SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN FRANCISCO

DEWAYNE JOHNSON,

Plaintiff,

vs. Case No. CGC-16-550128

MONSANTO COMPANY, et al.,

Defendants.

_____/

Proceedings held on Tuesday, July 17, 2018, Volume 11, Morning Session, before the Honorable Suzanne R. Bolanos, at 9:27 a.m.

REPORTED BY:

LESLIE ROCKWOOD ROSAS, RPR, CSR 3462

Job No. 2965314A

Pages 2423 - 2464

APPEARANCES:

FOR THE PLAINTIFF:

R. BRENT WISNER, ESQ.
BAUM, HEDLUND, ARISTEI, GOLDMAN PC
12100 Wilshire Boulevard, Suite 950
Los Angeles, California 90025
310-207-3233

DAVID DICKENS, ESQ.
THE MILLER FIRM, LLC
108 Railroad Avenue
Orange, Virginia 22960
540-672-4224

FOR THE DEFENDANT:

SANDRA A. EDWARDS, ESQ.
FARELLA BRAUN + MARTEL LLP
235 Montgomery Street
San Francisco, California 94104
415-954-4400

APPEARANCES (Continued):

FOR THE DEFENDANT:

GEORGE C. LOMBARDI, ESQ.
JAMES M. HILMERT, ESQ.
WINSTON & STRAWN LLP
35 West Wacker Drive
Chicago, Illinois 60601
312-558-5969

KIRBY T. GRIFFIS, ESQ.
HOLLINGSWORTH LLP
1350 I Street, N.W.
Washington, D.C. 20005
202-898-5800

INDEX OF PROCEEDINGS

EXHIBITS ADMITTED

(None.)

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Morning Session

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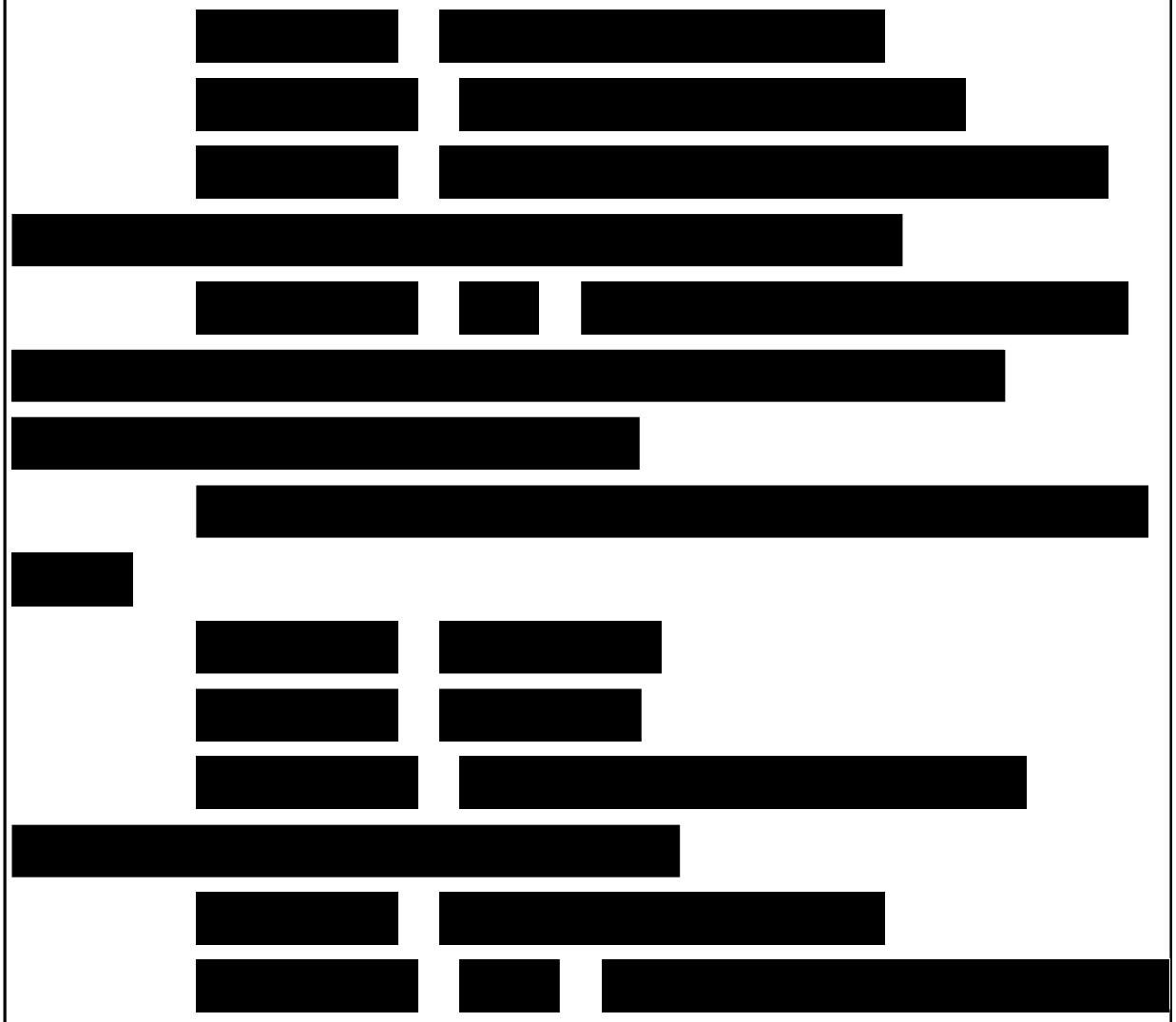
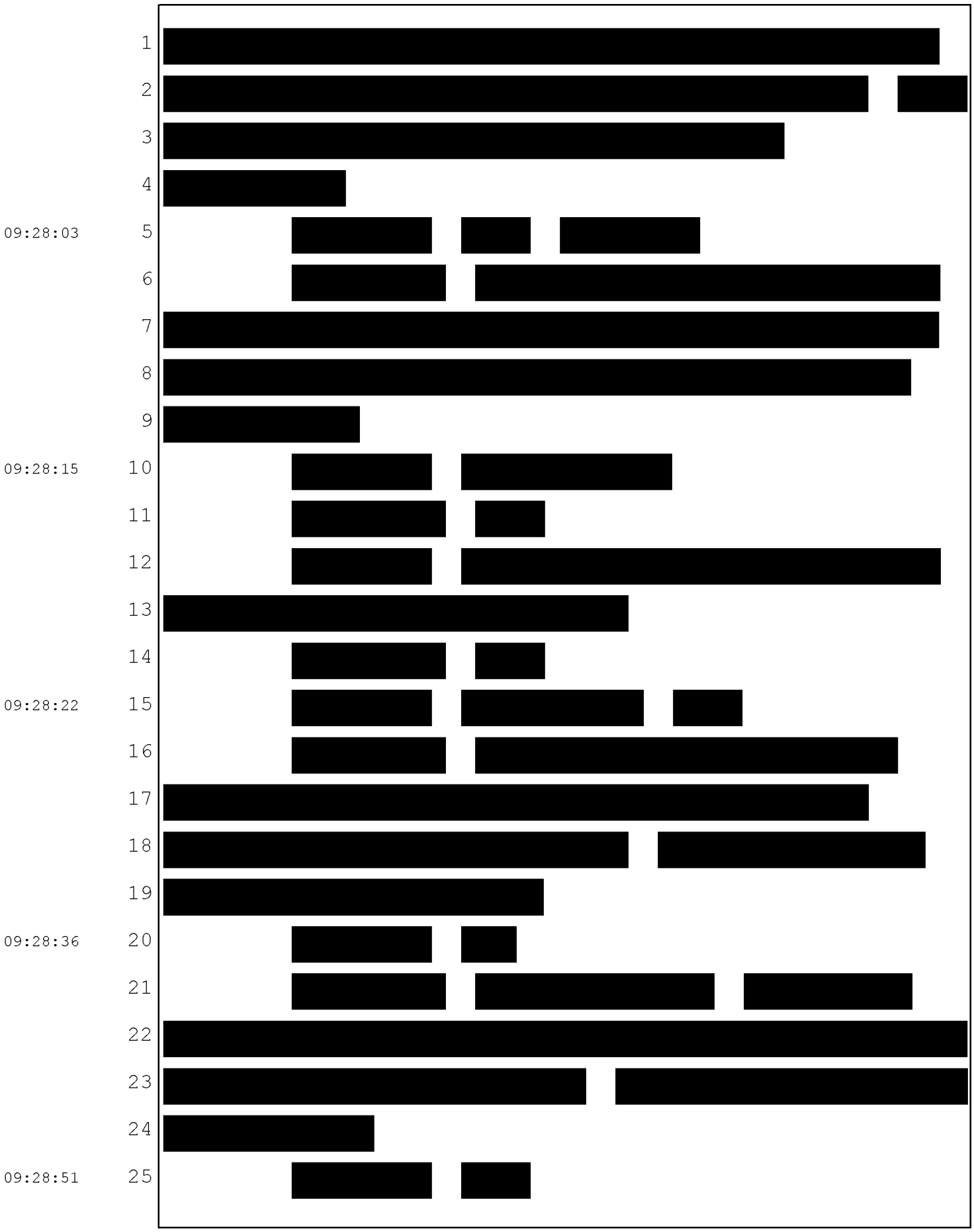
Judge Suzanne Ramos Bolanos

PROCEEDINGS

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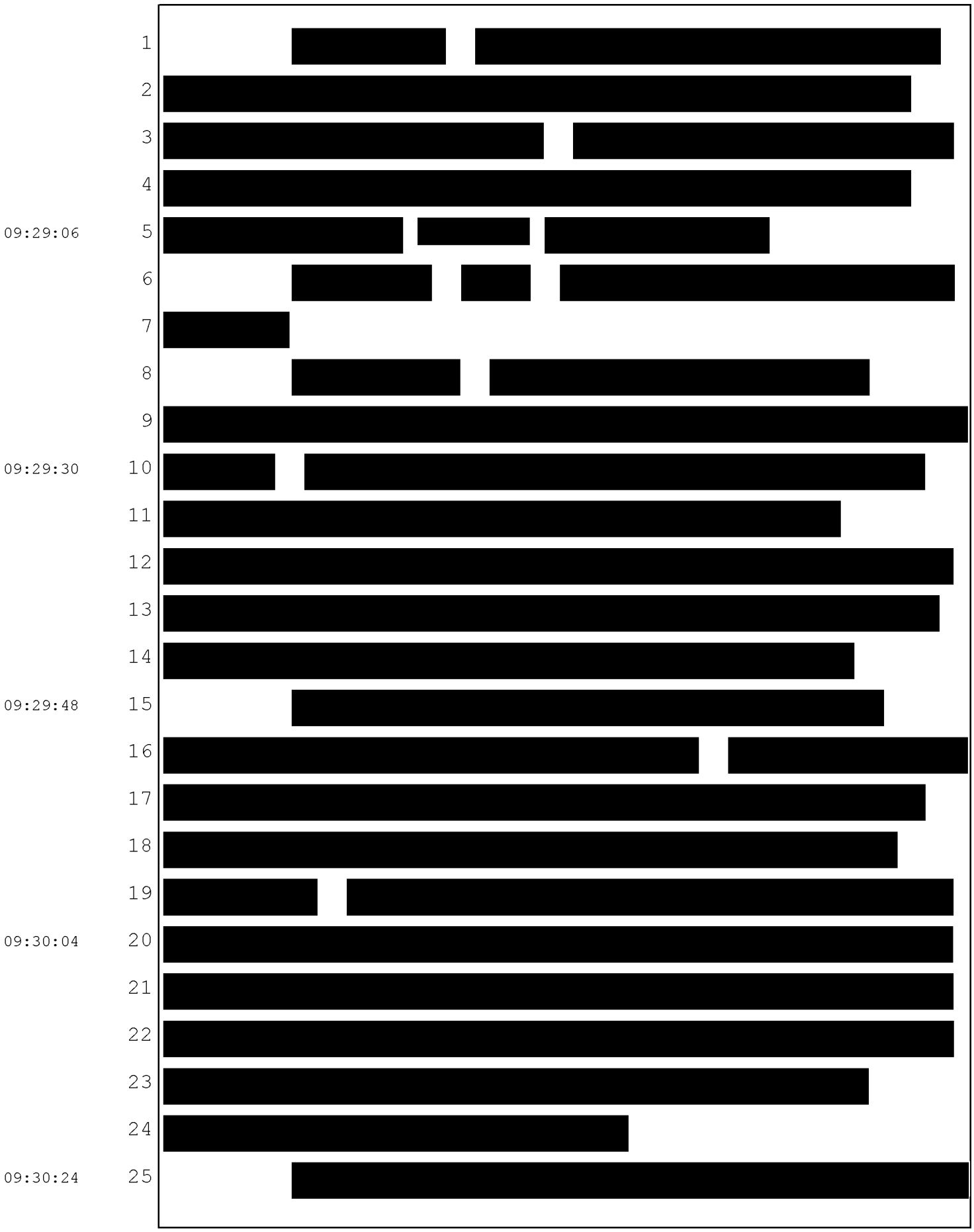
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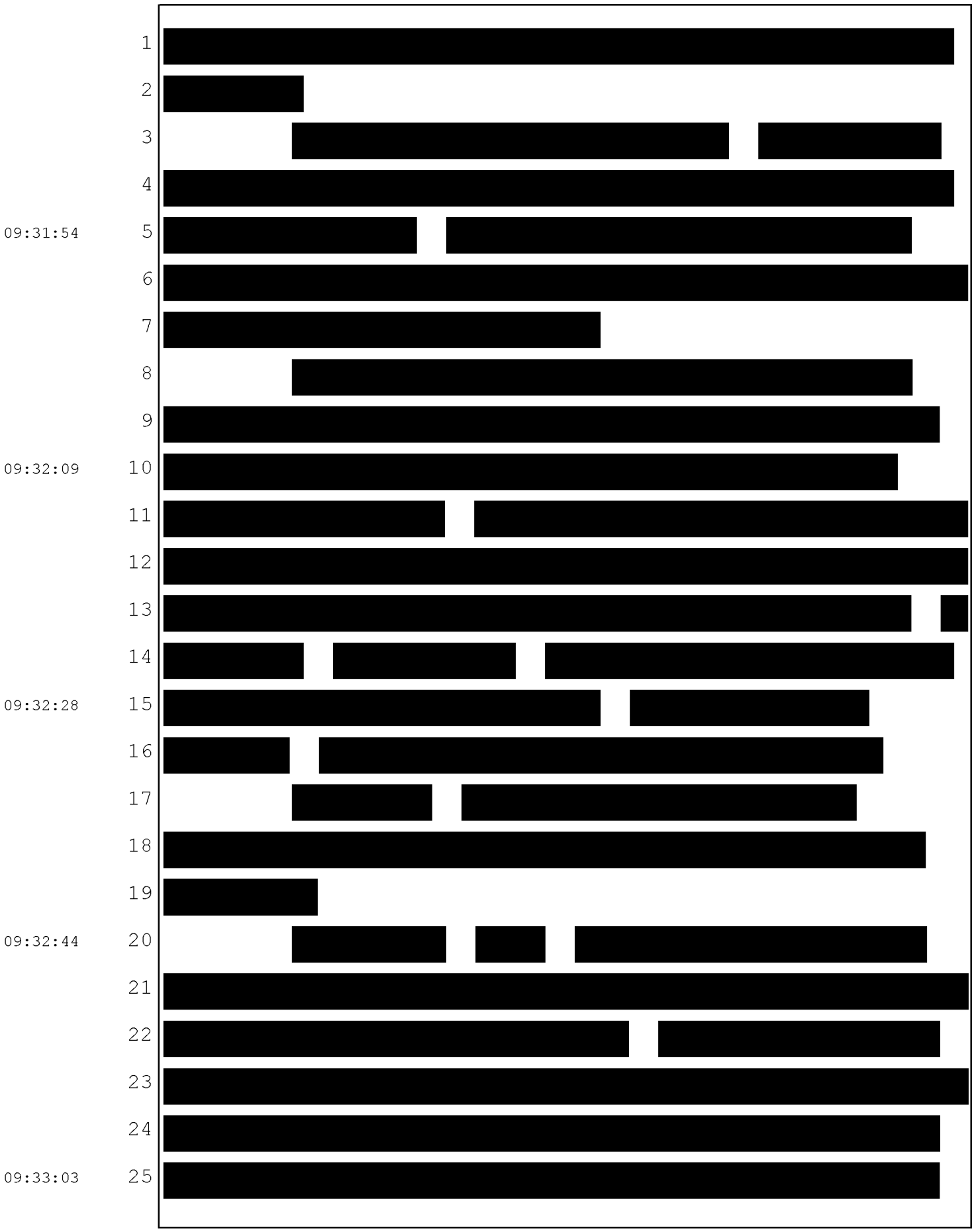
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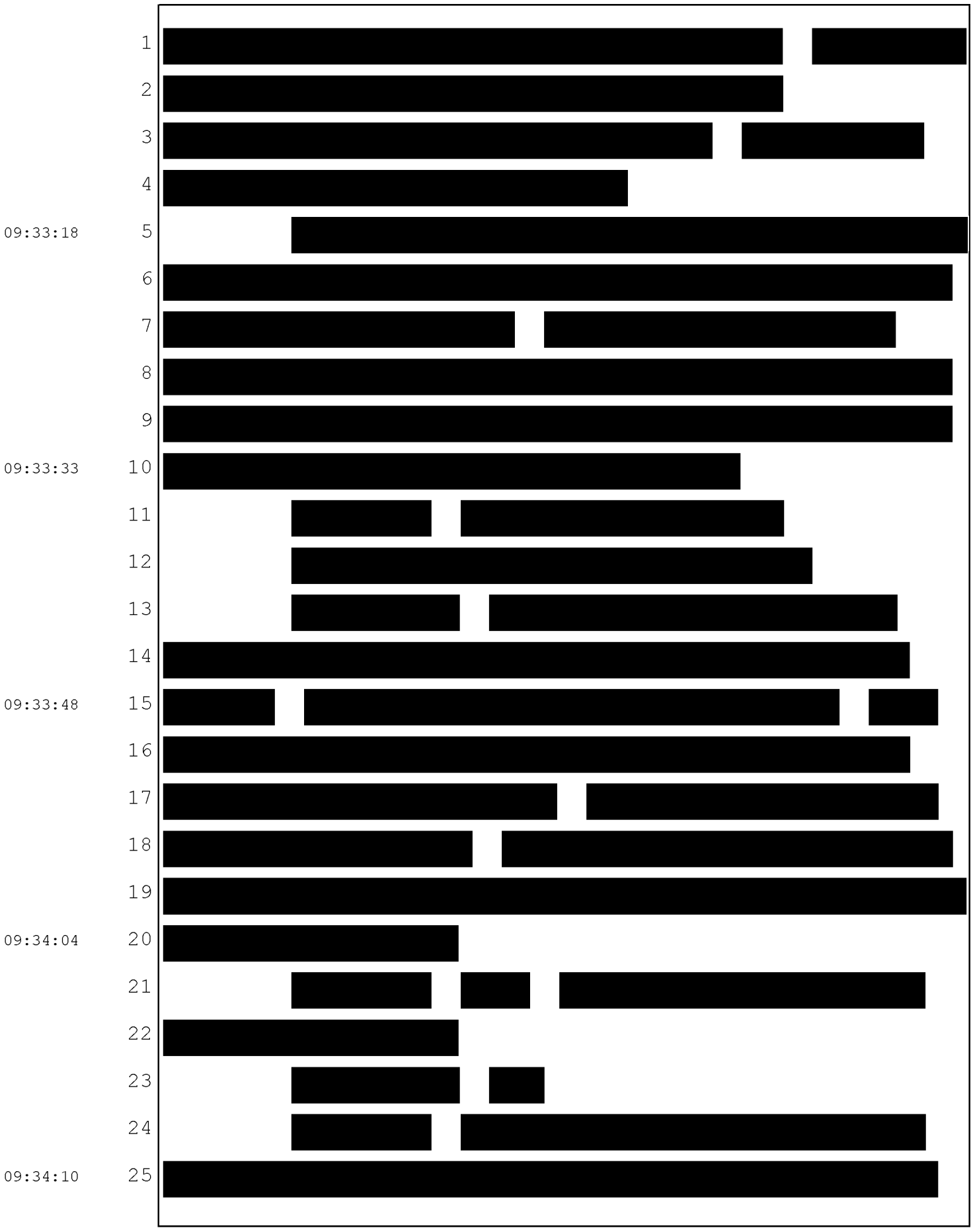
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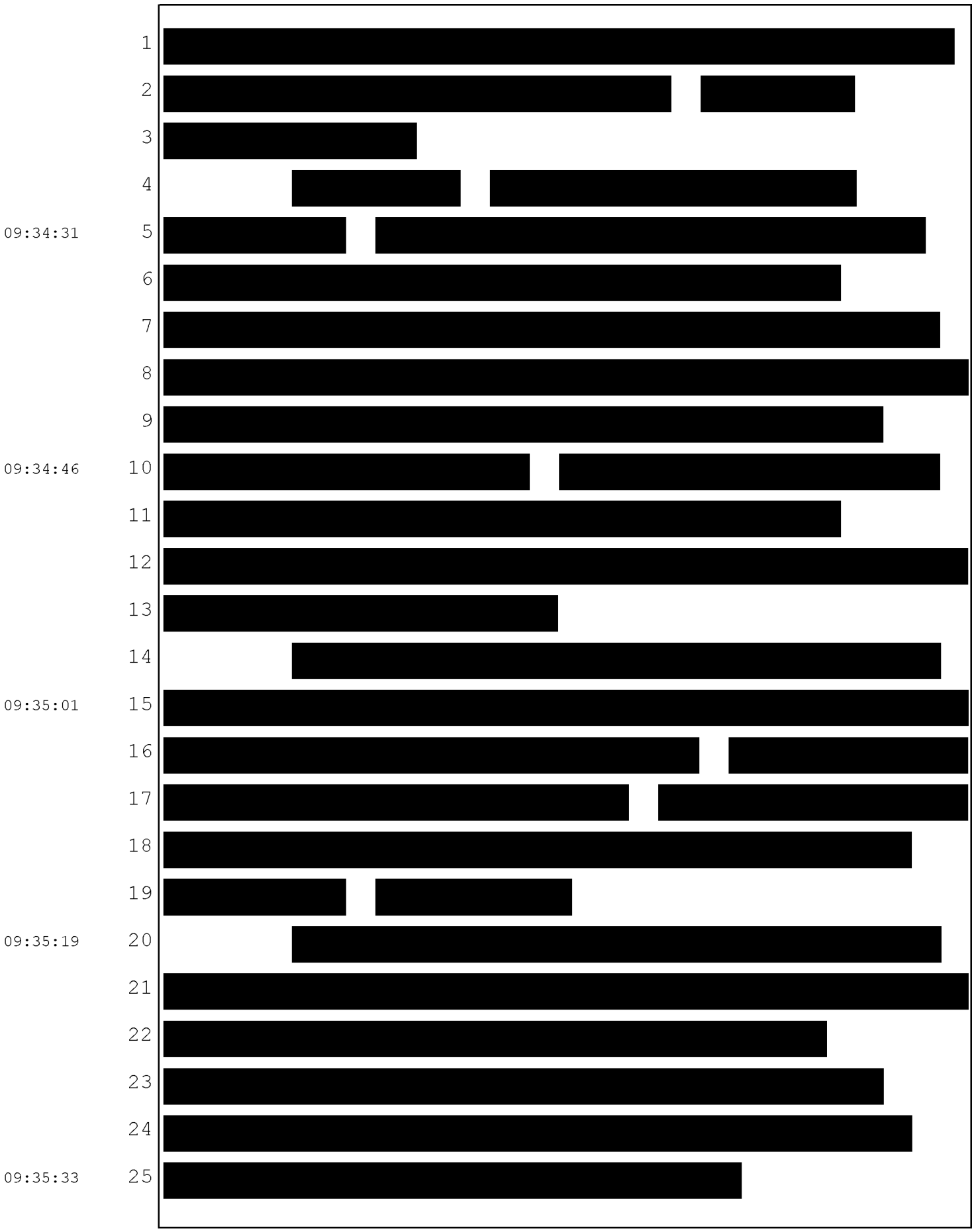
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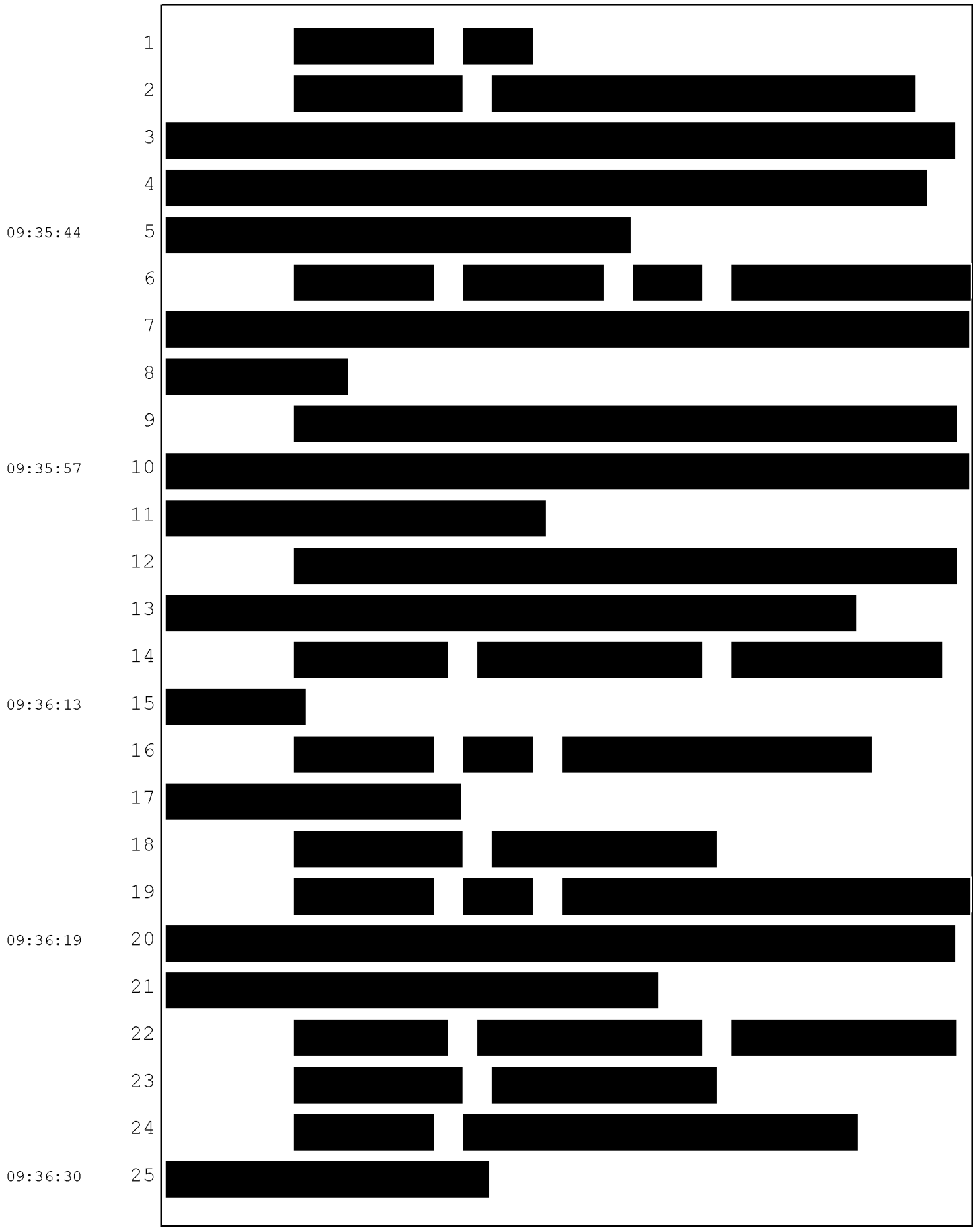
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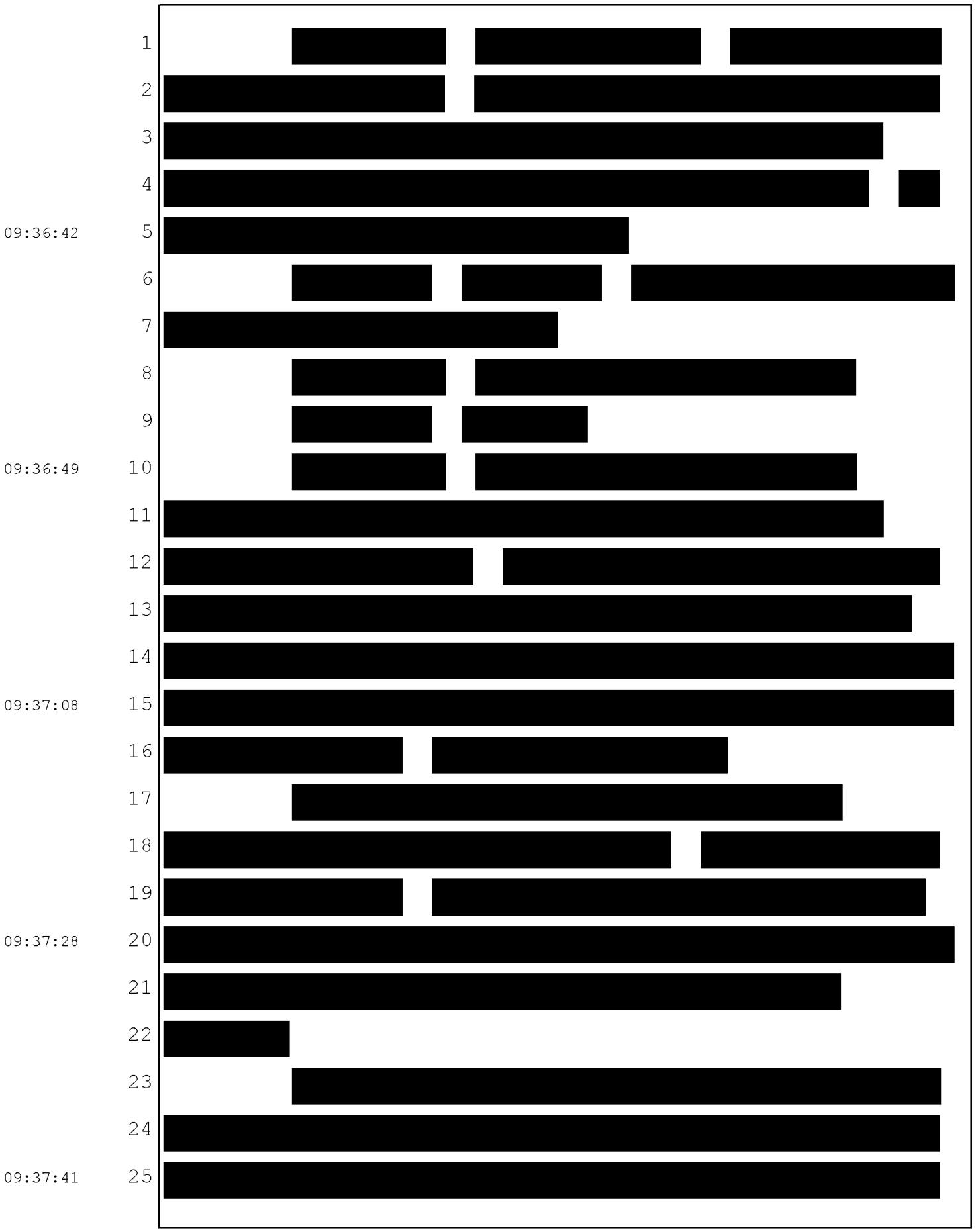
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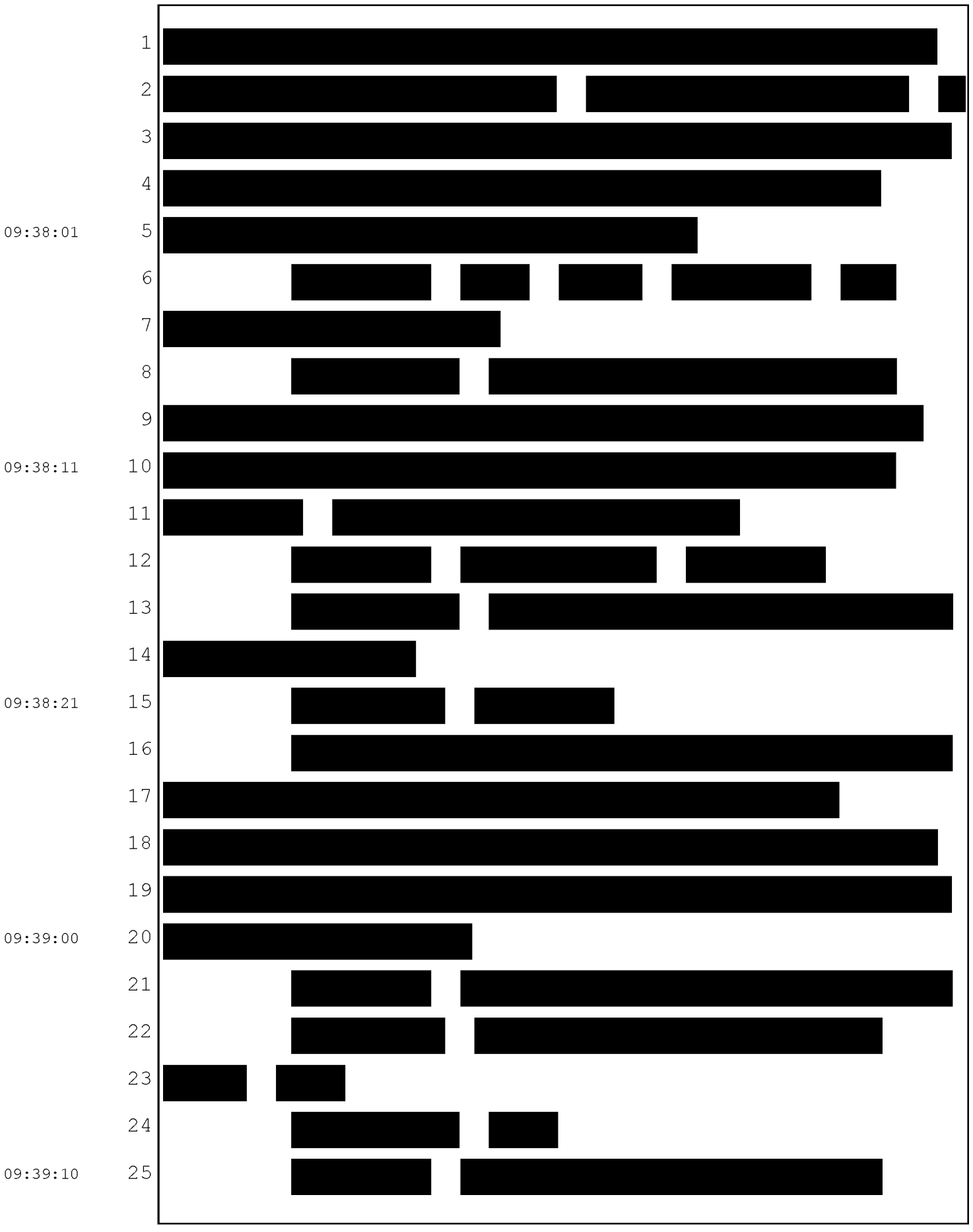
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[redacted]

(Jury enters courtroom.)

09:40:02 THE COURT: Good morning, Ladies and Gentlemen. Welcome back.

Good morning, Dr. Portier.

THE WITNESS: Good morning, your Honor.

THE COURT: Thank you for your patience, Ladies

09:40:16 and Gentlemen. We're now ready to resume with Dr. Portier, who remains under oath, and, Mr. Wisner, when you're ready, you may proceed.

MR. WISNER: Thank you, your Honor.

Good morning.

REDIRECT EXAMINATION (Continued)

BY MR. WISNER:

Q. Good morning, Doctor. How are you?

A. I'm fine. Thank you.

09:40:29 Q. If all goes according to plan, you will be off the stand today. Okay. Hopefully very soon.

All right. First thing I want to talk to you about is IARC, and one of the issues that came up on cross-examination was the timing that you guys had to

09:40:50 look at information at IARC. Can you please explain to

the jury how much time your understanding is that people had to review data and then come to a consensus at the meeting?

A. So my understanding is that the experts are chosen about a year in advance of the meeting. They're identified into what subgroup they will start the work with. They're given sections of the document to draft. They're given papers that IARC has identified as being important, and they go out and find their own papers as well.

09:41:05

09:41:29

About two to three months before the meeting, they generally start circulating drafts. They'll go to IARC first for English language correction. Not all of the scientists are native English speakers, and then they pass them back and forth. There's at least one reviewer for each section that's different than the person that wrote it, and then they all come together on -- for the Working Group meeting, and at that point, there's a draft in front of them, and they work from that for the eight days.

09:41:48

09:42:06

Q. And for all this time spent finding articles, reviewing them, summarizing them, drafting the Monograph, how much are the Working Group members paid for their time?

A. Nothing. They just get travel expenses, and

09:42:18

that's it.

Q. So you're telling me everyone in the Working Group, these 17 different scientists, didn't get paid for all the work they did on IARC?

09:42:30 A. No. They never get paid.

Q. What about you, as an invited specialist, do you get paid for your time?

A. No.

Q. Then why do you do it?

09:42:39 A. Because it's scientifically interesting to me, because it's an honor to work with IARC on one of these Working Group meetings. That's probably the main two reasons.

Q. Now, Doctor, I understand you submitted some

09:42:56 comments to the EPA and EFSA. Do you recall talking about that on cross?

A. Yes.

Q. How much were you paid for the time you spent putting together all those documents?

09:43:05 A. Nothing.

Q. Why did you do it?

A. Because I spent my entire career working on the best ways to evaluate and analyze and present data on carcinogenicity and help the interpretation of it, and I

09:43:25 participated in a lot of the guideline developments, and

they just weren't following them. So all of that effort had gone to waste, and it kind of made me a little annoyed.

Q. All right. Doctor, I understand you actually met with people in the EU who would listen to your scientific critiques; is that right?

A. That's correct.

Q. And so you spent time walking through science with these people; is that right?

A. Correct.

Q. How much did you get paid for that?

A. Nothing.

Q. So, again, is this part of this general concern about the quality of science?

A. Yes. I mean, I have a general concern about the quality of reviews for pesticides globally from all compounds, not just glyphosate, having scanned some of the others at this point.

Q. Have you ever testified as an expert in a litigation before?

A. No, never.

Q. So why did you choose to do it in this case?

A. I was asked.

Q. Okay. Were you interested in the subject matter?

A. Oh, yes. Absolutely. A glyphosate issue, absolutely I'm interested in it.

Q. And why are you so interested in it? Why are you spending so much of your free time trying to get the science straight on this issue?

09:44:38

A. Like I said, it's what I've dedicated my entire career to doing, and it seems to have been completely unraveled in some of these reviews.

MR. WISNER: Can you please put this on the Elmo?

09:44:51

Permission to publish Defendants' Exhibit 3183?

MR. GRIFFIS: No objection.

THE COURT: No objection?

MR. GRIFFIS: No.

09:45:00

THE COURT: You may proceed.

Q. BY MR. WISNER: Doctor, this is that chart we were looking at earlier from the defendants.

A. Yeah.

Q. All right. Remember we discussed previously

09:45:09

that there was some communications from the EPA to ECHA about this virus that was supposedly in the Kumar study? Do you recall that?

A. No. It was from EPA to EFSA.

Q. Fair enough. Thank you.

09:45:25

So EPA to EFSA, there was a conversation from

someone within the EPA that there was this virus; is that right?

A. That's right.

Q. Who -- who made that communication from the EPA?

09:45:35 A. I -- I only have hearsay. I -- I don't have firsthand knowledge of it.

MR. GRIFFIS: Objection. Hearsay.

THE COURT: Sustained.

MR. WISNER: Well, all right.

09:45:46 THE WITNESS: Sorry.

MR. WISNER: I love you, Man. All right.

Q. Well, let's talk a little bit about the AHS.

Now, the AHS was recently published, as it relates specifically to glyphosate, at the end of 2017; is that right?

09:46:07

A. The Andreotti paper, yes.

MR. WISNER: Permission to publish the Andreotti paper? It's Plaintiff's Exhibit 669.

THE COURT: Any objection?

09:46:16 MR. GRIFFIS: No objection.

THE COURT: You may proceed.

Q. BY MR. WISNER: All right. Here we go.

All right. Doctor, this is a copy of the Andreotti paper on the screen.

09:46:36 Do you see that?

A. Yes, I do see it.

Q. Now, I understand you don't agree that this is a well-conducted analysis of the AHS data for glyphosate; is that right?

09:46:45 A. It has some serious flaws, that's correct.

Q. Now, I want to be very clear. Do you have a problem with the AHS generally?

A. No, I don't.

Q. What is your problem?

09:46:57 A. Well, for -- for glyphosate, they -- the estimation -- the imputation of the exposures and the people there is just tremendously wrong.

For the other chemicals, it's wrong, but we're talking about percentages of less than 1 percent,

09:47:13 1-and-a-half percent. Not 7-and-a-half percent.

Q. All right. I'm going to look at one of the last pages of this document.

I'm looking at here, on page 7 of 8 -- okay, Doctor, I'm going to zoom in, so you can see it in a

09:47:34 second. Let's call out these limitations.

It says right here -- and limitations, is this a typical part of any published peer-reviewed article?

A. Yes. It typically is part of an article.

Q. All right. So it reads here: "This evaluation

09:47:48 has some limitations that should be acknowledged. First,

despite the specific information provided by the applicators about use of glyphosate, some misclassification of exposure undoubtedly occurred."

What does that mean?

09:48:02 A. Exactly what it says, that even though people gave them very clear information about what they used and when, it's never perfect. And so some people will have said they used it, and they didn't. Others will have said they didn't use it, and they actually did. That's

09:48:20 exposure misclassification.

Q. All right. And then it goes on to say here, "Given the prospective design, however, any misclassification should be nondifferential and lead to attenuated risk estimates."

09:48:34 What does that mean, "attenuated risk estimates"?

A. That means smaller than true. So if the true risk is 1.6, if it's attenuated it will be 1.4, 1.2. Depending on how bad the problem is.

09:48:48 Q. Okay. So generally it brings it closer to 1?

A. Correct.

Q. All right. I'm going to show you another limitation here. I think it's interesting.

It says, "Finally, it is important to note that

09:48:58 these studies have been conducted in different time

periods. Changing agricultural practices, such as pesticide application methods and use of protective" -- "personal protect equipment may impact actual exposure levels. In addition, if changing product formulations or
09:49:16 amounts used are associated with risk, this may also impact results."

Do you see that?

A. Yes.

Q. Do we have any evidence that glyphosate had
09:49:29 changing product formulations or amounts used during the study period?

A. I -- I'm not sure about formulations, but the amounts used have changed dramatically during the study period.

09:49:41 Q. And that was that diagram we showed of the country, where Iowa showed almost 20 times increased over -- between 1993 and 2015?

A. Yeah.

Q. Okay. Now, I understand you don't think that
09:49:56 this study's data is particularly reliable, but let's assume for a second that Monsanto's right, okay, that this is the end-all-be-all of epidemiological studies, the most important one. Okay? Let's walk into that universe for a second, if we can.

09:50:13 I want to look at some of the data on here. So

they pointed out -- this is the non-Hodgkin's lymphoma data.

Do you see that, Doctor? It's on the screen.

A. Yes, I do see it.

09:50:24 Q. And we talked about the different quartiles, 1, 2, 3 and 4.

Do you see that?

A. Yes.

Q. And it appears, based on this, that every single

09:50:32 exposure group is below 1; is that right?

A. That's correct.

Q. Below 1, actually -- I mean, if this was statistically significant, would suggest that glyphosate actually protects you against NHL, wouldn't it?

09:50:47 A. That's what it would suggest, yes.

Q. I mean, it would be like, "Hey, we should do a shot of glyphosate in the morning with breakfast to help us protect against cancer"?

A. I wouldn't go there.

09:50:57 Q. Okay. But if you actually look, it's not just NHL. I mean, all these other cancers are at or below 1. We have kidney, that one, Hodgkin's lymphoma, non-Hodgkin's lymphoma B-cell, chronic lymphocytic lymphoma, diffused B-cell lymphoma, marginal zone

09:51:19 lymphoma, follicular lymphoma, multiple myeloma.

Do you see how they're basically almost all at or below 1?

A. Correct.

Q. So we're not having any -- okay.

09:51:32 Does that in any way suggest anything to you about the quality of the study?

A. It's a consequence. It's an expected consequence of the exposure misclassification that is differential in this case.

09:51:46 Q. Okay. Now, here's one they didn't show you, non-Hodgkin's lymphoma T-cell.

Do you see this, Doctor?

A. Yes.

Q. And these risks are not below 1, are they?

09:51:57 A. No.

Q. In fact, for the middle exposure group, 4.25.

Do you see that?

A. Yes.

Q. And that's not statistically significant,

09:52:06 though, is it?

A. No. It crosses 1.

Q. But it's pretty elevated; right?

A. Yes.

Q. And if I were to pull out your plot chart and

09:52:16 lay it out for you, that would actually -- that number --

that point would be bigger than all the other ones on the chart, wouldn't it?

A. Yes.

Q. Now, if we actually go to the next page, there's a more comprehensive evaluation of a more deeper dive into non-Hodgkin's T-cell. And as you can see here, Doctor, for the first group, which is the less than five years of exposure, okay, we have a 1.86 for the middle group.

09:52:24 09:52:47

Do you see that?

A. Yes.

Q. So for the middle dose group, there's still an elevated, but it's not statistically significant.

Do you see that?

09:52:54

A. Yes.

Q. But for the 20-year lag -- well, before I ask you, what is a 20-year lag?

A. Basically if -- if -- they go back in time for 20 years and then start looking at your exposure and ignoring the exposure for the last 20 years.

09:53:09

Q. And so this would be -- you have had 20 years to, sort of, collect up cancers to look at; is that right?

A. Yeah.

09:53:22

Q. And so if you only looked at five years -- and

we talked about the bell curve of latency; right? If you look at only five years, you're looking at the first half -- the first part of the bell curve; right?

A. It's not latency here. It is lag time.

09:53:38 Q. Lag. You're only looking at the first part. Whereas for 20 years, you have more time to see more cancers to see if there's a risk?

A. Correct. And it changes where people go in what -- in which group.

09:53:50 Q. In this study, the one that Monsanto says is the greatest, there's actually a statistically significant, almost tripling of the risk for T-cell lymphoma; isn't there?

A. Yes, in the 20-year lag group.

09:54:02 Q. And, Doctor, mycosis fungoides, that's a T-cell lymphoma, isn't it?

A. Yes, it is.

MR. WISNER: No further questions.

THE COURT: Mr. Griffis.

09:54:12 MR. GRIFFIS: Yes. Thank you, your Honor.

RECROSS-EXAMINATION

BY MR. GRIFFIS:

Q. Good morning, sir.

09:54:18 A. Good morning.

Q. I'm going to talk to you about two things from the epidemiology part of the case. I'm going to talk to you about the NAPP slides that you were asked about during the redirect examination, and I'm going to ask you about the MCI 2018 study that we were just talking about.

So first of all, let's go to the NAPP slides. That's Defendants' Exhibit 2867.

MR. GRIFFIS: Permission to publish?

MR. WISNER: No objection.

THE COURT: Very well.

Q. BY MR. GRIFFIS: So let's go to page 10 of that.

And yesterday -- you remember when I asked you about these, sir? We talked about the difference between odds ratio A, which was controlled for age, sex, state, province, et cetera, and odds ratio B, which corrected for all of those -- adjusted for all of those plus the pesticides that they had found to be confounders. And there's statistical analyses; correct?

A. Correct. Well, potential confounders.

Q. Potential confounders. Well, they did change the data when you controlled for that; right?

A. Correct.

Q. Okay. And Mr. Wisner pointed you to this column (indicating) during your redirect examination, the A column. And the B column is the one that controls for

other pesticides; right?

A. Correct.

Q. And the overall risk there is not significant, 1.13 point estimate from 0.84 to 1.51; right?

09:55:46 A. That's -- that's what's there, yes.

Q. Now, I'd like to go to page --

A. But as I've noted many times, yes, no significance is not necessarily what you want to be looking at here.

09:56:03 Typically when you do these types of corrections, you're looking to see how much of the effect you see without the correction disappears when you put the correction.

You don't always just think of it as, well, it's 09:56:17 not significant, so it goes away. You look and see how much of a difference it made.

Q. And it makes a difference when you control for other pesticides. That's something we see consistently in the epidemiology. When we control for other 09:56:30 pesticides, the calculations go down. And that's because they're real confounders; right?

A. Not always. If you -- if you take a statistical analysis of an epidemiology study and keep adding on potential confounders, even if they're not confounders 09:56:48 you're going to see a reduction of statistical

significance.

Q. What I'm talking about is the glyphosate epidemiology. And the glyphosate epidemiology consistently, when studies are able to control for other
09:56:59 pesticides and they do so, the -- their calculated risks decline; correct?

A. That's only true on three of the studies. Three of -- two of the other studies didn't do a correction for other pesticides. And the De Roos 2003 study -- 2005
09:57:20 study didn't show us the case without correction for pesticides.

Q. Okay. Of the case control studies that you're relying on here, Eriksson, Orsi, the ones that are included in the North American Pooled Project, which are
09:57:32 all the North American US and Canadian ones, those, when they were able to correct for other pesticides, risk drops; right?

MR. WISNER: Objection. Compound. The lawyer's testifying.

09:57:43 THE COURT: Overruled.

He may answer, if he knows.

THE WITNESS: I'm not sure I know what the question was.

Q. BY MR. GRIFFIS: Okay. We'll move on. Let's go
09:57:51 to page 11 of the slides.

I'm sorry, page 12 is the one you were shown. I just want to ask you about stuff you were shown here.

So this is one that Mr. Wisner showed you as well, pointing to some statistically significant point estimates in the greater than two days per year group; correct?

09:58:11

A. Correct.

Q. Take a look at the asterisk on the odds ratio, and tell us whether this was controlled for other pesticides.

09:58:21

A. It did not control for other pesticides.

Q. Okay. Let's go to the last page -- or not the last page, because there were some pictures. But the last page of data on page 26 from this slide show.

09:58:38

And here we have a couple of exposure calculations. We have duration -- and this is something we went over during your cross-examination, sir. Duration, number of years of exposure, frequency, greater than 0 and less than or equal to 2 and greater than 2. And then a combined measure of intensity that combines lifetime days, number of years times number of days per year; correct?

09:58:58

A. Correct. That's what it seems to be. Again, I can't be certain, because I don't have a document to go with it. But that's what it seems to say.

09:59:13

Q. Right. Dr. Weisenburger and his colleagues never published this, so we don't have -- we don't have a publication. We have to deal with what we have; right?

A. Or not, which is what I've done -- what I've chosen to do.

09:59:26

Q. You've chosen not to deal with it, because you don't have it? Is that what you mean?

A. Yes. To me, it's not a -- it's not a solid piece of science, if I can't understand all the methods used, et cetera.

09:59:36

Q. Okay. Let's look at the self-respondents only. We talked about the problem with proxy and self-respondents. So these are the people reporting on their own exposure data, the aggregate calculation adjusted for other pesticides, combined intensity of exposure. Is that statistically significant, sir?

09:59:50

A. The one you've highlighted?

Q. Yes.

A. The confidence bound includes 1.

Q. All right. Let's go to the AHS study. That's Defendants' 2052.

10:00:04

MR. GRIFFIS: Permission to publish that?

THE COURT: Any objection?

MR. WISNER: Sorry, what is it?

MR. GRIFFIS: The 2018 --

10:00:19

MR. WISNER: Oh, yeah.

THE COURT: All right. Very well. You may proceed.

Q. BY MR. GRIFFIS: Let's go to Table 2, non-Hodgkin's lymphoma T-cell -- Table 2 is the display -- I'm sorry. We're on -- we're on page 5. Page 5, second page.

So this is a table -- a multi-page table showing the overall results for multiple cancer types; right?

10:00:46 A. Table 2?

Q. Yes.

A. Yeah. It's -- it's one of their measures of exposure. The intensity weighted measure of exposure for several cancers.

10:00:57 Q. Intensity weighted measure.

Let's go down to non-Hodgkin's lymphoma T-cell, because you were asked about that.

MR. GRIFFIS: A little farther down. Highlight the last one there.

10:01:07 Q. Now, first of all, these are in moieties; right?

A. Correct.

Q. And they're in moieties because there wasn't very much data. There wasn't enough data for terciles. There wasn't enough data for quartiles. They had to do

10:01:23 moieties for this one; right?

A. Well, there's tons of data here. What you're talking about is the number of cancer cases that they're looking at is what they did -- what they used. And since there was so few cancer cases, they only went into -- breaking it into half.

10:01:35

Q. There's so few cases of non-Hodgkin's lymphoma T-cell in this study. There's lots of multiple myeloma. They're able to have quartiles. There's a good amount of follicular lymphoma. They're able to have terciles. Lots of diffused B-cell lymphoma. They're able to have quartiles. But not so much of this T-cell; right?

A. For the non-Hodgkin's lymphoma T-cell, they have 22.

Q. Let me ask you this: If you had an animal study and you had an exposed group -- and unexposed group and then a low dose group that went up from the unexposed group, and then a high dose group that went down, what would you conclude about the significance of that tumor in your animal study (indicating), a response like that?

10:02:02

10:02:32

A. I can't say. It depends how much it goes down. It depends how it goes down.

Q. Okay. You've been talking about P trends a lot; right? P trends are one of the main tools that you use to tell us about the significance of the animal studies.

10:02:49

A. Correct.

Q. What's the P trend here? Is that significant?

A. The -- if you can get to the top, so I can verify, but I think that the trend's statistic.

Q. P trend?

10:02:54 A. Yes. So it's .31.

Q. And that's not significant; right?

A. That is not statistically significant.

Q. Let's go over to the next table, Table 3, and we're on page 6 of 8. And while we were looking at this

10:03:12 page, Mr. Wisner was talking about the issue of point estimates above and below 1; right?

A. Yes.

Q. Take a look -- take a look at the column here. There are 14 point estimates above 1 in this data; right?

10:03:33 In that column?

A. I couldn't know unless I sat down and counted them.

Q. We've got values above and below 1 all the way up; right? That's above, below, below, above, below,

10:03:44 below, below, below, above, below, below, below, above, below, right, et cetera. Right? They're not all below.

A. They're not all below, that's clear.

Q. Okay. Let's go down to non-Hodgkin's lymphoma T-cell, so this is a chart that's showing us five-year

10:04:04 lag and 20-year lags; right?

A. Correct.

Q. Again, we've got moieties? "Yes"?

A. Yes.

Q. Again, we have an increase and then a decrease and a T trend that is very much not statistically significant; right?

10:04:16

A. Both confidence intervals include 1, and the p-value's 1.36.

Q. And this thing that you were told was tripling, we don't have any data to calculate a P trend; right? There's so little data over there in that column?

10:04:31

A. Yeah, there was only one case in the high exposure group, so you don't have enough data there, but you do for the lower exposure group.

MR. GRIFFIS: Thank you, sir. No further questions.

10:04:47

THE COURT: Thank you.

All right. Ladies and Gentlemen, we have reviewed the questions that you submitted to Dr. Portier, and there are just a couple of questions that we're now going to be asking to Dr. Portier. The remainder of your questions we either already addressed during the course of his testimony over the last several days or perhaps they're not truly relevant to your decision in this case.

10:04:59

10:05:17

So having gone through all of the questions, I'm

now going to ask Dr. Portier a few questions, and you should not speculate as to why some questions are asked and others aren't.

All right. So, Dr. Portier, the first question
10:05:35 that the jurors have for you is: Are all human carcinogenic compounds positive in the Ames test?

THE WITNESS: So the -- I hope you'll understand that question, do they all have genotoxic activity as identified by the Ames test? No, they do not. There are
10:06:01 several well-known human carcinogens, dioxin being one of them, progesterone, estradiol, that do not have positive activity in the Ames assay.

THE COURT: And then as a follow-up to that question, how many are not positive in that test, but --
10:06:27 how many are not positive in that test but are human carcinogenic?

THE WITNESS: Well, that's a harder question, because I'd have to go and look at somebody's list of all the known human carcinogens, and so that would take some
10:06:45 time. Like I said, there are some well-known ones, dioxin is probably the most potent chemical carcinogen in the world, and it does not cause DNA damage directly in the Ames assay. I can't go beyond a few examples.

THE COURT: That's fine.

10:07:04 And then the final question is: Would

cytotoxicity have been reported in rat or mouse study pathology reports, and as a follow-up to that, were those made available during review?

THE WITNESS: So typically, in an animal cancer study -- we have to make sure we don't confuse the cancer studies with the genetic toxicology studies where they were looking at micronuclei. In the cancer studies -- because in those studies, the micronuclei studies, they seldom look inside the animals. They just take blood and look to see if there's a problem in the blood in terms of DNA damage or specific tissue, but they don't do full pathology.

In an animal cancer bioassay, you look at every tissue and every organ, and if there is tissue deterioration that appears to show up, regardless of the cause, it could be cell killing, it could be that the tissue is being invaded by parts of the immune system because it's beginning to look a little odd to the rest of the body, there's many reasons why you might have tissue damage, but that tissue damage is indeed recorded.

For the evidence that I had in -- from those studies and the Greim papers, some of those papers included some information on non-cancer findings. Others only showed cancer findings, so it was mixed as to whether I could see it.

In reading the reports of EFSA and the EPA, none of them reported any of these truly exceeding the maximum tolerated dose, which is what you would see when you start making the animals sick and killing them, with the exception of one study where they saw a 12-percent drop in body weight gain, if you can figure that out. You're looking at how the animals grow, and towards the end, the highest dose group grew slower. So they saw a 12-percent drop, which is indeed in the range of what would be called exceeding the MPD. However, if you examine the feeding, which they did at EFSA and at EPA, you see that the animals ate less food because it tasted bad. It was the highest dose of glyphosate. Probably it tasted bad, but they ate less, and by eating less, they grew less. So the conclusion was that none of them exceed the maximum tolerated does.

THE COURT: All right. Thank you very much, Dr. Portier.

THE WITNESS: And thank you for getting me out on time.

THE COURT: You may be excused. Thank you.

All right. Ladies and Gentlemen, so we're now going to return to the video deposition testimony of Dr. Heydens, which was -- which we were playing to you on Thursday before Dr. Portier came in on Friday to testify,

so we're now going to continue with that.

Counsel, when you're ready, you may proceed.

MR. DICKENS: Thank you, your Honor. We will resume the video testimony of Dr. William Heydens.

VIDEOTAPED TESTIMONY OF WILLIAM HEYDENS (Continued)

(Video played.)

(Video paused.)

THE COURT: All right. Ladies and Gentlemen,
11:03:10 we're going to pause now and take the morning recess. We'll resume again at 11:15. Please remember not to discuss the case with anyone. Thank you.

(Recess.)

THE COURT: Welcome back, Ladies and Gentlemen.
11:17:33 Mr. Dickens, you may resume Dr. Heydens' video.

MR. WISNER: Thank you, your Honor.

(William Heydens video played.)

(End of William Heydens video.)

THE COURT: All right. Ladies and Gentlemen,
12:11:56 that concludes the testimony of Dr. Heydens. We're now going to take the luncheon recess. Please remember do not discuss the case or do any research on the case. We'll resume again at 1:30. Thank you.

(Jury leaves courtroom.)

12:13:14 MR. WISNER: Your Honor.

THE COURT: We still have a juror present.

You know, Counsel, would you mind to approach the sidebar.

(Sidebar.)

[redacted]

(End sidebar.)

THE COURT: I'll see you at 1:20.

(Time Noted: 12:14 p.m.)

REPORTER'S CERTIFICATE

I certify that the proceedings in the within-titled cause were taken at the time and place herein named; that the proceedings were reported by me, a duly Certified Shorthand Reporter of the State of California authorized to administer oaths and affirmations, and said proceedings were thereafter transcribed into typewriting.

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