EXHIBIT B

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

ORACLE CORPORATION, a
Delaware corporation,
ORACLE USA, INC., a
Colorado corporation, and
ORACLE INTERNATIONAL
CORPORATION, a California
corporation,

Plaintiffs,

vs.

) No. 07-CV-1658 (PJH)

SAP AG, a German corporation, SAP AMERICA, INC., a Delaware corporation, TOMORROWNOW, INC., a Texas corporation, and DOES 1-50, inclusive,

Defendants.

VIDEOTAPED DEPOSITION OF BRUCE SPENCER, PH.D.

FRIDAY, JUNE 4, 2010

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

REPORTED BY: HOLLY THUMAN, CSR No. 6834, RMR, CRR (1-427339)

		Page 26		Page	28
09:27:56			09:30:32	-	
09:27:57			09:30:34		
09:27:58			09:30:36		
09:27:59			09:30:38		
09:28:01			09:30:41		
09:28:08			09:30:42		
09:28:10		·	09:30:43		
09:28:12	8	THE WITNESS: Well, the way it affects	09:30:44		
09:28:22	9	the way this point that we've been discussing	09:30:46		
09:28:25	10	affects my conclusions is that in statistics, there	09:30:47		
09:28:29	11	are established methods and procedures that have	09:30:48		
09:28:32	12	been studied and researched, and statisticians try	09:30:50		
09:28:35	13	to use the methods that are better.	09:30:51		
09:28:42	14	So part of it is a criticism of method.	09:30:53		
09:28:43	15	And then in terms of the lower bound changing, my	09:30:55		
.09:28:51	16	concern would be that it's plausible to me that	09:30:56		
09:29:00	17	this is a case where damages are involved, and it's	09:30:59		
09:29:04	18	plausible to me that the statistics will be used in	09:31:01		
09:29:08	19	some way that or another to make inferences	09:31:02		
09:29:13	20	about the levels of damages.	09:31:05		
09:29:15	21	And in that case, the lower bounds could	09:31:07		
09:29:20	22	affect money.	09:31:09		
09:29:27		·	09:31:10		
09:29:28			09:31:11		
09:29:35			09:31:12		
*was disabbas matuu tisaan e miramba ayaa mirambahan saga mirabban saga mirab aya sagaba aya	***************************************	Page 27		Page	29
09:29:38		_	09:31:13		
09:29:40			09:31:15		
09:29:41			09:31:15		
09:29:43			09:31:16		
09:29:47			09:31:18		
09:29:49			09:31:20		
09:29:53			09:31:23		
09:29:54			09:31:27		
09:29:57			09:31:29		
09:29:58			09:31:34		
09:30:00			09:31:38		
09:30:01			09:31:42		
09:30:01			09:31:42		
09:30:01			09:31:45		
09:30:03			09:31:51		
09:30:06			09:31:52		
09:30:09			09:31:54		
09:30:13			09:31:56		
09:30:21			09:31:58		
09:30:23			09:32:00		
09:30:25			09:32:03		
09:30:27			09:32:05		
09:30:28			09:32:08		
09:30:28			09:32:11		
09:30:29			09:32:11		

8 (Pages 26 to 29)

		Page 46		Page 4	18
10:07:50		_	10:10:37		
10:07:54	2	THE WITNESS: Well, if we had estimates of	10:10:38		
10:07:56	3	measurement error, it would be quantifiable.	10:10:42		
10:07:58	4	MR. PICKETT: Q. But you don't?	10:10:57		
10:08:00	5	A. Not at this time, I don't.	10:11:00		
10:08:02			10:11:05		I
10:08:04			10:11:08		
10:08:09			10:11:11		ı
10:08:10			10:11:16		
10:08:11			10:11:17		
10:08:12			10:11:19		
10:08:14			10:11:22		.
10:08:17			10:11:34		
10:08:20	14	Q. Have you concluded that any measurement	10:11:35		
10:08:23	15	errors in fact occur?	10:11:38		
10:08:25	16	MR. WILKES: Objection. Form.	10:11:42		
10:08:29	17	THE WITNESS: I've concluded that	10:11:44	•	
10:08:30	18	measurement errors have the potential to have	10:11:48		
10:08:33	19	occurred.	10:11:53		
10:08:34	20	MR. PICKETT: Q. So the answer to my	10:11:55	•	
10:08:35	21	question is, no, Mr. Pickett, I have not concluded	10:11:58		
10:08:38	22	that any specific measurement errors in fact occur.	10:11:59		
10:08:41	23	Right?	10:12:00		
10:08:41	24	MR. WILKES: Objection. Form.	10:12:03		
10:08:42	25	Argumentative, harassing, asked and answered.	10:12:06		
		Page 47		Page 4	١9
10:08:54	1	THE WITNESS: I don't have an opinion	10:12:12		
10:08:58	2	about the magnitude of measurement error.	10:12:14		
10:09:01	3	MR. PICKETT: Q. Or even the existence of	10:12:16		
10:09:02	4	a single one. Correct?	10:12:23		
10:09:04	5	MR. WILKES: Objection. Form.	10:12:26		
10:09:14	6	THE WITNESS: I don't have evidence of a	10:12:27		
10:09:16	7	measurement error that has occurred.	10:12:30		
10:09:19			10:12:33		
10:09:20			10:12:35		
10:09:22			10:12:39		
10:09:27			10:12:46		
10:09:28			10:12:51		
10:09:30			10:12:55		
10:09:33			10:13:10		
10:09:35			10:13:12		
10:09:41			10:13:14		
10:09:45			10:13:18		
10:09:58			10:13:20		
10:10:08			10:13:24		
10:10:13			10:13:28		
10:10:16			10:13:32		
			10:13:33		
10:10:26					
10:10:31			10:13:38		
			10:13:38 10:13:40 10:13:42		

Page	Page 56
10:19:07	10:21:59
10:19:08	10:22:05
10:19:11	10:22:08
10:19:16	10:22:13
10:19:16	10:22:20
10:19:22	10:22:22
10:19:27	10:22:23
10:19:27	10:22:29
10:19:29	10:22:38
10:19:30	10:22:41
10:19:33	10:22:42
10:19:35	10:22:42
10:19:36	10:22:37
10:19:39	10:23:10
10:19:39	<u> </u>
10:19:39	10:23:12
	10:23:24
10:20:04	10:23:25
10:20:07	10:23:35
10:20:11	10:23:37
10:20:13	10:23:42
10:20:14	10:23:46
10:20:17	10:23:50
10:20:21	10:24:02
10:20:33	10:24:08
10:20:43	10:24:11
Page !	Page 57
10:20:49	10:24:18
10:20:52	10:24:25
10:20:56	10:24:29
10:20:59	10:24:32
10:21:02	10:24:36
10:21:02	10:24:39
10:21:02	10:24:43
10:21:07	10:24:46
10:21:09	10:24:49
10:21:21	10:24:49
10:21:22	10:24:52
10:21:25	10:24:55
10:21:29	10:24:58
10:21:33	10:25:02
10:21:34	10:25:06
10:21:35	10:25:09
10:21:39	10:25:13
10:21:41	10:25:19
10:21:42	10:25:25
10:21:45	10:25:30
10:21:47	10:25:33 21 MR. PICKETT: Q. So this particular
10:21:51	10:25:34 22 criticism had no impact on the results. Correct?
10:21:55	10:25:37 23 MR. WILKES: Objection. Form.
10.21.55	
10:21:57	10:25:43 24 THE WITNESS: Not as calculated by

15 (Pages 54 to 57)

Page 74			Page 76
10:45:29	10:48:21		
10:45:31	10:48:22	2	MR. PICKETT: Q. You don't know how the
10:45:34	10:48:23	3	numbers tie into the case. Is that your testimony?
10:45:37	10:48:26	4	A. That's my testimony, yes.
10:45:40	10:48:29	5	Q. Therefore, you don't know whether any of
10:45:45	10:48:31	6	your criticisms of Dr. Levy make a difference in
10:45:52	10:48:36	7	the case. Right?
10:45:56	10:48:38	8	MR. WILKES: Objection. Form, asked and
10:46:02	10:48:39	9	answered, overly broad, compound, vague and
10:46:05	10:48:41	10	ambiguous.
10:46:09	10:48:45	11	THE WITNESS: I'm uncertain. My opinion
10:46:13	10:48:48	12	is that they do have some consequences for the
10:46:19	10:48:53	13	case.
10:46:23	10:48:57	14	MR. PICKETT: Q. What?
10:46:27	l	15	A. I don't know.
10:46:27	10:48:58	13	A. 1 dunt know.
•	10:49:01		
10:46:44	10:49:07		
10:46:46	10:49:15		
10:46:52	10:49:18		
10:46:56	10:49:21		·
10:47:01	10:49:23		
10:47:06	10:49:28		
10:47:08	10:49:30		
10:47:08	10:49:33		
10:47:11	10:49:35		•
Page 75			Page 77
10:47:13	10:49:40		
10:47:16	10:49:45		
10:47:19	10:49:48		
10:47:21	10:49:55		
10:47:22	10:49:57		
10:47:26	10:50:04		
10:47:29	10:50:06		
10:47:37	10:50:08		
10:47:38	10:50:12		
10:47:39	10:50:17		
10:47:42	10:50:22		
10:47:45	10:50:26		
10:47:47	10:50:31		
10:47:48	10:50:33		i
10:47:51	10:50:34		•
10:47:52	11:04:14		
10:47:53	11:04:45		
10:47:58	11:04:46		•
10:47:59	11:04:49		
10:48:02	11:04:52		•
10:48:04	11:04:53		
10:48:09	11:04:56		
10:48:14	11:04:56		
10:48:14	11:05:05		
10:48:18	11:05:11		
10:48:18	11:00:10	er energy security	

20 (Pages 74 to 77)

Page 78	Page 80
11:05:17	11:08:20
11:05:17	11:08:23
11:05:23	11:08:27
11:05:24	11:08:28
11:05:26	11:08:36
11:05:29	11:08:43
11:05:30	11:08:47
11:05:31	11:08:52
11:05:33	11:08:55
11:05:34	11:08:59
11:05:36	11:09:00
11:05:38	11:09:01
11:05:42	11:09:05
11:05:47	11:09:07
11:06:03	11:09:13
11:06:04	11:09:15
11:06:10	11:09:20
11:06:24	11:09:25
11:06:27	11:09:32
11:06:31	11:09:41
11:06:33	11:09:42
11:06:36	11:09:42
11:06:38	11:09:45
11:06:40	11:09:48
11:06:42	
11:00:42	11:09:51
Page 79	Page 81
11:06:43	11:09:52
11:06:49	11:09:56
11:06:51	11:10:00
11:06:54	11:10:02
11:07:02	11:10:09
11:07:04	11:10:11
11:07:09	11:10:12
11:07:10	11:10:17
11:07:13	11:10:20
11:07:14	11:10:24
11:07:16	11:10:31
11:07:17	11:10:31
11:07:19	11:10:33
11:07:20	11:10:39
11:07:23	11:10:50
11:07:25	11:10:53
11:07:28	11:10:59
11:07:30	11:11:05
11:07:34	11:11:07 19 Q. Do you have any information at all with
11:07:37	11:11:11 20 respect to how the summary statistics from
	11:11:18 21 Dr. Levy's report translate into damages
11:07:43	
11:07:43 11:07:47	11:11:21 22 calculations or other kinds of arguments in the
11:07:47	11:11:21 22 calculations or other kinds of arguments in the

21 (Pages 78 to 81)

Page 82	Page 84
11:11:33	11:14:19
11:11:35	11:14:23
11:11:40	11:14:25
11:11:44	11:14:25
11:11:47	11:14:29
11:11:52	11:14:29
11:11:59	11:14:35
11:11:59	11:14:35
11:12:02	11:14:30
11:12:11	11:14:40
11:12:14	11:14:42
11:12:14	11:14:49
11:12:17	11:14:54
11:12:21	11:15:00
11:12:22	11:15:04
11:12:25	11:15:14
11:12:25	11:15:17
11:12:26	11:15:17
11:12:32	11:15:25 19 Q. So the higher the dollars at stake in the
11:12:35	11:15:25 20 lawsuit, the higher the level of precision in the
11:12:35	11:15:33 21 statistical analysis should be?
11:12:37	11:15:35 21 statistical analysis should be: 11:15:35 22 A. In general, yes.
11:12:39	11:15:36 ZZ A. In general, yes.
11:12:45	11:15:38
11:12:52	11:15:41
Page 83	Page 85
11:12:57	11:15:41
11:13:02	11:15:43
11:13:05	11:15:46
11:13:09	11:15:48
11:13:15	11:15:50
11:13:20	11:15:53
11:13:24	11:15:54
11:13:28	11:15:56
11:13:32	11:15:58
11:13:35	11:16:00
11:13:37	11:16:02
11:13:39	11:16:05
11:13:41	11:16:07
11:13:45	11:16:11
11:13:50	11:16:14
11:13:53	11:16:17
11:13:59	11:16:18
11:14:01	11:16:19 18 Q. So there's a lot of money at stake.
11:14:05	11:16:21 19 A. There's a lot of money at stake.
11:14:08	11:16:23 20 Q. And that could justify foregoing sampling
11:14:10	11:16:26 21 altogether?
11:14:14	11:16:29 22 A. It depends on how the Dr. Levy's
11:14:14	11:16:31 23 numbers get used.
11:14:16	11:16:32 24 Q. Which you don't know?
11:14:18	11:16:33 25 A. Which I don't know.

22 (Pages 82 to 85)

	T
Page 90	Page 92
11:21:35	11:24:25
11:21:37	11:24:29
11:21:41	11:24:31
11:21:44	11:24:39
11:21:48	11:24:44
11:21:52	11:24:54
11:21:56	11:24:59
11:21:58	11:25:02
11:21:59	11:25:04
11:22:04	11:25:07
11:22:09	11:25:08
11:22:15	11:25:08
11:22:17	11:25:13
11:22:22	11:25:19
11:22:25	11:25:21
11:22:27	11:25:24
11:22:27	11:25:35
11:22:30	11:25:39
11:22:32	11:25:43
11:22:34	11:25:46
11:22:46	11:25:50
11:22:48	11:25:55
11:22:50	11:25:58
11:22:52	11:25:36
11:22:57	11:26:04
Page 91	Page 93
11:22:58	11:26:17
11:22:59	11:26:28
11:23:01	11:26:30
11:23:02	11:26:37
11:23:04	11:26:41
11:23:05	11:26:45
11:23:06	11:26:47
11:23:09	11:26:51
11:23:19	11:26:53
11:23:24	11:26:53
11:23:28	11:26:54
11:23:52	11:26:56
11:23:54	11:26:59
11:23:57	11:27:02
11:23:59	11:27:06
11:24:04	11:27:13
11:24:08	11:27:16
11:24:09	11:27:17 18 Q. What did you mean when you said, "This is
11:24:11	11:27:19 19 quite a large range of uncertainty to deliberately
11:24:12	11:27:21 20 aim for in a case where Plaintiffs' allegations
11:24:14	11:27:25 21 place large sums of money at stake"?
11:24:16	11:27:27 22 A. Right. So I'm making an implicit
_	11:27:31 23 assumption that there's some link that I don't know
11:24:20	
11:24:20 11:24:22	
11:24:20 11:24:22 11:24:24	1

24 (Pages 90 to 93)

_					
,		Page 94		Page	96
11:27:45			11:29:57		
11:27:48			11:29:59		
11:27:52		4	11:30:01		
11:27:57			11:30:06		
11:28:02			11:30:08		
11:28:03	6	Q. Well, it could or it could not. You don't	11:30:09		
11:28:06	7	know one way or the other.	11:30:12		
11:28:08	8	A. I don't know what the links are between	11:30:12		
11:28:12	9	Dr. Levy's statistics and any damages claims.	11:30:14		
11:28:23			11:30:17		
11:28:25		•	11:30:20		
11:28:27			11:30:23		
11:28:32			11:30:26		
11:28:33			11:30:28		
11:28:36			11:30:29		
11:28:42			11:30:34		
11:28:44			11:30:35		
11:28:45			11:30:38		
11:28:49			11:30:42		
11:28:50			11:30:45		
11:28:52			11:30:46		
11:28:55	22	A. What I know about this case is, I was	11:30:47		
11:28:57	23	asked to review and evaluate Dr. Levy's report and	11:30:51		
11:29:02	24	his work, and that's what I know about. And I'm	11:30:53		
11:29:08	25	pretty myopic about the rest of the case. So	11:30:56		
	·············	Page 95		Page	97
		rage 93		rage	,
11:29:11			11:30:57		
11:29:13			11:30:57		
11:29:13			11:30:59		
11:29:17			11:31:02		
11:29:19	_		11:31:07		
11:29:21	6	MR. PICKETT: Q. Do you understand that	11:31:09		
11:29:22	7	there is a burden of proof in the trial?	11:31:12		
11:29:27	8	MR. WILKES: Objection. Form.	11:31:14		
11:29:29	. 9	THE WITNESS: I would expect that there	11:31:16		
11:29:30	10	is, yes.	11:31:18		
11:29:31	11	MR. PICKETT: Q. Do you know what that	11:31:20		
11:29:32	12	burden of proof is?	11:31:20		
11:29:34	13	MR. WILKES: Objection. Form.	11:31:22		
11:29:35	14	THE WITNESS: Not exactly.	11:31:24		
11:29:36			11:31:25		
11:29:38			11:31:27		
11:29:41			11:31:28		
11:29:42			11:31:30		
11:29:43			11:31:31		
11:29:44			11:31:34		
11:29:45			11:31:37		
11:29:46			11:31:39		
11:29:48			11:31:43		
11:29:51			11:31:45		
11:29:56			11:31:46		

25 (Pages 94 to 97)

		Page 122		Page 1	124
12:31:20		23.32 - 22	12:34:28	rage	164
12:31:24		·	12:34:28		
12:31:26			12:34:31		
12:31:29					
12:31:31			12:34:37		
12:31:33			12:34:40		
12:31:35			12:34:44		
12:31:37			12:34:47		
12:31:37			12:34:49		
12:31:42			12:34:52		
12:31:43		'	12:34:55		
12:31:45			12:34:59		
12:31:47			12:35:07		
12:31:47			12:35:11		
			12:35:16		
12:31:51	15	Q. But are you of the opinion that sampling	12:35:20		
12:31:53	16	with replacement is not sufficiently precise for	12:35:25		
12:31:56	17	the purpose at hand?	12:35:27		
12:32:03	18	MR. WILKES: Objection. Form.	12:35:30		
12:32:05	19	THE WITNESS: I don't know how the	12:35:32		
12:32:07	20	statistics are going to be used, and so that's why	12:35:35		
- 12:32:10	21	I can't answer that question. I don't have an	12:35:38		
12:32:12	22	opinion on that.	12:35:44		
12:32:13	23	MR. PICKETT: Q. So it may make no	12:35:49		
12:32:15	24	difference whatever whether sampling with	12:35:51		
12:32:17	25	replacement or sampling without replacement is	12:35:53		
		Page 123		Page 1	125
12:32:19	1	used?	12:35:56		
12:32:20	2	MR. WILKES: Objection. Form.	12:35:58		
12:32:21	3	THE WITNESS: Could be.	12:36:02		
12:32:24			12:36:05		
12:32:29			12:36:08		
12:32:33			12:36:11	•	
12:32:43			12:36:14		
12:32:49		,	12:36:15		
12:33:05			12:36:16		
12:33:07			12:36:18		
12:33:12			12:36:20		
12:33:24			12:36:21		
12:33:30		·	12:36:26		
12:33:32			12:36:27		
12:33:33			12:36:28		
12:33:34			12:36:29		
12:33:35	,		12:36:29		
			12:36:31		
12:33:37					
12:33:37 12:33:40			12:36:33		
1					
12:33:40			12:36:33		
12:33:40 12:33:43		,	12:36:33 12:36:36		
12:33:40 12:33:43 12:34:02			12:36:33 12:36:36 12:36:37		
12:33:40 12:33:43 12:34:02 12:34:03			12:36:33 12:36:36 12:36:37 12:36:38		

32 (Pages 122 to 125)

	Page 138		Page 140
12:53:40	1 MR. PICKETT: Q. Do you know how	12:56:19	
12:53:42	2 Dr. Vandaele chose his seed?	12:56:25	
12:53:45	3 A. No, I don't.	12:56:26	
12:53:47		12:56:27	
12:53:51		12:56:28	
12:53:53		12:56:29	
12:53:56		12:56:30	
12:54:04		12:56:31	
12:54:07		12:56:33	
12:54:10		12:56:36	
12:54:14		12:56:37	
12:54:17		12:56:38	
12:54:20		12:56:38	
12:54:28		12:56:40	
12:54:30		12:56:41	
12:54:35		12:56:43	
12:54:37		12:56:45	
12:54:40		12:56:48	
12:54:51		12:56:51	
12:54:53		12:56:52	
12:54:55		12:56:54	
12:54:57		12:56:57	•
12:55:01		12:56:58	
12:55:04	·	12:56:59	
12:55:09		12:57:00	
	Page 139	· · · · · · · · · · · · · · · · · · ·	Page 141
12:55:11		12:57:02	
12:55:12		12:57:06	
12:55:15		12:57:07	
12:55:18		12:57:11	
12:55:25		12:57:13	
12:55:29		12:57:17	
12:55:33		12:57:18	
12:55:36		12:57:19	
12:55:38		12:57:21	•
12:55:40		12:57:24	
12:55:43		12:57:26	
12:55:44		12:57:29	
12:55:45		12:57:30	
12:55:46		12:57:36	
12:55:50	_	12:57:37	
12:55:53	•	12:57:40	
12:55:54		12:57:46	
12:55:59		12:57:48	
12:56:00		12:57:49	
12:56:04		12:57:50	
12:56:09		12:57:52	
12:56:13		12:57:55	
12:56:14		13:42:45	
		· · · -	
12:56:15			

36 (Pages 138 to 141)

		Page 150			Page 152
14:00:31			14:02:41		
14:00:31	2	Q. Based on the discrepancy analysis, you	14:02:43		
14:00:33	3	don't know whether Dr. Levy's random set of numbers	14:02:54		
14:00:37	4	are random or not?	14:02:56		
14:00:39	5	MR. WILKES: Objection. Form.	14:03:02		
14:00:40	6	Argumentative, asked and answered.	14:03:03		
14:00:41	7	THE WITNESS: The discrepancy analysis by	14:03:06		
14:00:42	8	itself does not prove with absolute certainty that	14:03:11		·
14:00:51	9	Dr. Levy's sample was selected in a manner other	14:03:12		
14:00:55	10	than how he claims.	14:03:13		·
14:00:57		man now no organis.	14:03:14		
14:00:58			14:03:17		
14:01:02			14:03:17		
14:01:02			14:03:20		
14:01:03					
			14:03:28		
14:01:09			14:03:32		
14:01:13			14:03:36		
14:01:13			14:03:37	18	Q. Is your z statistic analysis a hypothesis
14:01:15		•	14:03:43	19	test?
14:01:16			14:03:48	20	A. I haven't set it up that way.
14:01:16			14:03:53	21	Q. Well, isn't the hypothesis you're testing
14:01:17			14:03:56	22	that Dr. Levy did not perform a random sampling of
14:01:18			14:03:58	23	the Critical Support population?
14:01:18			14:04:03	24	A. I just said I didn't set it up as a
14:01:19			14:04:05	25 [.]	hypothesis test.
		Page 151			Page 153
14:01:24			14:04:06	1	Q. Isn't that your hypothesis that you're
14:01:28			14:04:09	2	trying to test, whether you set it up that way or
14:01:29		•	14:04:11	3	not? Isn't that what you did?
14:01:30			14:04:12	4	MR. WILKES: Objection. Form.
14:01:32			14:04:14	5	THE WITNESS: I'm not doing a formal
14:01:33			14:04:16	6	hypothesis test in this analysis.
14:01:39			14:04:18		and the same state of the same
14:01:42			14:04:19		
14:01:45		•	14:04:19		•
14:01:51		·	14:04:21		
14:01:52			14:04:25		
14:01:53	12	MR. PICKETT: Q. On the basis of the	14:04:27		
14:01:54	13	discrepancy of 8 you find for Mr. Levy's sample,	14:04:29		
14:01:57	14	you cannot say on that basis alone that his sample			
14:02:00	15	is not random?	14:04:31 14:04:33		
14:02:00	16	MR. WILKES: Objection. Form.			
14:02:02	17	THE WITNESS: On the basis of that alone.	14:04:34		
	18		14:04:34		
14:02:07	18	I do not say that his sample is not random.	14:04:36		
14:02:15			14:04:39		·
14:02:17			14:04:42		
14:02:20			14:04:45		
14:02:27		·	14:04:48		
14:02:29			14:04:49		
14:02:33			14:04:50		
14:02:39			14:04:50		

39 (Pages 150 to 153)

		Page 198		Page 200
15:13:13			15:15:46	
15:13:18			15:15:48	
15:13:20			15:15:50	
15:13:21			15:15:53	
15:13:23			15:15:55	
15:13:26		•	15:15:56	
15:13:29			15:15:58	
15:13:33			15:16:07	
15:13:37			15:16:08	
15:13:42			15:16:15	
15:13:45			15:16:18	
15:13:46			15:16:21	
15:13:48			15:16:24	
15:13:50			15:16:27	
15:13:51			15:16:27	
15:13:51				
15:13:52			15:16:30	
1			15:16:32	
15:13:55 15:13:58			15:16:36	
1			15:16:40	
15:14:01 15:14:04			15:16:45	
15:14:04			15:16:49	
			15:16:52	
15:14:24			15:16:59	
15:14:26		•	15:17:01	
15:14:27		MALE A. 1921 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	15:17:02	
		Page 199		Page 201
15:14:29		•	15:17:04	
15:14:30	2	Q. Does it impact the confidence interval for	15:17:09	
15:14:33	3	the sampled measures?	15:17:10	
15:14:36	4	A. The underlying skewness, I believe, will	15:17:14	
15:14:40	5	affect the coverage properties of the confidence	15:17:16	
15:14:43	6	intervals for the sampled measures, yes.	15:17:17	
15:14:46	7	Q. How?	15:17:18	
15:14:49	8	A. When you have large skewness, it appears	15:17:20	
15:14:53	9	that the coverage will tend to be lower than the	15:17:21	
15:14:58	10	advertised rate.	15:17:24	
15:14:59	11	Q. Large skewness in the fully enumerated	15:17:25	
15:15:02	12	samples?	15:17:27	
15:15:03	13	MR. WILKES: Objection. Form. Vague and	15:17:28	
15:15:04	14	ambiguous, asked and answered	15:17:29	
15:15:06	15	MR. PICKETT: Q. What did you mean when	15:17:32	
15:15:07	16	you said, when you tend to have - I'm sorry, when	15:17:36	
15:15:09	17	you have large skewness? Did you mean large	15:17:39	
15:15:12	18	skewness in the fully enumerated samples?	15:17:42	
15:15:15	19	A. I I meant large skewness with the	15:17:45	
15:15:21	20	variable for which you're calculating a confidence	15:17:48	
15:15:24	21	interval, whether it's fully enumerated or sampled.	15:17:51	
15:15:31	22	Q. How does skewness in one measure affect	15:17:52	
1	23	the confidence interval of another measure?	15:17:53	
15:15:33				
15:15:33 15:15:39	24	A. Directly, it does not.	15:17:55	

51 (Pages 198 to 201)

Page 21	4 Page 216
15:33:43	15:36:19
15:33:46	15:36:21
15:33:50	15:36:24
15:33:53	15:36:27
15:33:54	15:36:29
15:33:56	15:36:30
15:33:58	15:36:32
15:34:00	15:36:36
15:34:05	15:36:42
15:34:13	15:36:43
15:34:16	15:36:46
15:34:27	15:36:48
15:34:29	15:36:50
15:34:32	15:36:53
15:34:34	15:36:55
15:34:36	15:36:58
15:34:39	15:37:00
15:34:41	15:37:00
15:34:42	15:37:02
15:34:43	
15:34:47	15:37:09
15:34:50	15:37:10
15:34:57	15:37:12
15:34:59	15:37:15
15:34:59	15:37:16
15:55:05	15:37:37
Page 21	Page 217
15:35:05	15:37:38
15:35:09	15:37:39
15:35:12	15:37:41
15:35:16	15:37:42
15:35:20	15:37:44
15:35:24	15:48:09
15:35:27	15:48:10
15:35:29	15:48:13
15:35:32	15:48:19
15:35:35	15:48:20
15:35:37	15:48:21
15:35:39	15:48:26
15:35:41	15:48:31
15:35:44	15:48:32
15:35:47	15:48:35
15:35:49	15:48:40
15:35:50	15:48:43
15:35:52	15:48:47
15:35:56	15:48:50
15:35:57	15:48:54
15:36:01 21 THE WITNESS: The analysis I just	15:48:57
15:36:02 22 described is one that I did not even write down.	15:48:59
15:36:07 23 It was one that I have looked at the tables, saw	15:49:04
15:36:11 24 the underestimation, and thought that it could also	15:49:05
15:36:16 25 apply to the sampled measures.	15:49:08

55 (Pages 214 to 217)

	Page 222			Page	224
15:57:07	J	16:00:23		5-	
15:57:20		16:00:24			
15:57:32		16:00:27			
15:57:41		16:00:27			
15:57:43		16:00:36			
15:57:47		16:00:37			
15:57:51		16:00:42	•		
15:57:55		16:00:45			
15:57:57		16:00:52			
15:57:59		16:00:57			
15:58:02		16:01:01			
15:58:11		16:01:02			
15:58:13		16:01:02			
15:58:14		16:01:09			
15:58:18		16:01:11			
15:58:20		16:01:21			
15:58:25		16:01:23			
15:58:30		16:01:26			
15:58:31		16:01:29			
15:58:33	·	16:01:32			
15:58:36		16:01:32			
15:58:43					
15:58:45		16:01:36			
15:58:50		16:01:41			
15:58:52		16:01:42			
13:36:32		16:01:45			
	Page 223			Page	225
15:58:55		16:01:46			
15:59:00		16:01:47			
15:59:03		16:01:50	•		
15:59:06 4	Well first of all, what is an implicit	16:02:15			
15:59:07 5 ca	alculation?	16:02:17			
15:59:08 6	A. An implicit calculation is, I look at some	16:02:22			
15:59:11 7 m	umbers and get a sense and do a calculation in my	16:02:26			,
15:59:16 8 he	ead and say it's about such-and-such.	16:02:31			
15:59:18		16:02:33			
15:59:21		16:02:36			
15:59:27		16:02:41			
15:59:29		16:02:48			
15:59:36		16:02:53			
15:59:41		16:03:00			
15:59:47		16:03:05			
15:59:51		16:03:10			
15:59:52		16:03:12			
15:59:55		16:03:13			
15:59:58		16:03:14	•		
15:59:59		16:03:15			
16:00:00		16:03:17			
16:00:02		16:03:19			
16:00:06		16:03:21			
16:00:16		16:03:30			i
16:00:17		16:03:33			

57 (Pages 222 to 225)

Page 238	Page 24
16:37:21	16:39:23
16:37:21	16:39:24
16:37:23	16:39:31
16:37:26	16:39:34
16:37:29	16:39:39
16:37:33	16:39:47
16:37:37	16:39:49
16:37:41	16:39:54
16:37:45	16:39:56
16:37:52	16:40:00
16:37:54	16:40:03
16:37:58	16:40:05
16:37:59	<u> </u>
16:38:00	16:40:12
16:38:03	16:40:19
	16:40:24
16:38:04	16:40:28
16:38:06	16:40:29
16:38:06	16:40:29
16:38:08	16:40:32
16:38:09	16:40:34
16:38:11	16:40:39
16:38:16	16:40:41
16:38:21	16:40:44
16:38:26	16:40:47
16:38:29	16:40:50
Page 239	Page 24
16:38:31	16:40:54
16:38:33	16:40:57
16:38:34	16:41:05
16:38:35	16:41:06 4 MR. PICKETT: Q. Okay. Let me ask you
16:38:36	16:41:07 5 this more simply: What is the probability of A or
16:38:44	16:41:10 6 B occurring if the probability of A is 10 percent
16:38:44	16:41:13 7 and the probability of B is 10 percent?
16:38:48	16:41:15 8 MR. WILKES: Objection. Form. Incomplete
16:38:51	16:41:17 9 hypothetical, calls for speculation, vague and
16:38:53	16:41:17 10 ambiguous.
16:38:54	16:41:22 11 THE WITNESS: Well, it's the sum of the
16:38:55	16:41:23 12 probabilities minus the probability of the joint
16:38:57	16:41:26 13 event. So it would be if my mental arithmetic
16:39:00	16:41:30 14 is right, it would be 19 percent.
16:39:00	16:41:59
16:39:02	16:42:00
16:39:03	16:42:10
16:39:04	16:42:14
16:39:08	16:42:17
16:39:10	16:42:21
16:39:14	16:42:25
16:39:14	
16:39:16	16:42:28 16:42:30
16:39:18	
16:39:21	16:42:31
	16:42:33

61 (Pages 238 to 241)

Page 250			Page 252
16:55:30	16:59:55	1	MR. WILKES: Same objection.
16:55:32	16:59:57	2	THE WITNESS: My inclination is borne of
16:55:56	17:00:00	3	my experience as a practicing statistician.
16:56:30	17:00:05	-	my experience as a practioning statistician.
16:56:31	17:00:07		
16:56:32	17:00:10		
16:56:40	17:00:10		
16:56:45	17:00:12		
16:57:02	17:00:14		
16:57:14	17:00:17		
16:57:23	17:00:18		
16:57:28	17:00:13		
16:57:31			
16:57:36	17:00:26		
16:57:40	17:00:29		
16:57:40	17:00:31		
16:57:49	17:00:32		
16:57:49	17:00:33		
16:57:53	17:00:34		
16:58:11	17:00:36		
	17:00:40	:	
16:58:13	17:00:53	:	
16:58:20	17:00:57	:	
16:58:24	17:01:03	:	
16:58:27	17:01:07	:	
16:58:35	17:01:13	:	
Page 251			Page 253
16:58:36	17:01:17		
16:58:41	17:01:19		
16:58:42	17:01:23		
16:58:42	17:01:26		
16:58:45	17:01:29		
16:58:47	17:01:31		
16:58:50	17:01:32		
16:58:52	17:01:36		
16:58:55	17:01:46		
16:59:01	17:01:47		
16:59:06	17:01:51		
16:59:09	17:01:53		
16:59:11	17:02:00		
16:59:18	17:02:02	14	MR. PICKETT: Q. Based on what you know,
16:59:19	17:02:04	15	are you able to say whether or not his precision
16:59:23	17:02:08	16	ranges are precise enough?
16:59:25	17:02:11	17	MR. WILKES: Same objection.
16:59:29	17:02:12	18	MR. PICKETT: Q. For the purposes of this
16:59:30	17:02:12	19	case?
16:59:34	17:02:13	20	MR. WILKES: Same objections.
16:59:37	17:02:13	21	THE WITNESS: Without knowing the purposes
16:59:42	17:02:18	22	of the case or having seen how the numbers are
16:59:44 23 Q. So your inclination has no basis?	17:02:19	23	going to be used, I can't answer your question and
16:59:52 24 MR. WILKES: Objection. Form.	17:02:22	23 24	say I know, no. So the answer is, I don't know.
16:59:54 25 MR. PICKETT: Q. Right?	17:02:25	25	At this point.
Germanian Maria Carana and Carana	1,.V2.J4		A STATE POINT.

64 (Pages 250 to 253)

	Pac	ge 254	Page 256
17:02:41	1 If I had more information about the use	e,I 17:06:28	
17:02:43	2 might be able to answer.	17:06:32	
17:02:45		17:06:35	
17:02:47		17:06:36	
17:03:04		17:06:40	
17:03:05	•	17:06:43	
17:03:08		17:06:45	
17:03:12		17:06:51	
17:03:16		17:06:55	
17:03:17		17:06:57	
17:03:19		17:07:01	
17:03:35		17:07:03	
17:03:37		17:07:05	
17:03:41		17:07:06	
17:03:46	•	17:07:09	
17:03:48	1	17:07:13	
17:03:52		17:07:15	
17:03:54		17:07:18	
17:03:56		17:07:22	
17:03:50		17:07:22	
17:04:04		17:07:25	
17:04:19		17:07:29	
17:04:19		17:07:23	
17:04:49	•	17:07:39	·
17:04:56		17:07:39	
17:04:30			
	Pag	ge 255	Page 257
17:04:58		17:07:43	
17:05:09		17:07:44	,
17:05:12		17:07:45	
17:05:21		17:07:49	
17:05:27		17:07:51	
		2.1.2.1.2	
17:05:31		17:08:01	
17:05:31 17:05:35			·
	·	17:08:01	·
17:05:35	•	17:08:01 17:08:05	·
17:05:35 17:05:40		17:08:01 17:08:05 17:08:10	
17:05:35 17:05:40 17:05:44		17:08:01 17:08:05 17:08:10 17:08:11	
17:05:35 17:05:40 17:05:44 17:05:48		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55 17:05:57		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55 17:05:57 17:06:01		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55 17:05:57 17:06:01 17:06:02		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55 17:05:57 17:06:01 17:06:02 17:06:04		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40 17:08:49	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55 17:05:57 17:06:01 17:06:02 17:06:04 17:06:06		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40 17:08:49 17:08:56	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55 17:05:57 17:06:01 17:06:02 17:06:04 17:06:06 17:06:13		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40 17:08:49 17:08:56 17:09:01	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:51 17:05:55 17:06:01 17:06:02 17:06:04 17:06:06 17:06:16		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40 17:08:49 17:08:56 17:09:01 17:09:04	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:55 17:05:55 17:06:01 17:06:02 17:06:04 17:06:06 17:06:16 17:06:18		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40 17:08:49 17:08:56 17:09:01 17:09:04 17:09:10	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:55 17:05:55 17:06:01 17:06:02 17:06:04 17:06:06 17:06:16 17:06:18 17:06:19		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40 17:08:46 17:08:56 17:09:01 17:09:04 17:09:10 17:09:13	
17:05:35 17:05:40 17:05:44 17:05:48 17:05:55 17:05:55 17:06:01 17:06:02 17:06:04 17:06:06 17:06:13 17:06:16 17:06:18 17:06:19 17:06:21		17:08:01 17:08:05 17:08:10 17:08:11 17:08:19 17:08:20 17:08:23 17:08:27 17:08:39 17:08:40 17:08:49 17:08:56 17:09:01 17:09:04 17:09:10 17:09:19	

65 (Pages 254 to 257)

1		Page 258			Page	260
17:09:28			17:13:23			
17:09:34			17:13:33			
17:09:37			17:13:36			
17:09:39			17:13:38			
17:09:40			17:13:41			
17:09:43		_	17:13:42	•		
17:09:45		·	17:13:44			
17:09:46			17:13:47			
17:09:47			17:13:49			
17:09:54			17:13:51			
17:09:57			17:13:51			
17:10:02			17:13:53			
17:10:06	13	Q. Let me ask you, please, to turn to	17:13:55			
17:10:08	14	paragraph 8.1 of your report, on page 42.	17:13:58			
17:10:44	15	On page 43, continuing on with paragraph	17:14:02			
17:10:49	16	8.1, you state that some of Dr. Levy's statements	17:14:06			
17:11:07	17	are, quote, "misleading statements about	17:14:09			
17:11:10	18	percentages." Do you see that?	17:14:14			
17:11:16	19	A. I see that.	17:14:18			
17:11:16	20	Q. What did you mean by that?	17:14:21			
17:11:21	21	A. What I meant was that Dr. Levy is offering	17:14:23			
17:11:25	22	his percentages as unconditional truth, while he's	17:14:28			
17:11:31	23	ignoring sampling error and any even potential for	17:14:31			
17:11:35	24	measurement error by Mandiant. He's just offering	17:14:35			
17:11:38	25	them as, this is what the actual true percentages	17:14:36			
		Page 259			Page	261
1		3				
17.11.42	1	OTA .	17-14-39			
17:11:42	1	are.	17:14:39			
17:11:43	1	are.	17:14:40			
17:11:43 17:11:47	1	are.	17:14:40 17:14:44			
17:11:43 17:11:47 17:11:50	1	are.	17:14:40 17:14:44 17:14:47			
17:11:43 17:11:47 17:11:50 17:11:52	1	are.	17:14:40 17:14:44			
17:11:43 17:11:47 17:11:50	1	are.	17:14:40 17:14:44 17:14:47 17:14:48			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51 17:14:54			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:04	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51 17:14:54			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:04 17:12:06	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51 17:14:54 17:14:59 17:15:01			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:04 17:12:06 17:12:10	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51 17:14:54 17:14:59 17:15:01 17:15:03			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:04 17:12:10 17:12:10	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51 17:14:54 17:14:59 17:15:01 17:15:03 17:15:07			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:06 17:12:10 17:12:13 17:12:16	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51 17:14:54 17:14:59 17:15:01 17:15:03 17:15:07 17:15:10			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:06 17:12:10 17:12:13 17:12:16 17:12:17	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:59 17:15:01 17:15:03 17:15:07 17:15:10 17:15:10			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:06 17:12:10 17:12:10 17:12:13 17:12:16 17:12:17 17:12:20	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:59 17:15:01 17:15:03 17:15:07 17:15:10 17:15:10			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:06 17:12:10 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:54 17:14:59 17:15:01 17:15:03 17:15:07 17:15:10 17:15:10 17:15:17			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:06 17:12:10 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25 17:12:30	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:59 17:15:01 17:15:07 17:15:10 17:15:17 17:15:19 17:15:23			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:04 17:12:10 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25 17:12:30 17:12:49	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:54 17:15:01 17:15:03 17:15:07 17:15:10 17:15:17 17:15:17 17:15:23 17:15:25			
17:11:43 17:11:47 17:11:50 17:11:52 17:12:01 17:12:04 17:12:06 17:12:10 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25 17:12:30 17:12:49 17:12:53	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:54 17:14:59 17:15:01 17:15:07 17:15:10 17:15:17 17:15:19 17:15:23 17:15:25 17:15:27			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:04 17:12:06 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25 17:12:30 17:12:49 17:12:53 17:12:59	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:59 17:15:01 17:15:03 17:15:07 17:15:10 17:15:17 17:15:17 17:15:23 17:15:25 17:15:28			
17:11:43 17:11:47 17:11:50 17:11:52 17:11:57 17:12:01 17:12:04 17:12:06 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25 17:12:30 17:12:49 17:12:53 17:12:59 17:12:59	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:59 17:15:01 17:15:03 17:15:07 17:15:14 17:15:17 17:15:19 17:15:23 17:15:25 17:15:28 17:15:29			
17:11:43 17:11:47 17:11:50 17:11:50 17:11:57 17:12:01 17:12:04 17:12:06 17:12:10 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25 17:12:30 17:12:49 17:12:53 17:12:59 17:13:06 17:13:08	1	are.	17:14:40 17:14:44 17:14:47 17:14:48 17:14:51 17:14:59 17:15:01 17:15:03 17:15:07 17:15:10 17:15:14 17:15:17 17:15:23 17:15:25 17:15:28 17:15:29 17:15:29			
17:11:43 17:11:47 17:11:50 17:11:50 17:11:57 17:12:01 17:12:04 17:12:06 17:12:10 17:12:13 17:12:16 17:12:17 17:12:20 17:12:25 17:12:30 17:12:49 17:12:53 17:12:59 17:13:06 17:13:08 17:13:10	1	are.	17:14:40 17:14:44 17:14:48 17:14:51 17:14:59 17:15:01 17:15:03 17:15:07 17:15:10 17:15:14 17:15:17 17:15:23 17:15:25 17:15:28 17:15:29 17:15:31 17:15:39			

66 (Pages 258 to 261)

Page 278	Page 280
17:50:56	17:53:37
17:50:56	17:53:38
17:50:58	17:53:42
17:51:00	17:53:42
17:51:03	17:53:45
17:51:06	17:53:51
17:51:11	17:54:13
17:51:12	
17:51:13	17:54:33
17:51:17	17:54:35
17:51:24	17:54:37
	17:54:39
17:51:26	17:54:45
17:51:29	17:54:51
17:51:31	17:54:56
17:51:38	17:54:57
17:51:39	17:54:59
17:51:41	17:55:01
17:51:42	17:55:05
17:51:46	17:55:11
17:51:50	17:55:16
17:51:52	17:55:18
17:51:55	17:55:22
17:52:01	17:55:24
17:52:04	17:55:26
17:52:05	17:55:31
Page 279	Page 281
17:52:07	17:55:37
17:52:09	17:55:46
17:52:11	17:55:49
17:52:12	17:55:52
17:52:16	17:55:55
17:52:19	17:55:56
17:52:26	17:55:58
17:52:35	17:55:59
17:52:38	17:56:01
17:52:43	17:56:06
17:52:45	17:56:11
17:52:48	17:56:13
17:52:53	17:56:15
17:53:00	17:56:20
17:53:00	17:56:23
17:53:12	17:56:27
17:53:12	17:56:27
17:53:15	
17:53:15	•
	17:56:35
17:53:21	17:56:37
17:53:23	17:56:39
17:53:25	17:56:42
17:53:28	17:56:43
17:53:32	17:56:44
17:53:34	17:56:45

71 (Pages 278 to 281)

_	·					
İ			Page 282			Page 28
	17:56:46			17:58:28		_
	17:56:47			17:58:29		
ŀ	17:56:49			17:58:33	•	
•	17:56:49			17:58:34		
	17:56:50			17:58:39		
ľ	17:56:50			17:58:42		
	17:56:51			17:58:44		
}	17:56:52		•	17:58:46		
	17:56:54			17:58:47		
	17:56:54	10	A. I don't know what purposes we're talking	17:58:50		
	17:56:56	11	about. For some purposes it would be too low, and	17:58:54		
i	17:56:58	12	for other purposes it might not matter. It's	17:58:55		
	17:57:00	13	context-dependent. Can't say that it's too low for	17:58:55		
	17:57:04	14	all purposes.	17:59:00		
1	17:57:06	15	Q. Well, is it too low for purposes of this	17:59:04		
	17:57:08	16	case? Do you know?	17:59:09		
ľ	17:57:09	. 17	MR. WILKES: Objection -	17:59:10		
	17:57:09	18	THE WITNESS: I don't know all the	17:59:12	•	
ı	17:57:10	19	purposes to which this is going ton used in this	17:59:13		
	17:57:12	20	case.	17:59:14		
	17:57:13	21	MR. PICKETT: Q. Do you know any of the	17:59:16		
	17:57:14	22	purposes?	17:59:17		
	17:57:14	23	MR. WILKES: Objection. Form.	17:59:17		
1	17:57:16	24	THE WITNESS: Not as I sit here, no.	17:59:19		
1	17:57:18			17:59:21		
			Page 283			Page 285
Ì	17:57:18			17:59:22		J
1	17:57:20			17:59:25		
1	17:57:21			17:59:27		
	17:57:22			17:59:31	•	
1	17:57:23			17:59:32		
1	17:57:29			17:59:33		
1	17:57:29		·	17:59:37		
ł	17:57:32			17:59:39		
	17:57:35			17:59:51		
1	17:57:35			17:59:53		
	17:57:42		İ	17:59:55		
1	17:57:46			17:59:56		
	17:57:57		·	17:59:59		
1	17:57:59			18:00:00		
	17:58:07			18:00:00	•	
	17:58:09			18:00:01		
	17:58:14			18:00:03		
1	17:58:18			18:00:06		
1	17:58:20			18:00:07		
1	17:58:21			18:00:09		
	17:58:22			18:00:12		
1	17:58:23			18:00:17		
1				18:00:22		
	17:58:25					
:	17:58:25 17:58:25			18:00:23	•	

72 (Pages 282 to 285)

Page 286	Page 288
18:00:26	18:02:49
18:00:27	18:02:51
18:00:29	18:02:53
18:00:30	
18:00:33	18:02:57
18:00:34	18:02:59
18:00:36	18:03:00
li de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	18:03:01
18:00:37	18:03:02
18:00:37	18:03:07
18:00:38	18:03:07
18:00:39	18:03:14
18:00:41	18:03:15
18:00:43	18:03:17
18:00:44	18:03:18
18:00:46	18:03:19
18:00:48	18:03:21
18:00:51	18:03:22
18:00:58	18:03:23
18:00:58	18:03:26
18:01:05	18:03:29
18:01:09	18:03:35
18:01:12	18:03:38
18:01:13	18:03:41
18:01:17	18:03:44
18:01:20	18:03:52
Page 287	Page 289
18:01:23	18:03:56
18:01:25	18:03:59
18:01:29	18:04:22
18:01:33	18:04:28
18:01:36	18:04:31
18:01:37	18:04:33
18:01:40	18:04:33
18:01:44	18:04:36
18:01:45	18:04:37
18:01:53	18:04:39
18:01:59	18:04:42
18:02:01	18:04:44
18:02:05	18:04:46
18:02:07	
18:02:11	18:04:51
18:02:13	18:04:54
18:02:16	18:04:57
18:02:16	18:05:01
18:02:27	18:05:05
18:02:29	18:05:07
18:02:29	18:05:10
18:02:30	18:05:13
18:02:31	18:05:17
	18:05:19
18:02:40	18:05:21 24 Q. Why did you ask to have fewer samples done
18:02:43	18:05:23 25 in the bootstrap?

73 (Pages 286 to 289)

Page	290 Page 292
18:05:24 1 A. Because the computations were taking to	00 18:08:26
18:05:27 2 long, and we wanted to get you the results before	re 18:08:28
18:05:31 3 my deposition.	18:08:31
18:05:33 4 Q. So you did it to reduce the time and	18:08:35
18:05:36 5 effort that was put into the exercise?	18:08:38
18:05:38 6 A. Yes. We were under a significant time	18:08:41
18:05:41 7 constraint.	18:08:43
18:05:42	18:08:44
18:05:45	18:08:46
18:05:48	18:08:47
18:05:49	18:08:49
18:05:52	18:08:52
18:05:53	18:08:55
18:05:55	18:08:59
18:05:56	18:09:03
18:05:58	18:09:06
18:06:00	18:09:07
18:06:02	18:09:09
18:06:08	18:09:14
18:06:10	18:09:15
18:06:16	18:09:20
18:06:19	18:09:21
18:06:21	18:09:26
18:06:24	18:09:42
18:06:24	
	18:09:43
Page	291 Page 293
18:06:26	18:09:46
18:06:29	18:09:50
18:06:32	18:09:52
18:06:34	18:09:54
18:06:37	18:09:54
18:06:40	18:09:56
18:07:03	18:09:58
18:07:05	18:10:00
18:07:08	18:10:02
18:07:10	18:10:03
18:07:10	18:10:03
18:07:14	18:10:04
18:07:16	18:10:05
18:07:21	18:10:09
18:07:28	18:10:10
18:07:31	18:10:12
18:07:59	18:10:14
18:08:08	18:10:15
18:08:11	18:10:16
18:08:12	18:10:18
18:08:16	18:10:20
18:08:18	18:10:23
18:08:22	18:10:32
18:08:23	18:10:38
18:08:24	18:10:39

74 (Pages 290 to 293)

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

DATED:

24

HOLLY THUMAN, CSR

une 8,2010

CERTIFICATE OF REPORTER

I, HOLLY THUMAN, a Certified Shorthand Reporter, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth, and nothing but the truth in the within-entitled cause;

That said deposition was taken down in shorthand by me, a disinterested person, at the time and place therein state, and that the testimony of said witness was thereafter reduced to typewriting, by computer, under my direction and supervision;

That before completion of the deposition review of the transcript [X] was [] was not requested. requested, any changes made by the deponent (and provided to the reporter) during the period allowed are appended hereto.

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

25