# Exhibit 3

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK
No. 12-cv-08557 (CM)
----------X
IN RE: HI-CRUSH PARTNERS L.P.
SECURITIES LITIGATION
----------X

April 24, 2014
10:09 a.m.

Deposition of DR. ADAM WERNER, held at the offices of Vinson & Elkins, 666 Fifth Avenue, New York, New York, pursuant to Notice and Agreement, before Wendy D. Boskind, a Registered Professional Reporter and Notary Public of the State of New York.



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DR. ADAM WERNER,
business address at 2550 Ninth Street, Suite 210 A, Berkeley, California 94710, having been first duly sworn by a notary public of the State of New York, (Wendy D. Boskind, RPR), was examined and testified as follows:

EXAMINATION
BY MR. PARADISE:
Q. Good morning, Dr. Werner.
A. Good morning.
Q. We just introduced ourselves, but I'll do it on the record. I'm Steven Paradise, along with my colleague, Elizabeth Brandon, we represent the Defendants in this securities litigation lawsuit.
It appears that you've testified by deposition previously; am I right?
A. That is correct.
Q. I won't spend a lot of time



Dr. Adam Werner
going over any ground rules, just a couple.
A. Okay.
Q. One, I tend to sometimes speak quickly. So if I speak too quickly, or you don't understand anything I say, or you don't understand my question, please let me know and I'll do my best to rephrase it so that you understand it.
A. Okay.
Q. Second one is, you have to answer questions with yes, no, or, beyond that, you can't just nod your head.
A. (Nodding.)
Q. The court reporter can't take down nods of the head.
A. Right.
Q. Please try to remember that.
Third one is, please try to wait until I finish my questions and -- before you answer. I will try to wait to ask another question before you finish your answer. If I don't do that, and I

Dr. Adam Werner

accidentally cut you off, please let me know. I want to get a complete answer from you and not cut you off.

A. Okay.

Q. Last is, if you need a break, just let me know. The only thing I ask is that, if there's a question pending, you complete your answer to the question before we take a break.

A. Sure.

Q. Thank you.

MR. PARADISE: Let's mark, as Exhibit 1, a copy of your declaration.

(Whereupon Deposition Exhibit 1, Declaration of Dr. Adam Werner April 15, 2014, was marked for identification, as of this date.)

Q. The court reporter has handed you what's been marked as Exhibit 1. I ask you to please take a look at Exhibit 1 and, when you're ready, to identify it for the record, if you can.

A. (Pause.)



Dr. Adam Werner

Yeah, I believe it's the report I submitted in this case.

Q. I want to start by just going through -- briefly going through your employment history and background, which I believe is set forth in your Curriculum Vitae, Exhibit 1.

So if you can turn to -- unfortunately, we don't have exhibit tabs in there, but can you find Exhibit 1?

A. Yeah.

Q. Okay. Am I right that Gnarus Advisors is your current -- is where you are currently employed?

A. I believe that's correct.

Q. I'm sorry, you say you "believe that's" --

A. Well, I mean, I'm not a -- I don't get a W-2, so....

Q. You're working in some capacity for Gnarus Advisors.

A. Correct.

Q. Am I also correct that Gnarus Advisors acquired your -- a firm that you



Dr. Adam Werner

previously owned, called Berkeley Economic Consulting?

A. Uh -- that's accurate.

Q. Is there some reason why you're hesitating?

A. Again, I wasn't paid any money --

Q. Okay.

A. -- in the acquisition. I just was subsumed by them.

Q. Why did -- withdrawn. What were the circumstances behind Gnarus acquiring Berkeley?

A. I just wanted to go with a larger firm -- (gesturing) -- and -- you know.

Q. How large -- I'm sorry.

A. They take care of things like accounting and bookkeeping.

I don't have to do that anymore.

Q. And, when you were with Berkeley, were you the sole owuer of Berkeley?



Dr. Adam Werner

A. Yes.

Q. How many employees did Berkeley have?

A. Define "employees"?

Q. Well, how many people worked for Berkeley?

A. Worked in some capacity?

Q. Yes.

A. Between four and five.

Q. And how many people work at Gnarus?

A. I think probably 40, 45?

Q. Other than reporting to an employer with a different -- or, a company with a different name, have your responsibilities changed at all from Berkeley to what you're doing now, at Gnarus?

MR. STRAUSS: Objection.

Go ahead.

A. I don't believe so.

Q. Going back to your time before Berkeley -- well, first, when did you form Berkeley?

Dr. Adam Werner

A. You know, I don't know the exact year Berkeley Economics was formed. It was formed by two other gentlemen who subsequently went to the Brattle Group, so I took over the firm.

Q. So when did you join Berkeley?

A. My memory's not that good -- hold on -- I want to say 2008.

Q. There's a list on page 4 of your CV that's next to the heading: Previous employment.

Do you see that?

A. Right.

Q. Is that -- are those listed chronologically in reverse order from the dates that you worked with these various companies?

A. That is correct.

Q. Okay. So let's start with the beginning. After you left the Kellogg Graduate School of Management, you joined Cornerstone Research; is that correct?



Dr. Adam Werner

A. That is correct.

Q. In what capacity did you join Cornerstone?

A. I don't remember my title, it was probably associate.

Q. What were your job functions at that time?

A. Prepare expert reports -- I mean, basically litigation consulting stuff.

Basically, I did mostly securities work, and there were a bunch of Windstar cases, which are these lawsuits against the federal government by savings and loans -- or were -- I think, actually, they're still going on, so I worked on those, as well.

Q. Were you -- is it fair to describe your role at Cornerstone as more of a support role, as opposed to the person who's actually providing the testimony?

A. I don't believe I ever testified at Cornerstone.



Dr. Adam Werner

Q. When did you -- and I understand your memory on dates, it sounds like, is not terrific, so approximations are fine, but approximately when did you leave Cornerstone?

A. I believe 2000.

Q. And did you then join NERA, at that time?

A. That is correct.

Q. Did you have a different -- withdrawn.

Were your responsibilities, at NERA, different than what your responsibilities had been at Cornerstone?

A. I don't believe so.

I did some additional work in intellectual property, which I didn't do at Cornerstone, I was strictly in the finance practice at Cornerstone.

Q. Why did you leave Cornerstone?

A. Money.

Q. So you had a better financial



Dr. Adam Werner

deal at NERA than you had gotten at Cornerstone?

A. Yeah.

I had actually originally gone to Cornerstone, and taken less money, and NERA kept offering me more money. So, eventually, I took them up on their offer.

Q. How long did you remain at NERA?

A. I believe three years.

Q. So that brings us to 2007, or --

A. 2003?

Q. Oh, wait, I'm sorry, I'm sorry.

You left Cornerstone in 2000 and joined NERA, okay.

How long did you work for NERA?

A. I believe I said three years.

Q. So -- okay, sorry, getting lost here on chronologic -- got it. So you left NERA in 2003 to join CRA

Dr. Adam Werner

International?
A. No.
Q. What did you do --
A. I --
Q. I'm sorry, go ahead.
A. I took a year off to bartend and sell wine.
Q. And then you joined CRA?
A. That is correct.
Q. Why did you leave NERA to bartend and sell wine?
Although, I think I can imagine the answer to that.
A. Is NERA on -- is NERA supporting you in this case?
Q. No.
A. I did not like people at NERA.
Q. Fair enough.
Were you asked to leave NERA?
A. No.
Q. Were you working at NERA and at Cornerstone on the West Coast?
A. Yes.



Dr. Adam Werner

Q. So, in the San Francisco area?
A. Right.
Actually, I did some work for NERA in New York, as well, I maybe spent six months here.
Q. So you took a year off to bartend and to sell wine, and then you decided to go back into the business of economics consulting, and you joined CRA International in -- I guess my -- hopefully, my math's better now -- is that around 2005?
A. 2004.
Q. Okay, so I guess my math's not better yet.
And what were your job responsibilities, at CRA International?
A. Same as my job responsibilities at NERA and Cornerstone -- prepare expert reports, support other experts, testify -- things of that nature.
Q. How long did you work for CRA



Dr. Adam Werner

International?
A. Between four and five years.
Q. So that brings us to around 2008, 2009; correct?
A. Correct.
Q. Okay. And what did you do then.
A. So, when I was at CRA, they moved me down to Los Angeles, because that's where their finance practice was based out of, and on the West Coast. I then moved back to the Bay area.
So that's when I went to LitiNomics. And that was a group of former CRA people who had started another firm.
Q. So the reason was -- the reason why you decided to leave CRA is because you wanted to return to the Bay area?
A. Correct.
Q. How long did you work with LitiNomics?
A. I believe about a year.



Dr. Adam Werner

Q. Did you want to change that?
A. No.
I was going to say that I wasu't an employee of LitiNomics.
Q. You were working as a --
A. As a --
Q. -- 1099?
A. Exactly.
Q. As a consultant?
Why did you stop working as a consultant for LitiNomics, after about a year?
A. Travel.
Q. Well, can you --
A. They were --
Q. -- elaborate?
A. They were located in Menlo Park -- or, actually, it was Mountaiu View. And, so, the commute was an hour each way every day, so....
Q. It wasn't working out for you?
A. I didn't enjoy it.
Q. Okay.

Dr. Adam Werner
A. Driving, two hours a day.
Q. So, after you left LitiNomics, you joined Berkeley Economic Consultiug, you had inentioned earlier that, at the time, it had been started by two other gentlemen?
A. Correct.
Q. So you went there as a -- what type of capacity did you go there?
A. Same, 1099.
Q. So this is -- I'm being awful today with my years, but this is around 2009, 2010?
A. Correct.
Q. When you -- when Berkeley was subsumed by Gnarus, did the other employees of Berkeley go along with you, to join Gnarus?
A. Defiue "employees".
Q. Well, the other people that worked with you at Berkeley.
A. I believe that is correct.
Q. So Berkeley ceases to exist today?



Dr. Adam Werner
A. I believe that is correct.
Q. Okay. And you left each of these positious that we've been discussing of your own volition; is that correct?
A. That is correct.
Q. Okay. I'm going to ask you a general question, if it's too general let me know and I'll be more specific, but during the time you worked at these other firms, before you -- sorry -- before you joined Berkeley, were you working primarily on behalf of plaintiffs, primarily on behalf of defendants, or both?
MR. STRAUSS: Objection.
Go ahead.
A. Of both.
Q. Did that continue to be the case when you joined Berkeley, that you worked for both plaintiffs and defendants in securities litigation matters?
A. In securities litigation matters, I believe that's correct.



Dr. Adam Werner
Q. And how about today, how about since you've joined Gnarus, have you continued to rep-- to work on behalf of both plaintiffs and defendants iu securities litigation matters?
A. I'm not sure I've done any defendant work at Gnarus.
Q. Is there any reason for that? I mean on your side of the equation --
A. No.
Q. -- or is it that this is where the work has beeu coming from, the plaintiffs' side?
A. That is correct.
Q. So it's not that you have an aversion to representing defendants.
A. No, not at all. In fact, you're welcome to hire me on your cases.
Q. I'll keep that in mind, thank you.
Turning back, for a moment, to Exhibit 1 to your -- Exhibit 1 to



Dr. Adam Werner
Exhibit 1, your declaration. You have an exteusive list of the matters that you've been retaiued iu, beginning on page 1, continuing through I guess page 6 -- approximately, page 6.
Have your -- has your testimony, or any declaration that you've submitted in any of these cases, ever been excluded by a court?
A. No.
Q. You list on page 1, under the heading: Expert reports and testimony, a series of cases, and on page 3 you have a heading called: Experience.
Can you explain the difference between the matters that are listed under: Expert reports and testimony and the matters that are listed under: Experience?
A. Well, I mean, the things that I've done expert testimony and reports in, and I think that's self-explanatory.
And, in the other cases, I didn't submit reports on my behalf.

Dr. Adam Werner

Q. These are cases where you either supported someone, another expert who was submitting a report or testimony, or you never were asked to submit a report or testimony; is that fair to say?

A. I think that's correct.

Q. Is there any additional -- are there any additional matters on which you've been engaged as an expert that are not listed in your CV, that you can think of as you sit here today?

A. I'm sure there are but, as I sit here today, I can't think of any.

Q. Today, you know, this time, where you're working at Gnarus, approximately how much of your work is involved in the securities litigation matters?

A. Define "securities litigation matters"?

Q. Any lawsuits that are -- arise under the federal securities laws.

A. Probably, 90 percent.

Q. And I know you testified



Dr. Adam Werner

earlier that, at Gnarus, you have been working, to the best of your knowledge, you said, exclusively for plaintiffs.

Before joining Gnarus --

A. I --

Q. -- in securities litigation -- in securities litigation matters, I thought that's what you testified to.

A. I believe in securities litigation matters, that is correct.

Q. Right. And, just for the -- make it simpler, when I'm asking you these questions, when I don't specify, I'm asking for your work in securities litigation matters.

A. Okay.

Q. Prior to joining Gnarus, can you give me an estimation as to the percentage of work you had done for plaintiffs, as opposed to defendants? Just --

A. In my entire history?

Q. Yes.



Dr. Adam Werner

A. I mean, I'd be speculating.

Q. You can speculate.

I mean, I understand you're estimating, and I'm not -- you know, I'm not holding you to an exact number.

A. Okay.

Q. I just want to get a sense.

A. Okay, I would guess 50/50.

Q. And I'm not sure if I asked you before, but did you work for both plaintiffs and defendants at Berkeley?

A. I believe that is correct.

But, again, you're specifying in securities litigation?

Q. I am, thank you.

A. I believe that is correct.

Q. What opinion were you asked to provide in this case, this litigation, Hi-Crush litigation?

A. I think, if you turn to my report -- (pause) -- I don't know if that's paragraph 2: My opinions address the following matter: whether the market for Hi-Crush's common units was efficient



Dr. Adam Werner

during the class period.

MR. PARADISE: And, just for the record, the witness is referring to I guess paragraph 2 of Exhibit 1, his declaration.

Q. It says "opinions", plural. Is that a typo? Because that appears to me to be just one subject matter of your opinion.

A. (Pause.)

I believe that is correct.

Q. Have you been -- were you asked to provide any other opinion that you were not able to provide?

A. No.

Q. And is it fair to say that this Exhibit 1, your declaration, contains your opinion and the support for your opinion?

A. I believe that is correct.

Q. So, as you just answered, the opinion you've been asked to express in this case is whether the market for Hi-Crush's common units were efficient --

Dr. Adam Werner
or, was efficient, during the class period; is that -- that's correct?
A. I believe that is correct.
Q. Have you previously been retained to testify on the issue of whether or not the market for a publicly-traded security was efficient?
A. Yes.
Q. Can we just take a quick look at Exhibit 1 and, just, if you could identify, for the record, which of these cases involved that -- you know, that opinion, and it could have been more than just that opinion, but at least the opinion as to whether or not the market was efficient for the subject security.
MR. STRAUSS: You mean Exhibit 1 to Exhibit 1?
MR. PARADISE: Exactly.
A. Okay.
MR. STRAUSS: I just want to be clear.
MR. PARADISE: No. Thank you.



Dr. Adam Werner
A. Okay. (Pause.)
The Ebix case; Eric Poole and William Rhody versus Alange Energy Corp.; the Orient Paper case; the China Expert case; the China Agritech case --
Q. I'm sorry, could you just hold on one second? Oh, I'm sorry.
Orient Paper, you said, China Expert --
MR. PARADISE: Do you want to see a copy of this, so you can see the names?
THE COURT REPORTER: I'll have the exhibit, I'll work with that. Thank you so much.
Q. Sorry. So China Agritech.
A. The National Australia Bank case, I don't know if I -- I did not submit a report in that matter -- or, no, I did -- I don't recall.
Q. I'm sorry, where is the National Australia Bank case?
A. Pathway Investments.
Q. Oh, okay.



Dr. Adam Werner
A. The Armtec case. (Pause.)
I believe that's it.
Q. Was -- is it fair to say that each of those cases, and I count seven, I think you've mentioned, was it your opinion in each of those cases that the market was efficient?
A. I believe that is correct.
Q. And was your opinion rejected in any of those cases?
In other words, did the court or the finder of fact disagree with your opinion.
A. I believe in the China Agritech case.
Q. Was your work, or your opinion, criticized by the court in any of those cases?
MR. STRAUSS: Objection.
A. Define "criticize".
Q. Did the court take issue with your methodology, your conclusion, or any other aspect of your opinion?
MR. STRAUSS: Objection.



Dr. Adam Werner
Go ahead.
A. I don't know how to answer that question.
Q. Why not?
A. It's too broad.
Q. What's too broad about it?
A. I mean, you're asking me for an opinion about a court. I don't know -- I can't interpret what the court has said.
Q. You didn't read the -- if there was a decision issued -- well, let's do it that way. Did the court in any of those cases issue a decision which criticized or took issue with your opinion?
MR. STRAUSS: Objection.
Q. That you're aware of.
A. I don't believe so.
Q. Do you know why -- why the -- was it the court that rejected the market efficiency opinion in China Agritech or was it a jury?
MR. STRAUSS: Objection.

Dr. Adam Werner

A. I believe it was the court.
Q. Do you know what the basis of the court's decision was?
A. I believe the court was confused over the fact that two expert reports were submitted on market efficiency, and we looked at different events and, for whatever reason, they couldn't reconcile that you can look at different events and -- to determine market efficiency.
Q. Was the second expert report offered on behalf of the defendants?
A. No.
Q. Are there -- two plaintiffs' expert reports were offered.
A. Correct.
Q. Did the -- so, other than looking at different events, did the other expert in that case apply a -- apply the same methodology that you had applied to evaluate whether or not the market was efficient?
A. I believe that is correct.



Dr. Adam Werner

Q. You've also -- as I read your CV, it appears that you've also been retained in the past to estimate the alleged inflation per share in certain securities litigation matters; is that correct?
A. I believe that is correct.
Q. Just for the sake of completeness, you have not been asked to render that opinion in this case; right?
MR. STRAUSS: Objection.
THE WITNESS: Could you read back the question, please.
(The record was read.)
MR. PARADISE: And I think there was a second question.
(A portion of the record was read.)
A. I don't recall.
Q. Earlier, I had asked you whether you had been asked to render any opinions beyond that which you express in paragraph 2, and you said you don't believe you have, but now you're



Dr. Adam Werner

expressing uncertainty.
A. Well, to the extent that you measure inflation using event study methodology, I am aware of what the inflation might be in the alleged stock as a result of the alleged bad act by your client.
Q. Okay, but that's a slightly different question than what I'm asking, so let me try it again.
I'm asking whether or not you've been asked by Plaintiffs' counsel in this case to do any work to form an opinion as to what the alleged inflation per share of Hi-Crush was during the class period.
THE WITNESS: I'm sorry, could you read back the question?
(The record was read.)
A. I don't believe so.
Q. In the past, when you've been asked and have rendered an opinion as to inflation per share, have you done that both on behalf of plaintiffs and



Dr. Adam Werner

defendants?
MR. STRAUSS: Objection. You mean in other cases?
MR. PARADISE: Yes, I said "in the past".
MR. STRAUSS: Fine.
A. Define "render an opinion"?
Q. Submit either a declaration or testify.
A. Um -- as I sit here, I don't recall.
Q. Let's take a look at your CV, which is Exhibit 1 to Exhibit 1.
Starting with -- I'm just going to ask you, in the Hecla Mining, the Hecla Mining Securities Litigation matter, where you issued a declaration on investor losses, did that involve rendering an opinion as to inflation per share of the subject security?
A. I don't believe so.
Q. Okay. Were you -- which side did you represent in -- I'm sorry -- which side did you appear as an expert

Dr. Adam Werner
for in the Hecla Mining case?
A. Plaintiff.
Q. The next one that appears to involve some testimony as to damages is the Shenk case?
Looks like this was a derivative action?
A. Okay.
Q. Do you see that?
Was there any work in that case where you were required to express an opinion as to alleged inflation per share?
A. I don't believe so.
Q. Did you also represent the Plaintiff in that case?
A. I did.
Q. I'm just going to ask the same question, just go down the list for a second.
A. Okay.
Q. How about the BP case?
A. I don't recall.
Q. The Tripath Technology case?



Dr. Adam Werner
A. That -- on share inflation, no.
Q. How about Ainslie and Muriel Marentette versus CV Technologies?
A. I believe so.
Q. And who did you represent -- I'm sorry.
On whose side did you appear as an expert in that case?
A. The Plaintiffs.
Q. Let me see if I can cut through this, because you said you weren't sure if you testified on behalf of defendants as to inflation per share, so I take it you looked at this list, are any of the cases on this list ones in which you appeared on behalf of defendants in the situation where you were asked -- where you rendered an opinion as to inflation per share?
A. "This list" being --
Q. The list --
A. -- the list that's defined under: Expert reports and testimony?



Dr. Adam Werner
Q. Correct.
A. I don't believe so.
Q. Okay.
THE WITNESS: But could you read back the question, please? Make sure I've answered it correctly.
(The record was read.)
A. I don't believe so.
Q. In those cases where you did render an opinion as to the alleged inflation per share, how did you go about coming up with the number, you know, the alleged inflation.
MR. STRAUSS: Objection to form.
A. I did an event study.
Q. Anything beyond doing an event study?
A. I don't know how to answer that question.
Q. Okay. Well, let's take it -- let's break that down a little bit.
So you do an event study, and



Dr. Adam Werner
then how do you apply the results of an event study to determine what the alleged inflation per share is?
A. Well, I usually measure the abnormal return around the alleged -- I don't know, I don't know what you want to call it -- the alleged date, for want of a better term.
Q. The date of disclosure?
A. The date of disclosure, there we go, and use that as a measure of inflation.
Q. And then what do you -- let me help you out.
Do you take that alleged inflation and back it -- take it back to the date of the alleged fraud?
A. What do you mean by "take back"?
Q. Well, how do you -- well, let me ask a different question, actually.
What do you -- so you determine the alleged inflation as of the date of the -- what's called the

Dr. Adam Werner

"corrective disclosure"; is that fair to say?

A. Okay.

Q. And then, what do you do with that inflation? Do you apply it to the shares that were acquired at the beginning of the class period to the shares that were acquired throughout the class period?

How do you come up with a damages number?

A. Are you talking about a case with one disclosure?

Q. We'll start with that.

A. Yeah, I'd estimate the number of damage shares and apply that inflation to the -- to the damage shares.

Q. And what -- do you do something differently when there's more than one disclosure?

A. Not necessarily, but then you have -- you know, you have different types of people who are damaged.

You'll have -- so, if you



Dr. Adam Werner

have multiple disclosures, you'll have what we call in-and-out damages as well as buy-and-hold damages.

Q. How many -- do you have an opinion as to how many corrective disclosures there were in the Hi-Crush case, this case?

A. I do not.

Q. Have you not looked at that? Is that --

A. What do you mean, "not looked at" it?

Q. In other words, have you not looked at what disclosures were involved and not rendered -- or, not come to an opinion as to how many were corrective disclosures, or is there some other reason why you don't have an opinion?

A. I mean, I don't believe I have formed an opinion on that, but I believe there -- according to the filings in this case, there appears to be one corrective disclosure at issue.

Q. Is that the information that



Dr. Adam Werner

was -- and you can refer to your declaration, if you would like, but, if you remember, is that the information that was revealed iu a press release that was issued on November 13th, 2012?

A. I believe that is correct.

Q. We'll take a look at that press release a little bit later, and I'll ask some more questions about it, but I'm going to move on, for the time being.

Coming back to your answer to my question before, about how you go about applying the inflation to determine the amount of damages, you said that you have to look at the number of damage shares?

A. You have to estimate the number of damage shares.

Q. How do you go about doing that?

A. Using a trading model.

Q. Is that a trading model that you construct?



Dr. Adam Werner

A. I "construct" meaning?

Q. You put the model together or is there a model that's used in the industry.

A. I don't know how to answer that question.

Q. Well, what trading model do you use to estimate the number of damage shares?

A. A trading model -- (gesturing).

Q. Any?

So where do you find this trading model?

A. It's the same trading model I used at Cornerstone, NERA, and even my past employers.

I mean, I don't -- I don't know how to answer this question.

It's the trading -- it's the trading -- the standard trading model in the industry.

Q. That's what I'm asking, okay, it's --

Dr. Adam Werner

A. But there are different inputs that people put into those models.

Q. Okay, no, I understand that, that's what I was getting at.

It's a model that is used in the industry, you decide what inputs go into the model to come up with your estimate.

A. I believe that is correct.

Q. If you are asked to render an opinion in this case as to the alleged damages that were suffered as a result of the alleged omission in this case, wonld you apply that same model that you've used in other cases?

MR. STRAUSS: Objection.

Go ahead.

A. Again, when you say "same model", how do yon define the "same model"?

Q. Well, I guess the model will change depending on the inpnts. Is that your point?

A. Correct.



Dr. Adam Werner

Q. So maybe we'll call it a "formula", and then you put inputs into a formula to come up with the model -- the answer?

MR. STRAUSS: Objection.

A. I believe that's a fair statement.

Q. Generally, when you've done this type of work in the past, and I understand you have not done it in this case, what inputs do you use to populate your model?

A. This is just for damage shares -- my estiination of damage shares.

Q. Correct.

A. Share volume, float, shares outstanding.

I believe those would be the -- well, I mean, you'd also have to make different assumptions based on what market the stock has traded in -- um --

Q. Anything else?

A. I believe that's it.

Q. Okay.



Dr. Adam Werner

A. But I may have left something out.

Q. Has your -- in those cases in which you have done this type of work, prepared this type of model, and then expressed an opinion, has your opinion been rejected by any courts?

A. No.

Q. As you sit here today, do you have any intention of developing and expressing any opinions beyond those that are contained in your declaration -- in your declaration, which is Exhibit 1?

MR. STRAUSS: Objection.

A. As I sit here today, I mean, I don't know what the future holds --

Q. Okay.

A. -- so -- (gesturing) -- it's possible I will express different opinions in the future.

Q. But you haven't been -- well, let me ask it this way. Have you been asked or told that you will be asked to express additional or different



Dr. Adam Werner

opinions --

MR. STRAUSS: Objection.

Q. -- in the future, in this case?

A. I don't --

THE WITNESS: I'm sorry, can you re-read the question?

(The record was read.)

MR. PARADISE: Than -- there was a little bit more than that -- than what's contained in --

(A portion of the record was read.)

MR. STRAUSS: Objection, again.

THE WITNESS: I apologize, I'm going to have to -- could you re-read it, one more time.

(A portion of the record was read.)

A. I don't believe so.

Q. Have you been engaged by Kirby McInerney in prior securities litigation lawsuits?

Dr. Adam Werner
A. Yes.
Q. How many?
A. Just one.
Q. Which case -- is that case identified in your CV?
A. It is.
Q. Which one is that?
A. Under: Experience, Securities and Finance, Citigroup litigation.
Q. And it says -- if I'm reading this correctly, it says: Testified as to damages and inflation in a securities class action; is that right?
A. That is correct, but I was not sworn in.
Q. Can you explain?
A. Yeah. The -- the judge had some questions about -- about settlements and damage figures and, so, I was -- while there was a public hearing, I was on it by phone, so the judge asked me questions by phone, but I was never formally sworn in.



Dr. Adam Werner
Q. Did that case -- is that case pending, currently pending?
A. I don't believe so. I don't know.
MR. STRAUSS: The settlement is still --
MR. PARADISE: I'll --
MR. STRAUSS: -- in process.
MR. PARADISE: Fair, thank you.
Q. But your -- and let me ask you this way, is your work on that case concluded.
A. I believe that is correct.
Q. Have you worked previously with any of the lawyers from Kirby McInerney who are working on this matter when they were -- if they were and when they were -- at any other law firms?
A. I don't believe so.
Q. Have you ever been retained to testify on behalf of the Plaintiffs -- not the Plaintiffs' counsel, but the Plaintiffs in this lawsuit?



Dr. Adam Werner
MR. STRAUSS: Objection. You mean in any other cases.
MR. PARADISE: Yes.
A. I don't believe so.
Just so we're clear, would you --
Q. Yeah.
A. -- redefine --
Q. Sure.
A. -- who Plaintiffs are?
Q. It's Hite -- H-I-T-E, all caps -- Hedge L.P., and HITE -- all caps -- MLP L.P.
A. Yeah, I don't believe so.
Q. And for future reference, during the course of the deposition, if it's okay with you and Mr. Strauss, I'm going to refer to them as "Plaintiffs".
A. Okay.
Q. And for the Defendants, because there are numerous Defendants in the case, I'm just going to refer to them collectively as "Defendants", unless there is a reason for me to be specific.



Dr. Adam Werner
Is that okay?
A. That's fine.
MR. STRAUSS: And can I ask, if you're referring to the class, if you could just say "the class".
MR. PARADISE: Fair enough.
THE WITNESS: Right.
MR. STRAUSS: "The Plaintiffs" means just for the Plaintiffs.
MR. PARADISE: Fair enough.
Q. So let's talk about the specifics of your engagement in this case.
When were you first contacted by attorneys from Kirby McInerney to potentially work as an expert in this case?
A. Maybe two or three months ago.
Q. And what -- at that time, what did they ask you to do?
A. I believe they asked me to render an opinion on market efficiency.

Dr. Adam Werner

Q. Was there any discussion, at that time, as to any other potential opinions you may be -- you might be asked to render?

MR. STRAUSS: Objection.

A. Not that I recall.

MR. STRAUSS: All right if we take a break?

MR. PARADISE: Sure.

Off the record.

(Recess taken: 10:55 a.m. - 11:09 a.m.)

MR. PARADISE: Are we back on?

BY MR. PARADISE:

Q. Do you have -- do you need to change any answers that you gave before the break?

A. I don't believe so.

Q. So, coming back to your work on this engagement, you told me that you were contacted about two or three months ago and asked to render an opinion as to market efficiency.



Dr. Adam Werner

What did you do next, after that call?

A. With regards to?

Q. To perform your work on this case.

A. I believe I ran a conflict check. I had our general counsel draft an engagement letter, which I believe was transmitted somehow, either electronically or through the mail, to -- I believe Mr. Strauss. Then I started doing research.

Q. Well, let's go to the research part.

So what steps did you take to be able to render the opinion that you were asked to render?

A. I mean, that's an overly broad question.

Can you compartmentalize it somehow?

Q. Well, you just said you did some research, so we'll start with that.

What type of research did you



Dr. Adam Werner

do?

A. I mean, I looked at -- read some newspaper reports, some articles, read some academic articles, I gathered some data, or people gathered data at my behest, performed some analysis on that data, then put that analysis into this (indicating) report.

Q. The people that gathered data for you, are those people that were also -- I'm using the word "working for" but not in the W-2 sense.

A. I understand.

Q. But there's also people who came to work at Gnarus every day?

A. Every day?

Q. That were consulting with Gnarus?

I'm trying to ask it in a way to not make them W-2 employees.

A. Right.

Q. I don't want to get them in any trouble.

A. I don't believe they came to



Dr. Adam Werner

work every day, but yes.

Q. Did you also -- were you also assisted in the gathering of data that you needed to do your work, were you assisted by Plaintiffs' counsel at all?

A. I don't believe so.

Q. Who drafted your declaration?

A. I did.

Q. Did anybody else participate in drafting your declaration?

A. Define "participate"?

Q. Did anybody else put pen to paper to write any of the words that are contained in your declaration.

A. I believe counsel may have made some grammatical changes.

Q. By "counsel", you're referring to Kirby McInerney?

A. Correct.

Q. But, as far as people at Gnarus, it was primarily or solely you?

A. I believe that is correct -- oh, no. Someone may have drafted the section on the background.

Dr. Adam Werner

Q. I take it you reviewed it and edited it to your satisfaction?

A. Correct.

Q. How many -- well, withdrawn.

Did you submit any drafts for the declaration to Kirby McInerney before finalizing the declaration that has been marked as Exhibit 1?

A. Define "submitted"?

Q. Send to them, transmit to them, e-mail to them?

MR. STRAUSS: I'm going to object to that.

I mean, you're asking for communications between the expert and counsel that aren't within the -- you know, within the scope of the rule about what you can ask about.

If you want to ask him what opinion he was asked to render, what facts or data he was provided, that's all fair game but, you know, you're sort of intruding on other



Dr. Adam Werner

types of communications, and I'm going to object to that, and ask him not to answer it.

MR. PARADISE: Well, I don't agree with you.

I think that if the expert prepared earlier drafts of his declaration and they were submitted to counsel and then they were changed, I'm entitled to know that, so I'm not asking him any communications you've had, I'm asking him did he submit other drafts to Kirby McInerney. If we get into communications, we'll slow down a little bit.

MR. STRAUSS: If you start asking about the contents of those or what counsel said about those, that's going to be -- that's off-limits, and I think that's where you're going.

MR. PARADISE: Oh, okay, we can agree to disagree on that, but



Dr. Adam Werner

if you're instructing him not to answer, instruct him not to answer.

Well, let's take it -- let's first find out whether or not there were -- I don't even know if there were other drafts.

Q. So were there any other drafts of your declaration prior to Exhibit 1, (indicating)?

A. Define "drafts".

Q. A version of what is Exhibit 1 that's different from Exhibit 1.

MR. STRAUSS: Objection.

A. "Different" how?

Q. Dr. Werner, you don't know what "drafts" mean? I mean, are you for real? You really don't know what a "draft" is?

A "draft" is a document that you put together as a piece of work, you submit it to somebody, and then someone says: I don't like the way this reads, or: I don't like the way that reads, and you revise it and you have a second



Dr. Adam Werner

draft, and then you go through the same process again, and you have a third draft.

I'm just asking, were there numerous drafts of what ultimately became Exhibit 1. That's all I'm asking.

It's really not a difficult question.

MR. STRAUSS: Can I help?

MR. PARADISE: Sure.

MR. STRAUSS: If someone corrects a citation or inserts a page number or a reference to a paragraph of a complaint, does that make it a different draft?

MR. PARADISE: Yes --

MR. STRAUSS: Let's say, are you talking about material changes, materially-different drafts? Do you want to ask him if there was a materially-different draft that was submitted?

MR. PARADISE: I understand.

He --

Dr. Adam Werner
Q. You've already said that you think that counsel may have corrected some typos.
A. I believe that is correct.
Q. Okay, so I'm not concerned with typos.
I'm asking substantively different -- you know, a substantively-different draft that had a different opinion or didn't express something that is now contained in this opinion, that's what I'm getting at.
A. No.
Q. Okay.
A. And that's why I needed to clarify --
Q. No, I --
A. -- "draft".
Q. -- understand. Okay.
You don't mean -- you weren't really asking me what "drafts" means, you're really more asking me what am I asking you about in terms of different drafts.



Dr. Adam Werner
A. Right, if you're talking about content or --
Q. Understood.
Have you had any discussions with any representatives of Plaintiffs, and as we discussed earlier that means the two HITE entities, concerning your work on this matter?
A. I don't believe so.
Q. You mentioned that your general counsel, or Gnarus's general counsel, prepared an engagement letter that was submitted or transmitted to Kirby McInerney, and then I assume it was ultimately signed; is that --
A. I believe that is correct.
MR. PARADISE: I don't know if we have received a copy of that but, if we haven't, I request that we be provided a copy of that engagement letter.
(REQUEST.)
Q. But you mentioned in here that your rate -- your hourly rate is I



Dr. Adam Werner
think $475 an hour for this engagement?
A. I believe that is correct.
Q. Have you -- are you being paid on an ongoing basis or is the payment deferred until the end of the matter?
A. Ongoing.
Q. How much have you been paid to date, if you know, or how much has Gnarus been paid to date, if you know?
A. Somewhere between twenty and thirty thousand dollars.
Q. Again, I know this may be difficult, but I'm asking you to estimate, how much time would you estimate you put into drafting your declaration, including the work you did up until the time when you started drafting it?
A. Did I personally --
Q. Yes.
A. -- spend?
Maybe 40 hours? 50 hours?
Q. Is that --



Dr. Adam Werner
A. I'm speculating, I honestly don't know.
Q. I understand.
Let me ask it this way. Is the amount of time that you put into this project, or this engagement, substantively different than the amount of time you've put into other engagements, where you've been asked to render an opinion as to market efficiency?
MR. STRAUSS: Objection.
A. I don't know.
Q. Is any portion of your -- of Gnarus's compensation for this matter contingent on the outcome of the matter?
A. No.
MR. PARADISE: Off the record.
(Discussion off the record.)
Q. What -- I'm going to start broadly, and if you can't answer the broad question I'll try to be more specific but, just to move it along, did

Dr. Adam Werner

you do any research or slash due diligence on Hi-Crush to learn about its business in connection with the work that you did to express an opinion in this matter?

A. I believe so.

Q. Can you generally describe for me what you did?

A. I reviewed press releases, news stories, financials, SEC documents.

Q. Did you review the prospectus, the final prospectus that was issued, in connection with the initial public offering?

A. I don't recall.

Q. Did you come to any understanding, in connection with that research, as to what the trends were in Hi-Crush's business in the 2012 -- you know, mid-2012 time --

MR. STRAUSS: Objection.

Q. -- period?

A. Define "trends".

Q. "Trends" meaning demand for



Dr. Adam Werner

the product.

And you know what their product is, I assume; correct?

A. I believe that is correct.

Q. Fracking sand --

A. Correct.

Q. -- for proppants? Okay.

THE REPORTER: I'm sorry, what did you say?

MR. PARADISE: It's called fracking sand -- frac sand for proppants -- P-R-O-P-P-A-N-T-S.

MR. STRAUSS: Could you redo the question, because that was an exceedingly long question, interrupted by a number of things.

MR. PARADISE: Yes.

MR. STRAUSS: Could yon just rephrase it?

MR. PARADISE: Yes.

Q. Did you -- well; the question was about whether you did any research into trends in Hi-Crush's business in the mid-2012 -- you know, beginning in the



Dr. Adam Werner

mid-2012 time period, that was the question.

MR. STRAUSS: Well, objection.

Q. And you asked me to define "trends".

MR. STRAUSS: I'm going to object because that's beyond the scope of the opinions that he was asked to render, and that's the subject matter of this deposition.

But go ahead, and ask if you want.

A. I mean, to the extent that I knew what was going on with Hi-Crush, I mean, I understood what was going on with their business, I don't know if that would be industry trends or, really, that would be under your purview of "trend".

Q. You mentioned that yon read SEC filings, and I think that's also contained in your list of documents on which you relied, Exhibit 2.

Can you be more specific, and



Dr. Adam Werner

feel -- Exhibit 2 to Exhibit 1, on page 2, you just say: Hi-Crush financials, but I don't -- yon don't identify any specific ones.

We talked about the prospectus. Are there any others that you can think of?

A. There are 10-K's, there are 8-K's.

Q. And for what time period, if you remember?

A. So, I believe it would be 2012, 2013.

Q. Can you be specific as to which press releases because, again, you referred generally to "press releases", on page 2 of Exhibit 2 of Exhibit 1.

A. I believe any of them that are listed in my Appendix A.

Q. As you sit here today, are you aware of who Hi-Crush considers to be its main competitors?

MR. STRAUSS: Objection.

A. Not that I recall.

Dr. Adam Werner

Q. Did you have any communications with any of the market makers for Hi-Crush in connection with the work that you did to express your opinion in this case?

A. "Market makers" defined as?

Q. Entities that make markets for Hi-Crush.

A. So not in a securities -- like a NASDAQ market maker.

MR. STRAUSS: Are you talking about profit market makers?

MR. PARADISE: No, no, I'm sorry.

Q. I'm talkmg about a designated market maker from the New York Stock Exchange or anybody else that trades in Hi-Crush's security, on a market-making basis.

A. I don't believe so.

Q. Did you review any analyst reports issued for Hi-Crush during the 2012, 2013 time period?

A. I believe so.



Dr. Adam Werner

Q. As you sit here today, can you tell us which analyst reports you reviewed?

A. I remember reading the Baird downgrade. I believe that was on October -- either the 14th or the 15th.

Q. November? I think November.

A. November, yes, November 2012. I believe that's it.

I mean, I may have read other ones, I don't recall as I sit here. That one sticks out in my mind.

Q. There are other -- I think there are other analyst reports referenced in Appendix A, so feel free to look at that to see if it refreshes your memory.

A. Well, I think --

Q. That, you know, refreshes your memory that you might have looked at others.

A. (Pause.)

As I sit here, I don't recall.



Dr. Adam Werner

Q. In Exhibit 6, you have a list of the market makers that covered Hi-Crush during the period from -- well, you have two separate periods --

A. I want to stop you, because I don't think you're using the terminology correctly.

Q. I'm sorry.

A. It's not "market makers".

Q. You're right, I've made -- I used the wrong term. "Analysts" -- let me withdraw that question, start again.

In Exhibit 6, you have a list of analysts who issued reports or otherwise followed Hi-Crush during two different time periods. The first time period I see is August 15, 2012 to September 18th.

Do you see that?

A. Correct.

Q. And theu the second is September 19th through November 12th; is that correct?

A. I believe it's through



Dr. Adam Werner

November 12th --

Q. Right.

A. -- 2013.

Q. 2013, correct.

How many analysts were following Hi-Crush during the class period? And, by "the class period", I'm referring to the period from September 19th, 2012 through November 12th, 2012.

A. I believe it was either seven or eight.

Let me look at my report here.

Q. Sure. Just make sure you understood me correctly.

I'm only asking now for the class period, not this extended test period.

A. Ah, well, okay.

Going back to Exhibit 6 --

Q. I think -- go ahead.

A. Do you have a pen?

Q. Sure.

A. I know I can't mark this.

Dr. Adam Werner

Can I borrow a pad of paper, too? Thank you. (Writing.)

Okay. Going back to your question, define "covering".

Q. Well, "covering" meaning issuing research reports on Hi-Crush.

A. Do you have a pen?

(Discussion off the record.)

A. Can we go back to the question?

THE WITNESS: Can you read the question?

Q. I'll just say it again.

You asked me how do I define "covering", and I said issuing -- analysts that were issuing research reports.

A. On Hi-Crush.

Q. Correct.

A. (Pause.)

Define "the class period"?

Q. It's November -- I'm sorry -- September 19th, 2012 through November 12th, 2012.



Dr. Adam Werner

And that's also in your report, so --

A. I believe that is correct.

Q. Well --

A. And I wanted to make sure that you weren't talking about the 14th.

Q. No, no, no. Look at -- if you look at Footnote 1, on page 1 of yonr report, yon mention, that is the same class period.

A. Right.

So I will dispute your definition of "analyst coverage". If you're asking me how many reports were released by analysts during that time period, I believe three.

Q. And the three that you're referring to are -- three reports that you're referring to are Raymond James, on October 9, 2012, RBC on October 16th, 2012, and then Credit Suisse on October 17th, 2012?

A. I believe that's correct.

Q. So what is -- you said you



Dr. Adam Werner

don't agree with my or you dispute my definition of "covering", so how do you define "covering"?

How do you define an analyst covering Hi-Crush?

A. Well, an analyst certainly can be following the stock and not issue actual reports.

Q. So how many -- under your definition, then, how many analysts do you believe were covering Hi-Crush during the class period?

A. (Pause.)

Eight.

Q. Who are the other five, besides the three we just identified?

A. (Pause.)

Barclays, UBS, Robert W. Baird -- (pause) -- I don't know if EVA Dimensions was covering it during the class period -- William Blair & Company. I think that's it.

Q. That's -- I think that's seven, if I counted right -- Barclays,



Dr. Adam Werner

UBS, Robert Baird, William Blair, and the three that we had previously discussed.

A. Well, I did mention UBS.

Q. Okay, so those would be the eight.

And what's your basis for concluding that those other -- even though they were not issuing research reports, that those other firms were covering Hi-Crush during that time?

MR. STRAUSS: Objection.

A. I don't know whether they were or were not covering Hi-Crush during that time.

I'm just saying it's possible that they covered those for Hi-Crush during that time, as I define "coverage".

Q. You are familiar with the Cammer factors for measuring market efficiency; correct?

A. I believe I am.

Q. What is the -- if you know, what is the standard that's applied to determining whether or not an analyst is

Dr. Adam Werner
following or covering a company under Cammer?
Is it that they're issuing reports or is it just that they're doing something else?
A. I don't think Cammer defines that.
Q. If they're not issuing reports, is there some other way that you believe these analysts are communicating information that's being absorbed into the market for the price of the stock?
A. Sure. They could be telling their salespeople what their opinions are of the stock. They could be going on TV shows.
There is a whole host of ways they could be communicating information.
Q. Let's assume, for the sake of this question, that my definition is correct, and it means that they're actually issuing reports, and that there are only three during the class period. Are you aware of any federal court



Dr. Adam Werner
decisions that have held that three analysts covering a stock is a sufficient number to prove market efficiency under the Cammer factors?
MR. STRAUSS: Objection.
A. I don't know, one way or the other.
Q. Why not?
MR. STRAUSS: Objection.
A. If you want to show me a court opinion, I'm happy to look at it.
Q. Oh, I'm sorry, you are just not aware of any reports; is that what you mean?
A. Yeah.
Q. Okay. Have you ever expressed an opinion in a case, other than Hi-Crush, that three analysts covering the security is enough to demonstrate market efficiency for that Cammer factor?
MR. STRAUSS: Objection.
A. As you -- I'm sorry -- as you define "coverage" or as I define



Dr. Adam Werner
"coverage"?
Q. Oh, no, I said three analysts who are issuing reports.
A. Ah, okay. I don't know, one way or the other.
Q. No, my question is whether you've ever expressed an opinion that three is enough to satisfy the Cammer factor.
A. I don't recall.
Q. Turning back, for a moment, to Exhibit 2, the list of the academic articles and books that begins on page 1 and then continues over to page 2.
Did you read each of the items that are listed there in connection with the work that you did on this matter?
MR. STRAUSS: Objection.
A. At some point.
Q. Did anyone at -- anyone other than you, at Gnarus review and then prepare summaries of any of these materials for you?



Dr. Adam Werner
MR. STRAUSS: Objection.
A. The academic articles?
Q. Correct.
A. No.
Q. And turning to Appendix A, for a minute, the -- there are -- you know, there are various reports, data, articles, SEC filings, and press releases listed throughout Appendix A.
Did you read each of those items in connection with the work that you performed on this matter?
MR. STRAUSS: Objection.
A. Each of those items separately?
Q. Yes.
MR. STRAUSS: Can you repeat the question, please?
(The record was read.)
A. Each of the items? No -- well, again, define "item".
I only ask because, you know, there are things about lawsuits being filed, I didn't read the -- all the

Dr. Adam Werner

lawsuits. You know, did I read -- have I read this press release summary? Yeah. So I'm not really understanding the question.

Q. Is it fair to say that you read the items that you believe were considered news for the company?

A. That I considered news?

Q. Yes, in connection with your event study.

A. "News", as defined by?

Q. Well, how do you define "news"?

You talk about news in connection with your declaration; don't you?

A. I do.

Q. Right.

A. So one type of news is press releases.

If I'm defining "news" as that, did I review those? Yes.

Q. Take a look at page 12 of your declaration, for a moment, Exhibit



Dr. Adam Werner

1, paragraph 29.

The first sentence of paragraph 29 says, from your declaration: The second factor under Cammer is that -- quote -- it would be persuasive if a significant number of securities analysts followed and reported on a company's stock -- closed quotes.

Do you agree with that statement?

A. Do I agree with that that's what Cammer says? Yes.

Q. Well, do you also agree that that's what's persuasive?

MR. STRAUSS: Objection.

A. Persuasive to what?

Q. Persuasive to determining whether or not there's a sufficient number of analysts to satisfy the analyst coverage factor of Cammer.

You told me before it didn't matter if they were issuing reports or not, they could still be relevant and, in your definition, you saw there were seven



Dr. Adam Werner

analysts, and I asked you -- I told you my definition was issuing reports, you told me that you don't accept that definition.

In your report, you're saying that Cammer says -- followed a report, so I'm trying to get an understanding as to where you stand on all this, but now you've told me you don't think they have to be reporting on it.

MR. STRAUSS: Objection. You're asking him for a legal opinion, and that's not what he's here to testify about, and that's not what he testified about in his report, so -- but I object to your question.

MR. PARADISE: I don't agree that I'm asking for a legal opinion.

He expressed the opinion that the second factor of Cammer's been satisfied here by what I believe to be three analysts issuing reports



Dr. Adam Werner

during the relevant time period. Dr. Werner has told me now that he doesn't agree with that definition. He thinks that other analysts talking to their customers on the phone, or their salespeople, can also be relevant, and I'm trying to understand how he can reconcile that with Cammer, because Cammer seems to say they have to also be reporting on it.

Q. So I'm trying to understand if there's some explanation you can give me as to how you differentiate what you've come to the conclusion of and what Cammer says.

MR. STRAUSS: Right.

A. I don't --

MR. STRAUSS: Objection, that's a legal argument, that's not a question about his opinion or his analysis.

Go ahead.

A. Cammer doesn't define

Dr. Adam Werner

"reported" for us, so I don't know what Cammer means by "reported" --

Q. Well, do you think --

A. -- or "following".

Q. Again, if the number is three, you know, assuming for the sake of this question that the number is three, do you consider that a significant number -- a sufficiently-significant number of analysts to satisfy the second Cammer factor?

MR. STRAUSS: Objection. Once again, you're asking him for a legal opinion and not for his expert opinion or what analysis he conducted to get to his expert opinion, it's beyond the scope of the deposition.

Go ahead.

A. I defer to counsel on this one.

Q. In what sense?

A. In the sense that I believe you are asking me for a legal opinion.



Dr. Adam Werner

Q. Look at paragraph 30, the last sentence of paragraph 30: As a result of my opinion that, while analysts coverage implies there is interest in a company and securities, significant analyst coverage is not necessary to show that a security is traded in an efficient market.

Is that a legal opinion?

A. I don't believe so.

Q. So what makes that not a legal opinion and the question I'm asking you a legal opinion, besides that your -- besides that Mr. Strauss said it was.

THE WITNESS: Could you re-read the question, please?

MR. STRAUSS: Because this is asking -- is about market efficiency, and he's testifying about market efficiency.

The prior question was about whether something satisfies a legal requirement.

MR. PARADISE: (Indicating.)



Dr. Adam Werner

MR. STRAUSS: And I don't know whether he's able to -- whether he knows about that.

Go ahead.

A. I --

MR. STRAUSS: Do you want her to repeat the question? Hone in on what it was you asked?

MS. BRANDON: I think you want to go back to the question where he reads from paragraph 30, and from there.

(A portion of the record was read.)

A. I believe it's paragraph 29.

MS. BRANDON: The last question was started with paragraph 30 and then --

Q. The last sentence of paragraph 30.

A. Oh, theu I'm asking about the question before that.

THE WITNESS: Or, just read the last question.



Dr. Adam Werner

(A portion of the read was read.)

A. I really don't understand the question.

Q. Well, you did need to hear the prior question.

The prior question was asking about whether you needed -- essentially, I'm going to summarize it -- essentially, I was asking you about whether coverage was required to make an analyst relevant for purposes of the Cammer factor; right? Meaning that they were issuing reports.

That's how we got off onto this tangent in the first place, and you said you didn't think that was -- you didn't agree with that definition. You thought they don't necessarily have to be issuing a report to be determined to be covering it, the security.

Did I get that right?

A. I believe that is correct.

Q. Okay. And then I read to you paragraph 29, the first sentence, and you

Dr. Adam Werner

said, if I understood you correctly, that you don't believe that Cammer defined "reported", so you're -- I think what you're saying is you don't think it has to be actually a written published report to be reported; is that right?

A. I believe that is correct.

Q. Okay. I got it. I think we can move on, you know, we agree to disagree, I guess.

But, my next question is, let's assume that I'm right, and "reported" means issuing a written report.

A. Okay.

Q. And that there are three analysts doing so during the class period, which is what you testified to earlier, meaning there were three analysts issuing reports about Hi-Crush.

A. Okay.

Q. Is that a sufficient number of analysts for purposes of establishing the second Cammer factor, in your



Dr. Adam Werner

opinion?

MR. STRAUSS: Objection. Again, you're asking for a legal opinion.

If you're asking him whether it's sufficient to establish market efficiency from an economic point of view, I think that would be a valid question, but you're asking him for a legal opinion, and I think that's beyond the scope of a proper question in the deposition.

MR. PARADISE: Okay, I think I understand your objection, I think I'm short-circuiting it a little bit.

So let me, to satisfy you, I'll add to the question.

Q. Is three a sufficient number to prove that the second Cammer factor has been established and, therefore, there is market efficiency.

MR. STRAUSS: Objection.

A. So, first of all, I need you



Dr. Adam Werner

to define "sufficient".

Q. Well, how many analysts is it that you need to be covering a stock, in your opinion, to conclude from that that there is market efficiency?

MR. STRAUSS: Objection.

A. It's possible I could have no analyst coverage and the stock would be traded in an efficient market.

Q. Agreed, because you don't need to satisfy all the Cammer factors. That's why I'm asking to satisfy the second Cammer factor, that was the whole thing I'm getting at, to satisfy that specific factor.

A. If you want --

MR. STRAUSS: That's why your question is a legal question and not an expert question.

MR. PARADISE: I disagree.

A. If you want to show me the Cammer opinion, and show me where they talk about the number of analysts that are sufficient, I'll be happy to discuss



Dr. Adam Werner

that with you, but I don't believe Cammer states definitively that there have to be a certain number of analysts, it just says sufficient.

Again, you can define "sufficient" any way you want to.

Q. Okay. So, in your opinion, "sufficient" can be three or fewer than three, I think is what you are saying.

A. I'm saying it's possible for a stock to trade in an efficient market and not have any analyst coverage or it could have a million analysts covering it.

Market efficiency, in and of itself, is not going to be established by the number of analysts following a stock.

Q. Turning to your opinion that you express at the end of paragraph 30, that I read into the record earlier?

A. Mm-hmm -- okay.

Q. I'm looking specifically at the second clause, which says: Significant analyst coverage is not

Dr. Adam Werner

necessary to show that a security is traded in a sufficient market.

Is that a acceptable -- is that a peer-reviewed accepted opinion, to your knowledge?

A. "Peer-reviewed"?

Q. In other words, is there any literature out there that shares that opinion, that you're aware of.

A. As I sit here, I don't know.

Q. If I understood you correctly, and we'll move off of this, I apologize for belaboring it, you're saying is -- analyst coverage is or can be irrelevant to determining market efficiency; right?

A. Determining under what?

Q. Determining under the analysis that you performed and type of analysis that you performed in this case.

THE WITNESS: I'm sorry, could you read back the question?

(A portion of the read was read.)



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MR. STRAUSS: Objection.

A. I mean, look, this is a Cammer factor, I have to respond to that in this report.

To me, like I said, you can have infinite analyst coverage or no analyst coverage, the stock is still trading in an efficiency market.

Going back to your question about peer-reviewed articles, I can think of numerous event study articles that don't mention anything about analyst -- or, market efficiency studies, that don't mention anything about analyst coverage.

Q. So you said you had to analyze this because it's one of the Cammer factors, but if it can be efficient with zero market makers, why was it necessary for you to --

MR. STRAUSS: Objection, you mean "analysts".

MR. PARADISE: I'm sorry, you're right.

Q. Let's start over. Withdraw



Dr. Adam Werner

that question.

You said that a market can be efficient with zero analysts covering it and it could also have -- I can't remember the number you used, it was a very large number, analysts covering it and it can be efficient, but if it can be efficient or, in your opinion, can be proven to be efficient with zero analyst coverage, why did you bother even including this in your analysis, this Cammer factor two in your analysis?

A. Because the court demands that I do it.

Q. "The court" being Cammer, or Judge McMahon in the Southern District of New York?

A. Right.

MR. STRAUSS: Objection.

A. I believe Cammer.

Q. All right. What is your definition of an "efficient market"?

In other words, what does that mean, when you say "a market is



Dr. Adam Werner

efficient"?

A. I assume that it's semi-strong form-efficient.

Q. Can you explain what that means, please?

A. Turning to my report, paragraph 15, under the: Semi-strong form of efficiency: Prices reflect not just past prices but all other public information, for example from the internet or financial press.

Q. What does it mean to say that "a market is not efficient", in your opinion, or your understanding?

A. Prices do not reflect past prices or public information.

Q. You also used the term throughout -- and I can give you some examples, you have used the term, or some derivation of the term, "informationally efficient"?

Do you remember using that term?

A. I believe so.

Dr. Adam Werner

Q. If you take a look at -- do you want me to show you, just so we're on the same page?

A. Sure.

Q. Take paragraph 4 E, on page 2.

These are informational efficiencies?

A. Okay.

Q. And then there are other places where you'll say something is informationally efficient, et cetera.

Can you just explain what you mean by "informatioually efficient"?

A. It means that the information that is reflected in the stock price.

Q. Okay. So it's similar to the definition of what an "efficient market" is?

A. I believe that's correct.

Q. Outside of work you've done in connection with either testifying or preparing a report as an expert, so, in other words, in your academic life, have



Dr. Adam Werner

you ever studied or done research into market efficiency?

A. That's an overbroad -- overly broad question. I believe the answer is yes.

Q. Have you ever concluded that a market for a particular security was not efficient?

A. Yes.

Q. Aud have you ever done that in any litigation, securities litigation?

A. I believe so.

Q. Can you tell us which cases, as you sit here?

A. Not as I sit here.

I mean, I'd have to -- when I was at Cornerstone and NERA and CRA, I must have done, I don't know, multiple cases in which the expert found that the market for the stock was inefficient.

I've certainly found -- been brought cases currently where I'm asked to determine market efficiency, and I will say: Based on my determination, the



Dr. Adam Werner

market for this stock is inefficient. Amazingly enough, the plaintiffs don't want me to submit a report in those instances.

Q. But do they pay you?

A. They pay me.

Q. Okay, fair enough.

Do you remember what -- in those other cases to which you're referring, or these other instances to which you're referring, do you recall what led you to conclude that the market was inefficient?

A. The stock -- or, the stock or bond price would not respond to information, that I would expect it to respond to.

And, when I say "information", I should qualify that by saying "new information".

Q. And was that conclusion reached after conducting -- if you remember -- was that conclusion reached after conducting an event study?



Dr. Adam Werner

A. It could have been.

I mean, I could also eyeball it.

Q. In your opinion, is it possible for the market -- for a security to be efficient during one time period but inefficient during another time period?

MR. STRAUSS: Objection.

A. Is it possible? Anything's possible.

Q. Have you ever encountered that situation, where you looked at trading over different time periods for the same security and determined that in one time period it wasn't sufficient and in another it was?

A. Not that I recall.

Q. We talked earlier about the class period, and I just wanted to confirm that, to your knowledge, the class period still starts or begins in this case on September 19th, 2012?

A. That's my understanding,

Dr. Adam Werner
based on the judge's opinion.
Q. What -- if you know, what happened on September 19th, 2012 to make that the start date for the class period? Or what didn't happen, I should say.
A. Well, other than the judge determining that that was the start of the class period?
Q. She hasn't determined that yet, it's --
A. Well, then, I -- again, I'm not a lawyer, so that my reading of her opinion was that she thought that the class period started on --
Q. I'm going to --
A. -- September 19th.
Q. Let me try it this way.
Your -- not "your" -- the Plaintiffs' counsel has alleged the class period that begins on September 19th. Is it fair to say that you've accepted that for purposes of your analysis and haven't done any independent determination as to when the class period should or should



Dr. Adam Werner
not start?
A. That is correct, but --
Q. I'm sorry, go ahead.
A. Well, I was just going back to your question on September 19th.
If you go to paragraph 11, which is page 5 of Exhibit 1 to this deposition: Then, on September 19, 2012, Baker Hughes notified Hi-Crush that it was terminating its supply contract. According to Baker Hughes --
THE WITNESS: Am I going too fast?
Q. No.
THE COURT REPORTER: I'm there.
A. Not for you.
-- Hi-Crush had breached the confidentiality clause of the supply contract by attaching a version of the contract to its IPO registration statement. Hi-Crush, however, did not publicly disclose Baker Hughes' determination until November. In fact,



Dr. Adam Werner
during a presentation at an industry meeting, on September 25th, 2012, Hi-Crush continued to promote Baker Hughes as an important long-term buyer of its frac sand.
Q. Okay. So coming back to my question.
Then, what occurred or did not occur on September 19 -- what occurred on September 19th, based on your opinion, is that Hi-Crush received a letter from Baker Hughes, notifying them that Baker Hughes was terminating the contract; is that correct?
A. I don't believe that's my opinion.
Q. I said in your opinion, it's expressed in this paragraph you just read.
MR. STRAUSS: Objection.
Q. You just read me this paragraph.
A. Correct.
Q. Okay, so that's what I'm



Dr. Adam Werner
asking.
Is that the event that occurred on that date that makes that the start of the class period.
A. Well, you're --
MR. STRAUSS: I don't think it's alleged.
THE WITNESS: Right.
A. That's not my determination to make.
Q. Do you know, or have you done, any independent research to determine when, during the day on September 19th, Hi-Crush received a letter from Baker Hughes?
A. I don't believe so.
Q. Are you familiar with -- you mentioned earlier Form 8-K, are you familiar with the instructions for Form 8-K?
A. Not as I sit here.
Q. So if I was to ask you how many days after an event that requires disclosure, under Form 8-K, a registrant

Dr. Adam Werner

is obligated to file its Form 8-K, you wouldn't know the answer to that; would you?

MR. STRAUSS: Objection.

A. I don't believe so.

Q. Is it still your understanding, as you sit here today, that the class period ends on November 12th, 2012?

MR. STRAUSS: Objection.

Q. If you look at Footnote 1 on page 1.

A. I believe that is correct.

Q. So, again, like I asked you before, that date, you're taking that from what's been alleged in this lawsuit rather than any independent determination of your own; is that right?

A. Well, I guess.

Q. Well, you seem puzzled.

A. You know, again, I don't think -- you're asking me to make a legal determination, which is not anything I've thought about.



Dr. Adam Werner

It's not my job to determine when and -- the class period should start and end.

Q. No, that's exactly what I asked you. I didn't ask you to make a legal determination.

I said, you're accepting the period that's been set forth in this lawsuit rather than having done anything independent to determine when the class period should end.

MR. STRAUSS: Objection.

What do you mean by "accepting"? You mean that he's accepting as an assumption?

MR. PARADISE: Yes.

MR. STRAUSS: Okay.

A. I believe that's correct.

I mean, the only thing that -- the only confusion I have about this point is that, you know, you see the stock price reaction on November 13th, so do I consider that part of the class period? Not as formally defined in



Dr. Adam Werner

this -- in their complaint, but that was when the information was reflected in the stock price.

Q. And what -- do you know, or are you aware -- and you can certainly refer to your report -- are you aware of what happened on November 12th with respect to Hi-Crush that -- well, what occurred with respect to Hi-Crush on November 12th, 2012?

A. (Pause.)

I don't specifically recall. If I could look at the complaint.

MR. PARADISE: Do we have a copy of the complaint?

MS. BRANDON: I think we do.

Q. While we're looking for that, let me see if this helps.

Look at paragraph 12 of your declaration.

A. Right.

Q. You have a reference in there to November 12.

A. Oh.



Dr. Adam Werner

Q. I can represent to you that, what happened, that you recite in here, is Hi-Crush formally terminated the supply agreement.

Do you see that?

A. Yes.

Q. Do you want to still see the complaint?

A. And its suit, filed suit, against Baker Hughes.

Q. Right, do you still need to see that, (indicating)?

A. No.

Q. Turning to page 2 of your declaration, Footnote 2.

You discuss, in this Footnote, the -- what you call, or define, as the "test period", which is from September 19th, 2012 until November 13th, 2013.

Do you see that?

A. Yes.

Q. Okay. And you say, in parenthetical, after November 13th, 2013

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a -- and this is the parenthetical: A year after the impact of the corrective disclosure on Hi-Crush's stock price, which I define as the "test period", you continue on from there but for my purposes I'm going to stop there.

A. Okay.

Q. What do you mean by "corrective disclosure", as you use it in Footnote 2?

A. I guess corrective of the alleged fraud.

Q. And what was the disclosure that you believe was corrective of the alleged fraud, for purposes of your (indicating) opinion?

MR. STRAUSS: Objection.

A. Well, going back to the paragraph you pointed out --

Q. 12?

A. Yeah. Hi-Crush formally terminated its supply agreement on November 12th, 2012 but, at the same time, it filed suit against Baker Hughes,



Dr. Adam Werner

seeking damages --

THE WITNESS: Sorry.

A. -- over the contract termination.

Q. And what misrepresentation or omission do you believe this corrective disclosure corrected?

MR. STRAUSS: Objection. Once again, you're asking him for legal conclusions, you're not asking him for -- or, to recite the allegations, you're not asking him for his opinion or the analysis that led him to his opinion and, as such, it's not the proper scope of the deposition.

MR. PARADISE: Okay, I disagree.

Q. But you can answer.

If you don't have an opinion, you can say: I don't have an opinion, but you -- I'll just say, the reason I don't agree with Mark is because you say you've created this test period that runs



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from a year from the corrective disclosure, so I'm assuming, from that, that the corrective disclosure has some significance to you, so I want to have your understanding as to what you consider to be the corrective disclosure, to see if that's a valid time period that you're using.

MR. STRAUSS: He testified he's using that date as an assumption, not that he rendered an opinion on the corrective disclosure period.

MR. PARADISE: Well, I don't think so.

I asked about on the class period, he said he accepted it, but I don't think I asked him why he used November 13th, so I can ask him that question.

Q. Why did you use November 13th? What was the reason for using that date?

A. It's corrective of the



Dr. Adam Werner

omission of information.

Q. Right, and what was the omission that occurred?

A. That Baker Hughes had terminated its contract.

But let me -- hold on one second.

MR. STRAUSS: Are you asking him what happened on November 13th or why he selected November 13th, as opposed to any other date, to start this test period? Is that what you're asking?

MR. PARADISE: Well, he said he used November 13th in his opinion as -- because that's one year from the corrective disclosure, so I'm trying to understand what makes him think that was the corrective disclosure, why was that the right date to start from.

MR. STRAUSS: November 13th, 2013?

Dr. Adam Werner

MR. PARADISE: 12, he said one year from that date, he said. He's in the middle of answering, so....

A. No, I'll stick with my answer.

Q. Okay. Why do you -- did you feel it was necessary to use this test period, which, as you point out, runs from a year -- you know, a year following the class period, to establish or determine whether the market for Hi-Crush was efficient?

A. Because there was very little information disclosed about Hi-Crush during the class period.

Now, that having been said, I would have been more than happy to just look at the class period, where we have one significant disclosure that moves the stock price, but I'm sure your experts would then complain about the fact that I was only looking at a one- or two-month period of time, and I was only looking at



Dr. Adam Werner

one disclosure.

So, I mean, I'd be happy to do it. The problem is, if I do it, you guys are going to complain about it, or your -- the people you hire are going to complain about it. That's why I did it.

Q. Well, but, are you saying -- or was that a hypothetical, are you saying there was a significant disclosure during the class period, that's defined as September 19th, 2012 to November 12th, 2012?

A. I'm saying there was one significant piece of information released to the market during that time period.

Q. And what was that?

A. The -- Hi-Crush formally terminated its supply agreement on November 12th, 2012 while, at the same time, it filed suit against Baker Hughes seeking damages over the contract termination.

Q. You're referring to paragraph 12 again?



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A. Yes.

Q. But that was released on November 13th, 2012.

That's outside the class period.

A. No, I believe -- I mean -- okay, now we're getting into semantics.

The termin-- the information was released either post-closing of the market on the 12th versus -- or prior to the opening of the market on the 13th.

Q. I'll represent to you that it was the latter, it was prior to the opening on the 13th.

And I'm going to show you the press release in a second.

A. Okay. I don't under-- for me, I don't understand the legal distinction of why the class period ends on the 12th versus the 13th and how, if legally, whether you determine that if information is released prior to a market opening it should be reflected, the correct proper date that you need to look



Dr. Adam Werner

at for the class period is the prior day, I don't know.

Q. Okay, fair enough.

A. That's nothing I understand or -- but that's it.

Q. Okay, so, but, just for the record, the disclosure to which you are referring, to which you referred earlier as having occurred during the class period, is the disclosure that you discuss in paragraph 12 (indicating) of your declaration.

A. It's -- disclosure, conveyance of information, whatever you want to call it.

It's -- so, yes, a press release was issued, they filed a lawsuit I believe on the prior day, I don't --

Q. I'm just trying to establish that there's no other disclosure that you were referring to. That's all. You were referring to this disclosure, whether it happened on the 13th or at the end of the 12th, that's the disclosure that you're

Dr. Adam Werner
talking about.
A. I believe that is correct.
Q. Okay. Let me just hand you the press release, just to show it to you, so can see the date on it, and all that.
MR. PARADISE: Can you please mark this as Exhibit 2?
(Whereupon Deposition Exhibit 2, Press release, dated November 13th, was marked for identification, as of this date.)
A. Actually, you know what, can I take a break?
Q. Sure.
(Recess taken: 12:09 p.m. - 12:19 p.m.)
BY MR. PARADISE:
Q. Before we broke, I handed you what the court reporter has marked as Exhibit 2, just so we have it on the record.
And uow you've advised me that you'd like to clarify one of your



Dr. Adam Werner
previous answers, I believe?
A. Correct.
Q. Go ahead.
A. So, when we were talking about analyst coverage and analyst following, I do want to point out that, in terms of companies that were following Hi-Crush, as opposed to -- as I define it, part of that was based on the idea that they had previously issued reports on Hi-Crush, prior to the class period, so that's, to me, evidence that -- or, additional evidence that they were, in fact, following Hi-Crush.
Q. Just for the record, you're referring to Exhibit 6 of Exhibit 1, and you're referring to the -- some of the brokerage firms that are listed as having issued reports prior to the class period; is that right?
A. Correct.
Q. Okay. Is there anything else?
A. No.



Dr. Adam Werner
Q. During this last break, did you and Mr. Strauss discuss anything that bears upon any of my prior questions or any of your prior answers?
A. I believe we discussed analyst coverage.
Q. Anything else?
A. Not that I can think of.
Q. Let's come back, for a moment, to the test period that we were discussing.
I don't have any questions on the press release, just -- on Exhibit 2, but I wanted to show it to you just to show you that it's dated November 13th, if you see at the beginning of the press release there's a date, (indicating), that was the only purpose of me showing that to you at this point.
A. Right. But, in this press release that is issued on November 13th, it specifies: On November 12th, 2012, Hi-Crush formally terminated the supply agreement and filed suit in the State



Dr. Adam Werner
District Court of the Harris County, that in and of itself is information.
Q. I'm not disagreeing with you. The only question is when was that information released to the market, and the date of the press release is November 13th.
That's -- that was the only thing --
A. But the lawsuit was filed on the 12th.
Q. Correct.
A. That information -- the fact that the lawsuit was filed on the 12th would be conveyed to the market on the 12th, if the market was still open, or in terms of the calendar day, which seems to be what you're focusing on here, that was released on the 12th, that information about the lawsuit, the fact that a lawsuit had been filed would have been information on the 12th.
Q. Is it your opinion, or -- I mean -- I mean, because I want to make

Dr. Adam Werner

sure I'm understanding you now, is it your opinion that the market was aware that the lawsuit had been filed on November 12th?

A. Define "the market".

Q. You used the word "market" in your answer.

A. Well -- uh -- during -- I defined "the market" as during trading hours, I do not believe that the market was aware of it on the 12th --

Q. Okay.

A. -- during trading hours.

Anyone who owned shares in a stock, who lives 24 hours a day, though, may have seen this information after the market closed.

Q. Are you aware of any published information on the internet -- analyst reports, news reports, Motley Fool, Seeking Alpha -- any other source of information, that reported, on November 12th, whether it be during or after market hours, that Hi-Crush had



Dr. Adam Werner

filed a lawsuit against Baker Hughes.

A. I don't believe so, but hold on a second, let me review Appendix A.

(Pause.)

I don't believe so.

Q. And stay with Appendix A for a moment, if you don't mind.

So, looking at the date of November 12th, did the -- in your event study, did your -- I'm sorry, this is your event study; right?

A. Yes.

Q. Okay. Did the price of the stock move on November 12th in a manner that suggests to you that the market absorbed the news of the filing of that lawsuit?

A. Did it move in a way --

Q. In a -- let me use your lingo, if you don't mind, so I'm using it right -- did it move in a statistically-significant way on November 12th, 2012?

A. It did not.

Q. Okay. So let's stay -- well,



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let's talk about -- I want to talk more about the test period, because you explained that there -- that you didn't feel there was -- well, you said you thought that if you had used the period of September 19th to -- September 9th, 2012, through November 12th, 2012, that our experts would have criticized you as using an insufficient period of time; is that right? Is that fair?

A. Well, with regards to the release --

Q. Right.

A. -- of information.

Q. So, that's why you said you used an extended period of time.

Is there anything about the one-year period, is there any reason why you went one year out from November -- I guess November 13th, 2012, to November 13th, 2013?

A. I mean, most -- many event studies use a one-year window to measure as a measurement of time.



Dr. Adam Werner

Q. So you didn't look at a different period of time and then, you know, sort of cherry pick that one-year period, because that was a favorable time period; did you?

A. No.

Q. Now, when you look at the period outside of the class period, right, so you're looking at that November 13, 2012 to November 12th, 2013, is it your opinion that if the market for the stock was efficient during that time period or some, you know, time period other than the class period that's at issue, that means that the market was also efficient during the class period?

MR. STRAUSS: Objection.

Q. That was a bad question. Let me rephrase the question.

A. Okay, I was going to say --

Q. Let me ask it more generally, and then we'll get specific.

What I'm trying to get at is, in your opinion, if the market for the

Dr. Adam Werner

stock is efficient in one time period, does that mean it is always efficient?

MR. STRAUSS: Objection.

A. I don't know how to answer that.

Q. Why?

A. I mean, I don't know how to answer it.

That's my answer.

Q. Okay, then let's talk specifically.

Do you agree with me that, in your event study, Appendix A to Exhibit 1, there are no statistically-significant dates during the class period?

So that's September 19, 2012 through November 12, 2012.

And let me just further say that I'm drawing that conclusion because I don't see any asterisks during the during the -- during that time period, on any of the dates, and I do see numerous asterisks for the subsequent period of November 13th, 2012 through November



Dr. Adam Werner

13th, 2013, so I'm assuming -- sorry, it's very long -- but I'm assuming that the asterisks signify a statistically-significant date. Is that a fair assumption?

A. That is a fair assumption.

Q. Now, after that long-winded question, my question to you is, are there any statistically-significant dates during the class period.

A. During the class period, again, I'm using your definition, or everyone's definition --

Q. Right.

A. -- of September 19th through November 12th, no.

Q. Okay. So is it fair to say that your opinion in this case, that the market is efficient -- was efficient during the class period, is based on your observation of efficiency during the subsequent period of November -- you know, when I say "subsequent period", it's part of your test period, but it's



Dr. Adam Werner

outside the class period, that's what I'm trying to say by "subsequent period".

A. That informs my opinion.

Q. And, now, coming back to my original question, that you said you didn't know how to answer it, can you explain to me how you're able to conclude, based on the presence of statistically-significant events during this subsequent period -- can we just have an understanding that that means November 13, 2012 through November 13, 2013?

A. Okay.

Q. How does that form your opinion that the market was efficient during the class period?

A. Well, there are no -- I mean, I don't -- you're right, I don't see any statistically-significant price movements, but there was also no significant news issued during that period.

So, I mean, if I saw all



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sorts of crazy stock price movements on no information, that might inform me that the stock wasn't efficient.

Q. So, I understand -- I think I understand what you're saying -- so is it fair to say that you're drawing an inference based upon your observation of the subsequent time period that the market was also efficient during the class period?

A. That's part of it. Again, it informs my opinion.

Q. What else informs your opinion, besides that?

A. Well, I can look at the analyst coverage during the class period, trading volume during the class period, the fact that it was traded on the NYSE, it had a designated market maker, a $290 million company, the bid/ask spread was less than I believe -- I believe it was .49 percent, but I don't recall off the top of my head, which is less than the 2 percent threshold established in other

Dr. Adam Werner

court cases -- um -- (pause) -- let's see -- we can go -- well, those are certainly examples of things that inform my opinion, the absence of auto-correlation --

THE WITNESS: And this one is a tough one, "autocorrelation" -- A-U-T-O-C-O-R-R-E-L-A-T-I-O-N.

Q. So, essentially, the other -- and, again, I take it you are referring or -- referring to or consulting your opinion, your declaration, paragraph 4, for those items you just listed to me, they're listed here among the letters under the paragraph 4; is that right?

A. I believe so.

Q. Okay.

A. I mean, I was doing it off the top of my head at the time, but I believe that was correct.

Q. All right. We're going to come to -- we're going to talk about a bunch of those as we move forward, but



Dr. Adam Werner

it's fair to say -- so I just wanted to make an understanding, though, that the event study itself, though, is being used as an inference, that piece of your analysis is being used as an inference for the class period.

A. I don't -- I guess I don't understand the question because the event -- the event study is the time period that you look at with regards to information.

What you're defining is the "event window" in which you estimate the event study, but you then use that, those results, to look at -- you can look at a broader period.

So I'm not quite under-standing what you're talking about.

Q. The "event window", is that the -- what do you consider the "event window" in this case?

A. November 13th, 2012 to November 13th, 2013.

That's the time that the --



Dr. Adam Werner

I'll leave it at that.

Q. Let's stay with Appendix A for a moment.

Just looking at the first four entries, I notice that the data on the first four trading -- you know, the first four trading dates that you list there: September 19th, September 20th, September 21, and September 24, is all identical, and that strikes me as maybe an error; is that --

A. I believe that is an error.

Q. Okay.

A. But I also -- I do know there was no statistically-significant price movements on those dates.

Q. But the data was not replicated like this on those four days; was it? The trading day, the volume, the price, the return?

A. As I sit here, I don't know, but I believe that you are correct.

Q. Just -- and just coming back to your definition of "event window", for



Dr. Adam Werner

purposes of looking at Exhibit 7 --

A. Oh.

Q. -- my --

A. I just marked this, I'm sorry.

Q. That's okay.

MR. PARADISE: For the record, we'll note that the witness marked --

Q. What is that? What page is that?

A. Appendix A, the first page of Appendix A.

MR. PARADISE: Off the record.

(Discussion off the record.)

Q. Take a look at Exhibit 7 for a moment.

I just want -- on this event study time period -- I mean -- sorry, the "event window", on Exhibit 7, the period that you put down there is November 14, 2012 to November 13th. I don't know if that's also just a typo?

Dr. Adam Werner

A. No, that is November 4th -- I did not include the price reaction on November 13th in my analysis.

Q. I'm looking at yours. Does yours say November 14? Oh, okay.

So the reason why you used that is -- could you just explain that again, why you didn't look at November 13th?

A. I did look at November 13th in my -- I guess my confusion is, is you -- I'm not understanding your definition of an "event study".

Could you define what you mean by "event study"?

Q. Well, the only thing I mean by "event study" is whatever you mean, quite frankly, your event study.

A. Well, okay. So I did estimate it -- I did some regression analysis over this time period, but the event study encapsulates the class period.

Q. Yes, I understand that.



Dr. Adam Werner

You mentioned "event window" before, and you said -- the period you told me was November 13th, 2012 to November --

A. That was -

Q. -- 12th, 2013.

I'm just trying to understand why here it's November 14th.

A. It is No-- because I should have said November 14th.

Q. That's what I'm getting at, okay.

And, just so I understand, why don't you start with November 13th --

A. Because --

Q. -- 2012.

A. Right.

Because that was the day where large information was released to the market. Including that day would probably -- I don't want to say "mess up" --

Q. Skew?

A. It might skew my analysis --



Dr. Adam Werner

(gesturing).

Q. Back to Appendix A for a second.

So, with respect to the dates that are asterisked, my -- from reading your declaration and observing or reviewing your event study, my observation is that you starred those days and have a t-stat of greater or -- greater -- equal to or greater than one absent value of 1.96; is that --

A. I believe that is --

Q. -- correct?

A. -- correct.

Q. And that's -- if I'm reading your report correctly, that corresponds to a confidence level of 95 percent; is that right?

A. Correct.

Q. Okay. Why do you -- why is that the confidence level that you chose to use?

A. Oftentimes, that's the confidence level that an economist will



Dr. Adam Werner

use in doing an econometric analysis.

Q. Other times, in your report, I see references to a 99 percent confidence level and I also saw some references to a 90 percent confidence level.

99 percent, obviously, is higher than 95 percent, but do you also consider, in certain circumstances, in this report -- in this declaration, I keep calling it a "report" -- in this declaration, do you consider some of the events that had a statistical significance of -- I'm sorry -- the confidence level of 90 percent, to be statistically-significant?

A. "The events"?

Q. Or -- let me -- maybe I should show you specifically what I'm talking about. It may be easier that way.

For example, look at paragraph 49 for a moment.

A. (Pause.)

Dr. Adam Werner

Okay.

Q. Please read as much of it as you would like, but the sentence to which I was referring, or am referring, is the fourth sentence, beginning with: The coefficient?

A. Right.

Q. So there you see a statistically-- it says: Statistically-significant at a 90 percent confidence level.

I'm just curious as to how you would -- how you reconcile the 95 percent confidence level with the 90 percent confidence level for purposes of determining how something is statistically-significant.

MR. STRAUSS: Objection.

Q. If you do.

A. It's what the confidence level is, it's 90 percent for this observation, or in this analysis. I don't know what else to tell you about that.



Dr. Adam Werner

I mean, by definition, it's statistically significant that a 90 percent confidence level.

Q. What does that mean with respect to your opinion about the efficiency of the market? I.e. that it's statistically significant at a 90 percent level versus being statistically significant at a 95 percent confidence level, if anything?

MR. STRAUSS: Objection. Which -- what are you specifically referring to?

MR. PARADISE: Paragraph 49, where it refers to the t-stat of 1.67 being statistically significant at 90 percent confidence level and then, later on, in that same paragraph, Dr. Werner says that the common stock returns are -- I'm going to just read it: highly sensitive to movements in the market index and fairly sensitive -- parenthetical --



Dr. Adam Werner

at a 90 percent confidence level -- closed parentheses -- to the net-of-market industry index over the event window.

Q. I'm just trying to understand if it has any meaning with respect to your overall opinion about the efficiency of the market.

MR. STRAUSS: Objection.

A. I believe it informs my opinion.

Q. And does it support your opinion?

A. I don't think that one piece of information supports or does not support my opinion.

Q. Do you remember, is 90 percent rounded? Is that a rounded number there?

And if you take a look at Exhibit 7, because --

A. I believe it might have been.

Q. Okay. Is that acceptable, to round up like that? Because I think,



Dr. Adam Werner

technically, it was at 89.6 percent. If you look at Exhibit 7, you have this peak greater than an absolute value of T of .104, so --

A. I'm sorry, what exhibit?

Q. Exhibit 7.

MR. PARADISE: Off the record.

Q. If I'm doing my math correct, it's actually a .89 -- .896, and I just want to make sure that you're rounding up to 90?

A. You are correct.

Q. And just because I'm not the expert, that's acceptable, in your experience, to round up to 90 percent?

A. I don't -- I've never seen -- I don't know whether it's acceptable or unacceptable.

I mean, tech-- you're more than welcome to change that to 89.6.

Q. That wouldn't change your opinion; is that --

A. No.

Q. Okay. In terms of the five Cammer factors that you analyzed, do you consider any one of the five factors to be more important than any other?

A. 'More important" from what perspective?

Q. More important or more valuable in determining market efficiency.

A. I believe factor five is more informative than the other factors.

Q. In factor five -- let's just turn to your declaration for a moment. It is discussed at the beginning on page 24, am I right, paragraph 61?

A. I think it started earlier.

MS. BRANDON: Page 16.

MR. KEABLE: Page 16.

Q. You're right, I apologize, page 16.

A. Right.

Q. Okay. All right. I'm looking at the exhibits that I think correspond to your analysis of factor





five, which I believe are Exhibits 7 and 8.

Is that -- am I right about that?

A. There are many exhibits, there's more exhibits than that, I believe.

Exhibit 7 through -- I believe, Exhibit 13 -- through Exhibit 13, speaks to factor five.

Q. I'm just looking -- I'm trying to get an understanding as to the time periods that you used for these various analyses that you performed.

So I see that in Exhibit 7 and Exhibit 8 you use the period of November 14th through November 13th, which is a portion of your test period, but for Exhibits 9, 10, 11, 12, and 13 you used the entire test period -- and 14, I apologize, and 14.

I'm just trying to get an understanding as to why it is that you used the different periods for these --





for Exhibits 7 and 8 than you did for the remainder of the exhibits.

A. I think this goes to the question that we discussed earlier, about the definition of an "event study".

Q. Could you enlighten me again, if you don't mind?

A. The control period is from November 14, 2012 to November 13, 2013. That's where I performed my regression analysis.

Q. Aud that's the control period, because you -- I think, if I understood you earlier, you wanted to eliminate the 13th because you thought that might skew the results, and this is a period that doesn't have an event that would skew the results. Is that the idea?

A. I don't know if this has an event that would skew the results or not, but as this -- as the 13th is the largest stock price movement, at least during this entire period, I chose not to





include that.

Alternatively, I could have used -- I could have included that date and used the dummy variable to correct for that large fluctuation in price.

Q. And excuse my naivete here but, with respect to the exhibits beyoud Exhibits 7 and 8, so Exhibits 9 through 14, the reason that you were able to use the entire test period, because you were not performing your regression analysis in those exhibits? Is that -- am I understanding you?

I'm just trying to understand why it's okay to use the longer period for those other exhibits but, the shorter period, you felt it was important to use the shorter period for the Exhibits 7 and 8.

A. I mean, I'm look-- I use the longer periods because I'm interested in how the stock price reacts to information during those periods.

Q. But for Exhibits 7 and 8,

Dr. Adam Werner
you're not interested in that?
That's what I'm trying to understand.
A. So, the nature of an event study is to test whether a stock responds to news; right? And normally what you want to do is you want to use a clean period, which isn't -- which does not have some kind of -- you know, I'm not even quite sure how to explain it.
What I did was the standard event study methodology. It is what it is.
Q. And is this like an outlier event? You're trying to eliminate like an outlier event?
Is that the idea?
A. Well, I don't want to use the term "outlier", but you --
Q. In other words --
A. You try to --
Q. -- an aberrational --
A. It's like any statistical test that you do; right?



Dr. Adam Werner
I want a control period and then I look at my sample period. I used the control period, so it doesn't -- whatever happens in the other period doesn't influence my control period.
Q. Okay. And your control period --
A. But it's like any scientific experiment.
MR. PARADISE: Off the record.
(Discussion off the record.)
Q. I just want to ask you, just the two terms you used there, I want to make sure that I understand what you mean by it.
So the "control period", for these purposes, means the period of November 14th, 2012 to November 13th, 2013; correct?
A. I --
MR. STRAUSS: I think it's November 14th.
MR. PARADISE: Right, I said



Dr. Adam Werner
November 14th, 2012 to November 13th, 2013.
A. I believe that is correct.
Q. And the sample -- and you also mentioned a sample period.
So --
A. Well --
Q. -- what period is that?
A. That was my misuse of the language.
Q. Okay.
A. That, I should have said the period in which I want a study how information impacts the stock price.
Q. And is that the test period, the full test period?
A. That is the full test period.
Q. Got it, okay.
MR. PARADISE: Take a break?
MR. STRAUSS: Yes.
MR. PARADISE: Do you want to break for lunch?
(Luncheon recess: 12:50 p.m.)



Dr. Adam Werner
AFTERNOON SESSION
(1:43 p.m.)

DR. ADAM WERNER,
resumed, having been previously duly sworn, was examined and testified as follows:

MR. PARADISE: Dr. Werner has indicated that he'd like to clarify, or attempt to clarify, a prior answer.
CONTINUED EXAMINATION
BY MR. PARADISE:
Q. Go ahead, please.
A. Yeah, I think I was just -- before the break, my blood sugar was crashing, I think I was fairly inarticulate with regards to how one conducts an event study.
So I just wanted to point to something like -- I mean, the methodology I use is very similar to that used in the -- this St. John Law Review article,

Dr. Adam Werner

by Ferrillo, Tabak, and Dunbar, that I cited in my report.

There are other examples that I can point to that mirror discussions of this type of methodology.

Q. And, just to be clear, the type of methodology you mean is the -- what you described as the use of a control period, as opposed to the --

A. Okay, can I have the article?

Q. Yeah, sure, I want to make sure I understand what you're clarifying, because I thought I understood your answer.

A. Oh.

Q. So you talked about a control period and then another period, which is the period that you're evaluating, which I guess here would be the class period. Is that --

A. Well, that would be the test period.

Q. Right.

A. I evaluate the test period --



Dr. Adam Werner

Q. Okay.

A. -- which includes the class period.

Q. Got it. Thank you.

I want to come back to your declaration and some of the other Cammer factors, because we spent a lot -- a bunch of time on factor five, which I want to come back to, as well, but I want to just get some of these other ones on the record, for a second, and make sure that I understand what's going on with these other exhibits, if you will.

So starting with -- Exhibit 3.

A. Is it Exhibit 3 to Exhibit 1?

Q. Yes.

If you could just explain what Exhibit 3 is showing or what conclusions you reached based on Exhibit 3 or --

A. It's just more support with regards to the efficiency of the market for Hi-Crush.



Dr. Adam Werner

Q. Does it apply to any one of the five Cammer factors?

A. Well, you have volume, which Cammer factor one I believe is average weekly volume. Bid/ask spread deals with -- that's a Krogman factor, I believe.

Q. Could you spell that?

A. Yeah, K-R-O-G-M-A-N.

Market capitalization, that goes to factor four as well as I believe that's another -- I should say Cammer factor four -- as well as a Krogman factor.

Q. Is Krogman a court decision or is that an academic person?

A. Oh, it's a court decision.

Here, I can --

Q. Look at -- if you would, look at the second page of Exhibit 3, on the back -- I don't know if it's double-sided -- yeah, it's double-sided -- the line that's dated October 31, 2012, there's a couple of places in there where



Dr. Adam Werner

you have no data, and I just want to make sure, is that an error, is that a mistake?

A. No, Bloomberg did not have data.

Q. Oh, couldn't you compute the -- for example, couldn't you compute the day's average bid/ask spread based on the information that you do have?

A. No. We get all the bid/ask spread data from Bloomberg.

Q. Okay. So when it says: No data, across October 31, in three places, that just meant that there's no data available from Bloomberg.

A. Correct.

Q. So, I'm sorry, look at the column that's headed: Percentage of outstanding shares sold short. And there's a formula there: C equals A divided by B.

So, that one, you could have just divided A by B; right?

A. I believe, technically, that

Dr. Adam Werner

is correct.

I -- yeah, we get those numbers from Bloomberg, as well. I mean -- yes, I --

Q. I just want to make --

A. -- could have calculated.

Q. Again, just for the purpose of making sure I understand why it said no data.

A. As I sit here now, it's going to be 1.25 percent.

Q. Exhibit 4 is just a straight -- is that just a straight computation that's made based upon data that you obtained from some other source or is that --

A. Correct.

Q. Okay. Let's look at Exhibit 5 for a second.

The number that you have for the line: Average traded volume per year, I went back with my trusty old HP 12C, and did some math here, and I believe that I found a mistake, and I



Dr. Adam Werner

just want to make sure you agree with me.

Do you have a calculator? I think we have --

A. I can't use that thing.

Q. Do you want to use this, (indicating)?

A. I can get my computer out and use it itself, that's --

Q. Sure.

MR. PARADISE: Off the record.

(Discussion off the record.)

Q. Just look at: Average traded volume per year, F equals E divided by D.

And, when I ran that calculation, I came up with a much different number. I came up with 36,674,570. So I'm wanting to just make sure, is that an error or is that -- am I doing something wrong?

A. Class period -- (pause) -- (using calculator) -- no, you -- that is an error.

Q. Does that -- just speed this



Dr. Adam Werner

along, I'll tell you that, rerunning the rest of the calculations, I came up with a turnover -- analyzed turnover, of 269 percent.

A. I believe -- that looks like it would be in the ballpark.

Q. Would that have any impact on your ultimate opinion in this case?

A. No. It's still part of the NYSE average, of 67 percent.

Q. I meant to ask you earlier, have you -- in reviewing this, have you reviewed the declaration, Exhibit 1, since you've submitted it?

Like, for example, did you review it in preparing for today?

A. "This" (indicating) being Exhibit 1?

Q. Yes.

A. I believe so.

Q. Did you discover any errors or mistakes that needed to be corrected?

A. Obviously not.

Q. I just wanted to get an



Dr. Adam Werner

understanding as to whether there are any others that I might not have seen.

Okay. Turning to page 2 of your Exhibit 1, page 2 of Exhibit 1, where you list the various bases for your finding of market efficiency, I want to talk for a moment about the letter E, which is the strong correlation between Hi-Crush's common unit price and the movement in the market and the industry indices.

You chose -- for the industry indice that you compared Hi-Crush to, you chose the Dow Jones -- if I'm understanding correctly, you chose the Dow Jones Mining Industry --

A. I believe --

Q. -- Index?

A. -- that is correct.

Q. Why did you choose the Mining Industry Index?

A. I believe that was -- one of the reasons was Hi-Crush was included in it.

Dr. Adam Werner

I should say that, in doing my analysis, I excluded Hi-Crush from the index.

Q. Do you know what the date of the -- withdrawn.

The companies that are included in indexes change over time, so I'm trying to get an understanding as to what date, you know, of the index you looked at or examined, because the indexes that I pulled up did not indicate that Hi-Crush is part of the index. And we can show it to you, but I don't know if this is the one that you used, and you might have used something different, I don't know.

MR. PARADISE: Let's mark this as Exhibit 3.

(Whereupon Deposition Exhibit 3, Document, DJUSMG Index, as of January 18th, 2013, was marked for identification, as of this date.)

A. Yeah -- no, this isn't.

Q. This is -- I'm going to try



Dr. Adam Werner

to find a date for you here, this is -- this is as of January 18th, 2013, so it's during your test period.

A. Right, no, this is not the index we used.

It was much larger, it was a more general -- I'll have to check with my analyst, but I know there was something like 200 components in the index --

Q. Okay.

A. -- we used.

Q. I appreciate it.

MR. PARADISE: Mark, if you could, I don't know if that's been -- I don't think that's been produced. If so --

MR. STRAUSS: We'll identify it.

MR. PARADISE: I appreciate that.

Q. But, as best -- as you sit here today, the best of your recollection, Hi-Crush was one of the



Dr. Adam Werner

companies within this index.

A. Correct.

Q. Okay.

A. Correct.

Q. You mentioned that you excluded Hi-Crush from the index that you used, but did you exclude any other companies or is it just --

A. Just Hi-Crush.

MR. PARADISE: So we'll need -- just for the record, we'll need to see what the index was, I guess, and then we can make the assumption that Hi-Crush was eliminated.

MR. STRAUSS: Sure.

Q. And then I guess the weighting, was this a weighted index?

A. Equally weighted.

Q. Oh, it was equally weighted, so it's not like --

A. Like I said, it was like 200 companies --

Q. Right, right, right. I got



Dr. Adam Werner

you.

A. It was not like a small sample.

Q. Okay.

A. In fact, I mean, I can e-mail someone in my office, if you want.

Q. Oh, that would be great, if you could. You can do that on a break, too, if you want.

I'm just trying to find in your report where you discuss this index, because I thought --

MR. KEABLE: Paragraph 44, page 17.

Q. Okay, just paragraph 44, you call it the Dow Jones U.S. Mining Index, which is what I thought this was, but perhaps there's another version of it, or something, because this is clearly a weighted index.

A. Right.

Q. All right, we'll come back to that. If you're able to get it, we'll come back to that.

Dr. Adam Werner

Maybe this might be it. Let's see if this is it.

MR. PARADISE: Will you please mark this as Exhibit 4.

(Whereupon Deposition Exhibit 4, Document, Dow Jones U.S. Mining Index, with a list of the companies, was marked for identification, as of this date.)

Q. So the court reporter has handed you what's been marked as Exhibit 4.

Is this the index?

A. I believe so.

Q. So, obviously, this is -- Exhibit 4 is a list of the companies.

And I take it, then, that you have some other information that shows you the performance of these stocks? In other words, that you're comparing the performance of these stock to Hi-Crush stock.

A. I believe that's what a regression analysis does.



Dr. Adam Werner

Q. Right. So, what I'm saying is, do you have something that gave you the performance of this -- of these -- of this basket of companies over that period of time?

A. I believe so.

Q. I mean, is that something that you had to create or is that something that you were able to go to Bloomberg or to some other source?

A. To the extent that I could use Bloomberg but then I had to remove Hi-Crush.

Q. What I mean, though, is does Bloomberg like report --

A. Yes.

Q. -- as in the aggregate the performance of that basket of stocks or did you have to go and manually do that to come up with your measurement?

A. I believe Bloomberg includes them.

Q. No, it's not a trick question.



Dr. Adam Werner

A. I know.

Q. What I'm trying to understand is, because Exhibit 3, you know, clearly, you can see that this is some sort of a basket that was created by Dow Jones, and its easy to see that they must have some -- the stock price movement of these, of this index. I wasn't sure if there was a similar thing for this longer list.

A. Oh, yeah.

Q. Okay.

A. Yes, I should say.

Q. I'm just going to keep these here. If you need to refer back, here they are, (indicating).

A. Okay.

Q. In letter F, the speed -- you say: The speed at which Hi-Crush's common unit price reacted to news during the test period.

Is that -- when you say "news" there, are you referring to Hi-Crush-specific news or any news?



Dr. Adam Werner

A. I believe, in this instance, I'm talking about Hi-Crush-specific news.

Q. And then the same question for G. When you refer to "news days", as compared to "non-news days", is that news days reflecting Hi-Crush-specific news?

A. Presumably.

I mean, it's possible that there's some market news that included Hi-Crush -- (gesturing).

Q. Turning to paragraph 9, did you write this paragraph?

A. I believe this was drafted for me.

Q. By whom?

A. Haley --

Q. Somebody --

A. -- Johnson.

Q. Somebody at the firm?

A. Yes.

Q. Okay. The second -- I'm sorry, the last sentence of paragraph 9 says, and I'll read it into the record: This case arises in response to

Dr. Adam Werner

information Hi-Crush failed to publicly disclose during the third quarter of 2012.

Just to make sure we're complete, what information are you referring to there, that Hi-Crush failed to publicly disclose?

A. If you give me the Consolidated Complaint, I'll be happy to tell you.

Q. Is it fair to say it's based npon information that you took out of the Amended Consolidated Complaint?

A. I believe so.

MR. PARADISE: Let's mark this as Exhibit 5.

(Whereupon Deposition Exhibit 5, Amended consolidated class action complaint for violations of the federal Securities Laws, was marked for identification, as of this date.)

Q. To speed this along, you reference -- in your footnote, you give a



Dr. Adam Werner

citation to page 1 to 5 of the complaint.

A. (Pause.)

Okay.

Q. Can you tell me what information you're referring to?

A. Oh, the termination of the Baker Hughes contract.

Q. Which paragraph of the Amended Consolidated Complaint are you looking at?

A. Well, I think it's discussed throughout -- (pause) -- paragraph 7, paragraph 8, paragraph 10, paragraph 9 --

Q. I'm sorry, just slow down for a second.

7, 8, 9, and 10.

So is it your testimony that all of the information that's referred to in those paragraphs, of the Amended Complaint, should have been publicly disclosed during the third quarter of 2012?

MR. STRAUSS: Objection.

A. I don't know whether it



Dr. Adam Werner

should or should not have been publicly disclosed.

Q. So you're essentially accepting the allegations as set forth in the Amended Complaint for purposes of your analysis without making any independent determination as to whether those -- that information should or should not have been disclosed; is that fair to say?

MR. STRAUSS: Objection.

A. I don't think I've --

MR. STRAUSS: So you're asking him whether he's taking the allegations as an assumption?

MR. PARADISE: Yes.

MR. STRAUSS: Are you taking the allegations as an assumption?

THE WITNESS: I don't know.

A. I'm not sure if -- I guess so -- (gesturing) -- I mean, it doesn't affect my -- it's an exclusion, so it doesn't affect my analysis, either way.

Q. What do you mean, by "it's an



Dr. Adam Werner

exclusion"?

A. They failed to --

Q. Oh.

A. -- make the announcement.

Q. You mean an "omission"?

A. An omission -- exclusion, omission.

Q. We looked at paragraph 12 a little bit earlier, and I showed you the press release, but we never looked at them in conjunction with each other. So I'm going to ask you to take a look at the press release for a moment.

In paragraph 12, as you testified to earlier, and as it's reflected in your declaration, you say that: Hi-Crush disclosed the termination of the supply agreement with Baker Hughes, and then you go on from there to say that: Hi-Crush said it had -- quote -- engaged in discussions with Baker Hughes, but the parties were unable to reach a mutually-satisfactory resolution.

Dr. Adam Werner

Are you aware of there being any other information disclosed in the November 13th press release that's not reflected in paragraph 12 of your declaration?

THE WITNESS: Could you repeat the question, please?

(The record was read.)

MR. STRAUSS: Objection.

A. I mean, was there additional information released on that day? Yeah -- they -- yes.

Q. Did you do anything or make any attempt to quantify the impact, if any, of the disclosure of the additional news on the stock price of Hi-Crush on November 13th, 2012?

A. "Quantify"? I don't believe so.

Q. Now, I had asked you earlier if you had --

A. But --

Q. I'm sorry, go ahead.

A. That having been said, there



Dr. Adam Werner

was multiple news reports the next day about people talking about the stock tanking because of their failure to -- or, their agreement with Baker Hughes having fallen apart, and there wasn't very much other talk or discussion of the financial results. That was the main thing that people focused on.

So to the extent that there was any effect, I'm not sure -- it might very well be negligible.

Q. Now, you had testified earlier, you have not been asked to express an opinion or do any work to enable you to express an opinion as to the loss that was suffered as a result of the alleged fraud in this case; is that correct?

MR. STRAUSS: Objection. I'm sorry, could you repeat the question?

(The record was read.)

MR. STRAUSS: What's your question? That's not a question,



Dr. Adam Werner

that's just a --

Q. Is that -- is that correct?

A. Um -- I'm not sure.

THE WITNESS: Can you -- I'm sorry.

Q. Let me -- this is -- what I'm getting to here is damages.

You know, you -- as we went through your CV earlier, there were a number of cases where you've testified about damages and a number of cases where you've testified about market efficieucy and, of course, there are other cases. And I had asked you earlier whether or not you have been asked to do any work in connection with damages in this case, and I believe your answer was no.

So I'm just trying to make sure that I'm right about that.

A. I have not been asked to opine on damages in this case.

Q. But you have done on other cases and you feel that you are capable of doing so, if you were asked; correct?



Dr. Adam Werner

A. Correct.

Q. If you were asked to express an opinion about damages, would you feel it's necessary to isolate the damage that's caused by the alleged omission from any other -- I'm sorry, withdrawn.

If you were asked to express an opinion about damages in this case, would you feel it necessary to separate the loss caused by the alleged omission, which was revealed on November 13th, from other information that was revealed to the market on November 13th?

MR. STRAUSS: Objection.

A. I believe that's correct, but that can go both ways. It could be positive or negative.

Like if people thought that the earnings were good, or if there was a pleasant surprise, but for the disclosure, you know, it's possible damages would have been higher, if I adjust for the fact that there is also earnings --

Dr. Adam Werner

Q. Yeah, my question wasn't meant to suggest higher or lower, it was just that you would try to isolate the harm caused by the alleged -- by the revelation of the alleged truth.

A. I believe that's correct.

Q. Okay. Now, let's go back to the -- now I want to come back to the fifth Cammer factor exhibit that we have been going through this morning.

A. Okay.

Q. So starting -- I think we covered -- we covered 7 and 8, so I wanted to start for a second with 9 and 10, to make sure I understand them.

So looking at Exhibit 9, which is the analysis of the speed -- sorry, let me start with 14.

A. Exhibit 14?

Q. Yes, please.

So -- and part of the reason for this question is just to make sure that this is accurate, because we've seen a couple of -- and, by the way, nobody's



Dr. Adam Werner

perfect, but we've seen a couple of mistakes, and I just want to make sure that this is accurate.

And the part that I'm asking about is that there is a typo of September, but I want to make sure that the data you considered, in Exhibit 14, is for that time period that's revealed there, which is September 19th, 2012 to November 12th, 2012.

Is that right?

A. I read that as correct.

Q. And that is the class period as we've --

A. As we've --

Q. -- been discussing today.

A. -- defined it, yes.

Q. So why in this exhibit (indicating) did you only look at the class period and not your test period?

A. Because, when I was looking at my test period, I was -- that only dealt with information.

Q. By "information", you mean



Dr. Adam Werner

market information, like news?

A. Correct.

Q. And you had mentioned earlier that the September 19 to November 12 period, you felt if you had only used that for your event study for Appendix A, that you would have been criticized -- potentially criticized by Defendants' experts.

Why do you not have the same concern about Exhibit 14?

And, again, I'm not that familiar with this stuff, so I'm not asking as a trick, I'm just trying to really understand the distinction.

A. Well, this is the class period, it's the period I looked at.

The problem is, when you're doing an event study, you need events to occur. There was a lack of events during the class period. As a result, I -- again, I'd be happy to do an event study just on the class period, but your -- someone might accuse me of cherry picking



Dr. Adam Werner

my results.

Q. And the number of observations that's listed as 36, that corresponds I believe to the -- is that the number of trading days within that period of September 19 through November 12, 2012?

A. I believe it's either 36 or 37.

Q. And, as far as you're concerned -- I'm sorry, go ahead.

A. In order to calculate autocorrelation, you need two days of prices.

Q. So anything greater than two is sufficient for this --

A. No, that's not what I'm saying.

Q. Okay, I'm sorry. Go ahead.

A. I'm just -- it's strictly an accounting thing --

Q. But --

A. -- I don't think we should get hung up on.

Dr. Adam Werner

Q. No, but 36 is a sufficient number of days to use to draw a conclusion from an autocorrelation analysis like this, (indicating)?

A. I don't know if it's sufficient or not.

Q. Well, did you feel it was sufficient in this instance?

A. I feel that -- I felt that I looked at whether or not there was autocorrelation during the class period. This suggests -- or, this shows that there was no autocorrelation during the class period.

I should also say that the absence or inclusion of autocorrelation does not necessarily -- if there is autocorrelation in a stock price, it doesn't necessarily mean that the stock is inefficient.

Q. But here, just to be clear, it was -- you did not find any auto-correlation; correct?

A. During the class period,



Dr. Adam Werner

correct.

Q. Does the fact that the adjusted R-squared is negative suggest that the results are not conclusive?

A. I'm sorry, I don't understand the question.

Q. Explain, if you would, what "adjusted R-squared" means.

A. It's the R-squared adjusted for the number of variables.

Q. And here, am I right, that it's a negative -- that resulted in a negative number, negative 0 -- negative 0.025?

A. That is correct.

Q. Does that indicate anything to you about the meaningfulness of this test, (indicating)?

A. Define "meaningfulness".

Q. Its relevance to determine whether the market was efficient.

A. I'm not sure I understand the question.

Q. Okay. The bottom line is, as



Dr. Adam Werner

far as you're concerned, this (indicating) test that you conducted, that's reflected in Exhibit 14, supports your opinion that the market was efficient during the class period; correct?

A. It informs upon my opinion.

Q. Is there a difference between "informs upon" and "supports", in your mind?

A. Possibly.

Q. What would that difference be?

A. Well, again, as I said, the presence or non-presence of auto-correlation of, many people have argued, is a test for market efficiency, has been shown that even stocks that are auto-correlated are efficient doesn't necessarily render a stock inefficient, if there is autocorrelation present.

Q. Turn to page -- please turn to page 29 of Exhibit 1, paragraph 73.

A. Paragraph 73, okay.



Dr. Adam Werner

Q. Just read the last sentence, and see if that changes your answer to my question, whether it supports your opinion.

A. (Pause.)

I don't believe I said it didn't support my opinion.

Q. Well, you said it informs your opinion, I asked you -- I don't want to, you know, duel with you here, that's not the intention.

A. Right.

Q. I really thought that you answered that to my question, that's why I'm wondering why you didn't say yes, because right here you say that Exhibit 14 supports your opinion, and you said: It informs my opinion, but I don't know if it supports my opinion, so I'm just trying to understand, does this support your opinion or not?

A. You are correct --

Q. Okay.

A. -- it supports my opinion.

Dr. Adam Werner
Q. Thank you.
All right. Now, let's go back to Exhibit 9 of Exhibit 1.
Here, you use the entire test period; is that correct?
A. That is correct.
Q. And you -- if I'm reading this correctly, you found seven days in the test period with statistically-significant returns of the 99 percent significance level on event day, which you described or define as (day T); is that correct?
A. That is correct.
Q. If you remember -- and if you don't remember please feel free to refer to the rest of your report, or your declaration, did any of those seven days occur during the class period, because that would be September 19th through November 12th, 2012.
A. I don't believe so.
Q. And I take it, then, that Number 6 -- you know, the number 6, which



Dr. Adam Werner
is essentially T plus 1, that none of those days occurred within the class period, by definition; correct?
A. I believe that is correct.
Q. So is it fair to say that, effectively, the class period is not included within the analysis that's reflected in Exhibit 9.
A. I --
MR. STRAUSS: Objection.
A. I don't believe that's correct.
Q. Let me ask you a different way.
Is it -- it's fair to say that there were no days that reflect the speed or reaction to the news at the -- you know, the 99 percent significance level within the class period?
THE WITNESS: Could you read back the question, please?
(The record was read.)
A. I'm not trying to be obtuse here, I don't understand the question.



Dr. Adam Werner
Q. That's okay.
MR. PARADISE: Take a short break.
(Recess taken: 2:20 p.m. - 2:23 p.m.)
BY MR. PARADISE:
Q. Let's look at Exhibit 10.
A. Okay.
Q. Again, this is the -- this test, that's reflected in Exhibit 10 to your declaration, is for the entire test period; correct?
A. I believe that is correct.
Q. And here you have, if I'm reading it correctly, there are four days where -- wait, I'm sorry, let me make sure I'm reading this correctly.
Okay. There are four days during the test period where there were significant -- what you call significant news days; is that right?
Or maybe I'm misreading this or misunderstanding it.
A. Um -- I don't know if I said



Dr. Adam Werner
there's significant Hi-Crush price movement days.
Q. Okay, so "significant" there refers to price movement, not news?
A. At one point in the exhibit, "significant" deals with the news, or refers to the news.
Q. Okay, but I'm looking at under the column where it says: Number of days, and then, underneath: Number of days, it says: Significant and not significant.
A. That's statistically-significant at a 95 percent confidence number.
Q. Price movement.
A. Correct.
Q. Okay, in other words, that's not news, that's price movement.
And then there were 25 days where there was not a significant price movement within the 95 percent confidence level.
A. When the press release was

Dr. Adam Werner

reported.

Q. Do you remember how many of these days where there was a press release issued occurred during the class period?

A. I believe it's three, but I don't -- I have to check.

Let me go to the appendix here. (Pause.)

So, one --

Q. Could you just identify the --

A. Oh, I'm looking at Appendix A.

Q. Right, and the date.

So the first one is October 11, am I readiug that right?

A. I don't -- as I sit here, I don't recall whether or not Hi-Crush released a press release on 9-21-2012 about presenting at the Energy Prospectus Group but, yes, certainly October 11, 2012 would be one of those days.

Q. Okay, I'm sorry, keep going.



Dr. Adam Werner

A. I believe October 19th, 2012, October 22nd, 2012, and here we need to delineate between "new news" and "news".

On 11-1-2012, I don't think they had any -- yeah, that was not a Hi-Crush release. 11-6-2012, I believe there was a press release. And I believe that's it.

Q. The one that you referred to, where you have to distinguish between "news" and "new news", you said that was the -- did you say that was the October 22 -- is that the news that came out on October 22?

A. Correct.

Q. How do you -- in your parlance, how do you distinguish between "news" and "new news"?

A. Well, on the 19th Hi-Crush filed their Form 8-K. It was reported ou the U.S. Fed news service on 10-20-2012, it would be respect--

Q. Understood, okay.

And you mentioned -- you



Dr. Adam Werner

included November 6th, as well; right?

A. I believe so.

Q. Turning to Exhibit 11, which I think is another analysis or test of the response of the price to news, if I'm -- am I right about that?

A. I believe that is correct.

Q. So -- and the number of observations I see is 29, which I think corresponds to the sum of the first line of Exhibit 10, four plus 25 is 29, so is this -- would it be the same answers on Exhibit 11, that either three or four of the days occurred during the class period?

A. Of the press release days?

Q. Yes.

A. I believe that is correct.

THE WITNESS: Can we go off the record for a second? I'm just going to go get some more water.

MR. PARADISE: Oh, go ahead.

(Pause in proceedings.)

A. Thank you.



Dr. Adam Werner

Q. On those days within the class period, when there was news that you've just gone through with us, did you observe any statistically-significant price movements?

A. "News" as I defined it, in this report? I don't believe so.

Q. Turning back -- I'm sorry, but going back for one second to Exhibit 9.

A. Exhibit 9.

Q. Yes, the oue with the speed reaction to the news.

As you testified, none of the days -- none of the seven days reported in Exhibit 9 occurred during the class period; is that right?

A. I believe that is correct.

Q. How, then, does Exhibit 9 inform your opinion as to the efficiency of the market for Hi-Crush stock units during the class period?

A. It informs it because it's -- any analysis I did related to news I did

Dr. Adam Werner

over this longer period, because there's a lack of news during the class period.

Q. Does that -- in your expert opinion, does that allow you to draw any conclusion as to how the price of the stock would react during the class period to the issuance of news?

A. I believe so.

I believe there was a lack of issuance of news during the class period, and there were no price reductions.

Q. Oh, you're doing the inverse -- is that the inverse analysis, rather than measuring how the price moves in response to news, you're looking at how the price reacts to the absence of news, is that what you're saying?

A. I believe that is correct.

Q. Take a look at Exhibit 12, please.

A. Okay.

Q. For this -- I don't know if it's a test or an analysis, is it one or the other?



Dr. Adam Werner

What would you call this?

A. Analysis.

Q. For the purposes of this analysis, I just want to confirm that you used the entire test period; is that right?

A. I believe that is correct.

Q. Does this enable you to draw -- this analysis, that's reflected in Exhibit 12, does it enable you to draw any conclusions as to the relationship between returns and volume during the class period, just the class period?

A. I believe so.

Q. Can you explain?

A. Well, there were no -- if I remember correctly, there were no volume spikes during the class period, and there was a lack of information during the class period, so that would agree with these (indicating) results.

Q. And Exhibit 13, which I think, if I'm understanding you correctly, is -- well, what is the



Dr. Adam Werner

difference between the analysis that's in Exhibit 12 and the analysis that's in Exhibit 13?

A. In 12, the dependent variable is stock returns. In the -- or, I should say, the absolute value of stock returns. In Exhibit 13, it's excess -- absolute value of the excess stock returns.

Q. And, by "stock returns", you're referring to the returns for Hi-Crush?

A. Correct.

Q. And, for my edification, what is meant by "returns", as opposed to "excess returns"?

A. Excess or abnormal returns, it's just I use my regression analysis in the same way -- I guess instead of "excess" you could say "abnormal returns".

Q. And abnormal when measured against what?

A. Against my regression analysis.



Dr. Adam Werner

Q. Coming back to the Dow Jones Index, which was Exhibit 4, I believe, did you consider -- here -- as you yourself said earlier, this is quite a broad grouping of companies, that is, the companies that are listed in Exhibit 4.

And they run the gamut, as best I can tell, from mineral mining companies, gold -- you know, gold mining companies, nickel, copper, silica, et cetera.

Did you consider creating your own index that would more accurately replicate a company that competes or is in the same business as Hi-Crush, or is that not necessary to do?

A. May I take exception with your term "accurate" --

Q. Go ahead.

A. -- or "more accurate".

Q. Yeah.

A. I considered other indices and possibly creating an index, a custom index.

Dr. Adam Werner

Q. And why did you not create a custom index?

A. Well, I find that, oftentimes, when you create a custom index, defense expert will criticize one for being subjective in their choice of companies.

Q. Under-inclusive, in other words?

A. Under-inclusive, right.

Q. Or, I guess over-.

A. Or over-.

That having been said, if you've looked at -- I did look at other indices, it didn't change my results.

Q. Okay, that's a good answer. But did you actually go about creating your own -- you know, your own index?

A. I don't believe so.

Q. Here's where we're going to go back in time to my class in undergraduate. I just want to get an understanding of some of the terms that you used in your test.



Dr. Adam Werner

So going back to Exhibit 7.

A. Okay.

Q. Can you just explain the different abbreviated terms that are used in the chart.

So at the bottom where you have on the top co-- I think that means coefficient, standard error, t, P greater than absolute value of t.

MR. PARADISE: Absolute value of t is (indicating) two lines with a t in the middle.

Q. And then we already discussed 95 percent confidence interval, but could you just explain the first four, what is meant by each of those?

A. The coefficient, coefficient is the regression coefficient. Standard error is the standard error of the regression, or for that observ-- or for that variable. T statistic is just the coefficient divided by the standard error. And the P value is -- gives us basically the same thing as the 95



Dr. Adam Werner

percent conf-- it tells us the level of significance.

Q. Are all of the numbers -- under the Coefficient, are all of the numbers that are in that chart, under coefficient, and that means standard error -- Std.Err?

A. Correct.

Q. Are all these numbers the product of your regression analysis?

A. I believe that's correct.

Q. And what are the inputs that led to the numbers that appear under: Coefficient?

What data do you input to come up with the coefficient?

A. Hi-Crush's stock price, the S&P 500 returns -- or, I should say -- yeah, S&P 500 returns, and Dow Jones returns.

And then I ran the second regression, to control for the fact that there's -- the S&P 500 Mining Index is highly correlated with the market index,



Dr. Adam Werner

so, to exclude that combined effect, I included an error term as part of my regression from a different regression I ran.

Q. So, that, in other words, the error term essentially backs out the -- I don't know if that's the right term, but backs out the S&P 500 return?

A. It backs out the impact of the S&P 500 on the index -- the company index, the industry index.

Q. And just turning to the table or chart that appears above that one, the "SS", capital "SS", does that mean statistically-significant?

A. No, sum of squares.

Q. What does "DF" mean?

A. Degrees of freedom.

Q. And "MS"?

A. You know, as the -- as I sit here, I don't remember.

Q. But these are all statistical terms?

A. Yeah.

Dr. Adam Werner
Q. These are all -- they're typical --
A. Yeah.
Q. The number of observations is 252.
Is that -- to the best of your recollection, does that correspond to the number of trading days in this period?
A. I believe that is correct.
Q. What does: Stata 9 mean, which appears nnder Footnote 2?
A. It's a computer program.
Q. Turn to page -- I'm sorry -- turn to paragraph 10 of Exhibit 1.
If you look at the next page, the spillover of the paragraph, where it continues onto page 5?
A. Okay.
Q. You state here that: Sales to Baker Hughes represented 18.2 percent of Hi-Crush's expected contract revenue in 2012.
Do yon see that?



Dr. Adam Werner
A. I do.
Q. And according to your report, or declaration, you took that from Hi-Crush's Form S-1 registration statement.
A. Right.
Q. In paragraph 12, further down the page, which we've covered a few times today, you report, or state, that the units -- the value of the units dropped, from looking at the top of page 6, over 26 percent when the -- what you've called "corrective disclosure", was made on November 13th.
Am I reading that correctly?
A. I believe that's correct.
Q. If the value of the Baker Hughes contract, or if the -- I should say the percentage of the revenue that was supposed to be provided by the Baker Hughes contract, was 18 percent -- looks like you're ready for this one --
A. Well, I didn't think about it beforehand, but I see where you're going.



Dr. Adam Werner
Q. Let me ask -- I'm not sure I know where I'm going, but let me get there.
But you see that the percentage of revenue reported by Hi-Crush was -- you know, from the Baker Hughes contract, was 18 percent, but the stock price went down by 26 percent.
Does that suggest that the market was inefficient?
A. No.
Q. Why not?
A. "Why not?"
Q. Yeah.
A. It doesn't -- I mean, if you can give me an example of why it would be inefficient, by all means, go ahead, but --
Q. Well, if the market -- assuming the market was efficient, and was taking into account the value of the Baker Hughes contract, and being about 18 percent, and then the market goes down by 26 percent --



Dr. Adam Werner
A. 18 percent of revenue.
Q. Right -- seems like the market overreacted to the news -- well, and by where I'm sitting.
I mean, I --
A. Your drawing a correlation between the 18 percent and the 26.2 percent is not, necessarily, a linear correlation.
Q. And what do you mean by that?
A. Well, I mean revenue may have changed by 18-- or, what they, people, believe was 18.2 percent and, again, this was 18.2 percent as of July of 2012, whereas now we're in --
Q. November.
A. -- November 2012.
It's not clear -- there's jnst no clear delineation between market value and revenue. I mean, there's not a one-- there's not, necessarily, a one-for-one relationship, I guess is what I'm saying. There are other factors that goes into a firm's market value beyond

Dr. Adam Werner

revenue.

MR. PARADISE: Off the record.

(Discussion off the record.)

MR. PARADISE: Back on the record.

Q. In Appendix A, if you look at the news from November 13th -- November 13th, 2012, that is, you see the -- towards the bottom of 5 or 6 up from the bottom for that day, Hi-Crush plunges 35 percent below IPO price, and then it says U.S. Silica falls 11 percent.

Do you see that?

A. Yes.

Q. Do you know what U.S. Silica -- what they do, what business they're in?

A. I assume that they are a competitor of Hi-Crush's.

Q. Do you have any -- did you do anything to determine what may have caused U.S. Silica's stock price to go down by 11 percent on that same day?



Dr. Adam Werner

A. I believe so.

Q. What did you conclude?

A. I concluded that there was some correlation between the two price movements, which is why U.S. Silica is also in my Dow Jones U.S. Mining Index, which is in Exhibit 4.

Q. Was there -- was that -- did you conclude that that was an industry effect or did something happen that day, was there some news that affected U.S. Silica, that caused its price to go down that same day?

A. As I sit here, I don't know, but to the extent it was an industrywide effect, it's reflected in my regression analysis by controlling for an industry index, or using an industry index.

Q. With the errors or without the errors, in either case; right?

A. Errors?

Q. What you called the "error" -- what you called the "error", "error" term, on Dow Jones U.S. Mining



Dr. Adam Werner

Index returns?

A. Ah, ah.

Q. You know, I meant with the adjusted --

A. With the adjusted --

Q. -- for or without the S&P movement.

Did you look at any other specific competitors of Hi-Crush and the movement in their stock price on November 13, 2012 in connection with the work that you did?

THE WITNESS: Could you re-read the question?

Q. That was a bad question, let me try again.

Did you look specifically at the stock price of any of Hi-Crush's other competitors, on November 13th, to see whether there was any movements in those stock prices that correlated to the movement you saw in Hi-Crush and Silica's -- U.S. Silica's?

A. I believe so, by looking at



Dr. Adam Werner

the movement of the industry index I used.

If you're asking me did I specifically look at the stock performance of individual companies?

Q. That's what I meant, yes.

A. Or individual competitors? I don't believe so.

Q. I assume you feel that wasn't necessary for your work?

A. Well, to the extent that there was any industry effect, I adjusted for that.

Q. Through the index of the roughly -- I don't know if we talked about how many companies, but I think the exhibit said roughly 200 companies.

A. Correct, including Hi-Crush and U.S. Silica, which was mentioned in Appendix A.

Actually, can we take a short break?

Q. Yes.

A. Thank you.

Dr. Adam Werner
Q. Go ahead.
(Recess taken: 2:51 p.m. - 3:23 p.m.)
MR. PARADISE: Back on the record.
BY MR. PARADISE:
Q. You had said earlier that you were going to send an e-mail to see if you could get a copy of your --
A. Oh, I completely forgot.
Q. Okay.
A. But now remind me what I was supposed to get a copy of?
Q. The index that you used. You thought that might be what I handed to you as Exhibit 4.
A. Oh, it is.
Q. A hundred percent?
A. 99.99 percent.
Q. Okay.
A. I mean, that was definitely the index I saw.
Q. But I think, if I'm not mistaken, that you also -- there was also



Dr. Adam Werner
a part of it, maybe something additional to what is on that list, that showed the movement of those -- the price movement of those 200 --
A. That --
Q. -- companies?
A. That should have been produced.
Q. We haven't --
A. Not -- yeah, didn't you get all the Bloomberg data?
MS. BRANDON: We have the separate Bloomberg -- no, we don't have all of that.
THE WITNESS: You didn't get like the returns on -- I thougbt that -- okay.
MS. BRANDON: No.
THE WITNESS: I was under the impression that you had already received that.
(Discussion off the record.)
MR. PARADISE: All right, back on.



Dr. Adam Werner
BY MR. PARADISE:
Q. There is a number of court filings that you describe as "court filings" listed in Exhibit 2 that you relied upon, and some of these are reported decisions.
How did you choose which reported decisions to rely upon?
A. Well, some of them are standard, like Cammer and Krogman, Basic, I believe, was it --
Q. Mm-hmm.
A. -- was in there. Hold on, let me --
Q. It was Exhibit 2.
A. Okay. (Pause.)
Yeah. So the ones I'm familiar with, I just -- in general, is Basic -v- Levinson --
THE WITNESS: It's under: Court filings, on Exhibit 2, you'll find it, they're all there.
A. -- Cammer versus Bloom, Cheney versus CyberGuard, Krogman versus



Dr. Adam Werner
Sterritt.
The other ones were cases like I learned about from discussions with other ecouomists.
Q. And these are cases that you relied upon for what purpose? The other ones that you mentioned, not the standard ones.
A. They support the analysis that I used. They were cases in which the analysis that I've used have been found to be sufficient by the court to establish market efficiency. And I should mention that it -- the analysis in these cases are both by plaintiff and defendant.
So I believe in the Polymedica Corporation was a case that Fred Dunbar did in which he did the same type of analysis that I did, in arguing -- I mean, I don't know what he -- right, he was arguing against market efficiency, but he was using the same analysis.

Dr. Adam Werner

Q. And in that case, he, Mr. Dunbar, found that -- or, Dr. Dunbar found that the market was inefficient?

A. I don't recall, as I sit here.

Q. Did you consider -- are you familiar with a case, at the United States Supreme Court from last year, called Comcast?

A. I believe I'm familiar with it.

I've certainly heard of it, I don't know why.

Q. It was a ruling involving a class cert-- you know, it went to class certification. It was an antitrust case --

A. I was going to say, it was an antitrust case, yeah, I'm definitely -- I'm familiar with it.

Q. You didn't consider it in connection with the work you did here; is that right?

A. No.



Dr. Adam Werner

Q. Are you familiar with a case out of your neighborhood, Northern District of California, called Diamond Foods?

A. Again, I've heard of it, but I don't....

Q. You didn't consider it in connection with the work that you did here.

A. I don't believe so.

Q. Okay. I want to turn now to paragraph 77 of your declaration, where you discuss -- I think the pronunciation is, "arbitrageurs"?

A. Right.

Q. A-R-B-I-T-R-A-G-E-U-R-S.

A. And that is -- I should say that that is a term of art and not a term -- not a technical economic definition of what an arbitrageur should be.

MR. STRAUSS: Which paragraph?

MR. PARADISE: Paragraph 77.



Dr. Adam Werner

THE WITNESS: Paragraph 77.

Q. In your own words, can you explain what it is that arbitrageurs do and -- well, leave it at that.

A. Okay. Theoretically, an arbitrageur, or someone who engages in arbitrage, is supposed to be able to earn a profit without enduring any risk.

So people will talk about an arbitrage opportunity. Like if I know --

(Discussion off the record.)

Q. You had said that they should be -- or, they try to earn a profit without incurring any risk.

A. That's, theoretically, what someone engaging in arbitrage should be doing, but that's not what people who're called "arbitrageurs" are actually performing.

I mean, they do incur risk in trying to make a profit.

Q. So --

A. But --

Q. Go ahead, sorry.



Dr. Adam Werner

A. So, again, that's more a term of art as opposed to -- or, an industry -- a financial industry term, as opposed to an economic definition of an "arbitrageur".

Q. And, for purposes of your opinion, and the way you used the term, I take it you're referring to the second (indicating) category, rather than the first, meaning the ones that do actually incur risk?

A. That is correct.

Q. -- profit.

How, in your opinion, do arbitrageurs, and the activities in which they engage, contribute or fail to contribute to market efficiency?

A. Well --

THE WITNESS: I'm sorry, could you read the question back, please?

(The record was read.)

A. To the extent that there are -- there might be pricing

discrepancies in a security, or that the arbitrageurs believe the securities are mispriced, they can -- they will try to -- they will attempt to exploit that mispricing such as, you know, if they believe the stock is too high, the value of the stock is too high, and again, that's their belief, it's not a statement of fact, they will oftentimes sell those shares in an attempt to drive the price down to what they believe the true value of the company is.

So to the extent that these people are more informed than other individuals -- and, again, I put "informed" in quotation marks -- they will attempt to exploit what they believe are mispricings in equities, or other securities.

That's my Corporate Finance 101 description.

Q. Is it fair to say, in your opinion, that arbitrageurs ferret out or do more work to obtain -- and information





that research companies -- and obtain information that enables them to engage in the activity that you just described?

MR. STRAUSS: Objection.

A. Is it fair? Define "fair".

Q. Well, do you agree with that statement?

A. I don't know if I formed an opinion, one way or the other.

Q. And, again, if you don't have an opinion, please just say so, but you described, I thought very ably, the activities that arbitrageurs supposedly engage in to exploit mispricing of securities, and you yourself said --

A. And they --

Q. I'm sorry, I didn't mean to interrupt.

A. They do engage in these activities.

It's a question of whether or not they're more informed.

Q. No, that's what I was going to get to, because you had said to the





extent that they are more informed, which I took to mean that you don't, necessarily, believe that they always are more informed; is that right?

A. I believe that is accurate.

Q. But they're -- to the extent that they are successful and good arbitrageurs and are able to be more informed, what is your understanding as to how they obtain that additional infor-- you know, that better information, you know, i.e. how do they become more informed?

MR. STRAUSS: Objection.

Q. If you know.

A. I mean, there's all sorts of ways. You know, they may talk to company executives.

I have, actually, a pump-and-dump case now where, you know, this guy, like: Oh, I'm a great trader, you should invest with me, he talks about hanging out with the CFO's of the corporations that he's touting for





investment. That would be one form of information. You know, general research. I don't -- I mean, there are multiple ways --

Q. That's fair.

A. -- that people can attempt to be more informed.

Q. And, again, in your experience, or in your opinion, is one way or one method that they use to go out -- and, for example, let's use Hi-Crush as an example, and this is a hypothetical but we'll use Hi-Crush to form the hypothetical.

So Hi-Crush sells fracking sand. Would you expect that arbitrageurs, if they were engaged in arbitrageur activity, for Hi-Crush, might go and do research on the customers of Hi-Crush to analyze potential demand for Hi-Crush's product?

A. I'm --

MR. STRAUSS: Objection.

Go ahead.

Dr. Adam Werner

A. That sounds reasonable.

Q. You talk about the -- in paragraph 77, the last sentence, you say: If the price is -- this is a quote: If the price is too high, however, the arbitrageur might attempt to -- quote -- short -- closed quote -- the stock.

How would an arbitrageur know if the price is too high in that circumstance?

A. It would be their opiniou.

Q. And do you know -- well, have you ever engaged in arbitrage activity on your own?

A. (Gesturing) -- have I ever --

MR. STRAUSS: Objection.

A. I'm not sure --

MR. STRAUSS: Yeah, I mean, come on, that's -- you're asking about his personal investments? It's, you know --

Q. Well, do you know --

MR. STRAUSS: Has he ever



Dr. Adam Werner

been employed at an investment firm and engaged professionally in trading? You can ask him that, but --

MR. PARADISE: Okay.

MR. STRAUSS: -- I don't think it's fair to --

MR. PARADISE: That's fine.

MR. STRAUSS: -- ask him about his personal finances.

Q. I'll accept Mr. Strauss's comment -- question.

A. Have I ever worked for an investment firm?

Q. And engaged in arbitrage activity.

A. Again, I'm uncomfortable with this definition of "arbitrage" because it's a huge umbrella.

All sorts of things can be termed as "arbitrage".

Q. I'm sorry --

A. So in terms of the academic sense? No.



Dr. Adam Werner

Q. Okay. By the way, just for -- just to -- when you say you are uncomfortable with the definition, I'm trying to use the definition that you used before, not any other defiuition. So, you know, exploiting, mispricing securities, essentially, is the definition I'm working off of.

A. Is there a belief that those securities are mispriced, or you could -- I guess there are forms of arbitrage, if you think about this flash trading phenomenon, if I know the price of the stock on one exchange and I see that it's being traded at another price on another exchange -- well, you know, I take back. I guess there is still risk involved there.

There is a possibility that I won't get -- my trades won't get executed, so --

Q. Right.

Turning to paragraph 78, for a moment, of Exhibit 1. Here, if I'm



Dr. Adam Werner

understanding this correctly, you're comparing the amount of the short interest in Hi-Crush's stock -- I'm sorry -- in Hi-Crush's units, to the average for all New York Stock Exchange-listed stocks during the class period; is that correct?

A. I believe that is correct.

Q. And, according to your calculation, the shortages for Hi-Crush was .47 percent as compared with --

A. Between --

Q. Wait, I'm sorry -- I'm sorry, between .47 percent and 1.53 percent, and the average shortages for the New York Stock Exchange, during the comparable New York Stock Exchange-listed stocks -- during the comparable -- during the class period of 3.1 percent; is that right?

A. That is correct.

Q. Okay. So, turning to -- so turning to Exhibit 3, I just want to make sure I'm seeing where these numbers appear on there.

Dr. Adam Werner

These -- first off, so Exhibit 3, just to make sure, is for the class period; right? It goes from September 19, 2012 through November 12th, 2012; right?

A. I believe that is correct.

Q. So the New York Stock Exchange average is -- you say, is 3.1 percent.

Is that -- where is that found on here? Is that --

A. That's just taken from the NYSE.

Q. No, I mean, where -- is that -- I'm going to point to the exhibit for a minute -- (indicating) -- is that this number?

Again, I'm pointing to the second page of Exhibit 3.

A. Ah -- you mean the column to the one over from the right?

Q. Right.

A. I believe that is correct.

Q. And where on Exhibit 3 do you



Dr. Adam Werner

find that -- the corresponding numbers for the Hi-Crush, the .47 percent to the 1.53 percent? Could you just point me to the column?

Is that this column, (indicating)? I'm pointing to the --

A. I can't see it.

Q. I'm sorry, I'm pointing to the fifth (indicating) from the right.

A. I believe that is correct.

Q. And then the average of 1.07 percent, is that at the bottom of the second page under that same column, the column that's headed: Percentage of outstanding shares sold short?

A. Right.

Technically, it's 1.068 but I rounded up.

Q. Do you consider the difference between the average for Hi-Crush, of 1.068, and the average for all New York Stock Exchange-listed companies, at 3.1, do you consider that to be a large gap, a large difference, in



Dr. Adam Werner

percentage?

A. I haven't formed an opinion, one way or the other.

Q. In any event, what is the basis for your opinion that -- and I'm reading from paragraph 78 -- that the level of short interest in relation to common units outstanding provides no indication of any constraint on short-selling activities during the class period, such as the inability to locate or borrow the necessary common units to initiate a short position. And that's from paragraph 78.

A. Right. I don't believe that there were --

THE WITNESS: Could you re-read the question, please?

(The record was read.)

Q. And it's just the last sentence of paragraph 78.

A. So what's the question?

Q. I want to understand the basis for your opinion that you expressed



Dr. Adam Werner

there.

A. I didn't see any indication that people were -- could not short stock in Hi-Crush.

I believe there were stoppages. There may have been two during the entire test period, where Rule 202 went into effect.

Q. That's during the entire test period, so that's the class period plus the supplemental period that we talked about.

A. Correct, but I don't -- that did not occur during the class period.

Q. You don't know, though, whether or not anyone during that -- we talked first about the class period, whether anyone who wanted to sell Hi-Crush stock units short was unable to borrow the units necessary to complete that transaction; do you?

MR. STRAUSS: Objection.

A. I don't personally know of anyone who was unable to short the stock.

Dr. Adam Werner

Q. Is there any way to -- that you know of, to find out that information, any, you know, publicly-available means to find out that information.

A. I'd have to think about that.

Q. Please do, and let me know if you come up with an answer.

(REQUEST.)

Is it true that shares -- withdrawn. Is it true that -- if you know, that institutional holders of stock are often -- or, stock or units, are often the parties that loan stocks or units for short sales?

MR. STRAUSS: Objection.

A. I don't know, one way or the other.

I mean, I know I certainly had seen examples of people's brokerage accounts having loaned out shares.

Q. You mean individuals?

A. Yeah.

Q. Does the presence of



Dr. Adam Werner

institutional unit holders for Hi-Crush units suggest that there were units available to borrow -- suggest to you that there were units available to borrow?

A. It's possible.

That having been said, Hi-Crush isn't the type of stock that most institutions would hold, because it's a dividend-paying stock, and dividends are treated different for tax purposes.

Q. So -- okay, that's a good segue into my next line of questioning, which is about institutional holders, because you speak about that in your report, as well.

A. Correct.

Q. And let me ask you a general question first, before we get to the specifics, but why is the presence of institutional holders, or investors, if you will -- and these are units, so I may be --



Dr. Adam Werner

A. I understand.

Q. -- I may be mistakenly referring to stock or shares, and what have you, but --

MR. STRAUSS: No problem.

Q. -- for all intents and purposes I'm talking about units, but why is the presence of institutional investors important for market efficiency?

Generally speaking, not specific to Hi-Crush.

A. Quoting, in paragraph 74 of my report, this is I believe quoting Barbara Griffin and Lev -- L-E-V: The institutional investors e.g. mutual funds, money managers, banks, are presumed to be better informed about the securities they hold and better able to interpret new information than individual investors.

Q. So is it fair to say that their better information or better knowledge enables them to trade the stock



Dr. Adam Werner

so that it gets to its true value? Is that what you're saying?

MR. STRAUSS: Objection.

Q. I'm just trying to get an understanding as to why that means that the market is more efficient.

A. I'm sorry, I don't understand the question.

Q. Well, you, in response to my question as to why the presence of institutional investors makes a market more efficient, you just read from your report, or your declaration, you quoted from this resource that you relied upon, and I'm just not understanding why that means that the market is more efficient or why that makes the market more efficient.

A. Well, if one believes the premise that these people are better informed than other market participants, then their presence would suggest that more information, possibly information that uninformed investors, or

Dr. Adam Werner

individuals, could not receive, would be incorporated into the stock price.

Q. Because of their trading; right?

A. Because of their trading.

Q. Okay, that's what I thought you were saying, maybe I didn't articulate it that way.

In that same paragraph, you actually refer, two sentences later, to an arbitrageur again -- actually, an arbitrageur, groups among institutional iuvestors, in the first sentence, and then you talk about arbitrageurs again in the last sentence.

Are you distinguishing, in this paragraph, between an "arbitrageur" and "institutional investor" or could this be one -- could this also be one and the same?

Do you understand my question?

A. Not really.

Q. Are you suggesting that an



Dr. Adam Werner

"institutional investor" is one category of investor and an "arbitrageur" is another separate, or might there be some arbitrageurs who are also institutional investors?

A. That's certainly a possibility.

Q. But, by distinguishing, or using both terms here, you're not trying to suggest that it's either one or the other.

A. I don't believe so.

Q. Let's look at paragraph 76, for a moment, where you provide some data about the institutional investors holding units of Hi-Crush.

Do you see that, in the first sentence of paragraph 76?

A. Yes.

Q. And you -- the numbers that you include there is roughly 15 percent to 33 percent.

Is that during the -- that's during the class period, right, as



Dr. Adam Werner

opposed to the test period?

A. Correct.

Q. Look at Exhibit -- if you would, please look at Exhibit 15 for a moment.

Would this be the backup for those -- for the numbers that appear in paragraph 76?

A. Yes.

Q. Why do you say, in paragraph 76, that the level of ownership is 15.4 percent to 32.6 percent, and I'm reading from your declaration, paragraph 76: provides no additional support to my opinion that the market for Hi-Crush was informationally-efficient during the class period.

A. Why do I state that?

Q. Yes.

A. Well, I believe the courts have found that -- and this is off the top of my head -- I believe you need something like 80 institutional investors to be deemed as being sufficient for the



Dr. Adam Werner

finding of market efficiency.

But, again, that's one standard. I'm sure other courts will have had different findings.

Q. Understood. No, I just wanted to come -- understand why you didn't feel that those numbers provided you additional support, but you talked about the number, the absolute number, of institutional investors rather than a percentage.

Do you know what the number of institutional investors was during the class period that corresponds to these percentages?

A. I believe it was between one and ten.

Q. How did you go about determining what the number of institutional investors was during that period of time?

A. I looked up the data on Bloomberg, or someone did that at my behest.

Dr. Adam Werner

Q. Did you -- does Bloomberg provide that, you know, wrapped in a bow, or did you have to go to like the Schedule 13 aps and actually compute the numbers yourself?

A. I'm not sure "wrapped in a bow" is a technical term, but --

Q. It's not.

A. -- I believe that is correct, it is wrapped in a bow.

Q. Bloomberg provides the number for you rather than you having to go and compute it yourself?

A. Correct.

Q. That being said, did you, or anyone on your -- at your behest, look at any of the SEC forms, 13-F, for Hi-Crush during this period of time, during the class period?

A. Yes.

Q. You did.

A. Yes.

Q. Was that done as a check, to verify that the information you obtained



Dr. Adam Werner

from Bloomberg was accurate?

A. Yes.

Q. And did you find that anything was not accurate in the Bloomberg information?

A. Not that I'm aware of.

Q. And turning back to Exhibit 15 for a moment, you will see that -- well, let me take it one step back.

So my nnderstanding is that Schedule 13 -- Schedules 13-F -- or Forms 13-F, are filed on a quarterly basis. Is that your understanding, as well?

A. I believe that's correct, but I don't think there's any limitation on when -- on how many you can file. I mean, you could file them weekly, if one chose to -- (gesturing).

Q. Looking at the data in Exhibit 15, you'll see that the institutional holdings remains unchanged from September -- I guess you're listing it here on a weekly basis, it looks like; is that right?



Dr. Adam Werner

A. That is correct.

Q. So it looks like the data remains unchanged from September 16th through October 14th.

So, am I reading that correctly?

A. I believe so.

Q. So, if that's correct, that would mean that, at the end of the third quarter of 2012, the number of institutional units held was 2,097,326.

A. Approximately.

Q. And then, a week later, which is now into the fourth quarter of 2012, it remains at that same number, and it remains at that same number the following week, as well.

Does that strike you as unusual, that the institutional holdings would not change after a quarter ends?

A. I didn't say the institutional holdiugs didn't change.

Q. Okay.

A. I'm saying the data is what



Dr. Adam Werner

it is.

Q. Oh.

A. And you alluded previously to the fact that these things are often filed quarterly. I believe that that -- this phenomenon that you're discussing is a result of data being filed quarterly.

Q. I guess what I'm really getting at is, is this possibly another error or mistake in the report, or your declaration, I should say.

A. No, it's an estimation.

I could have just said between September 16, 2012 and 10-21-2012, there were approximately 2.097326 shares held, based on Bloomberg's review of the 13-F filings for these companies that held shares in Hi-Crush.

I don't know their exact number of holdings each day, nor do they have to report them.

Q. Okay. But, as far as you

Dr. Adam Werner

know, Bloomberg reported the same number on September 30th as it did on October 7th.

A. I believe that is correct.

Again, I'm more than happy to change that to a date range, in which case I know for sure that that represents the average number of shares held by institutional investors during that time period.

Q. No, I'm not quibbling with that.

I just want to make sure that this is -- that these numbers are right, that's all.

A. (Gesturing) -- okay.

Q. So, as far as you know, they are, that's your testimony.

A. Correct.

Q. And I have no reason to doubt that.

Just seemed odd that they did not change, that's all.

MR. PARADISE: I'm sorry, off



Dr. Adam Werner

the record for one second.

(Recess taken: 3:59 p.m. - 4:10 p.m.)

BY MR. PARADISE:

Q. So let me hand you what I'm asking Wendy to mark as I believe Exhibit 6.

MR. PARADISE: Is that right?

(Whereupon Deposition Exhibit 6, Document, represented to be a compilation of information retrieved from Thomson Reuters of 13-F filings as of September 30th, 2012, was marked for identification, as of this date.)

Q. This is -- Wendy's just handed you -- the court reporter's just handed you what is marked as Exhibit 6, which I'll represent to you is a compilation of information that we retrieved from Thomson Reuters of 13-F filings as of September 30th, 2012.

And I just wanted to show this to you and see if we can reconcile



Dr. Adam Werner

your numbers in Exhibit 15 to these numbers, because they are vastly different.

So you see that your number is 2,097,326, and you also see, I think on line 12, that one institutional holder has that exact number of shares -- or, units, but the total units held by institutional investors, as of September 30, is actually 7,838,548. And that makes the percentage of shares outstanding actually 57 -- percentage of shares held by institutional investors outstanding, as 57 -- rounded down to 57 percent.

Do you have any explanation for this discrepancy?

A. Yeah.

Q. What's that?

A. Thomson Reuters is terrible at collecting data.

Q. Okay.

A. I mean, I've found that, especially when it comes to these type of



Dr. Adam Werner

filings, they're oftentimes -- it's like significantly off, but -- and to the point where I've called them before, when I used to use Thomson Reuters, and said, like: Oh, look, you know, this -- here, I'm looking at the filing, it's not -- you know, whatever it is, these numbers not right. And they'll be like: Oh, you know what, you're right.

Now, that having been said, if you want me to take these numbers on face value, these numbers would only boost my opinion that the market for Hi-Crush was inefficient, but I will tell you that data garnered on -- from 13-F filings, is terribly inconsistent across all data providers, and Thomson Reuters is one of the worst iu providing that data.

Q. Perhaps not now, but perhaps wheu you go back to San Francisco, you can take a -- have somebody take another look, and if it turns out, in this instance, that Thomson Reuters is right,

Dr. Adam Werner

or that perhaps somebody at Gnarus, other than you, I'm sure, might have made a mistake, you could let us know and we can -- you know.

(REQUEST.)

A. Well, I can tell you now that this data was taken from Bloomberg, this is what Bloomberg represents as institutional holders. So I wouldn't say anyone made a mistake. (Indicating) -- someone else looked at Thomson Reuters and took these numbers off the Thomson Reuters.

Did they make a mistake? I don't know.

Q. Okay.

A. I assume they accurately entered this data onto this page.

Q. Well, you had said earlier -- it's your declaration so, obviously, you don't have to do any of this, but you had said earlier that you verified the Bloomberg data by reviewing the 13-F. So, obviously, if you go to the 13-F's --



Dr. Adam Werner

you don't have to go to all of them, if you even went to just a few of them, because there's 29 institutional iuvestors on this list, and you had I think said there were ten so, obviously, that would be pretty easy to see, if there was a mistake by either Thomson Reuters or perhaps Bloomberg or perhaps someone at Gnarus, but that's all I'll say on that. It is what it is.

If -- you said this strengthens your opinion on market efficiency, anyway, "this" being the data in Exhibit 6.

A. That is correct. But, again, I'd be very suspect of delineating that data -- trusting that data.

Q. Understood.

We were able to find the spreadsheets -- or, the Excel spreadsheet, that you said you thought you had provided regarding the Dow Jones Index, so I want to show it, if I have a -- do I have a copy of that? And I



Dr. Adam Werner

think -- I should say, I think we were able to find it, but you will have to tell us if I'm right or wrong.

MR. PARADISE: So let's mark this as Exhibit 7.

(Whereupon Deposition Exhibit 7, Document, which says Dow Jones U.S. Mining Index (Index DJUSMG), was marked for identification, as of this date.)

Q. So the court reporter has handed you what's been marked as Exhibit 7, which I can represent to you came from the documents that were provided by Plaintiffs' counsel in connection with your deposition.

Can you identify this for the record?

A. As I sit here, no.

Q. Okay.

A. I mean, if I'm reading it, it says Dow Jones U.S. Mining Index (Index DJUSMG).

MR. PARADISE: Off the record



Dr. Adam Werner

for one second.

(Discussion off the record.)

Q. You're not disputing that this came from your --

A. I believe you.

Q. Okay. You said earlier that you had accounted for -- I believe you testified earlier, that you had accounted for U.S. Silica in your event study; is that correct?

A. I said I adjusted for the industry -- industry effects of my analysis.

Q. And the reason -- and we were looking at U.S. Silica, because they -- there was some news about U.S. Silica reported in that same headline in your event study in Appendix A on November 13th.

Do you remember that, that we talked about that?

A. I remember discussing that, yes.

Q. Well, let me ask you, did you

Dr. Adam Werner

account for the price movement in U.S. Silica on November 13th in your event study?

MR. STRAUSS: Objection.

A. "Objection", asked and answered?

Q. You can answer.

A. To the extent that U.S. Silica is part of this industry index, I would say yes.

Q. And to the extent that U.S. Silica is not part of this industry index, would that have any impact on your event study, in your opinion?

MR. STRAUSS: Objection.

MR. PARADISE: Okay.

MR. STRAUSS: Are you sure that's the question you want to ask, you're assuming that it's not?

MR. PARADISE: I said to the extent that it is not. He said to the extent that it is that he accounted for it.

Q. I'm asking to the extent that



Dr. Adam Werner

it's not, would that have any impact on your event study.

MR. STRAUSS: Objection. I don't understand your question.

You mean did he evaluate it individually into that study? Do you want to ask that?

MR. PARADISE: My question stands.

Q. Do you understand my question?

A. I do not.

Q. Okay, let's do this again.

You testified earlier that you accounted for U.S. Silica -- and you just said it again, just now -- in your event study to the extent that it was part of the index, the Dow Jones Index -- I probably should have -- the Dow Jones Industry Index to which you relied; correct?

A. I believe that is correct.

Q. If it was not part of that index, would that have any effect on your



Dr. Adam Werner

event study, in your opinion, if U.S. Silica was not part of the index?

A. I have no -- it's a hypothetical, I have no way of being able to answer it.

Q. Well, do you think it's important, for the purpose of your event study, to account for a competitor like U.S. Silica?

A. I think --

MR. STRAUSS: Objection.

Go ahead.

A. I think it's important to account for market- and industry-specific factors in my analysis.

Q. Turning back to Exhibit 7 for a moment and, again, this came from your -- I mean, either your files or Kirby McInerney files, but it was represented to us that this was an information or data that was relied upon in connection with you're -- the preparation of your declaration. Okay?

A. Okay.



Dr. Adam Werner

Q. So, if you look at the top line, number 1, you see at the top of the page, line 1, there's a reference to an index DJX:DJUSMG.

Do you see that?

A. Yes.

Q. Now turn back to -- I think it was Exhibit 3.

Do you know what that symbol is, the DJUSMG?

A. Exhibit 3 -- I'm sorry, where is Exhibit 3?

Q. Well, the first -- the reference to the DJUSMG, on Exhibit 7, that I just read to you.

Do you know what that represents, DJUSMG?

A. This is irrelevant to Exhibit 3.

Q. No, I'm asking you, do you know what DJUSMG, from Exhibit 7, means?

A. It could be the index symbol, it could be the Bloomberg code for the symbol.

Dr. Adam Werner

As I sit here today, I don't know.

Q. So, here's Exhibit 3. And if you look at the upper left side, in black, it says: DJUSMG Index.

Do you see that?

A. I see that.

Q. And you said to us earlier that this was not the index that you relied upon.

A. I believe that is correct.

Q. Okay. So, even though the index that's identified on your documeut, Exhibit 7, is DJUSMG, and even though this Bloomberg screen shot is of the DJUSMG index, it's your testimony that these are not the same index -- the same indices.

A. (Pause.)

As I sit here today, I don't know.

Q. Okay. Let's see if we can do it this way.

Let's take a look at the



Dr. Adam Werner

Exhibit 7 for a moment, and if you need to get your computer out, that's fine, but if you can use the more simple calculator, I'll give you that again, but if you need to do it, I'm going to ask you to do a calculation with me, so if you need to get your computer -- I know you don't like the HP 12C, but -- oh, you have a calculator right in front of you. If you need to get your computer, please feel free to do so.

A. I'm going to hold off.

Q. Okay. I want you to look at line 63 and line 64, and I wanted you to compute with me the percentage change in the price from the 12th to the 13th.

So --

A. Okay, I'll need it.

Q. Yeah. And, if you don't mind, can you just tell me out loud how you're doing that, just to make sure that I'm doing it the same way?

A. (Using computer.)

Okay, you want me to do the



Dr. Adam Werner

price change from the 12th to the 13th?

Q. Correct.

A. Okay. So I'm taking the quantity of 140.07 minus 141.72 and dividing that by 141.72.

Q. (Using calculator.)

A. Oops, I forgot the equal sign.

So negative 1.2 percent, that's with rounding.

Q. Right. And I have the HP 12C, so going all the way, four decimal places, I got negative 1.16.

A. Negative 1.16?

Q. Well, because it went down, the price went down.

A. Oh, you've converted into percentages.

Q. Well, you had -- I thought you had 1.2; didn't you?

A. Percent.

Q. Right.

A. Yeah, I thought you were reading off the screen.



Dr. Adam Werner

Q. Oh, oh, oh. No, I'm sorry, I have negative 1.16 percent, okay.

Turn now to your Appendix A, and tell me what the industry return was on November 13th, 2012.

A. (Pause.)

Minus 1.16.

Q. Yes, okay.

So do you find it odd that that's the same number that is on your report, even though you didn't -- you say you didn't use -- well, withdrawn, withdrawn.

A. I'm sorry, I don't understand the question.

Q. It's okay.

There's no question, I withdrew it.

A. May I put away my computer?

Q. Yes, thank you.

Just for the record, if you'd take a look at Exhibit 3 for one moment. I just want you to agree or disagree with me.

Dr. Adam Werner

I do not see U.S. Silica on this list, or this index, if that's represented by Exhibit 3. Do you agree with me on that?

A. I do.

Q. Okay.

A. Maybe you can represent for me why these numbers start on 11 and go through 23?

Q. I actually asked that same question. And the answer is that's the Bloomberg thing, I think, because it says 13 members.

If you look at the line below alert, where it says: 7 alert, on the top of the page, (indicating).

A. Right, okay.

Q. It says 13 members --

A. Okay.

Q. -- and even though it starts at 11 it still has 13 members.

Look, all we're trying to get at is, we're trying to figure out what -- we're trying to just figure



Dr. Adam Werner

out -- we think, no surprise, that this (indicating) is this, and we think this is the index this represents, and you're telling us it's not, so perhaps you can give us the backup to show what companies are -- comprise this DJUSMG Index that's represented in this spreadsheet, if you know, if you have an employee to do that, so that's -- we're just trying to get -- to make sure that we're all on the same page here.

A. I understand.

Q. So, that's all. I mean, we just -- you know, we have this, (indicating), we have Exhibit 7, but we don't have -- and I had asked you earlier if you had a list of the companies, you said you think you do, and you're going to ask to get that but, you know, we don't have it.

We have what we gave you, you said it was the list, but we don't think that's right, frankly. So that's it.

A. Okay.



Dr. Adam Werner

MS. BRANDON: Off the record.

(Discussion off the record.)

BY MR. PARADISE:

Q. Now, let's go back to paragraph -- our favorite paragraph on your declaration, paragraph 12, the one we spent the most time talking about today, I think.

I want to just make sure -- I'm not asking you to answer, I just want to make sure I understand what you answered earlier, that I'm on the right track.

When I asked you earlier about what the corrected disclosure was, you directed us to paragraph 12 and to the Amended Complaint, but I think we were able to do it in paragraph 12, and you pointed to the information that you quote here, which was that Hi-Crush terminated the contract with Baker Hughes -- Hi-Crush terminated the supply agreement -- I'm paraphrasing now, but if anything I say is not accurate you'll



Dr. Adam Werner

correct me -- that Hi-Crush terminated the supply agreement with Baker Hughes -- full stop.

Is that --

A. I believe that's correct.

Q. Okay. Would you agree with me that Hi-Crush could not have disclosed the fact that it had terminated the contract with Baker Hughes any earlier than November 12th, 2012?

MR. STRAUSS: Objection, that's not an expert -- I don't understand, you're asking him whether they had a legal obligation to do it?

MR. PARADISE: No, not a legal obligation, I'm asking him a factual question.

Q. Could you disclose something that hasn't happened yet?

MR. STRAUSS: Can you re-read the question, please?

And you're making a legal argument, you're not making a --

Dr. Adam Werner

you're not asking for an expert opinion.

But go ahead, what was the question again?

(The record was read.)

MR. STRAUSS: That's not an expert question -- that's not a proper expert qnestion for the scope of this deposition.

You want to ask him about his opinion, did he render an opinion about when they could or would have disclosed something, then you can ask him, but he didn't render an opinion about that.

Q. Can you answer my question?

A. No.

Q. Okay, why not?

A. I don't understand it.

Q. Okay, let me try to do it this way.

If something happens, occurs, tomorrow, can I tell you that it happened today?



Dr. Adam Werner

MR. STRAUSS: Objection. Is this a metaphysics class or an expert deposition?

A. I'm sorry, I didn't follow that.

Q. If something happens tomorrow, can I disclose to you that it happened, that it occurred today?

MR. STRAUSS: Objection, nonsense.

A. I have no idea.

I honestly don't understand the question.

Q. Let's go -- you've testified numerous times as an expert on damages, correct, in securities litigation cases.

A. I believe that's correct.

Q. And we talked earlier about -- we touched upon earlier, a situation where -- we didn't call it this, but are you familiar with the concept of an overdisclosure?

Have you heard that term before?



Dr. Adam Werner

A. I don't believe so.

Q. You know, you are familiar with, and you cite to, an article by -- I think it's Brad Cornell, and I'm not sure of Morgan's first name, but it's somebody Morgan.

Do you know -- are you familiar with that article?

A. Yes.

Q. You cite to them on page 10, Footnote 31.

A. Oh, I'm sorry, page 10.

Q. Yes, paragraph -- I'm sorry -- Footnote 31, which appears at the top of the page.

A. Okay.

Q. And you say that that -- well, you cite them as one source of support for the use of event studies. I believe you're saying that they are one source of -- withdrawn.

You cite -- why do you cite -- let me just ask you, why do you cite to Mr. Cornell and Mr. Morgan's



Dr. Adam Werner

article there?

A. Can you hand me the article?

Q. Oh, yeah.

MR. PARADISE: Do you have a copy?

Q. While she's looking for that, did you work with Brad Cornell at Charles -- was it Charles River?

A. I did.

Q. Do you respect him as an economist?

A. I believe so.

Q. Okay.

MR. PARADISE: Let's have this marked as Exhibit 8.

(Whereupon Deposition Exhibit 8, Article, HeinOnline, was marked for identification, as of this date.)

A. Okay. So what did you want to ask me about this?

Q. I'm just asking you what -- for what purpose you cited to Cornell's and Brad -- and Morgan's article.

Dr. Adam Werner

A. I suppose to back up the idea that damage experts have used event studies to calculate losses and under the efficient market hypothesis.

Q. Have you read this article in its entirety at some point?

A. At some point.

Q. Do you recall -- and it's a difficult question, so if you don't you don't, but I'm going to ask it, anyway -- do you recall if there's anything in this article that you disagree with?

A. I don't recall.

Q. I asked you earlier, are you familiar with the term "overdisclosure", and I don't remember what your answer was.

A. My answer was I don't believe so.

Q. Okay. Well, let me tell you what I understand.

They used the term "overdisclosure" in here, I can't find it at the moment, but my understanding of



Dr. Adam Werner

what it means, and maybe you understand the concept and you call it something else, is when there is a corrective disclosure that reveals more than what is necessary to correct a prior misrepresentation or omission.

So, in other words, if you had a press release, we talked about earlier the November 13th press release disclosed the termination of the contract by -- the termination of the Baker Hughes contract -- by Hi-Crush, but it also disclosed earnings. So the earnings is not necessary to cor-- you know, the earnings that were described, or discussed, in that press release, was more information than was necessary to correct what was allegedly a prior omission. So that's what they determined "overdisclosure."

So does that concept --

A. I understand what you're talking about, but I don't know why you would -- why they term it an



Dr. Adam Werner

"overdisclosure".

Q. Well, they don't term it an "overdisclosure" in this case.

They talk about, generically, that something like that would be an "overdisclosure". They weren't speaking of the Hi-Crush case. They're saying it's an "over"-- they're calling it an "overdisclosure", because they're saying it is more information than is necessary to correct the prior misrepresentation or omission, so that's why they're saying "overdisclosure".

A. I don't know if that's more or less information.

Q. Okay. In any event, turn to page 897 for a moment.

And I'm looking at this paragraph that begins with: In summary, and it says -- I'll read it into the record: In summary, one can unambiguously define the disclosure date and the associated disclosure price only in simple situations. In most



Dr. Adam Werner

circumstances, the parties must conduct financial analysis to determine the price at which the security would have traded had the misrepresented or omitted information, and only that information, been disclosed.

Do you see that?

A. I do.

Q. Do you agree with that statement?

A. I don't know, as I sit here today.

Q. If you were -- and we touched upon this a little bit earlier, but just to come back to it for a second -- if you were asked by Mr. Strauss, or someone else with Kirby McInerney, to construct a damages model for this case, what would you do? How would you go about doing that?

MR. STRAUSS: Objection.

A. Use an event study to measure the abnormal return, I'd investigate what other news was released on that day, how

Dr. Adam Werner

the market viewed that news, all the news that was released. Um -- if it turned out that, you know, something was -- there was a compounding factor in what we were -- in the announcement, I'd take that into account.

Q. When you say "all" -- when you refer to "all the news", are you referring to the company's specific news or all the news in the market at large?

MR. STRAUSS: Objection.

A. I'm speaking of the company-specific news --

Q. Okay.

A. -- on the disclosure date.

Q. So -- and the reason for that, the reason for doing that, where you said you'd try to -- let me withdraw that.

So would your -- would you be trying or attempting to kind of isolate the drop in the stock price that was attributable to the corrective disclosure?



Dr. Adam Werner

Would that be your objective?

MR. STRAUSS: Objection. Once again, you're talking about a hypothetical --

MR. PARADISE: Yes.

MR. STRAUSS: -- a hypothetical exercise.

MR. PARADISE: Yes, one that he's done numerous times.

THE WITNESS: Could you read back the question, please?

(The record was read.)

A. It depends on what I would be tasked with.

Q. Tasked with determining the damages caused by the alleged fraud.

MR. STRAUSS: Objection.

A. Again, it would depend upon what someone asked me to do.

Q. So you can't -- you are unable to answer the question, based on these -- this hypothetical?

A. Based on the way you've described the situation, that is correct.



Dr. Adam Werner

Put another way, I believe it is an incomplete hypothetical.

Q. Let's look at another part of Morgan and Cornell's article, on page 891.

The first full paragraph, and for the record I'll just read: Yet cases in which a company announces A and then announces strictly A is not true are rare.

Do you agree with that statement?

MR. STRAUSS: Objection.

Go ahead.

A. In which a company announces -- are you asking do companies try to hide bad news with other news so -- to have these compounding effects, so they --

Q. I'm --

A. -- confuse the situation about whether or not a disclosure is a clear disclosure or not?

Q. I'm asking simply do you



Dr. Adam Werner

agree with the statement that -- I'm not being pejorative, you put a pejorative description in there, but I'm just simply asking, in your experience, whether you think it's for the purpose of hiding, or whatever, is it your opinion, if you have one, that it's rare for companies to simply say A and then announce later on that A is not true.

MR. STRAUSS: Objection.

A. I don't understand what Brad means -- or, Dr. Cornell means, in this -- by simply -- maybe you're adding "simply" --

Q. "Strictly."

A. "Strictly", yes, I'm sorry. "Strictly".

Q. He said "strictly", I didn't; right?

A. Correct, he did, he said "strictly", I'm not sure --

Q. Okay.

A. -- in what coutext he's using that term.

Q. If I said "simply", then I misspoke, and I meant to say "strictly", but I don't know.

MR. PARADISE: Did I say --

(The record was read.)

MR. PARADISE: Okay, it sounds like either I garbled it or you didn't get it all down.

Q. But, the bottom line is, I think the substance is the same, but I can correct it in the record.

It's -- what it should say is: Yet cases in which a company announces A and then announces strictly A is not true are rare. That's what I meant to quote.

A. Okay.

Q. The bottom line is, you can't agree or disagree because you're not sure of the context in which he's saying it; is that right?

A. Correct.

Q. Okay.

MR. PARADISE: All right,





let's take two minutes.

(Recess taken: 4:48 p.m. - 5:05 p.m.)

MR. PARADISE: Back on the record.

BY MR. PARADISE:

Q. I want to take you back to the "halcyon" days, when you worked for Defendants.

Do you remember those days?

A. I would say that that mischaracterizes who I work for currently.

Q. Who you work for currently?

A. Well, I mean, I will do defense work.

Q. I'm sorry, I was being tongue-in-cheek, and I shouldn't have. Okay.

But you testified that in your -- in the past, you have worked for defendants; is that correct?

A. Correct.

Q. And have you been asked in





any of those matters -- were you ever asked to calculate the share price inflation at the time of the disclosure that's supposedly, you know, revealed the truth to the market?

MR. STRAUSS: Objection.

Go ahead.

A. "Asked", do you mean as when I have been an expert, or are you speaking to when I've supported other individuals?

Q. If it's a different answer, then we can break it out like that, but I would say either/or.

A. I believe, yes.

Q. Okay.

A. That has been the case.

Q. In those -- in any of those matters, either as an expert or a -- supporting an expert, did you ever conclude that what was disclosed at the end of the class period could not have been disclosed at the beginning of the class period?





MR. STRAUSS: Objection.

I don't understand the question.

A. Well -- I don't understand the question, but I don't believe I've ever been asked to do that.

Q. Well --

A. To the extent that I understand what you're saying.

Q. Well, let me try it this way.

What I'm asking is, that information that was revealed at the end of the class period -- okay?

A. Okay.

Q. -- could not have been disclosed at the beginning of the class period, for whatever reason, be it that that information wasn't available at the beginning of the class period, that some event hadn't occurred at the beginning of the class period that had occurred at the end of the class period and it was disclosed at the class period, but couldn't have been disclosed earlier

Dr. Adam Werner
because it had not yet occurred, that's what I'm getting at.
MR. STRAUSS: Objection.
A. I'm just -- I'm very confused about this notion of has not yet occurred but has occurred or will occur -- I'm sorry, I'm trying to be --
Q. No --
A. -- as honest as I can with you, but I just -- I can't wrap my head around what you're trying to get at.
MR. STRAUSS: You're trying to back into a factual argument that really has nothing to do with his opinion on market efficiency.
And, you know, if you want to make your factual argument in your papers, that's great, and I think you already did but lost on that, on the motion to dismiss, but it's just not really appropriate for market --
Q. Oh, is that why you can't --
MR. STRAUSS: -- efficiency



Dr. Adam Werner
examination.
Q. -- answer it, or you can't answer it because you don't understand it?
A. I can't answer it because I don't understand it.
Q. Okay, I'm trying to come up with a hypothetical to try to see if it helps you understand it.
So let's take this as an example. You have a company that is engaged in merger negotiations on day one, okay?
A. Okay.
Q. And it tells the market: We are not engaged in merger negotiations, okay? On day one.
On day 30, the company announces that it has completed a merger, okay?
A. Okay.
Q. So day 30 they complete the merger, day one they deny being involved in any merger negotiations.



Dr. Adam Werner
On day 30, in addition to saying that: We've completed the merger, they also disclose that: We've been involved in merger negotiations since day one. Okay?
A. Okay.
Q. What I'm trying to get at is, could they have disclosed on day one that they had completed a merger?
MR. STRAUSS: Objection.
Q. That's the whole -- that's what I'm getting at with all of these questions I've been trying to ask you.
MR. STRAUSS: You're making a factual argument, you're not asking an expert opinion question or anything about his expert opinion or any of the analyses or assumptions that he offers expert opinion.
This has nothing to do with his expert opinion or market efficiency.
How does this relate to



Dr. Adam Werner
market efficiency?
MR. PARADISE: In fairness, I'm trying to get to the answer of the question I asked previously, which he said he couldn't answer, because he doesn't understand my question, because he doesn't understand the has occurred/has not occurred. So I'm trying to give an example of why I'm using that term, something that has occurred/has not occurred.
That's just an example of that.
MR. STRAUSS: What does this have to do with market efficiency or his opinion on market efficiency?
MR. PARADISE: Well, he's testified in here that he completed an event study, he testified that there was a corrective disclosure, that these are relevant to his analysis of market efficiency.

Dr. Adam Werner

But if you'll represent to us, on the record, that Dr. Werner is not going to be asked to do any other work on this case in connection with the class certification motion, including calculating damages, then I'll withdraw the question.

MR. STRAUSS: I'm not going to represent that.

MR. PARADISE: I didn't think you would.

BY MR. PARADISE:

Q. So does that help you understand --

MR. PARADISE: And again --

MR. STRAUSS: If you ask him if he's been asked to calculate damages or if he has an opinion on damages, and he's said no, so I don't understand why that's not the end of the analysis.

If he renders an additional opinion on damages, you'll have the



Dr. Adam Werner

opportunity to depose him on that.

MR. PARADISE: Will we? I don't know. Not with the schedule we have right now, I don't know that we will.

So, but let me just answer your other objection.

The hypothetical was only for the purpose of trying to explain to him what my question was about.

Q. And, I don't know, did that -- putting aside Mr. Strauss's objections, for the moment, did that -- do you at least now understand where I'm coming from or what I'm getting at, with that question?

A. It just -- it doesn't make -- I understand, I think, what you're trying to say.

It's like you're saying if something didn't occur, or something is going to occur in the future, can I -- and I don't know whether it's going to occur, can I talk about it today -- it's



Dr. Adam Werner

just -- it seems like some kind of time-travel thing that I'm not quite wrapping my head around.

Q. I assure you, it's not the "time-travel thing".

The bottom line is, you never -- you said you've never been asked to express an opinion -- at least as far as you understand my question -- you've not been asked to express that opinion in any of these other matters that you've worked on in the past for other defendants.

A. I have no idea.

Q. All right.

MR. STRAUSS: Yes, no opinions on time travel.

THE WITNESS: Could be cool, certainly go back and fix some errors in my life.

Q. You list, in Exhibit 2, one of the documents that you relied upon, the decision and order granting, in part, and denying in part, Defendants' motion



Dr. Adam Werner

to dismiss in this case. Is that right?

It's -- I think it's Document Number 2.

A. Okay. You know what? Let me amend Exhibit 2.

I believe that it should say: Documents reviewed.

Q. Okay, as opposed to: Documents relied on?

A. Yes.

Q. And what's that -- what's the distinction, in your mind?

A. These are all things that I have looked at. I'm not sure that every little thing on this page has formed my opinion -- or, helped form my opinion.

Q. Well, let me ask you specifically about that document, Number two. And if it's okay with Mr. Strauss, I'll just refer to it as a decision and order on the motion to dismiss.

Is that a document that you relied upon, as opposed to reviewed?

A. Can I -- I think you've

Dr. Adam Werner
already entered it as an exhibit.
Q. Not the Decision and order.
A. Oh.
Q. But I can give it to you.
A. Yeah, I would like to take a look at it.
Q. Sure. Always ask that, if you like.
A. I guess you gave me the Amended complaint over there.
Q. Right.
MR. PARADISE: This would be Exhibit 9.
(Whereupon Deposition Exhibit 9, Decisiou and order granting in part and denying in part Defendants' motion to dismiss, was marked for identification, as of this date.)
THE WITNESS: Okay, now that I have it in front of me, could you re-ask the question?
Q. The question is, using the distinction that you just drew, is this



Dr. Adam Werner
something that you reviewed and relied upon or just reviewed for the purposes of your opinion.
A. Well, to the extent that I believe this document informed my understanding of what the class period was, I believe -- to that extent I relied upon it and, in relying upon it, I reviewed it.
Q. Okay. There is -- let me ask you about some other things, besides that, and ask quickly if you have an opinion about them or you even are familiar with them.
The court ruled in this decision -- or this Decision and order, that -- well, she didn't rule, she stated, in this Decision and order, that the letter that Baker Hughes sent to Hi-Crush on September 19, 2012 did not -- was not an effective termination of the supply agreement.
MR. STRAUSS: Objection.
A. I don't know what that means.



Dr. Adam Werner
Q. Okay, so do you have -- you don't agree or disagree with that statement; is that fair to say?
A. I'll stick with my answer --
MR. STRAUSS: Objection.
A. -- I don't know what that means.
Q. Wheu you say you don't know what it means, what -- you don't know what what means?
A. I don't know what the judge meant by that.
Q. Okay, I'm sorry, you don't know what you meant -- what I meant by what I said, okay.
Let's look at -- maybe this will help, let's look -- sometimes it's easier to understand things in writing than oral, look at page 27, this first -- second full paragraph.
Read the first sentence of that paragraph.
A. (Pause.)
Yeah, I don't know what the



Dr. Adam Werner
judge was --
Q. So you don't agree or disagree with her statement there.
MR. STRAUSS: Which statement?
MR. PARADISE: The first -- the one I just asked about, the first sentence of -- the first -- second full paragraph on page 27.
Do you want me to read it into the record?
MR. STRAUSS: No, I see the first sentence.
A. Just the first sentence?
MR. STRAUSS: Of the second paragraph on page 27.
A. I would turn the question over to you, did you counter the Baker Hughes purported termination was invalid?
Q. I don't usually answer questions at depositions but, I'm curious, I don't know what you mean by that.
A. Maybe I'm looking at the

Dr. Adam Werner

wrong thing.

My thing says: The 10 B Defendants countered the Baker Hughes purported --

MR. STRAUSS: No, the second paragraph.

MS. BRANDON: Why don't you read it into the record.

A. I'm sorry.

MR. STRAUSS: Why don't you read the second paragraph, please --

THE WITNESS: Okay.

MR. STRAUSS: -- and then you can --

A. Should I point out the typo?

Q. Yeah, I see it, too.

You don't point out typos to judges.

A. Yeah, that's a bad idea.

(Pause.)

I don't understand that.

Q. You don't understand the first sentence or did you read more than



Dr. Adam Werner

just the first sentence?

A. I continued on.

Q. Okay, let's take a look at page 29 of the decision.

The second full paragraph, so -- and I'll just read it, to make this easier, the one that begins, at the bottom of the page: The 10 B Defendants are correct that Baker Hughes violated the agreement's termination provision by sending a termination notice prior to the occurrence of four serial uncured breaches. Thus, Hi-Crush did not -- quote -- receive a notice of termination pursuant to the terms of the agreement, and the agreement was not terminated within the meaning of item 1.02. Accordingly, this rule did not require Hi-Crush to disclose Baker Hughes' repudiation via Form 8-K.

Do you see that?

A. I do see it.

Q. Okay. The letter in which -- and we talked about this this morning,



Dr. Adam Werner

it's been a while but we talked about this morning what happened on September 19th, and you've answered, after we looked at your declaration, and some other documents, that that was the date on which Baker Hughes sent the letter to Hi-Crush.

A. Yeah, I believe that's correct.

Q. Okay. So, what the judge is saying here is the receipt of that letter by itself did not require disclosure by Hi-Crush.

Do you have any reason to disagree with that?

MR. STRAUSS: Objection.

A. Well, first, that's what you're representing the judge is saying. I personally don't read this and say that's the conclusion I come to. I don't understand it.

Q. Okay.

A. I'm not a lawyer.

Q. Okay. Fair to say that



Dr. Adam Werner

this -- the reasoning and the language that the judge used in her decision, was not something you relied upon in coming to your opinion in this case, that you've expressed in this case?

MR. STRAUSS: Objection. Which part of the language or which part of the decision?

MR. PARADISE: Well, this language about whether Hi-Crush was required to file an 8-K on -- upon receipt of the repudiation letter.

THE WITNESS: Can you re-read the question, please.

(A portion of the record was read.)

A. I don't know the answer to that question.

Q. You don't know whether you relied on it or not?

A. I don't believe -- I don't know, as I sit here today, only because, again, I don't understand the language.

Q. Well, does it have any

Dr. Adam Werner

bearing on whether the market for Hi-Crush was efficient or not efficient during the class period?

A. As I sit here today, I don't know.

Q. Okay.

MR. PARADISE: Thank you, no further questions.

(Time noted: 5:21 p.m.)

MR. STRAUSS: Okay. I'll just ask a few questions.

EXAMINATION

BY MR. STRAUSS:

Q. I'd just like to ask you a couple of follow-up questions about the methodology that you used for your event study.

Was the methodology that you used the methodology that's recognized in the literature in the field?

A. Yes, by numerous people.

I can turn to the articles by Tabak, Ferrillo, and Dunbar, and the St. John's Law Review. I believe they have



Dr. Adam Werner

another article -- not Ferrillo, just Dunbar and Tabak, in the -- it's -- I'll have to get it, the exhibit here -- oh, so turning to Exhibit 1 -- well, Exhibit 2 and Exhibit 1 -- right, in here, Number 27: The Tabak and Dunbar materiality magnitude event studies in the courtroom in the litigation service handbook, that was what I was looking for, the role of the financial expert, so yes, it's recognized, and by other individuals. Those are just two examples of....

Q. And is the methodology the same methodology that you used when you were at Cornerstone?

A. Yes.

Q. And is it the same methodology that you used when you were at NERA?

A. Yes.

Q. Okay. I'd like to turn back to there were some questions earlier about the control period that you used and whether or not you -- and about the



Dr. Adam Werner

control period that you used and the fact that you excluded November 12th, 2012 from the control period.

Could you explain why you excluded November 12th, 2012 from the control period?

MR. PARADISE: Objection.

A. I believe -- well, typically, when you do this type of analysis, you want to correct -- or, not "correct", you want to make sure that your sample is neutral, for want of a better term, such that I could have included it in my analysis, I could have run the event study over a different time period. I just would have used a dummy variable to account for this disclosure.

Q. And is it -- is either method -- are you describing two different methods, there is one method where you would use a dummy variable and include the event that you're evaluating, and another method where you would not include the event that you are evaluating



Dr. Adam Werner

and then you don't have to use a dummy variable to explain?

A. Well, no, I mean, it's all part and parcel of an event study. So when people do event studies, they can look at -- you know, they determine what their measurement period is.

Oftentimes, people do that over a class period, and in doing -- but, when doing so, use dummy variables to correct for the fact that you have these disclosures during the event period -- or, during the class period. Otherwise, people will use what's called a "neutral period" or period that is untainted by, in this case, the alleged fraud and estimate their event study over that period.

Q. And that's what you did here.

A. Correct.

MR. STRAUSS: Okay, that's it, I don't have anything else.

MR. PARADISE: I have no qnestions, no further questions.

Dr. Adam Werner
Thank you.
THE WITNESS: Thank you.
(Time noted: 5:26 p.m.)

DR. ADAM WERNER

Subscribed and sworn to before me
this _____ day of _____, 2014.

Notary Public



CERTIFICATE

STATE OF NEW YORK )
: ss.
COUNTY OF NEW YORK)

I, Wendy D. Boskind, an RPR and Notary Public within and for the State of New York, do hereby certify:

That DR. ADAM WERNER, the witness whose deposition is hereinbefore set forth, was duly sworn by me, and that such deposition is a true and accurate record of the testimony given by the witness.

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 28th day of April, 2014.

WENDY D. BOSKIND, RPR



April 24, 2014

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DR. ADAM WERNER

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ERRATA SHEET
VERITEXT REPORTING COMPANY
1250 BROADWAY
NEW YORK, NEW YORK 10001
800-362-2520

CASE: HI-CRUSH PARTNERS L.P. SECURITIES LITIGATION
DEPOSITION DATE: 4/24/14
DEPONENT: DR. ADAM WERNER

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_____
DR. ADAM WERNER

SUBSCRIBED AND SWORN TO BEFORE ME
THIS ____ DAY OF _____, 20___.

_____ _____
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