$\quad$ UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSIO

## COMPLAINT COUNSEL'S MOTION TO COMPEL DISCOVERY WRONGLY WITHHELD BY DR. DAVID STEWART

Pursuant to Rule 3.38(a), Complaint Counsel respectfully requests that the Court order Respondent ECM Biofilms, Inc. ("ECM") to supplement, immediately, its incomplete responses to document requests issued in November regarding ECM's sophisticated customer defense. Specifically, ECM engaged Dr. David Stewart to opine regarding how ECM's allegedly sophisticated customers understand biodegradation. Because Dr. Stewart wrongly withheld information highly probative (indeed, potentially dispositive) of ECM's sophisticated customer defense, we ask the Court to order ECM to provide all information within its control that responds to outstanding document requests regarding this defense.

## BACKGROUND

## A. David Stewart's Manufacturer's Pilot Study

Last week, Dr. Stewart testified that he conducted a "manufacturers' pilot study" for ECM. ${ }^{1}$ To facilitate this "study," ECM (likely CEO Robert Sinclair) apparently selected a subset of its customers whom interviewers working for Dr. Stewart would contact (as well as the particular employees at those businesses interviewers would contact). ${ }^{2}$ Dr. Stewart's interviewers then asked ECM's hand-picked customers, among other things: "How would you

[^0]define biodegradability?"3 Notably, Dr. Stewart further testified that-despite receiving specific individuals' information-he apparently was able to reach only ten ECM customers out of list containing approximately 150 ECM customers. ${ }^{4}$

Most important, four of the ten cherry-picked customers gave answers inconsistent with ECM's position that, notwithstanding its marketing claims, its customers understand that ECM Plastic will take much longer than advertised to biodegrade. In particular, one hand-picked customer defined "biodegradability" with reference to " $[\mathrm{t}]$ he ability to make materials dissolve within a year." ${ }^{5}$ Two other responses referenced ASTM tests D5511 and D6400, both of which are short-term tests that run for less than a year ${ }^{6}$ (and Dr. Stewart agreed that, given the timeframes of these tests, these ECM customers "understand[] biodegradation is something that happens in less than a year."). ${ }^{7}$ A fourth respondent defined "biodegradation as something that occurs "within 1 to 3 years." ${ }^{8}$ Suffice it to say, ECM did not instruct Dr. Stewart to convert the pilot study into full-scale research ${ }^{9}$ (Dr. Stewart attributed this largely to allegedly insufficient time). ${ }^{10}$

Significantly, notwithstanding the fact that ECM hand-picked the survey respondents, ECM, its counsel, and Dr. Stewart failed to produce the list of their names to us:

QUESTION: Have you ever seen a copy of the list?
${ }^{3}$ CXA: 2 at Q6.
${ }^{4}$ CXA:1 at 209:21-25.
${ }^{5}$ CXA:3 at 3 (emphasis added).
${ }^{6}$ Id .
${ }^{7}$ CXA:1 at 213:1-215:3 (emphasis added).
${ }^{8}$ CXA:3 at 3.
${ }^{9}$ CXA: 1 at 217:4-6.
${ }^{10}$ See id. at 219:14-220:1. Dr. Stewart testified that he only needed to interview approximately 40 more ECM customers to complete a full-scale study, see id. at 220:2-8 (testifying that he needed 50 overall), and it is unclear why he could not have done so in a few days. See CXA:4 (excerpted and redacted to preserve confidentiality). In fairness, Dr. Stewart also denied knowing "all of the reasons" that may have led to ECM's decision not to run the pilot study as a full study. See CXA:1 at 219:14-17 ("Q: Why was the pilot study not rerun as a full scale study? A: I don't know all of the reasons that may have gone into it.").

STEWART: I was provided the list, yes.
QUESTION: Why was a copy of that list not produced to Complaint Counsel?

STEWART: Because it's confidential.
QUESTION: Was there any other reason?
STEWART: I [have] an ethical responsibility to protect the identity of survey respondents and so if defense counsel wants to provide it since they provided it to me they're welcome to do that[.]

QUESTION: ECM has a copy of the list, correct?
STEWART: That's actually where I obtained it.
QUESTION: Just so the record is clear, you obtained it from Emord \& Associates and you infer that Emord \& Associates obtained it from ECM?

STEWART: That's fair, yes. ${ }^{11}$
Although ECM produced the list to Complaint Counsel yesterday evening, ${ }^{12}$ it remains impossible to determine which companies (or persons) on the list were interviewed, or who gave which answers. This is because the survey results identify respondents by number, and Complaint Counsel has no way to correlate the numbers on the results with Mr. Sinclair's list of potential respondents. Indeed, Dr. Stewart testified:

QUESTION: So Complaint Counsel based on information that has been produced to us to date cannot identify the manufacturers or the persons that participated in the manufacturer's [study], correct?

[^1]STEWART: That is correct. ${ }^{13}$
Producing the list with names but no numerical identifiers did not solve the problem because the survey data contains only numerical identifiers, not names. ${ }^{14}$

## B. Complaint Counsel's Document Requests

Seven months ago, Complaint Counsel issued two document requests covering the information at issue:

## Request No. 11

Provide all documents, whether prepared by or for ECM or any other entity, including any advertising agency, regarding consumer perception, comprehension, or recall (including, but not limited to, copy tests, marketing or consumer surveys and reports, penetration tests, recall tests, audience reaction tests, and communication tests) of . . . biodegradability in general.

## Request No. 12

Provide all documents that support or call into question your contention that your customers or distributors are sophisticated purchasers. ${ }^{15}$

ECM has a duty to supplement its responses "in a timely manner." See Rule 3.31(e)(2).

## LEGAL STANDARD

Rule 3.31 (c)(1) provides that "[p]arties may obtain discovery to the extent that it may be reasonably expected to yield information relevant to the allegations of the complaint, to the proposed relief, or to the defenses of any respondent." Although Rule 3.31(c)(2) limits discovery in certain respects, there is no statutory, constitutional, or common law "survey research" privilege.

## ARGUMENT

ECM apparently makes two arguments against disclosure, both of which fail. First, ECM contends, or at least implies, that it cannot obtain the names of the ECM customers who

[^2]
## PUBLIC DOCUMENT

answered Dr. Stewart's telephone calls. However, even if one assumes that ECM and/or its counsel do not have the information, requests under Rule 3.37(a) apply to all materials in ECM's "possession, custody, or control." ${ }^{16}$ As ECM itself explained, experts are agents of the party hiring them. ${ }^{17}$ If the Court so orders, ECM can request the responsive information from Dr. Stewart. To the extent that the responsive information is physically within the custody of the research firm (California Survey Research Services ("CSRS")) that Dr. Stewart engaged to call the manufacturers ECM chose, ${ }^{18}$ CSRS is Dr. Stewart's agent, ECM's agent, or both, and ECM thus retains control over the responsive information. ${ }^{19}$ The Court should not permit ECM's shell game with this critical data to defeat reasonable, necessary, and probative discovery.

Second, ECM implies that the names of interviewees are somehow protected. However, the telephone calls Dr. Stewart supervised were never a genuine survey. Rather, as discussed above, Dr. Stewart called specific ECM customers (that Mr. Sinclair apparently selected) and specific people at those companies (that ECM also selected). Assuming this is methodologically defensible from a survey research perspective (and it is not), the answers these ECM customers gave bear upon ECM's sophisticated customer defense just as much as answers ECM customers gave in depositions Complaint Counsel took - except that, obviously, ECM knows the names of those deponents and both parties have the opportunity to place responses to questions in

[^3]context. ${ }^{20}$ The Court cannot permit ECM to conduct de facto telephonic depositions of its customers without our participation or even disclosing whom its agent, Dr. Stewart, questioned. ${ }^{21}$

Finally, even if one considered the "manufacturer's pilot study" to be legitimate survey research rather than telephonic interviews with certain apparently cherry-picked ECM customers, there is no privilege protecting the names of such survey respondents from disclosure. The Commission's rules only protect information privileged "by the Constitution, any applicable act of Congress, or the principles of common law," Rule 3.31(c)(4), and no survey respondent privilege emanates from any of these sources. ${ }^{22}$

## CONCLUSION

For these reasons, we respectfully ask the Court to grant Complaint Counsel's motion to compel ECM to produce information sufficient to establish which ECM customers provided which interview responses to Dr. Stewart's researchers.

Dated: July 8, 2014
Respectfully submitted,


Katherine Johnson (kjohnson3@ftc.gov) Jonathan Cohen (jcohen2@ftc.gov)
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Washington, DC 20580
Phone: 202-326-2185; -2551; -2747; -3001
Fax: 202-326-2551

[^4]
## STATEMENT CONCERNING MEET AND CONFER

The undersigned counsel certifies that Complaint Counsel conferred telephonically with Respondent's counsel on July 3 regarding the issue raised herein. Respondent's counsel stated yesterday evening that Complaint Counsel should seek to subpoena CSRS rather than obtain the information at issue from ECM.

Dated: July 8, 2014
Respectfully submitted,

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## CERTIFICATE OF SERVICE

I hereby certify that on July 8, 2014, I caused a true and correct copy of the foregoing to be served as follows:

One electronic copy to the Office of the Secretary, and one copy through the FTC's e-filing system:
Donald S. Clark, Secretary
Federal Trade Commission
600 Pennsylvania Ave., NW, Room H-159
Washington, DC 20580
Email: secretary@ftc.gov
One electronic copy and one hard copy to the Office of the Administrative Law Judge:
The Honorable D. Michael Chappell
Administrative Law Judge
600 Pennsylvania Ave., NW, Room H-110
Washington, DC 20580
One electronic copy to Counsel for the Respondent:

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## UNITED STATES OF AMERICA BEFORE THE FEDERAL TRADE COMMISSION

| In the Matter of | ) |  |
| :--- | :--- | :--- |
|  | ) |  |
| ECM BioFilms, Inc., | ) | Docket No. 9358 |
| a corporation, also d/b/a | ) |  |
| Enviroplastics International | ) |  |

EXHIBITS IN SUPPORT OF COMPLAINT COUNSEL'S MOTION TO COMPEL DISCOVERY WRONGLY WITHHELD BY DR. DAVID STEWART

## Complaint Counsel Exhibit A

CX-A

## UNITED STATES OF AMERICA BEFORE THE FEDERAL TRADE COMMISSION

| In the Matter of |  |
| :--- | :--- |
|  |  |
| ECM BioFilms, Inc., |  |
| a corporation, also d/b/a |  |
| Enviroplastics International |  |

## DECLARATION OF JONATHAN COHEN IN SUPPORT COMPLAINT COUNSEL'S MOTION TO COMPEL DISCOVERY DR. DAVID STEWART WRONGFULLY WITHHELD

In accordance with 28 U.S.C. § 1746, I declare under penalty of perjury that the following is true and correct:

1. I am over 18 years of age, and I am a citizen of the United States. I am employed by the Federal Trade Commission ("FTC") as an attorney in the Division of Enforcement in the Bureau of Consumer Protection. I am an attorney of record in the above-captioned matter, and I have personal knowledge of the facts set forth herein.
2. Attachment 1 hereto is a true and correct copy of a rough transcript of the deposition of Dr. David Stewart, taken on July 1, 2014.
3. Attachment 2 hereto is a true and correct copy of interview questions interviewers working for Dr. David Stewart apparently used when interviewing ECM customers.
4. Attachment 3 hereto is a true and correct copy of responses to interview questions ECM customers provided, as produced by ECM to Complaint Counsel.
5. Attachment 4 hereto is a true and correct copy of a redacted excerpt of ECM customer contact information that was apparently provided to Dr. Stewart in May, 2014.
6. Attachment 5 hereto is a true and correct copy of Complaint Counsel's First Set of Requests for Production of Documents, dated November 27, 2013.

Executed this 8th day of July, 2014 in Washington, D.C.


## Complaint Counsel Exhibit A Attachment 1 <br> CX-A:1

## In the Matter of:

ECM BioFilms, Inc., et al.

July 1, 2014<br>David Stewart, Ph.D.

Condensed Transcript with Word Index


For The Record, Inc.
(301) 870-8025 - www.ftrinc.net - (800) 921-5555


LOS ANGELES, CALIFORNIA; TUESDAY, JULY 1, 2014 8:54 A.M.

DAVID STEWART, Ph.D., called as a witness by and on behalf of the Plaintiff, being first duly sworn, was examined and testified as follows:

## EXAMINATION

BY MR. COHEN:
Q. Good morning, Dr. Stewart.
A. Good morning.
Q. My name is Jonathan Cohen. I'm here on behalf complaint counsel at the Federal Trade Commission. I understand that you've been deposed any a number of times before I won't go over all the rules. I know you know them, but if for any reason you do have any questions or you need a break please let me know.
A. I will do that. Thank you.
Q. Did you personally write every word of your expert report in this case?
A. I believe so yes.
Q. Let's mark as Exhibit 1 your expert report in this case. Mark Exhibit 1.
Q. That this was a copy of the report that was produced to us?
A. Okay.
Q. And it was printed out. And I'll note as well it may be the case there are blue lines on certain foot notes that are links and I'm not sure they were actually blue in the actual report but it looks like that's how the printer printed them?
A. With that caveat well it looks as though it is the report that I wrote minus the minus the appendises although the append ceases are identified at the back.
Q. I direct you to page 9 and specifically the 7th sentence which is in the middle of the first paragraph begins with the word similarly. Similarly there have been periods where large when large numbers of a population have believed in the superiority or inferiority of particular races actions based on such shared beliefs had not had happy outcomes shared beliefs among customers especially when those shared beliefs have little basis in fact or personal expertise are a poor way to inform policy did I read that correctly?
A. You did.
Q. Is policy based on shared beliefs among
Q. And Professor Stewart it is the fact it is
the case that what's been marked as Exhibit 1 is your expert report in this case. You can go ahead and take a look. On?
A. Well there's some coloring that I don't believe was in your original report.
Q. What coloring don't you believe was in the original report?
A. Well, there's some there's some text that's
in some of it is in red. You know I I don't believe
that that was in the original report so I'm not sure
where where that.
Q. Can you?
A. May have come from and it looks like it's rather random.
Q. It's possible there's just some eccentricity with your copy can you point me to a specific page that has some red on it?
A. Oh, sure. Well, if you look at page 5 under scope of assignment there just a number of places where there's sort of random red, doesn't look like you've got red so.
Q. Let me just. That may be a feature of the printer that was used but I'll represent to you? A. Okay.

MR. AWERBUCH: Objection.
THE WITNESS: It's analogous in the sense
that it represents beliefs. Whether it's beliefs
6 about races or beliefs about particular events or
beliefs about the state of the world others we're
really talking about beliefs.
BY MR. COHEN:
Q. Is there anything the FTC does that you would analogize to policies based on the superiority or inferiority of particular races?
A. Well it appears to me in this action that's what's occurring is that there is an effort to make policy based only what people believe as opposed to any underlying science.
Q. Why are shared beliefs among consumers a poor way to inform policy?
A. Because consumers believe many things that are not true. And to the degree that there is an underlying science or an underlying criterion you'd really like to call upon that in establishing standards not a set of arbitrary on beliefs that are shared by a group of people that may have no basis in fact and may may in fact be wrong.

3 A. I don't think I am.
4 Q. Then I'll ask you to assume that many
consumers believe that magnets have medicinal
benefits do you understand the assumption I'm asking you to make?
A. I do.
Q. And I'll further ask you to assume that tens
of thousands of consumers purchase magnets from a
company that marketed them as medicinally beneficial
do you understand that assumption as well?
A. I do.
Q. When the FTC initiated litigation on behalf of those consumers was that poor policy in your view?

MR. AWERBUCH: Objection.
THE WITNESS: I can't really answer that without additional information. The question would become one of what was the source of those beliefs, what did the company do, without more information I really can't give you an answer.
BY MR. COHEN:
Q. And what additional information would you need to be able to answer that?
A. Well as indicated I -- I need to know what the company do, I'd need to know something about the underlying science, I would need to know something about what the what the beliefs were what the basis for those beliefs were.
Q. Let's assume that consumers had pre-existing beliefs that magnets had medicinal benefits and the
companies marketing capitalized on those are pre-existing beliefs, again given those assumptions
when the FTC initiated litigation on behalf of those consumers was that poor policy?
A. Again I would need to know a lot more of the facts in that particular case. How many consumers shared that belief? What was the source of those beliefs, how did the company capitalize on those beliefs.
Q. So it may be poor policy or it May not be poor policy depending on the specific factors I haven't give you sufficient information to make that judgment?
A. That's that's correct. I mean it would need to be more than just the fact that there were shared beliefs.
Q. So shared beliefs alone is not sufficient?
A. I don't believe so.
Q. Are shared beliefs or strike that. Why are shared beliefs among consumers a poor way to inform policy when the shared beliefs have little basis in personal expertise?
A. Because you're essentially asking
individuals to offer an opinion offer a statement to inform some action some policy that may have little or no basis in fact in.
Q. You're aware are you not that the FTC often brings cases against marketers making un substantiated medical claims?
A. I am aware that have.
Q. You would agree would you not that most consumers do not have personal experience or expertise in medicine correct?

MR. AWERBUCH: Objection. Objection.
THE WITNESS: I would agree with that too. BY MR. COHEN:
Q. There's no requirement that consumers have personal expertise for an un substantiated medical claim to violate the FTC act is there?
A. No there's not.
Q. And in fact people without the personal experience necessary to evaluate claims like those are precisely people whom the FTC act protects isn't
it?
A. It's part of what the FTC act is intended to protect that's correct that's people who not have have the expertise to evaluate a specific claim that was in fact factually incorrect.
Q. Is it your role as an expert in this case to opine regarding what policies the commission should or should not adopt?

MR. AWERBUCH: Objection.
THE WITNESS: I believe that part of my role here is is to opine on that largely because my understanding was case is quite an unusual case in the sense that there is a policy making component of this case as well as an issue of whether something is deceptively miss leading in terms of a communication so, but the policy aspect is really tide up very much with the communication aspect in this particular case.
BY MR. COHEN:
Q. Is the case unusual to you in any other respects?
A. Well it is somewhat unusual in the sense that at the heart of the case is the definition of a term and the definition of that term is really quite ambiguous and I think absent a clear standard on
what that definition is, you know it's it's difficult to conclude people are being misled or that they're getting correct factual information.
Q. Do I understand your position correctly that it is difficult to conclude that anyone has been misled if there is no clear standard as to what a term means?

MR. AWERBUCH: Objection.
THE WITNESS: Well I wouldn't go that far but I do think that you you cannot simultaneously establish a standard and then apply that standard to particularly a standard that's based on what people already believe and then apply that standard as the basis for bringing an action for deception. I mean if people already believe something it's not because it was communicated by by a marketer.
BY MR. COHEN:
Q. Do you consider yourself an expert in policy making?

MR. AWERBUCH: Objection.
THE WITNESS: Actually I do. I edit a
journal in public policy in marketing.
BY MR. COHEN:
Q. Let's mark as Exhibit 2 obviously professor please maintain Exhibit 1 we'll refer back to that

1 case I.D. one zero zero seven six one, it will be easier for you to find on Exhibit 3 A. And specifically the response to question four. In the it's the second row in response to question four reads weeks or months, did I read that correctly?
A. I'm not finding where you are.
Q. Take a look on the far left column you'll see a survey number one zero zero 7 six one?
A. I found that.
Q. And then if you go over to the response to four $B$, excuse me response to survey question four it's in the middle toward the right and you'll see weeks or months do you see that there.
A. I do now see that yes thank you.
Q. Would you characterize this consumers response as ludicrous?
A. No I would not.
Q. Would you characterize this consumers response as absurd?
A. I would not.
Q. And you coded this response correct?
A. I did.
Q. And you didn't disqualify it from your survey?
A. I did not.
let's mark as Exhibit 2 a set of screen shots. I'll provide copies to everyone and further more let's mark as Exhibit 3 you can set this to the side you can take a quick look at it but a compilation of the data that we understand is data in response to the survey that you under took. Those screen shots in exhibit two take a look at this I want to make sure that those are in fact the screen shots that contain the questions that were asked of the consumer survey respondents?
A. I believe they are yes.
Q. I certainly don't expect you to review four
hundred entries there professor Stewart but please
glance through and see whether you have any reason
to disagree with my representation that that's a
collection of the data?
A. I have no reason to disagree.
Q. Survey question four reads if something is bio degradable how long do you think it would take for it to decompose or decay correct?
A. That's correct.
Q. I'm going to mark as Stewart three Aan excerpt of three a little easier on so you don't have to flip through the document containing four hundred pages four hundred entries. I direct you to
Q. And why didn't you disqualify it from your survey?
A. Because weeks or months is a potentially appropriate answer here. It's unspecified in terms much how many weeks or how many months, but it it's an it's a reasonable response to to the question.
Q. I direct you to case I.D. one zero zero six nine seven also the response to question four which should be on the next page if I've done this correctly. I may have misspoken one zero zero six nine seven. That response says within weeks two months, did I read that correctly?
A. You certainly did.
Q. Would you characterize this consumers response as ludicrous?
A. No I would not.
Q. Would you are characterize this consumers response as absurd?
A. No I would not.
Q. You coded this response correct?
A. I did indeed.
Q. You didn't disqualify it from your survey?
A. No, I did not.
Q. Why not?
A. Because it's a perfectly reasonable

1 response. The individual doesn't specify a
2 particular interval they simply indicate weeks to
3 months in both cases plural, both could be could be
4 perfectly reasonable beliefs from the part of an
5 individual. It's nonspecific. But represents what the individual believes.
Q. Is it your contention this consumer may have meant more than a dozen months?
A. That could be the interpretation, I'm I'm not here to tell you what was in the minds of these consumers when they gave these responses. This is the response that they gave I think it's a reasonable response. But you know what they had in mind I don't know. They they clearly didn't put a number around weeks tore months. It could have been a few. It could have been many.
Q. So in your interpretation it's it could have been a hundred and four weeks?
A. Well anything is possible. I -- I suppose.

Again you're asking me to go beyond the data here.
I don't know what this person had in mind when they gave this response.
Q. You would agree with me that weeks or months probably doesn't mean two years?

MR. AWERBUCH: Objection.
A. I would agree that in most cases that's
probably correct bull gean we're going beyond the data here.
Q. The data does say weeks or months correct?
A. That's exactly what it says.
Q. And the most plausible interpretation of weeks or months would be some period of time less than a year correct?

MR. AWERBUCH: Objection.
THE WITNESS: That is a plausible
interpretation but it is an interpretation.
BY MR. COHEN:
Q. You didn't strike that you coded their response correct?
A. I certainly did.
Q. And you coded it as being less than a year?
A. I don't recall exactly how I would have
coded this it probably would have initially been
coded as weeks to months. I did not make an effort
to convert the responses into specific numeric
values unless a numeric value was provided.
Q. You didn't disqualify from your survey did you?
A. I did not.
Q. I direct you to one zero zero nine five six
on the next page the response to question four. A couple of weeks parentheses $P$, then the number one then no, did I read that correctly?
A. Again I'm not finding.
Q. It's in the last row. Roughly speaking the fifth column from the right so sir if you look at the lower left-hand corner you'll see one zero zero nine five six?
A. I do I've now found it I'm sorry. The type is rather small but.
Q. I apologize?
A. Yes, I do see the person says a couple of weeks one month.
Q. Before I forget to ask what does that parentheses $\mathbf{P}$, mean?
A. That would have been what the individual probably the interviewer put a plural on it. You know I don't know whether the respondent said a couple week or the interviewer said a couple of weeks but that's that's as I sit here I can't tell you specifically.
Q. Sticking with the $P$ for a moment if you go over on row left maybe three large subsidiaritive entries there's one that says so that we can leave a cleaner earth for our children. I don't use plastic

1 bags I use paper and I recycle. $P$, no do you see that?
A. Yes.
Q. That does don't indicate plural there could it?
A. Oh no actually actually you ask me now now I now I know what this is. That's not a that's not an S on the that the earlier thing you asked me about. That's a P, and the and that stands for probe. And the same is true in the P for the one you just asked me about. That would be a probe, anything else.
Q. And what do you mean by probe?
A. It would have been a question much as I just used, anything else.
Q. So returning to one zero zero nine five six, which states a couple of weeks before the probe, would you characterize that consumers response as ludicrous?
A. No I would not.
Q. Would you characterize that consumers
response as absurd?
A. I would not.

23 Q. And you coded this response correct?
24 A. I certainly did.
25 Q. And you didn't disqualify from the survey?
A. I did not.
Q. Let's go to case number one zero zero nine three seven response to question four which is in the second row the fifth column from the right. A couple of weeks did I will read that correctly?
A. Yes.
Q. Would you characterize this consumers response as ludicrous?
A. No I would not.
Q. Would you characterize this consumers response as absurd?
A. I would not.
Q. You coded this response correct?
A. I did.
Q. You didn't disqualify from your survey?
A. I did not.
Q. Let's go to one zero zero five one seven the response to question to question 4 which is in the third row fifth column from the right.

Probably two weeks did I read that correctly?
A. Again you'll have to tell me where you are.
Q. The third row I believe and the so that would be the bottom row in this instance. One zero zero actually let me, did I call out five one seven,
you may need to skip ahead an additional page to get to five one seven?
A. I do see five one seven.
Q. I apologize I miss directed you so if you go
to third row again and response to question four which is about one two three four five or so from the right you see probably two weeks.
A. I do see that yes.
Q. Would you characterize this consumers response as ludicrous?
A. I would not.
Q. Would you characterize this consumers response as absurd?
A. I would not.
Q. You coded this response correct?
A. I did.
Q. You didn't disqualify it from your survey did you?
A. I did not.
Q. Let's go to case I.D. number one zero zero eight four nine which may require a little more flipping it's toward the end.
Q. On the correct page it should be the last row. Again the fifth column from the right.
A. Uh-huh.
Q. This consumer responded within a couple of days did I read that correctly?
A. Yes, you did.
Q. Would you K characterize this consumers response as ludicrous?
A. No I would not.
Q. Would you characterize this consumers response as absurd?
A. I would not.
Q. You coded this response correct?
A. I sure did.
Q. You didn't disqualify from your survey?
A. I did not.
Q. Let me direct you to your report on page 12

I believe it's Exhibit 1 and I'm correct am I not
that you characterized responses that were described in terms of seconds minutes hours days or weeks as ludicrous and then I believe as well the term absurd
is used twice on the same page as well also to
characterize such responses. Have I understood that correctly.
A. That's correct.
Q. Why is it that the responses that are in

Professor Frederick's survey that are in days or weeks are ludicrous and absurd whereas the responses
that are in your survey that are lewd, that are days or weeks are not ludicrous and absurd?
A. Well because what I report is actually what the respondent said. What Dr. Frederick reports is a recoding of these, he converts two minutes, two weeks, ten days, all into half a year. That's that's not meaningful, that's ludicrous, that's absurd, I think it's certainly the case that weeks or months in some fashion is a reasonable response from the part of a consumer. It's not necessarily a statement of fact. It's a statement of belief and I believe Professor Frederick actually uses his data as though it's a statement of fact, not simply an uninformed opinion. And in fact many of these responses are ludicrous and absurd. Nanosecond, one second, ten minutes, I mean a thoughtful consume arer doesn't give these kinds of responses.
Q. You said a fuse things there first of all if I understood you correctly days and weeks are not ludicrous or absurd responses in your view correct?

MR. AWERBUCH: Objection.
THE WITNESS: Well it depends on what is
says said. I think I think days is unless they say
a hundred 80 days, is probably not a very well
informed response. Weeks again, weeks could be a
perfectly appropriate response if if if there's a
number on the front of it and it makes sense then it
could be a reasonable response. It is not a
reasonable substitute for half a year however.
Neither neither is it a statement of of a fact.
It's a statement of a belief.
BY MR. COHEN:
Q. So I understand, if I understand you
correctly and correct me if I'm wrong, you're saying
that it's not the weeks or days that's ludicrous and
absurd but the fact that Professor Frederick coded
weeks or days as half a year that's what you're contending it absurd?

MR. AWERBUCH: Objection.
THE WITNESS: Well no I'm also contending that some using some of these responses in and of themselves is is also ludicrous I mean one second one nano second I mean these are just absurd ludicrous responses but they become even more ludicrous when they're put in the context of being coded as half a year.
Q. Let's stick for a moment for weeks.

Specifically with respect to weeks was it ludicrous
for Professor Frederick to code a response of weeks as half a year.

THE WITNESS: Yes. BY MR. COHEN:
Q. And why do you say that?
A. Because two weeks is not half a year. It's factually incorrect.
Q. Two weeks is a shorter period of time than half a year isn't it?
A. Much shorter.
Q. So to the extent that Professor Frederick coded two weeks as half a year that's a result of favor see as isn't it?

MR. AWERBUCH: Objection.
THE WITNESS: No I don't think it favors at all. It's it is simply a failure to code what the individual actually said. In contrast to what I
did, which was to actually code what people actually had to say, this is a distortion of the data. BY MR. COHEN:
Q. Let's look at the first sentence in the first full paragraph. This erroneous coding of absurd responses is not the only reason Professor Frederick fails to report his results accurately diread that correctly?
A. You did.
Q. It doesn't say anything about professor fred
restriction coding decision being absurd it says that the responses are absurd correct?
A. It talks about the erroneous coding of absurd responses. That is correct.
Q. So it's the responses that are being characterized as absurd?

MR. AWERBUCH: Objection.
THE WITNESS: The responses and the way they're being coded yes.
BY MR. COHEN:
Q. If you go up about three lines there's a sentence that begins by counting such ludicrous responses and then the sentence goes on. That's a reference to the responses being ludicrous correct?
A. That's correct.
Q. If you go to the fourth line from the bottom of the middle paragraph on the page the combination of coding absurd responses and then it goes on. That's a reference to the responses being absurd correct?
A. That's correct.
Q. You understand this report will be publicly filed in this case correct?
A. I assume it will be correct.
Q. None of the respondents in your survey were
informed prior to agreeing to participate that their responses would be made public were they?

MR. AWERBUCH: Objection.
THE WITNESS: They were not informed that their responses would be made public they were informed that their responses would be would not be individually identifiable.
BY MR. COHEN:
Q. None of the respondents in your survey were informed prior to agreeing to participate that their responses would be made public and potentially characterized as absurd or ludicrous were they?
A. No and I wouldn't have been able to do that because I, I meant first of all as I've indicated in my own survey I haven't characterized as offering ludicrous or absurd responses. And I would have not have been able to do so in advance because I didn't know what they were going to say.
Q. You certainly could have characterized them one way or the other after you knew what they'd said.
A. Well I coded them. I didn't characterize them, I coded them as what what they said. It's very typical way of handling verbatim responses to open ended questions.
a representation of fact. And then converts it into an even more ludicrous code that corresponds in some cases but not all, to to to a fraction of a year.
Q. With respect to the two references to the word phrases absurd responses and one to ludicrous responses, do any of those refer to the manner in which Professor Frederick lect would to code his responses?

## A. Absolutely.

Q. Explain what you mean?
A. It goes to how he's using this data. He is not merely reporting this is what people said. He's he is he is basically using it as a statement of fact that he's then transforming into another statement of fact. You know. If all he had done was to simply report the responses and not attempt to transform them into something that they're not then I would have taken them at face value. Some I still would think are ludicrous and absurd.
Q. And which ones do you think are ludicrous and absurd?
A. I wasn't finished.

MR. AWERBUCH: Please let him answer the question.

THE WITNESS: What I was going to say was
Q. And for instance, several days is in

Professor Frederick's data set is characterized in your report as ludicrous but you would not characterize it in your report as ludicrous?

MR. AWERBUCH: Objection.
THE WITNESS: No because I'm using the terms in very different ways. What I'm reporting is what people believe. I'm not trying to use their responses to generate a factual statement about biodegrade bilt. I'm not trying to convert it into some sort of numeric code that is beyond what the individual offered.
BY MR. COHEN:
Q. That's what's referenced to professor fred restriction decision to code such responses as half a year. The question I'm asking has to do with whether someone who responded to your survey with a two week response was giving a ludicrous response regardless of how it was coded?
A. No there's a difference in the way the data are being used. I'm simply reporting what people said they believe. I'm not making any value judgment about whether it has in fact. Professor Frederick is apparently using these responses in what I would call a ludicrous fashion and that is as

1 irrespective of whether they were coded inappropriately or not, I would still think that one second or one nanosecond is pretty ludicrous. I don't have a problem with it being reported because that's what the person said. What I do have a problem with is the way that it is treated as though it is a factual statement. It is not and it's a fairly for some of these it's fairly bizarre statements of fact.
10 BY MR. COHEN:
board approve the study that we're discussing?
A. No, they did not.
Q. How many expert reports have you written?
A. Over 25 years probably, well let me let me ask for clarification. Do you mean in the context of litigation or do you mean all all expert reports.
Q. That's a fair question. Any expert report that was in any way connected to litigation?
A. Probably close to a hundred.
Q. Prior to this case have you ever prepared an expert report in which you characterized a response of a consumer you studied as absurd?
A. Yes.
Q. How often have you done that?
A. Not not very often most of the work that I see is actually pretty good work but I -- I have seen surveys that I thought were poorly organized poorly implemented poorly designed and where some of the responses I would have characterized as absurd.
Q. Prior to this case you've already prepared expert reports in which you characterize responses of consumers you've studies as ludicrous?

MR. AWERBUCH: Objection.
THE WITNESS: Quite possibly I don't have a particular recollection.

BY MR. COHEN:
Q. In which cases did you characterize consumers survey respondents responses as absurd?
A. I don't really have a recollection as I sit
here today of what specific word I may have used in connection with a particular case.
Q. Let's go to what I believe has been marked as Exhibit 3 , not three A , which is the larger data set. And I direct you to the very first entry which is case I.D. zero zero zero zero zero three and specifically the third text entry over on that row that consumer made the following remark regarding buy oh degradation, I think it's what I told you. It dissolves like those package 53 nuts are made of rice or rice products or corn state your full name I
know it's a product that will dissolve and doesn't
have to end up in our land fills did I read that correctly?
A. You did.
Q. The consumers understanding of
biodegradation appears to be dissolution here
correct?
A. That's what they said here.
Q. Consumer gives the example of corn starch packing 53 nuts correct?
A. Correct.
Q. Corn starch packing peanuts dissolve in a second or two in water correct?

MR. AWERBUCH: Objection.
THE WITNESS: I think they can yes.
BY MR. COHEN:
Q. If a consumer terms biodegradation to mean
dissolution why is a second or two an absurd response?

MR. AWERBUCH: Objection.
THE WITNESS: Because it is simply even too
short for the dissolution process to occur and
there's no context around it.
BY MR. COHEN:
Q. Do you know how long the dissolution process takes to occur?
A. I do not.
Q. How do you know that it's too short for the dissolution solution process to occur then?

MR. AWERBUCH: Objection.
THE WITNESS: Because I have seen no evidence that would suggest that one second is sufficient time for that cycle of dissolution to take place.
BY MR. COHEN:
Q. If you saw such evidence would you change your view as to whether or not that response was absurd?
A. I might. I might not.
Q. And how would you decide whether you would or would not change your view?

MR. AWERBUCH: Objection.
THE WITNESS: Well I actually think that we need to have a better understanding of what this respondent was talking about in addition to whatever other facts you wish to present.
BY MR. COHEN:
Q. Assume this respondent was talking about starch peanuts where yous toed them in the water?

MR. AWERBUCH: Objection.
THE WITNESS: How were theys toed into the water. I mean we don't have a complete understanding of what what this individual is talking about. This is what the person said. It's a perfectly reasonable response to give, is it possible that under some some circumstances that individual meant that it would dissolve in a second? Maybe so. Is it possible that under some circumstances it could dissolve in one second maybe so. We don't know that from what the individual has
said here. In fact when the individual was asked
about time quite specifically they said I have no idea I can't even guess.

MR. AWERBUCH: Can we go off the record for a second. I'd like to take a five-minute break if that's okay.

MR. COHEN: We've only been going for half an hour do you need to use the restroom or.

MR. AWERBUCH: Yeah.
MR. COHEN: We can go off the record.
(Recess)
(A discussion was held off the record.)
BY MR. COHEN:
Q. Let's go back on the record. Dr. Stewart, did you speak with your counsel during the break?
A. No.
Q. Did you communicate with anyone representing ECM ECM during the break?
A. No, I did not.
Q. Let's return to where we left off. We were talking about a consumer that might believe that dissolution of a starch based packing peanuts was what was meant by biodegradation. Is that your recollection as well?
A. That's correct.

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Q. And if I understand you correctly I mean again I want you to clarify this if I've got this incorrect. It could be absurd but it might not be absurd depending on various other considerations?
A. I mean anything is possible.
Q. I understand that philosophically anything is possible but if we assume that this consumer understood biodegradation to mean the dissolution of starch packing peanuts that wouldn't be an absurd response would it?

MR. AWERBUCH: Objection.
THE WITNESS: It would not be a absurd response it's what they believe yes it's what they said.
BY MR. COHEN:
Q.
Q. Assume that a consumer is asked the question if a package is labeled buy degradable how long will it take to decompose and the consumer interprets
biodegradation to mean the beginning of the biodegradation process not the completion of the process do you understand that assumption?
A. I do.
Q. Is it possible such a consumer could believe
that certain materials begin buy degrading

## immediately?

A. That's certainly possible.
Q. Do you know whether certain materials begin
buy oh degrading immediately?
MR. AWERBUCH: Objection.
THE WITNESS: It's my understanding that some may under some circumstances.
BY MR. COHEN:
Q. Given the assumption that a consumer interprets biodegradation to mean the beginning of the biodegradation process, not the completion of the process, is a second or two an absurd response in that circumstance?
A. No. Now it's an absurd question.
Q. And request is it an absurd question?
A. Well because now what you've done is is R you said if we ask the person something different they will give they might give a response that is sense cal, but now now we're asking now we're reinterpreting biodegradability to mean the beginning as opposed to the end I suppose you could even say in the middle I mean if that's what you want to ask ask that question but don't attempt to take a statement out of context and put it into the context of another question that was not asked. And
ask what is it what does it mean now, well I don't know. Because the person wasn't wasn't actually asked the question.
Q. Do you know whether anyone was asked the question if a package is labeled buy oh degradable how long will it take to decompose?
A. I believe they were.
Q. So someone was in fact asked that question?
A. They they were asked that question. They
were not asked the question of to begin to
decompose. To completely decompose. I mean those are different questions.
Q. Do you understand that my question is if someone was asked the question that we agree was asked, and they had interpreted biodegradation in the context of that particular question that was actually asked to mean the commencement of biodegradation rather than the completion, would a second or two be an absurd response in that circumstance?

MR. AWERBUCH: Objection.
THE WITNESS: I believe that it would generally be an absurd response because I don't think that's what people typically think about when they think about biodegradation. They don't think
about the start process and if you want to know about how quickly will it start ask that question. Then it's perfectly appropriate. But it's it's a complete distortion of any data to to begin to speculate about what an individual might have meant, by a response based on an interpretation that was not explicit in the question.
BY MR. COHEN:
Q. You didn't recall calculate any of Dr. Fred restriction survey is to see how the results would have changed if the responses deemed absurd were excluded did you?
A. I didn't do that specific computation. I
did do some computations and actually I did eliminate a lot of the absurd responses. Yes, I did do some yes, I did do that.
Q. And what were the results of those computations?
A. Off the top of my head my recollection is that first of all I included all the responses including those he did not code. The don't knows the depends write which I think are perfectly reasonable responses and should be included in any computation percentages and and my recollection is that almost 40 percent of the responses in his
various surveys were not coded. We really we really need to include them. My recollection is that those that were I think less than I think less than a day a day or less were about 3 percent of the responses. I think those were less than a month were about 13 percent of the responses. I do know that of the total responses, about little over 18 percent were responses between 30 days, more than 30 days and a year, which was about the same percentage as the responses of five years or or more. Now, that's based on my computation based on his data and I readily admit I don't fully understand all of the of the data, but that's my rough computation.
Q. What don't you understand about the data?
A. Well it's it's pretty messy data and I have
not gone through and tried to make a complete determination of how the how the data was constructed I've tried as best I can but I mean I got the CONCATTENATED data late on Friday so I haven't had a lot to do a lot with it.
Q. You've discussed some consumers under some circumstances their responses might be characterized as absurd but with respect to those specific responses how do you ascertain whether a consumers response is absurd enough to be disregarded?

MR. AWERBUCH: Objection.
THE WITNESS: Well there are two ways to do
it. I mean one is you actually don't have to
disregard it. You could you could September it and code it as for what it is. But you wouldn't use it necessarily in a computation. In the other case you could simply make a judgment as a well trained professional coder would often do that a particular response really didn't make any sense in the context of the question, was flip was nonresponsive and and and choose to eliminate it. That would be made by that would be a decision made by a professional coder whose job it is to do editing of data sets and I would expect that that individual would be blind the purpose of the study so that the purpose of the study had no impact on the decision on whether to use a particular data point or not.
BY MR. COHEN:
Q. What qualifies you or any of the researchers that worked for you to make judgments as to whether a consumers response to a biodegradation time question is too absurd to be coded?
A. I have spent 30 almost 40 years now engaged in doing consumer research. I think I have an understanding of responses that are meaningful

1 responsive, and and appropriate in the context. Consumer surveys, I believe my expertise qualifies me to to make those judgments and as I said they can accept the response for what it is. You have to be very careful about imbuing it with any meaning beyond what's actually there.
Q. There's the line between a reasonable but factually erroneous response and a factually erroneous response that's too unreasonable or too absurd to be coded?
A. I wouldn't draw a bright line.

MR. AWERBUCH: Objection.
THE WITNESS: What I would be inclined to do and what I did in my own survey is I would code everything as it was stated. I would not go beyond the data and start making assumptions about things people meant that are that are simply not in the data and in some cases are completely in consistent with the data. BY MR. COHEN:
Q. Why wouldn't you draw a line between
reasonable and factually erroneous and too
unreasonable?
A. Because I think it would be difficult to
establish a hard and fast criteria. I think you
could come up with some rules but there would still
be a certain amount of subjectivity that would be involved.
Q. Adopting a rule in which you code every response avoids having to draw that type of subjective line correct?
A. Well maybe and maybe not. It depends on how it's coded. I mean if you're actually coding the response as opposed to transforming it to give it different meaning then I think that's okay. The problem becomes one of transforming the actual response into something that may not be.

## Q. You criticized Dr. Frederick for coding extremely low numbers correct? <br> A. I'm not sure what you mean. MR. AWERBUCH: Objection. THE WITNESS: By low numbers. BY MR. COHEN:

Q. Seconds.
A. I do.
Q. Do you have any understanding one way or the other as to whether Dr. Frederick also coded extremely high numbers?
A. I believe he did.
Q. Is one trillion years an absurd response to

1 long did you?
A. No, I did not.
Q. Let's back up for a moment to the person who gave the packing peanuts response that suggested an understanding of biodegradation that is something that might also be considered dissolution do recall that?
A. I do.
Q. Let me direct to you what $I$ believe is Exhibit 2 and I apologize if I got this wrong but Exhibit 2 should be some screen shots?
A. And I direct you can specifically to Ssix.

That's a screening question that asks potential respondents do you have a general understanding of what the term buy degradable means did I read that correctly.
A. Yes you did.
Q. By virtue of the fact that the packing peanuts response appears in the data set we know don't we that the consumer who gave that response answered affirmatively when asked do you have a general understanding of was the term biodegradable means correct?
A. That's correct.
Q. So every consumer you counted in your survey
might be appropriate to follow what you just said to trim the very high and the very low correct?
A. Correct.
Q. But it wouldn't be appropriate to code the very high but not the very low would it?

MR. AWERBUCH: Objection.
THE WITNESS: Well, you're going to have to give me some context. I mean there certainly could be circumstances where that that might make sense. BY MR. COHEN:

## Q. Where might that make sense?

A. Well if if somebody were to say for example,
a million years, a material years, you could code that for what it is, million a trillion. Whether you would transform it is a whole other question I mean they could say eternity they could say never. I mean all of those are codeable responses whether you would want to transform them into some numeric value or use the numeric value as stated is a different question. And again I think the appropriate approach here would have been what I suggested would have been to trimmed if you wanted to create any any erythematic arithmetic exercise.
Q. In your survey you didn't disallow any responses because they were either too short or too
who gave a response that's arguably with any
scientific definition of biodegradation was a
consumer who had told your researchers that he or
she had a general understanding of what the term biodegradation means correct?
A. Yes.

MR. AWERBUCH: Objection.
THE WITNESS: That is correct.
BY MR. COHEN:
Q. Do you know how many consumers that was?
A. I don't no. I've not done a count.
Q. It's necessary to have some basic
understanding of the product at issue to study
consumer perception of the marketing of that product correct?

MR. AWERBUCH: Objection.
THE WITNESS: Well, if the focus is on a
product, yes it would be.
BY MR. COHEN:
Q. Let's take a look back at your report which
is I think marked as Exhibit 1. If you go to I'll
direct you to page 4, the first sentence under background, ECM plastics offers a product biofilm which is spelled capital bio capital film that may be applied to plastic products during the
manufacturing process. Did I read that correctly?
A. Yes you did.
Q. And as you mentioned earlier you wrote that sentence yourself?
A. I did.
Q. The product you understood yourself to be studying is called buy oh film?
A. That's what it's been referred to as yes.
Q. From the standpoint of mike biology and I understand if this is outside your expertise, do you
know what a buy oh film is?
MR. AWERBUCH: Objection.
THE WITNESS: I don't know I don't know specifically in a generic sense what a buy oh film is it's been represented to me that this product is an additive that is used in the manufacture of plastic I believe coats the exterior which is which I think it's called a film, that facilitates the break down of the of the plastic.
BY MR. COHEN:
Q. Are you familiar with a product ECM sells called master batch pellets capital $M$, capital $B$ in the batch and Capital $P$ for pellets, and then it's trade marked?
A. I'm not familiar with that.
Q. Let me mark as Exhibit 5 excuse me I think we're on four I apologize a flyer that Dr. Stewart you produced to us. Have you seen this before?
A. I have.
Q. It's entitled mechanism for biodegradation of products manufactured with ECM master batch pellets and then there's a trade mark up there correct?
A. That's correct.
Q. Did you consider this document strike that did you rely upon this document in the preparation of your report?
A. I don't believe that I did. It was part of a number of documents around the product and company that I was provided but I didn't make any use of it.
Q. Did you review the document prior to drafting your report?
A. I probably did review it. I don't, I don't
have a strong recollection of it.
Q. Let's mark as Stewart five a document that's
entitled sample claims by ECM buy oh films have you seen this document before Dr. Stewart?
A. I have.
Q. Who prepared this document?
A. I believe the attorneys in this particular

1 case.
Q. Which attorney?

MR. AWERBUCH: Objection.
THE WITNESS: Well it came to me from Leo Caputo I don't know who may have prepared it.

## BY MR. COHEN:

7 Q. Why was it prepared?
MR. AWERBUCH: Objection.
THE WITNESS: Because we we talked a bit about what claims might be at issue in in the case and I asked him for a sample of the claims that were at issue.
BY MR. COHEN:
Q. Let me direct you to the second bullet on the first page that begins master batch pellets TM, is a revolution air additive and goes on to make various claims. Have I read that correctly?
A. You have.
Q. Did you review and rely upon these sample claims in the preparation of your report?
A. I did review them and I -- I selected several that with some modification. I then use indeed my survey.
Q. What was the basis for the selections that you made?
A. I was simply looking for for various types of claims that that were made that seemed to be different in terms of specificity, detail, language.
Q. Were you told to use any particular claims?

MR. AWERBUCH: Objection.
THE WITNESS: I was not.
BY MR. COHEN:
Q. Where is it your understanding that ECM sells a product called buy oh film come from?
A. I believe I have seen this in some
documents. I think it's been a part of
conversations with with the attorneys and and with employees of the company.
Q. Which employees of the company?
A. The president is one I think that was his
title. I've had a couple of conversations with him.
He's the only one that I've had substantive
conversations with.
Q. And which attorneys did you speak with who told you that ECM sells a product called bio film?
A. I think Lou Caputo.
Q. Any others?
A. I think that's he think that's the only one.
Q. And I under you may not remember his name but the president would that have been Robert

## 1 Sinclaire?

A. Yes I believe that's correct.
Q. And he would have told you will that ECM sells a product called bio film?

MR. AWERBUCH: Objection.
THE WITNESS: Well that's my recollection it's been a while since I talked to him but I
certainly had a conversation with him about the product.
BY MR. COHEN:
Q. Let's assume just for the purpose of this next series of questions that ECM does not sell a product called biofilm. That wouldn't change your opinions would it?
A. Not at all.
Q. You would just substitute the references in the report to the alleged biofilm product to master batch pellets?
A. I might. The study that I did was really focused on any specific product, in fact I was I was quite clear in designing the survey that I didn't want to mention any specific product name. I simply wanted to evaluate claims absent reference to a particular vendor. So we could have you know we could have substituted most anything. It wouldn't
change the report.
Q. Well regardless of what you told survey respondents I understand there may be a reason why you wouldn't want to tell survey respondents the exact name of the product would there be a reason that you would use a different name for the product in the report?

MR. AWERBUCH: Objection.
THE WITNESS: That's the that's the name
that stuck with me, that's what I used.
BY MR. COHEN:
Q. Is it your view that a reasonable consumer
must correctly understand a claim to be deceived by it?

MR. AWERBUCH: Objection.
THE WITNESS: I believe they have to develop an understanding. It pay be an erroneous
understanding.
BY MR. COHEN:
Q. So a consumer with an erroneous
understanding of a claim can be deceived by it?
MR. AWERBUCH: Objection.
THE WITNESS: That's certainly possible yes. Just because there is an erroneous belief doesn't mean they have been deceived by a communication but

1 it
it is certainly possible that people taking an
erroneous belief away from a specific communication could be misled and deceived.
BY MR. COHEN:
Q. Let me give you a hypothetical. A juice is marketed as having more energy than a competitors products. Or competitor products. The only difference between the marketers product and the competitors product is that the marketers product contains more calories. Solely due to the poor nutritional education in the United States a substantial minority of reasonable consumers interpret the marketing reference to more energy to mean more vitamins and they buy the product in part
based on the more energy claim. Have those consumers been deceived?

MR. AWERBUCH: Objection.
THE WITNESS: If there's evidence that they take away a claim about vitamins, and that they take away that claim based on the communication, and they make a decision based on that that erroneous belief, then yes I think they have been deceived.
BY MR. COHEN:
Q. I asked you to assume that the sole basis for their belief that more energy meant more
vitamins was the poor state of nutritional education in the United States. Again given that assumption have those consumers been deceived?

MR. AWERBUCH: Objection.
THE WITNESS: If, there, there has to have been some marketing communication as well as the poor state of their knowledge.
BY MR. COHEN:
Q. The marketing communication in this example is the product is being marketed as having more energy.
A. Okay.
Q. Is that a sufficient marketing communication in your view such that the consumers who purchase the product based on that marketing communication have been deceived?

MR. AWERBUCH: Objection.
THE WITNESS: I would need to know whether there was evidence that in fact they took a vitamin claim away from communication and that that, that that, that the number of people who took away that claim about vitamins was substantially greater than people take being, would take away from exposure to any fruit juice.
BY MR. COHEN:
Q. Okay let's break that down. You said a couple of interesting things there. You would need to know that people took away the vitamin claim from the reference to energy. Did I understand that was one of the two points that you just made?
A. That's correct.
Q. So if the, if there were evidence that the energy claim contained an implied claim of vitamins, would that satisfy your concern now?
A. Well whether it's explicit or implied is not
the issue because that's a characteristic of the claim what's important is what do people carry away in terms of a message and you know if they if they infer something that is implied then they could conceivably been misled in that case.
Q. And I believe and I apologize you made a second point as well can you refresh my recollection?
A. Yeah.
Q. As to what that second point was?
A. Well the point was there needed to be a demonstration that it was the marketing communication that actually created the problem or the deception if you will so what you want to do is control for those pre-existing beliefs so for

1
example, if you simply provided a fruit juice absent the particular claim about energy, how many people make an inference about vitamins in that case, and is it substantially smaller number than is the case where people may have been exposed to the claim at issue.
Q. So if I understand your contention correctly and I'm sure you'll correct me if I don't. If the belief in this example energy means vitamins, does not come from the marketing communication itself there can't be deception?

MR. AWERBUCH: Objection.
THE WITNESS: Well it the person may be deceived for other reasons but they're not being deceived by virtue of the claim at issue. BY MR. COHEN:
Q. What about a situation where a marketer takes advantage of a preexisting erroneous belief amongst the population? Is that marketer deceiving consumers?

MR. AWERBUCH: Objection.
THE WITNESS: You'd have to give me more, I mean you'd have to give me more fact does I mean I -- I mean the answer is possibly but possibly not I mean you have framed the question as though the

2 be done.
BY MR. COHEN:
Q. So if the marketer intends to deceive in the sense that the marketer is capitalizing on a pre-existing erroneous belief. The marketer would be violating the FTC act in that situation correct?

MR. AWERBUCH: Objection objection.
THE WITNESS: Well now you're asking me for a legal opinion and I and I can't give you a legal opinion. I do think that in that situation if if if those are the only facts on the table there may be key word is maybe, a basis to believe the individual has been deceived. BY MR. COHEN:
Q. And just for the record, so the record is clear I understand that you're not a lawyer correct?
A. That's correct.
Q. You do, you are an expert in what I would call general sort of law and marketing would that be a fair sort of rough characterization?
A. That's fair.
Q. And so you wouldn't give me a different answer to the last question if $I$ couched it in terms of based on your expertise as an academic who
studies law and marketing would you?
A. I wouldn't change my answer no.
Q. Let's try one or two more. Let's say that a dietary supplement is marketed to consumers as boosting immunity. The claim is true in the sense that the supplement increases the presence of certain blood components associated with the body's immune system but it's not true in that it reduces the risk of cold and flu however again solely due to the poor state of science education in the United States a substantial minority of reasonable consumers believe that boosting immunity means reducing the risk of cold and flu. That substantial minority buys the product based in part on the boosting immunity claim have those consumers been deceived?

MR. AWERBUCH: Objection.
THE WITNESS: It's possible but again I would need more facts. I would need to know the extent to which that generalized belief influenced the purchase of any product. If it's a belief that people are carrying around with them and was not created by marketing communication, and people are using it to make make decisions about all manner of products then I'm not sure they are deceived. They
may have an erroneous belief but I'm not sure we can hold a motherer responsible for that.
BY MR. COHEN:
Q. Could you hold the marketer responsible if the marketer is capitalizing on a known erroneous belief?

MR. AWERBUCH: Objection.
THE WITNESS: Now you'll need to define capitalize.
BY MR. COHEN:
Q. The marketer is aware of the erroneous belief and never the less markets the product without any qualification?

MR. AWERBUCH: Objection.
THE WITNESS: Again I would think you have to give me more information in that specific case.
BY MR. COHEN:
Q. What I'm sorry go ahead?
A. Well, if people marketers are not
responsible for the general beliefs that people
carry around that have not been created by by the
marketing stimulus or the marketers actions. You
know if there is a specific claim that is misleading
than and people rely on it, then there may be
deception involved but you know I don't think we can

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hold marketers responsible for all the erroneous
beliefs people carry around in the marketplace.
Q. And you would maintain that position even if the marketer is knowingly capitalizing on those erroneous beliefs?

MR. AWERBUCH: Objection.
THE WITNESS: Again I I don't know I don't know what you mean by capitalizing. I mean that's that's my difficulty with your, you'd have to tell
me what the marketer is doing specifically before I
can answer that question.
BY MR. COHEN:
Q. Well let's stick with the hypothetical for a moment and let's assume that the marketer understands that a significant mine north of consumers understand that boosting immunity will be interpreted -- withdrawn.

The marketer understands that a significant minority of consumers who see the phrase boosting immunity will interpret that to mean reduces cold and flu. The marketer knows that. In that situation has there been deception?

MR. AWERBUCH: Objection.
THE WITNESS: Not necessarily. It depends on the nature of the claim, the characteristics of
the marketplace. Again you can't hold a marketer responsible for beliefs that have been developed by virtue of things that are not within the control of the marketer.
BY MR. COHEN:
Q. So if I understand you correctly the marketer has no responsibility for pre-existing erroneous beliefs among of the the population with respect to whether or not it's claim is evaluated as deceptive?

MR. AWERBUCH: Objection.
THE WITNESS: No, I didn't say that. I think marketers do have some responsibility but it is also the case that marketers don't have control over many of the things that create erroneous beliefs among consumers and you can't hold marketers responsible for those erroneous beliefs.

## BY MR. COHEN:

Q. Ma'am could you read back the answer read read?
Q. Thank you. When you said some responsibility in your answer, what is that responsibility that you referenced?
A. Well I think marketers have a responsibility to be generally aware of of who their consumers are,
what they believe, what they buy and to assure that the information that they present to their consumers is, is, is factually accurate.
Q. So again, if it's factually accurate but likely to be misunderstood based on pre-existing beliefs there's no deception there?

MR. AWERBUCH: Objection.
THE WITNESS: No that's not what I said there could be but there also may not be and we would have to identify specific cases I believe, to determine whether or not there was there was deception present. I mean again there has to be something that the marketer has done or not done that they can be held responsible to and it has to be you know, a belief that people are acting on. BY MR. COHEN:
Q. Are there any other I guess cry tear I don't know you just gave me two that will help me determine the circumstances in the situation where the marketer would be responsible and the marketer would not be responsible?
A. Well I mean there could be any, in specific situations there could be I suppose any number of other things, but in general there needs to be some evidence first of all that there's even an erroneous

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belief. Secondly that some how that erroneous belief is there by some action or inaction by the marketer, and thirdly that you know people are you know are behaving differently shop I differently making different purchase decisions by virtue of that erroneous belief created by the marketer.
Q. You took a telephone survey in this case correct?
A. I did.
Q. How is it possible to survey consumers impressions of the ECM logo over the phone? MR. AWERBUCH: Objection.
THE WITNESS: It's not that wasn't the
purpose of the survey.
BY MR. COHEN:
Q. In your survey of consumers why didn't you ask them how much time it would take for plastic labeled buy degradable to biodegrade?
A. Because I wasn't interested in that specific
topic. I was interested in peoples general understanding of biodegradability.
Q. And why were you not interested in that specific topic?
A. Because I thought it would emerge as a part of the more general discussion of biodegradability
and in fact it did.
Q. Why not ask both the more general questions that were in your survey and also, specifically how much time will it take for a plastic labeled biodegradable to biodegrade?
A. Because that wasn't the purpose of the
survey. I could have designed a different survey 8 but that was not the purpose of the say.
Q. You're not offering an opinion about
consumers views regarding how much time it would
take for a plastic product labeled biodegradable to
biodegrade are you?
MR. AWERBUCH: Objection.
THE WITNESS: To the extent that I have data that speaks to that issue I am.
BY MR. COHEN:
Q. And what is that opinion?
A. Well that by and large there's a great deal
of skepticism ignorance, and just general lack of
understanding about that topic.
Q. Other than the fact that in your opinion
with respect to consumers assessments of
biodegradation times there is a lot of skepticism ignorance and lack of understanding. You're not offering any other opinions about consumers views

1 regarding how much time it would take for a plastic product labeled biodegradable to biodegrade are you?

MR. AWERBUCH: Objection.
THE WITNESS: I'm only offering opinions that are grounded in the survey work that I did. I think I've given you those opinions. There may be others but those are the ones that I -- I can
identify as we speak.
BY MR. COHEN:
Q. And so the answer to my question is no?

MR. AWERBUCH: Objection.
THE WITNESS: Well no the answer is there may be other opinions that the data inform, I may not have fully framed them. They're likely subopinions of what we've talked about, but I'm not going to say that there wouldn't be any opinions that might emerge.

## BY MR. COHEN:

Q. What other opinions do you anticipate might, emerge?

MR. AWERBUCH: Objection.
THE WITNESS: I don't know. I was given Dr. Fredericks survey and asked to opine on that. I don't know what else I might be given and might be asked to opine upon. It may also be the question

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arises that the day an I've collected could inform and then I'll use that data to inform that, you know that opinion.

## BY MR. COHEN:

Q. These opinions that may develop in the future, you would agree by definition they're not in the report that was provided to complaint counsel correct?
A. I would grow with that yes.
Q. Let's take a look back at Exhibit 2. Which I believe is the screen shots but $I$ apologize if $I ' m$ incorrect I think it is the screen shots?
A. Mm-hmm.
Q. I direct you will to questions four $A$, and four $B$. Why were these questions asked at all?
A. Because I was trying to develop more
complete understanding of whether, what people understood the term biodegrade to mean and I I had seen other studies read other materials, that clearly indicated that that the types of products type of material has an influence on the rapidit of biodegradability and so I wanted to understand what consumers understood about that. I also understood
from various sources that there are there are differences in the time it takes for various
materials to biodegrade so I wanted to understand something about consumers understanding of that.
Q. Were there any other reasons?
A. I don't believe so. The purpose of the survey was to gain an insight into what people understood about biodegradability.
Q. It would have been possible wouldn't it to ascertain consumers understanding of ECMs marketing without asking questions four $A$, through four $B$;
correct?
A. I suppose so, that's a different question.
Q. Why were these questions four A. Through
four $B$, asked before the question series that purportly replicates ECMs marketing which would be the question five series?

MR. AWERBUCH: Objection.
THE WITNESS: Because I did not want
specific claims to contaminate the answers to the
earlier questions. I didn't want to give people a
statement that referenced a specific timeframe and
then ask them about time. It's generally
appropriate in surveys to ask more general questions
followed by more specific questions. And that's the
approach I followed here.
BY MR. COHEN:
Q. Take a look back at question four A, please.

Do you think there are differences in the amount of
time it takes for different types of products to
biodegrade decompose or decay, that's a leading question isn't it?

MR. AWERBUCH: Objection.
THE WITNESS: Well it's leading to the
extent that it asks people "yes" or "no."
BY MR. COHEN:
Q. A leading question is a question that suggests the answer correct?

MR. AWERBUCH: Objection.
THE WITNESS: That's correct.

## BY MR. COHEN:

Q. This question suggests that there are differences in the amount of time it takes for different types of products to biodegrade decompose or decay correct?
A. No it doesn't.
Q. And why don't you think this is a leading question in that regard?
A. It doesn't suggest a yes or a no answer.
Q. You don't believe that this question put in the mind of survey respondents the fact that there are differences in the amount of time it takes for
different types of products to biodegrade decompose or decay?
A. Well I hope we did put that in their minds because we're asking them whether or not they think there are those differences "yes" or "no", people could say no and some people did.
Q. Most people didn't?
A. Most people did not correct.
Q. Can you think of an alternative question or question series that would enable to learn whether consumers estimate different biodegradation times for different productions. I could have asked a whole series of questions product by product material by material that would have lengthened the questionnaire and I don't think would have begin us any greater insight?
Q. How about a design where you ask one group how long plastic takes to biodegrade and another group how long wood takes to biodegrade and compare the answers?
A. That that certainly could have been a
design. It would have required using two different
groups but it certainly something that would have
been possible.
Q. Information conveyed to respondents earlier
in a survey can affect their answers to later
questions correct?
A. It certainly can.
Q. What's more important to determining whether

ECMs claims are deceptive, whether consumers
estimate different biodegradation times for
different products or how consumers understand ECM;s
marketing?
MR. AWERBUCH: Objection.
THE WITNESS: I actually you need to read the question back I'm sorry read read.

THE WITNESS: I don't think you can say one
is more important than the other in this context.
In so far as people are carrying around beliefs that
may be highly varied in some cases perhaps erroneous
those things may be elicited those beliefs may be
elicited in response to any marketing
communications. So you really have to have some
understanding of sort of the baseline much as I've
done here, to gain insight into what the claims may
have communicated.
BY MR. COHEN:
Q. Questions five A through five C ostensibly
simulate ECM's marketing correct?
MR. AWERBUCH: Objection.
not going to be a useful answer.
Q. Shouldn't that be for the court to decide?
A. Well the, no. It's for me to decide whether

I can give you a meaningful answer to your question
and you've asked me to assume something that is patently false.
Q. Let's mark Exhibit 6 mark mark Exhibit 6. Let me give this to Dr. Stewart.
Q. Dr. Stewart was is this document?
A. This is a copy of I believe the final
progress report on the interviewing that was done
for my survey, survey of consumers and it reflects the disposition of the sample.
Q. And I apologize I think you just said this so again I apologize for repeating but this is the final report isn't it?
A. I believe it is the final report yes I was
given these on a routine basis not daily but
regularly to give me an update on where we stood with respect to collecting data.
Q. And you can tell this is the final report
because it reports data for four hundred respondents and you had four hundred respondents in your survey?
A. That's correct.
Q. Based on the information provided here the
average call length across the four hundred respondents was 12 minutes?
A. That's correct.
Q. Do you know what the range was?
A. As I sit here I don't know exactly what the 6 range was.
7 Q. Could that information be ascertained?
8 A. I believe it probably could be yes.
9 Q. And how would that information be
10 ascertained?
A. The survey research company would would very
likely have records. It it would probably have to
be computed but I -- I believe that they would have
a record of how long each call lasted.
Q. Based on your professional expertise do you have an approximate range that you can provide us?

MR. AWERBUCH: Objection.
THE WITNESS: I would say between five minutes and 20 minutes.
BY MR. COHEN:
Q. It would be fair to estimate and I understand this is only an estimate, that by the time respondents were asked question five $A$, they had already been on the telephone talking about biodegradation for anywhere from seven to ten

## minutes is that fair?

A. That's fair. That's quite possible yes.
Q. The fact that respondents were involved in a seven to ten minute conversation about biodegradation before being asked questions five Ato five $C$ could have affected their answers to those questions couldn't it?

MR. AWERBUCH: Objection,.
A. Certainly it could would have made them more attentive to the questions.
BY MR. COHEN:
Q. Could it have affected their answers in any other ways?
A. I don't believe so.
Q. Most consumers don't engage in seven to ten minute conversations about biodegradation when they
walk into a store and decide to buy a product do they?
A. Not as a general rule.
Q. So in this respect your survey doesn't
simulate the actual consumer experience does it? MR. AWERBUCH: Objection.
THE WITNESS: It does not and that was not it's attempt.
BY MR. COHEN:
Q. The net impression that a consumer takes away from a biodegradeable claim is different when the consumer confronts it on a store shelf rather than after a seven to ten minute conversation about biodegradation correct?
A. I -- I would agree that that is the case.

We didn't show people a logo here. That was not the purpose of the of the of the research. So there would be some difference yes.
Q. In professor fred restriction study
consumers were shown productions with ECM biodegradeable logos but without a seven to ten minute conversations regard biodegrade ability beforehand?
A.

MR. AWERBUCH: Objection.
THE WITNESS: It's my understanding some of his surveys did that yes.
BY MR. COHEN:
Q. Just so the record is clear and I believe it is clear, you are not going to respond to any questions that ask you to assume that four and four A are leading?

MR. AWERBUCH: Objection asked and answered. THE WITNESS: I I'm not going to make a
false assumption and then give you an answer based
on a false assumption.
BY MR. COHEN:
Q. With respect to this telephone survey, only land lines were dialed correct?
A. That is correct.
Q. Where did the sample of land lines come from?
A. It came from two sources. One was from scientific sampling that scientific sampling generated a random digit dial sample and we supplemented that with a listed sample that we obtained from survey sampling. And and the final sampling frame was a combination of the two.
Q. Was one of those sets of samples something that is known as age enhanced?
A. Well you could you could call it age
enhanced. It was the the the survey sampling survey
recollect the listed sample was obtained in order to represent more younger consumers, yes.
Q. Why was it necessary to modify the sample to obtain more younger consumers?

MR. AWERBUCH: Objection.
THE WITNESS: Because experience generally demonstrates that a pure random digit survey
particularly one that's done over a relatively short period of time even a month tends to produce larger numbers of older less mobile consumers in order to pick up more younger consumers it's necessary to use a listed sample ask.
BY MR. COHEN:
Q. How long over what period of time was this survey conducted?
A. It was about a month.

10 Q. Are you sure about that?
11 A. Well it would be it would be in my report.
2 Well could take a look at that because it is stated
in my report. Yeah I was right it's about a month
the study began March 262014 and it was completed on
May 1st 2014. That was the primary study. We had
done a pilot earlier, but you know a little longer
than a month.
Q. What percentage of Americans still has a land line?
A. About 75 percent.
Q. What percentage of Americans uses the Internet?
A. Again about 75 to 80 percent and I'm assuming by that you mean in the home.
Q. Uses the Internet in the home?
A. Yes.
Q. What percentage of Americans uses the Americans at all?
A. Probably close to 90 percent have some use of the Internet in some way or fashion. You'd have to include you'd actually have to include mobile devices in that. You'd have to include people who access Internet in limited fashion on the job, who access kiosks but it would be a very sizeable percentage of the population.
Q. Do you know whether the percentages of Americans that still have a land line is greater or lesser than number of Americans that use the Internet anywhere may have just begin me that answer?
A. I think I just gave you that answer. You
know I would -- I haven't seen specific numbers but I think I would be on solid ground to say that more people have access to the Internet in some form than have a land line.
Q. It's the case isn't it that Americans that still have a land line are demographically different than Americans who do not correct?

MR. AWERBUCH: Objection.
THE WITNESS: Well if, if by that you mean

3 BY MR. COHEN: correct?
Q. And another is their age?
A. That would be correct.
Q. And another is their education?
A. Probably. Yes.
Q. Are there others that I've neglected?
other one I could think of. surveys results are valid?

MR. AWERBUCH: Objection. to in some cases no.
Q. One of the demographic characteristics on which what I'll call the land line group and the non land line group differ is their income is that
A. That that would be generally correct yes.
A. Have well, the length of time they have been
in their residence for example. That's the only
Q. Assume that a survey of American consumers is conducted and further assume that that survey is demographically un representative of American consumers in a substantial way. Can you conclude without additional information whether or not the

THE WITNESS: In some cases you may be able

BY MR. COHEN:
Q. In the cases where you cannot reach that conclusion, what additional information would you need?
A. Well it depends on what what the question is. Some questions require a representative sample, some questions do not. Some questions can be addressed just by knowing what people in a sample that is generally representative but not completely, have to say whereas in other cases you you need a more representative sample. So it really depends on the question at hand.
Q. Are the questions in your consumer survey questions such that a representative sample is necessary?
A. I think it's necessary to have a generally representative sample but I don't think it has to be a perfect replica of the population characteristics.
Q. Would you say the same thing, that with respect to Professor Fredericks survey it has to be generally representative but not a perfect replication of the population?
A. Well if we actually knew what his population was I would say yes but we have no clue who was in his population.
Q. If we assume that we know who his population was would you then give the same answer?
A. Again you're asking me to assume something that's false. You know if he had a representative sample which he does not, then I would say great it's representative?
Q. Let's take a look back at Exhibit 6, do I understand correctly that your researchers made 70 thousand two hundred 79 phone calls to obtain a final sample of four hundred people?
A. That's correct.
Q. Four thousand 20 people answered the phone
but refused to participate correct?
A. That's correct mm-hmm.
Q. The line below refuse to participate reads RF underscore S1 dash not willing to participate and then gives the number 291 do you see that?
A. I do.
Q. What does that line mean?
A. Well, these were people that answered the
first question which is would you be willing to answer a few questions, they declined.
Q. What's the difference between people who refused to participate and people who refused to answer or declined to answer a few questions?
A. Well the people who refused to participate just very early in the telephone call said I'm not interested and didn't even get to the first question. The 291 people who were asked the first question and declined.
Q. So it would be accurate to say that the number of people who refused to participate after the first question is $\mathbf{4 , 0 2 0}$ plus two hundred nine one?
A. That's correct.
Q. What, if anything, do you know about the demographic characteristics about the people who refused to participate after the first question?
A. I know little about the demographic characteristics other than they were a random sample of the sampling frame.
Q. What does not qualify interviews what does the not qualified interviews category mean?
A. Well this is actually broken out above in the total not qualified interviews there in the middle of the page and so people could have been disqualified for participation for a number of reasons, so for example, there were two individuals where the call was answered by someone under 18 and there was no one in the household who was 18 or
older. We disqualified people who were employed by either a plastic product manufacturer or a waste disposal association largely because we thought they would have unusual knowledge there were 11 of those people so we disqualified them we had a few people who had not purchased a plastic container. We had some people that did not have a general understanding of biodegradeable and then we established some general quotas based on age and gender and in some cases we were over quota when we reached an individual so that individual was disqualified so it was basically disqualification based on questions in the screener questionnaire.
Q. Why did you exclude people who reported not personally purchasing if I plastic product or any anyone that came in a plastic container or made of plastic in the past month I think email paraphrasing there queening question five?
A. Because I thought those individuals would be un representative of the population as a whole.
Most people purchase something made of plastic, packaging products what have you and to the people had not had a recent experience of purchasing something made of plastic I thought they would be un represent tiand we excluded them.
Q. Was it possible some people had purchased something made of plastic in the past month but didn't remember?
A. That's possible.
Q. Is it possible they weren't telling the truth because they had changed their minds about whether they wanted to participate in the telephone survey?

MR. AWERBUCH: Objection.
THE WITNESS: Anything is possible. I think it unlikely.

## Q. Why do you think it's unlikely?

A. I don't know why -- there's no good reason for that to have occurred. First of all they don't know they're going to be disqualified if they give a particular answer to that question. There's no way that the respondent in advance of giving an answer to any of one of these questions knows whether a particular answer will take them further into the questionnaire or will result in the questionnaire or interview being terminated.
BY MR. COHEN:
Q. You don't believe that some questions might make it at least plausible to a respondent that by
giving a particular answer they're more likely to be disqualified?

MR. AWERBUCH: Objection.
THE WITNESS: Again anything is possible but there's no reason why an individual should think these questions should should lead them to believe that they will be disqualified.
BY MR. COHEN:
Q. What, if anything, do you foe about the demographic characteristics of the people who you deem not qualified for the reason that they allegedly had not purchased a plastic product or plastic container within the past month?
A. I don't know anything about the demographic characteristics than they were part of the larger sampling frame.
Q. Your researchers spoke with 39 respondents who stated that they did not have a general understanding of the term biodegradeable correct?
A. That's correct.
Q. It's possible that those 39 people changed their minds about whether they want today participate in the survey?

MR. AWERBUCH: Objection.
THE WITNESS: Again anything is possible but
there was no way for them to know what what outcome would be associated with any answer to this question. This could have been a question that was asked without an instruction to terminate. It could have simply been we like to know for everybody whether they havave general understanding or not but we're going to ask everybody. There was no way for a respondent to know whether that was going to happen or that we might terminate them. In fact there was no way for a respondent to nope whether any of these questions would result in termination. BY MR. COHEN:

## Q. It's possible isn't it that these 39

consumers or some of them had a general understanding of what the term biodegradable meant but weren't confident enough in that understanding to participate once they had an understanding what that survey was about?

MR. AWERBUCH: Objection.
THE WITNESS: Well they don't at that point know what the survey is about, so I don't I don't know how they could, how they could arrive at that logic. I mean they they may decide that they don't want to participate conceivably but i don't see the i don't see any logic that would lead them to
believe one way or another what what the survey is
ultimately going to be about.
BY MR. COHEN:
Q. The question they were asked was do you have a general understand being of what the term biodegradeable means that's Exhibit 2 question section six, it's possible that consumers who answered no to this question did have an understanding but weren't confident enough to express that to the researcher correct? MR. AWERBUCH: Objection. THE WITNESS: Anything is possible. Certainly in answering this type of question the degree of certainty, the level of knowledge, plays a role in determining how an individual may respond. BY MR. COHEN:
Q. And in your professional experience and I'm not talking about this specific question, but in your professional experience generally, it's sometimes the case that people hold views but if they aren't sufficiently confident in those views they may be reluctant to express them correct?
A. That can on occasion happen, yes.
Q. Why did you exclude people who were under 18?
Q. Assume there's a convenience store that sells bottled water in plastic bottles. Someone who's 17 might walk into the convenience store and purchase a bottle of water on his or her own. That's possible isn't it.
A. Oh sure sure certainly.
Q. And that purchasing decision could be influenced by the word biodegradable on some of the bottles but not others correct?
A. It's conceivable yes.

11 Q. And that could be true for someone who is $\mathbf{1 6}$ 2 as well right?
A. Certainly could.
Q. Maybe even someone in junior high school?
A. That certainly could be.
Q. I mean there's probably there's a bottom to this right? You you know can't be five or six.
What percentage of consumers of American consumers
are above the age where they have the ability to
make these purchases and potentially be influenced
by a biodegradeable claim but below the age of majority?
A. I I don't know.
Q. You don't have any information at all regarding the income ranges of your respondents do
A. Because we were interested in individualed
who had achieved majority status, it's very common
in doing surveys of consumers to collect data only on individuals who are 18 of age and older.
Q. Why were you interested in only in individuals who had achieved majority status?
A. Because I thought they were the ones most likely to be relevant. I think if we were looking at people who were under 18 we would we would open up a whole variety of other things that we would have to ask, so for example, were they still living at home, did they make purchases as contrasted to their parents making purchases for them. So I think there are a whole set of questions that begin to arise for people who are under 18 that we would have had to have asked to further qualify them that we didn't have to ask for people who are 18 and older.
Q. Limiting the survey to people that are 18 or older then makes the survey easier to conduct? MR. AWERBUCH: Objection.
THE WITNESS: Well I think it makes it easier to conduct and it also I believe results in a somewhat more homogeneous group since there are many, many differences that begin to arise when you dealing with people whore under 18 years of age.

1 you?
2 A. I do not.
3 Q. Have you conducted any sort of analysis
4 regarding whether persons with different income
5 levels understand the term biodegradeable differently?
A. I have not done that analysis.

8 Q. You're not offering any opinion on that 9 subject are you?
A. I'm not planning to offer an opinion at this point.
Q. You don't have any information at all regarding where your respondents reside do you?
A. I don't have specific information, some of that would be retrievable. We would have area codes.
Q. You're not presently in possession of that information?
A. No I'm not.
Q. And it didn't influence your analysis one
way or another?
A. It did not.

23 Q. You did not rely on that information?
24 A. I did not.
25 Q. The survey research firm might have that

## 1 information correct?

2 A. That's correct.
3 Q. Did you have any understanding as to whether
Q. Sticking specifically with random geographic selection biassed on different telephone numbers from different regions, however well founded the assumption you're making is, it would be fair to say it's an assumption; you did not personally investigate those?
A. I did not personally investigate that;
that's correct. I relied upon the laws of
probability.
Q. Is that another way of saying you relied upon assumptions that you believed to be well founded?

MR. AWERBUCH: Objection.
THE WITNESS: Well it's not an assumption.
I mean laws of probability are the laws of probability. I relies on their their operating as we would expect them to operate.
BY MR. COHEN:
Q. Reliance on the belief that at a survey research firm is operating as you would expect them to operate with respect to the gathering of data is typical in survey research?
A. Can you read that back read read.
A. Yes it is quite typical as I indicated there may be ways that you can monitor their procedures
and I've done that in this particular case.
However, you would also not want to be physically
present when the interviewing is taking place for
fear of compromising the double blind character of
the of the survey so yes you'd have to you have to at some level make an assumption.
Q. Have you conducted any sort of analysis regarding whether persons living in different regions understand the term biodegradeable differently?
A. I have not.
Q. You are not offering any opinion on that subject are you?
A. I am not.
Q. In your survey respondents gender was recorded by your researchers by observation?
A. That's correct.
Q. That means that someone listens to that persons voice and makes an estimation regarding that persons gender?
A. In general that is true although if it's
unclear the strucks are to ask some of the time I
don't want to characterize it as let me withdraw it.
A significant portion of the time it's done by
estimation correct.

MR. AWERBUCH: Objection.
THE WITNESS: No it's not done by estimation. It's done by observation.
BY MR. COHEN:
Q. That's a fair point. A significant portion of the time it's done by observation?
A. Yes.
Q. What's the error rate when survey
researchers make that observation?
MR. AWERBUCH: Objection.
THE WITNESS: Well it depends on what the instructions arement if they're instructs to ask
when they're uncertain the error rate is very small.
If if people are not asking that question, then you could find maybe 5 percent of the cases where the gender may be miss identified in a telephone call. BY MR. COHEN:
Q. In the situation where individuals are instructed researchers are instructed to ask if they are uncertain, what's the basis for your assertion that the error rate in that situation is very small?
A. I I've done survey research using telephone interviewing for more than 30 years and have seen studies that have looked at just that issue and the error rates tend to be very small.
Q. Can you identify some of those studies for me now?
A. Not off the top of my head. Some of them go back to my days in advertising. They would not have been published studies but they would have been research that we did in the context of the advertising research I was engaged in.
Q. Were the survey researchers in your survey instructed to inquire if based on observation they were uncertain?
A. They were. It's a part of their general
training, that if they can't determine, then they
should ask the question.
Q. How would you establish that that is a part of their general training?
A. Well we'd have to look at the nature of the training they receive.
Q. Is that something that was produced to the Federal Trade Commission?
A. No it was not.
Q. Is that something you possess?
A. I don't believe I possess a copy.
Q. Let me direct you to Exhibit 2 which I
believe is again the screen shots of the survey
questions and specifically Stwo, it states record
gender from observation correct?
A. That's correct.
Q. It doesn't say inquire if you're uncertain does it?
A. No it does not.
Q. Is there are other survey questions in

Exhibit 2 and I'll give you an example but let's go
to question one for instance. You would agree with
me would you not in question one there's a specific
instruction that is given to the researcher about
how to act depending on what answer they receive correct?
A. Well there's an instruction about probing
and they were given the specific probe to use. And
they were given instructions about how to record the response yes.
Q. And there's no instruction about probing if the researcher is uncertain about the respondents gender is there?
A. No there's not.
Q. Have you conducted any analysis of any sort regarding whether persons of different genders understand the term biodegradable differently?
A. I have not.
Q. You're not offering any opinion on that
subject are you?
A. If I'm asked to render an opinion I may. I have data that would speak to that question.
Q. What data do you have that would speak to that question?
A. Well we did capture gender in my survey and and so we could do an analysis of people's responses by gender. I have not done that.
Q. That you haven't done that withdrawn. It's not in your report at moment correct?
A. It is not.
Q. And you haven't yet been asked to do that correct?
A. I have not.
Q. It's is the case isn't it that

African-Americans represent approximately 12 point 6 percent of the population?
A. Approximately. I don't know the decimal point but that's a reasonable range.
Q. Do they make up approximately 12 percent of the population of persons 66 or older?
A. I -- I haven't looked at that recently I don't know.
Q. More broadly, is the ethenografic make up of the population consistent across age groups 18
through 34, 35 through 49, 50 through 65 and 66 and older?
A. You're going to have to read that bck
A. Do you mean in my survey read read.
Q. No I mean across the population?
A. Then I'm lost because I don't know what you're asking.
Q. Let's approach it this way and for the next series of question we're talking about the population we can put your survey to the side for the moment. You would agree with me that there are many ethnographic groups in the United States; correct?
A. Certainly.
Q. And we discussed earlier that 12 percent of the population overall is African-American correct?
A. That's correct.
Q. And you testified that you weren't sure one way or the other whether they afternoon Americans also make up 12 percent of the population of 65 and solder. I don't know as I sit here today?
Q. So you don't know to phrase it differently whether with respect to African-Americans, the ethgraphic make up of the population six or older is the same as it is with respect to the population at

1 large?
2 A. I if I understand the question I think the 3 answer is no.
4 Q. So putting aside African-Americans as one 5 particular ethno graphic group is the ethnographic
6 make up of the population consistent across age
7 groups 18 to 34, 35 to 49, 50 to 65, and 66 and 8 older?
9 MR. AWERBUCH: Objection.
there different percentages of various ethnic groups
within different age categories the answer is yes.
BY MR. COHEN:
Q. You actually -- your articulation is much
better than mine.

The ethnographic makeup of the population of persons 56 or older is disproportionately white isn't it?
A. I believe that's correct.
Q. A survey that over includes people that includes people 66 and older would under include minorities correct?
A. It may yes.
Q. The ethnographic makeup of the population of persons 50 to 55 is disproportionately white isn't

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## it?

A. Yes again if you're defining if you're defining white as to exclude Hispanics for example, yes.
Q. A survey that over includes persons 50 to 65 would under include minorities including Hispanics correct?
A. That would be correct.
Q. Have you conducted any analysis of any sort regarding whether minorities understand the term biodegradeable differently?
A. I have not.
Q. You're not offering any opinion on that subject are you?
A. I am not.
Q. You set quotas for how many people 66 and older could participate in your survey correct?
A. I did.
Q. And what were those quota, was that quota based?
A. Well the quota was based on a desire to assure some minimum representation of various age groups and was and they were not hard quotas, they were a range, and I as I sit here today I don't recall the specific range but the idea and purpose

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behind doing so was to simply assure a reasonable disPersian across the age categories.
Q. You mentioned that part of the goal was to assure minimum representation. Why wouldn't the goal be to assure as close to optimal representation as possible?
A. Because I didn't think that that was necessary given the topic.
Q. And why didn't you think it was necessary given the topic?
A. Because I wasn't interested in specific age differences. I was interested in peoples general understanding of the term biodegradeable, biodegradeable, and I simply wanted a reasonable representative and diverse set of age rainings I wasn't trying to match the population of the United States.
Q. The quota for people 66 and over was a hundred 15 out of four hundred correct?
A. I think that's correct yes.
Q. A hundred four people were excluded because you'd exceeded the quota for people 66 and older correct?
A. That's correct.
Q. The quota for people 50 to $\mathbf{6 5}$ was a hundred

## 15 out of four hundred correct?

A. I'm sorry.
Q. I apologize I'll just repeat the question withdraw the question he'll repeat it?
A. Yeah.
Q. The quota for people 50 to 65 was a hundred 15 out of four hundred correct?
A. That's correct.
Q. 41 people were excluded for exceeding that quota correct?
A. That's correct.
Q. The percentage of respondents in your survey that were 66 and over is 29 percent correct?
A. I believe that's correct.
Q. What percentage of the population of consumers aged 15 and older do people 66 and older represent?
A. I'm sorry. I you're going to have to repeat
the question or read it back.
MR. COHEN: Ma'am would you read it back read read.

THE WITNESS: As you sit here today I really can't tell.
BY MR. COHEN:
25 Q. You that's not something you consider when
preparing your report?
A. It was not. I -- I didn't even look at consumers under 18.
Q. Let me rephrase the question to make sure
that, and I don't mean to be excessively anytime
picky here but what population of the consumers aged 18 and over to people 66 and over represent?
A. As I sit here today I don't recall that either.
Q. And that's not something you considered when preparing your report?
A. I didn't give it a great deal of thought no.
Q. You didn't give it any thought or not a great deal of thought?
Q. What thought did you give it?
A. Well I did give it some thought at the time

I established quotas but I was more concerned with establishing you know representation, adequate representation in the various age categories and not with mapping the exact demographics of my sample into the population.
Q. If I told you will that the percentage of consumers aged 15 and older represents around 18 percent of the population of American consumers would you have any reason to disagree with me.
A. Let me be sure I understood the question, that consumers 15 years and older represent.
Q. No I misspoke you're absolutely right. If I
told you that the percentage of consumers who are 66
and older represents around 18 percent of the population of American consumers who are 15 and older, would you have any reason to disagree with me?
A. That sounds about right.
Q. The percentage of respondents in your survey
that was 50 to 65 or that were 50 to 65 years of age
was also 29 percent correct?
A. I believe that's correct.
Q. What percentage of the population of consumers aged 15 and older do people 50 to 65 represent?
A. Again as I sit here today I I don't know the answer to that and and I certainly don't know for 15 or 18.
Q. That's not something you considered when preparing your report correct?
A. No only in the most general sense of thinking about establishing quotas.
Q. If I told you will that the population of - C-

American consumers between 50 to 65 represent around

124 percent of the population of American consumers
2 aged 15 and older would you have any reason to
3 disagree with me.
4 A. Again that sounds about right I haven't
5 looked recently at population demographics.
6 Q. And just so that the record is clear and I
7 apologize for asking you a question where I think I
8 already know the answer, what percentage of the
9 population of consumers aged 18 and older do people
1050 to 65 represent?
11 A. Again as I sit here today, I I can't tell 2 you.
Q. That's not something you considered when preparing your report?
A. I didn't consider that specific fact. I mean as I said I did consider it in the sense of trying to establish reasonable quotas for the sample.
Q. Have you conducted any analysis of any sort whether persons of different ages understand the term biodegradeable differently?
A. I have not.
Q. You're not offering any opinion on that subject are you?
A. I have not been asked to offer an opinion.

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1 Again it's something for which we have survey data
2 that could be used to inform the quell but I have
3 not been asked to address it.
4 Q. Photocopy you were provided with information 5 suggesting that older Americans aged 50 and above have a different understanding of the terms biodegradable than younger Americans would that affect your opinions in this case?
A. No.

10 Q. Why not?
11 A. I've collected data on both groups. I have
2 I have data. They're both represented here and to
the extent that they are different then it would be
reflected in the data.
Q. Would it affect the conclusions that you believe could be drawn from the data?
A. I don't believe so.

18 Q. So even if we assume that older Americans have different views with respect to what the term biodegradeable means and over -- we further assume that older Americans are over represented in your survey. That would not affect your conclusions?
A. No it would not

24 Q. And why not?

[^5]we could look at the degree to which there may be age differences. I frankly don't think there are any based on my reading of the responses but as I said earlier I haven't done a specific analysis by age.
Q. What if that analysis were done and demonstrated that Americans below the age of 50 had different views with respect to what biodegradeable meant?
A. And what?
Q. Would that affect your conclusions?
A. Well it would depend on what the differences were. It may or may not. They could be uncertain in different ways but still be uncertain. They could be skeptical in different ways but still be skeptical, it would really depend on what the nature of the differences were.
Q. What would be some examples of differences where it would affect your overall conclusions?
A. Well if one group categorcally greed on a
particular definition of biodegradeable and another
group did not, then I think that's a that's an
interesting piece of information and and might be worth pointing out.
Q. Is that the only circumstance you can think

1 of where differences between the age groups might 2 affect your conclusions?
A. Well, I yes I think so.
Q. You'd agree that measured against the actual population of American consumers, ageded 15 and older the population in your survey is un representative at least because Americans 50 and older are over represented.

MR. AWERBUCH: Objection.
THE WITNESS: Well we keep using 15. I've been very clear that there was no one in the sample under 18. And so so they're not even in the sample so the fact that they're not in the sample clearly means that they are they're not over weighted.
They're I mean they're not there. Many.
MR. COHEN: Ma'am can you read back my question. Read read. Are.

THE WITNESS: You asked me if Americans 15 and older are over represented they're not in my sample. They can't be overrepresented.
BY MR. COHEN:
Q. That's not what I asked?
A. Okay.
Q. I'll ask it again. You'd agree that
measured against the actual population of American
consumers aged 15 and older so not just those between 15 and 18 , but 15 basically to the end of you are an American consumer the population in your survey is un representative at least because Americans 15 and older are over represented?

MR. AWERBUCH: Objection.
THE WITNESS: Are you saying 50 or 15 ?
MR. COHEN: Ma'am can you read back the question please read read.

MR. COHEN: I misspoke.
THE WITNESS: Okay.

## BY MR. COHEN:

Q. You're absolutely right. So the end of the question I'll try ask see if I can ask the whole question again. You'd agree that measured against the actual population of American consumers aged 15 and older the population in your survey is un representative at least because Americans 50 and over are over represented?
A. Okay. I would agree that is not representative of the actual age distribution of the American population. Aged 15 and older yes.
Q. Notwithstanding the fact that it is not representative of the actual age distribution of the American population of consumers it remains
sufficiently valid for the court to rely upon?
MR. AWERBUCH: Objection.
THE WITNESS: Absolutely. Yes.

## BY MR. COHEN:

Q. So let me take a step back. I'm just going to re-ask the question that we had I had some difficulty articulating earlier but I want to make sure that I don't get a different answer if I use the word 18 instead of 15 . You'd agree that measured against the actual population of American consumers age 18 and older the population in your survey is un representative at minimum because Americans 50 and older are over represented?

MR. AWERBUCH: Objection.
THE WITNESS: It is certainly the case that is un representative with respect to the actual population demographics related to age. BY MR. COHEN:
Q. And not with stand being that feature they remain sufficiently valid for the court to rely upon?

MR. AWERBUCH: Objection.
THE WITNESS: Yes it does.
BY MR. COHEN:
Q. Have we marked Exhibit 7? Let's take a look

1 at Exhibit 7 Dr. Horizontal a copy four?
Q. Have you conducted any analysis of any sort
regarding whether retired persons understand the term biodegradeable differently?
A. I have not.
Q. You're not offering any opinion on that subject are you?
A. I have not, I have not been asked to offer such an opinion. The data would lend themselves to doing an analysis of that but I have not done that analysis.
Q. What percentage of Americans consumers agented 15 and older are disabled?
A. I as I sit here today I don't know.
Q. That's not something you considered when you prepared your report?
A. I really didn't.
Q. Have you considered any strike that. Have you conducted any analysis of any sort regarding whether disabled persons understand the term biodegradeable differently?
A. I have not.
Q. And you're not offering any opinion on that subject are you?
A. I'm not.
Q. What percentage of American consumers aged 15 and older are unemployed?
A. Off the top of my head, I I can't tell you.

And it would vary depending on how you defined
unemployed. People have left the labor force and are unemployed but the unemployed statistics don't
reflect that. But it's generally thought the real
unemployment rate is somewhere in the vicinity of 12 to 14 percent.
Q. The percentage of American consumers age 15 and and older who are unemployed is not something you considered when you prepared this report is it?
A. It's not.
Q. Have you conducted any analysis of any sort
regarding whether unemployed persons understand the term biodegradeable differently?
A. I have not.
Q. You're not offering any opinion on that subject are you?
A. I'm not.
Q. Does disabled as it's used here in table $S$
four, include only people who are too disabled to
work or does it include people with disabilities but
who are employed?
A. It could include people who are disabled and employed depending on how people interpreted the term.
Q. It would depend on how survey respondents interpreted the term?
A. Yes generally I think they would interpret
it in the sense of are you employed or not and
disabled would be unemployed but I suppose someone
could interpret it differently.
Q. You're not sure one way or the other definitively?
A. No I'm not.
Q. Can you tell me how many of the 44 percent
are disabled, how many are unemployed, and how many
are retired?
A. I cannot.
Q. Does that data exist?
A. I don't believe that's the way the question
was asked. But I will tell you momentarily. No
there was simply one category retired unemployed
disabled that people could select from the list of
organizations that people might work for or not work
for.
Q. Put differently it's not possible to tell
how many are disabled how many are unemployed or how
many are retired based one the way the question was
asked?
A. That's correct.
Q. Is it possible to determine based on the data produced to the FTC and also publicly available census data or other publicly available data that you're aware of, whether your survey overrepresents people in the category defined as retired slash unemployed slash disabled relative to the percentage of American consumers falling within that category.
A. It would probably be possible to find some census data that could be brought to bear for purposes of comparison.
Q. How would we be able to do that if we're not able to tell how many persons are retired versus how many persons in your survey were unemployed versus how many persons in your survey were disabled?
A. Well we would need to find data that either
asks the question in the same way and this is a very common way to ask this question or we would need to try to aggregate across multiple categories.
Q. Can you aggregate across multiple categories if a person is both unemployed and disabled?
A. You could get a rough estimate but you run risk of doing some double counting. We would only count them once in response to this question but if you had data that broke things out retired unemployed disabled a person might conceivably appear in more than one category.
Q. Is there some piece of survey publicly available survey data that you can point me to where we could get an estimate of the percentage of the population of American consumers that fall within this category retired slash unemployed slash disabled?
A. Not as I sit here today. As I said there are this is a very common way to ask about this particular category of unemployment or employment. But I can't point you to a specific source today.
Q. Assume we can't tell one way or the other whether those individuals are over represented or under represented or represented in exactly the optimal proportion, your survey would still remain sufficiently valid for the court to rely upon it?
A. Yes I believe so.
Q. And why is that?
A. We have, we have data across a range of types of individuals, employed not employed, you know we can look at their responses broken out by whatever category we choose to put them in and determine whether or not there are differences so if there's reason, you know if there's reason to do that analysis if somebody would like to determine
whether or not the results are different for retired unemployed disabled and the rest of the sample the data are available we could certainly do that analysis. I don't have any reason to believe that we will get a difference.
Q. You didn't ask consumers how much time it would take for plastic labels biodegradeable to biodegrade did you?
A. I did not.

10 Q. That's probative of the consumer per session
question at issue in this case isn't it?
MR. AWERBUCH: Objection.
THE WITNESS: It certainly is.
BY MR. COHEN:
Q. Why didn't you ask consumers how much time it would take for plastic labeled biodegradeable to biodegrade?
A. Because I was more interested in
understanding what peoples general understanding of
biodegradability was near obtaining responses in the
respondents own words that provided any caveats
qualifications contin general sees and we did get
people talked about plastic specifically. We had
people who talked about other materials and I
thought this was a much more useful way of asking

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questions about the understanding of
biodegradability in general which was the purpose of the survey rather than the biodegradability of a very specific substance.
Q. Are there any other reasons?
A. That's the primary reason. I don't I don't think of any other reasons.
Q. You indicated that you were more interested in and I'm paraphrasing but correct me if it's not fair pair phrase. You're more interested in consumers views of biodegradability generally. Why were you more interested in that?
A. Because I think that's the more relevant question here. To the degree that there are, that people perceive there to be differences in the biodegradability of materials, I think it's
important to understand that. If you ask people only about one material focus people on only one material you really don't get an understanding of
the rich necessary that's associated with the
understanding of biodegradability and that's what I
was really interested in. We pick up differences
associated with materials in context in the
responses of the survey, to the survey, but we we get a much richer understanding of biodegradability
by asking the more general open ended questions.
Q. You weren't told by anyone that you should
focus on that topic were you?
MR. AWERBUCH: Objection.
THE WITNESS: I wasn't, no I was not told
that I should focus on that topic. I was given two
other surveys, one by the American plastics counsel
and one by SYNOVATE and asked to evaluate those and
asked you know how I would do those differently
check check so they they guided my thinking and both
of those dealt with the more general question of
biodegradability and that's why I took the approach
that I did.
BY MR. COHEN:
Q. Certain of the questions in APCO and sin survey specifically asked consumers for estimates of biodegradation times correct?
A. They do check check.
Q. You didn't ask consumers how much time it would take for plastic labeled easier to conduct biodegradeable to biodegrade did you?
A. I did not.
Q. That's the primary consumer perception question at issue in this case isn't it?

MR. AWERBUCH: Objection.

THE WITNESS: It's I think it's a subclass of the question that's that's at issue in this case.
I think that there is a broader issue and that is what do people understand about biodegradability generally.
BY MR. COHEN:
Q. When you say it's a subclass of that issue, what do you mean by that?
A. Well what I mean by that is if we're not applying a term that demonstrably has many different meanings to consumers in a specific context and I don't think that you can interpret results obtained
for plastics or any other specific material alone without having a more general understanding of what people understand the term biodegradability to mean.
Q. Is there any other reason why you didn't ask consumers how much time it would take for a plastic labeled easier to conduct biodegradeable to biodegrade?
A. I was interested as I've said before I was
interested in peoples general perceptions of biodegradability without putting in their heads any information about context or material and you know that that's the way the questions were framed and to the extent that we got results that speak to context
or speak to plastic or other materials I think
that's relevant and important but again it's the more general understanding of biodegradability that I think is really important here.
Q. Why not ask two sets of questions one directed to understanding consumers general understanding of biodegradability and another asking easier to conduct specific questions such as how much time it would take for plastic labeled easier to conduct biodegradeable to biodegrade?
A. Because that wasn't really within the scope of my assignment. I was really asked to evaluate the concept of biodegradability recollect to design a survey that would correct the flaws that are present in the Synovate survey and the APCO survey, and that's what I did.
Q. And the scope of your assignment was defined by counsel?
A. My clients generally do define the scope of my assignment yes. Even if they're attorneys.
Q. And in this case specifically the scope of your assignment was defined by counsel correct?
A. That's correct.
Q. You would agree with me wouldn't you, that well let me just ask one further question. There
isn't any reason why putting aside what the scope of your assignment is and putting aside the fact that you have an obligation to comply with the scope of your assignment, there isn't any reason from the standpoint of consumer perception research why one could not ask both questions related to the general understanding of biodegradability and then also ask questions specific to how much time it would take a plastic labeled easier to conduct biodegradeable to biodegrade correct?

MR. AWERBUCH: Objection.
THE WITNESS: You could you certainly could design a different survey that asks different questions.

## BY MR. COHEN:

Q. You would agree with me wouldn't you, I think you've mentioned this I think already that consumers understanding of what the word biodegradeable means is central to this case?

MR. AWERBUCH: Objection.
THE WITNESS: It's my understanding that it is yes.
BY MR. COHEN:
Q. Consumers understanding of what a word means is always based at least to a degree on their prior
belief about what the word means isn't it?
A. If they have a prior belief yes.
Q. If an advertiser doesn't do anything one way or another to influence how consumers withdrawn. It's the case that you had a screening question to ask consumers in your survey whether or not they had a general understanding of what the phrase term biodegradeable means correct?
A. That's correct.
Q. So at least with respect to the respondents in your survey we're were not dealing with individuals who had no prior belief as to what the term biodegradeable means?
A. That's correct.
Q. So if an advertiser doesn't do anything one
way or another to influence how consumers understand a word, then those consumers understanding of that word will come exclusivelily from their prior belief correct?

MR. AWERBUCH: Objection.
THE WITNESS: Well or the media or it could
be any number of other sources that may may come
into place, it's certainly prior beliefs are one of those.
BY MR. COHEN:
Q. Well prior beliefs are an amalgam of media things the consumer has seen on television, things someone told the consumer recollect the consumers education and so forth you'd agree with that right?
A. All of those things can influence prior beliefs yes.
Q. So if the advertiser doesn't do anything one
way or another to influence how consumers understand
a word, then their understanding of what that word
means will come exclusively from their prior beliefs
however those prior beliefs were otherwise created?
MR. AWERBUCH: Objection.
THE WITNESS: No. Consumers very frequently when confronted with something they don't understand pull out a smart phone go to the Internet and gather information. And that that wasn't a prior belief.
It's it's an immediate communication that will
influence their their perceptions. But it's not
it's not a prior belief. It's another piece of
information.
BY MR. COHEN:
Q. Do you have any evidence that suggests that any consumer confronted with the claim easier to conduct biodegradeable went online and googled or researched what the word biodegradeable might have

1 meant?
A. Yes.
Q. And what is that?
A. Well I actually Googled the question how long does it take material to biodegrade and there
6 is an enormous amount of material on the Internet that's present. People have contributed to it.
8 Some of this are blogs, some of it are these formal
9 websites. Some of it is is trade organizations.
10 There's just an enormous amount of activity around
1 the definition of this term so clearly clearly
consumers are engaged in a conversation about about
this topic employ which suggests that people are going on line and sharing information obtaining information.
Q. Do you know one way or another whether those consumers are doing that after being exposed to marketing materials regard ECM plastic?
A. Do you know whether those consumers that you're reference other represent any material portion of the population of American consumers. MR. AWERBUCH: Objection.
THE WITNESS: I don't know what portion they may represent no.
BY MR. COHEN:
Q. Assume that an advertiser doesn't define the word free in it's ads. This is probably a problem you've confronted before. Consumers would understand free based solely on their prior beliefs regarding that term correct?

MR. AWERBUCH: Objection.
A. Unless there's other information available yes.
BY MR. COHEN:
Q. Do you think it's likely the consumers would Google was the word free means?
A. Some consumers might very well it's not at all difficult to find consumers sharing information with one another. You know what does this mean and obtain information from others. I don't know how many people would do that but it's certain lip happens.
Q. Let's assume that no material number of consumers when confronted with an advertisement that says the word free Google what the word free means. And let's assume that the advertiser understands free to mean that a promotional item is free but the consumer will still pay shipping and handling.
Consumers understand the term free to mean no cost of any kind. So do you understand that the

1 framework that I'm asking to you assume?
A. I do.
Q. In this case, if an advertiser and consumers
have a different understanding of what the word free
means, the advertiser has a burden or the burden to
clarify what it means correct?
MR. AWERBUCH: Objection.
THE WITNESS: I think that's the case where
if people didn't have an understanding and I believe
they do, that free often excludes shipping and
handling. That at some point in the purchase
process it would be appropriate for the advertiser
to indicate shipping and handling not included.
BY MR. COHEN:
Q. So if a material portion of consumers did not understand that free included shipping and
handling then if I understood you correctly the advertiser would have a burden at some point in the purchase process to clarify that?
A. I -- I think that is correct yes.
Q. Let's take a look all the way back to

Exhibit 1, your report in this case. Let me actual
landfill just ask one follow-up question about the
hypothetical we were discussing. In the situation where the advertiser would have an obligation to
clarify at some point in the purchase process that
shipping and handling is going to be assessed so
it's not prix as some portion of consumers might
understand that term if the advertiser fails to do
that you would agree with me would you not that deception has occurred?

MR. AWERBUCH: Objection.
THE WITNESS: Well I have to put this in the context of your hypothetical which is consumers don't have an understanding that shipping and handling is not included in the term free.
BY MR. COHEN:
Q. That was my hypothetical?
A. If that is the case then I would agree with you.
Q. Let's take a look at Exhibit 1 I believe page 27?
A. By the way when you get to a stopping point it would be nice to take a break.
Q. Do you need to -- do you want to take a lunch break. I mean this is a logical point.
A. At least a break.

MR. COHEN: We'll go off the record. (A discussion was held off the record.)
(Whereupon, at the hour of 11:50 a.m., a luncheon recess was taken, the deposition to be resumed at $12: 50$ p.m.)

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LOS ANGELES, CALIFORNIA; TUESDAY, JULY 1, }201
        12:50 P.M.
        DAVID STEWART, Ph.D.,
    having been previously duly sworn,
        was examined and testified as follows:
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## EXAMINATION

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BY MR. COHEN:
Q. Welcome back Mr. Stewart I hope you had a nice lunch. Did you speak with anyone during the lunch break regarding this deposition or this matter in any way?
A. No.
Q. Just to back up something that I believe we discussed earlier and again I don't want to mischaracterize prior testimony. If I understood you correctly, one potential problem with adding additional questions to a telephone survey is that it makes the telephone survey longer. Did I understand that correctly?
MR. AWERBUCH: Objection.
THE WITNESS: Yes that's an issue. The
length of a survey particularly on the telephone is
a cause of concern so the more questions you add the
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Q. Are you relying on any source other than the jest Richards book for the contention that deception under the FTC act requires a false belief an attributable to the action of the marketer?
A. Yes.
Q. And what are those other sources?
A. It's the FTC standard.
Q. And can you be more specific please?
A. I -- I can't point you to a specific
document. It it's available on the website. But it
it's a well known well established FTC standard.
Q. You mean available on the FTCs website?
A. Yes.
Q. Is there a particular case you can direct me to?
A. Not as I sit here today I mean there there is a document on the FTC standards for deception and I -- I just can't point you to the particular source at the moment.
Q. And your contention is that that document that is the FTC standards on deception includes the requirement that the false belief be attributable to the action of the marketer?
A. That's the standard yes.
Q. Other than what you've characterized. The
material to consumers is not present did I read that correctly?
A. Yes you did.
Q. You refer in a footnote to Jeff Richards 1990 deceptive advertising behavioral study of a legal concept is that correct?
A. I do.
Q. And the footnote says that that source will provide a discussion of the legal definition of deception and it's behavioral science foundations. Is that correct?
A. That's correct.
Q. Is it your contention that the Jeff Richards
book states that deception cannot be found without a false belief attributable to the market?
A. He discusses three criteria for the
establishment of deception in those that that's included in the in the list yes.

## Q. What is the first criteria?

A. Well there's three criteria. The first is
that there is a false belief the second is that false belief has been created by an action or inaction by the marketer. And the third is that it is material to the consumer that it has some effect on consumer behavior.

Jeff Richards source and what you've characterized
in a general way as FTC deception standards is there
negligent else that you're relying upon for that proposition?
A. Well there's a very substantial literature in the market in the advertising area that deals with deception. I'm not pointing to any one of those documents or published papers but certainly knowledge of that literature informs my opinion.
Q. A control group isn't always necessary in consumer survey research is it?
A. No there's certain types of consumer survey research that does not require control.
Q. And you can talk to consumer survey research without using a control correct?
A. I have.
Q. Can you identify well in how many instances have you conducted consumer survey research without using a control?
A. I -- I I can't give you an estimate many
vase are not intended to establish cause at there's
no need for control in those cases. I've done a lot
of descriptive surveys for my academic research
consulting and in litigation where there was no need for control but we were trying to establish
causation.
Q. Were you trying to establish causation of any sort in the survey that you conducted for ECM bio films?
A. No.
Q. Do you understand Professor Frederick to be attempting to establish causation in the survey that he conducted for complaint counsel?
A. That's my understanding yes.
Q. That he was attempting to establish causation?
A. A relationship between peoples response to the the ECM biofilms logo and certain beliefs yes.
Q. So are you contending and I'm not sure if you are, are you contending that Professor Frederick should have used a control?
A. Well if he's going to assess causation he should have used a control yes.
Q. What would you suggest that that control might have been?
A. I haven't given that a great deal of
thought. I mean one approach could have been to simply not use the ECM logo and simply put the term biodegradeable and determine whether the action of the marketer in this case the ECM, produced a
different kind of response than a response to the word alone.
Q. Are you aware whether Professor Frederick showed certain consumers plastic products that deny contain the ECM logo?
A. It was my understanding that he did yes.
Q. And that he showed other sets of consumers about plastic products that did contain the ECM logo correct?
A. That's my understanding yes.
Q. And why does that not constitute a control?
A. Well it could be a control. I'm not I I
don't think I'm following your question. The issue
is you know what are you controlling for? It's my
understanding that that and I'd have to go back and
look at his mini surveys but that some of the
surveys were such that they used the buy oh film
logo and some did not but I don't remember all the specifics of what was done.
Q. Professor Frederick asked consumers in substance how much time would it take for plastic label BCM Biodegrade to -- strike that.

In substance Professor Frederick asked consumers how much time it would take for plastic label ECM Biodegradable to biodegrade. Do you

## recall that generally?

A. I do.
Q. Is it your contention that there was no adequate control for that question?
A. I don't believe there was an adequate control. I think an adequate control would have to include something that examined what people interpret the term biodegrade to mean.
Q. What would be question be that would correspond to the question I just asked that would constitute an adequate control?
A. Well again I -- I I have not been asked to design such ape survey and I haven't thought a great deal about it but I would think that there would be a need to use the term biodegrade as a part of the control in order to correct for pre-existing beliefs about the definition of the term.
Q. Can you give me an example of what that question would sound like?
A. It would sound very similar to the question you just read me what would differ would be what people are shown.
Q. The question that I just read you was not a question that was accompanied by any visual image?
A. Okay.

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Q. So if it's just a written question what would an adequate control be?
A. Well I don't know because if it's just a written question, I'm not sure what the basis of that information of an answer would be based on.
Q. It wouldn't be based on a consumers
perception or understanding of how much time it would take for plastic labeled ECM biodegradeable to biodegrade?
A. Well it it would be based on what they
believe biodegrade means I don't know what the ECM
buy oh film component ads. If people are not aware
of that they have no basis for answering that
question.
Q. One circumstance when a control would not be used is when it's unclear when strike that. One circumstance when a control would not be used is when it's unclear what would constitute an adequate control correct?

MR. AWERBUCH: Objection.
THE WITNESS: Well, certainly if you can't think of what a control would be, you can't very
well design one in but the fact that you don't have a control puts you in a position where the inference of causality is is really problematic so it's
certainly the cause that you may have situations where you don't know what the control might be and obviously you can't just show people a blank piece of paper but the that makes it very difficult to make any inferences about causality.
BY MR. COHEN:
Q. What is the inference that you understand Professor Frederick to be making with respect to cause at when he collected data regarding how much time consumers believed it would take for plastic products labeled ECM biodegradeable to biodegrade?
A. Well I think what he is attempting to do is
to draw inferences about what the ECM buy oh film product, it's label, it's logo, information about it, implies to consumers.
Q. If I understand you correctly and I think maybe I don't, but if I understand you correctly you seem to be testifying that Professor Frederick's question which I've just paraphrased was assessing how consumers understood the language that was presented to them?
A. I think in some cases, the difficulty I'm having is that Professor Frederick asked a lot of different questions and I don't know specifically which one you're referring to and so if we really
want to get into the specifics you know we're going to have to actually look at what was done, what was shown the respondent and what question was asked. It you know there's just too much data there for me to do justice to an answer from memory without having the.
Q. Let's assume that Professor Frederick did in fact ask how much time would it take for plastic label ECM Biodegradable to biodegrade?
A. Without showing people anything.
Q. Without showing people anything.
A. Okay.
Q. What's the causal inference that you
understand Professor Frederick to be attempting to draw from the results to that survey?
A. That that statement causes consumers to
infer something about the length of time that the
product will take to biodegrade.
Q. And what would be the control necessary in your mind to give that question sufficient validity?
A. I would probably remove the reference to the specific product and simply ask as I did in my survey how long do you think it would take for something to degrade. I might even go so far as to ask how long would it take for plastic to degrade.

1 I think those provide a baseline that of responding that is independent of any reference to the Econsiders M bio film product.
Q. So if Professor Frederick had in fact asked the questions that you just described then there would be adequate control?
A. Perhaps. Again I would need to see the full design, what people were asked, and and how the analysis was done but certainly that would get 0 closer to a control.
Q. You did review Professor Frederick study in preparation for this deposition?
A. Yes, I did.
Q. You didn't use a control in any of the work you performed for ECM correct?
A. I did not I was not trying to make any inferences about causality.
Q. Do you contend that Professor Shane Frederick is biassed?
A. I.

MR. AWERBUCH: Objection.
THE WITNESS: I think that the approach he took to the analysis demonstrates a lack of objectivity so to that degree yes I think there's bias.

## BY MR. COHEN:

## Q. Have you contending that Professor

Frederick's approach lacks objectivity or that Professor Frederick lacks objectivity?
A. Well I can't speak to his personality characteristics. I think his approach the way he's gone about his analysis lacks objectivit.
Q. Would another way to say this be that Professor Frederick lacks objectivity because his methodology is improper?
A. I'm not sure that's the way I would say it I
certainly think his methodology lacks objectivity.
Q. I'm not sure that I understand the difference. You've testified that Professor Frederick's methodology lacks objectivity. Correct?
A. That's correct.
Q. And what is the basis for your belief that his methodology lacks objectivity?
A. Well there's several. I mean first of all, the work that he did was not double blind. Both he and his coders were very much involved in the in the coding and both were very much aware of what they were what they were hoping to find. It's also very clear that he has failed to code items responses that people gave that are clearly relevant such as I

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## BY MR. COHEN:

Q. Can an expert lack objectivity yet conduct a methodologically sound survey?
A. Yes I think so.
Q. Can an expert conduct a methodology I can flawed survey yet be objective?
A. Yes I think so.
Q. You testified that if it were to be
established that your methodology was improper that
would not necessarily mean that you lack objectivity correct?
A. That's correct.
Q. What is it about your critiques about professor Frederick's methodology are that suggests to you that he lacks objectivity?
A. I think I've answered this question. As

I've indicated I think the failure to code what are
clearly relevant answers serves to bias the results
in a particular direction. I think the way he has
coded some of the responses serves to bias the results in a particular direction. Those are those are the bases for my opinion.
Q. Let me direct you to paragraph excuse me page 30 of your report. I apologize page 11 of your report. I need to make it clear for the record that

I'm going to read what it says. I'm obviously doing that because that's what it says. I'm in no respect endorsing this. On the second full sentence on the page it is quite possible for our respondent for a Google survey to be an eight year old or a male pretending to be a woman did I read that correctly?
A. Yes you did.
Q. What's wrong with including in a survey of American consumers men pretending to be women?
A. Because they are not who they are and by
definition they are there to perpetuate a ruse and
so I would be we very reluctant to accept a response
by someone pretending to someone they are not. I
think it would call into question the validity of that that information that they supply.
Q. How do you know that none of the respondents to your consumer survey were men pretending to be women?
A. Because we actually had a live interviewer
who was in contact in talking with the respondents
so it's highly improbable. Is it possible? I
suppose but highly improbable.
Q. Why do you believe it's more improbable over the phone than over the Internet?
A. Well because on the Internet we know that
many people develop different person as at nettites
there's a pseudonym for emails there's a whole industry that sells people privacy protection and and temporary email addresses all for the purpose of people one being able to protect their privacy and two being able to pretend to be someone that they're not. Well documented phenomena.
Q. There could though be men pretending women who answer phone calls that?
A. Could happen but it's less likely because we have real interaction between two human beings.
Q. And how would that real interaction be able to guard against again I don't like the language but men pretending to be women?
A. The voice should help identify who the person is that the interviewer is talking to. We don't have that cue available on the Internet. We also don't have a lot of data that suggests that when people are called on phone surveys that they assume alternative identities. We do have pretty good evidence that happens frequently on the Internet.
Q. Has there been research done as to whether people participating in phone surveys sometimes give inaccurate demographic information?
A. Yes there is.
Q. Has there been research regarding whether respondents on telephone surveys sometimes give an accurate information regarding their gender?
A. They can do that yes.
Q. With when your report states that it's quite
possible for a respondent to be a man pretending to a woman, what does quite possible mean?
A. What I really mean there is that there's no control at all there's no ability to determine who the individual is at the other end of the survey. Unlike well constructed well maintained Internet consumer panels where there is an effort made to verify the identity of individuals who participate in surveys, in Google survey there's no ability to identify who is the respondent that is completing the survey.
Q. When you say no ability, you mean absolutely no ability or no ability that's sufficiently reliable in your mind?
A. In my view at this stage in the development of Google consumer survey, I don't think there is sufficient ability for any given survey to identify with sufficient certainty who the respondent is to allow a conclusion that the survey is in any way
valid.
Q. Please quantify the probability that any given respondent was a man pretending to be's woman?
A. I can't qualify you. I'm for you. I'm
simply giving you I gave you two examples of how
somebody could pretend to be who they are not.
There are many other ways people could pretend to be who they are not. The problem is there's simply no way with Google consumer survey at least as it is used today to verify the identity of the respondent in contrast to well designed surveys using well constructed and well maintained Internet consumer panels.
Q. When the report states that it's quite possible for a respondent to be an eight year old what does quite possible mean in that context?
A. That it's possible that there could be an
eight year old among the respondents.
Q. Can you quantify the possibility?
A. I didn't attempt to quantify the
possibility. It simply making the point that there
is no way that you could control for that given the way that Google consumer survey operates.
Q. Are you familiar with the content provider Google survey uses?
A. I'm generally familiar with them I don't think they provide a comprehensive list of the content providers I think they provide general categories.
Q. Do you know whether they provide any specific examples at all?
A. I'm not aware of any and it has been changing over time in the two years that it's been in existence.
Q. You don't know one way or the other whether

Google consumer surveys uses content providers that are likely to appeal to small children do you?

MR. AWERBUCH: Objection.
THE WITNESS: I don't have specific
information but they do use sites that they
categorize as entertainment. They do have sites
that they categorize as sports. Those would be
appealing to younger children.
BY MR. COHEN:
Q. Out of more that 28 thousand respondents in Professor Frederick surveys how many would have to be small children before the results are no longer probative of questions before the court?

MR. AWERBUCH: Objection.
THE WITNESS: The mere possibility that that

1
could half invalidates the entire survey.
BY MR. COHEN:
Q. So if it were established let's assume that some how we had the ability to know this beyond any doubt, that there was one eight year old who had responded to one of Professor Frederick's questions and no one else below the age of 15 had responded. That would invalidate the entire survey?
A. Well no because you've no provided more information because now you've actually suggested there's an eight year old and that everybody else is not an eight year old. Now we can now we can parse the data, we can say awe somebody slipped in, we now have data on that. The problem with the Google consumer survey is we don't know that. We don't know if there was none one a thousand, we just have no way of we have no way of knowing that.
Q. So we if I understand your testimony correctly we have no way of knowing whether one out of every 28 was an eight year old?

MR. AWERBUCH: Objection.
THE WITNESS: We have no way to verify that characteristic. That is correct.
BY MR. COHEN:
Q. Even assuming it would be possible to make

MR. AWERBUCH: Objection.
reasonable assumptions about that information, the inability to know for certain invalidates the entire survey?
A. Well I don't know what assumptions you would make you can certainly make assumptions as you did that there's only only identifiable eight year old and if you if you know that then I think you change the character of the data but as long as there is no way to identify that individual or the number of individuals who meet that characteristic, then it's an invalid survey.
Q. So you need to know precisely the number of individuals who meet that characteristic in order for the survey to be valid correct?

MR. AWERBUCH: Objection.
THE WITNESS: I think you need to know with a high degree of certainty that the respondents are who you think they are yes.
BY MR. COHEN:
Q. Do I understand your testimony correctly
that you need to know with a high degree of certainty that the respondents do not include a material number of individuals below say the age of 15?

THE WITNESS: I don't know what you mean by material but you would want to know you would need to know how many of those individuals this were. Ideally you would have a way of screening those individuals out so they were never in the survey to start with.
BY MR. COHEN:
Q. So if you don't know an exact number of the individuals who shouldn't be in the survey population, the survey is invalid and I'll add to that let me withdraw the question because you you've put an important qualifier in here that $I$ think is important to be fair. So if you don't know with a high degree of certainty, not perfect certainty but if you don't know with I a high degree of certainty whether how many individuals are in the pool of survey respondents who shouldn't be, the survey is invalid?
A. I would say that the survey is invalid. I certainly wouldn't make important decisions based on such a survey.
Q. Have you ever communicated with anyone associated with Google consumer survey?
A. Not with Google consume are surveys per se I regularly communicate with people at Google but not
related to the surveys.
Q. Who do you communicate with at Google?
A. We have a couple people who sit on our board of visors for something we call the M school. It's an interactive digital branding program that we have
on campus and we have representatives at the local office who are part of the advisory group.
Q. What does that advisory group do?
A. It gives us advice on our curriculum. They do some team teaching with our faculty. They raise interesting research questions with us.
Q. Have you ever conducted a survey on Google consumer surveys?
A. I've not I've not I don't. I don't believe
it currently is sufficiently reliable that I would
ever do a survey on it.
Q. How many surveys have you conducted in your career?
A. Thousands.
Q. Tens of thousands?
A. Well I don't know if it's tens of thousands but certainly thousands.
Q. Out of the thousands of surveys you've conducted in your career how many were conducted on line?
A. Well early in my career there wouldn't have been very upon many because you couldn't do it on line but I would say in recent years probably 50 percent of the surveys I've done are done on the Internet.
Q. Over the entire course of your career what's the percentage that have been done on line?
A. Maybe I don't know maybe 10 percent. It's been the ability to do valid vase on line is really only about oh depends on who you talk to but five to ten years old at most.
Q. And so that's the period during which you indicated that you had done 50 percent of your research survey research on line?
A. I believe that's correct.
Q. Do you consider yourself an expert who
specializes in Internet research?
MR. AWERBUCH: Objection.
A. Well I don't know what you mean by Internet
research. I mean I used Internet survey
methodology. Use Internet consumer panels regularly
and feel like I have a great deal of expertise in
that area. I have also studied the Internet as a
communication tool but there are certainly vast
areas of Internet in which I don't have have

1 expertise.
A. I have. moment.
A. I have. recall?

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## Q. Have you ever published a paper regarding Internet research?

Q. And what paper or papers would those be?
A. Well there have been several of the there was a paper I published in the journal much public policy in marketing back around 2000 that dealt with business models in the Internet space. I've done several papers and book chapters around the Internet and more broadly interactive media, papers that have been published in the journal of the market much academy science that's what comes to mind at the
Q. Have you ever spoken on a conference regarding Internet research?
Q. Can you give me what examples you can
A. I've spoken at the academy of marketing science at the American marketing association, at the association, the American academy of advertising those are the ones that come to mind.
Q. Can you give me dates or other information

## you mentioned four there that are sufficient for us

 to locate those presentations?A. Well, if, if it was only a presentation they may not have ever existed in hard copy form. I certainly could identify dates. In fact my CV would include my whole list of publications as well as a
lot of the presentations I've made so that would give you an indication.
Q. But I don't mean to be difficult here I mean
there's more than one. I there's more than one instance where you've presented at various different professional organizations so is there any additional information let me ask it this way I'll withdraw the question. Do you have copies of any of the presentations that you've mentioned?
A. It's possible I don't know.
Q. Are you willing to look and produce them to complaint counsel?
A. Sure. I'm happy to do that.
Q. And?
A. As I said they're all listed or at least of them would be listed on my curriculum vitae and the title would probably make it very clear whether they were about the Internet or not.
Q. And the same are true about the articles
that you mentioned are you willing to look and I'm assuming you have copies of those articles produce them to counsel?
A. I'm certainly willing to do that.
Q. What's the basis for the opinions included in your report, regarding Google consumer surveys?

MR.: Objection.
THE WITNESS: I have investigated Google consumer surveys and one reason that I've done so is because the question comes up regularly in my role as editor of a journal as to whether or not we would accept for publication a paper based on Google consumer surveys so I've done some investigation to educate myself so that I can give a meaningful relevant answer to that question. Most of what has been written about Google consumer surveys to date has appeared on in the trade press in online trade blogs done by the market research community. There are a number of things that have appeared on what's called the green book online, the green book is actually a publication that deals with market research providers. I've also seen a study by the pew foundation that's looked at the accuracy of Google consumer surveys so I think I have I've informed myself pretty well about what the general
thinking is about Google surveys and about what it is. It is however as I indicated still evolving, what it was two years ago when it was introduced is quite different from what it is today. So it's not it's not something that you could evaluate one time and develop a definitive opinion. You kind of really have to figure out where it is at this point in time.
Q. You mentioned a journal. What journal?
A. I'm sorry.
Q. You mentioned a journal in which your role
with respect to that journal caused you to need to become familiar with the consumer surveys?
A. I'm editor, currently the editor of the journal of public policy and marketing it's a
publication of the American marketing association.
Q. Have you ever accepted for publication any submission in which the author related in whole or in part on google consumer surveys?
A. I can say with absolute certainty I have not
and I can say that for two reasons first of all
Google consumer surveys have not been along for very
long so there would have been very little
opportunity for people to have crafted papers using
that methodology but I at this point where I'd
received such say paper I'm certain that I would reject it.
Q. In how many instances that you're aware of has Google consumer surveys been far off the mark? MR. AWERBUCH: Objection.
THE WITNESS: I haven't done first of all I haven't done a systematic analysis to see if I can make that determination. Secondly that data are really still quite sparse, the pew foundation
project found it was in some cases close in other cases pretty far off. But there just aren't that many instances. Again we've only had two years of history. It is safe to say that one could not with certainty even even with some modest uncertainty, say you could rely on the results obtained from Google surveys for anything more than maybe some directional information maybe a quick snapshot where you weren't really interested in something that was very accurate. And I think that's the general assessment of the research community today as well. BY MR. COHEN:
Q. Is there someone in the research communicator publication or references other than those contained within your report that you could direct me toward that would support the opinion that

1 A. I can't give you a specific count there was one one report that I recall that was early in it's history that was very far off the mark and I can't 4 even recall what was, what it was measuring. I 5 think it was measuring something about media usage 6 but I don't I don't have a specific recollection. I know that in the pew foundation work it was close on some many items but also pretty far off on some other items but I don't remember how many things I looked at.
Q. When you say media use was that a reference to wickipedia?
A. I don't as I sit here today I don't recall.
Q. Let me direct you to your report at page 14
note 11. It's a reference to Jeffrey Henning 2012.
A. Mm-hmm.
Q. Have you read the material referenced?
A. I have.
Q. What sort of material is it?
A. It's on line columns it's blogs, it's it's
the sharing of practitioners with other
practitioners which is about the only thing you're going to find that's currently available with respect to Google consumer surveys.
Q. It's actually a tweet from Jeffrey Henning

## you just provided?

A. Well I did cite some in the report itself.

I would refer you to those. Some of the citations
are to the green book which I mentioned earlier and
is available on line. There there in addition to to
those I've sighted there are other papers or blogs
by research professionals that have dealt with
Google consumer surveys, that's a very useful
source. And I would also I think the pew foundation
paper is is's very useful source as well there are other sources I just can't identify them at the moment.
Q. And you mentioned blogs other than the ones that are in your report can you identify anything in particular anything that would enable complaint counsel to locate that information?
A. Well again I would send you to the green book which is basically an on going on line trade publication that is used widely by market research professionals as a place to find probably the most current discussion of Google consumer survey outside of Google.
Q. As you sit here today how many instances can you name where Google consumer surveys was far off the mark?

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## isn't it?

A. Well it's a long tweet but yeah that's fair, I -- I would characterize that in a way.
Q. Let's mark the blog with the tweet as

Stewart eight this is the long tweet that you were referring to?
A. That's correct.
Q. DeR did you locate this blog post containing the tweet yourself?
A. I did.
Q. And it provides one example where Google
consumer surveys produced an allegedly inaccurate result doesn't it?
A. It does.
Q. It doesn't provide more than one such instance does it?
A. I do not believe so know.
Q. Who's the author of the blog post?
A. I believe it's Jeffrey Henning.
Q. And what's the basis for that belief?
A. Because that's who's listed at the top as the as the author.
Q. I want to make sure that my question is clear. I am in agreement with you that Jeffrey Henning is the author of the tweet. Who is the

1 author of the blog post? Do you understand the 2 difference in the question?
3 A. I'm not sure that I'm understanding the 4 question.
5 Q. I will represent to you that my
6 understanding is that Jeffrey Henning is the author 7 of this tweet.
8 A. Okay.
9 Q. The tweet is excerpted from a larger blog
10 post. Which is a different piece of material. It
11 contains the tweet correct?
A. That's correct.
Q. Who's the author of the blog post?
A. It appears on what on what I believe is
brand savant. I don't know who the specific author
16 is in that case.
17 Q. So the author is not sighted in your report?
18 A. No.
19 Q. Is it relevant who the author is?
A. Not for my purposes.
Q. Is it relevant where the author works?
A. It may be but again not for my purposes.
Q. And why is it not relevant for your
purposes?
A. I'm simply presenting information that's

1 that I have found assessing the quality of Google survey. It's what the literature states.
Q. Is it relevant where she works?
A. I don't again not for my purposes.
Q. And for the same reason?
A. For the same reason.
Q. Let's go to page 14, footnote nine. Kevin ought walled is the reference there. Did you locate that reference to kevin Oswald yourself?
A. Yes, I did.
Q. What sort of content is referenced?
A. Well I believe it's content that exists on the website of a research firm and I believe it's discovery research group. And it's an it's an again it's a discussion of his experience with Google consumer surveys.
Q. Kevinos walled is employed by discovery research group correct?
A. I think that is correct. I would have to confirm that.
Q. Discovery research group is a competitor of grog will consumer surveys is it not?

MR. AWERBUCH: Objection.
THE WITNESS: I actually I wouldn't characterize it as that at all. I mean they are
available in the in the market research community raising concerns about Google consumer surveys. It's what's available. If there were if there were referee publications I would have sighted those but Google scholar I'm sorry Google survey is so new that there's very little available other than among people who are kind of practicing professionals and 8 so I went looking for things that relevant of what practicing professionals think of the product.
Q. Let's back up to page 11 foot note seven. Did you locate the katrina lerman reference yourself?

## A. I did.

Q. What sort of reference is this?
A. Well this appears in the green book something I've referred to earlier. It basically I would characterize it as a blog. This is the green book blog that it appears on. It's essentially an on line publication in which marketing research professionals share information about about best practices.
Q. Is it relevant who katrina letter man is?
A. I not for my purposes.
Q. And why is that?
A. Again I'm simply reflecting the literature
involved in market research but Google consumer
surveys is not. So I don't consider them
competitors.
BY MR. COHEN:
Q. You don't consider Google consumer surveys to be involved in market research?
A. What they do is not market research. It's a way to monetize publications. It's not market research by any definition. That anybody who's a serious scholar would agree with.
Q. As a serious scholar what is your definition of market research?
A. Well market research is the collection of of information about consumers and about the marketplace that carries a degree of certainty sufficient to make decisions. Those decisions may vary in terms of what they are and so that the research may vary. But the market research community does not consider Google scholar Google surveys to be a serious competitor at this point.
Q. How do you know whether discvoery research group considers google consumer surveys to be a competitor or not?
A. I wouldn't consider them a competitor.
Q. How do you know -- please answer my

1 question
competitor.

How do you know whether discovery research group considers them to be a competitor?

MR. AWERBUCH: Objection.
THE WITNESS: My understanding of how Google
surveys is viewed in the market research community
would would suggest to me that serious market
research firms would not really consider it a

BY MR. COHEN:
Q. Have you interacted with anyone at Discovery research group?
A. I have not.
Q. Do you know whether they are a serious marketing firm?
A. I believe they are.
Q. Then what is that belief based?
A. I'm aware of some of the work they have done
but I I don't have any further basis of that.
Q. You don't actually have any personal
knowledge as to whether or not they view Google consumer surveys as a competitor?
A. I don't have I have not spoken to anyone there I have no personal knowledge that is correct.
Q. Let's say on page 14 the sentence beginning
after footnote nine, it's about six or seven lines
from the bottom, another review noted the annoyance
factor, the tendency for respondents to give bog us
answers and concluded that Google surveys is just
terrible. It annoys your most important asset, your
reader. It misleads your partners, the brands, and
it forces you as a publisher to focus on volume over
quality, which reduces the overall value and lower
how much people trust your content did I read that correctly?
A. Yes you did.
Q. Whose words are those?
A. Those are I -- I you've sighted I've given you the sight there.
Q. Is this a paraphrase of the citation or are
those your words? I guess only let me withdraw the question. Paraphrasing your words would be really
the same thing. Is it a paraphrase or are you
actually quoting from the citation there?
A. I think that that that where I'm quoting I
would probably have put it in quotes so I would say it's probably a pair phrase.
Q. What source of content is footnote ten referencing?
A. Again it's referring to a website that is
used by publishers to share information with one another.
Q. Do you know whether withdrawn. The website is, the specific content reference is a blog post isn't it?
A. It is.
Q. And to whom is the blog post directed?
A. Yes I believe the post is directed at people who are in the largely in the media and publications industry.
Q. Did Thomas Beck tall do any research in support of his conclusions?

MR. AWERBUCH: Objection.
MR. COHEN: What's the basis for your objection.

MR. AWERBUCH: You're asking him something that he can't really have personal knowledge of.

THE WITNESS: Yeah I'm as I have I've said before I'm offering you what the what the opinion of Google surveys is in the professional community. What they're based on varies, there is some research that I have pointed to, there are blogs there are opinions, I don't necessarily know what all of the opinions are based on but this is what's out there about Google surveys.

## BY MR. COHEN:

Q. I move to strike that as nonresponsive ma'am can you please read back my question read read ?
A. I can't answer that I don't know I don't know the basis of his opinion as I did say in my responsive an answer.
Q. Does it matter who he is?
A. It may. For my purposes it doesn't really matter.
Q. And why doesn't it matter for your purposes?
A. Because what I'm trying to reflect in my report is what the general opinion published opinion admittedly on the website on websites is of Google consumer surveys at this point in time. Some of it I'm certain is purely opinion some of it may be based on research I pointed to some research but there's a the some of all of these suggest an enormous amount of skepticism of Google surveys at least as it's currently constructed.
Q. The sum of all of these what is the all of these that you're referring to?
A. I've given you a number of different sites quotations that in summary, lead to a conclusion that you need to be very careful about drawing any inferences from Google surveys.
Q. And it's so the all of these is the references in your report?
A. That's correct.
Q. Anything else?
A. Well this is, this is a selection of things
that I have found over time. Many of these I was
aware of before before I even began working on this
project as you needed information in order to be
responsive to questions I was receiving from
authors. There are other things that I've seen.
This is this is simply representative.
Q. Can you identify some of the other things that you've seen?
A. Not as I sit here today.
Q. Is it relevant where Thomas Beck tall works?
A. Not for my purposes.
Q. And for the same reasons you've already explained?
A. Yes.
Q. You testified and I don't mean to
mischaracterize I'm sure you'll correct me if I'm getting this wrong that Google has made refinements in it's methodologies since it's inception is that correct?
A. That's correct.
Q. Do you know what those refinements are Lynn?
A. I know some of them I know they have
expanded a number of questions that you can ask.
It's my understanding that when they initially
launched you were restricted to two questions and I
think that has been relaxed. I know they have
expanded a number of websites where Google surveys
now collects data. Those are the two things I'm most aware of.
Q. Are there others?
A. I -- I don't know of others. Those are the ones I'm aware of.
Q. How much does it cost to run a google consumer survey?
A. It's my understanding it varies and I don't I don't remember the price structure. It's based in part on the number of questions that you're going to ask. But I I don't remember the pricing structure.
Q. And when you say just so that the record is clear when you say you don't remember the pricing structure, do you remember anything about the pricing structure?
A. Well only that it seems to take into account the number of questions that you're going to, you're going to ask. And I believe the sample sizes, but
other than that I'm not aware of what the specific structure is.
Q. So you don't know how much it would cost for instance to ask a hundred respondents one question on Google consumer surveys?
A. Not as I sit here this afternoon no.
Q. How would you physically describe the user experience when a potential respondent is presented with a Google consumer survey?
A. I think it varies by by respondent. I do think that one of the quotes I have here or one the paraphrases I have here is is is accurate. I think many respondents will be annoyed. They are they are they did not come to the sight for the purpose of participating in research un like a well constructed Internet consumer panel. You know they came because they wanted to access content and this now become says a price a door if you will to get to the content. And for some people I think that's going to create annoyance, for some peoplit going to be a matter of trying to get rid of it as quickly as possible. Some people may in fact find of interesting to give their response.
Q. It's your understand being if I understood you correctly that google consumer surveys is

## preventing an Internet user from accessing content

 that he or she would otherwise be able to access?Q. Well there may be other ways that people could access the content. They might pay for the content they may perform some other task to get to the content but it is one of the things that would be necessary in order to access the content. They may have a choice of several things they can do to do it?
Q. What would those several things be one would be to answer the survey right and what would another be?
A. Well the other would be to pay for the sight to pay for the content. I you know, I don't know what the others might be. I would envision responding to a promotion. I think there are a lot of things could be done. I don't know specifically what what else they might do.
Q. Do you know one way or the other whether potential participates in Google consumer surveys are given the option of responding to a promotion to access the content?
A. I don't know that with certainty no I have
seen some discussion but that may may be an I
direction in which they're going to go but I don't
know if they have implemented that or not.
Q. Let's assume that a potential survey respondent is given the option of responding to a survey let's assume for further more it's one question. Or paying to get money, excuse me paying to get behind a pay wall and access otherwise accessible content. Do you understood those assumptions?
A. I do.
Q. Why is it your contention that someone confronted with that decision would be annoyed or disturbed by this?
A. Because people don't like barriers between what they're interested in accessing and themselves themselves whether that be to pay for content publishers have had enormous difficulty getting people to pay for content that is on line. Having a survey pop up as a barrier is again an interference with the goal of the respondent so some respondents are going to be frustrated and annoyed by that think wanted content and couldn't get it.
Q. Are respondents more likely to be frustrated by having to pay to get behind the pay wall or having to answer the survey question to get behind the pay wall. I think they may be annoyed in either

7 Q. Is that relevant to you at all?
8 A. No, sir.
Q. What was the average response time across Professor Frederick's studies?
A. I have a recollection somewhere in the neighborhood of maybe 20 seconds, but that's only a but that's only a best estimate based on a fault I will recall.
Q. Why is that not relevant to you?
A. Because I think the data is so fundamentally flawed whether they spent 20 seconds or 20 minutes doesn't it doesn't rehabilitate the data.
Q. Is it relevant to you with respect to the specific question of whether respondents are likely giving serious consideration to to the question before responding putting aside the overall validity of the survey?
A. No.
Q. Why not?
A. Because I don't, I don't really think it's a particularly meaningful piece of information. You know it if it's ten seconds or 20 , second really doesn't matter. You can put a meaningful answer in for a short question, something where one merely had to check a box in in five seconds, one could sit and

## ways case?

Q. And you have no view as to which the respondent is likely to prefer?
A. I think you already asked most respond he wants would say I just want access to the content.
Q. Have you considered whether some respondents might be happy to answer a question that takes 15 to 25 seconds in exchange for being able to access content behind a pay wall for free?
A. I don't have any document that there may be some consumers who would be very happy to give a response whether it be a nonsense cal sponsor a meaningful response in order to get some content that was of interest to them.
Q. What's the average response time across Google consumer surveys?
A. I don't know. I -- I think it would
probably depend on the nature of the question and and the number of questions.
Q. What's the average response time across Google consumer surveys for single questions?
A. I off the top of my head I don't know that as I sit here today.
Q. Is that relevant to you at all?
A. No it's not relevant.

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stair at a screen while you're watching the world cup ask you might be on the screen or you know a minute before you respond and then you give a really sillily response so I don't think that tells us anything one way or another about the validity of the responding.
Q. You've studied Professor Frederick data to an agree at least haven't you?
A. To a degree yes.
Q. You would agree would you not that
substantial majority of respondents give to biodegradation time questions give reasonably plausible answers correct?

MR. AWERBUCH: Objection.
THE WITNESS: I wouldn't say an is substantial majority. Recognize he doesn't even code almost 40 percent of the responses. So so we have to take those 40 percent and set those aside. You know of the of the remaining roughly 60 percent, yes I think the majority give what I would consider to be plausible responses, not all but most.
BY MR. COHEN:
Q. You, there's obviously disagreement about the parties about this but you believe I don't know is a plausible response?

1 it's perfectly plausible and in fact the logic there is perfectly plausible but they didn't necessarily have that belief prior to actually confronting this task that has been set for them that stands as a barrier to get to what they really want.
Q. What's a pilot study?
A. A pilot study is generally a study done on a small scale for purposes of refining a larger study for purposes of estimating sample size for purposes of making modifications that may be necessary given you know un wanted things that may happen during the survey.
Q. Using that definition until I tell you otherwise I'm only going to be asking about pilot studies related in some way to litigation or potential litigation do you understand that assumption?
A. I do.
Q. Have you ever been involved with a pilot study that was terminated prior to completion?
A. I'm sure I must have been. I don't have a specific recollection.
Q. Can you estimate how many?
A. No. I'm surely that I'm sure that there have been several. I've done a lot of pilot work

1 came to the task for a completely different reason
and were interrupted. And just because the
responses are plausible in that case one can give at
a plausible response that is that is not a real
response. It would be very easy for somebody to
simply type in one year and they don't believe that
it simply a way to make the screen go away and we
have no way people weren't screened in in way way
they weren't present to to any research you know the
entire incentive is to get that screen out of the
way and many people are will give a plausible
response just to get rid of it. Whether that's what they really think or not, who knows.
Q. Why would someone give a plausible response that isn't what they really think?
A. To get rid of the screen.
Q. So on they have one view but they give a
different plausible view to get rid of the screen is that what I understand you to be testifying?
A. No I I'm not sure that they necessarily even
have a have a view. But they need to put something in the box to make it go away so you know I've never thought about that question before but one year sounds about right. Let me type that in this thing will go away and I can get on with my business. Now

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2 r
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and often been the case that you know you get results that suggest you don't want to go forward or the client simply decides that they don't really want to do the survey after all. But I don't I don't have an estimate of the number of times.
Q. Can you think of any pilot studies in particular that were terminated prior to completion?
A. I can't think of any as I sit here today.
Q. Have you ever been involved with a pilot
study that was terminated prior to completion because of concerns with that the results would be adverse to the party ultimately funding the study?
A. No I don't believe so.
Q. Let's look back at your report page five.

The section involve many scope of the assignment.
Please read the scope of the cement section and just
look up at me when you're finished.
A. Okay.
Q. The scope of assignment section doesn't
mention the manufacturers pilot study does it?
A. No it does not.
Q. Why not?
A. Because that study was done we're talk
become that study from the very beginning, but that
study was done very late in in my assignment and it

1 I simply didn't get it into the scope of assignment 2 here. I would, I would encompass it within the the 3 the larger survey of consumer perceptions these were 4 consumers they just happen to be business people.
Q. Who's the we in that sentence?
A. Where? We?
Q. Ma'am could you read back professor stewart's response?

Read read
A. I didn't hear a we in here.
Q. Ma'am maybe I misheard it. I thought I did hear it. If you wouldn't mind just reading it. I think it's towards the beginning. Read read.
A. I and the attorneys in discussing what I would do we we went back and forth about what my assignment would be and it changed a bit over time.
Q. In what respects did it change over time?
A. Well early early on I had no notion that
that was going to be an expert to whom I was going
to be asked to respond early on I was merely asked
to comment on evaluate the saneovay and the an co
surveys subsequently I was asked to describe's
survey in the context of that discussion we talked bye-bye whether it should be of end user customers
or whether it should be of manufacturers and in in
collaboration with the attorneys we agreed that
consistent with the approach that was used in
Synovate and APCO we would focus on end user
customers but that we would also do an manufacturers
survey at some point and ultimately we decided to do a pilot on the manufacturers.
Q. You mentioned attorneys plural which attorneys were you discussing it with?
A. Well it was largely with Lou Caputo I know
there were other attorneys who were in the
background but most of my conversation until very recently was with Mr. Caputo.
Q. And who were the other attorneys in the background that you know were in the background?
A. First name is Peter, and I don't recall his
last name. Eric has only recently become involved.
I don't think he was involved in the earlier
conversations so that would have been the group.
Q. You did in fact design a manufacturers pilot study for ECM, correct?
A. I did.
Q. Let's go to page 27 of your report the fourth line down beginning in the middle a pilot study was conducted using a list of ECM customers as

1 a sampling frame did I read that correctly?
A. You did.
Q. Have you ever seen a copy of the list?
A. I was provided the list yes.
Q. Why was a copy of that list not produced to complaint counsel?
A. Because it's confidential.
Q. Was there any other reason?
A. I haven't have an ethical responsibility to
protect theite of survey respondents and so if
defense counsel wants to provide it since they provided it to me they're welcome to do that but I will not provide the identity of my respondents.
Q. We won't do this on the record Mr. Our balk but we're going to have to talk about this because let me ask a couple follow-up questions?

MR. AWERBUCH: Are we on the record now.
MR. COHEN: No we're on the record the tire entire time.
BY MR. COHEN:
Q. You possess a copy but it wasn't produced to complaint counsel because what you understand to be your confidentiality obligations to your survey respondents correct?
A. That is correct.
Q. And what is your understanding if any as to the relationship between whatever obligation that there may be in that regard and the obligations that ECM has under the part three administrative rules?
A. I don't have an understanding. As I said if ECM elects to provide that information that's fine I have an obligation to protect the confidentiality of my research respondents.
Q. ECM has a copy of the list correct.
A. That's actually where I obtained it.
Q. Just so the record is clear, you obtained it from Emord and associates and you infer that Emord and associates obtained it from ECM?
A. That's fair yes.
Q. Did Mr. Sin clar, in particular provide the information to Emord and associates that was then provided to you?
A. It's I was given an initial list which
included multiple individuals in each of about two
hundred or so companies and I asked through the attorneys that we identify one or two of the most
knowledgeable people in each organization rather
than having six or eight people that would then
become the focus of our work and it's my
understanding that Mr. Sinclare or someone in his
organization did go through and identify those
victims and then through the attorneys I was provided that.
Q. I won't keep repeating this question so the record is clear, any place type of question that I ask you in today's deposition that requires you to disclose the names of the specific customers, you are not going to respond correct?
A. That is correct.
Q. Okay. So we'll save me from having to ask a
series of questions related to that issue. Can you
tell me whether the list was in electronic format?
A. Well it was an it was transmitted to me as a

PD F.
Q. And transmited to you presumely as a PDF
means transmitted to you by email?
A. That is correct.
Q. So both you and Emord and associates have a PD Fif an email?

MR. AWERBUCH: Objection.
THE WITNESS: Well I may still have it's
possible.
BY MR. COHEN:
Q. And at least one point in time Emord and associates had a copy of a sent email that contained
a PD F?
MR. AWERBUCH: Objection.
THE WITNESS: That's correct.
BY MR. COHEN:
Q. Were any of the companies on the list company that's complaint counsel depose indeed this matter?

MR. AWERBUCH: Objection.
THE WITNESS: Not to my knowledge I don't
know who complaint counsel has deposed.
BY MR. COHEN:
Q. So you don't know the answer to that one way or the other?
A. I don't.
Q. When was the list provided to you?
A. Well the initial list which we which I refer
was probably provided quite early in my assignment.
Probably probably in the fall or winter of last
year. The smaller list the list of most
knowledgeable individuals was probably provided more recently, maybe in April.
Q. So there was a list in fall or winter of last year that contained around two hundred companies and then there was a subsequent list in April that contained in one or two individuals at a
subset of those two hundred companies when were most knowledgeable. Did I say that correctly?
A. No.

MR. AWERBUCH: Objection.
BY MR. COHEN:
Q. That's why I'm asking?
A. No.
Q. Correct me?

9 A. No. As I indicated for each, I shouldn't
10 say for each but for many of the companies there
were six seven eight different individuals that were
listed. And with titles and it was clear to me just in looking at the list that some were likely to be more knowledgeable than others. And it also made little sense to have more than a couple of representatives of each company on the list for purposes of trying to contact the company. I don't want to bombard a company with lots of with lots of calls. So what I asked for was a for each company, a subset of one or two individuals names that would be most likely to be most knowledgeable who could then serve as the sampling frame for the survey research.
Q. So I'll try it a second time and I'm going to break it down in pieces and I want you to usually

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we try not to interrupt you each. This time interrupt me when I've got something wrong okay?
A. Okay uh-huh.
Q. In fall or winter you received a list of approximately 200 companies from Emord and associates?
A. That's correct.
Q. That list contained approximately six to eight names per company?
A. Well as many as six to eight. In some companies it was only a couple but in quite a number of cases it could have been six to eight.
Q. So that list contained as many as eight names per company for the two companies?
A. That's my recollection yes.
Q. You made a judgment that you didn't want to bombard 200 different companies with as many as eight phone calls and in April you were provided a new list of two hundred companies but with a more targetted group of one two two employees per company?
A. That's correct.

MR. AWERBUCH: Is it a good time for a break now. We've been going about an hour and a half, use the restroom.

MR. COHEN: Sure we'll go off the record. MR. AWERBUCH: Thanks. Recess.
MR. AWERBUCH: Regarding any lists supplied
ECM or their counsel to Dr. Stewart to the best of
our knowledge we provided it to you in our 331A
production, to the extent that any list was not
production we're more than happy to oblige at this
point. Please feel freely to send an email or on
our on volition.
MR. COHEN: Okay.
BY MR. COHEN:
Q. A couple more questions. Dr. Stewart did you speak to anyone during the break related to this deposition or about this case?
A. No, sir I have not.
Q. This list that we've been discussing was it amended at any time, was the list of two hundred companies that were on the original list the same as the one that was on the one that you received in April?
A. Yes I believe so. And just to be clear it's about recollect it's about two hundred companies it's probably a little bit more than that. I just don't remember the specific number.
Q. We won't hold you to the specific number.
received in September?
A. The only other thing I recall having received in September was the Synovate survey.
Q. And your communications in September were with Mr. Caputo?
A. Yes.

7 Q. Any others?
8 A. No.
9 Q. It's been a while but if we go back to page
0 between onto the next sentence which is the last
full sentence on that page, ECM personnel were asked
to identify by name a representative, a customer
organizations who was involved in the purchase of materials for the manufacturer of plastic and likely to be most knowledgeable about the manufacturing process much did I read that correctly?
A. Pretty much yes.
Q. Did I read it material others I may have misspoken materially incorrectly in any way?
A. No it's just you inserted about rather than of but no problem.
Q. My apologies, who were the ECM personnel you referred to?
A. I believe Mr. Sin can.
Q. Anyone else?

## About two hundred. And again I apologize if you

just answer my question but was there any, were
there any changes in the list between the ones that
were there in either the fall or winter of last
contrary and the ones that were there in April?
A. I do not believe so.
Q. And just withdrawn. Do you recall when you received the list, the second list in April? Was it early April late April, the middle of the month?
A. I don't have a specific recollection.

Probably just given the timing of the events it
probably would have been early April but I could be wrong.
Q. When were you engaged in this matter?
A. Well I was contacted and actually did some work beginning in September, maybe eastbound late August of last year. I -- I did not get a formal and I signed a confidentiality agreement in September much I did not get a formal engagement letter until I think December.
Q. Can you just give me a little more detail about what you received in September? You mentioned that there was I guess a confidentiality agreement?
A. Yes.
Q. And were there other documents that you

1 A. It was my understanding that either he did 2 it himself or someone in his organization did it but 3 I wouldn't know who those other people were.
Q. And are there any communications with Mr. Sin clear that you're aware of related to the identification of customer organizations other than the two communications we've been discussing? One toward the end of last year and one in April of this year?
A. Well I did have a conversation with Mr. Sin clear in which the topic of survey of manufacturers came up and it was at that point that I mentioned to him what I'd already talked to the attorneys about and that was it would be helpful to have a more tar getted list of names and could he help me with that and he said yeah if we go down that road that is to do a manufacturer survey, he could he could have that done.
Q. And when was that conversation?
A. January maybe.
Q. Okay.
A. I can't recall.
Q. Were there any other communications with Mr. Sin clear?
5 A. I think I had two telephone conversations

1 with Mr. Sin clear. to you? issues in the case. substance of the conversations.
A. I have not. currently? other understanding. excluded? customer.
Q. Two in addition to to the one you just mentioned or two including the one?
A. Two including the one I just mentioned.
Q. What was the other one regarding?
A. I -- I said to the attorneys it would be
really helpful to me to have a somewhat better understanding of the product and the business and so could somebody do a tutorial for me and arranged a call about a 20 minute call with Mr. Sin clear and he gave me a quick lesson on biodegradability.
Q. And why did you think that would be helpful
A. Well I -- I often find it useful to have
some understanding of the background in business of
the clients with whom I work: I just thought it
would be of assistance to me in thinking about the
Q. To simplify things putting together all of your communications were Mr. Mr. Sin clear were any attorneys present on any of those telephone calls?
A. Actually I don't believe there were.
Q. Again putting together all of your telephone calls with Mr. Sin clear were there any subjects discussed other than the identification of customer
organizations and background regarding the business?
A. No that as best as I recall that was the
Q. Have you ever met Mr. Sin clear in person?
Q. Regarding who would participate in the
manufacturers pilot study, why weren't selections made randomly from ECMs customer list?
A. I'm sorry they were. Maybe I'm misunderstanding your question.
Q. Well let me take a step back I may be misunderstanding what you're sex plaining to me do you have an idea how many customers ECM has
A. I don't. I assume that the list that I got was a reasonably complete list. Certainly of the of their larger customers. But I don't have any any
Q. Why would smaller customers have been
A. It's not uncommon for's for a firm to maintain a list of major customers significant customers and not necessarily include the one off
Q. The exclusion of smaller customers from the
manufacturers pilot study would have the potential to introduce bias into that study wouldn't it?
A. I don't know even know that there was more customers beyond what was on the list. It is very common in designing survey research particularly in the business to business context to bias sample selection on the volume of of business that one does and if you do that then really small customers would be a very small fraction of the of the total volume of the customers. But as I said I don't even know that the list that I had was in in way in complete.
Q. Do you know how many customers have purchased product from ECM over the last five years?
A. I do not.
Q. And you would give me the same answer if I asked you for ten years?
A. That's correct.
Q. So you don't know with one way or the other whether the two hundred you were provided is the entire list or just a fraction of the list?
A. I -- I it was represented to me as the customer list I don't know any more about it than that.
Q. If it were not a complete customer list in some regard, that would have the potential to

## introduce bias would it not?

A. It, certainly it has the potential, but again, as I said, to the extent that most of the sales volume would be represented on the list that I was given the bias would not be great if if existed at all.
Q. Why do you believe if you do that large customers with substantial sales volume would have the same interpretations of ECMs marketing claims as a small customers with lower sales volume?
A. No that's not what I says I believe I simply said that in the context of business to business survey research it is customary to go give greater rate to respondents based on their sales volume very common you got a customer who does 50 percent of their business you definitely want to include that customer in your sample because they represent
50 percent of your business. You have another
customer who has done one purchase in ten years, you
know that customer is a trivial portion of the whole business. It's less important that they get represented because they don't represent much sales volume and typically in business to business research we wait the responses of individuals based on the sales volume their organizations represent.
Q. ECM not only provided the companies your researchers would speak with or a subset, withdrawn ECM not only provided the much companies your researchers would speak with but the specific people correct?
A. That's correct.
Q. That has the potential to introduce bias doesn't it?
A. It it certainly could what I asked for were
the people who would be most knowledgeable about the
manufacturering and production process and the
purchasing that was related to to that. I would I
would hope that that's what I got because I think
they are the people who are most relevant to the topic that we were interested in.
Q. ECM could have spoken those persons before they were surveyed correct?
A. I -- I because they're customers I have to believe at some point there had been some discussion with somebody: I don't know what transpired with those customers. You know after I got the list and before we conduct would the survey.
Q. There was nothing in the pilot study designed that would have prevented that was there? A. No.

1 much involved in the purchase decision. And in fact in many cases the actual person involved in purchasing say a purchasing agent knows eventuallily nothing about what's being purchased employ their job is to execute the paperwork to maybe it happenment what you really want is the individual that's the technical specifier and that's really what I was interested in and what I talked to 9 Mr . Sin clarabout.
10 Q. Someone might be involved with the 1 purchasing decisions but not be the decision maker right?
A. That's very common in business to business marketing yes.
Q. Let look at what may be exhibit nine in fact it is Exhibit 9 which is the manufacturers pilot study screen shots. The question one asked survey respondents are you involved in the decisions of your organization regarding the materials used in the manufacturing and I think there's a typo there products or product packaging. Have I read that correctly?
A. I didn't uh-huh.

24 Q. If the person answered affirmatively they were then asked question two, are any of those terms

1 plastic or components used for manufacturing plastic 2 correct?
A. That's correct.
Q. And then if the person answered
affirmatively again a subset of questions began correct?
A. That's correct.
Q. None of the screening questions ask whether the person being surveyed is involved with the purchase of materials for the manufacture of plastic correct
A. I don't use the term purchase, and I don't
know how you're using the term purchase here. But
we do ask if they're involved in the decisions of
the association regarding materials used in
manufacturing products or product packaging. I
think purchase would be subsumed within decisions.
Q. Why didn't you use the word purchase.
A. Because I thought activities subsumed within term decisions.
Q. You could have added the word purchase correct?
A. Yeah I could have added a lot of words but it didn't seem to be necessary.
Q. Your view is that this question is just as
et cetera I have with or without the word purchase?
A. In my view it was and in part because I had asked that names be prescreened by people in the ECM organization to identify people who would be knowledgeable.
Q. Thus the reason that it's just as effective with and within out word purchase is because the persons being surveyed were prescreened by Mr. Sin clear correct?

MR. AWERBUCH: Objection.
THE WITNESS: Well I don't know that he's the one who prescreened them. I got a list of people who were represented to me as like lick to be the most knowledgeable about the manufacturing processes and that the materials that we go into it. BY MR. COHEN:
Q. Take mr. Sinclaire out of there. Let's
Q. The reasons whyment questions are just as effective with and without the word purchase in there is because ECM provided you with the information regarding with whom you should speak, no and I've said this before purchase is subsumed within decisions. The way businesses make decisions there isn't a purchaser in most cases. There's multiple people involved in purchase. There's often

1 tried very hard to ask questions in a very neutral fashion that did not suggest you know which particular firm we were doing research for.
Q. Why didn't you ask to speak to the person at the organization who made the decision to purchase biodegradeable additives?
A. That seemed that would have seemed to me to be to be very specific. And again could have suggested I suppose, that it was being done by a particular company or small subset of companies. It seemed to me that this was a much more neutral way of asking the question.
Q. Was the manufacturers pilot study study conducted by California research services or CSRS?
A. Yes, it was.
Q. Was CSRS paid to conduct the pilot study?
A. They were.
Q. Why is that not disclosed in your report?
A. I don't know. I -- I I have that
information. It was done it was done fairly quickly and it was just something that I added quite late in the in the crafting of of this report.
Q. To clarify the record, the report was done fairly quickly or the pilot study was done fairly quicly?
a technical specifier, there's often a financial decision maker. There may be users. There may be a whole host of individuals who are involved in the decisions, the and to say purchase, actually connotes that the individual might actually be the one who writes the order form and sends the check. They may know nothing about what they're buying. They all be done by somebody who understands the technical needs, the financial needs of the organization. So it's important to talk about this in terms of the decisions whether or not they were the implementer of the purchase or not. I think decision size a much more appropriate term for what we were looking for here than purchase, which has a very specific connotation in a business.
Q. Let's talk about the word decision. Why didn't you ask to speak with the person made the decision to purchase the ECM additive?
A. Because if I had asked for the person who purchased the ECM additive, I would have conducted that that's for whom the survey was being conducted.
Q. And you believe the individuals who were surveyed her didn't know for whom this was being conducted?

[^6]1 A. Well the pilot study was done fairly quickly and much of the report was done before the pilot study was completed, so I had relatively little time to add the results in to the final draft.
Q. How much was CSRS paid?
A. My recollection is about 2000 dollars the pilot really was construct the in such a way that we agreed they would do 20 hours worth of calling. That would be what constituted the pilot. So as many as interviews as they could conduct in 20 hours was was the scope of their assignment.
Q. Let me show you what's been marked as Stewart ten and I'll provide a copy to counsel. The formatting may be slightly different but this is a set of data collected from the pilot study correct?
A. That's correct.
Q. The file was produced to complaint counsel and labeled I'm going to read this slowly ma'am.
Capital P partial, manufacturers capital $M$, under score data, under score five dash two zero space two XLS. Who gave it that label?
A. That was probably the label given by begin to it by California survey research.
24 Q. Was there a file number one?
25 A. There could have been an an incomplete

1 version of this file. I asked for reports of the
2 results and so I think I may have gotten one that
may have had maybe the first four or five responses
and they just tacked on the others as we completed interviews.
Q. Do you have a copy of the earlier file?

7 A. I may. I don't I don't recall.
8 Q. If that was not produced to us I assume you'll be willing to produce that to us?
A. I don't have any problem with that.
Q. If we look at your report, page between, the sentence beginning with the very last two words on the page?
A. Mm-hmm.
Q. Really on page 28 but we'll start on page
27. Ten customer representatives participated in a telephone interview carried out by interviewers employed by California research services have I read that correctly?
A. You have.
Q. Why does what's been marked as Stewart ten contain data for only eight companies?
A. I don't know they she carry, there should be ten. Perhaps you got the wrong file but there were ten companies.
Q. If you have access to those two additional companies I assume you'll provide that to us?
A. Be happy to do that.
Q. Is there anything else that complaint
counsel could do to get that information?
A. I I'm certain that I can I can find the
other two responses it just looks like an incomplete
version of the data file so I'm certain there is a version of this that has the ten customers in it.
Q. Am I correct that looking at this data, one where it's you know take a look at the first page, one means that the respondent answered yes and two means that the respondent answered no.
A. Thatwould be correct.
Q. And if you look back at the screen shots to take a look at the questions, question five asks is biodegradability an important consideration in your selection of the plastic materials and supplies used in production and packaging in your organization. Have I read that correctly?
A. You have.
Q. The data in Exhibit 10 ask includes only one response to that question correct?
A. What we have here includes only one response to that question. Again it looks to me like this is
simply an incomplete file.
Q. And you believe there's a more complete file out there somewhere?
A. I do.
Q. And it would be possible to obtain that if it hasn't been produced to complaint counsel?
A. I'm certain of that.
Q. You understand these eight survey
respondents to be ECM customers that purchased the ECM additive correct?
A. That's correct. Or representatives of the organizations purchased.
Q. Let me just back up to something that's probably self evident but with respect to question
five A where there's only one response in the event because maybe I've missed it or because you haven't produced it to us yet you would agree with us that neither the court nor complaint counsel can make reasonable assessment of the results of question five A correct?
A. I absolutely agree.
Q. Again, I think you just answered but I'll ask again. You understand that these eight survey respondents in the manufacturers pilot study that we're aware of are customers who purchased the ECM
additive correct?
A. They are representatives of customer organizations yes.
Q. Why would a plastic productions manufacturer purchase the ECM additive if that manufacturer was not interested in making their products
biodegradeable?
A. I don't know.
Q. And you're not offering well let's actually go to question eight. Question eight is does the term biodegrade suggest or imply to you any amount of time by which decomposition will occur did I read that correctly?
A. Did you.
Q. Now if you'll return before we go further are you offering any opinions regarding the responses you received to question eight?
A. Only in the most general form. And that is that even among customer organizations, there is variability in what the responses are, not inconsistent with the variability we saw among the end user customers.
Q. Let's look at question six. That question asks how would you define biodegradability correct? A. That's correct.
Q. Let's take a look at the first answer.

Using ASTM 6400 and then there's a P, either that or ASTM D5511 P that's all. Did I read that correctly?
A. You did.
Q. Do you have an understanding as to what ASTM 6400 refers to?
A. Not in detail. It's apparently a standard but I don't I'm not familiar with the standard.
Q. And I understand it isn't your area of expertise --
A. Yeah.
Q. But I'm going to ask you to assume that it refers to ASTM P6400 which is a test that's sometimes used to assess biodegradability. And I'm going to further ask you to assume that it's a task that's run for less that a year do you understand those assumptions?
A. I do.
Q. What does ASTM D55 11 refer to?
A. Again it's a standard but again I it's
beyond my expertise.
Q. Again, I'll ask you to assume that ASTM D

5511 is a test that is sometimes used to assess
biodegradability and further assume that it's a test that's run for considerably less than a year. Do

you understand those assumptions?
A. I do.
Q. Given those assumptions it would be fair wouldn't it to consider this persons response to be one that understands biodegradation is something that happens in less than a year?
A. If the standards are what you represent yes I would agree.
Q. Let's look at the second response the
ability to make materials dissolve within a year. Is it fair to consider this person's response to be one that understands biodegradation is something that happens in less than a year?
A. I would agree with that.
Q. Let's look at the next to last response on
the page. Something that would break down according to ASTM 6400 standards. Did I read that correctly?

## A. You did.

Q. I'll again ask you to assume that ASTM D 64 hundred is a test that is sometimes use today assess biodegradability and further ask you to assume that it's a test that's run for less than a year. Given those assumptions it would be fair wouldn't it to consider this persons response to be one that understands biodegradation is something that happens

1 in less than a year?
2 A. Again if the standards as you represented it I think that's a reasonable interpretation.
Q. There's another person who responded I think it's toward the middle, fourth from the bottom, that the product will be completely decomposed within one to three years, have I read that correctly?
A. You have.
Q. So out of the eight, three could be characterized based on assumptions that I've given you as giving time frames of a year or less and the fourth gave one to three years correct?
A. That's fair yes.
Q. Why didn't you ask ECMs customers how they understood ECMs claim that it's additive renders plastic 100 percent biodegradeable?
A. Because I wasn't attempting to test ECMs claims. I was again as in the consumer survey attempting to test what the understanding of these respondents was of what biodegradability means.
Q. You may have just told me this but you are not offering any opinion then regarding how ECMs customers understood ECMs claim that it renders it's claim that it, lame $\mathbf{1 0 0}$ percent piedable?
A. That was not the purpose of the survey.
Q. Why didn't you ask ECMs customers how they understood ECMs claim that it's additive renders plastic biodegradeable within nine months to five years in most land fills?
A. Because again I wasn't interesting in testing claims in this survey I was interested in understanding gaining insight into their general understanding of biodegradability as it might relate to plastics.
Q. You're not offering any opinion regarding how ECM's customers understood ECM's claim that its additive renders plastics biodegradeable in nine months to five years in most landfills?
A. I am not.
Q. Why didn't you ask ECM's customers how they understood ECM's claim that its additive renders plastic biodegradeable in some period greater than a year?
A. Again this was not intended to test specific
claims of ECM. It was intended to gain insight into general understanding of biodegradability
specifically within the content of plastic and plastic products.
Q. You're not offering any opinion regarding how ECMs customers understood ECM's claim that its

1 additive renders plastics biodegradeable in some
2 period of time greater than a year are you?
3 A. I am not.
4 Q. The pilot study was never rerun as a full 5 scale study was it?
6 responses were before it was decided that the pilot
diversity in the responses and whether they communicated that to ECM, I don't know I just know that there was a decision made not not to proceed with the larger survey and part of that will decision was simply we had run out of time. BY MR. COHEN:
Q. You don't remember the entire, the details in full of that communication though do you?

MR. AWERBUCH: Objection you don't have to answer that communication to us.

THE WITNESS: I can't and I don't remember the details of the communication.
BY MR. COHEN:
Q. Why was the pilot study not rerun as a full scale study?
A. I don't know all of the reasons that may have gone into it. I do know that we were we were getting very close to the deadline for when the report was due and I and I indicated that I did not think we could get a full blown survey done in time to meet the deadline as I understood it. And and that was part of my communication to to the attorneys, that begin what we had learned about the amount of time it took to reach these respondents, I estimated that it would we were going to run out of

## study would not be rerun as a full scale study

 correct?A. I don't believe that's correct either. I don't believe I shared any of the specific results other than a verbal description which was largely that there's considerable degree of variability much as we found in the consumer survey, and it and that's I believe all that was communicated prior to the decision not to run a larger survey.

## Q. Was that the same verbal description that

 you proud to Emord and associations?MR. AWERBUCH: Objection that's
attorney-client privilege.
THE WITNESS: Well I mean first of all I don't think I would have provided it to ECM directly. It would have all been through Emord.
Q. But Emord and associates was provided with general description of the survey results just not the specific survey results correct?

THE WITNESS: Well.
MR. AWERBUCH: Objection.
THE WITNESS: They were provided with my verbal description of what I thought the results were revealing which was that there was a lot of
time before we could complete a full blown survey.
Q. Well how many respondents would you need to contact before you could complete a full blown survey?
A. Well I indicated that I would like to would like to have contacted as many as 25 percent of the people on the list. That would have been about 50 plus people.
Q. And you'll have to remind me when the dates, when was the pilot study concluded?
A. Late May, maybe even early June. I believe.
Q. Does the absence of a shared understanding among consumers about a particular fact mean that deception cannot occur?
A. I'm sorry.
Q. Ever ma'am if you can just read that back please read read?
A. Well if deception can occur in individual cases so the question of whether deception can occur is is yes at least in the individual case. I'm struggling a little bit with your question because it has basically a double negative employ the absence of a shared fact and I'm I don't know how to respond to that.
Q. It's only necessary that a legally relevant
minority of consumers share an understanding correct?

MR. AWERBUCH: Objection.
THE WITNESS: That's my understanding yes. BY MR. COHEN:
Q. So let's assume there are two hundred 50 million American consumers and if you have a better ballpark I'd be happy to adopt your assumption. Is that my assumption all right?
A. Sure.
Q. Assume that each of those consumers hold a different understanding for a product to biodegrade so there are two hundred 50 million different understandings. Do you understand that assumption?
A. I do understand that.
Q. Further assume that 20 percent or 50 million of those consumers understand that the time it takes for a product to biodegrade is some quantum of time one year or less. Do you understand that assumption?
A. I understand.
Q. Can those consumers in that 20 percent be deceived?
A. Well it can be but that fact alone doesn't mean they have been deceived.

1 earlier in the day. Let's assume that one of the marketers is capitalizing on consumers false beliefs with respect to biodegradation times and further more assume that that particular marketer is doing so intentionally. Would that be sufficient for a
finding of liability under the FTC act?
A. I you'll have to and we discussed this earlier today. You'll have to explain to me what you mean by capitalize.
Q. Imagine that the marketer is aware that consumers misunderstand what the word biodegradeable means and the marketer knowingly under takes a campaign that they understand will miss lead consumers. Is that sufficient for FTC act liability?
A. Again it could be but it depends on depends on a lot of other, a lot of other facts.
Q. So it might not be the case?
A. It might not be the case.
Q. Does the fact that some proportion of consumers are skeptical of a claim mean that deception can customer?
A. Deception could occur, not everybody may be skeptical, but to the extent that people discount ape claim and don't use it for decision making for
Q. What additional fact does are necessary to dish that they have been deceived?
A. That the belief was created by actions or Nactions of the manufacturer or the marketer and that the belief was material to some behavior for purchase decision.
Q. Imagine that there's stick with the same hypothetical imagine that there's a hundred marketers and they are all in some minor way contributing to the false belief that's at issue here. Is that sufficient for liability of any one of those marketers?
A. I would I would need to know's great deal more that be you've indicated I'd need to know what those marketers were doing what they're doing is if what they're doing is actually having an impact on consumers, what other sources of information may be available, you know a major source of information about biodegradability is actually the government, so I'd like to have some understanding of the degree of which their actions may be dominated by government communications or the or the or the media generally, so I you know I I can't answer that question in the abstract.
Q. Let's go back to something we discussed
those individuals it would not be material so
deception would not occur but it certainly could be the case that there certainly are consumers who are not skeptical.
Q. It's the case isn't it that sometimes when consumers are surveyed, consumers who answer I don't
know to a question might have a view but just not one that the survey respondent feels sufficiently certain to share?
A. I guess. I think we discussed that this
morning, that is certainly the case.
Q. Researchers might be able to learn that respondent's view by probing or encouraging a respondent to share his or her view correct?
A. That's precisely why we used a personal
interview on the telephone was that we could
encourage those respondents to offer their opinions.
Q. And there actually could be a lot of reasons
why a consumer doesn't feel sufficiently certain to
share his or her view on the first inquiry correct?
A. That's correct.
Q. We don't need to go through them all but one might be the prospect much embarrassment if they got it wrong?
A. That's a possibility.

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Q. All right just quickly 'cause you're an expert in this area are there other possibilities that come up frequently?
A. Maybe embarrassment. May just be you know an individual has a certain tolerance or lack of tolerance or certainty or uncertainty they just want to be sure before they offer an opinion. There could be there could be some social buttons, desire bilt component that you know they don't want to answer a question because they think it reflects negatively on them or positively on them so there's a number of reasons.
Q. One struck me as particularly interesting is that different people have different understanding or beliefs as to how certain they need to be before they feel comfortable answering a question.
A. Yes that's correct and I'm going to stop you because I need to take a break.
Q. That's okay. Recess.

MR. COHEN:
BY MR. COHEN:
Q. We were discussing the potential prospects for embarrassment in the context of survey research.
A. Or reasons why people may be reluctant to give responses and say I don't know.
Q. Very fair. Is the prospect, but the prospect for embarrassment would be one such reason?
A. In in some cases yes that's true.
Q. Is the prospect for embarrassment greater
than in an in person interview a mall enter
September interview or in a telephone interview with a live interviewer?
A. It would probably be greater with a live interviewer in a mall.
Q. Is the prospect greater for embarrassment in a telephone interview with a live interviewer or in an on line survey?
A. In most cases it would be greater but not large in the case of a telephone say.
Q. If a number of people have fuse as to the correct answer to a question but not complete confidence one would expect them to be more likely to answer I don't know in a telephone survey in with a live interviewer than an on line survey correct?
A. I need you to read that back read read.
A. No I wouldn't agree with that.
Q. Why not?
A. Just as embarrassment could work in the direction of people not wanting to respond because they may be wrong it could also work in the
direction of people being embarrassed because they can't give an answer. And you know the fact that there is a live person there is actually a motivator for people to respond. So I -- I wouldn't say that they're greater, that one is greater than the other in in that particular context.
Q. Assume that some portion of people who answer I don't know when asked about a biodegradation time regardless of the motive method of survey, actually have a view as to the correct answer, do you understand that assumption?
A. I think. I mean there's an an assumption here that there is a correct answer.
Q. No I'll withdraw the question and I'll
repeat it because I don't 19 suggest that there is a correct answer. I'm merely meaning to suggest that the person may think there's a correct answer?
A. Fair enough.
Q. So assume that some portion of people who answer I don't know when asked about biodegradation time actually have a view as to the correct answer, do you understand that assumption?
A. I do.
Q. Given that assumption do you have any reason to believe that those people as a group are
demographically different from people who gave responses other than I don't know?
A. It is it is conceivable that they may be different in terms of their perceived self efficacy, that is their sense of personal control and personal knowledge of the world and generally we find that people who are stronger in self efficacy tend to be people with more resources, more highly educated, higher incomes. So that in that way there may be a link between demographics and the tendency to say I don't know.
Q. I don't may be to be flip but how confident are you in that response?
A. I think I'm pretty confident in that response.
Q. Given the assumption that $I$ asked you to make, do you have any reason to believe that people who answer I don't know as a group would have a different distribution of views than people who express their views immediately?
A. No there's literature on the I don't know response and that literature generally finds that you don't really change the distribution of responses substantially based on kind of forcing people not to have, not to use I don't know. So
we'd have fewer people who make the response.
Q. Assume that some portion of people who answer equivocally when asked about biodegradation time actually have a view as to the correct answer. Do you understand that assumption?
A. Again they have a view that they know the correct answer.
Q. That's correct?
A. Okay. Yes.
Q. I'm not saying there is a correct answer?
A. Okay.
Q. I'm saying that they're answering
equivocally. They're saying it depends. I'm not entirely sure. Something along those lines. An equivocal answer. Assume that some portion of people who answer equivocally when asked about biodegradation time actually have a view as to the correct answer. Do you understand that assumption?
A. When you say answer equivocally what do you mean?
Q. Let me withdraw the question. And say let me I'll withdraw the question because I think you're raising a fair objection. Let me ask you something else. What's a protest response?
A. A protest response can take one of two
forms. One is a protest to being involved in a survey, that is so you know I don't like being interrupted in trying to get my contact, my content on Google survey so I respond by saying get out of here. That's a protest. Another protest response would be one that is offered as more as a substantive opinion, you know I you know I want to protest my view that all products should be biodegradeable or you know no products are biodegradeable where people actually have a point of view that they're trying to express.
Q. In fairness the first example you will gave was an example involving the Internet and I don't think that's an unfair example but isn't it also a protest response if someone gets a call from a telephone researcher and hangs up the phone?
A. Sure I would agree that they don't like being interrupted.
Q. Assume that some portion of people who give a protest response when asked about biodegradation time actually have a view as to a correct answer. They just don't want to give it because they don't like being interrupted do you understand that assumption?
A. I do.
Q. Given that assumption do you have any reason to believe that these people as a group are demographically different from people who gave responses?
A. They may be different demographically I
think it would depend on what the nature of the survey was. Some people are particularly more educated people more high people with higher incomes are less likely to want to respond to surveys because they consider it an imposition on their time but by the same token we find that the other end of the income distribution there's also a reluctant of people to participate so in some ways the the demographics kind of wash out. Center.
Q. So the answer to my question is no?
A. Well it's a more subtle answer than that there are demographic factors at work but because there are multiple factors at work there's a
canceling effect that tends to occur in the
aggregate.
Q. Understood so I think I understand there may be some demographic differences but there's enough it demographic diss and such demographic differences that they're off setting so there's no net effect?
A. That's correct.

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Q. Given the assumption that I've asked you to make do you have any reason to believe that such people providing protest responses as a group would have a different distribution of views than people who express their views immediately?
A. I I don't know one way or the other. Again I think it would depend on the issue.
Q. And you're not giving an issue about that in this matter are you?
A. I'm not.
Q. In what respect if any is the population in

Professor Frederick survey not properly chosen and defined?
A. First of all we don't nope what the population is so without a definition of the population it's very difficult to know whether it has been chosen properly.
Q. Is it not properly chosen and defined for any other reasons?
A. Well it's just not defined. It's not clear who is in the population so we start with an ill defined population and then we can move to the sampling frame and it's not clear the sampling frame is representative of that undefined population. So it's a you know it's just a problem that builds on
itself I mean if you can't define the population you
can't know whether the sample represents that population. If you don't know what the sampling frame is you can't determine whether the sample is representative of the population and you sure can't tell anything if the sampling, if the unknown sampling frame reflects an ill defined population.
Q. Assume that Professor Frederick's chosen defined population is American consumers. Was if anything would be problematic with that definition?
A. Well, there's nothing wrong with that definition. Of the population. Now the problem becomes one of the sampling frame.
Q. Okay we'll move to the sampling frame in a moment. We'll move to the salveling frame now. In what respect if any is the sample chosen in Professor Frederick study not representative of the population of American consumers?
A. It is it is selected based on peoples
presence at a particular web, at a small number of specific websites that that are not representative of even people who traffic the Internet. That's the primary reason.
Q. Are there other reasons?
A. They they are not representative because
they have been enter Septembered. Largely against
their will. Which is a typical of of the typical survey research situation. It is they are not representative in the sense that they are they may not be, as I indicated in my report they may not be who they represent themselves to be. We have no way of knowing who these people are. That's what makes them non representative.
Q. Are there any other objections related to the representative necessary of Professor Frederick sample or to Google consumer surveys that you have not mentioned in your report?
A. I don't believe so.
Q. You did mention that one issue with the representative necessary of the Google consumer surveys sample is that people are being in effect surveyed against their role did I under that correctly?
A. That's correct.
Q. How is that different from someone who gets a telephone call that maybe they don't want to receive?
A. It's it's different in the sense that in order for an individual to access content that they're interested in, they have to perform some
action. So this interferes with a motivated behavior in which they're engaged. The telephone call they may not want to participate they may just want to hang up but it doesn't interrupt their their their goal driven behavior. They're not trying to accomplish something else. Yeah it's interruption but sorry I don't have time you hang up. It doesn't interfere with a more goal driven behavior which is what happens with Google survey.
Q. Is there any literature that you're aware of that indicates that the interference with the sort of goal driven behavior that Google consumer surveys capitalizes on result in biased result?
A. As I think I indicated earlier Google says has been around for a very short period of time so there's very little literature that speaks to the validity or the biases that may be present beyond what we've talked about earlier.
Q. My question was specific to not Google consumer says is an example but is there literature more generally it could be from 50 years ago that talks about the fact that the nature of a survey is such that interferes with some form of minor goal driven behavior means that the results that that say produces are likely to be skewed or inaccurate in
some way?
A. I'm sure there is. I can't identify it as I sit here this afternoon.
Q. An assume that the sample Professor Frederick chose is I am perfectly representative but still more representative than the sample you chose in your consumer study. Given that assumption would you contend that Professor Frederick had failed to choose a sample will adequately representative of the population?
A. Well first of all I just reject the premise.

It is not a sample that is more representative than
the one I chose. So I mean you're basically asking me to assume something that's factually incorrect. But if I make the assumption, then then clearly the answer has to be yes. I mean you're asking me you know is black black. Well of course black is black. You know but if I'm looking at a white piece of paper and you say that's black assume that that's black is it black, you know, under that assumption I have to say yes but it's you know it it it's not an accurate representation of the facts.
Q. In what respect if any was the data gathered in Professor Frederick studies not accurately reported?

And that's that's an inaccurate presentation of the
Q. That strikes me as a dispute with his statistical methodology not an issue of accurate reporting of the data?
A. No that's a problem with accurate reporting of the data. Statistics are summary of the data and to the extent he misreports misuses statistics he is 8 not being accurate.
Q. What's the basis for your belief if you have one that Google consumer surveys does not accurately report the data it collects?
A. I didn't say it does not accurately report
the data it collects. What I said is he did not
accurately report the data because of the way he treats it.
Q. You don't contend then that Google consumer surveys does not accurately report the data it collects?
A. I have no way of knowing one way or the other and that that was not my opinion my opinion was the data are not accurately reported by Dr. Fred and I've given you the reason for that. He ignores a very substantial amount of data that includes highly plausible responses. He transforms the data in ways that are inappropriate.
Q. In what respect other than what you've already told me did Professor Frederick not analyze the data you collected in accordance with accepted statistical principals?
A. I've given you the precise.
Q. What statistical principle or principles did Professor Frederick violate?
A. One he does not base his statistic on all of the available data. Almost 40 percent of the responses are ignored in the computations that he's made. He's also transformed data in ways that are non representative of what the data actually indicate and if you look at what he has done in terms of coding he doesn't even follow his own rules consistently in many cases.
Q. Can you quantify in many cases?
A. I have not attempted to do a specific count.

We have, I have only had the data in an in a
reasonably manageable analyzable form since late on
Friday I believe so I haven't been able to quantify it.
Q. You would agree though that there is some number where in consistent analysis of the data between let's say coders is too insubstantial given the volume to affect the results?

MR. AWERBUCH: Objection.
THE WITNESS: I don't know what results we're talking about. I mean I the data are so poorly organized and so poorly that I I don't know how talk about an insubstantial problem it's like it's like saying I've got a barrel of rotten apples might there be one that's not rotten somewhere in the barrel. Possibly but there's so much that's rotten that you would have difficulty finding it and so they're -- you know there's this little trivial problem that's unsubstantial but all the rest are okay. That's not the case with this data. It's fundamentally flawed data and you can't pick one little problem and say well it didn't happen very much because it's not one little problem. It's multiple problems that make this data completely use less.
BY MR. COHEN:
Q. Let's mark let me just be clear. You've identified, I believe three statistical principals that Professor Frederick did not follow. Are there others?
A. That's those are the ones that occur to me
this afternoon. Let's mark Professor Frederick report as Stewart 11 until I lost track.

1 to be labeled biodegradable unless it biodegrades 2 within this time period and then people were asked 3 for a time period you know without without qualifiers I don't know how people can give you a reasonable response to that.
Q. And what was the sort, what would be the sort of qualifier that you're looking for there?
A. The qualifiers might include the type of material the context in which it biodegrades, very similar to the other questions and when there's simply no context put around this coupled with the fact that federal regulators should not permit I mean what does that what does that mean, which federal regulators, what does it mean should not permit? You know does it mean that if something is actually superior in terms of it's biodegradability that a marketer should be forbidden from from communicating that point of superiority? I mean there's there's there's no effort here to capture competitive advantage or differences among products. It's asked all not guilty abstract as though something is biodegradeable or it's not, when we know that there are degrees of biodegradability, that that are not reflected in the survey.

## Q. So if I understand you correctly there are

Q. Which questions if any do you contend are unclear enough to render them invalid and you'll note that in appendix A there's a list of all of the questions?
A. Well I'm not sure that I follow your questioning here in the context of was we were just talking about so you need to help me. Are we talking about analysis or are we talking about the questions.
Q. I won't help you. We're talking about the questions. The reason that I'm asking is that your report says Professor Frederick questions are unclear. But it doesn't identify any specific questions. So now I would like you to identify the specific questions that are unclear?
A. Okay. All the questions are unclear to the extent that they are interpreted as he does to be evidence of fact. These to ask people in contrast to what I did where I was asking people for opinions and and not a statement of fact, what he is doing is asking questions that he is then transcribing into a statement of fact. And I -- I genuinely believe that if people had been asked question one A , if a package is labeled biodegradeable, okay, how long will it take to decompose, and were then given a
whole variety of qualifiers or caveats you would get very different responses. So for example if you were to say if a package or let's let's be more specific. If a piece of paper or the package of a ream of paper is labeled biodegradeable how long will it take to decompose. If a bicycle is labeled biodegradeable how long will it take to decompose. If a package is labeled biodegradeable and it were put in your backyard how long would it talk to decompose. If it were biodegradeable and it were put into a landfill, how long would it take to decompose? The results of my survey show that quite a number of respondents have a clear understanding that there is no definitive answer to these types of questions absent a variety of qualifiers. And so to the extent that these things are asked without qualification, they're really they're really unclear.
Q. If I understand you correctly all of Professor Frederick questions are unclear for the reason you just articulated. Are there any, are they hall unclear or are any specific questions unclear for any other reasons?
A. Well again I think when you have a question like federal regulators should not permit a product
the problems you just articulated was with two Aand then there's the problem with all of the questions regarding the lack of qualifiers are there any questions that are unclear for various reasons?
A. Well again I think you're asking people for very specific information factual information, that that most people are just unlikely to know. So you show people a label and you say if you saw this on a water bottle how long would it take to decompose.
Q. Is that a reason for the question being unclear or just a different type of problem with the question?
A. Well it's it's unclear again it doesn't include appropriate caveats qualifiers, and couples with that there's no reason to believe that whatever the response that the respondent gives, it has any basis in fact or in information. So as I did in my survey you can ask their opinion but it really is not a statement of of fact.
Q. Are there other reasons or specific questions why you, are there other specific questions that you believe are unclear or other reasons why you believe that all of the questions are unclear?
A. Most of my my problems are related to what

1 what I've already articulated and that's simply that there's there's simply inadequate information to 3 provide a basis for an answer in most of these cases 4 even if the individual had an answer that was based
A. I believe that $15 \mathrm{~A}, 15 \mathrm{~B}$, are certainly
leading. 'Cause of what they suggest to the
respondent is they ought to simply do some multiply indication to arrive at an answer. And are there others I see you're at the end.
A. I am at the end.
Q. So there are no others?
A. Not that I can identify.
Q. Did the respondents in Professor Frederick strike that in what respect if any was Professor Frederick side not conducted by qualified persons following proper interview procedures?
A. It was not double blind. He was using apparently was using students to to do coding. You know these are not trained professional market researchers. And and very clearly as we've discussed, there were problems with with sampling, I mean there there were problems with way that data were coded. I mean these were all at variance with accepted research methods.
Q. Qualified persons following proper interview procedures isn't really a metric that applies to Internet surveys is it?
A. But it is. I mean you still have you have
an automated interview, but to the extent that
you're using Google survey and it's not really a survey, it's a pay wall, that's not accepted procedures and as I've indicated earlier, Google survey in my view, is not a market professional market research firm so they, you know they're not qualified by any stretch of the imagination. Maybe they will be in ten years but they're not qualified in any stretch of the imagination to be engaged in survey research. And in fact that's not actually their purpose in setting up Google survey any way it's simply an a way to monitor content on the web.
Q. Did the respondents in Professor Frederick survey no who response order his survey?
A. Not to my knowledge.
Q. Did Google consumer surveys no who response order Professor Frederick's surveys?
A. Not to my knowledge.
Q. Then the surveys double blind that regard isn't it?
A. No it's it's not double blind because you had people who were engaged in the coding which is part of the analysis and part of making ready the data who were very much aware of the purpose and sponsor of the research.
Q. But the respondents and the data collector

1
2
were not aware of the purpose of the research were they?
A. Well I would submit that the person doing the coding is actually a part of the data collector. There's a term that we use called making data and when you're coding is what you're really doing is making data and so that's a part of the of the that's a part of the data collection process and to the extent that your coders are not blind to the sponsor and the purpose of the research, you know it it's not it's not double blind.
Q. What evidence did you have do you have if any, that the coders who worked for Professor Frederick made errors?
A. I did spot some cases where rules did not appear to be followed appropriately. And and it also appears to me that decisions about how certain things were to coded are not coded were really problematic, as we talked about before when you're not coding almost 40 percent of all the responses, that's that's a problem and a trained coder would have identified that as a problem. And at minimum those data would have been coded but they were not.
Q. At the first part of the your answer you said you'd spotted errors, can you identify any in

## particular?

A. I'm upon going to be able to find them out of 29,000 records. As I sit here this afternoon.
But there were cases where non numeric data was in fact given a numeric code, there were cases where numeric data was coded in consistently, and so there there there are there are some errors in the data.
Q. Are you offering any opinions in this case regarding the data coded in Professor Frederick's studies relative to the data that was not coded other than the opinions your report contains?
A. I think my opinions in my report are are pretty consistent that the I would simply elaborate that any statistics that are computed based on the data that ignores the un coded responses is a misrepresentation of the data. I think I say that in my report I just want to be sure that I'm not record as making that clear.

## Q. You understand in his initial report

Professor Frederick did not code data in which the
survey respondent provided a numeric response but not a unit of time correct?
A. That's what I understand although I think there are some examples where that was done.
Q. You understand that that's the rule that at

1 that but I you know the coding is such a mess and so 2 poorly done, I had not tried to identify every 3 possible way it might, it might be wrong.
4 Q. And the specific question that I asked is 5 not something you addressed in your report is it?
A. I think that's correct yes.
Q. Let's focus on two categories of survey 8 response data that Professor Frederick collected in
9 response to questions asking for biodegrade time.
10 The first category is numbers plus a unit of time
11 like one year where one is the is the number and year is the unit or 30 days, do you follow me so far?
A. I do.
Q. The second category is only numbers like one, nothing else, or 30, and nothing else do you follow me?
A. I do.
Q. Assume that the numbers in the first category have approximately the same distribution as the numbers in the second category. Given that assumption, is it reasonable to assume that as a group survey respondents in the first category have similar views regarding biodegradation time as survey respondents in the second category?
least he was attempting to implement?
A. I do understand that yes.
Q. What understanding do you have if any, regarding the number of responses that Professor Frederick did not code because the survey responded provided a numeric response but not a unit of time?
A. As I sit here today, I don't know a number.
Q. You're not offering an opinion are you, regarding whether as groups people who respond to questions asking for estimated biodegradation times and respond with only a number hold different views regarding biodegradation times than those who respond with a number plus a unit of time correct?
A. I hadn't thought about it. It would a
number alone without a unit of time would be
difficult to interpret.
Q. So the answer to my question as to whether you're offering an opinion is yes or no?

## A. Well I think it's a part of the larger

opinion related to the problems with the coding of the data.
Q. Prior to my question you hadn't considered it?
A. I hadn't considered that that specific problem. I mean I certainly identified cases of

1 A. No.
2 Q. Why not?
3 A. Because we don't know what unit they're 4 referring to. Somebody says one without any time it
5 could be and we see this in the data, it could be
6 one second, one minute, one day, one week one year,
7 just the number one alone without a unit doesn't
8 doesn't give us any information. And absent that
9 information there's inform way you can draw any
0 conclusions about the you know the comp bilt of the distributions of those responses with a unit of time versus those without a unit of time.
Q. Assume hypothetically that in response to a particular question regarding biodegradation time, the number of one year responses and I'm this is an assumption is 10 percent. Further assume that the number of responses that is just one is also 10 percent. Is it your contention that no inferences can be drawn from that data?
A. No because the one, the one could refer to any unit of time and in fact it may refer to for different respondents it may refer to different units of time. So there's there's nothing you can really do with that data.
Q. You're aware that ECM is asserting a

1 sophisticated customer defense are you not?
A. I I don't know what they're asserting but I certainly had that conversation with them about sophisticated customers yes.
Q. Do you understand that ECM to be arguing in this case that it could not have deceived it's customers in part because they are sophisticated?
A. Again I have not been privy to all of the pleadings and legal arguments in the case but it's my understanding that that is a part of their contention yes.
Q. Do you also understand ECM to be arguing in this case that it could not have deceived and used consumers because they're unsophisticated?
A. I'm I'm less aware of that that particular
argument. I don't know what the I don't know what the nature of that argument would be other than if people are completely unaware of the meaning of something they can't use it. But I -- I don't have any real information to address that.
Q. Well let's assume that is in fact the argument. That because people are unsophisticated they're not aware of what biodegradation means and therefore they can't be deceived do you understand that ECM is asserting that position?
A. I I've certainly had that conversation with them again I don't know exactly what they're asserting, I mean as I said I'm not privy to all of the legal arguments in the case. I mean I I'm aware that there there is that point of view.
Q. So there is the point of view that ECM could not have deceived and used customers because they are unsophisticated?
A. Yes I don't know what the legal argument is but I do understand the consumer behavior argument yes.
Q. Let's back up for a moment. We were talking before about the circumstance where people gave units without a measure of time versus units and a measure of time. Do you recall that conversation just a few minutes ago?
A. I do.
Q. And you indicated that there was nothing useful that could be accomplished or inferred from the data where people gave only units?
A. That's correct well only numbers not units.
Q. Only numbers, that's what I mean. Let's say I want you to assume that people 10 percent of people gave as a response 30 days, so it's an it's a number and a measure of time. And approximately

10 percent of people just said 30 . Is it a reasonable inference that the people who just said 30 meant 30 days?
A. No it's not a reasonable inference. 30

5 could refer to 30 years. You know so there's you
6 know possibly some meant that but some didn't and 7 you don't know so you really can't use the data.
$8 \quad$ Q. If it were the case and we've pointed I've 9 pointed to one and 30 but there's obviously a number
10 of different numbers and combinations that $I$ could point to that the overall distribution of numbers and units provided is similar to the overall distribution of numbers provided. Is it at that point a reasonable inference that the views with respect top biodegradation time are same in both categories?
A. No.
Q. Why not?
A. Because you're mixing apples and oranges. So what that the distributions are the same or similar? That tells you nothing about the what the responses really mean. The distributions could be very similar. But it could be because whatever the number is is a mixture of of you know 30 days, 30 weeks, 30 years, and it comes out you know the same
as people who said who said 30 years let's say. You
know the distributions are constructed from
completely different responses of the again there's nothing that you can do with data that lacks a unit identifier.
Q. Let assume that you're absolutely correct that for one particular number you can't draw any inferences. I'm unclear as to why if the overall distribution of all numbers in both categories is approximately the same you can't draw an inference from that?
A. Well now you've lost me. I don't I don't I don't even know now what distribution we're talking about. I don't know what you mean by all numbers.
Q. Well there are a number of number that's are given that are associated with units, units of time correct?
A. That's correct.
Q. I'm making this up it to make it easier one two three four five six seven.
A. Mm-hmm.
Q. And then there are a number of numbers that are begin without numbers of time one two three four five six seven, in the second category. Okay. Even if it's the case that you can't draw an inference

1 because the ones in the first category happen to be 2 roughly the same percentage as the number of ones in the second category, why does that mean that you cannot draw an inference from the fact that the overall distribution of all of the numbers is approximately the same?
A. Because you don't have, you don't have adequate information to to determine what that actually means. I can do two random draws from a distribution that will very closely match one another just just based on chance alone. That doesn't mean I mean that doesn't mean anything other than you know there's some laws of probability at work. You have, you have no basis for placing any interpretation on those units, on those numbers that are not identified by units.
Q. If I understand you correctly and I'm sure you'll correct me if I've got this wrong, is that one possibility, you seem to be excluding the possibility that that the views with respect to biodegradation time in both categories are are the same. Are you excluding that possibility? It is possible isn't it?
A. Well negligent is possible. I'm not excluding that.
have, copies of the reports that I got on the progress of the survey.
Q. Before I continue and I apologize, Mr. Hour balk, you had mentioned that you were going to produce the copy of the customer list that was provided to Dr. Stewart correct?

MR. AWERBUCH: Actually I'm glad you brought it up counsel. We confirmed that we did provide all lists that we provided to Dr. Stewart in our three three one production.

MR. COHEN: Okay I'm not sure that that's the case.

MR. AWERBUCH: To the best of our knowledge of course but we did confirm, as Dr. Stewart
testified there were two ways, and we have
identified both lists that were sent to you. The original and the condensed one.
Q. And it's possible from the information you provided to determine which manufacturers were spoken to?

MR. AWERBUCH: I don't know that that's possible or not.

MR. COHEN: So if additional information is necessary you'll provide that to us.

MR. AWERBUCH: We can discuss that.
Q. You're saying it's not proven?
A. It's not proven.
Q. And the reason that it's not proven if I understood you correctly, is that it could occur by chance?
A. It it certainly could occur by chance yes.
Q. And is there another reason other than it occurs by chance, it occurs because the fact the views are the same. Is there a third thing out there a third consideration?
A. No. I mean the most, the most logical explanation would be that it's a chance occurrence and you know you really can't draw any inferences from it.
Q. Were there any emails writings or other
written communications of any sort between you and
the survey research firm CSRS, that conducted your studies?
A. Not very many. If if there were, there probably was one with some some cost estimates for
the the pilots and the surveys, and I -- I would
have communicated to them a draft of the
questionnaire and in the case of the manufacturers pilot I would have sent him a copy of the customer list and then of course you have reports that I

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THE WITNESS: Well I can tell you that they don't know. I don't know. And that's because I have an obligation to maintain the confidentiality of the respondents and so there's simply no way that I can share information on who was spoken to specifically. BY MR. COHEN:
Q. So if I understand correctly Emord and associates may have produced to us a less of companies identified by number but we complaint counsel have no ability to match those up with any names of any companies that's your understanding Dr. Stewart?
A. Well, no. I what I'm telling you is that the identities of the are individuals who participated in the pilot are simply not going to be available to you.
Q. And to whom are these available? To you?
A. I don't even know.
Q. They're available to someone under your control?
A. Potentially yes.
Q. Are they available to Emord and associate does no?
Q. So Emord and associates would not have

1 produced them to us?
2 A. No they would have produced the list what
I'm telling you is the identity of the specific
respondents in a manufacturers pilot they would not know. I don't know actually.
Q. You do understand that giving us a number
like a code case I.D. zero zero zero zero one doesn't actually enable us to learn anything about that survey respondent correct. You know exactly what the survey respondent said?
Q. But it doesn't enable us to tell who the survey respondent was?
A. That's exactly right.
Q. So to the extent this is what he board and sorts produce to us we don't know who the survey respondents are correct?
A. No and let's be clear what they puced to us are the lists that represented the sampling frame for the manufacturers pilot. I was very careful to assure that no individual was identified by name.
Q. So complaint counsel based on information that has been produced to us to date cannot identify the manufacturers or the persons that participated in the manufacturers say correct?
A. That is correct.
Q. Who directly paid California survey research services or CSRV, to conduct the field work associated with the surveys?
A. I I don't know whether it was the client or
the attorney. I believe the the invoice, my
instructions were to send the instruction to e board but I don't know who cut the check.
Q. For who are is the contract with the work with CSarrive Swith one party who is the counter party?
A. Women the billing would have been sent to he board.
Q. The billing was sent to he board but who was the counter party to the contract?
A. Well there was no written contract with the survey research company.
Q. Is it typical for there not to be a written contract with the survey research common?
A. It's very common particularly when I'm working with attorneys.
Q. And why when you're working with attorneys is it very common for there not to be a written contract?
A. Because attorneys manage their time so poorly that there's not time to get contracts done.

I -- I often have to do surveys on very very short notice. There's simply not time to go through the nice tis of developing a contract. So there's a great deal that gets done basically on the telephonic handshake.
Q. What's your understanding as to why CSRS is willing to undertake a then thousand dollar un taking without a written contract?
9 A. Because I have a relationship with them.
10 Q. If we assume that ECM biofilms paid CSRS, 1 then CSRS knew for whom it was conducting the surveys correct?
A. Well the president or the accounting people would ultimately have known. That's true. The people who performed the work would not have known.
Q. And you would have given me the same answer if Emord and associates paid CSRS. The president and accounting people might know for whom the work was being done but not the the researchers and supervisors correct?
A. That's correct.
Q. What if a researcher or supervisor simply typed in the marketing claim from question five $B$ in Exhibit 2 into a search engine he?
A. I don't know what would transpire.
Q. If ECM biofilms would have popped up that would have given the survey researcher an indication as to who was sponsoring the survey correct?
A. Sure and if they had run into somebody in an airport and overheard a conversation that might
have happened too. It's unlikely but anything is possible.
Q. Has CSRS always been known by that name?
A. At one time they were simple landfill

California survey research ink and I think they have
changed their name, I don't know exactly when but to
California survey research services Inc.
Q. Does CSRS have any corporate affiliates?
A. Not to my knowledge.
Q. What is the total number of surveys you've
conducted through CSRS and any predecessors to SCRS?
A. I don't know over 20 years several dozen.
Q. What's the total amount paid to CSRS and any predecessors for those surveys?
A. I haven't got a clue.
Q. Is it more than five hundred thousand dollars?
A. Probably is.
Q. Is it more than a million?
A. I -- I really don't know.
Q. Is that in the range?
A. I doubt that it's quite that high, but it it
could be over a half a million yes. And I'm going
to need to take another break.
MR. COHEN: That's fine and I'm sympathetic
Q. Do you have any surveys under way with CSRS now?
A. I have nothing nothing that's active at the
moment. I have some discussions of potential surveys but no, no active projects.
Q. Is there any survey research withdrawn is
there any research including survey research that
you conducted for ECM or in any way related to this
litigation that has not been disclosed to the FTC?
A. No.
Q. You're being paid $\$ 750$ an hour for your work
in this case correct?
A. I am.
Q. What's the total amount that you've received so far?
A. I've received one payment of about 64
hundred dollars so far.
Q. Is there a contract between I'm sorry from whom did you receive that payment?
A. I believe from ECM.
Q. Is there a contract between you and Emord and associates regarding this case?
A. I have a letter of the engagement from he board.
Q. And did ECM also sign that letter of the engagement?
A. I don't believe so.
Q. Have you received any payment for your work in this case from any source other than ECM?
A. No, I have not.
Q. Other than your travel to and physical
presence at today's deposition, have you completed any work in on this matter for which you have not yet been paid?
A. Oh, yes.
Q. And what is the total amount owed?
A. Not counting today?
Q. Not counting today.
A. Not counting today probably going to be on

24 the order of 30 thousand dollars or so.
25
Q. And it's going to be if we assume ten hours

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or so for today is that a reasonable ballpark estimate?
A. Close enough. Yeah.
Q. Yeah. So then that would add another 7500 ?
A. Yeah. Mm-hmm.
Q. So the outstanding balance as we sit here
today again this I understand is an approximation is about $\$ 37,500$ ?
A. That's probably close yeah.

10 Q. What did you do to prepare for today's 1 deposition?
A. I reread my report, I spent some time with

Dr. Fredericks report, I had a brief conversation on
Friday with counsel. And that's pretty much it.
Q. Without explaining the substance of the conversation, who was on the call?
A. Eric was on the call and another attorney who was was it John -- I can't I can't remeber.
Q. Could it have been Jonathan Emord?
A. Could be yeah.
Q. How many times have you testified as an expert at trial?
A. I haven't made a specific count recently but over 25 years probably two dozen times or so.
Q. How many times have you testified as an

## expert in a deposition?

A. That's probably probably 70 or 80 times.
Q. In how many different cases have you testified as an expert so in I'm looking for total number of cases even if there were multiple depositions and trial testimony.
A. I don't know. Probably probably less than a hundred but more than 90. I don't I don't I haven't done a recent count.
Q. Between 90 and a hundred is a fair statement?
A. Over the last 25 years probably yes.
Q. If you go back even further would the number increase?
A. No my first first work I did for as an
expert witness was actually for the FTC in 1988.
Q. I'm familiar with the craft litigation. How many expert reports have you prepared?
A. For litigation or or.
Q. For litigation in any way connected to litigation?
A. I don't know, it would probably be close to the same number of times I've testified. Because
I've prepared report where I didn't testify and I
have testified where I didn't actually do a form at

1 report but probably 90 to a hundred.
2 Q. What's the total amount approximately that 3 you've been paid as an expert over the course of 4 your life?
5 A. I wouldn't even know where to begin and I 6 assume you're using expert there to refer to.
7 Q. Litigation expert?
8 A. Litigation expert. I -- I would not, I wouldn't even know.
Q. Would it be more than a million dollars?
A. It could be.
Q. What's the total amount approximately that you've been paid as an expert over the past ten years?
A. Again I I have not computation of that. It's probably several hundred thousand dollars.
Q. What about over the past five years?
A. Again probably probably be it would be probably several hundred thousand dollars.
Q. So over the past five years is several hundred thousand dollars and over the past ten years it would necessarily be a greater number?
A. It would be a greater number although I did less expert witness work for a while and I now started doing more so there wouldn't be that much in
the five to ten year period.
Q. So going back ten years would four to five hundred thousand dollars be a reasonable approximation?
A. Probably a reasonable approximation.
Q. Over the past five years what percentage of your professional time has been spent on litigation related activities?
A. Probably 20, maybe 20 percent.
Q. Over the past five years what percentage of your income has come from litigation related activities?
A. Again probably be in the vicinity of 25 percent.
Q. Let's mark an article called limits of attraction as Stewart 12. Provide a copy to everyone. Fish out my own copy.

Dr. Stewart have you seen this article before?
A. I have.
Q. Have you reviewed this article?
A. I did read it briefly yes.
Q. Did you read it briefly as part of your activity related to this case or did you read it briefly as part of your academic activities?
A. I believe I read it as a part of this case.
Q. And why was it significant to you?
A. It was sent to me by counsel apparently it was produced by Dr. Shane -- Dr. Frederick, and beyond that I'm not I'm not otherwise sure why it was shared with me.
Q. Let me direct to you what $I$ believe is page 5 and in the left column very far down last sentence, in middle it states we were curious whether the marginally significant repulsion affect we obtained would replicate so we reran the study using Google surveys which enable us to obtain very large samples quickly did I read that correctly?
A. You did.
Q. And then if you flip to the next page under three $B$ on the column on the left side I guess it's the second paragraph under the three $B$ results and discussion, it states the adjusted data replicate one aspect of the prior study. We found significant attraction effects when quality was represented numerically -- and then there's some numbers but no effect when the quality was represented visually. We did not find further evidence of a repulsion effect. Did I read that correctly?
A. Yes you did.
Q. Do you understand the authors of this study to be saying that a portion of their prior work not done on Google surveys was replicated on Google surveys?
A. I do understand that.
Q. Do you have any other opinions about this article?
A. I think they had the good judgment to sight my prior work in it.
Q. Other than that?
A. No that's all.
Q. Let's go to and I may have lost track here
so I apologize. But was I believe if you call back
Exhibit 2 which should be the data excuse me the screen shots from your original survey. And then Exhibit 7 I think which is summary of our responses so I've got exhibit 7. Let me see if I can find those screen shots and let me know when you've caught up. I apologize for all the shoveling of the paper?
A. I think I have them both here yes.
Q. Okay. Let's I direct you to question five A in Exhibit 2 and I'm not going to read the whole thing but one of the claims that's in the that's articulated or the claim the primary claim that's
articulated to survey respondents is it's in bold I
won't scream it but transform any plastic into biodegradeable plastic exclamation point dot dot dot the revolutionary added technology when combined as a one percent load to the most widely used plastic resins renders the finished products, plastic products biodegradeable while maintaining their other desired characteristics. The potential uses of this technology are only limited by the imagination. Did you read that correctly?
A. You did.
Q. And did you draft that paraphrase of ECMs claims?
A. Yes, I did.
Q. What's one percent load rate mean?
A. I don't really know it's simply a claim that I took from claims that it has been represented to me that ECM has used.
Q. How did you expect consumers to understand what one percent load meant?
A. I didn't actually. I was interested in how consumers would respond to what is clearly very technical information.
Q. The same could be said about widely used plastic resins do you understand consumers have
general understanding as to what plastic res ins are?
A. Yes again I selected three statements and I did so because I thought they represented quite different types of claims. This one was selected because it's a very in my view a very technical claim the others are not so technical, they are fairly straight forward, one one offers a number of different benefits but I selected them principal apply because I thought they were they were quite, quite different of but also represent, quite different but also representative claims that ECM hazardous waste used or at least it's been represented to me that they used.
Q. Do you know one way or the other whether any end use consumer has ever seen marketing material on ECM plastic that referred to a one percent load?
A. I have no idea one way or the other.
Q. Let's assume that the answer is no and there
are no such consumers, what would be the purpose of asking question five A ?
A. Because I wanted to understand the effect
that this particular claim would have on the end end user customers. In my conversations with the attorneys that there was discussion that some of
these claims may have been picked up and transmitted to end user customers and if that were the case I wanted to see how end user customers would respond.
Q. If I understood you correct. So attorneys told you that end use customers might have seen claims involving one percent loads?
A. Well they didn't tell me that specifically, they simply indicated that some of the claims may have been picked up and passed on through some of their customers to end user customers. So what I was trying to do was to simply pick some some different but representative claims to see how end user customers would respond if in fact they were exposed to these claims.
Q. You would agree with me would you not, that it's -- the results of question five $A$ are not particularly illuminating if in fact no end use consumers saw any claim like this?
A. It would not be illuminating if no end use consumers saw a claim like this and would not see a claim like this in the future.
Q. Let's take a look at question five C.

Plastic products made with ECM additives. And then it goes on.
A. Mm-hmm.
Q. Why did you choose this one to -- as one of the three that you presented to the survey respondents in your survey?
A. Because I felt like it was making multiple promises to the recipient and the original claim actually had these bulleted and I wanted to I wanted one that was kind of representative of multiple promise points to see how people would respond.
Q. Is it your opinion that consumers generally understand what the word aerobically means?
A. Actually we we had some respondents who did know what the word meant. Do all consumers? No not at all.
Q. Could you characterize the percentage of respondents who knew what the word aerobically meant?
A. I haven't attempted to do a count of people who gave a response that suggested that they know the meaning of this. I just recall that there were such responses.
Q. Aerobic is a technical term strength it?
A. Yes it is.
Q. Would it be fair to characterize the number
of respondents who appear to upside the word aerobically as relatively small out of the overall

1 population of four hundred?
A. I think that's a fair characterization.
Q. Would you say the same thing with respect to the word anaerobically?
A. I would I would agree with that as well.
Q. Help me understand what the purpose of asking end use consumers who are unlikely to know what the words anaerobeicly or aerobically mean why is that helpful,?
A. Becausewhat we wanted to understand what I
wanted to understand was you know what people do
when they see this claim. They may not know what
these things mean people do all sorts of things with
terms they don't understand and I wanted to have an
understanding if people were exposed to these claims
what would they do with them, would it have any
material effect on on their understanding on their
their degree of skepticism, on their sense of understanding.
Q. Would you agree that if no significant
number of end use consumers ever saw a claim that
used the words anaerobically aerobically that the
results with respect to question five $C$, would not be particularly illuminating?
A. No I would not agree with that. I mean
quite illuminating in terms of what people might
interpret this this message to mean. You know they may not understand these specific words but there's still a claim here that is multi-dimensional and it would make sense to to test this. I mean people might very well for example, focus in on nine months to five years when they don't understand the anaerobic or aerobic terms. They might focus in on landfills. So I think it's a perfectly reasonable approach to trying to understand how end user
consumers who if exposed to this claim might give it meaning.
Q. Why not exchange the phrase anaerobe he cannily or aerobically in landfills to simply say in most landfills?
A. I could have done that but that was not the language that I saw in the claims.
Q. Do you know whether the language that I'm suggesting is much closer to what end use consumers actually see?
A. No, I don't. I don't know.
Q. Assuming that it is much closer to the
language that end use consumers actually see, there would be a benefit to asking the question that way wouldn't there?
A. Well depends on what you want to know. If we, if we wanted to know consumers response to a claim that's worded in that way obviously if we had interested if how people respond to this claim which is what I was interested in then we need to use this language.
Q. And explain again why were you interested if why consumers how consumers understood either anaerobically or aerobically in land fills?
A. Well we we actually had some consumers as I've mentioned who seem to understand what these terms were. So to the extent that there are some consumers, may not be many, at least who had an understanding, that's helpful in understanding the totality of the meaning that these terms provide in the end user population.
Q. The first phrase fully biodegradeed nine months to five years that's an express claim correct?

MR. AWERBUCH: Objection.
THE WITNESS: Yes it is.

## BY MR. COHEN:

Q. Let's take a look at 5 B , plastic products manufactured with our additives will biodegrade in any biologically active environment including most
landfills in some period greater than a year. And then $I$ direct you to five $B$ in the data set obviously toward the back. I do understand correctly that when presented with five B24 percent of the respondents gave answers that were coded as quote gone slash decomposed slash biodegrade in one year?
A. That's correct.
Q. Is there any repair the court can rely on that result?
A. I think it's a very reliable result based on the well constructed survey.
Q. The gone slash decomposed slash biodegrade in one year category is the first one listed on the page that's not a trick question I just want to make sure the next couple questions are clear. That's the first one on the page?
A. Yes it is.
Q. Okay. Well there's a total sample at the top?
Q. Yeah not counting the total sample it's the first subcategory underneath total sample. Physical a respondent answered question five $B$ by stating that the product would biodegrade in six months, that response would have been coded in the first

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## the 24 percent there?

A. I I believe that's correct employ based on my recollection of the code.
Q. If a respondent answered five $B$, by stating that the product would biodegrade in ten years, that response would have been coded in the second subcategory which reads some products will take longer slash longer to biodegrade slash longer than a year correct?
A. No. What this would suggest to me is that
no one gave that that response that what people gave
are responses that are summarized here, some
productions will take longer longer to buy, longer
than a year, again I did not do transformations of data like Dr. Frederick did and what these represent are classifications that summarize the verbal responses that individuals had made. If somebody had said ten years, we well a number of people had said ten years it would probably have been a category if and of itself. If only one person says that it probably would have ended up in the other comments.
Q. Where I'm having a little bit of difficulty you mentioned and $I$ have no reason to disagree with you if someone said almost a year a year a little
more than a year they would fall within that first 24 percent. How much further way from a year did they need to be to fall into the second subcategory which includes a longer than a year?
A. No you're misunderstanding the nature of this coding process. The coding process used the verbal responses that people gave us. In stark contrast to what Dr. Frederick did, we did not attempt to interpret and transform responses into into numeric values that the individual did not give so if somebody said some products will take longer they would fall in the category we're talking about. If they said longer than a year, they would fall into that category. You know I don't have a recollection of what all 55 of the responses were but I -- I doubt that there are very many very specific numeric responses that are in here. Could be wrong.
Q. I'm not suggesting that you're wrong. The so longer than a year means in effect people who stated longer than a year without providing further detail?
A. That's correct.
Q. So if the coders felt comfortable that the respondent was close enough to a year so they said's
little more than a year, that would be someone who would fall within the $\mathbf{2 4}$ percent whereas if they simply stated longer than a year they would fall within the 14 percent?
A. Yes I believe that is correct.
Q. Let's go back to your report. Page 9 the first paragraph next to the last sentence. Denial of factual information to consumers that is contrary toer ownius briefs does not serve consumer welfare. Did I read that correctly?
A. Yes you did.
Q. In what respect if any would adoption of
complaint counsel's position in this case mean
denying factual information to consumers that is contrary to erroneous beliefs?

## MR. AWERBUCH: Objection.

THE WITNESS: To the extent that there is a benefit to a consumer associated with a product that differentiates that product from others in the marketplace that product will only exist in the marketplace if the marketer or manufacturer can in fact communicate to consumers about that product. You if people, if companies cannot communicate advantage says or benefits of a product to the marketplace, they have no incentive to innovate, no
no incentive to bring that beneficial product to the marketplace.
Q. I understand you're not an expert, you're not a polymer scientist you're not a microbiologist you're not a chemist and you have made -- you've been candid in not attempting to you know put forth those opinions. You would agree though if it's the case or I'll say assume it's the case that ECM additive does nothing at all. You're understanding that's the FTCs position. It may not be right automatic saying but that's the FTCs position. In that case would denial of information regarding the ECM additives alleged efficacy serve consumer welfare?
A. If in fact the claim of the benefit is not is not factual, and really does do nothing, then clearly there's no service of consumer welfare associated with communicated that information to consumers.
Q. So put differently, the policy prescription is that if the product is efficacious, then consumer welfare is served by allowing consumer to learn about the product; however if the product the products the claims made regarding the product are false then consumer welfare is not served?

MR. AWERBUCH: Objection.
THE WITNESS: I would I would generally
agree with that with that statement yes if something
is false consumer welfare is not served by by
communicating that false information to the
consumer. It's only in in the case where there is
an identifiable benefit an identifiable point of
sport that can be communicated that consumer welfare
would be served.
BY MR. COHEN:
Q. So a tremendous amount much your views with respect to what is and is not good policy depends on the court and the commission and ultimately other reviewing authorities views as to whether or not the products claims are are substantiated correct?
A. Well I would hope that they would not be based on the courts and the commissions views. I would hope that they would be based on good science.
Which would be endorsed by the courts and the commission.
Q. That's a fair way to put it?
A. Yeah.
Q. So your view with respect to policy really turns on the science?
A. Yes.
Q. Do you plan to do any additional work on this case before you testify it willy I withdraw do you intend to testify in this case?
A. I do intend to testify on that case and and I -- I know of no additional work that I -- I will do between now and the time I testify.
Q. Do you intend to testify about anything other than what your report contains?
A. As I sit here now no, I do not.
Q. Do you intend to offer any opinions other than those your report contains?
A. There certainly will be no new opinions
there may be elaboration on some of the opinions
based on things that I've learned for example reading Dr. Fredericks deposition testimony but I
think I've largely captured my general opinions about that in the report on so to the extent that there are some degree of new opinions that are offered they would be based on Dr. Fredericks deposition testimony.
A. Well that would, that and I mean I don't know what else I may be I may be asked to testify about I mean to the extent that you know there there is additional information from Dr. Fredericks for example, I might need to address that.

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Q. Are your opinions in your report based on anything other than your professional expertise and the materials produced to complaint counsel?
A. No. I believe that they're largely based on my professional expertise and the imper cal survey research that I've done.
Q. Are there any fact says not disclosed to complaint counsel at this time that are necessary to understand the opinions that your report contains?
A. I don't believe so.
Q. Let's go off the record. It's five 13.
(Recess)
MR. COHEN: Let's go back on the record and
I think we're on 13. I'm going to mark this will
document as Stewart 13 and provide copies to everyone.

Just briefly Dr. Stewart what is this document.
A. This would be a report on the progress of the of manufacturers pilot that we did.
BY MR. COHEN:
Q. And this report is dated May 20th correct?
A. That's correct.
Q. And that's a month before your expert report is due in this case?
A. That's correct.
Q. And what are the terms on the left side resolved sample and available salve mean?
A. We resolved sample simply means that the sample, that portion of the sample has been used either either an interview has been completed the individual was for some reason not qualified, the individual refused to participate but that would be that would be no further call made to individuals in resolved sample employ. Available sample would be the numbers of people who were still available and kind of active for calling purposes.
Q. Why is the number two hundred or approximately two hundred not anywhere on here?
A. Two hundred was my my recollection of the number of companies. I -- I can't tell you I mean this is this is the number of companies that apparently were on the list.
Q. The number of companies apparently on the list according to this appears to be 85 ?
A. No no no it would have been the combination of the 73 which is resolved.
Q. I understand so it would be a hundred 58?
A. That's correct.
Q. Okay. And so not counting whatever small
number had been already contacted there would be in the ballpark of a hundred 50 left to go?
A. Something like that yes.
Q. And explain again why it was not possible to complete a survey of a hundred 50 companies begin the 30 days remaining before your expert report was due?
A. Because as I considered the difficulty of getting these people on the telephone, it it just became clear to me that collecting a larger sample in the time available was I mean we could have certainly completed more interviews but we could not have completed the full set of interviews that I would like in the in the time that was available.
Q. Why was it necessary to get all the way to a hundred 58 if order to have completed the manufacturers pilot study?
A. Well I'm sorry. I mean this was the pilot study. The the full study as I indicated earlier, I would have preferred having at least a 25 percent response rate. It didn't have to be everybody. But I -- I wanted a larger portion of the available sample in the main survey and these are people who don't make a living sitting in their offices so they're very difficult to track down. You know all

## of the we spent 20 hours resolving the 73 here. And

I just made the the judgment that you know I didn't
think we were going to be able to complete
sufficient numbers in the time available. He communicated that to the attorneys and we just concluded that we wouldn't do any further research.
Q. What is the sufficient number?
A. Well I would like to have had about 25
percent but maybe 50 .
Q. 25 percent of the two hundred?
A. Yes.
Q. In order for it to be a successful pilot.

No not a pilot. In order for it to have been a successful main survey. The?
Q. Awe. The pilot was a small?
Q. I withdraw the question I understand. 25 percent of the two hundred would be what was necessary for you to complete basically transform the pilot into a full scale survey?
A. That was my my sense yes.
Q. And you did not believe that it would have been possible to obtain 50 response does in the remaining 30 days?
A. I based on what we learned in the pilot I
did not think it was going to be possible to
complete that complete the analysis, and and
incorporate the full results into my report. That's correct.
4 Q. How long was the pilot study going on? When did the pilot study commence?
A. I don't have a recollection of exactly when we started. I think it was in late April early may.
Q. So at this point it had been going on
somewhere between three weeks to maybe longer than that?
A. That's my recollection.
Q. And did you evaluate what options might be available to accelerate the response rate?
A. Well, I did, I had a conversation with folks
at California survey research about what we might do
to accelerate but again one reason you do pilots is
you learn something about the people that you're
trying to survey, and these just turned out to be
people who were who are difficult to catch in the office.
Q. You never talked with Mr. Sin clear about
how you might be a better able to catch those people in the office did you?
A. I did not.

MR. COHEN: I pass the witness.

MR. AWERBUCH: Yeah we have no further
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MR. COHEN: We'll go off the record.
(The deposition was concluded at 5:26 p.m.)

STATE OF CALIFORNIA )
) ss .
4 COUNTY OF LOS ANGELES )
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I, DAVID STEWART, Ph.D., having appeared for my deposition on July 1, 2014, do this date declare
under penalty of perjury that I have read the
foregoing deposition, I have made any corrections,
additions or deletions that I was desirous of making
in order to render the within transcript true and
correct.
IN WITNESS WHEREOF, I have hereunto
subscribed my name this day of
2014.

W I T N E S S

## --000--

Please be advised I have read the foregoing deposition, and I state there are:
(Check one)
5
6
7
NO CORRECTIONS
CORRECTIONS ATTACHED

DAVID STEWART, Ph.D.
Date Signed
--000--

6 That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, 9 prior to testifying, were placed under oath; that a
10 verbatim record of the proceedings was made by me
11 using machine shorthand, which was thereafter
12 transcribed under my direction; further, that the
13 foregoing is an accurate transcription thereof.
15 financially interested in the action, nor a relative
16 or employee of any attorney of any of the parties.

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| 284:4 | 270:13 291:20 | 50 100:1 101:7,25 | 8 |
| 15 103:19 104:1,7 | 292:8,10,16 | 102:5 103:25 | 8 4:10 |
| 104:16 105:23 | 262014 79:14 | 104:6 106:11,11 | 8:54 1:20 2:16 5:2 |
| 106:2,6,15,18 | 27 130:17 133:22 | 106:15,25 107:10 | 80 24:24 79:23 |
| 107:2 110:5,10,18 | 186:23 209:16 | 108:5 109:7 110:7 | 268:2 |
| 111:1,2,2,5,7,16 | 28 151:20 152:20 | 111:7,18 112:13 | 824-4343 3:8 |
| 111:22 112:9 | 209:15 | 156:4,13 200:15 | 85 290:20 |
| 113:20 114:11,25 | 29 104:13 106:12 | 200:18 220:7 | 85286 3:12 |
| 115:8 152:7 | 29,000 249:3 | 221:6,13,16 | 9 |
| 153:24 178:7 | 291 83:17 84:4 | 235:21 291:2,5 | $\frac{9}{94: 11 ~ 7: 13 ~ 203: 16 ~}$ |
| 16 91:11 | 3 | 53 33:14,25 | 284:6 |
| 17 91:3 | 3 4:8 14:3 15:2 33:8 | 55 101:25 283:15 | 90 80:4 268:8,10 |
| 18 41:7 84:24,25 | 41:4 | 5511 213:23 | 269:1 |
| 89:25 90:4,9,15,17 | 30 41:8,8 42:23 | $56101: 17$ | 90024 3:8 |
| 90:18,25 99:25 | 96:23 146:24 | 58 290:23 291:16 |  |
| 101:7 105:3,7,23 | 251:12,16 254:24 | 6 |  |
| 106:5,19 107:9 | 255:1,3,3,4,5,9,24 | 6 |  |
| 110:12 111:2 | 255:24,25 256:1 | 6 4:9 74:7,7 83:7 |  |
| 112:9,11 | 266:24 291:6 | 99:17 |  |
| 19suggest 227:15 | 292:23 | 60 180:19 |  |
| 1988 268:16 | 310 3:8 | 600 3:3 |  |
| 1990 134:5 | 3210 3:11 | 602 3:12 |  |
|  | 326-2551 3:4 | 64 214:19 265:25 |  |
| 2 | 331A 193:5 | 6400 213:2,6 214:17 |  |
| 2 4:713:24 14:1 | 34 100:1 101:7 | 65 100:1,20 101:7 |  |
| 47:10,11 68:10 | 35 100:1 101:7 | 102:5 103:25 |  |
| 89:6 97:23 98:7 | 388-8899 3:12 | 104:6 106:11,11 |  |
| 263:24 272:14,23 | 39 87:17,21 88:13 | 106:15,25 107:10 |  |
| 20 75:19 83:12 |  | 66 99:21 100:1 |  |
| 179:4,11,11,22 | 4 | 101:7,21 102:16 |  |
| 197:10 208:8,10 | 4 3:11 4:8 21:18 | 103:18,22 104:13 |  |
| 221:16,22 264:17 | 48:22 | 104:16 105:7 |  |
| 270:9,9 292:1 | 4,020 84:8 | 106:4 |  |
| 20th 289:22 | 40 40:25 42:23 |  |  |
| 200 192:5,17 | 180:17,18 237:2 | 7 |  |
| 2000 157:9 208:6 | 237:23 239:9 | 7 4:10 15:8 112:25 |  |
| 2012 163:15 | 248:20 | 113:1 272:16,17 |  |
| 20141:12 2:17 5:1 | 41 104:9 | 7th 7:14 |  |
| 79:15 132:1 296:7 | 44 113:15 116:10 | 70 83:8 268:2 |  |
| 296:15 | 49 100:1 101:7 | 700 1:14 2:15 3:7 |  |
| 202 3:4 |  | 73 290:22 292:1 |  |
| 20580 3:4 | $\frac{5}{54 \cdot 96: 1950 \cdot 1}$ | $75 \text { 79:20,23 181:18 }$ |  |
| 24 107:1 282:1 | 54:9 6:19 50:1 | 181:20,21 |  |

For The Record, Inc.

## Complaint Counsel Exhibit A Attachment 2

CX-A:2


Hello. My name is $\qquad$ from California Survey Research Services. We are conducting a survey of the use of plastic materials for product manufacturing and packaging. We are not selling anything and all of your responses will be confidential. We are offering a $\$ 25$ incentive to qualified respondents who will answer a few questions.

## CLICK NEXT TO CONTINUE

| - | CSRS WebCATI Study - Google Chrome | - $\square$ | $\times$ |
| :---: | :---: | :---: | :---: |
| [ 192.168.2.15/cgi-bin/cfmcogi/websrv83.cgi |  |  |  |

```
CSRS WebCATI Study
```


## (Q1)

Are you involved in the decisions of your organization regarding the materials used in manufacturing products or product packaging?

- YES
- NO


[192.168.2.15/cgi-bin/cfmccgi/websrv83.cgi

```
CSRS WebCATI Study
```


## (Q3)

How is plastic used in your organization's products or packaging?
INTERVIEWER NOTE: WRITE DOWN VERBATIM ON PAPER AND TYPE IN AT THE END OF THE SURVEY.

## CLICK TO CONTINUE AND CLICK NEXT

- TO CONTINUE

```
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CSRS WebCATI Study
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CSRS WebCATI Study
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(Q4)
In your organization's decision to use plastic as a manufacturing material what factors are important in the selection of suppliers? (Probe until no further response)

INTERVIEWER NOTE: WRITE DOWN VERBATIM ON PAPER AND TYPE IN AT THE END OF THE SURVEY.

## CLICK TO CONTINUE AND CLICK NEXT

- TO CONTINUE

Next Previous

```
CSRS WebCATI Study - Google Chrome
192.168.2.15/cgi-bin/cfmccgi/websrv83.cgi
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CSRS WebCATI Study
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## (Q5)

Is biodegradability an important consideration in your selection of the plastic materials and supplies used in production and packaging in your organization?

- YES
- NO


| $\square 192.168 .2 .15 /$ cgi-bin/cfmccgi/websrv83.cgi | CSRS WebCATI Study - Google Chrome |
| :--- | :--- |

```
CSRS WebCATI Study
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## (Q6)

How would you define biodegradability?
INTERVIEWER NOTE: WRITE DOWN VERBATIM ON PAPER AND TYPE IN AT THE END OF THE SURVEY.

## CLICK TO CONTINUE AND CLICK NEXT

- TO CONTINUE


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```
CSRS WebCATI Study
```


## (Q7A)

What process or type of process does the term biodegradable suggest or imply to you?
INTERVIEWER NOTE: WRITE DOWN VERBATIM ON PAPER AND TYPE IN AT THE END OF THE SURVEY.

## CLICK TO CONTINUE AND CLICK NEXT

- TO CONTINUE


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CSRS WebCATI Study
```


## (Q8A)

What does the term biodegradable suggest or imply to you about the specific amount of time by which decomposition will occur.

INTERVIEWER NOTE: WRITE DOWN VERBATIM ON PAPER AND TYPE IN AT THE END OF THE SURVEY.

CLICK TO CONTINUE AND CLICK NEXT

- TO CONTINUE
Is the amount of time by which decomposition will occur important in your organization's selection of material and supplies used in production and packaging?
- Yes
- No
Nexi Previous


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```

```
CSRS WebCATI Study
```


## (Q8C)

Thinking specifically about plastic, is the amount of time it takes for a material to biodegrade an important consideration in your organization's selection of the plastic materials and supplies used in production and packaging?

- Yes
- No

[192.168.2.15/cgi-bin/cfmcogi/websrv83.cgi

```
CSRS WebCATI Study
```


## (Q9A)

How do you think these guides will affect your business, if at all?
INTERVIEWER NOTE: WRITE DOWN VERBATIM ON PAPER AND TYPE IN AT THE END OF THE SURVEY.

## CLICK TO CONTINUE AND CLICK NEXT

- TO CONTINUE


## Complaint Counsel Exhibit A Attachment 3

CX-A:3


PUBLIC DOCUMENT



## Complaint Counsel Exhibit A Attachment 4

CX-A:4

## Manufacturers/Distributors

The following companies may be able to assist with your desire to purchase biodegradable plastic products, components or packaging made with ECM BioFilms additives:

| Organization Name <br> Address | Contact Name | Phones | EmailWebsite | Company/Products Info. |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |




## Complaint Counsel Exhibit A Attachment 5

CX-A:5

## UNITED STATES OF AMERICA BEFORE THE FEDERAL TRADE COMMISSION

|  | ) |
| :--- | :--- |
| In the Matter of | ) |
|  |  |
| ECM BioFilms, Inc., | ) |
| a corporation, also d/b/a | ) |
| Enviroplastics International |  |

## COMPLAINT COUNSEL'S FIRST SET OF <br> REQUESTS FOR PRODUCTION OF DOUMENTS

Pursuant to Rule 3.37 of the Federal Trade Commission’s Rules of Practice for Adjudicative Proceedings, Complaint Counsel hereby request that ECM Biofilms, Inc. ("ECM") respond to these Requests within the time prescribed by the Federal Trade Commission’s Rules of Practice, and produce the following documents and/or tangible things for inspection and copying at the Federal Trade Commission, 600 Pennsylvania Avenue, NW, M-8102B, Washington, DC 20580, or at such time and place as may be agreed upon by all counsel.

## INSTRUCTIONS

1. These instructions and definitions should be construed to require responses based upon the information available to ECM as well as your attorneys, representatives, investigators, and others acting on your behalf.
2. If you are unable to produce a document or property requested, state in writing why you cannot produce the document or the property and, if your inability to produce the document or the property is because it is not in your possession or the possession of a person from whom you could obtain it, state the name, address, and telephone number of any person you believe may have the original or a copy of any such document or property.
3. If you object to a portion or an aspect of any Request, state the grounds of your objection with specificity and respond to the remainder of the Request.
4. If, in answering these Requests, you encounter any ambiguities when construing a request, instruction, or definition, your response shall set for the matter deemed ambiguous and the construction used in responding.
5. Where a claim of privilege is asserted in responding or objecting to any discovery requested in these Requests and information is not provide on the basis of such assertion, you shall, in your response or objection, identify the nature of the privilege (including work product) which is being claimed. When any privilege is claimed, you shall indicate, as to the information requested, whether (a) any documents exist, or (b) any communications took place, and (c) also provide the following information for each such document in a "privileged documents log" or similar format:
a. the type of document;
b. the general subject matter of the document;
c. the date of the document;
d. the author(s) of the document;
e. the addressee(s) and any other recipient(s) of the document; and
f. the custodian of the document, where applicable.
6. If the requested documents are maintained in a file, the file folder is included in the request for production of those documents.
7. These Requests for Production seek documents not already produced by you pursuant to the FTC's letter requests. To the extent responsive documents have already been produced by you, you should so indicate and include the Bates Number identifying the
documents responsive to that Request. If the document previously produced by you was wholly or partially redacted, please provide an unredacted copy, or the basis for claiming privilege or other protection as described in Instruction No. 5. If the document includes charts or graphs, provide color copies of such documents.
8. Every Request for Production herein shall be deemed a continuing Request for Production, and Respondent is to supplement its answers promptly if and when you obtain responsive documents which add to or are in any way inconsistent with Respondent's initial production.

## DEFINITIONS

Notwithstanding any definition below, each word, term, or phrase used in these Requests is intended to have the broadest meaning permitted under the Federal Trade Commission’s Rules of Practice.

1. "All" means and includes "any and all."
2. "Advertisement" means any written or verbal statement, illustration, or depiction that is designed to effect a sale or create interest in the purchasing of goods or services, whether it appears on the Internet, in email, on packaging, in a brochure, newspaper, magazine, pamphlet, leaflet, webinar, circular, mailer, book insert, free standing insert, letter, catalog, poster, chart, billboard, point of purchase material (including, but not limited to, a display or an item worn by salespeople), fact sheet, film, slide, radio, broadcast or cable television, audio program transmitted over a telephone system, program-length commercial, or in any other medium.
3. "And" and "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the request any information that might otherwise be construed to be outside its scope.
4. "Any" means and includes "any and all."
5. "Document" or "documents" are synonymous in meaning and equal in scope to the usage of the terms as defined by 16 C.F.R. 3.34(b), and includes, without limitation, any written material, whether typed, handwritten, printed or otherwise, and whether in draft or final form, of any kind or nature, or any photograph, photostat, microfilm or other reproduction thereof, including, without limitation, each note, memorandum, letter, release, article, report, prospectus, memorandum of any telephone or in-person conversation, any financial statement, analysis, drawing, graph, chart, account, book, notebook, draft, summary, diary, transcript, computer database, computer printout, or other computer-generated matter, contract or order, laboratory report, patent, trademark or copyright, and other data compilations from which information can be obtained. Electronic mail is included within the definition. A draft or nonidentical copy is a separate document.
6. "ECM" shall mean ECM Biofilms, Inc., including without limitation, its agents, employees, officers, or anyone else acting on its behalf.
7. "ECM Additive" means the plastic additive manufactured by ECM, including but not limited to "Masterbatch Pellets."
8. "ECM Plastics" means plastics that contain ECM Additives.
9. "Regarding" means and includes affecting, concerning, constituting, dealing with, describing, embodying, evidencing, identifying, involving, providing a basis for, reflecting, relating to, respecting, stating, or in any manner whatsoever pertaining to that subject.

## REQUESTS

## Request 1

Provide all documents regarding the efficacy of the ECM Additive in initiating, causing, enabling, promoting, or enhancing the biodegradation of plastics containing the ECM Additive.

## Request 2

Provide all documents regarding whether or how to market ECM Additives as capable of initiating, promoting, causing, enhancing, or enabling the biodegradation of plastic.

## Request 3

Provide all documents regarding the duration of time for complete biodegradation of a plastic product containing the ECM Additive.

## Request 4

Provide all documents regarding whether and how plastics containing ECM Additives will biodegrade in different disposal conditions.

## Request 5

Provide all documents regarding ASTM D5511 or ASTM D5526.

## Request 6

Provide all documents regarding any express or implied claims that ECM Additives initiate, cause, enable, promote, or enhance the biodegradation of plastics containing the ECM Additive, and specifically including the following representations:
a. ECM Plastics will completely break down and decompose into elements found in nature within a reasonably short period of time after customary disposal;
b. ECM Plastics will completely break down and decompose into elements found in nature within a reasonably short period of time in a landfill;
c. ECM Plastics will completely break down and decompose into elements found in nature within a nine months to five years in a landfill;
d. ECM Plastics will completely break down and decompose into elements found in nature within one year in a landfill; and
e. ECM Plastics have been shown to perform as stated in (a) through (d) under various scientific tests including, but not limited to, ASTM D5511.

## Request 7

Provide all documents that tend to call into question or disprove any express or implied claims that ECM Additives initiate, cause, enable, promote, or enhance the biodegradation of plastics containing the ECM Additive.

## Request 8

Provide all documents regarding any tests conducted on ECM Additives or plastics containing ECM Additives purporting to show biodegradability of ECM Additives or plastics containing ECM Additives.

## Request 9

Provide copies of each different ECM advertisement (including those disseminated to or by ECM distributors) that represents, expressly or by implication, that ECM Additives initiate, cause, enable, promote, or enhance biodegradation of plastic.

## Request 10

Provide copies of any materials relating to any ECM Additive made available to any ECM Additive distributor or customer, including, but not limited to: packaging, clipart, seals, logos, other marketing materials, instructions or suggestions regarding making marketing claims, or instructions for the use or marketing of the ECM Additive.

## Request 11

Provide all documents, whether prepared by or for ECM or any other entity, including any advertising agency, regarding consumer perception, comprehension, or recall (including, but
not limited to, copy tests, marketing or consumer surveys and reports, penetration tests, recall tests, audience reaction tests, and communication tests) of:
a. any advertisement, whether disseminated or not, that represents, expressly or by implication, that ECM Additives initiate, promote, or enhance biodegradation of plastic; and/or
b. biodegradability in general.

## Request 12

Provide all documents that support or call into question your contention that your customers or distributors are sophisticated purchasers.

## Request 13

Provide all communications with customers, distributors, potential customers, or potential distributors regarding ECM Additives.

## Request 14

Provide all documents regarding your strategy for selling the ECM Additive to customers or distributors, including any documents used for verbal sales communications or in preparation for verbal sales communications.

Dated: November 27, 2013
Respectfully submitted,
/s/ Katherine Johnson
Katherine Johnson (202) 326-2185
Elisa K. Jillson (202) 326-3001
Division of Enforcement
Bureau of Consumer Protection
Federal Trade Commission
600 Pennsylvania Avenue, NW
Mailstop M-8102B
Washington, DC 20580

## CERTIFICATE OF SERVICE

I hereby certify that on November 27, 2013, I caused a true and correct copy of the paper original of the foregoing Complaint Counsel's First Set of Requests for Production of Documents to be served as follows:

One electronic copy to Counsel for the Respondent:

Jonathan W. Emord
Emord \& Associates, P.C.
11808 Wolf Run Lane
Clifton, VA 20124
Email: jemord@emord.com

Peter Arhangelsky
Emord \& Associates, P.C.
3210 S. Gilbert Road, Suite 4
Chandler, AZ 85286
Email: parhangelsky@emord.com

## Lou Caputo

Emord \& Associates, P.C.
3210 S. Gilbert Road, Suite 4
Chandler, AZ 85286
Email: lcaputo@emord.com
I further certify that I possess a paper copy of the signed original of the foregoing document that is available for review by the parties and the adjudicator.
/s/ Katherine Johnson
Katherine Johnson
Division of Enforcement
Bureau of Consumer Protection
Federal Trade Commission
600 Pennsylvania Ave., NW, M-8102B
Washington, DC 20580
Telephone: (202) 326-2185
Facsimile: (202) 326-2558
Email: kjohnson3@ftc.gov


[^0]:    ${ }^{1}$ CXA: 1 at 186:20-22.
    ${ }^{2}$ Id. at 201:3-6 ("Q: . . . . ECM not only provided the [] companies your researchers would speak with but the specific people, correct? A: That's correct."); id. at 188:24-189:1 (testifying that "it's my understanding that Mr. Sinclair or something in his organization" developed the list).

[^1]:    ${ }^{11}$ CXA: 1 at 187:3-188:13.
    ${ }^{12}$ See CXA:4 (excerpted and redacted to preserve confidentiality). ECM implied that it produced this document to Complaint Counsel as part of ECM's initial disclosures. This is false, as the document ECM produced last night is dated "Sunday, May 4, 2014." See id. Additionally, several large current customers are missing from the May 4 list ECM provided to Dr. Stewart, and the May 4 list contains at least one company that is not a current ECM customer. Thus: (1) on or about May 4, Dr. Stewart received a partial list of ECM customers he should interview (the list appears both over and under-inclusive); (2) before his deposition, Dr. Stewart produced a report of "pilot study" results that identified survey respondents only by number; and (3) after his deposition, Dr. Stewart produced the May 4 list, which identifies potential survey respondents only by name.

[^2]:    ${ }^{13}$ CXA: 1 at 261:21-25.
    ${ }^{14}$ As the Court undoubtedly will recall, this is reminiscent of ECM's tactic with respect to its initial disclosures. See Order (Feb. 4, 2014) at 2 ("The Revenues List, however, does not identify revenue by customer name, and the Customer List does not contain customer numbers. Thus, there is no way to tie the revenues figures disclosed to particular identified customers.").
    ${ }^{15} \mathrm{CCA}: 5$ at 6-7.

[^3]:    ${ }^{16}$ (Emphasis added).
    ${ }^{17}$ ECM Mtn. to Serve Subpoenas (June 4, 2014) at 2 ("Here, the party receiving the subpoena [an expert for Complaint Counsel] is, in fact, an agent of the Federal Trade Commission[.]") (Emphasis added).
    ${ }^{18}$ ECM offered not to oppose a subpoena to CSRS, knowing that CSRS will almost certainly move to quash. CSRS likely would lose, but this approach would consume considerable time, and trial is less than a month away.
    ${ }^{19}$ Dr. Stewart was evasive regarding who physically possesses the information at issue, although it seems likely that at least CSRS does. See CXA:1 at 260:14-17 ("[W]hat I'm telling you is that the identities of [the] individuals who participated in the pilot [study] are simply not going to be available to you."); id. at 260:18-22 ("Q: And to whom are they available? To you? A: I don't even know. Q: They're available to someone under your control? A: Potentially, yes.") (emphasis added).

[^4]:    ${ }^{20}$ To the extent ECM offers not to rely on Dr. Stewart's interviews with its customers, this resolution unfairly penalizes Complaint Counsel. As discussed, the pilot study-which ECM and/or Dr. Stewart abruptly terminated-produced data that strongly favors our position, and we are entitled to rely on it.
    ${ }^{21}$ Indeed, Complaint Counsel has no way to know whether some of the companies Dr. Stewart called were companies that Complaint Counsel also deposed.
    ${ }^{22}$ Even if the law should be expanded to create a privilege protecting the names of individual consumers responding to surveys, Dr. Stewart supervised telephone interviews with businesses (ECM customers) ECM selected. At very most, ECM could request that the names of these customer/interview participants be treated as nonpublic information.

[^5]:    A. Because we have data on various age groups

[^6]:    A. I don't know whether they knew or not. We

