audio example #12). I ran the "TAD" intro through the same high pass filter and -1.54% time stretch, in order to maintain consistency. Switch back and forth between #11 and #12: the same sample can be clearly heard playing in both.

Furthermore, though one can hear that there are other sounds in the two, waveform comparison reveals enough correlation that, in conjunction with our hearing, points positively to a common origin.

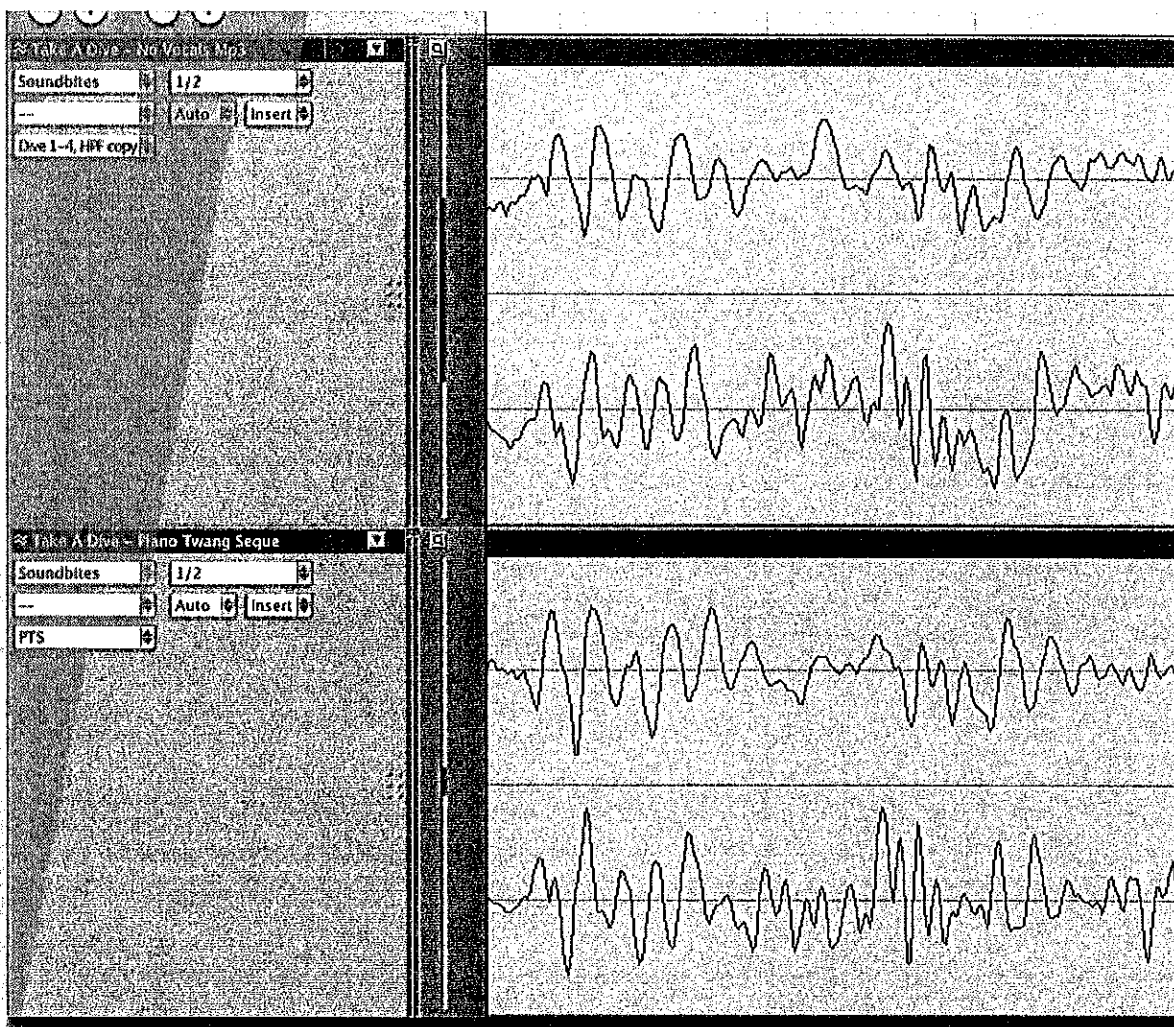




Listening and Waveform Comparison, "Take A Dive" V. "Piano Twang Sequence"

In order to confirm that the "Piano Twang Sequence" is in fact contained in "Take A Dive", I conducted the same types of tests. Audio Example #15 consists of "Take A Dive" on the left, with the "Piano Twang Sequence" on the right. The other elements that make up "Take A Dive" introduction, various synthesizers, are audible on the left. But the "Piano Twang exists on both sides, and sounds as if it is centered between the speakers- monaural. This effect is what we call a phantom center. There is no sound originating from between the speakers; it is a psychoacoustic effect created by hearing the same thing on both sides.

Here's a screen shot, zoomed in to the waveform and showing the similarities between "TAD" and PTS":



Conclusion

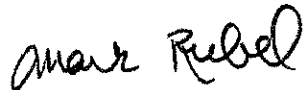
My hearing, upon which I and my clients rely, tells me that the "Piano Twang Sequence" appears in both "Take A Dive" and "I Gotta Feeling". Many listening experiments as detailed, coupled with waveform analysis, reinforce this conclusion.

As previously explained, the different elements of the Black Eyed Peas song exist as separate recordings, and given access to all the multi-track masters, in-depth analysis will provide reinforcement for my determinations and conclusions. I look forward to performing these tests- if the defendants have not sampled from "Take A Dive", then they should have nothing to fear from such an examination.

After extensive listening, comparison, computer analysis and visual inspection of waveforms, it is my opinion that "I Gotta Feeling" by Black Eyed Peas includes a repeated sample from Bryan Pringle's sound recording "Take A Dive".

Compensation

I have testified as an expert at trial or by deposition in other cases within the last four years, and have authored many recordings and a number of magazine articles as outlined in my Curriculum Vitae (attached). I am being compensated at a rate of \$150 per hour for my study of this matter.



Mark Rubel
Instructor, Audio and Recording Director
Eastern Illinois University

Recording Instructor
Parkland Community College

Owner, Engineer/Producer
Pogo Recording Studio
Champaign, IL

Index of CD Audio examples

1. Black Eyed Peas, "I Gotta Feeling"
2. Bryan Pringle, "Take A Dive - No Vocals"
3. Bryan Pringle, "Take A Dive - Piano Twang Sequence"
4. David Guetta, "Love Is Gone"
5. "I Gotta Feeling", first eight measures
6. "I Gotta Feeling", first eight measures filtered
7. "Piano Twang Sequence", eight measures
8. "I Gotta Feeling" plus "Piano Twang Sequence"
9. IGF left, PTS right
10. IGF and PTS, alternating measures
11. IGF, four measures filtered
12. "Take a Dive", four measures filtered
13. IGF plus TAD
14. IGF and TAD, alternating every two beats
15. TAD left, PTS right
16. TAD left, PTS right, alternating every three beats
17. TAD and PTS alternating every three beats, centered
18. TAD, IGF and PTS playing simultaneously
19. TAD, IGF and PTS, cycling one beat each for four measures
20. TAD, IGF and PTS, cycling one beat each for eight measures

Curriculum Vitae

Mark B. Rubel

35 Taylor Street,
Champaign, IL 61820-4020

Telephone: 217.351.8155

Email:

mbrubel@eiu.edu or mark@pogostudio.com

<http://www.pogostudio.com/>

Experience

Instructor and Director of Recording

Eastern Illinois University, Charleston IL

Sept. 2007 to present

Teaches Music 1070, "Introduction to Music Technology". Teaches Music 2557, "Evolution of Jazz and Rock", 150 students per section. Conducts independent study with graduate and undergraduate students in the fields of audio technology and music business.

Coordinates recording studios and services, and live audio support for School of Music and Fine Arts Center events of all types. Training and supervising student engineers and assistants, interfacing and consulting with faculty and staff, maintaining and initiating many complex systems within the Doudna Fine Arts Center. Developing new Audio Technology program for Eastern Illinois University.

Adjunct Assistant Professor of Music Business/Commercial Music

Millikin University, Decatur IL

Sept. 2003 to May 2008

Taught "Introduction to Music Industry", and "Senior Seminar in Music Business", core music business classes of four-year music business and commercial music degree programs. Developed own curricula. Brought in many important guest speakers including Jake Slichter, drummer for Semisonic and author of "So You Want To Be A Rock and Roll Star", songwriter and recording artist Jim Peterik (Eye of the Tiger, .38 Special, Ides of March, etc.); Leslie Ann Jones, audio director for Lucasfilm and daughter of Spike Jones; and many others. Former students currently work at William Morris Agency; as road manager of Fall Out Boy; directing studios and concert halls across the country; at record companies including Aware and Dualtone, and elsewhere, including overseas. Furnished first-hand real world music business experience by connecting each student with an individualized job shadowing. Initiated, organized and led music business student field trips to Nashville, Memphis, Chicago, Miami, etc.

Audio and Recording Instructor

Parkland College, Champaign IL

1985 to present

Millikin University, Decatur IL

1997-98, Spring 2006-May

2008

Created "Introduction to Recording Studio" and "Intermediate Recording" classes at Parkland College, Champaign IL. Teaches five sections per year- the class is now in its seventy-second

semester. Taught recording at Millikin University, and to private students. Has had more than 3,000 students; many have gone on to become professional audio engineers, or are now full-time engineering students. Former students include the president of major audio equipment manufacturer Neve America; others teach recording and music in the US, Korea, and England. Former recording students own and work in studios across the country including Conway (LA), Chicago Recording Company, Pixar, and elsewhere.

At Millikin University, taught Introduction to Recording Studio, Studio Tech. I and II, oversaw daily operation of 32-track digital recording studio, location recording service and tape duplication facility. Planned and installed recording system in recital hall.

Chief Engineer/Producer, President and Studio Administrator 1983 to present
Pogo Records Recording Studio, Champaign IL

Planned, developed, constructed, installed and has continuously operated a professional recording studio, showcasing a unique mixture of new technology and vintage equipment. Has also recorded in New York, Los Angeles, Nashville, Memphis, Chicago, and elsewhere.

Have worked with thousands of clients in all styles of music, including film and video game soundtracks. Produced and engineered more than 1000 projects. Clients include Grammy-winning artists, RCA Records, Capitol, MCA, Warner Bros., Sony, Jive/Zomba and many others. Selected artists: Alison Krauss, Rascal Flatts, Adrian Belew, Hum, Jay Bennett of Wilco, Paul Barrere of Little Feat, Los Lobos, Ani DiFranco, Junior Brown, Keb' Mo' Band, Melanie, Daniel Lanois, Andy Summers, Taj Mahal, Vernon Reid, Henry Butler, Toby Twining, Ian Hobson, Luther Allison, American Minor, United States Air Force Bands, and the Smithsonian Institution.

Chief Engineer, Studio Director
Faithful Sound Studio, Urbana, IL 1980-1983

Planned, developed, constructed, installed, engineered and operated a professional recording studio.

President
Pogo Records, Champaign IL 1982 to present

Produced, engineered, and supervised marketing and distribution of commercial recordings by an independent record label.

Managing Partner
Sunsinger Records, Champaign IL 2000 to 2008
Starcastle Music Partners, Champaign IL

Production, mixing, and release supervision of *Song of Times*, CD by major progressive rock band *Starcastle*. Supervising artwork, copyright and publishing administration, conducted record shopping, negotiation and contracts with label and artists, promotion of record, assisting and planning festival appearances, etc.

Audio and Music Business Consultant

1979 to present

Consulting in electronics and acoustics, music business, forensic audio and other areas to recording studios, churches, colleges, musical groups, radio stations, teleconferencing centers, planetariums, theaters, and many others. Beta testing for major music manufacturers, including Shure Bros Microphones, Universal Audio, M-Audio and others. Reviewer of music business and audio textbooks for Prentice-Hall, Pearson Education and Sage Publishing (Baskerville, Music Business Handbook and Career Guide)

Legal Expert Witness in the Fields of Audio and Music Business 2005 to present

Expert witness for legal firms, particularly in the area of copyright litigation involving sampling.

Cases:

RE: Bridgeport Music Inc., et al. V. Bad Boy Entertainment, et al.
Case 3:05-0206 (2006)

RE: Bridgeport Music Inc., et al. V. Bad Boy Entertainment, et al.
Case 3:05-0205 (2006)

RE: Bridgeport Music Inc., et al. V. Bad Boy Entertainment, et al.
Case 3:05-0155 (2006)

RE: Bridgeport Music Inc., et al. V. Rhyme Syndicate Music, et al.
Case 3:01-0725 (2006)

RE: Bridgeport Music Inc. V. Smelzgood Entertainment, et al.
Case 3:01-0780 (2006)

RE: Thomas Turino, et al. V. Island Def Jam Music Group, a division of UMG Recordings, inc., et al.
Case CV 05-01314-AHM (CWx) (2006)

Re: Kernel Records OY, plaintiff, v. Timothy Z. Mosely p/k/a Timbaland; UMG Recordings, Inc.; Interscope-Geffen-A&M, d/b/a Interscope, d/b/a Geffen, Mosley Music Group, LLC; Universal Music Distribution; and Nelly Furtado, defendants
Case 1:09-cv-21597-DLG (2009 to present)

Professional Bassist, Performer, Composer and Studio Musician 1973 to present

Member of popular group Captain Rat and the Blind Rivets since 1980, having recorded a concert video and four records, one selling more than 10,000 copies. The band has played to more than a million people, at times playing 80-100 shows per year. Appeared on television and film, and played to crowds as large as 80,000 at such venues as the Rose Bowl Parade, University of Illinois Memorial Stadium, Soldier Field, Chicago Air and Water Show, Bahamas Atlantis Resort, etc.

Has played all styles of music, including studio work, touring with bluesman J.B. Hutto, etc., and composed music for records, video game and film soundtracks (ASCAP); publishing contract with Hal Leonard Company.

Live Sound Mixer and Recording Engineer

1980 to present

Mixing live concerts and audio mixes for radio, TV and video. Toured extensively as audio engineer for BMG/Catalyst recording artist Toby Twining Music including Prairie Home Companion broadcasts, Lincoln Center, Ravinia, CAMI Hall, etc. Served as audio mixer/recording engineer for New Expressions, live WILL music show featuring artists of all musical styles including Sinfonia Da Camera, Medicare, Poster Children, and many other artists. Live recording engineer/producer for biennial Wall to Wall Guitar Festival, Krannert Center for the Performing Arts, Urbana IL. 2003-2007 annual recording of Millikin University Vespers, which includes orchestra, 300-voice choir and pipe organ.

Writer

Various Publications

1981 to present

Regular contributor to international recording magazine *Tape Op*, including equipment reviews, interviews and member of "panel of experts". Interviews include Les Paul, famed engineer/producer Terry Manning of Compass Point Studios, Bahamas; producers Norbert Putnam (Elvis, Dan Fogelberg, Jimmy Buffet, etc.); Ray Kennedy (Steve Earle, Lucinda Williams, Ray Davies), etc. NARAS Producers and Engineer's Wing Columnist: "The Arts of Listening", *Mix Magazine* 2007.

Selected Publications:

Les Paul: The Kid's At It Again, *Tape Op Magazine*

Terry Manning Interview, *Tape Op Magazine*

The Arts of Listening, *Mix Magazine* (2007)

Administrative Assistant

1982-1984

Champaign County Arts and Humanities Council

Responsible for initiation and administration of projects, skills bank, calendars, newsletters, grant writing and fund-raising. Founded Project Cheer, sponsoring monthly performances and art workshops in all Champaign County nursing homes, selected schools and other institutions.

Project Administrator

1979-1981

Champaign County Consortium for Cultural Arts

Managed CETA-funded arts organization with fifteen employees and over \$100,000 annual budget.

Music Booking Agent

1979-1980

Blytham Ltd., Champaign, IL

Education

University of Illinois	MBA courses 1981
University of Illinois	Bachelor's in English Literature, music minor 1979
	Undergraduate GPA 4.65/5.0
	Edmund James Scholar
	Honors program
	Departmental Distinction
	Dean's List
	Phi Eta Sigma Honorary Fraternity
	Phi Eta Sigma Book Award

Participated in Unit One living-learning project at University of Illinois. Set up independent music and recording classes, worked with composers and artists in residence, including Scott Wyatt and Michael Udow.

Sangamon State University	Community Arts Management Certificate 1983
	Awarded Illinois Arts Council Scholarship
Parkland College	Electronics and business classes

Courses Taught

Eastern Illinois University

Introduction to Music Technology
Evolution of Jazz and Rock (rock history)
Non-Western Music
Independent Study in the areas of Audio and Music Business

Millikin University

Introduction to Recording Studio
Studio Tech I
Studio Tech II
Guest lecturer, Recording Production
Guest lecturer, The Rock Experience

Parkland College

Music 134, Introduction to Recording Studio
Music 135, Intermediate Recording

Recording Projects:

About a thousand, too many to list

Film/Video Projects:

Apple Education Profile, featured subject 2009
Audio engineering for BBC America TV show "Moving Up", 2009
Subject: "For Those About to Rock, We Educate You" (independent, 2007)
"Prairie Fire" (PBS), subject of 2008 feature

“Crab Orchard” (Dreamscape Cinema, 2006), extra
“Melvin’s Discontent” (Pogo Films, 1989), producer, sound engineer
“Test Drive Cycles” (Infogrames video game, 2000), music composer, producer, engineer
“SheMad” (Cynthia Oliver, 2000), soundtrack engineer

Source for others’ books, articles and dissertations:

Seven-page profile in *The Golden Moment- Recording Secrets from the Pros* by Keith Hatschek, Backbeat Books, 2005; also published in *Discmaker’s Pro Studio Edition Newsletter* and *Fast Forward Magazine*

Four-page profile in *Tape Op Magazine*, *Mark Rubel, Zengineer* (2005)

Numerous newspaper profiles

Interviewee, WNYU, WILL, WDWS, and more

Jonathan Sterne, McGill University: source and advisor for *The Audible Past: Cultural Origins of Sound Reproduction*

Tom Turino, University of Illinois:

William Joseph Phillips, NYU: doctoral dissertation on the impact of digital recording technology on the field and practices of music production

Tim Johnson, doctoral dissertation on the recording and composition of Toby Twining’s *Chrysalid Requiem*, for which MR was the recording engineer

Reviewer of music business and music technology textbooks for Prentice-Hall and others

Memberships and Honors

CHAMMY (Champaign Area Music Awards) Lifetime Achievement Award, 2006; Best Producer 2006, 2007, 2008 (every year the awards were presented)

National Academy of Recording Arts and Sciences (NARAS) Grammy Producer's Committee, 2001- present

NARAS Producer's and Engineer's Wing Committee

NARAS Education Committee

Judge, Audio Engineering Society 2009 International Conference (Javits Center, NYC) in the categories of Stereo: Pop/Rock and Stereo: World/Folk, Oct. 11/12, 2009

Judge, Urbana Public Arts Commission Arts Grants 2009

Former Vice President, Engineering and Recording Society (EARS), Chicago

Judge, BMI/John Lennon Songwriters competition 2008

MEIEA (Music and Entertainment Industry Educator’s Association)

Audio Engineering Society

ASCAP

SPARS (Society of Professional Recording Studios)

40 North Arts Group

Who's Who in Music

Who's Who in Entertainment

Who's Who in the Media and Communications

Who's Who Among Executives and Professionals

Who's Who in Popular Music

International Who's Who in Music

Who’s Who in America

Selected Panels and Workshops

Guest Lecturer: ISU Music Business, Bloomington, IL, November 2009

Guest Lecturer: Millikin University Entrepreneurship Center, April 2008

Guest Lecturer: Music Business, Valparaiso (IN) University, April 2007

Guest Lecturer: Minneapolis MN AES Student Chapter, March 2007

Guest Lecturer: University of Illinois Theater Department audio students, annually

Guest Lecturer: University of Illinois Art Department 2005-present

Guest Lecturer: NYU Tisch School of Arts, 1993

Panelist: "Studio Etiquette and the Artists' Perspective" and "Sunday Morning Story Time", Nashville Recording Summit, (Nashville, TN) Nov. 15th, 2009

Panelist: "Producing/Engineering" and "Vintage Gear Addiction", Nashville Recording Summit, (Nashville, TN) Nov. 14th, 2009

Workshop Presenter: "Analog Recording Session", Audio Engineering Society Student Summit, Webster University, (St. Louis, MO), April 3, 2009

Panelist: "Vintage Gear Addiction", Audio Engineering Society Student Summit, Webster University, (St. Louis, MO), April 4, 2009

Presenter: "Audio Careers Mentoring Sessions", Audio Engineering Society Student Summit, Webster University, (St. Louis, MO), April 4, 2009

Panelist: "The Recording Studio as Musical Instrument", Fourth International Art of Record Production Conference, Lowell University, (Lowell MA), Nov. 15th, 2008

Panelist/Co-moderator: "The Effects of Advancements In Audio Processing on Musicality", International Conference of Music and Entertainment Industry Educator's Association, Five Towns College, (Long Island NY), March 29th, 2008

Workshop Presenter: "Minimal and Extended Drum Miking Techniques", International Conference of Music and Entertainment Industry Educator's Association, Five Towns College, (Long Island NY) March 29th, 2008

Panelist: "Audio Careers Mentoring", South By Southwest Music Conference (SXSW), (Austin, Texas), March 15th 2008

Presenter: "How Can a Musician Make Money in this Digital 21st Century?" University of St. Francis Moser Performing Arts Center, Joliet IL, March 28th, 2007

Panelist/Moderator: "Recording Careers" International Conference of the Music and Entertainment Industry Educator's Association (MEIEA), Stockton, CA 2006

One of 46 educators nationwide invited to "Music Business Education Summit" presented by NARAS/MEIEA, (Nashville TN) 2006

Panelist/Moderator: "Truth, Lies and Digital Audio" NARAS Producer's and Engineer's Wing, (Chicago, IL) 2006

Panelist: "Entrepreneurship in the Arts", Krannert Center for the Performing Arts, University of Illinois at Champaign-Urbana, 2006

Panelist: "Music Business Careers" Regional MEIEA Conference, Butler University 2006

Panelist/Moderator: "More Records That Made Me Want to Record", International Tape Op Recording Conference (New Orleans, LA) 2008

Panelist/Moderator: "More Records That Made Me Want to Record", International Tape Op Recording Conference (Tucson, AZ) 2007

Workshop Presenter: "Acoustic Instrument Recording Techniques", International Tape Op Recording Conference (Tucson, AZ) 2007

Workshop Presenter: "Crazy Tracking", International Tape Op Recording Conference (Tucson, AZ) 2007

Panelist/Moderator: "Records That Made Me Want to Record", International Tape Op Recording Conference (Tucson, AZ) 2006

Workshop Presenter: "Guitar Tunings and Recording Techniques" International Tape Op Recording Conference (Tucson, AZ) 2006

Panelist: "Producers Listening Panel". South by Southwest (SXSW, Austin TX) 2005

Panelist, "Record Producers" Midwest Music Festival (St. Louis, MO) 1998

Speaker and Workshop Leader, Midwest Radio Conference (Champaign, IL) 1990-1993

Arts Advocacy and Music Education Leadership Seminar (Chicago, IL 1983)

Illinois Arts Council and Illinois Arts Alliance Conference, (Chicago IL) 1982-1983

Many more workshops and presentations to schools, groups, universities, Audio Engineering Society Chapters, etc.

PROOF OF SERVICE

I am employed in the County of Orange, State of California. I am over the age of 18 and not a party to the within action. My business address is 2101 East Coast Highway, Suite 260, Corona del Mar, California 92625. On November 22, 2010, I served the within document(s) described as:

DECLARATION OF MARK RUBEL IN SUPPORT OF PLAINTIFF'S EX PARTE APPLICATION FOR TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE RE PRELIMINARY INJUNCTION

on the interested parties in this action as stated below:

Kara Cenar
[E-mail address: kara.cenar@bryancave.com]
Bryan Cave LLP
161 North Clark Street, Suite 4300
Chicago, IL 60601-3315

Jonathan Pink
[E-mail address: jonathan.pink@bryancave.com]
Bryan Cave LLP
3161 Michelson Drive, Suite 1500
Irvine, CA 92612-4414

Linda Burrow
[E-mail address: burrow@caldwell-leslie.com]
Caldwell Leslie & Proctor, PC
1000 Wilshire Blvd., Suite 600
Los Angeles, CA 90017-2463

Barry I. Slotnick
[E-mail address: bslotnick@loeb.com]
Loeb & Loeb LLP
345 Park Avenue, New York, NY 10154

(BY ELECTRONIC MAIL) I electronically mailed a true copy of the foregoing document to the email address as noted above; **AND**.

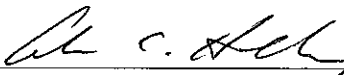
(BY OVERNIGHT DELIVERY) I deposited in a box or other facility regularly maintained by Federal Express, an express service carrier, or delivered to a courier or driver authorized by said express service carrier to receive documents, a true copy of the foregoing document(s) in a sealed envelope or package designated by the express service carrier, addressed as set forth above, with fees for overnight delivery paid or provided for.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed on November 22, 2010, at Corona del Mar, California.

Colin C. Holley

(Type or print name)



(Signature)